

It's Our Future: A Choice City



CITY OF VIRGINIA BEACH COMPREHENSIVE PLAN

Technical Report



Adopted May 17, 2016

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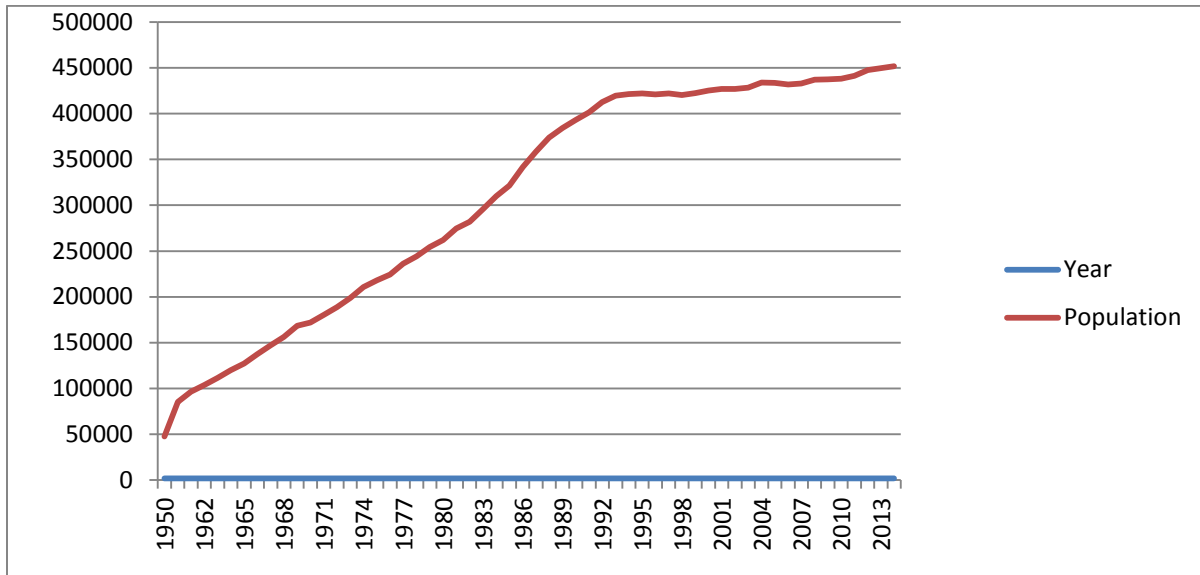
CHAPTER 1. POPULATION AND DEMOGRAPHICS

Virginia Beach is the most populous city in Virginia and is almost twice as large in population as Norfolk, the next largest city in the Hampton Roads region. It is the 39th largest city in the U.S. The City's 2010 population was 437,994.¹ Population growth accelerated slightly at a rate of 2.99% from 2000-2010 (12,737), compared to the 8.18% growth rate from 1990-2000.²

Historically, the City's annual growth rate slowed from 1980 to 2010. Robust growth of 5% per annum occurred from 1980 to 1990 (13,087 per annum); moderate growth of 0.8% per annum was experienced from 1990 to 2000 (3,219 per annum); and, slow growth of 0.3% per annum occurred from 2000-2010 (1,274 per annum).³ By comparison, the U.S. population grows at about 0.75% annually. An annual growth rate of 2% is generally considered to be sustainable for localities.

Within the past decade, the City's annual growth rate has begun to increase concurrent with the adoption and implementation of the City's Strategic Growth Area (SGA) Master Plans. The Weldon Cooper Center for Public Service at the University of Virginia (WCCPS) population estimates indicate that our population has now grown for seven consecutive years, following a period of two consecutive declines. The July 2014 population estimate was 451,672.⁴ This is 0.45% higher than the 2013 estimate of 449,628 and essentially matches the growth rate from 2012 to 2013; it is 50% above the annual rate of growth between the decennial Census of 2000 and 2010.

Virginia Beach Historical Population Growth: 1950-2014



Source: Weldon Cooper Center for Public Service at UVA, January 2015.

Except for Chesapeake and Suffolk, Virginia Beach grew at a greater rate than our large neighboring cities, and Virginia Beach did experience an increase, albeit small, in net migration (people moving from another location into Virginia Beach). This reverses trends prior to 2010,

¹ U.S. Census Bureau Decennial Census 2010.

² U.S. Census Bureau Decennial Census 1990-2010.

³ U.S. Census Bureau Decennial Census 1980-2010.

⁴ Weldon Cooper Center for Public Service (WCCPS) at University of Virginia. January 26, 2015.

as shown below. The Hampton Roads Planning District Commission (HRPDC) predicts continued growth for Virginia Beach through 2040.⁵

**Population and Growth Rates 2010-2014
Virginia Beach and Surrounding Cities**

	2010	2013	2014	Change from		Net Migration as a % of Total Change
				13-14	10-14	
Va Beach	437,994	449,628	451,672	0.45%	3.12%	2.1%
Chesapeake	222,209	232,977	235,638	1.14%	6.04%	63.5%
Norfolk	242,803	246,392	246,394	0.00%	1.48%	-109.6%
Portsmouth	95,535	96,871	96,802	0.07%	1.33%	-75.1%
Suffolk	84,585	87,831	89,586	2.00%	5.91%	68.1%
Hampton	137,436	139,032	138,545	0.35%	0.81%	-168.4%
Newport News	180,719	183,412	183,362	0.03%	1.46%	-124.8%
MSA	1,641,078	1,682,842	1,690,090	0.43%	2.99%	NA
Virginia	8,001,024	8,260,405	8,326,289	0.80%	4.07%	48.1%

Source: Weldon Cooper Center for Public Service at UVA, January 2015.

**Population Profile
Virginia Beach and Surrounding Cities**

City	1990	2000	2010	Forecast 2040	1990 - 2000	2000 - 2010	2010 - 2040
					Growth Rates		
Virginia Beach	393,089	425,257	437,994	497,500	8.18%	2.99%	13.58%
Norfolk	261,250	234,403	242,803	253,200	-10.27	3.58%	4.28%
Chesapeake	151,982	199,184	222,209	314,600	31.05%	11.55%	41.57%
Hampton	133,811	138,437*	137,436	137,200	3.45%	-.72%	-.17%
Portsmouth	103,910	100,565	95,535	98,200	-3.21%	-5.0%	2.78%
Suffolk	52,143	63,677	84,585	182,700	22.11%	32.83%	115.99%
Newport News	171,439	180,150	180,719	189,100	5.08%	.31%	4.63%

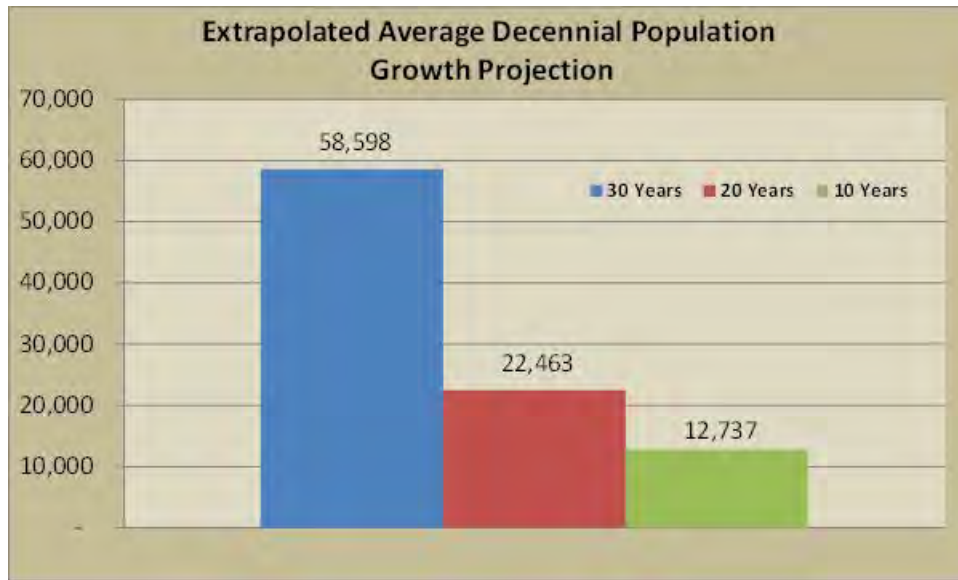
Source of Historical Data: U.S. Census Bureau (* denotes adjusted value)

Forecast Source: 2040 Socioeconomic Forecast, HRPDC, December 2013

In 2013, the City's Strategic Growth Area Office prepared a locally-derived population projection for a thirty (30) year period from 2010 to 2040, based on planned growth as per the development programs in each of the eight (8) Strategic Growth Area Master Plans. Three scenarios were considered for base decennial population growth projections between 2010 and

⁵ 2040 Socioeconomic Forecast. Hampton Roads Planning District Commission.

2040 as follows: 1) slow growth = 476,205 (+12,737) by 2040; 2) modest growth = 505,382 (+22,463) by 2040; and 3) robust growth = 613,789 (+58,598) by 2040.⁶



Source: City of Virginia Beach Strategic Growth Area Office, 2013.

Age

The median age in Virginia Beach is 35.0. The MSA median age is 35.9.⁷ People age 65 years or older constitute 16.6% of the City's population.⁸

Gender

Virginia Beach's population is estimated to be 49% male and 51% female.⁹

Race & Ethnicity

Ethnic Background	Percent
African-American	19.3%
American Indian	0.4%
Asian/Pacific Islander	6.6%
Hispanic or Latino (of any race)	7.7%
White	67.1%
Some other race	2.2%
Two or more races	4.4%

Source: Virginia Beach Community Profile 2015-2016. Department of Economic Development, January 2015.

⁶ City of Virginia Beach Strategic Growth Area Office. August 7, 2013.

⁷ Virginia Beach Community Profile 2015-2016. City of Virginia Beach Department of Economic Development and Inside Business, the Hampton Roads Business Journal, January 2015: 5,7.

⁸ American Community Survey - City of Virginia Beach, 2013.

⁹ Op cit: 5.

Educational Attainment

Virginia Beach has an extremely well-educated population. Nearly 70% of the City's residents have either some college experience or an advanced degree, compared with only 58% of the national population.

Educational Attainment Comparisons

	Virginia Beach	MSA	United States
Less than 9 th grade	1.3%	2.8%	5.8%
Some high school	4.0%	6.5%	7.6%
High school graduate or GED	23.0%	25.8%	27.8%
Some college	27.1%	26.0%	21.1%
Associate's degree	9.9%	9.3%	8.1%
Bachelor's degree	22.9%	18.7%	18.4%
Graduate degree	11.9%	10.9%	11.2%

Source: Virginia Beach Community Profile 2015-2016. Department of Economic Development, January 2015.

Income

Household and per capita income levels are another area that Virginia Beach shows relative dominance within the Hampton Roads area and compared to the U.S. Median household income in 2014 was \$62,998, compared with the MSA (\$56,091) and U.S. (\$52,076).¹⁰ Average household income in 2014 was \$81,713, compared with the MSA (\$73,462) and U.S. (\$72,809).¹¹ Virginia Beach's 2014 household income is the third highest within the Hampton Roads region, following Suffolk and Chesapeake, and is projected to continue to show growth over the next five years.

Median Household Income 1990-2014 Virginia Beach and Surrounding Cities

City	1990	2000	2010	2014	1990 - 2000	2000 - 2010	2010 - 2014
					Growth Rate		
Virginia Beach	\$36,271	\$48,681	\$64,212	\$62,998	34.21%	31.90%	-1.89%
Norfolk	\$23,563	\$31,945	\$41,643	\$43,108	35.57%	30.35%	3.52%
Chesapeake	\$35,737	\$50,745	\$68,955	\$66,563	41.99%	35.88%	-3.47%
Hampton	\$30,144	\$39,541	\$51,275	\$49,848	31.17%	29.67%	-2.78%
Portsmouth	\$24,601	\$33,782	\$43,674	\$42,647	37.31%	29.28%	-2.35%
Suffolk	\$26,125	\$41,114	\$69,294	\$64,334	57.37%	68.54%	-7.16%
Newport News	\$27,469	\$36,693	\$50,937	\$48,976	33.57%	38.81%	-3.85%
Regional MSA	\$30,742	\$42,698	\$57,315	\$57,356	38.89%	34.23%	0.07%

Source: U.S. Census Bureau, HRPDC, and City of Virginia Beach Department of Economic Development.

¹⁰ U.S. Census Bureau, HRPDC, and City of Virginia Beach Department of Economic Development.

¹¹ Ibid.

Per capita income levels in Virginia Beach are on par with the rest of Virginia and above the national average.¹²

¹² *Economic Assumptions for the United States and Virginia.* Virginia Employment Commission, December 2009: 25.

CHAPTER 2. LAND USE

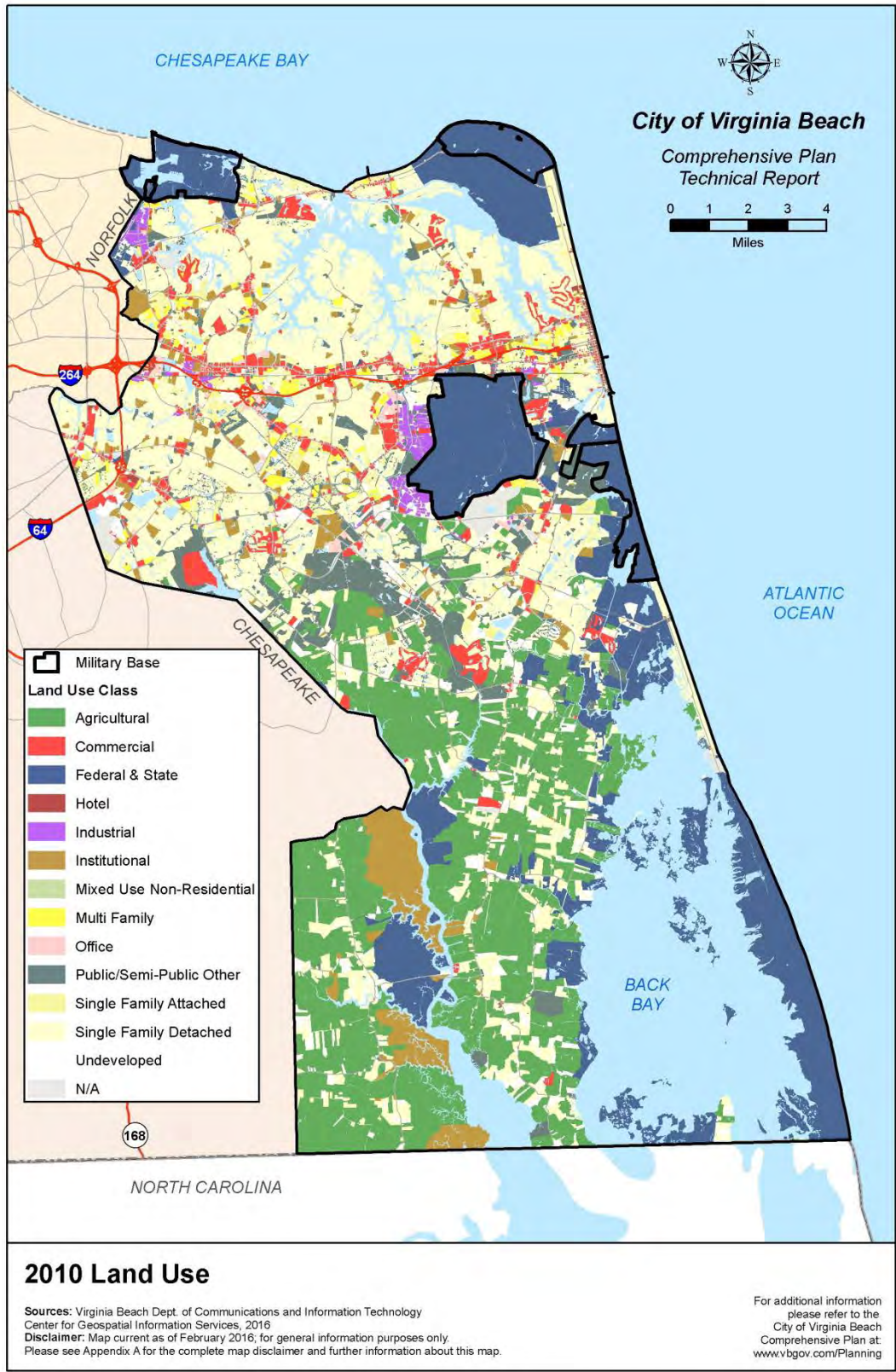


FIGURE 1

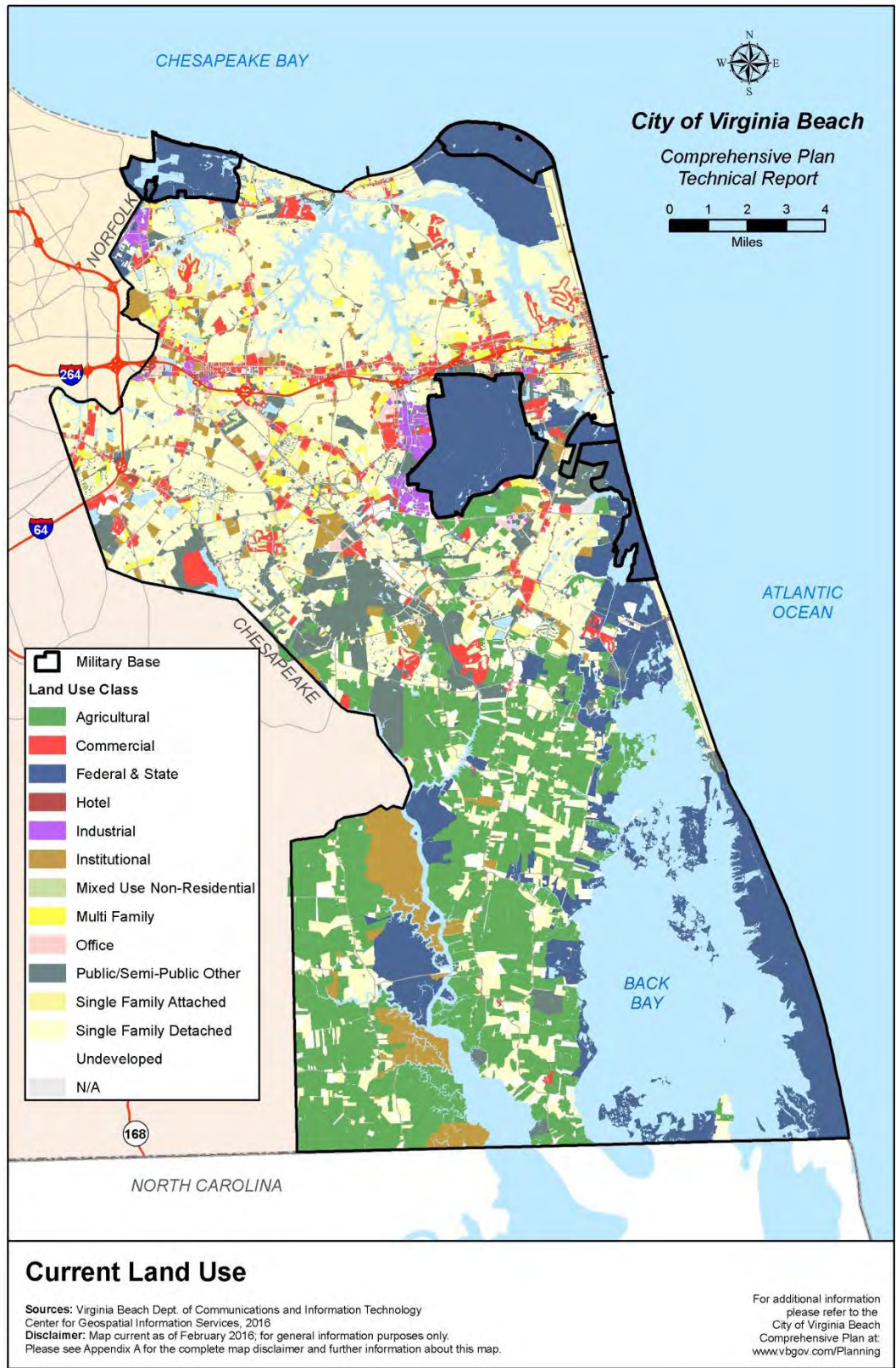


FIGURE 2

2010 AND 2016 COMPARISON BY LAND USE CLASS

Land Use Class	2010 Acres (without water or public rights-of- way)	% of total acres	2010 Square Miles (without water or public rights-of- way)	2016 Acres (without water or public rights-of- way)	% of total acres	2016 Square Miles (without water or public rights-of- way)
Agricultural	34,452.43	24.29%	53.83	32,297.60	22.79%	50.46
Commercial	6,135.64	4.32%	9.59	6,128.71	4.32%	9.58
Federal & State	30,217.13	21.31%	47.21	30,142.61	21.27%	47.10
Hotel	214.24	0.15%	0.33	171.77	.12%	0.27
Industrial	1,232.07	.86%	1.93	1,264.09	.89%	1.98
Institutional	7,771.49	5.48%	12.14	8,097.32	5.71%	12.65
Mixed Use Non-Residential	0.00	0.00%	0.00	0.13	0.00%	0.00
Multi Family	1,868.04	1.31%	2.92	2,014.10	1.42%	3.15
Office	1,098.37	.77%	1.72	1,076.90	.76%	1.68
Public/Semi-Public Other	10,306.31	7.26%	16.10	13,063.49	9.22%	20.41
Single Family Attached	3,608.55	2.54%	5.64	3,867.01	2.72%	6.04
Single Family Detached	34,769.16	24.52%	54.33	35,574.08	25.11%	55.58
Undeveloped	8,715.13	6.14%	13.62	7,822.20	5.52%	12.22
n/a (no assigned land use class)	1,403.59	.98%	2.19	148.82	.10%	0.23
City Land Area Total	141,792.15		221.55	141,668.82		221.36

Sources: City of Virginia Beach Real Estate Assessors Office and ComIT

Note: Figures shown include parcel area that is land only and does not include water areas or public rights-of-way. Federal and state-owned parklands and military installations are included.

AICUZ ZONES AND SUB AREAS

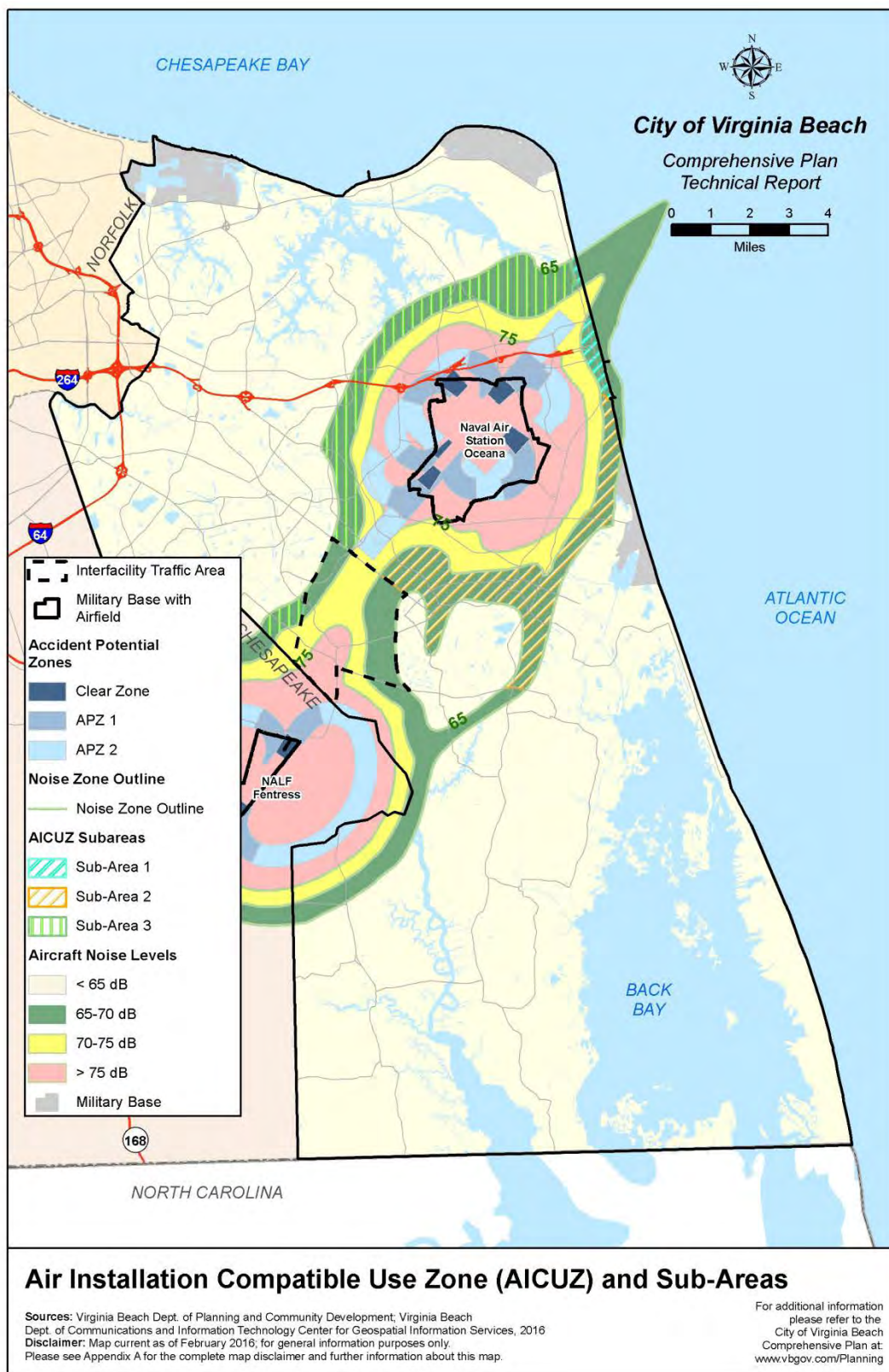


FIGURE 3

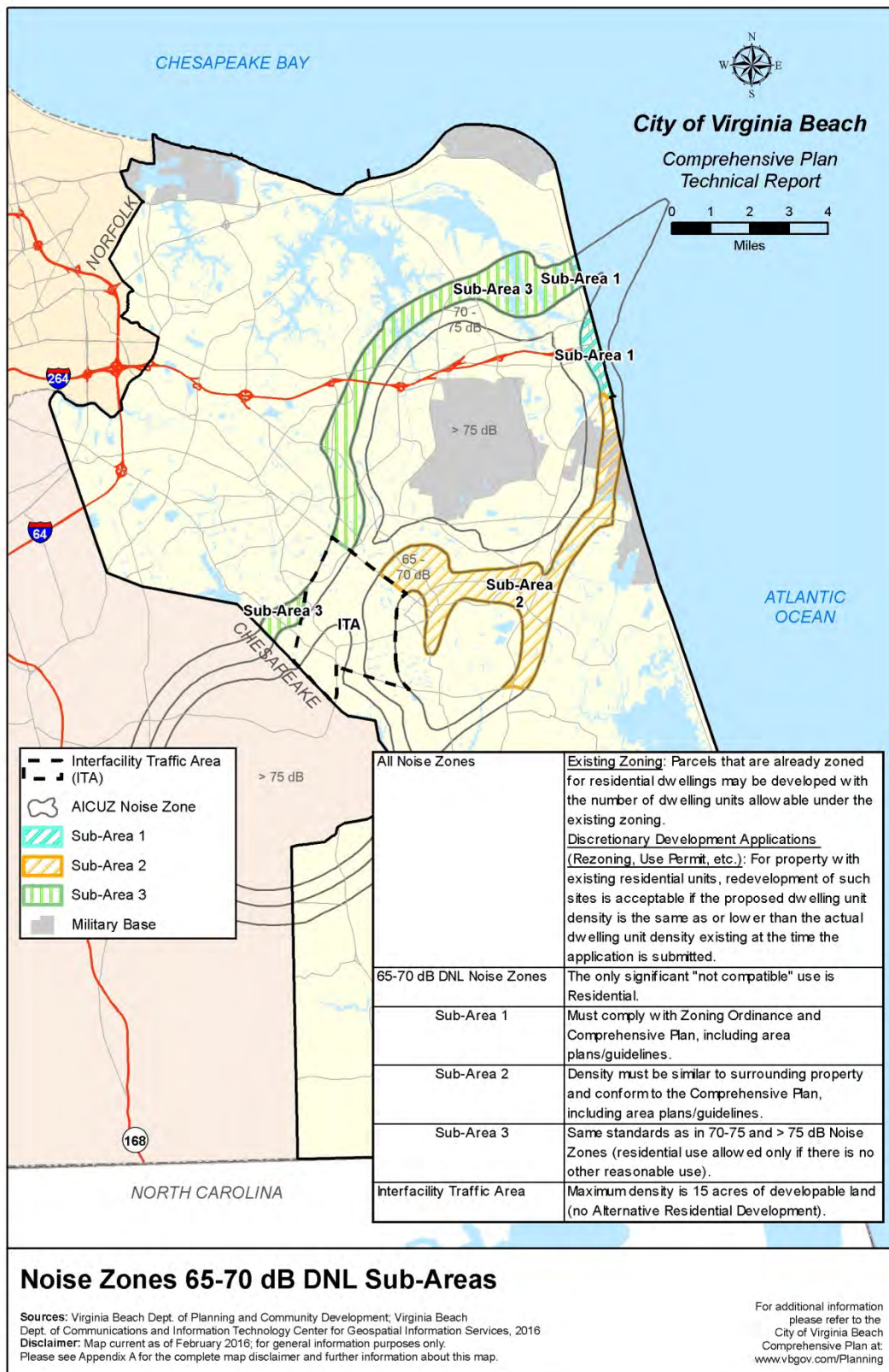


FIGURE 4

CHAPTER 3. URBAN AREAS

Planning is viewed in Virginia Beach as an essential civic process for building a beautiful and sustainable city. In our 2003 and 2009 Comprehensive Plans, Virginia Beach identified Strategic Growth Areas (SGAs), which are underutilized areas attractive for redevelopment at higher densities as new “urban areas,” representing only 2% of the City’s total land area. This decision by our city leaders came several years before the 2007 state-mandated designation of Urban Development Areas (UDAs) in Comprehensive Plans, which subsequently became voluntary in 2012 and further relaxed in 2015. Under the new definition, UDAs can be any area(s) designated in a Comprehensive Plan for higher density development that incorporates the principles of Traditional Neighborhood Development (TND). TND embodies classic characteristics of traditional communities such as walkable neighborhood centers, interconnected streets and blocks, diversity of land uses, and easy access to jobs, housing, and recreation by a variety of travel options. Our SGAs have been found to meet the requirements of the Code of Virginia, Section 15.2-2223.1 regarding “Urban Development Areas.”

As of 2013, Virginia Beach completed a series of continuous city planning initiatives with the culmination and adoption of eight master plans for our SGAs, all of which have been adopted as amendments to the Comprehensive Plan. We now have citizen-derived and Council-supported visions and development and redevelopment guidelines for a sustainable future.

Burton Station SGA

Current Land Use

The Northampton Boulevard Corridor SGA Implementation Plan, hereinafter noted as the Burton Station SGA, is approximately 826 acres and is located at the convergence of major highway, rail, and airport facilities. This area benefits from nearby deep water ports and a major military installation that brings value to the SGA as an area for future economic development.

- As illustrated in the Land Use table below, the predominant land use across the Burton Station SGA is Industrial (29%). Other major land uses in the area include Federal & State (22%), Public/Semi-Public (14%), Commercial (10%), and Residential (8%).
- Approximately 96 acres in the SGA as of January 2016 are undeveloped.
- The most significant change in land use from 2010 to 2016 is multifamily which increased 83% (18 acres to 32 acres).

Land Use, 2010 - 2016

Burton Station SGA					
Land Use Category	2010		2016		2010 to 2016 % Change
	Acres	%	Acres	%	
Commercial	91.50	11.04%	80.48	9.75%	-12.04%
Federal & State	183.01	22.08%	181.78	22.02%	-0.67%
Hotel	21.28	2.57%	21.34	2.59%	0.31%
Industrial	240.16	28.97%	240.60	29.14%	0.18%
Institutional	12.11	1.46%	12.14	1.47%	0.22%
Multifamily	17.69	2.13%	32.39	3.92%	83.10%
Office	17.80	2.15%	11.02	1.33%	-38.08%
Public/Semi-Public Other	112.08	13.52%	119.57	14.48%	6.68%
Single Family Attached	17.40	2.10%	17.67	2.14%	1.57%
Single Family Detached	16.73	2.02%	12.16	1.47%	-27.34%

Undeveloped	99.17	11.96%	96.43	11.68%	-2.76%
Total	828.93	100.00%	825.59	100.00%	-0.40%

Source: City of Virginia Beach Real Estate Assessors Office and Planning Department. Calculations reflect approximations and should be used for general planning purposes only. Water areas and rights-of-way are not included in these land use calculations.

Ownership

In the Burton Station SGA, approximately 569 acres of land is privately-owned, and 285 acres is publicly owned. Norfolk International Airport and the City of Norfolk are major land holders in this strategic growth area.

Land Ownership, 2010 - 2015

Owner	2010		2015	
	Acres	%	Acres	%
Private	579.09	67.48%	569.73	66.65%
Public	279.07	32.52%	285.13	33.35%
Total	858.16	100.00%	854.86	100.00%

Source: City of Virginia Beach Real Estate Assessors Office and Planning Department. Calculations incorporate water areas and reflect approximations that should be used for general planning purposes only.

Zoning

- The Zoning table shows the city zoning districts for the Burton Station SGA. More than 506 acres (60%) of land within the SGA is zoned for Industrial land uses (I district).
- Residential zoning (R and A districts) encompasses approximately 238 (28%) and Business zoning (B district) encompasses approximately 80 acres (9%).

City of Virginia Beach Zoning, 2015

Burton Station SGA		
Zoning District	Acres	%
A-12	17.18	2.03%
A-18	23.98	2.83%
A-24	9.37	1.11%
B-2	79.61	9.41%
H-1	17.38	2.05%
I-1	505.94	59.80%
O-2	4.71	.56%
R-15	.10	.01%
R-10	.15	.02%
R-7.5	71.01	8.39%
R-5D	116.66	13.79%
Total	846.10	100.00%

Source: City of Virginia Beach Planning Department. Calculations incorporate water areas and reflect approximations that should be used for general planning purposes only.

Development Constraints

- Lack of proper infrastructure along Burton Station Road
- Multiple land ownership fragments the site
- Coordination required with two municipalities and the airport

- High traffic and truck routes along surrounding roads and through the SGA
- Spot zoning allows incompatible uses and complicates block redevelopment

Development Opportunities

- Implement infrastructure improvements for Burton Station
- Affordable housing
- Mix of uses providing for residents, workers and visitors
- Transform Northampton Boulevard into a gateway to Virginia Beach
- Prepare for the future with light rail connections and green initiatives
- Tie into the regional network with pedestrian friendly paths and bike trails

Source: Northampton Boulevard Corridor SGA Implementation Plan, Adopted: January 27, 2009
<http://www.vbgov.com/government/departments/planning/areaplans/Documents/StrategicGrowthAreas/NorthamptonCorridorSGAImpPlan.pdf>

Public Investment

The basic infrastructure system for the implementation of the Burton Station plan includes public vehicular, pedestrian and bicycle linkages and the improvement and extension of public water, sanitary sewer, and stormwater drainage systems to serve the area. These improvements will be developed in a phased implementation plan and will most likely be accomplished through a public/private development partnership. The following map shows programmed and funded Capital Improvement Projects (CIPs) for the Burton Station SGA.

Programmed and Funded Capital Improvement Projects (CIPs), December 2015

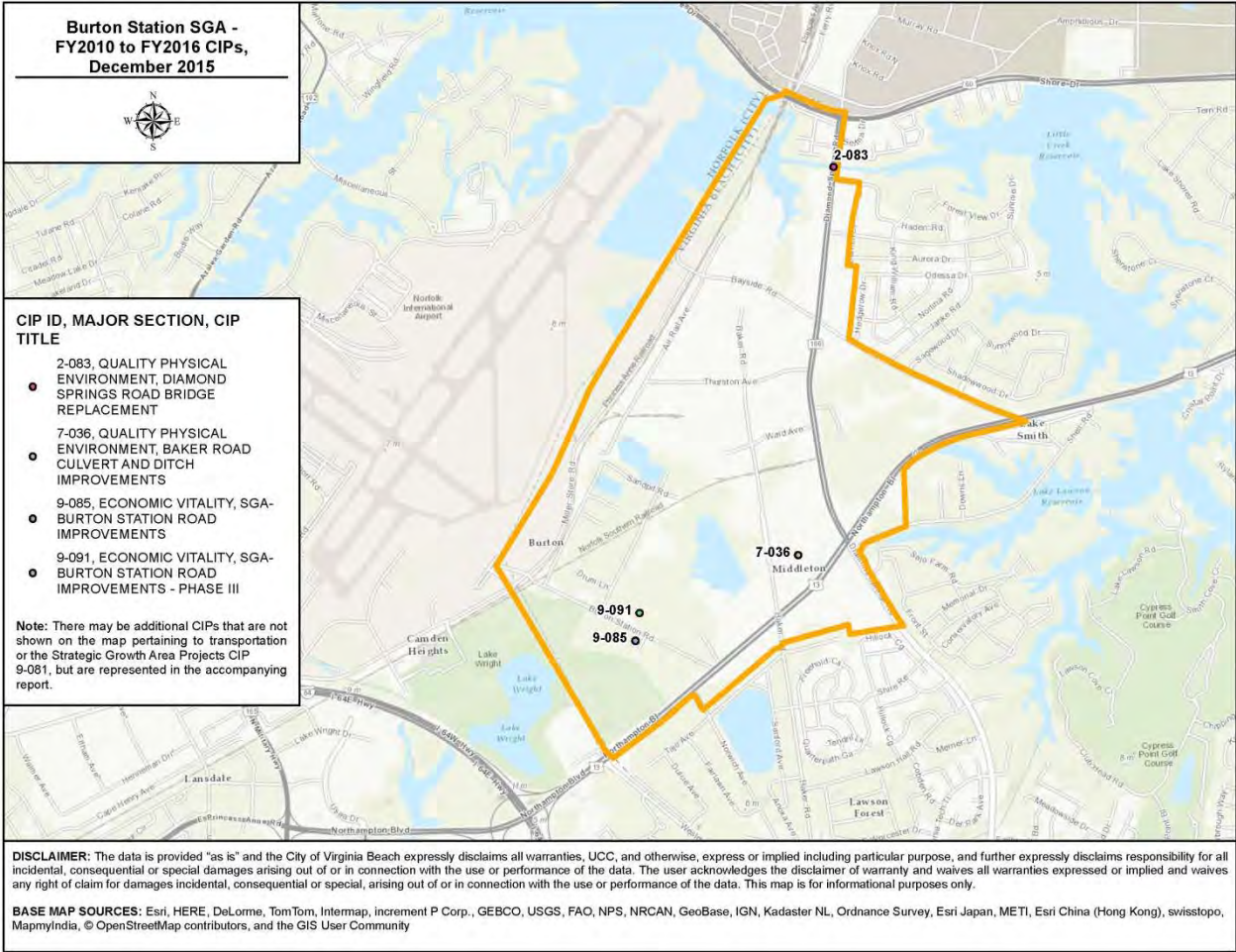


FIGURE 1

Burton Station SGA - FY2010 to FY2016 CIPs, December 2015							
CIP ID	MAJOR SECTION	CIP TITLE	PROJECT CLASS	FIRST YEAR	LAST YEAR	PROGRAMMED FUNDING	APPROPRIATED FUNDING
2-083	QUALITY PHYSICAL ENVIRONMENT	DIAMOND SPRINGS ROAD BRIDGE REPLACEMENT	ROADWAYS	2010	2011	\$4,320,000	\$4,120,000
2-093*	QUALITY PHYSICAL ENVIRONMENT	BUSES FOR VIRGINIA BEACH TRANSIT EXTENSION	ROADWAYS	2016	2016	\$3,636,212	\$0
7-036	QUALITY PHYSICAL ENVIRONMENT	BAKER ROAD CULVERT AND DITCH IMPROVEMENTS	STORM WATER	2010	2016	\$450,000	\$450,000
9-081-003**	ECONOMIC VITALITY	STRATEGIC GROWTH AREA PROJECTS	ECONOMIC AND TOURISM	2010	2016	\$18,078,786	\$18,078,786
9-085	ECONOMIC VITALITY	SGA-BURTON STATION ROAD IMPROVEMENTS	ECONOMIC AND TOURISM	2012	2016	\$3,250,000	\$3,250,000
9-091	ECONOMIC VITALITY	SGA-BURTON STATION ROAD IMPROVEMENTS - PHASE III	ECONOMIC AND TOURISM	2012	2016	\$8,500,000	\$8,500,000
Totals	6					\$38,234,998	\$34,398,786
*This CIP pertains to all SGAs.							
** The programmed and appropriated funding amounts represent the parent CIP, 9-081, not the portion applied to this specific SGA.							

Private Investment

The plan implementation strategies build on the momentum generated by public investments which focus on key plan recommendations for implementation: the core of the study area, focused around Burton Station Road, commercial development along the Northampton Boulevard - Diamond Springs Road corridor, and infrastructure improvements and potential expansion of the Airport Industrial Park. The map below illustrates new commercial and residential building permits generated between January 2010 and December 2015 in the plan area.

Commercial and Residential New Building Permits, January 2010 to December 2015

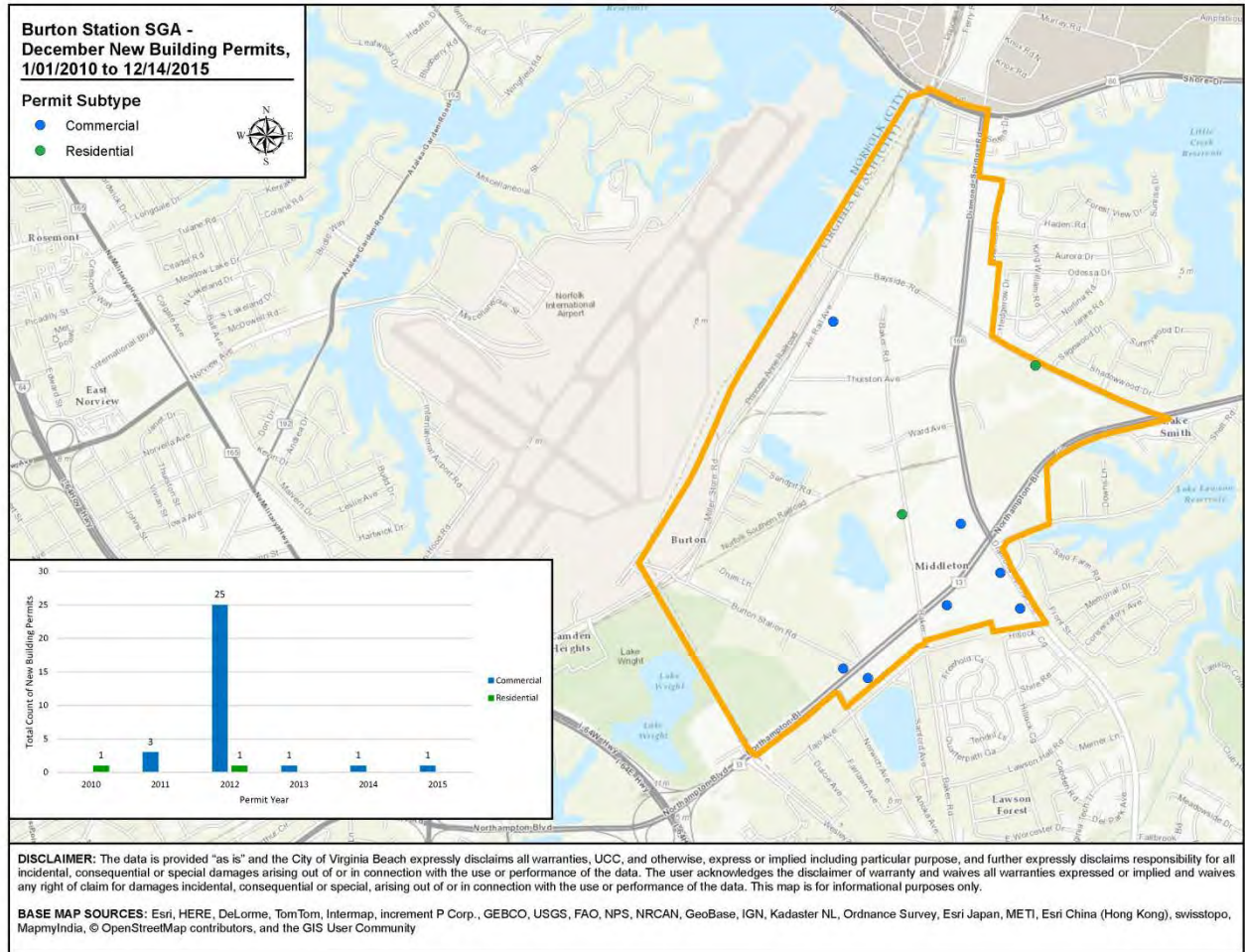


FIGURE 2

Burton Station SGA – New Building Permits, 1/01/2010 to 12/14/2015			
GPIN	Permit Year	Permit Description	Permit Subtype
14690008010000	2010	SET MOBILE HOME, LOT 126.	Residential
14589864030000	2011	RESTAURANT	Commercial
14589815970000	2011	NEW SEPARATED MIXED USE SHELL	Commercial
14599411750000	2011	OFFICE BUILDING FOR HRSD	Commercial
14681976220000	2012	SPRINGWATER APARTMENTS CLUBHOUSE	Commercial
14691071230000	2012	O'REILLY AUTO PARTS	Commercial
14681976220000	2012	BUILDING 1-RIGHT SIDE 12 UNITS ALL 3 FLOORS	Commercial
14681976220000	2012	SPRINGWATER APARTMENTS BUILDING 1-LEFT SIDE-ALL 3 STORIES	Commercial
14681976220000	2012	SPRINGWATER APARTMENTS- GARAGE BUILDING #1	Commercial
14681976220000	2012	SPRINGWATER APARTMENTS- GARAGE BUILDING #2	Commercial
14681976220000	2012	SPRINGWATER APARTMENTS- GARAGE BUILDING #3	Commercial

Burton Station SGA – New Building Permits, 1/01/2010 to 12/14/2015			
GPIN	Permit Year	Permit Description	Permit Subtype
14681976220000	2012	SPRINGWATER APARTMENTS- GARAGE BUILDING #4 AND MAINTENANCE ROOM	Commercial
14681976220000	2012	SPRINGWATER APARTMENTS- BUILDING #3 RIGHT SIDE 12 UNITS	Commercial
14681976220000	2012	SPRINGWATER APARTMENTS- BUILDING #3 MIDDLE 12 UNITS	Commercial
14681976220000	2012	SPRINGWATER APARTMENTS- BUILDING #3 LEFT SIDE 12 UNITS	Commercial
14681976220000	2012	SPRINGWATER APARTMENTS- BUILDING #4 LEFT SIDE 12 UNITS	Commercial
14681976220000	2012	SPRINGWATER APARTMENTS- BUILDING #4 RIGHT SIDE 12 UNITS	Commercial
14681976220000	2012	SPRINGWATER APARTMENTS- BUILDING #5 LEFT SIDE 12 UNITS	Commercial
14681976220000	2012	SPRINGWATER APARTMENTS- BUILDING #5 RIGHT SIDE 12 UNITS	Commercial
14681976220000	2012	SPRINGWATER APARTMENTS- BUILDING #6 LEFT SIDE 12 UNITS	Commercial
14681976220000	2012	SPRINGWATER APARTMENTS- BUILDING #6 RIGHT SIDE 12 UNITS	Commercial
14681976220000	2012	SPRINGWATER APARTMENTS- BUILDING #7 LEFT SIDE 12 UNITS	Commercial
14681976220000	2012	SPRINGWATER APARTMENTS- BUILDING #7 RIGHT SIDE 12 UNITS	Commercial
14681976220000	2012	SPRINGWATER APARTMENTS- BUILDING #8 RIGHT SIDE 12 UNITS	Commercial
14681976220000	2012	SPRINGWATER APARTMENTS- BUILDING #8 MIDDLE 12 UNITS	Commercial
14681976220000	2012	SPRINGWATER APARTMENTS- BUILDING #8 LEFT SIDE 12 UNITS	Commercial
14681976220000	2012	SPRINGWATER APARTMENTS- BUILDING #9 MIDDLE 12 UNITS	Commercial
14681976220000	2012	SPRINGWATER APARTMENTS- BUILDING #9 LEFT SIDE 12 UNITS	Commercial
14681976220000	2012	SPRINGWATER APARTMENTS- BUILDING #9 RIGHT SIDE 12 UNITS	Commercial
14692269930000	2012	VA TECH AGRICULTURE RESEARCH NEW DWELLING	Residential
14680996010000	2013	OCEAN STORAGE II - NEW MINI WAREHOUSE W/SELF STORAGE	Commercial
14690099940000	2014	NEW CRESCENT SQUARE 81 APT UNITIS, OFFICE AREA, AND COMMUNITY ROOM FIRST FLOOR	Commercial
14690099940000	2015	CONSTRUCTION TRAILER	Commercial
Total			33

Centerville SGA

Current Land Use

The Centerville SGA is approximately 1,030 acres and is located in the southwestern part of the City, bordering Chesapeake, Interstate 64 (I-64), and includes Regent University and the Christian Broadcasting Network (CBN).

- As illustrated in the Land Use table, the predominant land use across the Centerville SGA is Public/Semi-Public (35%). Other major land uses in the area include Commercial (25%), and Institutional (13%).
- Approximately 160 acres in the SGA as of January 2016 are undeveloped.
- The most significant change in land use from 2010 to 2016 is Public/Semi-Public, which increased 453% (66 acres to 363 acres).

Land Use, 2010 - 2016

Centerville SGA					
Land Use Category	2010		2016		2010 to 2016 % Change
	Acres	%	Acres	%	
Commercial	201.04	19.52%	260.42	25.28%	29.54%
Federal & State	13.23	1.28%	13.23	1.28%	0.00%
Hotel	28.34	2.75%	28.34	2.75%	0.00%
Institutional	129.33	12.56%	129.42	12.56%	0.07%
Multi Family	21.43	2.08%	21.43	2.08%	0.00%
Office	34.88	3.39%	38.16	3.70%	9.39%
Public/Semi-Public Other	365.48	35.50%	362.70	35.21%	453.22%
Single Family Attached	0.05	0.01%	0.22	0.02%	317.23%
Single Family Detached	17.98	1.75%	16.75	1.63%	-6.82%
Undeveloped	217.94	21.17%	159.49	15.48%	-26.82%
Total	1,029.70	100.00%	1,030.15	100.00%	0.04%

Source: City of Virginia Beach Real Estate Assessors Office and Planning Department. Calculations reflect approximations and should be used for general planning purposes only. Water areas and rights-of-way are not included in these land use calculations.

Ownership

The generalized Ownership table shows public and private land ownership across the Centerville SGA. Approximately 665 acres (61%) of land are privately-owned, and 428 acres (39%) are publicly-owned.

Land Ownership, 2015

Owner	2010		2015	
	Acres	%	Acres	%
Private	1031.2	93.24%	665.41	60.88%
Public	74.80	6.76%	427.55	39.12%
Total	1106.03	100.00%	1092.96	100.00%

Source: City of Virginia Beach Real Estate Assessors Office and Planning Department. Calculations incorporate water areas and reflect approximations that should be used for general planning purposes only.

Zoning

- Residential zoning (R and A districts) encompasses approximately 600 acres, with 504 acres (66%) zoned R districts, and 76 acres (27%) zoned for Apartment districts.
- Office zoning (O-2 district), which is intended for larger scale office, represents 164 acres (15%); Community Business zoning (B-2) represents approximately 126 acres (11%).

City of Virginia Beach Zoning, 2015

Centerville SGA		
Zoning District	Acres	%
A-12	50.08	4.52%
A-24	26.30	2.38%
B-1	20.18	1.82%
B-2	125.70	11.36%
H-1	32.42	2.93%
I-1	98.66	8.91%
I-2	39.80	3.60%
O2	163.62	14.78%
R-5D	409.91	37.04%
R-7.5	95.99	8.67%
R-10	6.98	0.63%
R-40	10.81	0.98%
Total	1106.82	100.00%

Source: City of Virginia Beach Planning Department. Calculations incorporate water areas and reflect approximations that should be used for general planning purposes only.

Development Constraints

- Heavy peak traffic
- Decline of existing retail, vacancies
- Environmental and aesthetic concerns surrounding landfills and future development
- Lack of access into/out of shopping centers
- Lack of transportation choice
- Lack of bicycle and pedestrian infrastructure
- Aging residential stock

Development Opportunities

- Improve access/connectivity across study area
- Adapt district to pursue a University Village concept
- Partner with Chesapeake to develop coherent strategy for the area
- Plan for phased closing of landfill and future reuse for open space
- Preserve existing tree cover and open space
- Expand Regent University Campus
- Improve stormwater infrastructure along Centerville Turnpike

Source: Centerville Strategic Growth Area Master Plan, Adopted: March 26, 2013

<http://www.vbgov.com/government/departments/planning/areaplans/Documents/Centerville/20130326-CSGA-MasterPlan-Final-Screen.pdf>

Public Investment

The development of the Centerville SGA as a transit-ready, mixed-use, pedestrian-friendly

center will not likely occur without improvements to road, trail, stormwater, and open space infrastructure. Redevelopment will require the types of infrastructure that can support more urban, walkable environments; more balanced street designs, interconnected park spaces, and stormwater management facilities. The primary public investment within the SGA is a potential new interchange on I-64 between Indian River Road and Greenbrier Parkway. This would result in the reconfiguration of Centerville Turnpike so that it would flow continuously from the interchange to Kempsville Road. The following map shows programmed and funded Capital Improvement Projects (CIPs) for the Centerville SGA.

Programmed and Funded Capital Improvement Projects (CIPs), December 2015

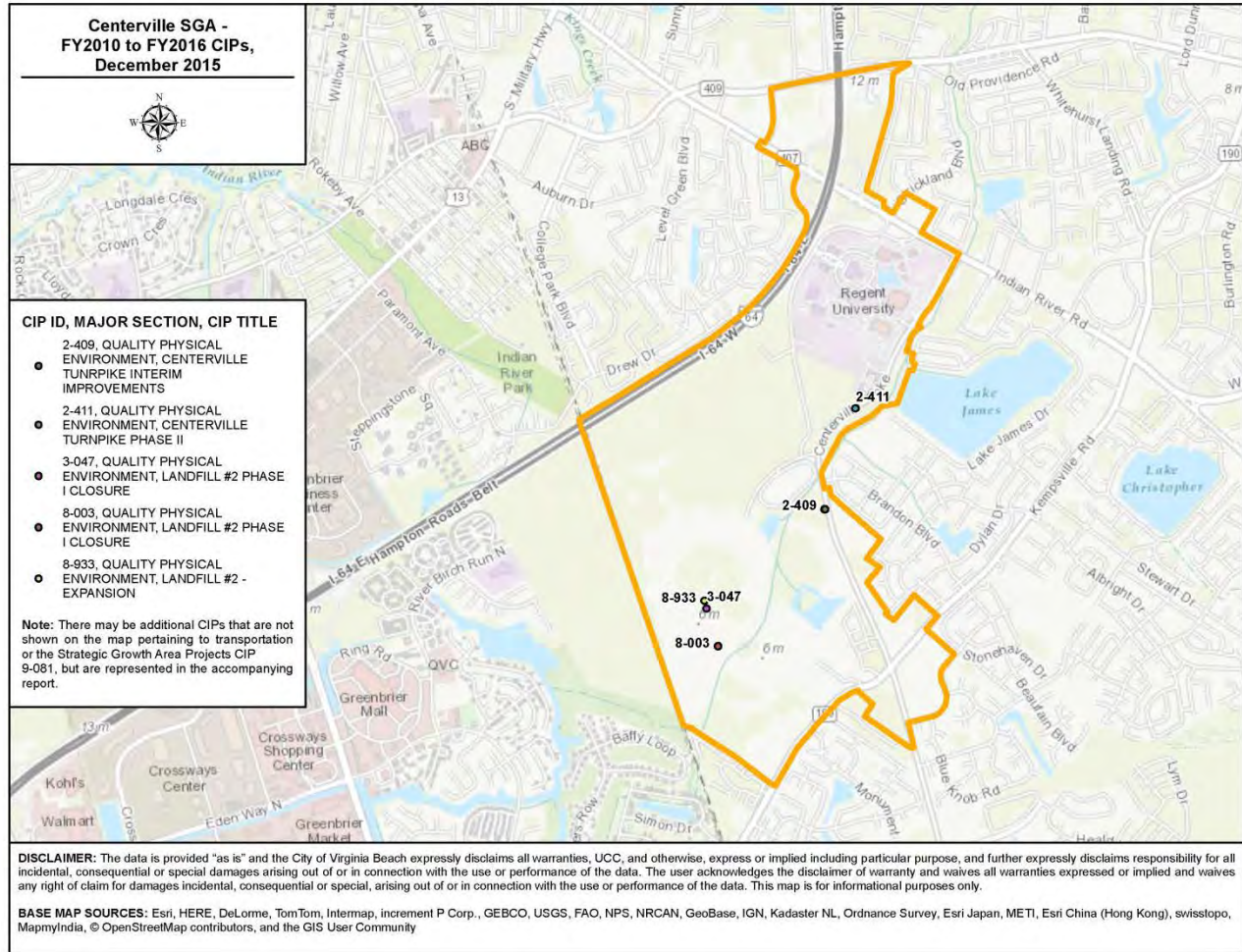


FIGURE 3

Centerville SGA - FY2010 to FY2016 CIPs, December 2015							
CIP ID	MAJOR SECTION	CIP TITLE	PROJECT CLASS	FIRST YEAR	LAST YEAR	PROGRAMMED FUNDING	APPROPRIATED FUNDING

Centerville SGA - FY2010 to FY2016 CIPs, December 2015							
CIP ID	MAJOR SECTION	CIP TITLE	PROJECT CLASS	FIRST YEAR	LAST YEAR	PROGRAMMED FUNDING	APPROPRIATED FUNDING
2-093*	QUALITY PHYSICAL ENVIRONMENT	BUSES FOR VIRGINIA BEACH TRANSIT EXTENSION	ROADWAYS	2016	2016	\$3,636,212	\$0
2-409	QUALITY PHYSICAL ENVIRONMENT	CENTERVILLE TURNPIKE INTERIM IMPROVEMENTS	ROADWAYS	2012	2016	\$36,674,015	\$17,868,747
2-411	QUALITY PHYSICAL ENVIRONMENT	CENTERVILLE TURNPIKE PHASE II	ROADWAYS	2013	2013	\$16,123,433	\$0
3-047	QUALITY PHYSICAL ENVIRONMENT	LANDFILL #2 PHASE I CLOSURE	BUILDINGS	2015	2016	\$15,435,000	\$14,451,878
8-003	QUALITY PHYSICAL ENVIRONMENT	LANDFILL #2 PHASE I CLOSURE	COASTAL	2010	2014	\$17,417,000	\$3,220,756
8-933	QUALITY PHYSICAL ENVIRONMENT	LANDFILL #2 – EXPANSION	COASTAL	2010	2013	\$23,948,402	\$23,948,402
9-081-005**	ECONOMIC VITALITY	STRATEGIC GROWTH AREA PROJECTS	ECONOMIC AND TOURISM	2010	2016	\$18,078,786	\$18,078,786
Total	7					\$131,312,848	\$77,568,569
*This CIP pertains to all SGAs.							
** The programmed and appropriated funding represent the parent CIP, 9-081, not the portion applied to this specific SGA							

Private Investment

The configuration of the local connector streets in the Centerville SGA is especially important to improving public accessibility. With a neighborhood-based network of walkable streets, a clear structure of future development blocks will better connect the Centerville SGA to the surrounding neighborhoods. Private property owners can initiate redevelopment and development of individual parcels using the street network. The map below illustrates new commercial and residential building permits generated between January 2010 and December 2015 in the plan area.

Commercial and Residential New Building Permits, January 2010 to December 2015

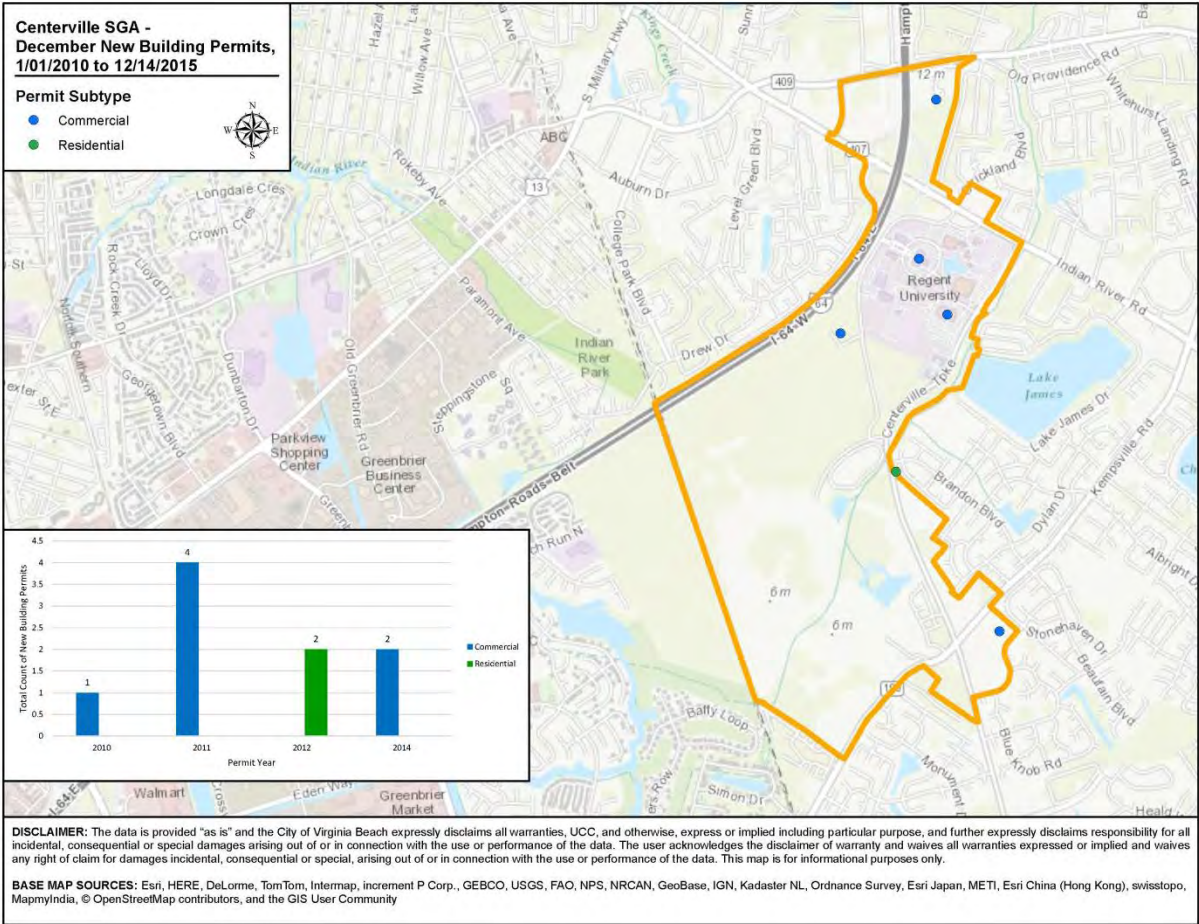


FIGURE 4

Centerville SGA – December New Building Permits,1/01/2010 to 12/14/2015			
GPIN	Permit Year	Permit Description	Permit Subtype
14556846290000	2010	18X27 STORAGE SHED.	Commercial
14568332440000	2011	PICNIC SHELTER WITH CLOTH ROOF. AS PER AGREEMENT W/P&R CLOTH WILL BE REMOVED IF WIND IS GOING TO EXCEED 65MPH	Commercial
14557989510000	2011	REGENT UNIVERSITY CHAPEL SITE PLANS WITH PERMIT 2011-BDCN-04999	Commercial
14558867630000	2011	REGENT UNIVERSITY CHAPEL	Commercial
14558867630000	2011	REGENT UNIVERSITY SCHOOL OF DIVINITY	Commercial
14557544880000	2012	CENTERVILLE TPKE DUPLEX 1516,1520	Residential
14557544880000	2012	CENTERVILLE TPKE DUPLEX 1516,1520	Residential
14557544880000	2012	As built approved 10/17/13 mc	Residential
14559260380000	2014	WALMART 6226 FOUNDATION ONLY CENTERVILLE APPROVED SITE PLANS AND FOUNDATION ONLY PLANS IN PROJECT FILE. DFU'S PAID AND RECEIPT #WITH THIS PERMIT (COPY ATTACHED). APPROVED PLANS IN PROJECT FILE. FOUNDATION ONLY PERMIT ORIGINALLY HAD IT'S OWN PROJEC	Commercial
14559260380000	2014	WALMART #6226 KEMPSRIVER SHOPPING CENTER	Commercial
Total			9

Newtown SGA

Current Land Use

The Newtown SGA represents approximately 266 acres and is located along the I-264 corridor on the western edge of Virginia Beach adjacent to the City of Norfolk. The western side of Newtown Road in the study area is within the City of Norfolk and includes the eastern most transit stop on the HRT Light Rail system that currently serves Norfolk.

- As illustrated on the Land Use table, the predominant land use across the Newtown SGA is Office (78 acres or 29%), other land uses in the area include Industrial (39 acres or 15%) and Public/Semi-Public tracts (28 acres or 11%).
- Approximately 12 acres (4%) in the SGA are Undeveloped land.
- The most significant change in land use from 2010 to 2016 is Multifamily which increased 691% (10 acres to 16 acres).

Land Use, 2016

Newtown SGA					
Land Use Category	2010		2016		2010 to 2016 % Change
	Acres	%	Acres	%	
Commercial	37.36	14.08%	50.37	18.97%	34.81%
Federal & State	12.36	4.66%	13.65	5.14%	10.42%
Hotel	22.07	8.32%	22.06	8.31%	-0.03%
Industrial	39.29	14.80%	39.34	14.81%	0.12%
Institutional	1.32	0.50%	1.34	0.50%	1.39%
Multi Family	9.74	3.67%	16.42	6.18%	68.61%
Office	79.09	29.80%	78.29	29.48%	-1.02%
Public/Semi-Public					
Other	27.49	10.36%	28.25	10.64%	2.75%
Single Family Attached	0.01	0.00%		0.00%	-100.00%
Single Family Detached	5.27	1.98%	4.31	1.62%	-18.22%
Undeveloped	31.40	11.83%	11.51	4.34%	-63.34%
Grand Total	265.40	100.00%	265.53	100.00%	0.05%

Source: City of Virginia Beach Real Estate Assessors Office and Planning Department. Calculations reflect approximations and should be used for general planning purposes only. Water areas and rights-of-way are not included in these land use calculations.

Ownership

The generalized Ownership table shows public and private land ownership across the Newtown SGA. Approximately one-third (66 acres or 23%) of land is publicly-owned, and two thirds (226 acres or 77%) is privately-owned.

Land Ownership, 2015

Owner	2010		2015	
	Acres	%	Acres	%
Private	250.06	82.76%	226.45	77.41%
Public	52.07	17.24%	66.07	22.59%
Total	302.13	100.00%	292.52	100.00%

Source: City of Virginia Beach Real Estate Assessors Office and Planning Department. Calculations incorporate water areas and reflect approximations that should be used for general planning purposes only.

Zoning

- The Zoning table shows the city zoning districts for the Newtown SGA. More than 183 acres (65%) of land within the SGA is zoned for Industrial purposes (I district).
- Office zoning (O-1 and O-2 districts) encompasses approximately 49 acres (17%) with Residential (A and R districts) encompassing approximately 19 acres (7%).

City of Virginia Beach Zoning, 2015

Newtown SGA		
Zoning District	Acres	%
A-12	0.02	0.01%
A-18	9.86	3.48%
A-36	6.60	2.33%
B-2	27.16	9.58%
H-1	4.47	1.58%
I-1	182.98	64.54%
I-2	0.98	0.34%
O-1	1.01	0.36%
O-2	47.55	16.77%
P-1	0.03	0.01%
R-7.5	0.09	0.03%
R-10	0.45	0.16%
R-20	0.04	0.01%
R-40	2.27	0.80%
Total	283.51	100.00%

Source: City of Virginia Beach Planning Department. Calculations incorporate water areas and reflect approximations that should be used for general planning purposes only.

Development Constraints

- Lack of accessible park spaces
- Lack of interconnected pedestrian and street infrastructure
- Lack of integrated mixed-uses
- Norfolk and Virginia Beach spilt ownership of Newtown Road

Development Opportunities

- Central location between Norfolk and the Virginia Beach at the intersection of I-264 and I-64
- Gateway to Virginia Beach
- Institutions in the area including the hospital, churches, and a variety of educational facilities
- Natural amenities such as water bodies and green spaces
- Future light rail transit
- The potential for new business growth and new retail opportunities

Source: Newtown Strategic Growth Area Master Plan, Adopted: July 6, 2010

<http://www.vbgov.com/government/departments/planning/areaplans/Documents/StrategicGrowthAreas/NewtownSGAPlan.pdf>

Public Investment

The basic infrastructure system for the implementation of the Newtown plan builds on a phased new street framework and block structure that provides the access and visibility necessary to consider redevelopment at higher densities. The new street network and block structure will

provide sidewalks for easy pedestrian movement throughout the district connecting to new parks and open space amenities. The following map shows programmed and funded Capital Improvement Projects (CIPs) for the Newtown SGA.

Programmed and Funded Capital Improvement Projects (CIPs), December 2015

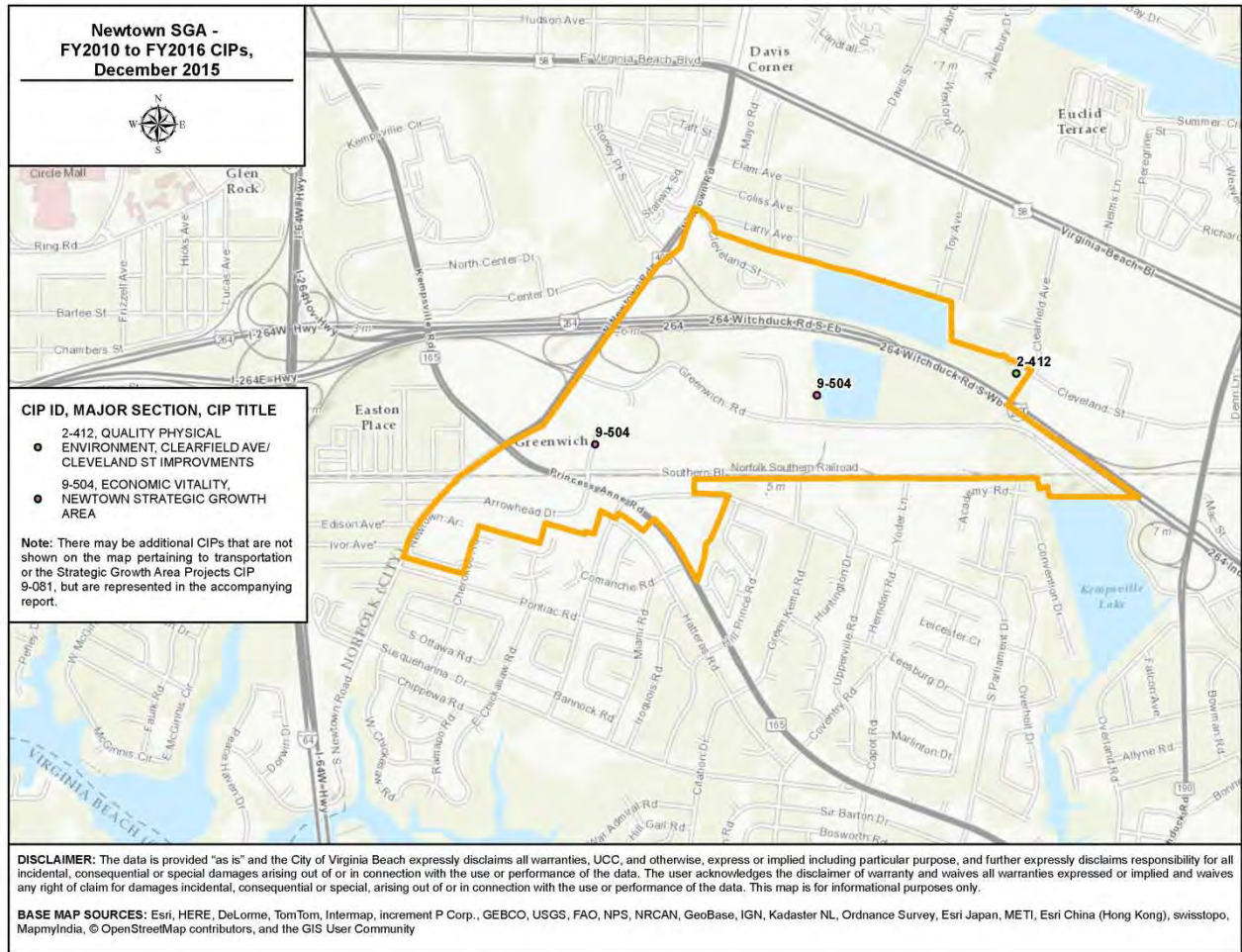


FIGURE 5

Newtown SGA - FY2010 to FY2016 CIPs, December 2015							
CIP ID	MAJOR SECTION	CIP TITLE	PROJECT CLASS	FIRST YEAR	LAST YEAR	PROGRAMMED FUNDING	APPROPRIATED FUNDING
2-093*	QUALITY PHYSICAL ENVIRONMENT	BUSES FOR VIRGINIA BEACH TRANSIT EXTENSION	ROADWAYS	2016	2016	\$3,636,212	\$0
2-412	QUALITY PHYSICAL ENVIRONMENT	CLEARFIELD AVE/ CLEVELAND ST IMPROVMENTS	ROADWAYS	2013	2013	\$825,000	\$825,000
9-081-004**	ECONOMIC VITALITY	STRATEGIC GROWTH AREA PROJECTS	ECONOMIC AND TOURISM	2010	2016	\$18,078,786	\$18,078,786
9-504	ECONOMIC VITALITY	NEWTOWN STRATEGIC GROWTH AREA	ECONOMIC AND TOURISM	2013	2014	\$3,583,240	\$420,000
Totals	4					\$26,123,238	\$19,323,786
*This CIP pertains to all SGAs.							
*The programmed and appropriated funding amounts represent CIP, 9-081, not the portion applied to this specific SGA							

Private Investment

The plan implementation strategies seek to transform underutilized commercial property into a series of mixed-use development opportunities. The old commercial properties will be transformed into a new mixed-use center, state of the art business parks, an educational campus, new light industrial space, and new residential neighborhoods.

Commercial and Residential New Building Permits, January 2010 to December 2015

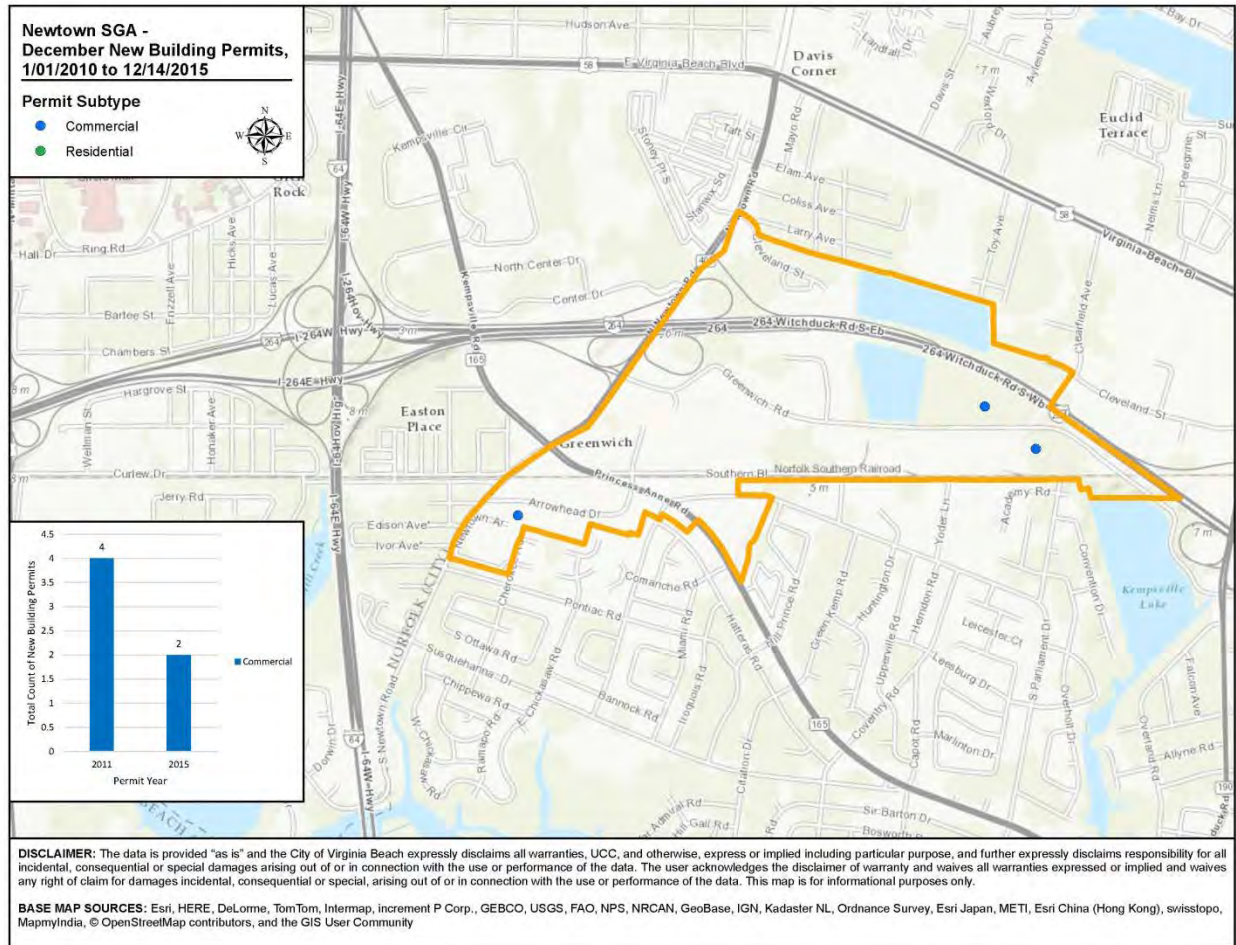


FIGURE 6

Newtown SGA – December New Building Permits, 1/01/2010 to 12/14/2015			
GPIN	Permit Year	Permit Description	Permit Subtype
14675462280000	2011	NEW 4 STORY APARTMENT SHELL ONLY. UNITS TO BE PERMITTED BY FLOOR FOR CO. PLANS AND SITE PLANS IN BIN 0.	Commercial
14675462280000	2011	CLUBHOUSE FOR GREENWICH VILLAGE APTS	Commercial
14675462280000	2011	GREENWICH VILLAGE APTS/BUILDING 2 SHELL	Commercial
14675462280000	2011	GREENWICH VILLAGE APTS/BUILDING 3 SHELL	Commercial
14674488420000	2015	TOP GOLF	Commercial
14579314580000	2015	construction trailer	Commercial
Total	6		

PEMBROKE SGA

Current Land Use

The Pembroke SGA is approximately 934 acres and is served by Interstate 264 and two major arterial roadways, Virginia Beach Boulevard and Independence Boulevard. This SGA benefits from an unused rail line that passes through the area extending from the Norfolk city line to the vicinity of the Oceanfront Resort Area.

- As illustrated on the Land Use table, the predominant land use across the Pembroke SGA is Commercial (296 acres or 32%). Other land uses in the area include Office (119 acres or 13%) and significant tracts of land devoted to Institutional (107 acres or 11%) and Residential uses (143 acres or 15%).
- Approximately 81 acres (9%) in the SGA are undeveloped land.
- The most significant change in land use from 2010 to 2016 is Multifamily which increased 48% (37 acres to 55 acres).

Land Use, 2016

Pembroke SGA					
Land Use Category	2010		2016		2010 to 2016 % Change
	Acres	%	Acres	%	
Commercial	312.68	33.42%	296.35	31.73%	-5.22%
Federal & State	6.69	0.72%	4.61	0.49%	-31.14%
Hotel	16.47	1.76%	18.71	2.00%	13.58%
Industrial	75.92	8.11%	75.94	8.13%	0.04%
Institutional	102.80	10.99%	107.23	11.48%	4.31%
Multi Family	37.15	3.97%	55.10	5.90%	48.30%
Office	128.98	13.79%	118.95	12.73%	-7.78%
Public/Semi-Public Other	66.09	7.06%	85.55	9.16%	29.46%
Single Family Attached	71.71	7.66%	71.36	7.64%	-0.48%
Single Family Detached	26.43	2.82%	16.51	1.77%	-37.54%
Undeveloped	90.29	9.65%	81.15	8.69%	-10.12%
Total	935.64	100.00%	934.04	100.00%	-0.17%

Source: City of Virginia Beach Real Estate Assessors Office and Planning Department. Calculations reflect approximations and should be used for general planning purposes only. Water areas and rights-of-way are not included in these land use calculations.

Ownership

The generalized Ownership table shows public and private land ownership across the Pembroke SGA. Approximately 84.44% (798.04 acres of land is privately-owned, and 15.56% (147.05 acres) is publicly-owned.

Land Ownership, 2015

Owner	2010		2015	
	Acres	%	Acres	%
Private	843.23	88.29%	798.04	84.44%
Public	111.84	11.71%	147.05	15.56%
Total	955.07	100.00%	945.09	100.00%

Source: City of Virginia Beach Real Estate Assessors Office and Planning Department. Calculations incorporate water areas and reflect approximations that should be used for general planning purposes only.

Zoning

- The Zoning table shows the city zoning districts for the Pembroke SGA. The predominant zoning is Business (B-2, B-3, B-4C, CBC districts) 498 acres (53%) of land within the SGA.
- Residential zoning (R and A districts) encompasses approximately 172 acres (18%), and Industrial zoning (I-1 and I-2 districts) represents approximately 193 acres (21%).

City of Virginia Beach Zoning, 2015

Pembroke SGA		
Zoning District	Acres	%
A-12	64.63	6.93%
A-18	16.27	1.74%
A-24	50.84	5.45%
A-36	9.50	1.02%
B-2	133.13	14.27%
B-3	193.99	20.80%
B-4	18.52	1.99%
B-4C	23.52	2.52%
CBC	128.49	13.78%
H-1	5.14	0.55%
I-1	160.75	17.23%
I-2	32.04	3.43%
O-2	65.19	6.99%
P-1	3.13	0.34%
R-2.5	0.60	0.06%
R-5D	19.7	2.12%
R-7.5	7.17	0.77%
R-10	0.06	0.01%
Total	932.80	100.00%

Source: City of Virginia Beach Planning Department. Calculations incorporate water areas and reflect approximations that should be used for general planning purposes only.

Development Constraints

- Traffic congestion and large street cross sections at boulevards are challenging for pedestrians
- Auto-oriented retail increases asphalt
- Lack of open space and gathering areas
- Lack of pedestrian connectivity makes it difficult to move around via foot or bike
- Industrial areas are unattractive and in need of improvement and better use

- Lack of transit

Development Opportunities

- Well positioned to take advantage of future transit system
- Improved traffic flow patterns, traffic calming measures, and streetscapes
- An urban street network with pedestrian connectivity
- Create a variety of diverse districts
- No restrictions for noise
- Foster a strong identity and create gateways so that people know they are in Pembroke
- Establish Thalia Creek's recreation activities, large network of open spaces, parks, boat ramp, walkways, and kayaking along the waterway
- Expand Town Center street concept to surrounding areas
- Connect to Lynnhaven River
- Blend new residential and complementary non-residential uses creating attractive, more intense, mixed-use centers.

Source: Pembroke Strategic Growth Area 4 Implementation Plan, Adopted: November 10, 2009
<http://www.vbgov.com/government/departments/planning/areaplans/Documents/Pembroke-TownCenter-CentralBusinessDistrict/PembrokeSGAPlan.pdf>

Public Investment

As the City has evolved from a rural county and oceanfront resort into major metropolitan area, the need has emerged for a social, economic, cultural and civic center to support the community. The Pembroke SGA located at the major intersection of the primary transportation corridors into a central position of the City's developed area presents a unique opportunity for the creation of a regional downtown. As the City moves forward and the area continue to redevelop, future planning efforts will need to consider the proposed urban system. The following map shows programmed and funded Capital Improvement Projects (CIPs) for the Pembroke SGA.

Programmed and Funded Capital Improvement Projects (CIPs), December 2015

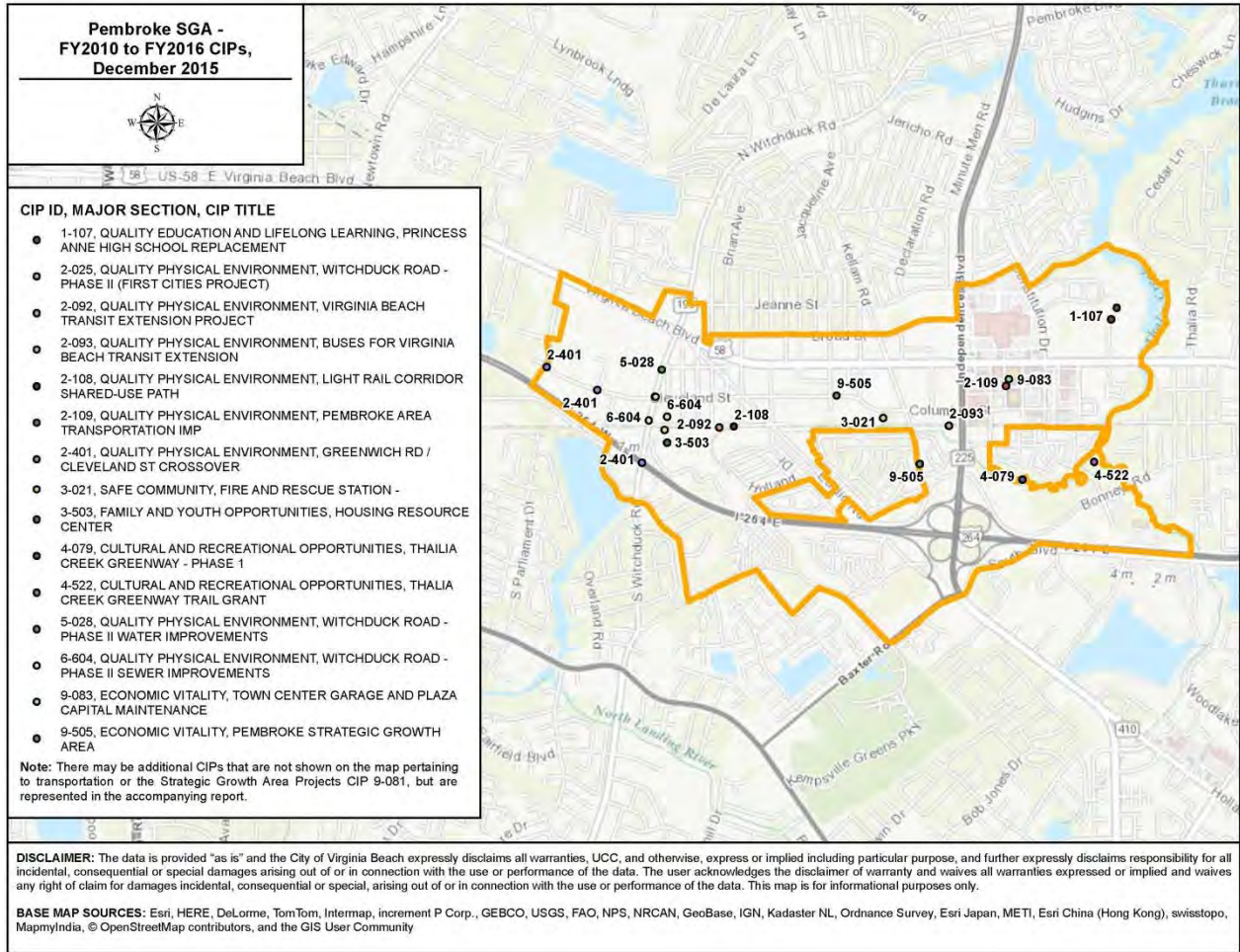


FIGURE 7

Pembroke SGA – FY2010 to FY 2016 CIPs, December 2015							
CIP ID	MAJOR SECTION	CIP TITLE	PROJECT CLASS	FIRST YEAR	LAST YEAR	PROGRAMMED FUNDING	APPROPRIATED FUNDING
1-107	QUALITY EDUCATION AND LIFELONG LEARNING	PRINCESS ANNE HIGH SCHOOL REPLACEMENT	SCHOOLS	2010	2016	\$15,000,000	\$0
2-025	QUALITY PHYSICAL ENVIRONMENT	WITCHDUCK ROAD PHASE II (FIRST CITIES PROJECT)	ROADWAYS	2010	2016	\$62,663,448	\$51,760,816
2-092	QUALITY PHYSICAL ENVIRONMENT	VIRGINIA BEACH TRANSIT EXTENSION PROJECT	ROADWAYS	2016	2016	\$310,378,000	\$0
2-093*	QUALITY PHYSICAL ENVIRONMENT	BUSES FOR VIRGINIA BEACH TRANSIT EXTENSION	ROADWAYS	2016	2016	\$3,636,212	\$0
2-108	QUALITY PHYSICAL ENVIRONMENT	LIGHT RAIL CORRIDOR SHARED-USE PATH	ROADWAYS	2016	2016	\$17,686,080	\$0
2-109	QUALITY PHYSICAL ENVIRONMENT	PEMBROKE AREA TRANSPORTATION IMP	ROADWAYS	2010	2011	\$3,500,000	\$0
2-401	QUALITY PHYSICAL ENVIRONMENT	GREENWICH RD / CLEVELAND ST CROSSOVER	ROADWAYS	2011	2016	\$12,618,750	\$11,360,750
3-021	SAFE COMMUNITY	FIRE AND RESCUE STATION - THALIA	BUILDINGS	2010	2014	\$9,435,000	\$9,435,000
3-503	FAMILY AND YOUTH OPPORTUNITIES	HOUSING RESOURCE CENTER	BUILDINGS	2011	2016	\$29,963,792	\$4,694,339
4-079	CULTURAL AND RECREATIONAL OPPORTUNITIES	THALIA CREEK GREENWAY - PHASE 1	PARKS AND RECREATION	2013	2016	\$1,100,000	\$125,000
4-522	CULTURAL AND RECREATIONAL OPPORTUNITIES	THALIA CREEK GREENWAY TRAIL GRANT	PARKS AND RECREATION	2014	2016	\$800,000	\$800,000
5-028	QUALITY PHYSICAL ENVIRONMENT	WITCHDUCK ROAD PHASE II WATER IMPROVEMENTS	WATER UTILITY	2013	2016	\$1,802,000	\$1,802,000
6-604	QUALITY PHYSICAL ENVIRONMENT	WITCHDUCK ROAD PHASE II SEWER IMPROVEMENTS	SEWER UTILITY	2010	2016	\$461,499	\$461,499
9-081-002**	ECONOMIC VITALITY	STRATEGIC GROWTH AREA PROJECTS	ECONOMIC AND TOURISM	2010	2016	\$18,078,786	\$18,078,786
9-083	ECONOMIC VITALITY	TOWN CENTER GARAGE AND PLAZA CAPITAL MAINTENANCE	ECONOMIC AND TOURISM	2010	2016	\$4,426,357	\$2,310,001
9-505	ECONOMIC VITALITY	PEMBROKE STRATEGIC GROWTH AREA	ECONOMIC AND TOURISM	2013	2014	\$6,977,656	\$415,000
Totals	16					\$498,527,580	\$101,243,191
*This CIP pertains to all SGAs							
**The programmed and appropriated funding amounts represent the parent CIP, 9-081, not the portion applied to this SGA							

Private Investment

The plan implementation strategies focus on key project areas as start-ups for the transition of suburban land use to urban development. Suggested areas are adjacent to Town Center and build on the momentum generated by public investments. The map below illustrates new commercial and residential building permits generated between January 2010 and December 2015 in the plan area.

Commercial and Residential New Building Permits, January 2010 to December 2015

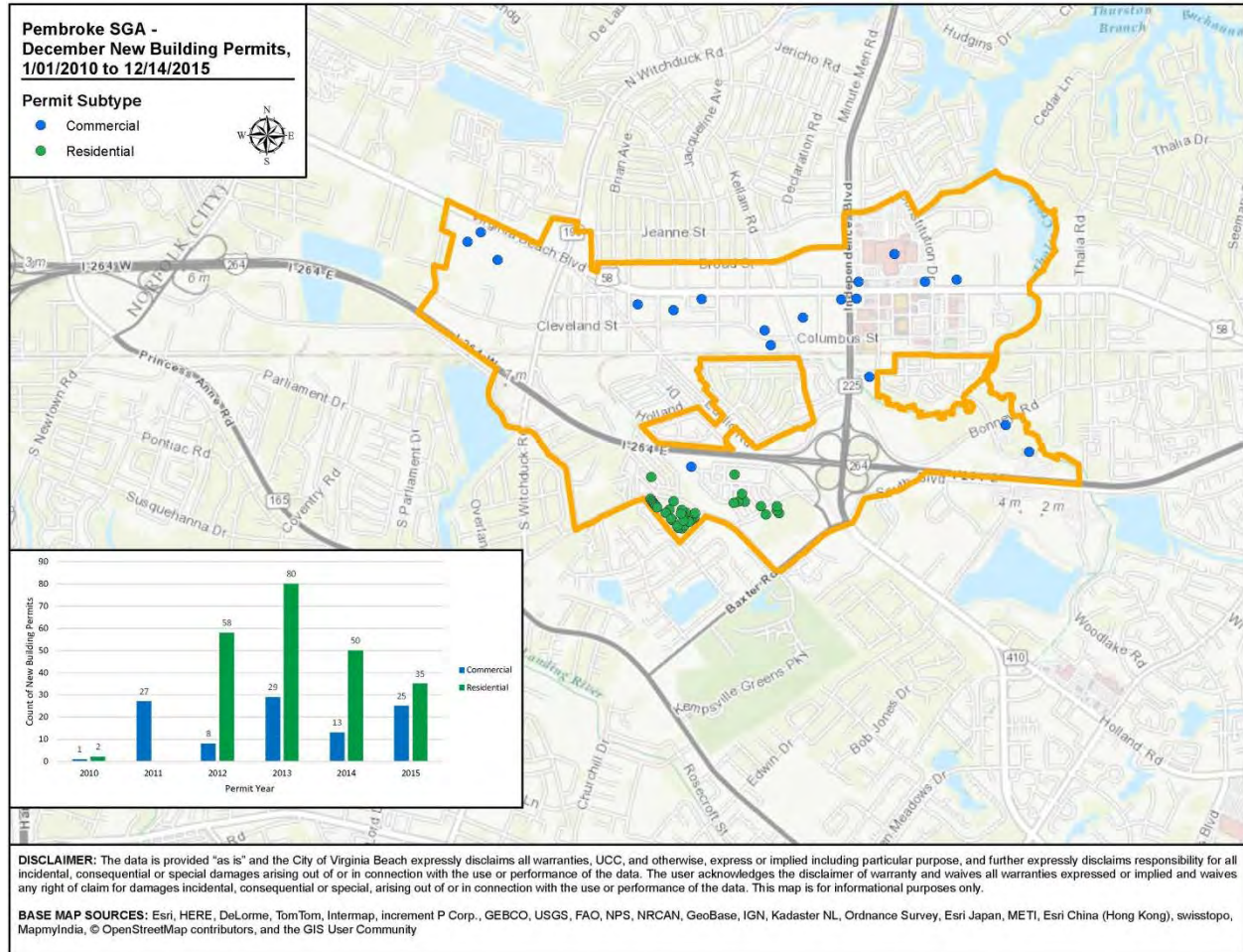


FIGURE 8

Pembroke SGA – December New Building Permits, 1/01/2010 to 12/14/2015			
GPIN	Permit Year	Permit Description	Permit Subtype
14772077040000	2010	NEW S/F RESIDENCE	Residential
14774551310000	2010	RESTAUNT	Commercial
14772097780000	2010	S/F RESIDENCE	Residential
14773447530000	2011	OFFICE ADDITION SHELL ONLY INT PERMIT REQUIRED FOR OCCUPANCY	Commercial
14772145640000	2011	MAINTENANCE BLDG	Commercial
14772145640000	2011	FITNESS CENTER	Commercial
14772145640000	2011	CLUB HOUSE	Commercial
14772145640000	2011	BUILDING TYPE 1 (12 UNITS 1 BED/1 BATH) 101 THRU 304	Commercial
14772145640000	2011	BUILDING TYPE 1 (12 UNITS 1 BED/1 BATH) 101 THRU 304	Commercial
14772145640000	2011	BUILDING TYPE 4 (12 UNITS 1 BED/1 BATH) 101 THRU 304	Commercial

Pembroke SGA – December New Building Permits, 1/01/2010 to 12/14/2015			
GPIN	Permit Year	Permit Description	Permit Subtype
14772145640000	2011	BUILDING TYPE 1 (12 UNITS 1 BED/1 BATH) 101 THRU 304	Commercial
14772145640000	2011	BUILDING TYPE 1 (12 UNITS 1 BED/1 BATH) 101 THRU 304	Commercial
14772145640000	2011	BUILDING TYPE 2 (12 UNITS 2 BED/2 BATH) 101 THRU 304	Commercial
14772145640000	2011	BUILDING TYPE 2 (12 UNITS 2 BED/2 BATH) 101 THRU 304	Commercial
14772145640000	2011	BUILDING TYPE 2 (12 UNITS 2 BED/2 BATH) 101 THRU 304	Commercial
14772145640000	2011	BUILDING TYPE 2 (12 UNITS 2 BED/2 BATH) 101 THRU 304	Commercial
14772145640000	2011	BUILDING TYPE 2 (12 UNITS 2 BED/2 BATH) 101 THRU 304	Commercial
14772145640000	2011	BUILDING TYPE 2 (12 UNITS 2 BED/2 BATH) 101 THRU 304	Commercial
14772145640000	2011	BUILDING TYPE 2 (12 UNITS 2 BED/2 BATH) 101 THRU 304	Commercial
14772145640000	2011	Engineer letter for foundation with 201111503B0	Commercial
14772145640000	2011	BUILDING TYPE 2 (12 UNITS 2 BED/2 BATH) 101 THRU 304	Commercial
14772145640000	2011	BUILDING TYPE 2 (12 UNITS 2 BED/2 BATH) 101 THRU 304	Commercial
14772145640000	2011	BUILDING TYPE 2 (12 UNITS 2 BED/2 BATH) 101 THRU 304	Commercial
14772145640000	2011	BUILDING TYPE 2 (12 UNITS 2 BED/2 BATH) 101 THRU 304	Commercial
14772145640000	2011	BUILDING TYPE 2 (12 UNITS 2 BED/2 BATH) 101 THRU 304	Commercial
14772145640000	2011	BUILDING TYPE 3 (12 UNITS 3 BED/2 BATH) 101 THRU 304	Commercial
14772145640000	2011	BUILDING TYPE 3 (12 UNITS 3 BED/2 BATH) 101 THRU 304	Commercial
14772145640000	2011	BUILDING TYPE 3 (12 UNITS 3 BED/2 BATH) 101 THRU 304	Commercial
14772145640000	2011	BUILDING TYPE 3 (12 UNITS 3 BED/2 BATH) 101 THRU 304	Commercial
14772145640000	2011	BUILDING TYPE 3 (12 UNITS 3 BED/2 BATH) 101 THRU 304	Commercial
14676694720000	2011	CAR WASH	Commercial
14772098330000	2012	NEW S/F 2006 USBC, DACOR LLC MODEL 2212.	Residential
14770135900000	2012	SET MOBILE HOME.	Residential
14775594250000	2012	NEW WALGREENS.	Commercial
14775594250000	2012	NEW WALGREENS.	Commercial
14770135900000	2012	NEW MOBILE HOME TO LOCATED AT COUNTY VIEW MOBILE HOME PARK	Residential
14772122020000	2012	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2012	TOWNHOUSE MODEL 900 2009 USBC	Residential

Pembroke SGA – December New Building Permits, 1/01/2010 to 12/14/2015			
GPIN	Permit Year	Permit Description	Permit Subtype
14772122020000	2012	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2012	TOWNHOUSE MODEL 900 2009 USBC	Residential
14775594250000	2012	NEW WALGREENS	Commercial
14772122020611	2012	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020611	2012	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122021021	2012	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122021021	2012	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122021021	2012	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122021021	2012	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122021021	2012	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122021021	2012	TOWNHOUSE MODEL 901 2009 USBC	Residential
14774374890000	2012	DESTINATION XL @ TOWN CENTER STATION INTERIOR ALTERATIONS	Commercial
14772122021021	2012	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122021021	2012	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122021021	2012	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122021021	2012	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122021021	2012	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122021021	2012	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122021021	2012	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122021021	2012	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122021021	2012	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122021021	2012	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122021021	2012	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122021021	2012	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122021021	2012	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122021021	2012	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122021021	2012	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122021021	2012	TOWNHOUSE MODEL 901 2009 USBC	Residential
14775620340000	2012	TEMPORARY CONSTRUCTION TRAILER	Commercial
14772122020000	2012	TOWNHOUSE MODEL 901 2009 USBC	Residential

Pembroke SGA – December New Building Permits, 1/01/2010 to 12/14/2015			
GPIN	Permit Year	Permit Description	Permit Subtype
14772122020000	2012	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2012	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122020000	2012	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122020000	2012	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2012	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2012	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122020000	2012	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122020000	2012	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2012	TOWNHOUSE MODEL 901 2009 USBC	Residential
14771541010000	2012	NEW 1 STORY 14X28 OFFICE/STORAGE	Commercial
14770097930000	2012	GBK BUILDERS MODEL CKA 01 3 STORY 4 BEDROOM,3.5 BATH	Residential
14770097930000	2012	MODEL BKA01 3 STORY,3 BEDROOM	Residential
14772122020000	2012	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2012	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122020000	2012	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2012	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2012	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122020000	2012	TOWNHOUSE MODEL 901 2009 USBC	Residential
14770097930000	2012	NEW SF 2009 USBC. GBK DAYTON MODEL WITH DKA01 OPTIONS	Residential
14770097930000	2012	GBK BUILDERS MODEL CKA 01 3 STORY 4 BEDROOM,3.5 BATH	Residential
14770097930000	2012	GBK BUILDERS MODEL CKA 01 3 STORY 4 BEDROOM,3.5 BATH	Residential
14772481070000	2012	TOWN CENTER FIRE STATION	Commercial
14772122020000	2012	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2012	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2012	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122020000	2012	TOWNHOUSE MODEL 900 2009 USBC	Residential

Pembroke SGA – December New Building Permits, 1/01/2010 to 12/14/2015			
GPIN	Permit Year	Permit Description	Permit Subtype
14772481070000	2012	2 TEMP CONSTRUCTION TRAILERS	Commercial
14772122020000	2012	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2012	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122020000	2012	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2012	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122020000	2012	TOWNHOUSE MODEL 901 2009 USBC	Residential
14771146920000	2013	PAVILION STRUCTURE	Commercial
14771146920000	2013	MAIL KIOSK	Commercial
14771146920000	2013	FITNESS CENTER	Commercial
14771146920000	2013	MULTI-FAMILY 12 UNITS 101 THRU 304	Commercial
14771146920000	2013	MULTI-FAMILY 12 UNITS 101 THRU 304	Commercial
14771146920000	2013	MULTI-FAMILY 12 UNITS 101 THRU 304	Commercial
14771146920000	2013	MULTI-FAMILY 12 UNITS 101 THRU 304	Commercial
14771146920000	2013	MULTI-FAMILY 12 UNITS 101 THRU 304	Commercial
14771146920000	2013	MULTI-FAMILY 12 UNITS 101 THRU 304	Commercial
14771146920000	2013	MULTI-FAMILY 12 UNITS 101 THRU 304//FINAL	Commercial
14771146920000	2013	MULTI-FAMILY 12 UNITS 101 THRU 304//FINAL	Commercial
14771146920000	2013	MULTI-FAMILY 12 UNITS 101 THRU 304	Commercial
14771146920000	2013	MULTI-FAMILY 12 UNITS 101 THRU 304	Commercial
14771146920000	2013	MULTI-FAMILY 12 UNITS 101 THRU 304	Commercial
14771146920000	2013	MULTI-FAMILY 12 UNITS 101 THRU 304	Commercial
14771146920000	2013	MULTI-FAMILY 12 UNITS 101 THRU 304	Commercial
14772122020000	2013	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2013	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122020000	2013	TOWNHOUSE MODEL 901 2009 USBC	Residential

Pembroke SGA – December New Building Permits, 1/01/2010 to 12/14/2015			
GPIN	Permit Year	Permit Description	Permit Subtype
14772122020000	2013	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122020000	2013	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2013	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2013	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122020000	2013	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2013	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2013	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122020000	2013	TOWNHOUSE MODEL 901 2009 USBC	Residential
14770488370000	2013	NEW MERCEDES BENZ DEALERSHIP.	Commercial
14770488370000	2013	NEW MERCEDES BENZ DEALERSHIP.	Commercial
14772122020000	2013	CORNERSTONE CLUBHOUSE	Commercial
14772122020000	2013	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2013	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122020000	2013	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122020000	2013	TOWNHOUSE MODEL 901 2009 USBC	Residential
14770419590000	2013	NEW CAR CHOICE HEADQUARTERS	Commercial
14770419590000	2013	NEW CAR CHOICE HEADQUARTERS	Commercial
14770097930000	2013	NEW SF 2009 USBC. GBK DAYTON MODEL WITH DKB01 OPTIONS.	Residential
14770097930000	2013	GBK BUILDERS MODEL CKA 01 3 STORY 4 BEDROOM,3.5 BATH 2009 USBC	Residential
14770097930000	2013	GBK BUILDERS MODEL CKA 01 3 STORY 4 BEDROOM,3.5 BATH 2009 USBC	Residential
14770097930000	2013	NEW SF 2009 USBC. GBK DAYTON MODEL WITH DKA01 OPTIONS.	Residential
14770097930040	2013	NEW SF 2009 USBC. GBK AKRON MODEL WITH AKB01 OPTIONS.	Residential

Pembroke SGA – December New Building Permits, 1/01/2010 to 12/14/2015			
GPIN	Permit Year	Permit Description	Permit Subtype
14772099210000	2013	NEW SF MODEL 1750 2009 IRC	Residential
14772099210000	2013	NEW SF MODEL 1750 2009 IRC	Residential
14772122020000	2013	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2013	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122020000	2013	TOWNHOUSE MODEL 901 2009 USBC	Residential
14770097930000	2013	NEW SF 2009 USBC. GBK DAYTON MODEL WITH DKB01 OPTIONS.	Residential
14770097930000	2013	NEW SF 2009 USBC. GBK DAYTON MODEL WITH DKB01 OPTIONS.	Residential
14772122020000	2013	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2013	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122020000	2013	TOWNHOUSE MODEL 901 2009 USBC	Residential
14770097930000	2013	GBK BUILDERS MODEL CKA 01 3 STORY	Residential
14770097930000	2013	GBK BUILDERS MODEL CKA 01 3 STORY	Residential
14770488370000	2013	TEMP CONSTRUCTION TRAILER	Commercial
14770097930000	2013	GBK BUILDERS MODEL CKA 01 3 STORY 4 BEDROOM,3.5 BATH	Residential
14770097930000	2013	GBK BUILDERS MODEL CKB 01 3 STORY 4 BEDROOM, 3.5 BATH.	Residential
14770097930000	2013	NEW SF 2009 USBC. GBK AKRON MODEL WITH AKB01 OPTIONS.	Residential
14772122020000	2013	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2013	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122020000	2013	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2013	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2013	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122020000	2013	TOWNHOUSE MODEL 901 2009 USBC	Residential

Pembroke SGA – December New Building Permits, 1/01/2010 to 12/14/2015			
GPIN	Permit Year	Permit Description	Permit Subtype
14772122020000	2013	TOWNHOUSE MODEL 901 2009 USBC	Residential
14676557950000	2013	NEW FIRE PUMP HOUSE FOR TRC III CENTER.	Commercial
14676557950000	2013	NEW FIRE PUMP HOUSE FOR TRC III CENTER.	Commercial
14770097930000	2013	GBK BUILDERS MODEL CKA 01 3 STORY 4 BEDROOM,3.5 BATH	Residential
14770097930000	2013	GBK BUILDERS MODEL CKA 01 3 STORY 4 BEDROOM,3.5 BATH	Residential
14770097930000	2013	MODEL BKA01 3 STORY,3 BEDROOM,VERIFY SITE PLAN FOR RATED EXTERIOR WALL BASED ON FIRE SEPARATION TO LOT LINE.	Residential
14770097930000	2013	MODEL BKA01 3 STORY,3 BEDROOM,VERIFY SITE PLAN FOR RATED EXTERIOR WALL BASED ON FIRE SEPARATION TO LOT LINE.	Residential
14770097930000	2013	NEW SF 2009 USBC. GBK DAYTON MODEL WITH DKA01 OPTIONS.	Residential
14770097930000	2013	NEW SF 2009 USBC. GBK DAYTON MODEL WITH DKA01 OPTIONS. ***VERIFY FIRE SEPERATION DISTANCE AS REQUIRED, RATED WALL DETAILS ARE ON PLANS***	Residential
14770130750000	2013	FOUNDATION PERMITS ONLY... BLDNG PERMIT TO BE ISSUED SEPARATELY	Residential
14772122020000	2013	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2013	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122020000	2013	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122020000	2013	TOWNHOUSE MODEL 901 2009 USBC	Residential
14770419590000	2013	TEMP CONST TRAILER - NEW CAR CHOICE HEADQUARTERS	Commercial
14770130750000	2013	KENLEY ROAD 200 204 HABITAT DUPLEX	Residential
14770140010000	2013	KENLEY ROAD 204 HABITAT DUPLEX	Residential
14770049280000	2013	KENLEY ROAD 208 212 HABITAT DUPLEX	Residential
14770049550000	2013	KENLEY ROAD 208 212 HABITAT DUPLEX	Residential
14770049720000	2013	KENLEY ROAD 216 220 HABITAT DUPLEX	Residential
14770048990000	2013	KENLEY ROAD 216 220 HABITAT DUPLEX	Residential
14772145640000	2013	1 OF 6 TOWNHOMES. CHESAPEAKE HOMES MODEL 901 2009 USBC.	Residential

Pembroke SGA – December New Building Permits, 1/01/2010 to 12/14/2015			
GPIN	Permit Year	Permit Description	Permit Subtype
14772145640000	2013	1 OF 6 TOWNHOMES. CHESAPEAKE HOMES MODEL 901 2009 USBC.	Residential
14772145640000	2013	1 OF 6 TOWNHOMES. CHESAPEAKE HOMES MODEL 901 2009 USBC.	Residential
14772145640000	2013	1 OF 6 TOWNHOMES. CHESAPEAKE HOMES MODEL 901 2009 USBC.	Residential
14772145640000	2013	1 OF 6 TOWNHOMES. CHESAPEAKE HOMES MODEL 901 2009 USBC.	Residential
14772145640000	2013	1 OF 6 TOWNHOMES. CHESAPEAKE HOMES MODEL 901 2009 USBC.	Residential
14772145640000	2013	1 OF 6 TOWNHOMES. CHESAPEAKE HOMES MODEL 901 2009 USBC.	Residential
14772145640000	2013	1 OF 6 TOWNHOMES. CHESAPEAKE HOMES MODEL 901 2009 USBC.	Residential
14772145640000	2013	1 OF 6 TOWNHOMES. CHESAPEAKE HOMES MODEL 900 2009 USBC.	Residential
14772145640000	2013	1 OF 6 TOWNHOMES. CHESAPEAKE HOMES MODEL 900 2009 USBC.	Residential
14772145640000	2013	1 OF 6 TOWNHOMES. CHESAPEAKE HOMES MODEL 900 2009 USBC.	Residential
14772145640000	2013	1 OF 6 TOWNHOMES. CHESAPEAKE HOMES MODEL 900 2009 USBC.	Residential
14770097930034	2013	NEW SF 2009 USBC. GBK DAYTON MODEL WITH DKC01 OPTIONS.	Residential
14772122021121	2013	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122021121	2013	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122021121	2013	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122021121	2013	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122021121	2013	TOWNHOUSE MODEL 901 2009 USBC	Residential
14770097930000	2013	NEW SF 2009 USBC. GBK MODEL CKC01 2 STORY 3 BEDROOMS 2.5 BATHS.	Residential
14770097930000	2013	NEW SF 2009 USBC. GBK MODEL CKC01 2 STORY 3 BEDROOMS 2.5 BATHS.	Residential
14770097930000	2013	GBK BUILDERS MODEL CKA 01 3 STORY 4 BEDROOM,3.5 BATH	Residential
14772476250000	2013	WALMART TOWN CENTER	Commercial
14772476250000	2013	WALMART OPEN PARKING GARAGE TOWN CENTER	Commercial
14773447530000	2014	NEW COMMERCIAL RETAIL SHELL, TOWN CENTER OUTPARCEL - 4701 VIRGINIA BEACH BLVD///SHELL ONLY,	Commercial
14772122020000	2014	TOWNHOUSE MODEL 901 2009 USBC	Residential

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GPIN	Permit Year	Permit Description	Permit Subtype
14772122020000	2014	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122020000	2014	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2014	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122020000	2014	TOWNHOUSE MODEL 901 2009 USBC	Residential
14770097930011	2014	NEW SF 2009 USBC. GBK REVISE PERMIT TO CHANGE TO CANTON MODEL CKCA01	Residential
14770097930018	2014	GBK BUILDERS MODEL CKA 01 3 STORY 4 BEDROOM,3.5 BATH	Residential
14770097930024	2014	NEW SF 2009 USBC. GBK AKRON MODEL WITH AKB01 OPTIONS.	Residential
14772122020000	2014	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2014	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122020000	2014	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2014	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122020000	2014	TOWNHOUSE MODEL 901 2009 USBC	Residential
14770097930035	2014	NEW SF 2009 USBC. GBK MODEL CKC01 2 STORY 3 BEDROOMS 2.5 BATHS.	Residential
14770097930036	2014	NEW SF 2009 USBC. GBK DAYTON MODEL WITH DKC01 OPTIONS.	Residential
14770097930053	2014	NEW SFR. UNITS THAT ARE LESS THAN 5FT FROM PROPERTY LINE ARE TO HAVE THE EXTERIOR WALLS RATED TO ONE HOUR PER R302.1	Residential
14770097930023	2014	NEW SFR. EXTERIOR WALLS THAT ARE WITHIN 5FT OF THE PROPERTY LINE ARE TO BE RATED TO R302.1 FOR ONE HOUR	Residential
14777265350000	2014	OLYPIA CONVERGENCE V	Commercial
14772122020000	2014	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2014	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2014	CHESEPEAKE HOMES TOWNHOUSE MODEL 901 2 009 USBC	Residential
14772122021411	2014	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122020000	2014	TOWNHOUSE MODEL 900 2009 USBC	Residential
14777282720000	2014	TEMPORARY CONSTRUCTION TRAILER	Commercial
14777282720000	2014	TEMPORARY CONSTRUCTION TRAILER	Commercial

Pembroke SGA – December New Building Permits, 1/01/2010 to 12/14/2015			
GPIN	Permit Year	Permit Description	Permit Subtype
14770097930026	2014	NEW SF 2009 USBC. GBK DAYTON MODEL WITH DKA01 OPTIONS.	Residential
14770097930033	2014	NEW SF 2009 USBC. GBK AKRON MODEL WITH AKB01 MODIFIED,,OPTIONS.	Residential
14770097930033	2014	SF RESIDENCE MODEL AKB01-MODIFIED IRC 2009	Residential
14772122020000	2014	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2014	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122020000	2014	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2014	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2014	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122020000	2014	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2014	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122020000	2014	TOWNHOUSE MODEL 901 2009 USBC	Residential
14770097930056	2014	GBK BUILDERS MODEL CKA 01 3 STORY 4 BEDROOM,3.5 BATH	Residential
1477265350000	2014	CONVERGENCE V PARKING DECK,,MODIFICATION GRANTED TO BUILD OVER AN INTERIOR LOT LINE PER LETTER ON FILE//FIELD CHANGE TO DSC SITE PLANS IN PR FILE,,ADDITIONAL SHOP DRAWINGS REQUIRED FOR COVERED CANOPY WALKWAYS	Commercial
14770097930013	2014	NEW SF 2009 USBC. GBK DAYTON MODEL WITH DKA01 OPTIONS. ***VERIFY FIRE SEPERATION DISTANCE AS REQUIRED, RATED WALL DETAILS ARE ON PLANS***	Residential
14770097930013	2014	MODEL DKA01. VERIFY FIRE SEPERATION AS REQUIRED. RATED WALL DETAILS ARE ON THE PLANS. USBC 2009	Residential
14772122020000	2014	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2014	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122020000	2014	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2014	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2014	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122020000	2014	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2014	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122020000	2014	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2014	1 OF 8 CONDOS 2009 USBC	Commercial
14772122020000	2014	CORNERSTONE	Commercial
14772122020000	2014	2 OF 8 CONDOS 2009 USBC	Commercial
14772122020000	2014	CORNERSTONE	Commercial
14772122020000	2014	3 OF 8 CONDOS 2009 USBC	Commercial
14772122020000	2014	CORNERSTONE	Commercial

Pembroke SGA – December New Building Permits, 1/01/2010 to 12/14/2015			
GPIN	Permit Year	Permit Description	Permit Subtype
14772122020000	2014	4 OF 8 CONDOS 2009 USBC CORNERSTONE	Commercial
14772122020000	2014	5 OF 8 CONDOS 2009 USBC CORNERSTONE	Commercial
14772122020000	2014	6 OF 8 CONDOS 2009 USBC CORNERSTONE	Commercial
14772122020000	2014	7 OF 8 CONDOS 2009 USBC CORNERSTONE	Commercial
14772122020000	2014	8 OF 8 CONDOS 2009 USBC CORNERSTONE	Commercial
14770097930000	2014	GBK BUILDERS MODEL CKA 01 3 STORY 4 BEDROOM,3.5 BATH	Residential
14770097930000	2014	NEW SF 2009 USBC. GBK AKRON MODEL WITH AKB01 OPTIONS.	Residential
14772122020000	2014	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2014	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2014	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2014	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2014	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2014	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2014	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122020000	2014	SPRINKLER ROOM FOR EQUIPMENT	Residential
14770097930053	2015	GBK BUILDERS MODEL CKA 01 3 STORY 4 BEDROOM,3.5 BATH.	Residential
14770097930003	2015	NEW SF 2009 USBC. GBK DAYTON MODEL WITH DKB01 OPTIONS.	Residential
14772122020000	2015	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122020000	2015	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2015	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122020000	2015	TOWNHOUSE MODEL 901 2009 USBC	Residential
14770097930000	2015	NEW SF 2009 USBC. GBK AKRON MODEL WITH AKB01 OPTIONS.	Residential
14770097930000	2015	NEW SF 2009 USBC. GBK AKRON MODEL WITH AKB01 OPTIONS.	Residential

Pembroke SGA – December New Building Permits, 1/01/2010 to 12/14/2015			
GPIN	Permit Year	Permit Description	Permit Subtype
14770097930000	2015	NEW SF 2009 USBC. GBK AKRON MODEL WITH AKB01 OPTIONS.	Residential
14770097930000	2015	NEW SF 2009 USBC. GBK DAYTON MODEL WITH DKA01 OPTIONS.	Residential
14770097930000	2015	GBK BUILDERS MODEL CKA 01 3 STORY 4 BEDROOM,3.5 BATH	Residential
14772122020000	2015	1 OF 4 CONDOS 2009 USBC.	Commercial
14772122020000	2015	CORNERSTONE	Commercial
14772122020000	2015	1 OF 4 CONDOS 2009 USBC.	Commercial
14772122020000	2015	CORNERSTONE	Commercial
14772122020000	2015	1 OF 4 CONDOS 2009 USBC.	Commercial
14772122020000	2015	CORNERSTONE	Commercial
14772122020000	2015	1 OF 4 CONDOS 2009 USBC.	Commercial
14772122020000	2015	CORNERSTONE	Commercial
14770097930022	2015	NEW SFR AKB01-M. ALL EXTERIOR WALLS LESS THAN 10FT FROM NEIGHBOR BUILDING ARE TO BE RATED FOR 1HR	Residential
14770097930058	2015	NEW SFR. ALL EXTERIOR WALLS WITH IN 10FT OF THE NEIGHBOR BUILDING ARE TO BE 1HR RATED	Residential
14770097930017	2015	NEW SFR. ALL EXTERIOR WALLS WITH IN 10FT OF THE NEIGHBOR BUILDING ARE TO BE 1HR RATED	Residential
14770097930043	2015	NEW SFR. EXTERIOR WALLS LESS THAN 5FT FROM THE PROPERTY LINE. STRUCTURE TO BE RATED FOR ONE HOUR ON BOTH SIDES	Residential
14772122020000	2015	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122020000	2015	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2015	TOWNHOUSE MODEL 901 2009 USBC	Residential
14772122020000	2015	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122020000	2015	TOWNHOUSE MODEL 900 2009 USBC	Residential
14772122020000	2015	TOWNHOUSE MODEL 901 2009 USBC	Residential
14774673210000	2015	CONSTRUCTION TRAILER AS SHOWN ON SITE PLAN	Commercial
14772122020000	2015	1 OF 4 CONDOS 2009 USBC.	Commercial
14772122020000	2015	CORNERSTONE	Commercial
14772122020000	2015	1 OF 4 CONDOS 2009 USBC.	Commercial
14772122020000	2015	CORNERSTONE	Commercial
14772122020000	2015	CONDOS 2009 USBC.	Commercial
14772122020000	2015	CORNERSTONE	Commercial
14772122020000	2015	CONDOS 2009 USBC.	Commercial
14772122020000	2015	CORNERSTONE	Commercial

Pembroke SGA – December New Building Permits, 1/01/2010 to 12/14/2015			
GPIN	Permit Year	Permit Description	Permit Subtype
14772122020000	2015	CONDOS 2009 USBC. CORNERSTONE	Commercial
14772122020000	2015	CONDOS 2009 USBC. CORNERSTONE	Commercial
14772122020000	2015	CONDOS 2009 USBC. CORNERSTONE	Commercial
14772122020000	2015	CONDOS 2009 USBC. CORNERSTONE	Commercial
14770097930029	2015	NEW SF 2009 USBC. GBK DAYTON MODEL WITH DKC01 OPTIONS.	Residential
14676643060000	2015	TEMP CONST TRAILER	Commercial
14774673210000	2015	R.E.I SHELL ONLY. NO UTILITY RELEASES UNDER THE SHELL. NEW TENANT TO PULL SEPERATE PERMITS	Commercial
14772122020000	2015	NEW STACKED TOWN HOUSE 8-UNIT BUILDING - PLANS IN BIN 197 MODEL 655 A - 2009 USBC	Commercial
14772122020000	2015	NEW STACKED TOWN HOUSE 8-UNIT BUILDING - PLANS IN BIN 197 MODEL 656 A - 2009 USBC	Commercial
14772122020000	2015	NEW STACKED TOWN HOUSE 8-UNIT BUILDING - PLANS IN BIN 197 MODEL 658 RA - 2009 USBC	Commercial
14772122020000	2015	NEW STACKED TOWN HOUSE 8-UNIT BUILDING - PLANS IN BIN 197 MODEL 657 - 2009 USBC	Commercial
14772122020000	2015	NEW STACKED TOWN HOUSE 8-UNIT BUILDING - PLANS IN BIN 197 MODEL 657 - 2009 USBC	Commercial
14772122020000	2015	NEW STACKED TOWN HOUSE 8-UNIT BUILDING - PLANS IN BIN 197 MODEL 658 R - 2009 USBC	Commercial
14772122020000	2015	NEW STACKED TOWN HOUSE 8-UNIT BUILDING - PLANS IN BIN 197 MODEL 656 A - 2009 USBC	Commercial
14772122020000	2015	NEW STACKED TOWN HOUSE 8-UNIT BUILDING - PLANS IN BIN 197 MODEL 655 A - 2009 USBC	Commercial
14770097930000	2015	NEW SF 2012 USBC. GBK AKRON MODEL WITH AKB01 OPTIONS. ***VERIFY FIRE SEPERATION DISTANCE AS REQUIRED, RATED WALL DETAILS ARE ON PLANS*** - CORRECT GPIN 1477-00-9793-0016	Residential
14770097930000	2015	NEW SF 2012 USBC. GBK AKRON MODEL WITH AKB01 OPTIONS. ***VERIFY FIRE SEPERATION DISTANCE AS REQUIRED, RATED WALL DETAILS ARE ON PLANS***	Residential

Pembroke SGA – December New Building Permits, 1/01/2010 to 12/14/2015			
GPIN	Permit Year	Permit Description	Permit Subtype
		CORRECT GPIN - 14770097930020	
14774511630000	2015	233 INDEPENDENCE BLVD COMMERCIAL ADDITIONT MOBILE - SHELL ONLY.	Commercial
14772122020000	2015	NEW TOWNHOUSE 2012 USBC	Residential
14772122020000	2015	NEW TOWNHOUSE 2012 USBC	Residential
14772122020000	2015	NEW TOWNHOUSE 2012 USBC	Residential
14772122020000	2015	NEW TOWNHOUSE 2012 USBC	Residential
14772122020000	2015	NEW TOWNHOUSE 2012 USBC	Residential
14772122020000	2015	NEW TOWNHOUSE 2012 USBC	Residential
14772122020000	2015	NEW TOWNHOUSE 2012 USBC	Residential
14770097930000	2015	NEW SF 2012 USBC. GBK MODEL CKC01 2 STORY 3 BEDROOMS 2.5 BATHS. FIRE RATED WALLS TO BE INSTALLED WHERE FIRE SEPARATION <5' AS NEEDED, DETAILS ARE ON APPROVED PLANS.	Residential
14772122020000	2015	NEW TOWNHOUSE 2012 USBC. MODEL 900	Residential
14772122020000	2015	NEW TOWNHOUSE 2012 USBC. MODEL 900	Residential
14772122020000	2015	NEW TOWNHOUSE 2012 USBC. MODEL 901	Residential
14772122020000	2015	NEW TOWNHOUSE 2012 USBC. MODEL 901	Residential
14776554690000	2015	TOWN CENTER COMPLEX SHELL BUILDING - NO RELEASES OR C/O UNTIL BUILD OUTS PERMITTED.	Commercial
Total			328

Rosemont SGA

Current Land Use

The Rosemont SGA is approximately 323 acres and located in the center of the city east of the Pembroke SGA and is served by an I-264 interchange and two major crossing arterials. This SGA is attractive to businesses seeking easy access to transportation and serving the vast residential neighborhoods that surround it.

- As illustrated on the Land Use table, the predominant land use across the Rosemont SGA is Commercial (231 acres or 71%). Other land uses in the area include Public/Semipublic (25 acres or 8%), Office (21 acres or 7%) and Multi-Family (21 acres or 7%).
- Approximately 11 acres (3%) in the SGA are Undeveloped land.
- The most significant change in land use from 2010 to 2016 is Commercial which increased 3% (224 acres to 231 acres).

Land Use, 2016

Rosemont SGA					
Land Use Category	2010		2016		2010 to 2016 % Change
	Acres	%	Acres	%	
Commercial	224.01	69.19%	230.67	71.40%	2.97%
Federal & State	0.16	0.05%	0.35	0.11%	110.79%
Hotel	0.87	0.27%	0.87	0.27%	0.00%
Institutional	13.37	4.13%	13.34	4.13%	-0.26%
Multi Family	21.07	6.51%	21.11	6.53%	0.19%
Office	22.26	6.88%	21.17	6.55%	-4.93%
Public/Semi-Public Other	25.04	7.74%	24.59	7.61%	-1.80%
Single Family Attached	0.20	0.06%	0.09	0.03%	-57.94%
Single Family Detached	0.25	0.08%		0.00%	-100.00%
Undeveloped	16.49	5.09%	10.90	3.37%	-33.92%
Total	323.75	100.00%	323.09	100.00%	-0.21%

Source: City of Virginia Beach Real Estate Assessors Office and Planning Department. Calculations reflect approximations and should be used for general planning purposes only. Water areas and rights-of-way are not included in these land use calculations.

Ownership

- The generalized Ownership table shows public and private land ownership across the Rosemont SGA. Approximately 305 acres (94%) of land is privately-owned, and 20 acres (6%) is publicly-owned.

Land Ownership, 2015

Owner	2010		2015	
	Acres	%	Acres	%
Private	318.80	97.91%	304.88	93.76%
Public	6.79	2.09%	20.29	6.24%
Total	325.59	100.00%	325.17	100.00

Source: City of Virginia Beach Real Estate Assessors Office and Planning Department. Calculations incorporate water areas and reflect approximations that should be used for general planning purposes only.

Zoning

- The Zoning table shows the city zoning districts for the Rosemont SGA. Approximately 266 acres (85%) of land within the SGA is zoned for Business purposes (B-2 district).
- Residential zoning (R and A districts) encompass approximately 29 acres, Office (O-2) 11 acres, Industrial (I-1) 5 acres, and Hotel (H-1) .87 acres.

City of Virginia Beach Zoning, 2015

Rosemont SGA		
Zoning District	Acres	%
A-12	0.24	0.08%
A-18	5.82	1.87%
A-24	15.74	5.05%
A-36	0.82	0.26
B-2	266.00	85.36%
H-1	0.87	0.28%
I-1	5.39	1.73%
O-2	10.53	3.38%
R-7.5	6.22	2.00%
Total	311.64	100.00%

Source: City of Virginia Beach Planning Department. Calculations incorporate water areas and reflect approximations that should be used for general planning purposes only.

Development Constraints

- Lack of pedestrian accommodation and open space
- Virginia Beach Boulevard and I-264 are barriers
- Car-oriented
- Deterioration of nearby housing stock and retail
- Lack of transit connections to the neighborhoods
- Lack of adequate provisions for stormwater

Development Opportunities

- Establish a pedestrian and bicycle realm, connecting neighborhoods to retail, open spaces, transit, and each other
- Make arterials including South Plaza Trail and Rosemont Road safer and more pedestrian-friendly
- Develop mid-rise, mixed-use, mixed-income, development
- Increase land productivity
- Create functional open spaces that address recreational and stormwater management needs

Source: Rosemont Strategic Growth Area Master Plan, Adopted: September 13, 2011

<http://www.vbgov.com/government/departments/planning/areaplans/Documents/StrategicGrowthAreas/RosemontSGAMasterPlan-August2011.pdf>

Public Investment

The basic infrastructure system for the implementation of the Rosemont plan includes public vehicular, pedestrian and bicycle linkages and the improvement of public water, sanitary sewer, and stormwater drainage systems to serve the area. These improvements will be developed in a phased implementation. The following map shows programmed and funded Capital Improvement Projects (CIPs) for the Rosemont SGA.

Programmed and Funded Capital Improvement Projects (CIPs), December 2015

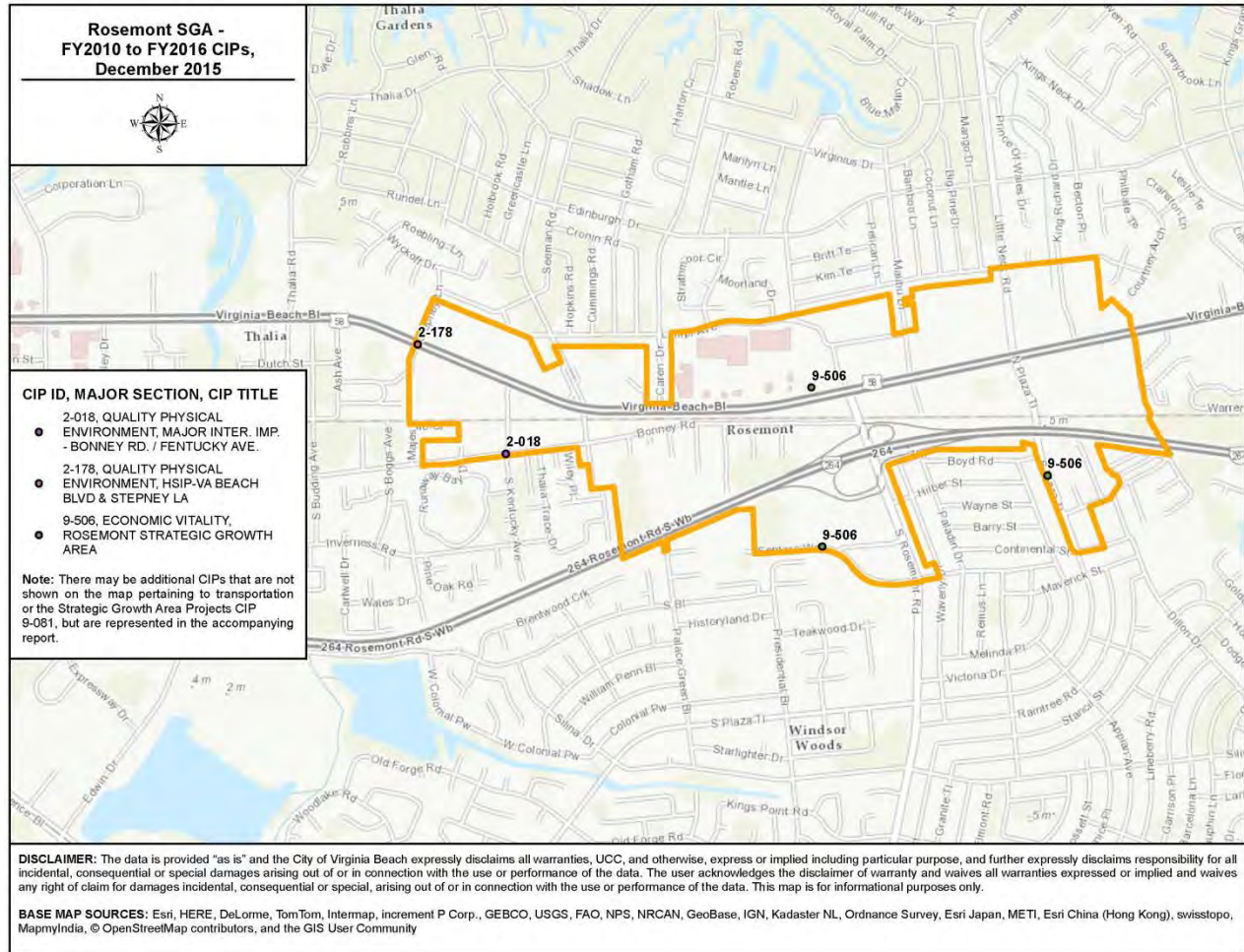


FIGURE 9

Rosemont SGA - FY2010 to FY2016 CIPs, December 2015							
CIP ID	MAJOR SECTION	CIP TITLE	PROJECT CLASS	FIRST YEAR	LAST YEAR	PROGRAMMED FUNDING	APPROPRIATED FUNDING
2-018	QUALITY PHYSICAL ENVIRONMENT	MAJOR INTER. IMP. - BONNEY RD. FENTUCKY AVE.	ROADWAYS	2010	2013	\$9,972,673	\$3,371,856
2-093*	QUALITY PHYSICAL ENVIRONMENT	BUSES FOR VIRGINIA BEACH TRANSIT EXTENSION	ROADWAYS	2016	2016	\$3,636,212	\$0
2-178	QUALITY PHYSICAL ENVIRONMENT	HSIP-VA BEACH BLVD & STEPNEY LA	ROADWAYS	2010	2013	\$12,638,135	\$12,638,135
9-081-005**	ECONOMIC VITALITY	STRATEGIC GROWTH AREA PROJECTS	ECONOMIC AND TOURISM	2010	2016	\$18,078,786	\$18,078,786
9-506	ECONOMIC VITALITY	ROSEMONT STRATEGIC GROWTH AREA	ECONOMIC AND TOURISM	2013	2015	\$415,000	\$415,000
Totals	5					\$44,740,806	\$34,503,777

*This CIP pertains to all SGAs

Private Investment

The plan implementation strategies build on the momentum generated by public investments which focus on key plan recommendations that address structural issues inhibiting redevelopment to unlock development potential. The below map illustrates new commercial and residential building permits generated between January 2010 and December 2015 in the plan area.

Commercial and Residential New Building Permits, January 2010 to December 2015

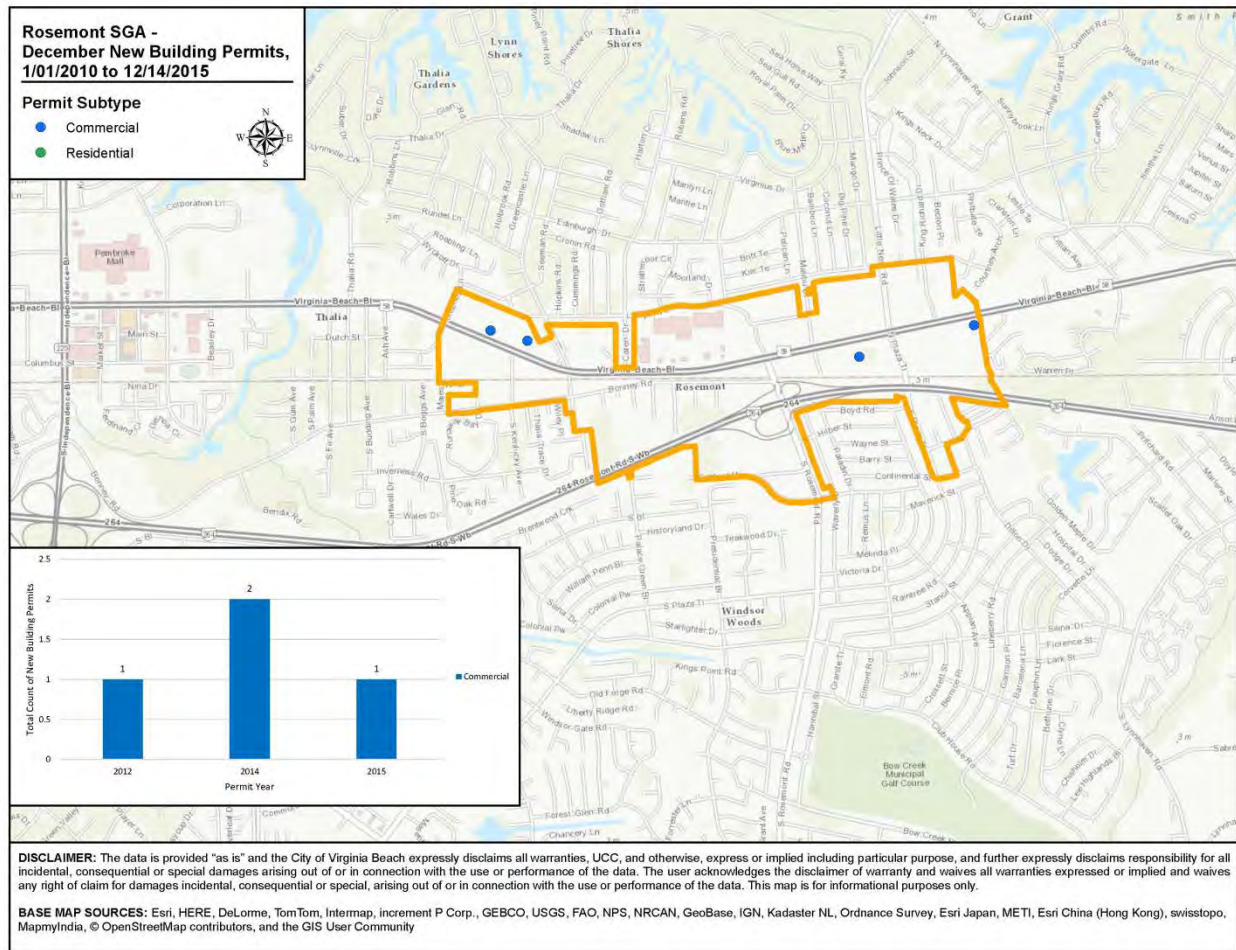


FIGURE 10

Rosemont SGA – December New Building Permits, 1/01/2010 to 12/14/2015			
GPIN	Permit Year	Permit Description	Permit Subtype
14879419940000	2012	TEMP CONST TRAILER	Commercial
		TEMP CONSTRUCTION TRAILER	
14871428930000	2014		Commercial
14877413860000	2014	MINI PRICE STORAGE	Commercial
14871496290000	2015	CONSTRUCTION TRAILER AS SHOWN ON SITE PLAN	Commercial
Total			4

Lynnhaven SGA

Current Land Use

The Lynnhaven SGA Implementation Plan represents approximately 589 acres and is located in the center of the city east of the Rosemont SGA and is served by an Interstate 264 interchange and three major crossing arterials. This area is attractive to businesses seeking easy access to transportation and serving the vast residential neighborhoods that surround it.

- As illustrated on the Land Use table, the predominant land use across the Lynnhaven SGA is Commercial (31%). Other land uses in the area include residential (19%), Public/Semi-Public (18%), Institutional (9%), Office (7%), and Industrial (3%).
- Approximately 20 acres (3%) in the SGA are undeveloped land.
- The most significant change in land use from 2010 to 2016 is the reduction in office decrease 33% (63 acres to 43).

Lynnhaven SGA					
Land Use Category	2010		2016		2010 to 2016 % Change
	Acres	%	Acres	%	
Commercial	181.20	30.78%	184.19	31.27%	1.65%
Federal & State	35.11	5.97%	35.75	6.07%	1.81%
Industrial	17.05	2.90%	17.06	2.90%	0.07%
Institutional	40.00	6.80%	50.65	8.60%	26.62%
Multi Family	11.77	2.00%	11.71	1.99%	-0.47%
Office	63.39	10.77%	42.62	7.24%	-32.76%
Public/Semi-Public Other	84.90	14.42%	106.74	18.12%	25.73%
Single Family Attached	35.17	5.97%	35.46	6.02%	0.83%
Single Family Detached	86.47	14.69%	84.62	14.37%	-2.13%
Undeveloped	27.54	4.68%	20.20	3.43%	-26.65%
Total	583.38	100.00%	589.00	100.00%	0.07%

Source: City of Virginia Beach Real Estate Assessors Office and Planning Department. Calculations reflect approximations and should be used for general planning purposes only. Water areas and rights-of-way are not included in these land use calculations.

Ownership

- The generalized Ownership table shows public and private land ownership across the Lynnhaven SGA. Approximately 473 acres (77%) of land are privately-owned, and 138 acres (23%) are publicly-owned.

Owner	2010		2015	
	Acres	%	Acres	%
Private	517.21	84.21%	472.56	77.34%
Public	96.99	15.79%	138.47	22.66%
Total	614.20	100.00%	611.03	100.00%

Source: City of Virginia Beach Real Estate Assessors Office and Planning Department. Calculations incorporate water areas and reflect approximations that should be used for general planning purposes only.

Zoning

- The Zoning table shows the city zoning districts for the Lynnhaven SGA. More than 243 acres (41%) of land within the SGA is zoned for Business purposes (B-1, B-1A, and B-2 districts).
- Residential zoning (A-12, A-18, A-24, R-5D, R-7.5, R-10, R-15 districts) encompasses approximately 184 acres (31%), Industrial zoning approximately 101 acres (17%), and Office zoning 65 acres (11%).

City of Virginia Beach Zoning, 2015

Lynnhaven SGA		
Zoning District	Acres	%
A-12	44.87	7.53%
A-18	8.65	1.45%
A-24	1.65	0.28%
B-1	0.26	0.04%
B-1A	1.20	0.20%
B-2	242.02	40.60%
I-1	75.20	12.62%
I-2	26.18	4.39%
O-2	64.86	10.88%
P-1	2.67	0.45%
R-5D	15.57	2.61%
R-7.5	23.95	4.02%
R-10	88.92	14.92%
R-15	0.09	0.01%
Total	596.07	100.00%

Source: City of Virginia Beach Planning Department. Calculations incorporate water areas and reflect approximations that should be used for general planning purposes only.

Development Constraints

- Few opportunities for public use of natural resources and recreation
- Unfriendly streetscapes bordered by too much paving
- Noise and development restrictions related to NAs Oceana
- Under-utilized residential, commercial and industrial properties

Development Opportunities

- Improve access to natural waterways and marchlands and provide more places for passive recreation
- Improve traffic circulation throughout the area
- Improve streets for pedestrian and cyclist use, create necessary bike paths and improve connectivity across Interstate 264

Source: Lynnhaven Strategic Growth Area Master Plan, Adopted: April 24, 2012

http://www.vbgov.com/government/departments/planning/areaplans/Documents/Lynnhaven%20SGA%20Plan/201508-PLN-CMP-LynnhavenSGAMasterPlanFinalEdits_web_Sm.pdf

Public Investment

The Lynnhaven SGA plan illustrates how, with public improvements in transit, local street networks, and open space, private property owners have an increased range of opportunities for development and utilization of their land to create new mixed-use districts that are appealing to the market place. The following map shows programmed and funded Capital Improvement Projects (CIPs) for the Lynnhaven SGA.

Programmed and Funded Capital Improvement Projects (CIPs), December 2015

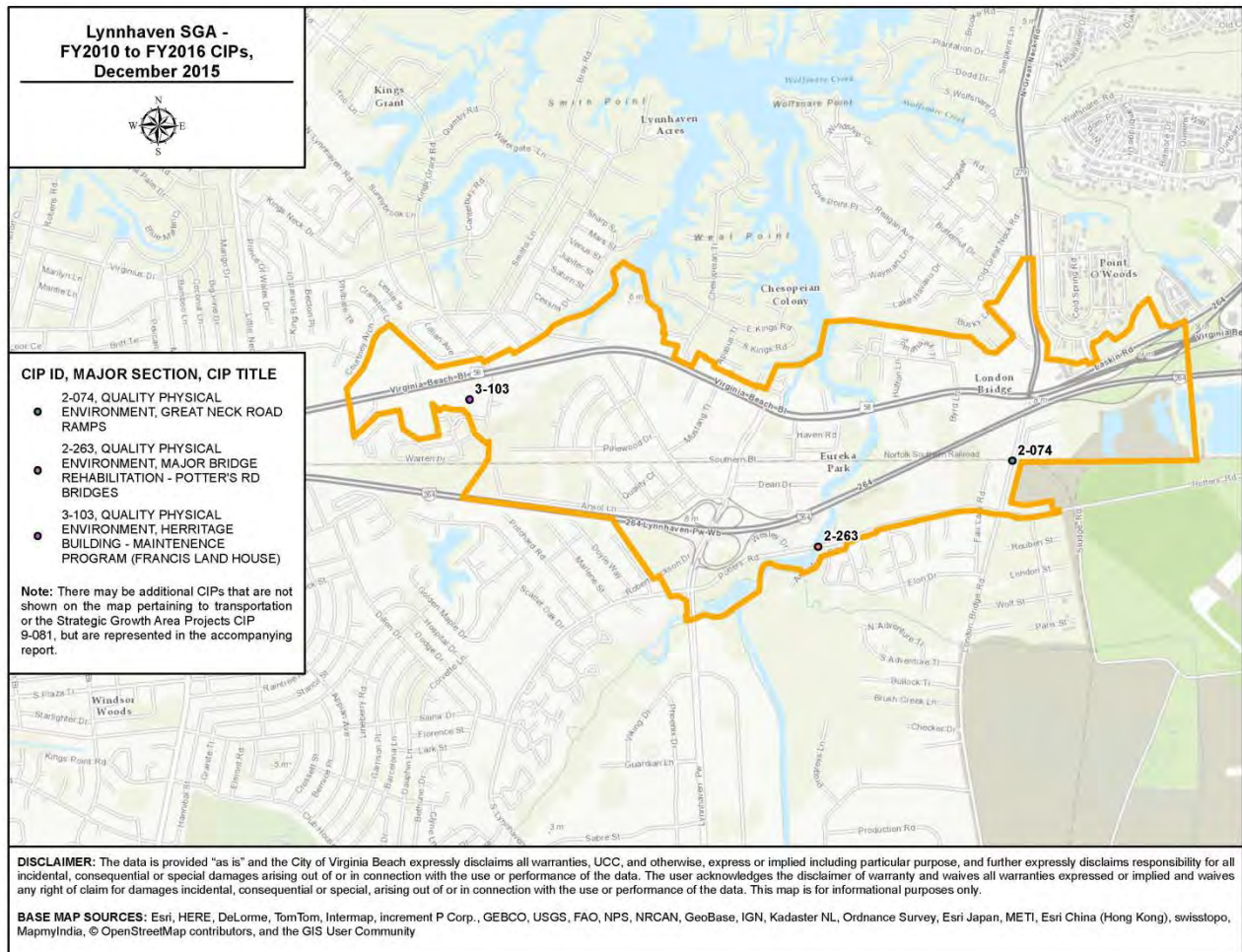


FIGURE 11

Lynnhaven SGA - FY2010 to FY2016 CIPs, December 2015							
CIP ID	MAJOR SECTION	CIP TITLE	PROJECT CLASS	FIRST YEAR	LAST YEAR	PROGRAMMED FUNDING	APPROPRIATED FUNDING
2-074	QUALITY PHYSICAL ENVIRONMENT	GREAT NECK ROAD RAMPS	ROADWAYS	2011	2011	\$2,030,984	\$0
2-093*	QUALITY PHYSICAL ENVIRONMENT	BUSES FOR VIRGINIA BEACH TRANSIT EXTENSION	ROADWAYS	2016	2016	\$3,636,212	\$0
2-263	QUALITY PHYSICAL ENVIRONMENT	MAJOR BRIDGE REHABILITATION POTTER'S RD BRIDGES	ROADWAYS	2010	2013	\$12,877,538	\$9,237,538
3-103	QUALITY PHYSICAL ENVIRONMENT	HERRITAGE BUILDING MAINTENANCE PROGRAM (FRANCIS LAND HOUSE)	BUILDINGS	2010	2016	\$3,768,850	\$1,318,850
9-081-005**	ECONOMIC VITALITY	STRATEGIC GROWTH AREA PROJECTS	ECONOMIC AND TOURISM	2010	2016	\$18,078,786	\$18,078,786
Totals	5					\$40,392,370	\$28,635,174
*This CIP pertains to all SGAs.							
*The programmed and appropriated funding amounts represent the parent CIP, 9-081, not the portion applied to this specific SGA.							

Private Investment

The plan implementation strategies build on the momentum generated by public investments such as the new Interstate 264 ramps for London Bridge Road and additional road improvements to position property for new private development. The below map illustrates new commercial and residential building permits generated between January 2010 and December 2015 in the plan area.

Commercial and Residential New Building Permits, January 2010 to December 2015

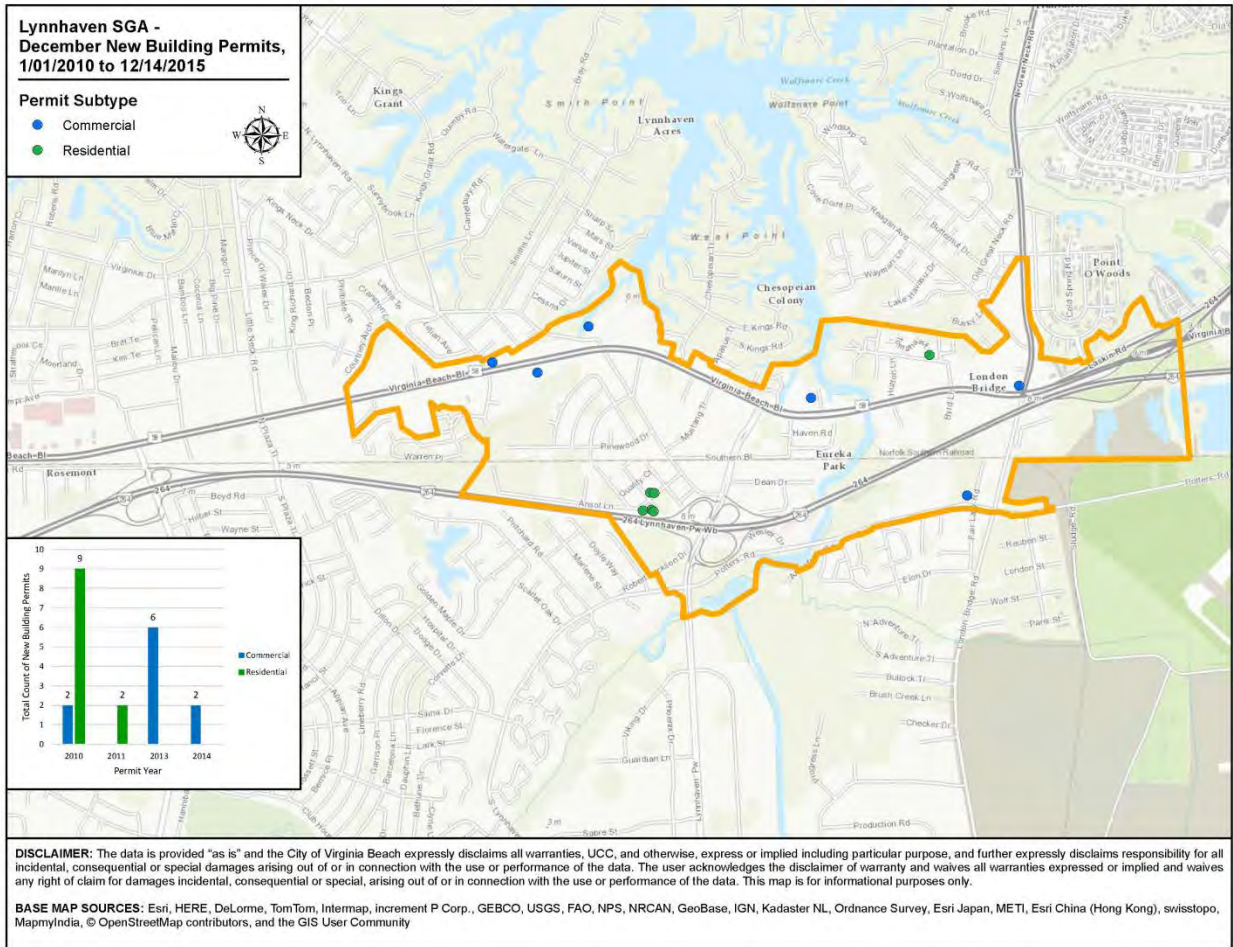


FIGURE 12

Lynnhaven – December New Building Permits, 1/01/2010 to 12/14/2015			
GPIN	Permit Year	Permit Description	Permit Subtype
14979335670000	2010	1 STORY ADDITION AND SITE WORK.	Commercial
14978640190000	2010	SET MOBILE HOME	Residential
14974323030000	2010	NEW S/F. >75DB NOISE ZONE.	Residential
14974303830000	2010	1/2 OF DUPLEX. >75DB NOISE ZONE.	Residential
14974303830000	2010	1/2 OF DUPLEX. WILL NOISE TEST BEFORE CO, >75DB NOISE ZONE.	Residential
14974323410000	2010	NEW S/F.	Residential
14974316700000	2010	1/2 DUPLEX	Residential
14974316700000	2010	1/2 DUPLEX (ALL PLANS W/201009716B0)	Residential
14974326340000	2010	1/2 DUPLEX (ALL PLANS W/201009716B0)	Residential
14974326340000	2010	1/2 DUPLEX (ALL PLANS W/201009716B0)	Residential
14972535710000	2010	1 STORY ADDITION, EAST COAST LEISURE.	Commercial
14978640190000	2011	SET MOBILE HOME.	Residential
14978640190000	2011	MANUFACTURED HOME (MOBILE HOME)	Residential
24070523160000	2013	STARBUCKS LONDON BRIDGE//NO CO RELEASE UNTIL ALL REQUIRED EASEMENTS PROPERLY RECORDED PER DSC	Commercial
24070523160000	2013	STARBUCKS LONDON BRIDGE//NO CO RELEASE UNTIL ALL REQUIRED EASEMENTS PROPERLY RECORDED PER DSC	Commercial
14976570990000	2013	GODDARD SCHOOL INSTITUTIONAL DAY CARE I4	Commercial
14976570990000	2013	GODDARD SCHOOL INSTITUTIONAL DAY CARE I4	Commercial
14971567230000	2013	RESTAURANT,RETAIL SHELL ONLY//INDIVIDUAT TENANT PERMITS REQUIRED	Commercial
14971567230000	2013	TEMPOPRARY CONSTRUCTION TRAILER	Commercial
14973675430000	2014	NEW WALMART #6574 N LYNNHAVEN	Commercial
14973675430000	2014	CONSTRUCTION TRAILER	Commercial
Total			21

Hilltop SGA

Current Land Use

The Hilltop SGA represents approximately 588 acres and is located in the eastern part of the City between the Lynnhaven SGA and the Resort Area. Hilltop is served by three Interstate 264 interchanges: First Colonial Road, Oceana Boulevard and Laskin Road/Virginia Beach Boulevard.

- As illustrated on the Land Use table, the predominant land use across the Hilltop SGA is Commercial (257 acres or 44%). Other land uses in the area include Public/Semi-Public (103 acres or 18%), Residential uses (105 acres or 18%) and office uses (26 acres or 4%).
- Approximately 20 acres (3%) in the SGA are Undeveloped land.
- The most significant change in land use from 2010 to 2016 is Public/Semi-Public, which increased 5% (98 acres to 103 acres).

Hilltop SGA					
Land Use Category	2010		2016		2010 to 2016 % Change
	Acres	%	Acres	%	
Commercial	257.03	43.68%	256.66	43.66%	-0.14%
Federal & State	30.49	5.18%	30.25	5.14%	-0.80%
Hotel	0.39	0.07%	0.39	0.07%	0.00%
Industrial	4.60	0.78%	4.60	0.78%	0.00%
Institutional	42.95	7.30%	42.10	7.16%	-1.98%
Multi Family	91.06	15.48%	91.03	15.48%	-0.04%
Office	26.27	4.46%	26.19	4.46%	-0.29%
Public/Semi-Public Other	97.98	16.65%	103.34	17.58%	5.47%
Single Family Attached	4.02	0.68%	4.16	0.71%	3.61%
Single Family Detached	12.80	2.18%	9.44	1.61%	-26.21%
Undeveloped	19.57	3.33%	19.61	3.34%	0.21%
Total	587.16	100.00%	587.78	100.00%	-0.09%

Source: City of Virginia Beach Real Estate Assessors Office and Planning Department. Calculations reflect approximations and should be used for general planning purposes only. Water areas and rights-of-way are not included in these land use calculations.

Ownership

- The generalized Ownership table shows public and private land ownership across the Hilltop SGA. Approximately 476 acres or 79% of land are privately-owned, and 127 acres or 21% are publicly-owned.

Hilltop SGA – Land Ownership, 2015					
Owner	2010		2015		2010 to 2015 % Change
	Acres	%	Acres	%	
Private	489.51	80.95%	476.32	78.97%	
Public	115.16	19.05%	126.82	21.03	
Total	604.67	100.00%	603.13	100.00	

Source: City of Virginia Beach Real Estate Assessors Office and Planning Department. Calculations incorporate water areas and reflect approximations that should be used for general planning purposes only.

Zoning

- The Zoning table shows the city zoning districts for the Hilltop SGA. More than 339 acres (56%) of land within the SGA are zoned for business land uses (B-1, B-1A, B-2).
- Residential zoning (R and A districts) encompasses approximately 219 acres (37%) with apartment zoning (A districts) encompassing approximately 138 acres (24%).
- Industrial zoning (I-1 and I-2) encompasses approximately 19 acres (3%) and Office zoning (O-2 district), which is intended for larger scale office, represents approximately 13 acres (2%).

City of Virginia Beach Zoning, 2015

Hilltop SGA		
Zoning District	Acres	%
A-12	30.96	5.19%
A-18	106.78	17.90%
B-1	2.52	0.42%
B-1A	0.46	0.08%
B-2	336.40	56.39%
I-1	18.91	3.17%
I-2	0.41	0.07%
O-2	13.10	2.20%
P-1	5.26	0.88%
R-10	8.54	1.43%
R-5D	1.54	0.26%
R-7.5	71.70	12.02%
Total	596.58%	100.00%

Source: City of Virginia Beach Planning Department. Calculations incorporate water areas and reflect approximations that should be used for general planning purposes only.

Development Constraints

- No pedestrian and bicycle accommodations
- Navy jet noise and AICUZ restrictions on real estate development
- Access to transit
- Traffic volumes, intersections, and feeder roads

Development Opportunities

- Proximity to amenities such as the hospital, beach, retail, schools, and churches
- Access from Virginia Beach Boulevard and Interstate 264
- Ability to capture tourism spending
- Improve efficiency and quality of land use with more compact development and less prominent parking facilities

Source: Hilltop Strategic Growth Area Master Plan, Adopted: August 28, 2012

http://www.vbgov.com/government/departments/planning/areaplans/Documents/Hilltop%20SGA%20Plan/120828-PLN-CMP-AdoptedHilltopRpt_Web.pdf

Public Investment

The basic infrastructure system for the Hilltop plan proposes transportation management and street design, improvements to pedestrian and bicycle infrastructure, utilities, and transit initiatives. The following map shows current programmed and funded Capital Improvement Projects (CIPs) for the Hilltop SGA.

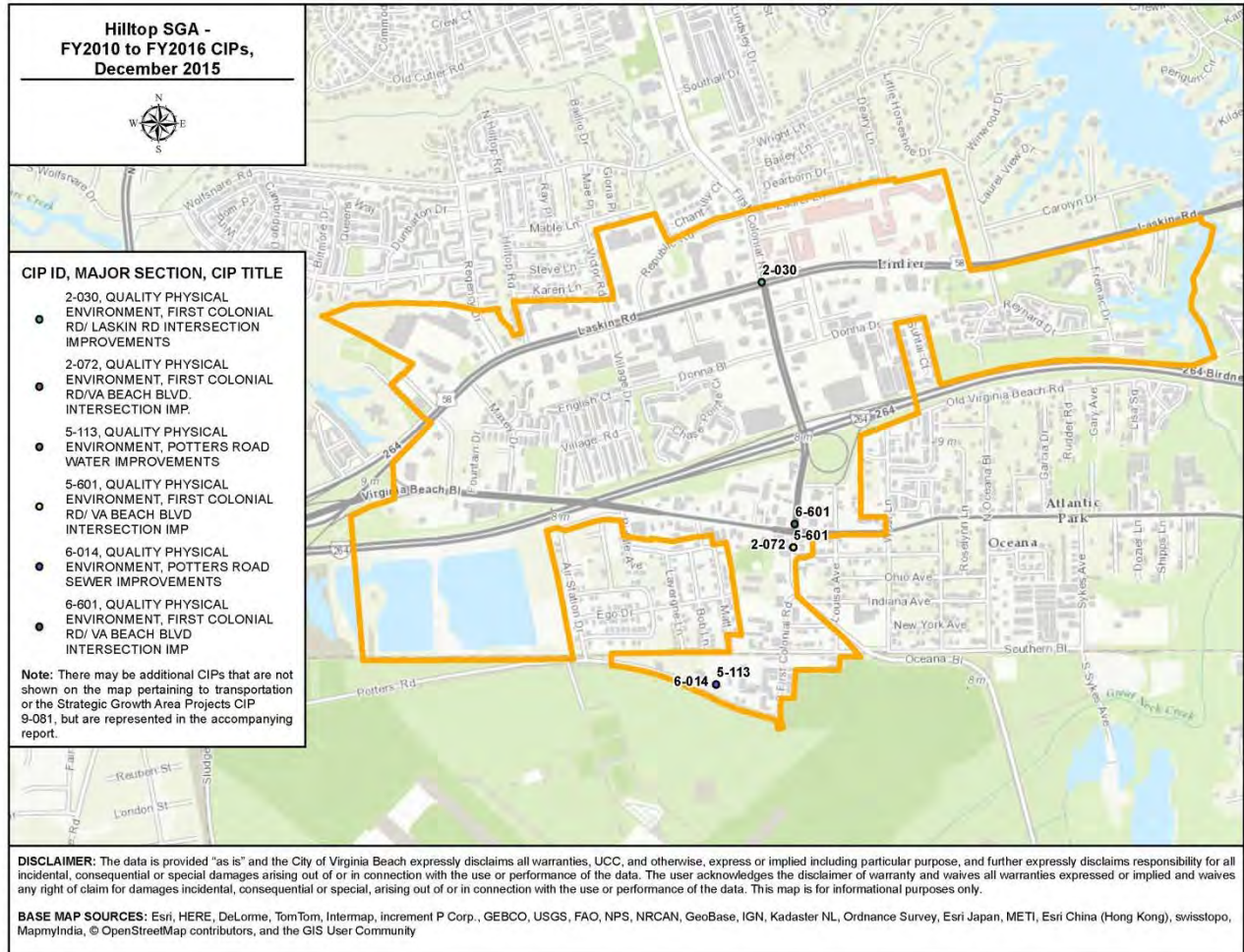


FIGURE 13

Hilltop SGA - FY2010 to FY2016 CIPs, December 2015							
CIP ID	MAJOR SECTION	CIP TITLE	PROJECT CLASS	FIRST YEAR	LAST YEAR	PROGRAMMED FUNDING	APPROPRIATED FUNDING
2-030	QUALITY PHYSICAL ENVIRONMENT	FIRST COLONIAL RD/ LASKIN RD INTERSECTION IMPROVEMENTS	ROADWAYS	2014	2016	\$55,000	\$0
2-072	QUALITY PHYSICAL ENVIRONMENT	FIRST COLONIAL RD/VA BEACH BLVD. INTERSECTION IMP.	ROADWAYS	2010	2016	\$28,277,794	\$23,096,938
2-093*	QUALITY PHYSICAL ENVIRONMENT	BUSES FOR VIRGINIA BEACH TRANSIT EXTENSION	ROADWAYS	2016	2016	\$3,636,212	\$0
5-113	QUALITY PHYSICAL ENVIRONMENT	POTTERS ROAD WATER IMPROVEMENTS	WATER UTILITY	2010	2012	\$485,000	\$0
5-601	QUALITY PHYSICAL ENVIRONMENT	FIRST COLONIAL RD VA BEACH BLVD INTERSECTION IMP	WATER UTILITY	2010	2016	\$120,000	\$0
6-014	QUALITY PHYSICAL ENVIRONMENT	POTTERS ROAD SEWER IMPROVEMENTS	SEWER UTILITY	2010	2012	\$935,000	\$0
6-601	QUALITY PHYSICAL ENVIRONMENT	FIRST COLONIAL RD VA BEACH BLVD INTERSECTION IMP	SEWER UTILITY	2010	2016	\$230,000	\$10,000
9-081-005**	ECONOMIC VITALITY	STRATEGIC GROWTH AREA PROJECTS	ECONOMIC AND TOURISM	2010	2016	\$18,078,786	\$18,078,786
Totals	8					\$51,817,792	\$41,185,724
*This CIP pertains to all SGAs.							
**The programmed and appropriated funding amounts represent the parent CIP, 9-081, not the portion applied to this specific SGA.							

Private Investment

The plan implementation strategies build on the momentum generated by public investments and encourage private property owners to participate in the redevelopment and mobility improvements for the Hilltop SGA. The map below illustrates new commercial and residential building permits generated between January 2010 and December 2015 in the plan area.

Commercial and Residential New Building Permits, January 2010 to December 2015

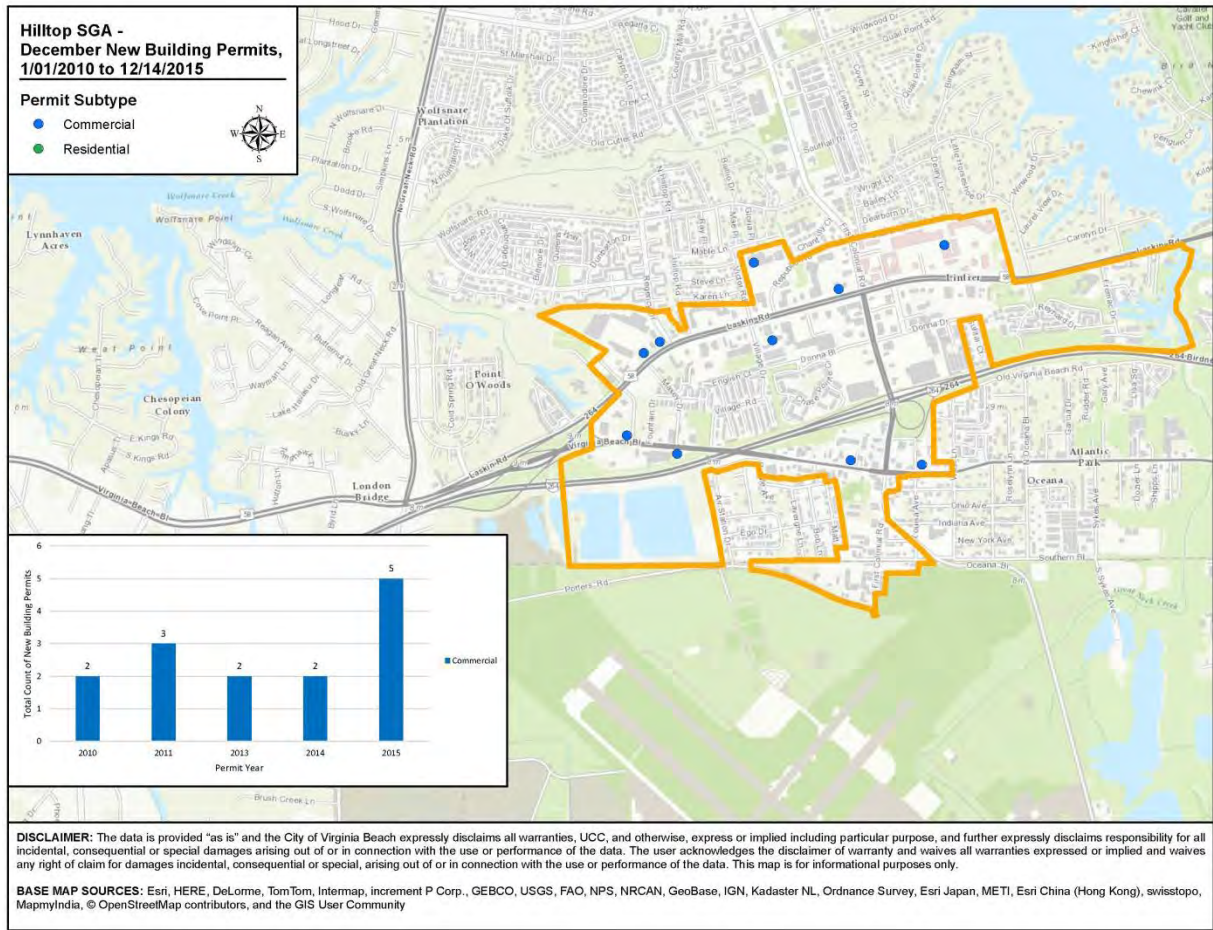


FIGURE 14

Resort SGA

Current Land Use

The Resort Area SGA represents approximately 1,151 acres and identifies the potential for three distinct, yet complementary, districts at Laskin Gateway, Central Beach and Rudee Marina.

- As illustrated on the Land Use table, the predominant land use across the Resort SGA is Residential land use (564 acres or 49%). Other land uses in the area include Public/Semi-Public (259 acres or 22%), Commercial (134 acres or 12%), Hotel (63 acres or 5%), Institutional (32 acres or 3%), and Office (23 acres or 2%).
- Approximately 56 acres (5%) in the SGA are Undeveloped land.
- The most significant change in land use from 2010 to 2016 is Public/Semi-Public which increased 9% (236 acres to 259 acres).

Resort Area SGA					
Land Use Category	2010		2016		2010 to 2016 % Change
	Acres	%	Acres	%	
Commercial	135.56	11.76%	133.69	11.61%	-1.38%
Federal & State	23.61	2.05%	5.05	0.44%	-78.60%
Hotel	81.25	7.05%	62.61	5.44%	-22.94%
Institutional	33.47	2.90%	32.44	2.82%	-3.05%
Multi Family	127.79	11.09%	134.12	11.65%	4.96%
Office	25.60	2.22%	23.42	2.03%	-8.51%
Public/Semi-Public Other	236.16	20.49%	258.55	22.46%	9.48%
Single Family Attached	187.07	16.23%	192.03	16.68%	2.65%
Single Family Detached	238.40	20.69%	238.22	20.69%	-0.08%
Undeveloped	58.55	5.08%	55.93	4.86%	-4.47%
Total	1,147.47	100.00%	1,136.31	100.00%	-0.09%

Source: City of Virginia Beach Real Estate Assessors Office and Planning Department. Calculations reflect approximations and should be used for general planning purposes only. Water areas and rights-of-way are not included in these land use calculations.

Ownership

- The generalized Ownership table shows public and private land ownership across the Resort SGA. Approximately 885 acres or 73.28% of land is privately-owned, and approximately 323 acres or 26.72% is publicly-owned.

Owner	2010		2015	
	Acres	%	Acres	%
Private	916.64	74.12%	885	73.28%
Public	320.04	25.88%	323	26.72%
Total	1236.68	100.00%	1208.13	100.00%

Source: City of Virginia Beach Real Estate Assessors Office and Planning Department. Calculations incorporate water areas and reflect approximations that should be used for general planning purposes only.

Zoning

- The Zoning table shows the city zoning districts for the Resort SGA. More than 623 acres (57%) of land within the SGA is zoned for Residential land uses. R districts encompass approximately 314 acres (29%) with Apartment zoning (A districts) encompassing approximately 309 acres (28%).
- OR represents approximately 368 acres (34%), and Business (B-2) 40 acres (4%), and Office (O-2), which is intended for larger scale office, represents 1.5 acres (.13%).

City of Virginia Beach Zoning, 2015

Resort SGA		
Zoning District	Acres	%
A-12	96.77	8.80%
A-18	108.51	9.87%
A-24	56.29	5.12%
A-36	46.97	4.27%
B-2	39.88	3.63%
I-1	3.39	0.31%
O-1	0.91	0.08%
O-2	1.48%	0.13%
OR	368.33	33.50%
P-1	11.15	1.01%
R-5S	220.75	20.08%
R-7.5	40.94	3.72%
R-10	1.43	0.13%
RT-1	4.33	0.39%
RT-3	47.18	4.29%
RT-4	0.16	0.01%
Total	1099.62	100.00%

Source: City of Virginia Beach Planning Department. Calculations incorporate water areas and reflect approximations that should be used for general planning purposes only.

Development Constraints

- Underutilized land for surface parking
- Multiple land ownership fragments the area
- Seasonal nature of resort activity

Development Opportunities

- Expand the trail & bike network to make the natural systems more accessible
- Develop a system of centralized, shared parking to unlock development potential
- Enhance transit service and support sustainable goals of engaging alternative transportation options, minimizing auto reliance
- Grow residential to support year-round activity

Source: Resort Area Strategic Action Plan, Adopted: December 2, 2008 -

<http://www.vbgov.com/government/departments/planning/areaplans/Documents/Oceanfront/ResortAreaStrategicActionPlan120208.pdf>

Public Investment

The basic infrastructure system for the implementation of the Resort Area plan includes public vehicular, pedestrian and bicycle linkages and the improvement of public water, sanitary sewer, and stormwater drainage systems to serve the area. These improvements will be developed in a phased implementation plan. The following map shows programmed and funded Capital Improvement Projects (CIPs) for the Resort Area SGA.

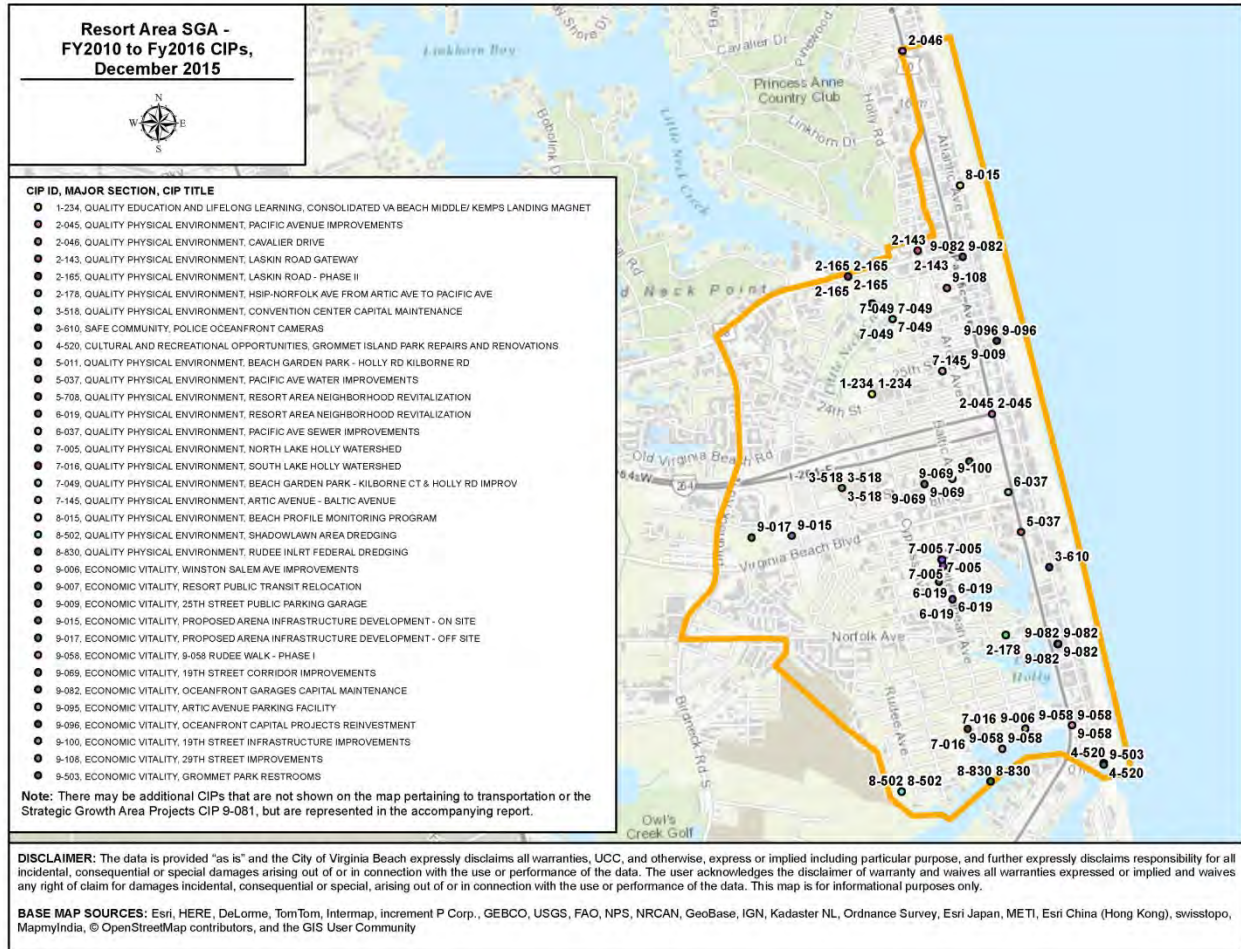


FIGURE 15

CIP ID	MAJOR ECTION	CIP TITLE	PROJECT CLASS	FIRST YEAR	LAST YEAR	PROGRAMMED FUNDING	APPROPRIATED FUNDING
1-234	QUALITY EDUCATION AND LIFELONG LEARNING	CONSOLIDATED VA BEACH MIDDLE/ KEMPS LANDING MAGNET	SCHOOLS	2010	2012	\$51,196,022	\$51,196,022
2-045	QUALITY PHYSICAL ENVIRONMENT	PACIFIC AVENUE IMPROVEMENTS	ROADWAYS	2014	2016	\$17,330,000	\$17,330,000
2-046	QUALITY PHYSICAL ENVIRONMENT	CAVALIER DRIVE	ROADWAYS	2015	2016	\$2,449,040	\$2,449,040
2-093*	QUALITY PHYSICAL ENVIRONMENT	BUSES FOR VIRGINIA BEACH TRANSIT EXTENSION	ROADWAYS	2016	2016	\$3,636,212	\$0
2-143	QUALITY PHYSICAL ENVIRONMENT	LASKIN ROAD GATEWAY	ROADWAYS	2010	2013	\$39,956,947	\$39,956,947
2-165	QUALITY PHYSICAL ENVIRONMENT	LASKIN ROAD – PHASE II	ROADWAYS	2010	2016	\$1,417,017	\$1,417,017
2-178	QUALITY PHYSICAL ENVIRONMENT	HSIP-NORFOLK AVE FROM ARTIC AVE TO PACIFIC AVE	ROADWAYS	2010	2013	\$12,638,135	\$12,638,135
3-518	QUALITY PHYSICAL ENVIRONMENT	CONVENTION CENTER CAPITAL MAINTENANCE	BUILDINGS	2013	2016	\$2,404,429	\$343,563
3-610	SAFE COMMUNITY	POLICE OCEANFRONT CAMERAS	TECHNOLOGY	2015	2016	\$7,368,308	\$2,665,400
4-520	CULTURAL AND RECREATIONAL OPPORTUNITIES	GROMMET ISLAND PARK REPAIRS AND RENOVATIONS	PARKS AND RECREATION	2013	2016	\$144,000	\$144,000
5-011	QUALITY PHYSICAL ENVIRONMENT	BEACH GARDEN PARK – HOLLY RD KILBORNE RD	WATER UTILITY	2010	2015	\$500,000	\$500,000
5-037	QUALITY PHYSICAL ENVIRONMENT	PACIFIC AVE WATER IMPROVEMENTS	WATER UTILITY	2015	2016	\$1,755,151	\$1,755,151
5-708	QUALITY PHYSICAL ENVIRONMENT	RESORT AREA NEIGHBORHOOD REVITALIZATION	WATER UTILITY	2010	2016	\$4,446,636	\$4,446,636
6-019	QUALITY PHYSICAL ENVIRONMENT	RESORT AREA NEIGHBORHOOD REVITALIZATION	SEWER UTILITY	2010	2016	\$14,960,000	\$14,960,000
6-037	QUALITY PHYSICAL ENVIRONMENT	PACIFIC AVE SEWER IMPROVEMENTS	SEWER UTILITY	2015	2016	\$858,284	\$858,284
7-005	QUALITY PHYSICAL ENVIRONMENT	NORTH LAKE HOLLY WATERSHED	STORM WATER	2010	2016	\$17,871,135	\$16,771,135
7-016	QUALITY PHYSICAL ENVIRONMENT	SOUTH LAKE HOLLY WATERSHED	STORM WATER	2010	2016	\$14,738,000	\$12,538,000
7-049	QUALITY PHYSICAL ENVIRONMENT	BEACH GARDEN PARK – KILBORNE CT & HOLLY RD IMPROV	STORM WATER	2010	2015	\$900,000	\$900,000
7-145	QUALITY PHYSICAL ENVIRONMENT	ARTIC AVENUE - BALTIC AVENUE	STORM WATER	2010	2012	\$7,345,181	\$7,345,181
8-015	QUALITY PHYSICAL ENVIRONMENT	BEACH PROFILE MONITORING PROGRAM	COASTAL	2015	2016	\$270,000	\$0

CIP ID	MAJOR ECTION	CIP TITLE	PROJECT CLASS	FIRST YEAR	LAST YEAR	PROGRAMMED FUNDING	APPROPRIATED FUNDING
8-502	QUALITY PHYSICAL ENVIRONMENT	SHADOWLAWN AREA DREDGING	COASTAL	2014	2016	\$572,503	\$135,000
8-830	QUALITY PHYSICAL ENVIRONMENT	RUDEE INLRT FEDERAL DREDGING	COASTAL	2010	2012	\$9,549,142	\$7,199,142
9-006	ECONOMIC VITALITY	WINSTON SALEM AVE IMPROVEMENTS	ECONOMIC AND TOURISM	2014	2016	\$3,604,516	\$3,018,764
9-007	ECONOMIC VITALITY	RESORT PUBLIC TRANSIT RELOCATION	ECONOMIC AND TOURISM	2014	2016	\$250,000	\$250,000
9-009	ECONOMIC VITALITY	25TH STREET PUBLIC PARKING GARAGE	ECONOMIC AND TOURISM	2015	2016	\$7,650,000	\$7,650,000
9-015	ECONOMIC VITALITY	PROPOSED ARENA INFRASTRUCTURE DEVELOPMENT - ON SITE	ECONOMIC AND OURISM	2016	2016	\$46,520,000	\$0
9-017	ECONOMIC VITALITY	PROPOSED ARENA INFRASTRUCTURE DEVELOPMENT – OFF SITE	ECONOMIC AND OURISM	2016	2016	\$21,151,000	\$0
9-058	ECONOMIC VITALITY	9-058 RUDEE WALK - PHASE I	ECONOMIC AND TOURISM	2010	2014	\$1,477,551	\$1,477,551
9-069	ECONOMIC VITALITY	19TH STREET CORRIDOR IMPROVEMENTS	ECONOMIC AND TOURISM	2010	2016	\$12,700,000	\$12,700,000
9-081-001**	ECONOMIC VITALITY	STRATEGIC GROWTH AREA PROJECTS	ECONOMIC AND TOURISM	2010	2016	\$18,078,786	\$18,078,786
9-082	ECONOMIC VITALITY	OCEANFRONT GARAGES CAPITAL MAINTENANCE	ECONOMIC AND TOURISM	2010	2016	\$6,137,991	\$4,031,671
9-095	ECONOMIC VITALITY	ARTIC AVENUE PARKING FACILITY	ECONOMIC AND TOURISM	2014	2014	\$19,499,500	\$0
9-096	ECONOMIC VITALITY	OCEANFRONT CAPITAL PROJECTS REINVESTMENT	ECONOMIC AND TOURISM	2014	2016	\$5,355,877	\$1,155,877
9-100	ECONOMIC VITALITY	19th STREET INFRASTRUCTURE IMPROVEMENTS	ECONOMIC AND TOURISM	2016	2016	\$10,863,200	\$0
9-108	ECONOMIC VITALITY	29TH STREET IMPROVEMENTS	ECONOMIC AND TOURISM	2014	2016	\$3,200,000	\$3,200,000
9-503	ECONOMIC VITALITY	GROMMET PARK RESTROOMS	ECONOMIC AND TOURISM	2011	2011	\$250,000	\$0
Totals	36					\$369,044,563	\$247,111,302
*This CIP pertains to all SGAs							
**The programmed and appropriated funding amounts represent the parent CIP, 9-081, not the portion applied to this SGA.							

Private Investment

The plan implementation strategies build on the momentum generated by public investments which focus on the development of the three districts: Laskin Gateway, Central Beach, and Rudee Marina. The map below illustrates new commercial and residential building permits generated between January 2010 and December 2015 in the plan area.

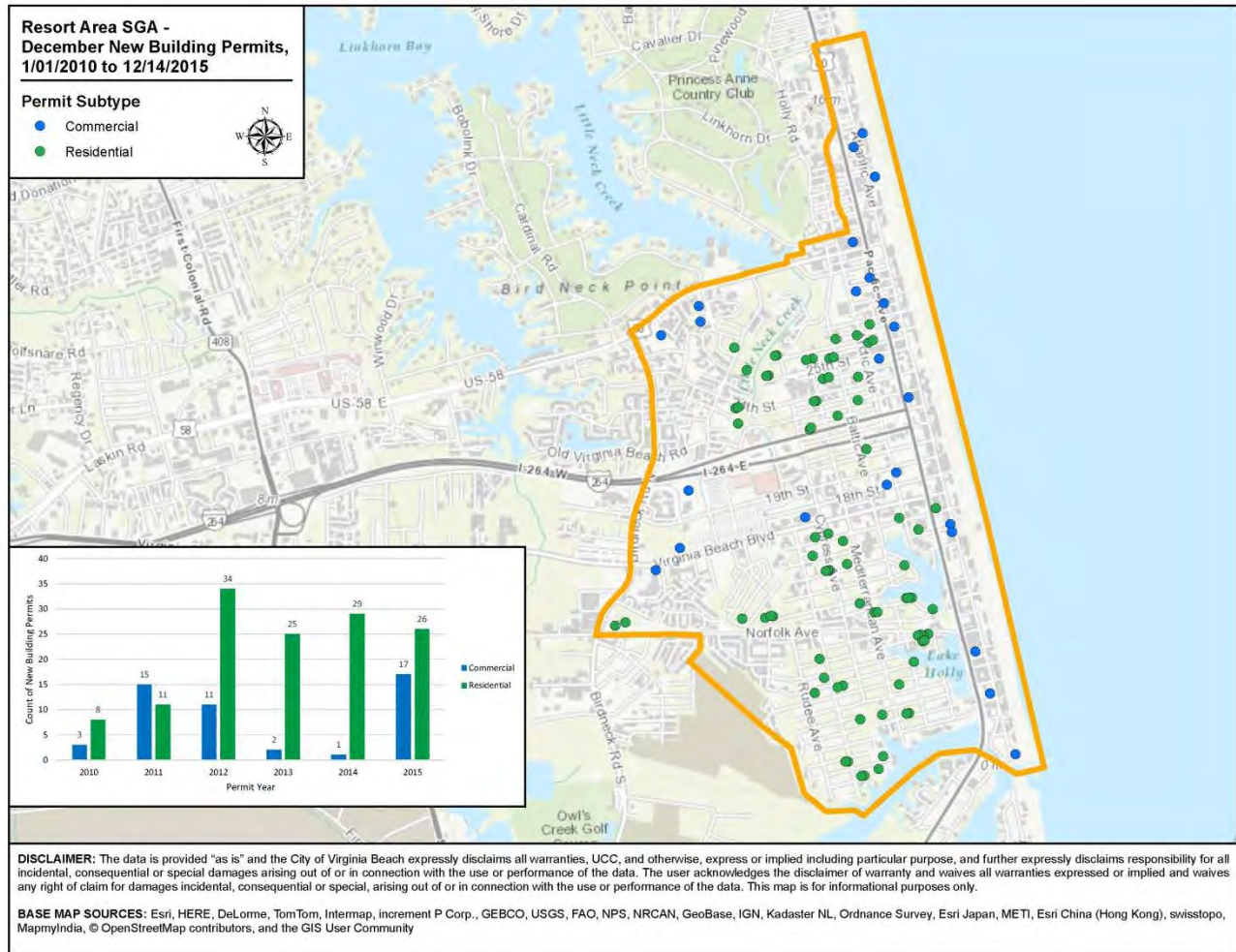


FIGURE 16

Resort Area SGA – December New Building Permits, 1/01/201 to 12/14/2015			
GPIN	Permit Year	Permit Description	Permit Subtype
24270215920000	2010	NEW S/F. 70-75DB NOISE ZONE.	Residential
24177475980000	2010	SET MOBILE HOME (AFTER THE FACT)	Residential
24270418890000	2010	SFR WITH DECK	Residential
24177475980000	2010	SET MOBILE HOME, LOT 29.	Residential
24280424020000	2010	NEW OUTSIDE BAR AT POOL AREA	Commercial
24270910350000	2010	NEW S/F,	Residential
24272380460000	2010	NEW RESTAURANT SHELL ONLY TO INCLUDE DEMISING WALLS AND RESTROOMS AS SHOWN ON PLANS. INT FINISH PERMIT REQD FOR RELEASE/CO	Commercial
24272359400000	2010	DUMPSTER ENCLOSURE	Commercial
24177475980000	2010	SET MOBILE HOME	Residential
24177475980000	2010	SET MOBILE HOME	Residential
24179944350000	2010	NEW S/F.	Residential

Resort Area SGA – December New Building Permits, 1/01/2011 to 12/14/2015			
GPIN	Permit Year	Permit Description	Permit Subtype
24273138430000	2011	NEW RESTROOMS FOR GROMMET ISLAND PARK. NO RECEIPT FOR DFU S, FEE WAS IDT.	Commercial
24186097410203	2011	3 OF 4 REISSUE OF 200513154B0	Commercial
24280085800000	2011	INTERIOR AND EXT ALTERATIONS,EXPANDING ROOMS,REPLACING DOORS,NEW ROOF,EIFS,CONVERTING ADA ROOMS INCLUDES OFFICE BLDG	Commercial
24179814950000	2011	NEW S/F.	Residential
24179814540000	2011	NEW S/F. PLANS W/201102486B0.	Residential
24179814950000	2011	NEW S/F. PLANS W/201102489B0.	Residential
24280344470000	2011	POOL ROOM	Commercial
24280344470000	2011	OWNERS LOUNGE	Commercial
24280344470000	2011	MEETING ROOM	Commercial
24280344470000	2011	LOBBY MIXED USE A3/B	Commercial
24280344470000	2011	CATERING KITCHEN	Commercial
24280344470000	2011	SHELL MIXED USE A3/B/R1	Commercial
24179196490000	2011	MOVED RESIDENCE, 1 STORY ADDITIONS, ADD TO FROG, ADD TO GARAGE, NEW FRONT PORCH AND NEW GRADE LEVEL DECK.	Residential
24271910870000	2011	ATTENDANT SHELTER FOR DAY PAY BEACH PARKING LOT WITH ATM. PLANS SEALED BY ENGINEER	Commercial
24179343650000	2011	NEW S/F. 70-75DB NOISE ZONE. SOUND TEST OK SUBMITTED 11/22/2011	Residential
24177475980000	2011	SET MOBILE HOME, LOT 26.	Residential
24179196080000	2011	NEW S/F DWELLING	Residential
24280202530000	2011	4 STORY APARTMENTS,SHELL ONLY,ROUGH IN UNDER SHELL PERMITS ONLY UNTIL DFUS AND INDIVIDUAL FLOOR PERMITS OBTAINED	Commercial
24280202530000	2011	1 STORY PLUS MEZZANINE MIXED USE A2,M,B SHELL ONLY,ROUGH IN UNDER SHELL PERMITS ONLY UNTIL DFUS PAID	Commercial
24280202530000	2011	7 STORY PARKING GARAGE MOD APPROVED FORDOUBLE 4INCH T S PER 714.1 EXC. 5 2009 IBC	Commercial
24270772490000	2011	MIXED USE BUILDING. GROUND AND 2ND FLOOR COMMERCIAL, 3RD FLOOR RESIDENTIAL.	Commercial
24178935300000	2011	NEW SINGLE FAMILY DWELLING Posted bond for landscaping mc 03/27/13	Residential
24178935300000	2011	NEW SINGLE FAMILY DWELLING Posted bond for landscaping mc 03/27/13	Residential

Resort Area SGA – December New Building Permits, 1/01/201 to 12/14/2015			
GPIN	Permit Year	Permit Description	Permit Subtype
24270914570000	2011	NEW S/F 2006 USBC. 1 OF 2 S/F ON SAME LOT. Received approved as built 07/27/12 mc-as built with this permit	Residential
24270914570000	2011	NEW S/F 2006 USBC. 1 OF 2 S/F ON SAME LOT. PLANS WITH 2011-BDRN-04937 IN SAME PROJECT FILE. Received approved as built 07/27/12-as built with file 2011-BDRN-04937 mc	Residential
24176772020000	2011	MIXED USE DEVELOPMENT,1ST FLOOR OPEN PARKING GARAGE	Commercial
24270772490000	2012	DETAILS 18TH STREET,MIXED USE BUSINESS FLOORS 1 AND 2,RESIDENTIAL R3 3RD FLOOR,REISSUE OFR PERMIT 201113958B0	Commercial
24270795240000	2012	TEMPORARY CONSTRUCTION TRAILER.	Commercial
24271684690000	2012	NEW GAME/ARCADE BUILDING FOR 15TH ST FUN PARK.	Commercial
24271684690000	2012	NEW GAME/ARCADE BUILDING FOR 15TH ST FUN PARK.	Commercial
24280031660000	2012	NEW S/F, VB HOMES MODEL B 2006 USBC. received approved as built for lot grading only mc 12/06/12	Residential
24280031660000	2012	NEW S/F, VB HOMES MODEL B 2006 USBC. received approved as built for lot grading only mc 12/06/12	Residential
24176772020000	2012	PAVILION PLACE RESIDENTIAL APARTMENTS/SHELL AREA 1,2,3 AND COMMON AREA HALLS,CLUBHOUSE	Commercial
24176772020000	2012	PAVILION PLACE RESIDENTIAL APARTMENTS/SHELL AREA 1,2,3 AND COMMON AREA HALLS,CLUBHOUSE	Commercial
24176772020000	2012	CONSTRUCTION TRAILER	Commercial
24179653500000	2012	TOWNHOUSE MODEL 1 A (CAPEVIEW) 2006 IRC SITE PLAN AND PLANS IN BIN 402 ENGINEERS REPORT RECEIVED 04/22/14 MC	Residential
24179653500000	2012	TOWNHOUSE MODEL 2 B (SEASIDE) 2006 IRC SITE PLAN AND PLANS IN BIN 402	Residential
24179653500000	2012	TOWNHOUSE MODEL 1 A (CAPEVIEW) 2006 IRC SITE PLAN AND PLANS IN BIN 402	Residential
24179653500000	2012	TOWNHOUSE MODEL 3 A (LYNNHAVEN) 2006 IRC SITE PLAN AND PLANS IN BIN 402	Residential
24179653500000	2012	TOWNHOUSE MODEL 1 B (BAYVIEW) 2006 IRC SITE PLAN AND PLANS IN BIN 402	Residential
24179653500000	2012	TOWNHOUSE MODEL 2 B (SANDWATCH) 2006 IRC SITE PLAN AND PLANS IN BIN 402	Residential
24179653500000	2012	TOWNHOUSE MODEL 1 B (BAYVIEW) 2006 IRC SITE PLAN AND PLANS IN BIN 402	Residential
24179653500000	2012	TOWNHOUSE MODEL 2 C (SANDWATCH) 2006 IRC SITE PLAN AND PLANS IN BIN 402	Residential
24179653500000	2012	TOWNHOUSE MODEL 1 C (BAYVIEW) 2006 IRC SITE PLAN AND PLANS IN BIN 402	Residential

Resort Area SGA – December New Building Permits, 1/01/201 to 12/14/2015			
GPIN	Permit Year	Permit Description	Permit Subtype
24179653500000	2012	TOWNHOUSE MODEL 2 A (SANDWATCH) 2006 IRC SITE PLAN AND PLANS IN BIN 402	Residential
24271506960000	2012	NEW S/F DWELLING	Residential
24176772020000	2012	INDIGO 19 APARTMENTS/SHELL AND COMMON AREAS 4,5	Commercial
24271216870000	2012	received approved as built mc 12/17/12	Residential
24280112210000	2012	TEMP CONST TRAILER.	Commercial
24270167680000	2012	NEW S/F DWELLING 2009 USBC. SOUND TEST APPROVED,UPLOADED. PART OF HOUSE LIES IN FLOOD ZONE AE, FLOOD RESISTANT CONSTRUCTION APPLIES.	Residential
24186099010000	2012	OCEAN STORAGE	Commercial
24186099010000	2012	OCEAN STORAGE	Commercial
24271452670000	2012	NEW DUPLEX 2009 USBC (FOUNDATION ONLY)	Residential
24271452670000	2012	NEW DUPLEX 2009 USBC (FOUNDATION ONLY)	Residential
24271442860000	2012	NEW DUPLEX 2009 USBC (FOUNDATION ONLY)	Residential
24271442860000	2012	NEW DUPLEX 2009 USBC (FOUNDATION ONLY)	Residential
24271442350000	2012	NEW DUPLEX 2009 USBC (FOUNDATION ONLY)	Residential
24271442350000	2012	NEW DUPLEX 2009 USBC (FOUNDATION ONLY)	Residential
24271452670000	2012	Received approved as built for lot grading only mc 02/20/14	Residential
24271452670000	2012	NEW DUPLEX 2009 USBC Received approved as built for lot grading only mc 02/20/14	Residential
24271442860000	2012	NEW DUPLEX 2009 USBC Received approved as built for lot grading only mc 02/20/14	Residential
24271442860000	2012	NEW DUPLEX 2009 USBC Received approved as built for lot grading only mc 02/20/14	Residential
24271442350000	2012	NEW DUPLEX 2009 USBC RECEIVED APPROVED AS BUILT FOR LOT GRADING ONLY 01/17/14 MC	Residential
24271442350000	2012	NEW DUPLEX 2009 USBC RECEIVED APPROVED AS BULT FOR LOT GRADING ONLY 01/17/14 MC	Residential
24271432750000	2012	NEW DUPLEX 2009 USBC Received approved as built for lot grading only mc	Residential

Resort Area SGA – December New Building Permits, 1/01/201 to 12/14/2015			
GPIN	Permit Year	Permit Description	Permit Subtype
		02/20/14	
24271432750000	2012	NEW DUPLEX 2009 USBC Received approved as built for lot grading only mc 02/20/14	Residential
24179382510000	2012	DELAWARE AVE 720 NEW SF	Residential
24270696750000	2012	NEW SINGLE FAMILY MODEL 12A IRC 2009	Residential
24270696750000	2012	NEW SINGLE FAMILY MODEL 12A IRC 2009	Residential
24270696750000	2012	NEW SINGLE FAMILY DWELLING IRC 2009	Residential
24270696750000	2012	NEW SINGLE FAMILY DWELLING IRC 2009	Residential
24187060060000	2013	NEW S/F 2009 USBC. SOUND TEST APPROVED UPLOADED 12/10/13	Residential
24271467770000	2013	NEW SF 2009 USBC. ***AE FLOOD ZONE, FLOOD RESISTANT CONSTRUCTION APPLIES*** Received Elevation Certificate 03/10/14 As built approval letter received 04/14/14 mc	Residential
24179606830000	2013	RESORT AREA PUMP STATION 716 18TH ST new s/f dwelling, 1 story, 2009 VRC.	Commercial
24271216350000	2013	souond test approved uploaded 12/10/13	Residential
24178949510000	2013	NEW S/F DWELLING. 3 STORY "OSPREY" MODEL WITH 60FT2 OPEN COVERED FRONT PORCH AND OPEN/COVERED 2ND FLOOR 66FT2 DECK Received approved as built for lot grading only mc 02/13/14 Engineers Report received 02/24/14	Residential
24178949510000	2013	NEW S/F DWELLING. 3 STORY "OSPREY" MODEL WITH 60FT2 OPEN COVERED FRONT PORCH AND OPEN/COVERED 2ND FLOOR 66FT2 DECK Received approved as built for lot grading only mc 02/13/14 Engineers report received mc 02/24/14	Residential
24178949920000	2013	NEW S/F DWELLING. 3 STORY "OSPREY" MODEL WITH 60FT2 OPEN COVERED FRONT PORCH AND OPEN/COVERED 2ND FLOOR 66FT2 DECK Received approved as built for lot grading only mc 02/13/14 Engineers report received 02/24/14 mc	Residential
24178949920000	2013	NEW S/F DWELLING. 3 STORY "OSPREY" MODEL WITH 60FT2 OPEN COVERED FRONT PORCH AND OPEN/COVERED 2ND FLOOR 66FT2 DECK Received approved as built for lot grading only mc 02/13/14	Residential

Resort Area SGA – December New Building Permits, 1/01/201 to 12/14/2015			
GPIN	Permit Year	Permit Description	Permit Subtype
		Engineers report received 02/24/14 mc	
24189072020002	2013	BALTIC AVENUE 2605 NEW SF 8/22/13 ADDING 134 SQ.' TO PORCH Received approved as built 11/19/13 mc	Residential
24280134890000	2013	NEW CONDITIONAL 3 YEAR PARKING LOT.	Commercial
24177875130000	2013	NEW SF 2009 USBC. BISHARD MODEL 3(CAROLINE). SOUND TEST APPROVED UPLOADED 9/19/14	Residential
24179528450000	2013	15th st duplex 717 APPROVED FOOTING AND SLAB INSPECTIONS COMPLETE UNDER 200906254B0 as built approved 01/17/14 for lot grading only mc	Residential
24179528450000	2013	15th st duplex 719 FOOTING AND SLAB INSPECTION PASSED UNDER 200906253B0 as built approved 01/17/14 for lot grading only mc	Residential
24270266440000	2013	HIGH POINT AVENUE 616 NEW SF***SOUND TEST APPROVED,12/31/13***	Residential
24177987310000	2013	OSPREY POINT TOWNHOMES 825 829 833 837//SOUND TEST BASED ON END UNIT TEST/PLANS IN BIN L-4	Residential
24177987310000	2013	OSPREY POINT TOWNHOMES 825 829 833 837//SOUND TEST APPROVED BASED ON END UNIT TEST/PLANS IN BIN L-4	Residential
24177987310000	2013	OSPREY POINT TOWNHOMES 825 829 833 837//SOUND TEST APPROVED BASED ON END UNIT TEST//PLANS IN BIN L-4	Residential
24177987310000	2013	OSPREY POINT TOWNHOMES 825 829 833 837//SOUND TEST APPROVED BASED ON END UNIT TEST/PLANS IN BIN L-4	Residential
24177987310000	2013	OSPREY POINT TOWNHOMES 801 805 809 813//SOUND TEST REQUIRED BEFORE CO	Residential
24177987310000	2013	OSPREY POINT TOWNHOMES 801 805 809 813//SOUND TEST REQUIRED BEFORE CO	Residential
24177987310000	2013	OSPREY POINT TOWNHOMES 801 805 809 813//SOUND TEST REQUIRED BEFORE CO//PLANS IN BIN L-4	Residential
24177987310000	2013	OSPREY POINT TOWNHOMES 801 805 809 813//SOUND TEST APPROVED BASED ON END UNIT TEST 6/2/14//PLANS IN BIN L-4	Residential
24177987310000	2013	OSPREY POINT TOWNHOMES 801 805 809 813//SOUND TEST APPROVED BASED ON END UNIT TEST//PLANS IN BIN L-4	Residential
24177987310000	2013	OSPREY POINT TOWNHOMES 801 805 809 813//SOUND TEST APPROVED BASED ON END UNIT TEST/PLANS IN BIN L-4	Residential
24177987310000	2013	OSPREY POINT TOWNHOMES 801 805 809 813//SOUND TEST APPROVED UPLOADED 5/5/14//PLANS IN BIN L-4	Residential

Resort Area SGA – December New Building Permits, 1/01/201 to 12/14/2015			
GPIN	Permit Year	Permit Description	Permit Subtype
24179596380000	2013	DUPLEX. AS BUILT SURVEY REQUIRED PRIOR TO THE ISSUANCE OF A C O RECEIVED APPROVED AS BUILT 07/09/14 MC	Residential
24179596380000	2013	DUPLEX. ASBUILT SURVEY REQUIRED PRIOR TO THE ISSUANCE OF A CO AS BUILT SUBMITTED AS OF 05/23/14 MC-10,000.00 BOND POSTED PER C HAINER FOR AS BUILT AND APRON OK TO ISSUE CO MC 06/13/14 RECEIVED APPROVED AS BUILT 07/09/14-PER THERESA TEMP ASPHALT APR	Residential
24270392910000	2014	NEW SF. WPL MODEL L 2009 USBC (MEETS 110 MPH WITH SHEAR WALLS AND OPENINGS PROTECTED).	Residential
24270392910000	2014	NEW SF 2009 USBC. WPL HOMES VIRGINIA AVE MODEL. MEETS 110 MPH REQUIREMENTS WITH SHEARWALLS AND OPENINGS PROTECTED WHERE REQUIRED.SOUND TEST APPROVED UPLOADED 4/28.14 NEED TO HAVE AS BUILT APPROVED BEFORE CO CAN BE ISSUED-CAN OBTAIN A TEMPORARY CO IF	Residential
24179958750508	2014	SFR 2009 VRC. VB HOMES MODEL 1946	Residential
24270447810000	2014	LAKE DR 536 NEW SF//SOUND TEST APPROVED UPLOADED 6/18/14//OPENINGS TO BE PROTECTED PER SECTION R301	Residential
24270457410000	2014	S/F MODEL C 2009 USBC//MCQ MODEL CONSTRUCTED BY BEACH BUILDING PER APPROVED LETTER/ENGINEERED SHEAR WALLS REPLACING BRACED WALL PANELS//SOUND TEST APPROVED UPLOADED 7/8/14//OPENINGS TO BE PROTECTED BY SECTION 301	Residential
24271337000000	2014	NEW SFR. ALL GLAZING TO BE IMPACT RESISTANT.	Residential
24179928350000	2014	NEW SF 2009 USBC. SOUND TEST APPROVED UPLOADED 9/29/14, ELEVATION CERTIFICATE/ELEVATION DOCUMENTATION REQUIRED FOR FINAL (AE 5.9). ***ELEVATION CERTIFICATE SUBMITTED 10-31-14 SS- BFE (5.9), FFE (7.7) ATTACHED GARAGE FFE (7.0)***	Residential
24179555760000	2014	NEW SFR MODEL 20. 2009 VRC. PROJECT WITHIN ONE MILE OF THE COAST IMPACT GLAZING PROTECTION OF OPENINGS REQUIRED	Residential
24179555360000	2014	SFR MODEL 19. VRC 2009. PROJECT ONE MILE FROM THE COAST REQUIRE IMPACT GLAZING AND PROTECTION OF OPENINGS	Residential
24179545940000	2014	SFR. VRC 2009. SINGLE FAMILY 19. PROJECT ONE MILE FROM THE COAST NEED IMPACT GLAZING AND PROTECTION OF OPENINGS	Residential
24179877240002	2014	NEW SF 2009 USBC. BISHARD DEV SF 16 MODEL. WILL NOISE TEST 70-75 DB NOISE ZONE. WITHIN 1 MILE OF COAST, SHEAR WALLS DESIGNED AND OPENINGS REQUIRED TO BE PROTECTED.	Residential
24271520310000	2014	NEW SF 2009 USBC. AS BUILT REQUIRED BY DSC BEFORE CO.	Residential

Resort Area SGA – December New Building Permits, 1/01/201 to 12/14/2015			
GPIN	Permit Year	Permit Description	Permit Subtype
		RECEIVED APPROVED AS BUILT 10/31/14 MC	
24179622730000	2014	1/2 OF DUPLEX 2009 USBC. WILL NOISE TEST AS REQUIRED BASED ON NOISE ZONE. COMPLETE DUPLEX CONSIST OF OCEANA DUPLEX A & B. APPROVED NOISE TEST RECEIVED 12/15/14 MC	Residential
24179622730000	2014	1/2 OF DUPLEX 2009 USBC. WPL HOMES OCEANA DUPLEX B. WILL NOISE TEST AS REQUIRED BASED ON NOISE ZONE. COMPLETE DUPLEX CONSIST OF OCEANA DUPLEX A & B. RECEIVED APPROVED SOUND TEST 12/15/14 MC	Residential
24179908920000	2014	NEW SFR PR03202	Residential
24270155650000	2014	SINGLE FAMILY 22.	Residential
24280042620000	2014	NEW 2 STOREY SINGLE FAMILY	Residential
24280045030000	2014	NEW 3 STORY SINGLE FAMILY RESIDENCE RECEIVED AS BUILT APPROVAL LETTER MC 05/26/15 MC	Residential
24280401840000	2014	NEW OFFICE BUILDING AND PARKING GARAGE. WEATHERLY COASTAL OFFICE BUILDING	Commercial
24271441620000	2014	NEW SFR RECEIVED APPROVED AS BUILT FOR LOT GRADING ONLY MC 06/19/15	Residential
24271451030000	2014	NEW SFR RECEIVED APPROVED AS BUILT LETTER FOR LOT GRADING ONLY MC 06/19/15	Residential
24178425670000	2014	HALF DUPLEX MODEL 10A	Residential
24175424040000	2014	NEW SF 2009 USBC. COLONNADE CONSTRUCTION KENYA MODEL ***WILL NOISE TEST BEFORE CO >75DB NOISE ZONE*** Sound Test received/approved 5/21/2015 c muller	Residential
24179954580000	2014	NEW SFR. 2009USBC. IMPACT GLASS FOR ALL THREE STORY STRUCTURES. FIRE SUPPRESSION SYSTEM REQUIRED	Residential
24179954580000	2014	NEW SFR. 2009 USBC. IMPACT GLASS REQUIRED FOR A THREE STORY STRUCTURE. FIRE SUPPRESSION SYSTEM REQUIRED	Residential
24175445230000	2014	WPL OCEAN BAY HOMES CARPENTER MODEL 2009 IRC.	Residential
24179920910000	2014	NEW SF 2012 USBC. BISHARD SF 18 MODEL	Residential
24179920910000	2014	NEW SF 2012 USBC. BISHARD SF 17 MODEL ***WILL NOISE TEST BEFORE CO 70-75DB NOISE ZONE.***	Residential
24179920910000	2014	NEW SF 2012 USBC. BISHARD SF 17 MODEL ***WILL NOISE TEST BEFORE CO 70-75DB NOISE ZONE.***	Residential

Resort Area SGA – December New Building Permits, 1/01/201 to 12/14/2015			
GPIN	Permit Year	Permit Description	Permit Subtype
		NOISE TEST RECIEVED 11-19-15 SS - 39.8LDN	
24179829480000	2014	NEW SF 2012 USBC. BISHARD SF 18 MODEL	Residential
24271633670000	2015	new single family residence	Residential
24280013300000	2015	NEW SF 2009 USBC.	Residential
		LEASING OFFICE	
		AQUA APTS	
24270947330000	2015	2009 USBC	Commercial
		AQUA APARTMENTS UNITS 101 THRU 208	
		2009 USBC	
		BLDG B	
24270947330000	2015	UNIT 101 1A CONST. OTHERS 3A	Commercial
		FITNESS CENTER/GYM - AQUA APTS BLDG B	
		UNIT 200	
		2009 USBC	
24270947330000	2015	BLDG B	Commercial
		AQUA APARTMENTS UNITS 301 THRU 410	
		2009 USBC	
24270947330000	2015	BLDG B	Commercial
		AQUA APARTMENTS UNITS 501 THRU 510	
		2009 USBC	
24270947330000	2015	BLDG B	Commercial
		AQUA APARTMENTS UNITS 121 THRU 222	
24270947330000	2015	2009 USBC	Commercial
		AQUA APARTMENTS UNITS 325 THRU 424	
24270947330000	2015	2009 USBC	Commercial
		AQUA APARTMENTS UNITS 520 THRU 529	
24270947330000	2015	2009 USBC	Commercial
		AQUA APARTMENTS UNITS 109 THRU 214	
		2009 USBC	
24270947330000	2015	PHASE 2	Commercial
24271419390000	2015	NEW SFR	Residential
		AQUA APARTMENTS UNITS 313 THRU 416	
		2009 USBC	
24270947330000	2015	PHASE 2	Commercial
		AQUA APARTMENTS UNITS 511 THRU 519	
		2009 USBC	
24270947330000	2015	PHASE 2	Commercial

Resort Area SGA – December New Building Permits, 1/01/201 to 12/14/2015			
GPIN	Permit Year	Permit Description	Permit Subtype
24179337650000	2015	NEW SFR. AS BUILT REQUIRED BY DSC PRIOR TO OBTAINING C O. A SOUND TEST REPORT TO BE SUBMITTED PRIOR TO OBTAINING A C O.	Residential
24280069770000	2015	2 CONSTRUCTION TRAILERS. FOR THE Hyatt Hotel	Commercial
24280013300000	2015	NEW SFR	Residential
24179681450000	2015	NEW SFR 2012 USBC **NOISE TEST REQUIRED BEFOR ECO**	Residential
24271419790000	2015	NEW SFR 2012 USBC	Residential
24271693810000	2015	PIER SHOPS 14TH/15TH STREETS	Commercial
24178934160000	2015	NEW SFR	Residential
24271678310000	2015	NEW SINGLE FAMILY TOWNHOUSE RISSUE OF 200817463B0 TO GET FINIAL TO OBTAIN CO MODIFICATION GRANTED FOR LOFTS.-PER CHRIS H	Residential
24271693810000	2015	TEMP CONSTRUCTION TRAILER	Commercial
24179968380000	2015	new sfr model 18 2012 usbc	Residential
24175595730000	2015	o'reilly auto parts	Commercial
24186013430000	2015	CONSTRUCTION TRAILER FOR APPROX 6 MO. DURATION	Commercial
24271678310000	2015	RE-ISSUE OF 200807323B0. NEW OWNER AND CONTRACTOR TO COMPLETE THE PROJECT. INSPECTION RESULTS CONNECTED TO PERMIT. A NEW COPY OF FLOOR PLANS IN PROJECT FILE. 2 OF 4 CONDO UNITS /FOUNDATION PERMIT 2008009954B0	Residential
24271678310000	2015	RE-ISSUE OF 200807324B0. NEW OWNER AND CONTRACTOR TO COMPLETE THE PROJECT. INSPECTION RESULTS CONNECTED TO PERMIT. A NEW COPY OF FLOOR PLANS IN PROJECT FILE. 3 OF 4 CONDO UNITS /FOUNDATION PERMIT 2008009954B0	Residential
24179371380000	2015	NEW SFR. SOUND TEST REQUIRED PRIOR TO THE ISSUANCE OF THE C O	Residential
24179320750000	2015	NEW SFR 2012 USBC NOISE TEST REQUIRED PRIOR TO CO	Residential
24179320750000	2015	NEW SFR 2012 USBC NOISE TEST REQUIRED PRIOR TO CO	Residential
24179320750000	2015	NEW SFR 2012 USBC NOISE TEST REQUIRED PRIOR TO CO	Residential
24178436820000	2015	NEW DUPLEX - BISHARD MODEL 9 B UNIT - 2012 USBC	Residential
24178446220000	2015	NEW DUPLEX - BISHARD MODEL 9 B UNIT - 2012 USBC	Residential
24178446220000	2015	NEW DUPLEX - BISHARD MODEL 9 A UNIT - 2012 USBC	Residential

Resort Area SGA – December New Building Permits, 1/01/201 to 12/14/2015			
GPIN	Permit Year	Permit Description	Permit Subtype
24178436820000	2015	NEW DUPLEX - BISHARD MODEL 9 A UNIT - 2012 USBC	Residential
24270124700000	2015	NEW SFR 2012 USBC - BEACH BUILDING GROUP PALM II MODEL *NOISE TEST PRIOR TO CO*	Residential
24270123290000	2015	NEW SFR BEACH BUILDING - NEW MODEL 2012 USBC ANY ENCLOSURE BELOW BFE (8.0) WILL REQUIRE FLOOD VENTS - FINAL ELEVATION CERT REQ. PRIOR TO CO. NOISE TEST PRIOR TO CO.	Residential
24176612040000	2015	TEMP CONSTRUCTION TRAILER	Commercial
24179968380000	2015	NEW SF 2012 USBC. BISHARD SF 24. ***ZONING SET BACKS AS SHOWN ON SITE PLAN***	Residential
24177868540000	2015	NEW SFR 2012 USBC - NOISE TEST REQUIRED PRIOR TO C/O. FINAL ELEVATION CERTIFICATE REQUIRED PRIOR TO C/O FOR SITE IN AE FLOOD ZONE	Residential
24177878070000	2015	NEW SFR 2012 USBC - NOISE TEST REQUIRED PRIOR TO C/O. FINAL ELEVATION CERTIFICATE REQUIRED PRIOR TO C/O FOR SITE IN AE FLOOD ZONE	Residential
24270830230000	2015	NEW SF 2012 USBC. ***ENGINEER'S REPORT REQUIRED FOR ICF*** ***ZONING SETBACKS AS SHOWN ON APPROVED SITE PLAN***	Residential
182			

CHAPTER 4. AGRICULTURAL

According to the data compiled by the United States Department of Agriculture (USDA) Farm Service Agency, the Virginia Beach Department of Agriculture and the Virginia Beach Cooperative Extension, agribusiness is a significant contributor to the City's overall economy. In 1995, the City approved the Agricultural Reserve Program to protect the agricultural lands and the rural character of southern Virginia Beach. As of 2014, over 9,220 acres have been protected in agricultural easements and the success of the program has stimulated further protection of open space in the rest of the City. The goal of the program is to protect 20,000 acres as a resource base for our agriculture industry. Over the next decade the local agriculture industry will continue changing to include many alternative enterprises to the traditional commodity crops. Because of our location, population and tourism industry, Virginia Beach is the best example of farming on the edge of urban development.

Agricultural Reserve Program

The ARP is a voluntary program and many factors can have an effect on a landowner's decision to enroll his or her property. The purchase price of the easement and the current interest rates are sometimes the most discussed factors with staff. The interest rate especially was an item of concern for many applications during FY 2014. Applications also take a certain amount of time to process, so one year, there may be more applications received with few closings, compared to another year with more closings and less applications received. Therefore, over time, some peaks and valleys continue to be seen with enrollments.

Fiscal Year	Acres Enrolled
1997	835.32
1998	2,692.90
1999	480.92
2000	499.46
2001	924.35
2002	585.47
2003	586.72
2004	206.22
2005	213.57
2006	53.81
2007	165.59
2008	246.44
2009	428.07
2010	173.21
2011	739.61
2012	47.21
2013	321.62
2014	23.12

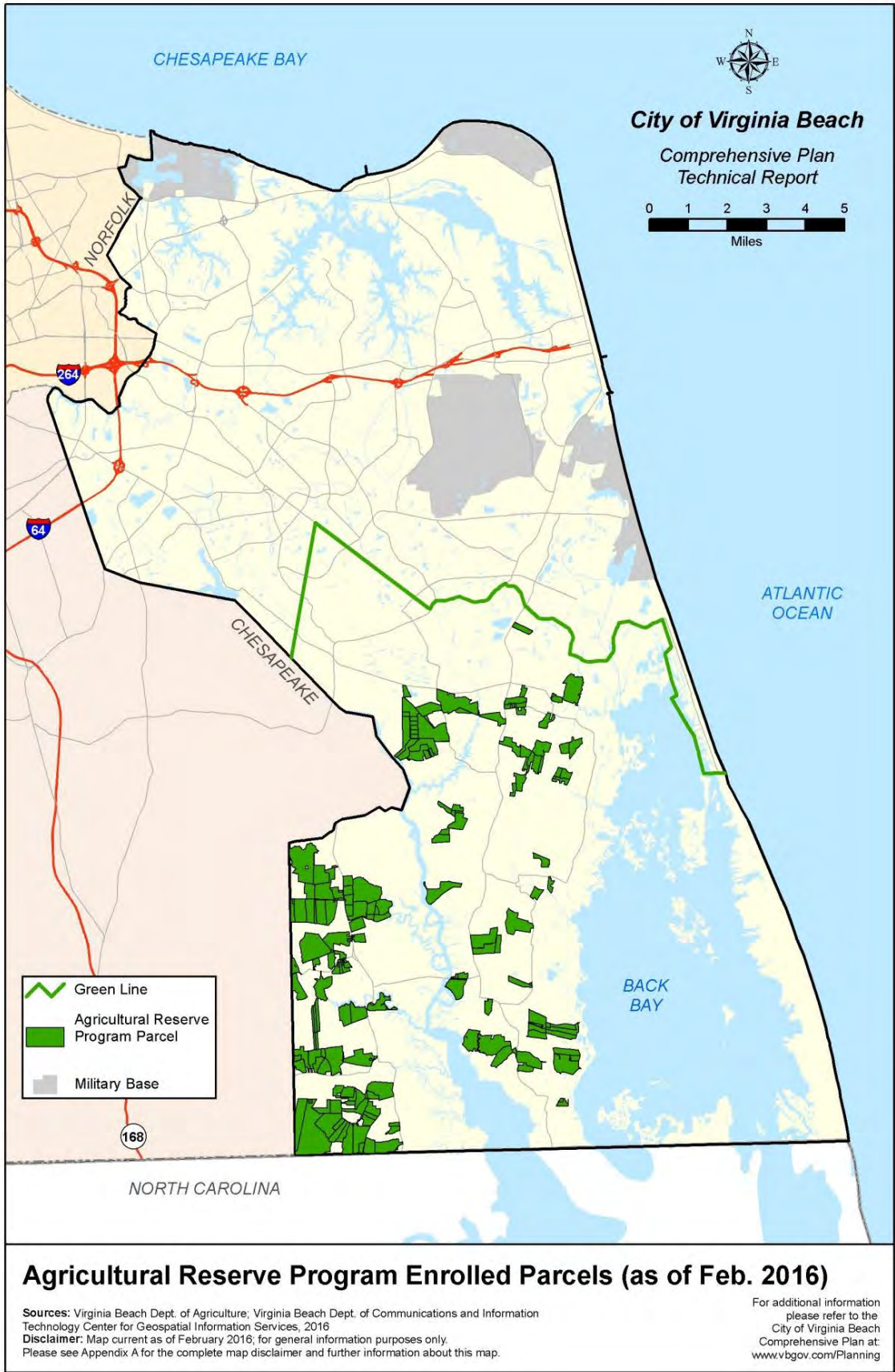


FIGURE 1

CROPLAND ACREAGE IN VIRGINIA BEACH

The following table provided by the Virginia Beach Cooperative Extension Service provides a breakdown of the volume of agribusiness products produced in the City of Virginia Beach.

CROP	ACRES	AV. YIELD	TOTAL YIELD	AV. PRICE/BU	GROSS INCOME
CORN	4,254	185	786,990	\$3.93	\$3,092,870.70
SOYBEANS	15,439	48	741,072	\$9.69	\$7,180,987.68
WHEAT	3,953	65	256,945	\$4.18	\$1,074,030.10
other small grains	150	80	12,000	\$2.51	\$30,120.00
SUBTOTAL	23,796				\$11,378,008.48
Fruits, Vegetables, Ornamentals & Pasture (acres)		Estimated Value of Fruits, Vegetables, Crops and Livestock			
POTATOES	250		VALUE OF AGRONOMIC CROPS		\$11,378,008.48
STRAWBERRIES	38		FRUITS & VEGETABLES		\$3,600,000.00
SWEET CORN	350		OTHER PRODUCTS		\$3,956,000.00
SNAP BEANS	20		ALL LIVESTOCK		\$18,300,000.00
SWEET POTATOES	20				
TOMATOES	15		TOTAL VALUE OF AG PRODUCTS		\$37,234,008.48
WATERMELONS	10				
OTHER F & V	600				
ORNAMENTALS	200		ECONOMIC IMPACT OF AGRICULTURAL PRODUCTS		
PASTURE/HAY	3000				
SUBTOTAL	4503				
Total Acres	28,299				
Value of Livestock Sold		Annual expenses for Horses in VB	ANNUAL ECONOMIC IMPACT - LIVESTOCK		
HOGS	Cattle, sheep, goats				
\$2,000,000	\$300,000				

CHAPTER 5. TRANSPORTATION

EXISTING LOCAL ROADWAY SYSTEM

Although several decades of dramatic growth has changed the appearance of much of the City, southern Virginia Beach still maintains many of the rural characteristics of its Princess Anne County era, whereas, the northern half of the city has been urbanized. Essentially, there are two unique roadway systems to maintain, both of which have felt the effects of growth.

The city's urban/suburban arterial road network consists of three east-west corridors that run through the northern, central and southern portions of the urbanized part of the city. These roads provide direct access within the city and connections to the rest of Hampton Roads. The geographic transportation corridors include:

- Northern corridor - includes Shore Drive and Northampton Boulevard, which accommodate through traffic to I-64, and local and commercial traffic to employment areas in Norfolk and the northwestern section of Virginia Beach. **Northampton Boulevard (Route 13) and Interstate 64, are listed as a corridors of statewide significance on the Draft Vtrans Plan (Commonwealth of Virginia Transportation Plan - See VTRANS map published by VOIPI)**
- Central corridor - I-264 and Virginia Beach Boulevard together form the backbone of Virginia Beach's transportation system and connect six of the City's eight Strategic Growth Areas. Both roadways serve the large retail and commercial centers located along the corridor and accommodate through traffic as well as local and commercial trips. **Virginia Beach Boulevard/Laskin (Route 58) is listed as a corridor of statewide significance on the Draft Vtrans Plan (Commonwealth of Virginia Transportation Plan);**
- Southern corridor - includes a series of arterials running diagonally southeast to northwest, linking the southern half of the city to the regional roadway system at I-264 and I-64. Centerville Turnpike, Lynnhaven Parkway, Ferrell Parkway, Providence Road and Kempsville Road channel traffic to Indian River Road, which provides key western access to I-64.

These three major urban corridors are traversed and connected by a series of arterial roads running north to south.

The rural road network was designed to serve the needs of the southern rural area. This road system is strained in locations where it transitions between rural and urban use. It consists of a large network primarily made up of two-lane roads.

The following maps show the roadways in Virginia Beach that are part of the National Highway System and part of the Virginia Corridors of Statewide significance:

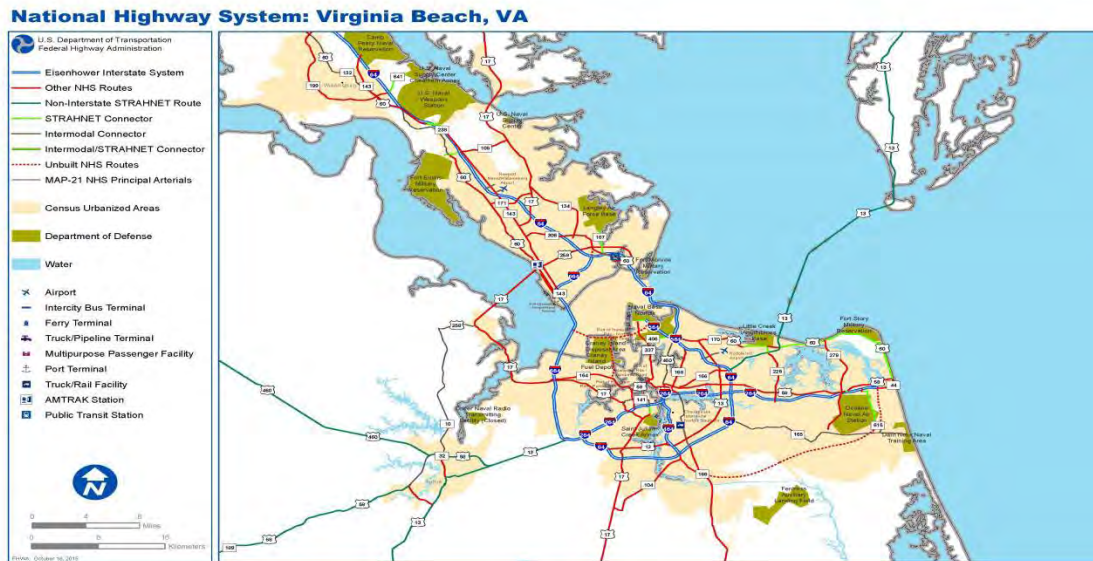


FIGURE 1

VTRANS CORRIDORS OF STATEWIDE SIGNIFICANCE

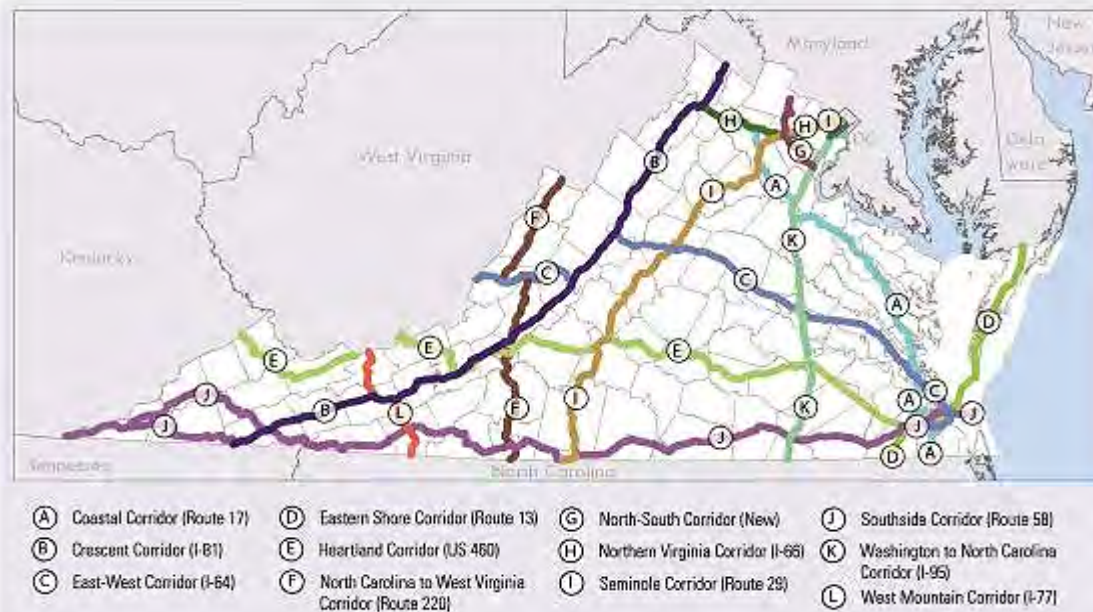


FIGURE 2

LOCAL CAPITAL PROJECTS

The City of Virginia Beach has accomplished much in recent years to improve traffic conditions on its roadway network. Currently, the City has a robust local transportation funding program as shown below:

Major transportation improvements that are listed within the City's Adopted Capital Improvement Program for full or partial funding (FY2015-16 through FY2020-21)

19th Street Infrastructure Improvements (CIP #9100000) – Streetscape improvements including wider sidewalks, street trees and undergrounding of overhead utilities. The estimated cost is \$10,863,200.

Centerville Turnpike Phase II (CIP#2409000) – This project is for the construction of a four-lane divided highway within a 130 foot right-of-way from Indian River Road to Kempsville Road, a distance of 1.85 miles. This project will include triple left turn lanes at the Indian River intersection, sidewalks, dedicated bike lanes, landscaping and relocation of existing aerial utilities. The estimated cost is \$36,674,015.

Centerville Turnpike Phase III (CIP#2419000) – This project is for the construction of a four-lane divided highway between Kempsville Road and the Chesapeake City Line for a distance of 1.15 miles. The project will include on and off bike accommodations and existing aerial utilities will be relocated. The estimated cost is \$26,869,776 has been appropriated.

Elbow Road Extended-Phase II (CIP#2152000) – This project is for improving Elbow Road from Indian River Road to Dam Neck Road at the Virginia Beach Amphitheatre. The typical section will include a four-lane divided highway into a 110-foot to 125-foot variable right-of-way with a sidewalk, bike lanes, landscaping, and aesthetic features for a length of approximately 2.5 miles. The estimated cost is \$75,103,669

Ferrell Parkway (CIP#2054000) – This project is for construction of an additional lane along westbound Ferrell Parkway from Indian Lakes Boulevard to Indian River Road, a distance of 0.85 miles. The estimated cost is \$2,032,050.

First Colonial Road/Virginia Beach Boulevard intersection (CIP#2072000) – Addition of turn lanes and traffic signalization improvements. The estimated cost is \$28,277,794.

First Colonial/Laskin Road intersection (CIP#2030000) – This project is for the construction of improvements to the intersection to include the addition of a second westbound left turn lane. The estimated cost is \$1,055,000.

Greenwich Road Crossover and Cleveland Street Improvements (CIP#2401000) – This project is part of the overall eastbound VDOT I-264 interchange project between I-64 and the Witchduck Road interchange. This portion of the project will consist of a four lane roadway with sidewalk and shared use path. The estimated cost is \$16,263,750.

Holland Road Phase VI (CIP#2158000) – This project is for completion of a four-lane divided highway on a 100 foot right-of-way width from Dam Neck Road to Nimmo Parkway Phase V. The estimated cost is \$52,292,677.

Indian River Road/Kempsville Road intersection improvements (CIP#2418000) – This project is to reconstruct the intersection to increase the capacity, improve safety and improve traffic flow. The estimated cost is \$15,638,375.

Indian River Road/Princess Anne Road interim intersection improvements (CIP#2422000) - This project is part of potential cost participation with private developer. The estimated cost is \$250,000

Indian River Road/Providence Road intersection improvement (CIP#2042000) This project provides funding to construct improvements to Indian River Road between Providence Road and Level Green Boulevard. The estimated cost is \$2,052,200.

Indian River Road-Phase VII (CIP#2256000) – This project will construct a four lane divided arterial highway from Lynnhaven Parkway to Elbow Road Extended, a distance of 2.3 miles, and includes a multi-use path on both sides of the road. The estimated cost is \$86,761,892.

Landstown Road Improvements-Phase I (CIP#2050000) – This project is for the widening of the existing Landstown Road to a four-lane undivided roadway with paved shoulders, and an 8-10 wide multi-use path for a total distance of 0.6 miles from Landstown Centre Way south to the bend in Landstown Road. The estimated cost is \$7,334,000.

Laskin Road (Route 58) Bridge Replacement (CIP#2040000) – This project is to replace the existing bridge over Linkhorn Bay. The new bridge will match the typical section for the 2.1 mile long widening project of Laskin Road from Republic Road to South Oriole Drive with 6 lanes, a sidewalk, and a multi-use path. The estimated cost is \$17,765,000.

Laskin Road – Phase I (CIP#2156000) – This project is for the construction of an eight lane divided highway in a 160' right-of-way from Republic Road to Winwood Road and a six-lane divided highway to Oriole Drive in a 150' right-of-way with multi-use path and sidewalk. The estimated cost is 103,222,000.

Laskin Road – Phase II (CIP#2165000) – This project is for the construction of a six lane divided highway with multi-use path from Oriole Road to the 30th St. /31st St. split. The estimated cost is \$11,648, 659.

Lesner Bridge Replacement (CIP#2168000) – This project will replace the existing Lesner Bridge with a facility that is capable of handling six lanes of traffic in the future. The replacement structures will include 10' outside shoulders and 10' multi-use paths. The estimated cost is \$119,546,064.

Lynnhaven Parkway – Phase XI (CIP#2167000) – This project is for reconstruction of the existing roadway to provide for a four-lane divided highway with an eight foot multi-use path and a sidewalk from Indian River Road to Centerville Turnpike. The estimated cost is \$39,777,104.

Newtown Road/Baker Road Intersection Improvements (CIP#2037000) – This project is for construction of improvements to improve safety and reduce congestion. The estimated cost is \$1,000,000.

Pacific Avenue Improvements Phase I (CIP#2045000)– This project provides improvements to Pacific Avenue between 17th St. and 22nd Street within the existing right-of-way to include

undergrounding of overhead utilities and public utility upgrades. The estimated cost is \$17,330,000.

Pleasure House Road Street Improvements Phase I (CIP#2056000) – This project will provide street and safety improvements, including curb, gutter and sidewalk improvements from Northampton Boulevard to Shore Drive. The estimated cost is \$1,222,446.

Pleasure House Road Street Improvements Phase II (CIP#2057000) – This project will provide street and safety improvements, including curb, gutter, sidewalks and bike accommodations for approximately one mile between Shore Drive and Lookout Road. The estimated cost is \$2,911,000.

Princess Anne Road Phase VII (CIP#2195000) - This project is for construction of a four-lane divided roadway within a 143' right-of-way with a multi-use path, from General Booth Boulevard to Fisher Arch, a distance of 1.25 miles. The estimated cost is \$34,784,707.

Princess Anne Road Phase VIIA (CIP#2033000) – The project is for safety improvements on Princess Anne Road from Seaboard Road to Indian River Road. The estimated cost is \$6,871,800.

Providence Road sidewalk (CIP#2058000) -This project will provide street and pedestrian safety improvements and a 5' sidewalk from Kempsville Road to Indian Lakes Boulevard/Churchill Drive, a distance of 0.6 miles. The estimated cost is \$911,950.

Rosemont Road Phase V (CIP#2038000) – This project is for the construction of a four-lane divided highway between Lynnhaven Parkway and Dam Neck Road for a distance of 1.5 miles. The estimated cost is \$17,435,000.

Sandbridge Road Bridge replacement (CIP#2416000) – This project is for the replacement of the existing bridge over Hell's Point Creek. The estimated cost is \$7,794,700.

Sandbridge Road/Nimmo Parkway Phase VIIA (CIP#2078000) – This project is for the construction of Nimmo Parkway as a two lane roadway from Sandpiper Road to approximately 1 mile west. The estimated cost is \$12,301,780.

Shipp's Corner Road Improvements (CIP#2414000) – This project is for construction of improvements from Skylark Drive to London Bridge Road. The estimated cost is \$2,047,270.

Shore Drive Corridor Improvements Phase III (CIP#2117000) – This project is from Vista Circle to Croix Drive and will include roadway improvements, a multi-use path, a sidewalk and on-street bike lanes. The estimated cost is \$15,104,208.

Shore Drive Corridor Improvements Phase IV (CIP#2118000) – This project begins at the Marlin Bay Drive and Sandy Oaks Drive intersection and ends west of the Lesner Bridge and will include roadway improvements, a multi-use path, sidewalk and on street bike lanes. The estimated cost is \$12,758,721.

Southeastern Parkway and Greenbelt Partial (CIP#2089000) – Site acquisition for an 11.5 mile four lane divided parkway from I-264 to the Chesapeake City Line. The acquisition fund is \$23,549,335

Upton Drive Extended/Dam Neck Station Improvements (CIP#2047000) – Intersection improvements at General Booth Boulevard and Dam Neck Station and at Upton Drive and Dam Neck Road. The estimated city cost is \$1,300,000.

Virginia Beach Transit Extension (CIP#2092000) – This is a design-build project to extend light rail fixed guide-way transit, “The Tide” from its terminus at Newtown Station/Norfolk-Virginia Beach line, east to the Town Center/Constitution Drive area. The estimated cost is \$310,378,000 with the City contribution roughly 50% of the total.

West Neck Road Phase IV (CIP#2088000) – This project is to design and construct a two-lane parkway from Kellam High School to the end of the curve at the Fountain property, for approximately 5,750 feet. The project will provide paved shoulders for cyclists, pedestrian accommodations and drainage swells. The estimated cost is \$9,000,000

Winston-Salem Avenue Improvements (CIP#9006000) – This project will provide funding for design, property acquisition, and construction of a two-lane roadway with on street parking, wider sidewalks, and new LED lighting. The total cost is \$3,604,516.

Witchduck Road Phase II (CIP#2025000) – This project will provide a six-lane divided roadway on a 143’ to 165’ variable right-of-way from I-264 to Virginia Beach Boulevard, a distance of 2,600 feet. The estimated cost is \$62,663,448

Shown in the following listing are additional roadway improvements shown on the Primary Roadway Network Map that reflect the estimated cost to complete the ultimate lane width shown on the map:

PRIMARY ROADWAY NETWORK MAP COST ESTIMATES (2015\$ in millions)

Birdneck Road (I-264 – Virginia Beach)	\$21.1
Dam Neck Road (Holland – Drakesmile)	\$34.8
Dam Neck Road (Drakesmile – London Bridge)	\$48.9
Dam Neck Road (Princess Anne – Holland)	\$31.0
Ferrell Parkway (Indian Lakes – Pleasant Valley)	\$42.3
Ferrell Parkway (Pleasant Valley – Salem)	\$31.0
First Colonial (Old Donation – Virginia Beach Blvd.)	\$51.0
General Booth Boulevard (Dam Neck – London Bridge)	\$52.7
General Booth Boulevard (Nimmo – London Bridge)	\$18.0
General Booth Boulevard (Birdneck – Oceana)	\$44.9
General Booth Boulevard (Oceana – Dam Neck)	\$37.4
Great Neck Road (Wolfsnare – Virginia Beach)	\$32.4
Great Neck Road (Wolfsnare-Shore)	\$59.5
Holland Road (Independence – Rosemont)	\$126.4
Independence Boulevard (Virginia Beach Blvd. – Haygood)	\$36.2
Independence Boulevard (Haygood – Northampton)	\$51.0
Indian River Road (Centerville – Ferrell)	\$74.2
Indian River Road (Elbow – North Landing)	\$68.0
Indian River Road (West Neck – North Landing)	\$79.8
Laskin Rd. (Great Neck – Republic)	\$56.5
London Bridge (Dam Neck – Shipp's Corner)	\$40.8
Lynnhaven Parkway (Holland – Princess Anne)	\$92.7
Newtown Rd. (Diamond Springs – Haygood)	\$10.9
Newtown Rd. (Baker – Virginia Beach Blvd.)	\$28.0
Nimmo Parkway (Holland – General Booth)	\$20.0
Nimmo Parkway (Holland – P. Anne)	\$7.0
Nimmo Extended (West Neck – North Landing)	\$41.1
North Lynnhaven (Virginia Beach Blvd. – Lynnhaven Pkwy)	\$14.6
North Lynnhave (King's Grant – Virginia Beach)	\$13.4
Princess Anne (Dam Neck-Nimmo)	\$30.8
Princess Anne (Providence – Salem)	\$17.0
Providence (Kempsville – Princess Anne)	\$63.8
River Birch Road (Chesapeake Line – Centerville)	\$21.8
Rosemont Road (Holland – Virginia Beach Blvd.)	\$144.8
Salem (Independence – Elbow)	\$19.0
Salem (Elbow – Nimmo Extended)	\$62.6
Sandbridge Road (Princess Anne – Atwoodtown)	\$60.6
Shore Dr. (Pleasure House – Treasure Island)	\$18.4
Shore Dr. (Marlin Bay – E. Stratford)	\$14.8
Shore Dr. (Page – Great Neck)	\$12.9
South Independence (Salem- Indian River)	\$39.1
West Neck (North Landing – Indian River)	\$42.0
West Neck Parkway (Nimmo Extended – Elbow)	\$49.1

The following chart provides information regarding traffic volume (most current counts and future projections) for most major roadways shown on the Primary Roadway Network Map in the policy document:

Route Name	From	To	2013 Counts	2040 Total	% Difference	
19TH ST (both directions)	Birdneck	Cypress	3600	3428	5%	2040 < 2013
21ST ST EB	I-264	Baltic	11000	15939	45%	2040 > 2013
22ND ST WB	Baltic	I-264	13000	20999	62%	2040 > 2013
BIRDNECK RD	19th St	Va Beach Blvd	14000	6637	53%	
BIRDNECK RD (both directions)	Norfolk Ave	Bells Rd	15000	10425	31%	
BIRDNECK RD NB	Va Beach	19th St	14000	5844	58%	
BLACKWATER RD (both directions)	Indian Creek	North Carolina Border	850	553	35%	
DAM NECK RD EB	Drakesmile	London Bridge	23000	6342	72%	
DAM NECK RD EB	Harpers	Corp Landing	13500	3334	75%	
DAM NECK RD WB	London Bridge	Drakesmile	23000	5946	74%	
DAM NECK RD WB	Corp Landing	Harpers	13500	3206	76%	
EDWIN DR (both directions)	Independence	South Blvd	7000	9485	35%	
FERRELL PKWY EB	Princess Anne	Pleasant Valley	21500	12424	42%	
FERRELL PKWY WB	Pleasant Valley	Princess Anne	21500	13154	39%	
FIRST COLONIAL RD NB	Wolfsnare	Old Donation	18500	22745	23%	
FIRST COLONIAL RD SB	Old Donation	Wolfsnare	18500	22882	24%	
GENERAL BOOTH BLVD (both directions)	Pacific	Aquarium	18000	26011	45%	
GENERAL BOOTH BLVD NB	Oceana	Birdneck	14500	15252	5%	
GENERAL BOOTH BLVD NB	Corp Landing	Dam Neck	14500	13758	5%	
GENERAL BOOTH BLVD SB	Birdneck	Oceana	14500	14784	2%	
GENERAL BOOTH BLVD SB	Dam Neck	Corp Landing	14500	13340	8%	
GREAT NECK RD NB	Laskin	Wolfsnare	10500	17061	62%	
GREAT NECK RD NB	Old Donation	First Colonial	10500	11600	10%	
GREAT NECK RD NB	Mill Dam	Shore	18500	14757	20%	
GREAT NECK RD SB	Wolfsnare	Laskin	10500	17124	63%	

GREAT NECK RD SB	First Colonial	Old Donation	10500	11537	10%
GREAT NECK RD SB	Shore	Mill Dam	18500	15047	19%
HOLLAND RD EB	Windsor Oaks	Chimney Hill	18000	19714	10%
HOLLAND RD NWB	Lynnhaven	Rosemont	16000	12293	23%
HOLLAND RD SEB	Rosemont	Lynnhaven	16000	12720	21%
HOLLAND RD WB	Chimney Hill	Windsor Oaks	18000	16272	10%
I-264 EB	First Colonial	Birdneck	19000	30543	61%
I-264 EB	First Colonial	Birdneck	9500	14344	51%
I-264 EB	London Bridge	First Colonial	27375	39142	43%
I-264 EB	London Bridge	First Colonial	9125	13107	44%
I-264 EB	Rosemont	Lynnhaven	50250	57470	14%
I-264 EB	Rosemont	Lynnhaven	16750	20270	21%
I-264 EB	Witchduck	Independence	59700	71343	20%
I-264 EB HOV	Witchduck	Independence	19900	22100	11%
I-264 EB Shoulder	Witchduck	Independence	19900	3464	83%
I-264 WB	Birdneck	First Colonial	9500	16625	75%
I-264 WB	Birdneck	First Colonial	19000	34890	84%
I-264 WB	First Colonial	London Bridge	27375	39825	45%
I-264 WB	First Colonial	London Bridge	9125	13265	45%
I-264 WB	Independence	Witchduck	59700	75950	27%
I-264 WB	Lynnhaven	Rosemont	50250	61167	22%
I-264 WB	Lynnhaven	Rosemont	16750	20866	25%
I-264 WB HOV	Independence	Witchduck	19900	22855	15%
I-264 WB Shoulder	Independence	Witchduck	19900	2288	89%
I-64 EB	I-264	Indian River	54750	49745	9%
I-64 EB	I-264	Indian River	18250	16100	12%
I-64 WB	Indian River	I-264	54750	49125	10%
I-64 WB	Indian River	I-264	18250	15760	14%
INDEPENDENCE BLVD NB	Jeanne	Constitution	26500	27426	3%
INDEPENDENCE BLVD NB	Witchduck	Haygood	14000	22633	62%
INDEPENDENCE BLVD NB	Haygood	Pleasure House	23500	25081	7%
INDEPENDENCE BLVD NWB	Windsor Oaks	S. Plaza	13500	14350	6%
INDEPENDENCE BLVD SB	Constitutio	Jeanne	26500	28110	6%

	n				
INDEPENDENCE BLVD SB	Haygood	Witchduck	23500	23589	0%
INDEPENDENCE BLVD SB	Pleasure House	Haygood	22000	26833	22%
INDEPENDENCE BLVD SEB	S. Plaza	Windsor Oaks	13500	14227	5%
INDIAN RIVER RD (both directions)	North Landing	West Neck Rd	5200	7697	48%
INDIAN RIVER RD (both directions)	Lynnhaven Pkwy	Independence	16000	35698	123%
INDIAN RIVER RD EB	Centerville	Kempsriver Dr	30000	36419	21%
INDIAN RIVER RD WB	Kempsriver Dr	Centerville	30000	33731	12%
KEMPSVILLE RD NB	Volvo	Centerville	16000	18057	13%
KEMPSVILLE RD SB	Centerville	Volvo	16000	19665	23%
LASKIN RD EB	I-264	Regency	15500	22293	44%
LASKIN RD EB	First Colonial	Birdneck	15000	12402	17%
LASKIN RD EB	Birdneck	roundabout	14000	19600	40%
LASKIN RD WB	Birdneck	First Colonial	15000	11512	23%
LASKIN RD WB	roundabout	Birdneck	14000	15144	8%
LASKIN RD WB	Regency	I-264	15500	23413	51%
LONDON BRIDGE RD (both directions)	International	Shipp's Corner	38000	21732	43%
LONDON BRIDGE RD EB	Gen Booth	Dam Neck	12000	19371	61%
LONDON BRIDGE RD WB	Dam Neck	Gen Booth	12000	20041	67%
LYNNHAVEN PKWY EB	Indian River	Salem	11000	14235	29%
LYNNHAVEN PKWY NB	Holland	Lynnhaven Rd	17000	25220	48%
LYNNHAVEN PKWY NB	International	Lynnhaven Rd	16000	19133	20%
LYNNHAVEN PKWY SB	Lynnhaven Rd	Holland	17000	24746	46%
LYNNHAVEN PKWY SB	Lynnhaven Rd	International	16000	18972	19%
LYNNHAVEN PKWY WB	Salem	Indian River	11000	14174	29%
NORTH LANDING RD	West Neck Rd	Landstown Extended	13000	3063	76%
NORTHAMPTON BLVD EB	Independence	Shore	22000	17602	20%
NORTHAMPTON BLVD EB	Diamond Springs	Independence	19000	27661	46%
NORTHAMPTON BLVD NB	at CBBT		5500	3549	35%
NORTHAMPTON BLVD SB	at CBBT		5500	3550	35%
NORTHAMPTON BLVD WB	Independence	Diamond Springs	19000	26216	38%
NORTHAMPTON BLVD WB	Shore	Independence	12500	18013	44%
OCEANA BLVD	Va Beach Blvd	Bells Rd	35000	24368	30%

PACIFIC AVE (both directions)	22nd St	30th St	16000	28136	76%
PACIFIC AVE (both directions)	17th St	Norfolk Rd	19000	30498	61%
PRINCESS ANNE RD (both directions)	Morris Neck	North Carolina Border	3700	2307	38%
PRINCESS ANNE RD (both directions)	West Neck Rd	Indian River	7200	4849	33%
PRINCESS ANNE RD (both directions)	Seaboard	Holland	26000	9774	62%
PRINCESS ANNE RD NWB	Parliament	Susquehanna	12500	21846	75%
PRINCESS ANNE RD NWB	S. Plaza	Green Meadows	14000	13453	4%
PRINCESS ANNE RD NWB	Brandywine	Baxter	17500	20071	15%
PRINCESS ANNE RD NWB	Dam Neck	Independence	23000	21624	6%
PRINCESS ANNE RD SEB	Independence	Dam Neck	23000	21601	6%
PRINCESS ANNE RD SEB	Green Meadows	S. Plaza	14000	14480	3%
PRINCESS ANNE RD SEB	Baxter	Brandywine	17500	20297	16%
PRINCESS ANNE RD SEB	Susquehanna	Parliament	12500	19986	60%
PROVIDENCE RD EB	Indian River	Whitehurst Lndg	10000	20486	105%
PROVIDENCE RD WB	Whitehurst Lndg	Indian River	10000	24391	144%
ROSEMONT RD	Old Forge	Bow Creek	15500	24518	58%
ROSEMONT RD NB	Bow Creek	Old Forge	15500	26545	71%
SHORE DR EB	First Court	Great Neck	17000	27870	64%
SHORE DR EB	First Landing Park	Atlantic	2750	5163	88%
SHORE DR EB	Northampton	First Court	19000	26275	38%
SHORE DR WB	Atlantic	First Landing Park	2750	4812	75%
SHORE DR WB	Great Neck	First Court	17000	27412	61%
SHORE DR WB	First Court	Northampton	19000	25866	36%
VIRGINIA BEACH BLVD (both directions)	Cypress	Birdneck	11000	8763	20%
VIRGINIA BEACH BLVD EB	Witchduck	Newtown	19500	34301	76%
VIRGINIA BEACH BLVD EB	Constitution	Thalia	22500	42450	89%
VIRGINIA BEACH BLVD EB	Little Neck	Kings Grant	18500	24794	34%
VIRGINIA BEACH BLVD EB	Lynnhaven	Great Neck	19500	25314	30%
VIRGINIA BEACH BLVD WB	Kings Grant	Little Neck	18500	20705	12%
VIRGINIA BEACH BLVD WB	Great Neck	Lynnhaven	19500	25864	33%

VIRGINIA BEACH BLVD WB	Thalia	Constitution	22500	40958	82%
VIRGINIA BEACH BLVD WB	Newtown	Witchduck	19500	34614	78%
WESLEYAN DR EB	Diamond Springs	Haygood	11000	14042	28%
WESLEYAN DR WB	Haygood	Diamond Springs	11000	13767	25%
WEST NECK RD (both directions)	North Landing	Indian River	6700	2471	63%

HAMPTON ROADS REGIONAL ROADWAY SYSTEM

Hampton Roads currently ranks 29th out of 36 among similar size metropolitan areas in vehicle miles traveled (VMT). However, the INRIX INDEX ranks the region 8th out of 36 in regards to overall congestion, and 7th in delay per peak auto commuter. The ranking can be partially attributed to Virginia's placement as 50th out of 51 states and the District of Columbia in the percentage of funds used for new highway construction¹³. Taken together, these statistics indicate that a reasonable explanation for why people drive fewer miles in this region is due to high congestion levels and low state spending on projects to address this congestion.

Recently, steps have been taken to address regional transportation needs. The Virginia General Assembly passed legislation in 2014 that created the Hampton Roads Transportation Accountability Commission (HRTAC) to allocate the House Bill 2313 Hampton Roads Transportation Fund (HRTF) revenues. HRTAC also has the authority to issue bonds and other debts, as well as to set toll rates on regional projects. To address congestion at several of the major regional choke points, HRTAC is pursuing funding for five "mega" projects shown on the below map.¹⁴

¹³ HRTPO, The State of Transportation in Hampton Roads, 2015

¹⁴ HRTPO, 2014

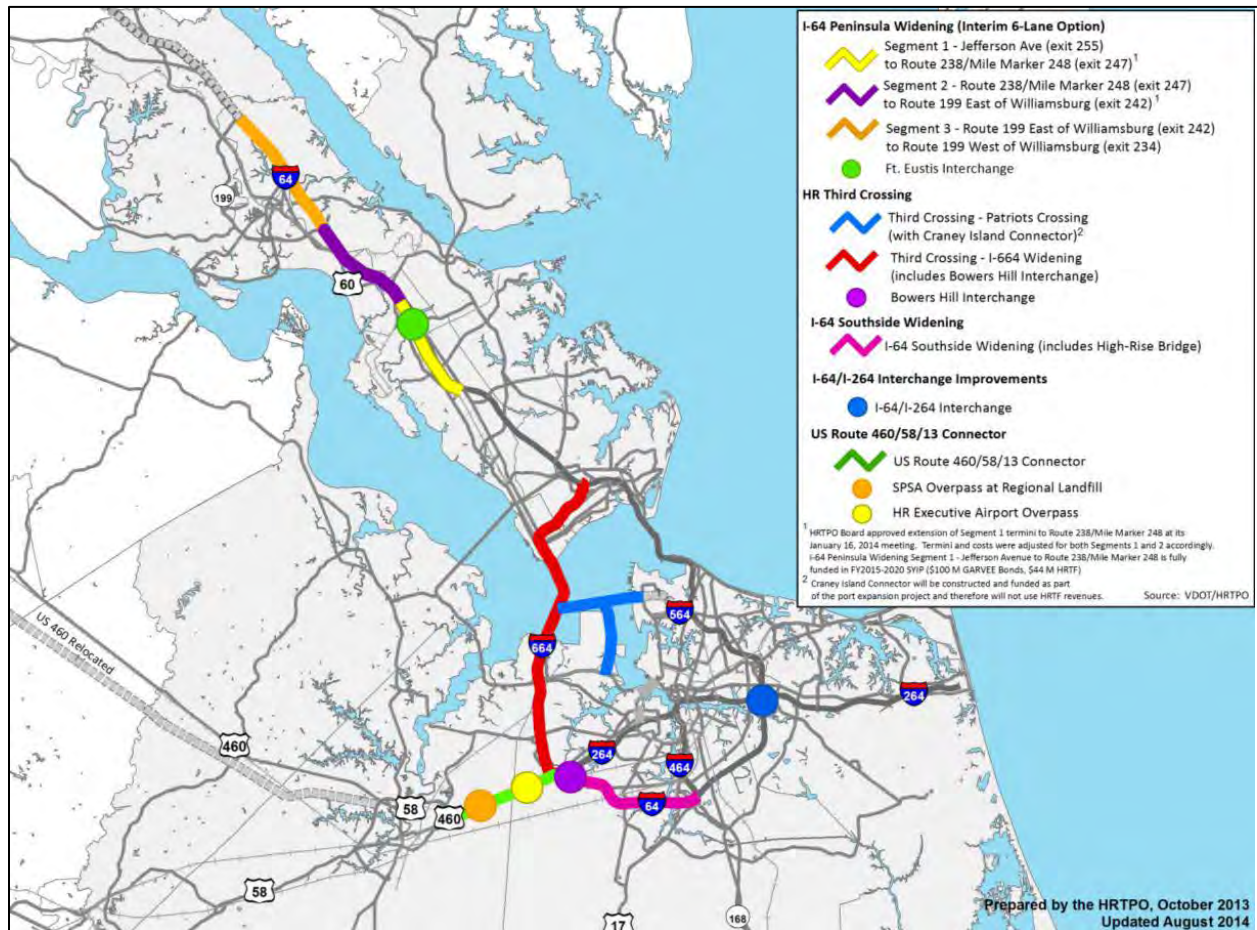


FIGURE 3

EXISTING VIRGINIA BEACH TRANSIT SYSTEM

Hampton Roads Transit (HRT) is the federally designated provider of mass transit for the Hampton Roads region. HRT is governed by the Transportation District Commission of Hampton Roads (TDCHR) as authorized by the Commonwealth of Virginia. The City of Virginia Beach is a member of the TDCHR. HRT provides bus, shuttle, light rail, ferry and paratransit services.

In Virginia Beach, HRT operates scheduled bus and shuttle routes, seasonal resort area services, and the complementary paratransit service mandated by the Americans with Disabilities Act. The following table describes the existing bus services within Virginia Beach:

HRT 2015 BUS ROUTES

ROUTE # DESCRIPTION

- Route 1 Downtown Norfolk to Pembroke East
- Route 12 South Norfolk (in Chesapeake) to Tidewater Community College VB Campus
- Route 15 Naval Station Norfolk to Robert Hall Blvd (along Military Highway in VB)
- Route 20 Downtown Norfolk to VB Oceanfront
- Route 25 Military Circle to Princess Anne
- Route 26 Lynnhaven Mall area to Tidewater Community College VB Campus
- Route 27 Pleasure House Rd. to Military Circle
- Route 29 Pleasure House Rd. to Tidewater Community College VB Campus

Route 30 Atlantic Ave. (seasonal)
Route 31 Aquarium & Campground Shuttle (seasonal)
Route 32 Shoppers Shuttle (seasonal)
Route 33 North Seashore to Municipal Center
Route 36 Pembroke East to Holland Rd.
Route 918/919 Virginia Beach to Naval Station Norfolk (Max Express)
Route 922 Chesapeake, Virginia Beach to Naval Station Norfolk (Max Express)
Route 960 Virginia Beach to Norfolk (Max Express)
Route 967 Virginia Beach, Chesapeake to Newport News (Max Express)

Source: Hampton Roads Transit

As discussed in the policy document, public transit must be aligned to service affordable, accessible housing and community services. The following four maps show the alignment of the current bus routes to transit dependent and paratransit users in Virginia Beach. The routes do appear to align fairly well with the areas of transit dependent concentrations. However, only three year round routes provide Sunday service and two stop service before 7 pm.

The criteria used to develop these maps are briefly described below:

- Map A - Carless Transit Focus areas (Census tracts with 1.5 times the City average of households without a car)
- Map B – Elderly Transit Focus areas (Census tracts with 1.5 times the City average of its population over the age of 65)
- Map C – Poverty Transit Focus areas (Census tracts with 1.5 times the City average of its population below the federal defined poverty level)
- Map D – Shows the HRT paratransit service area based on a ¾ mile radius from existing fixed route service (please note that paratransit service is only available during the daily duration of fixed route service).
- All four maps show the existing HRT bus routes (2015) and specific transit dependent uses which include; adult day care, assisted living facilities, dialysis centers, human service buildings, libraries, nursing homes, and senior housing facilities.

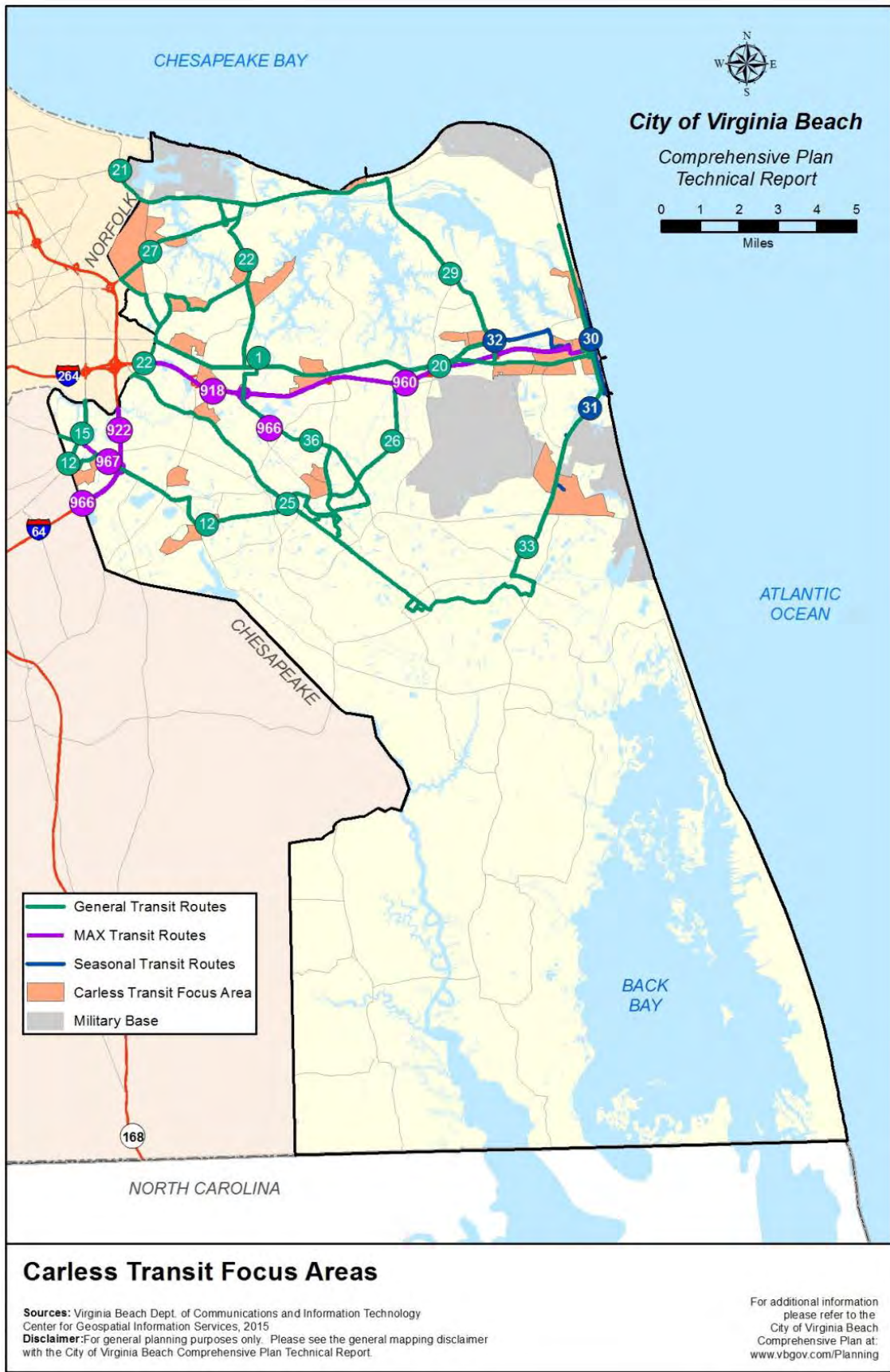


FIGURE 4

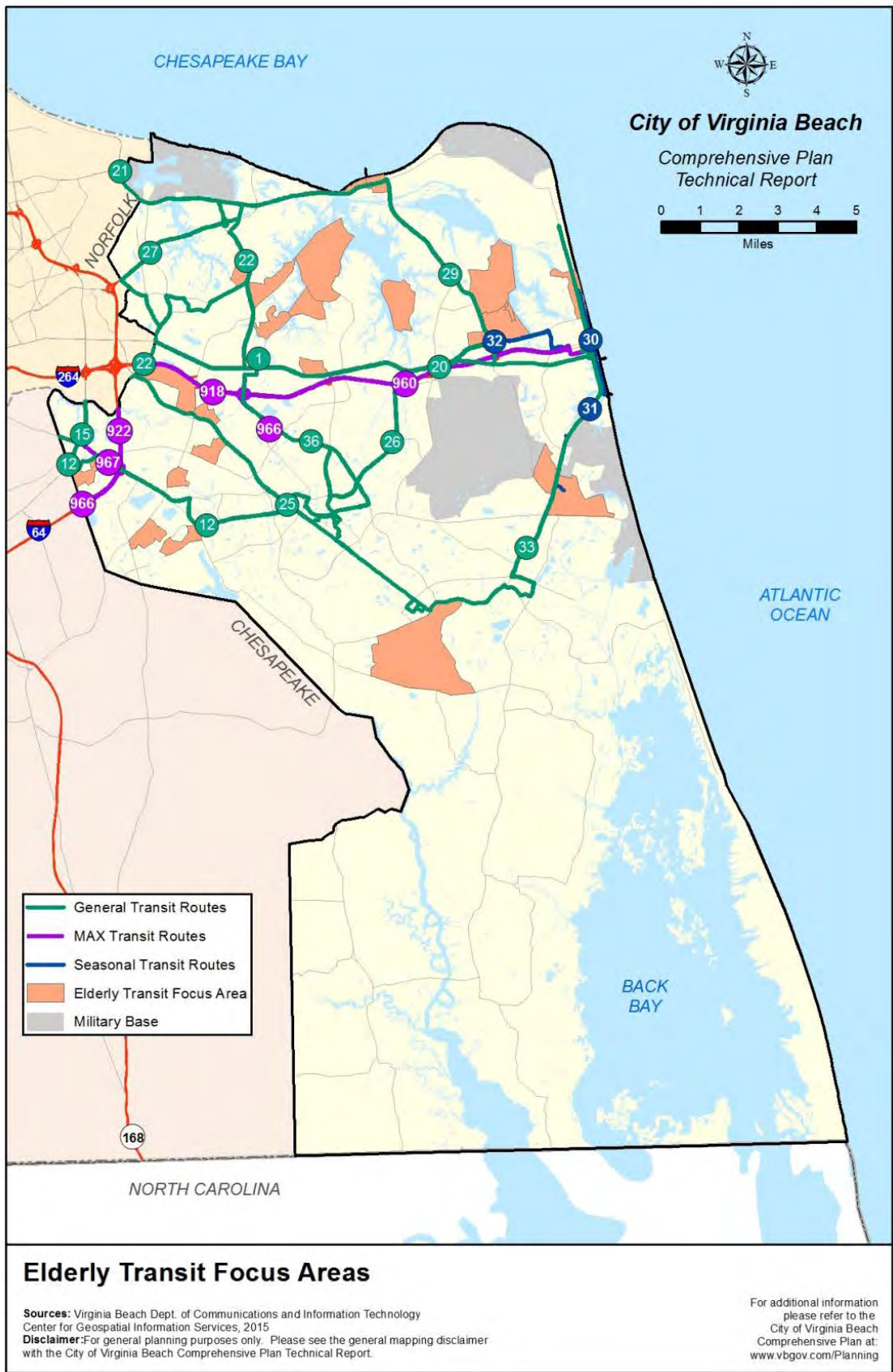


FIGURE 5

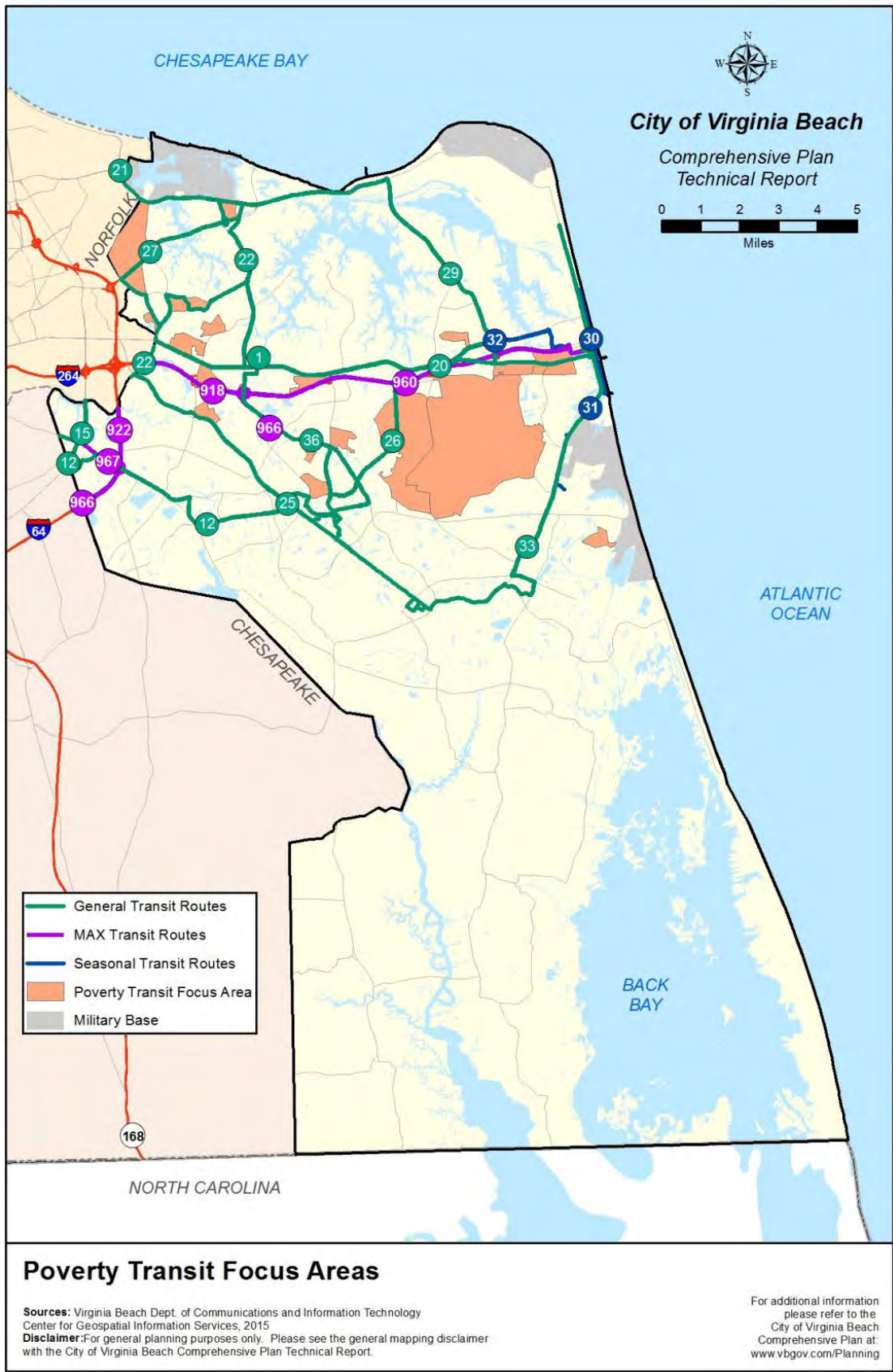


FIGURE 6

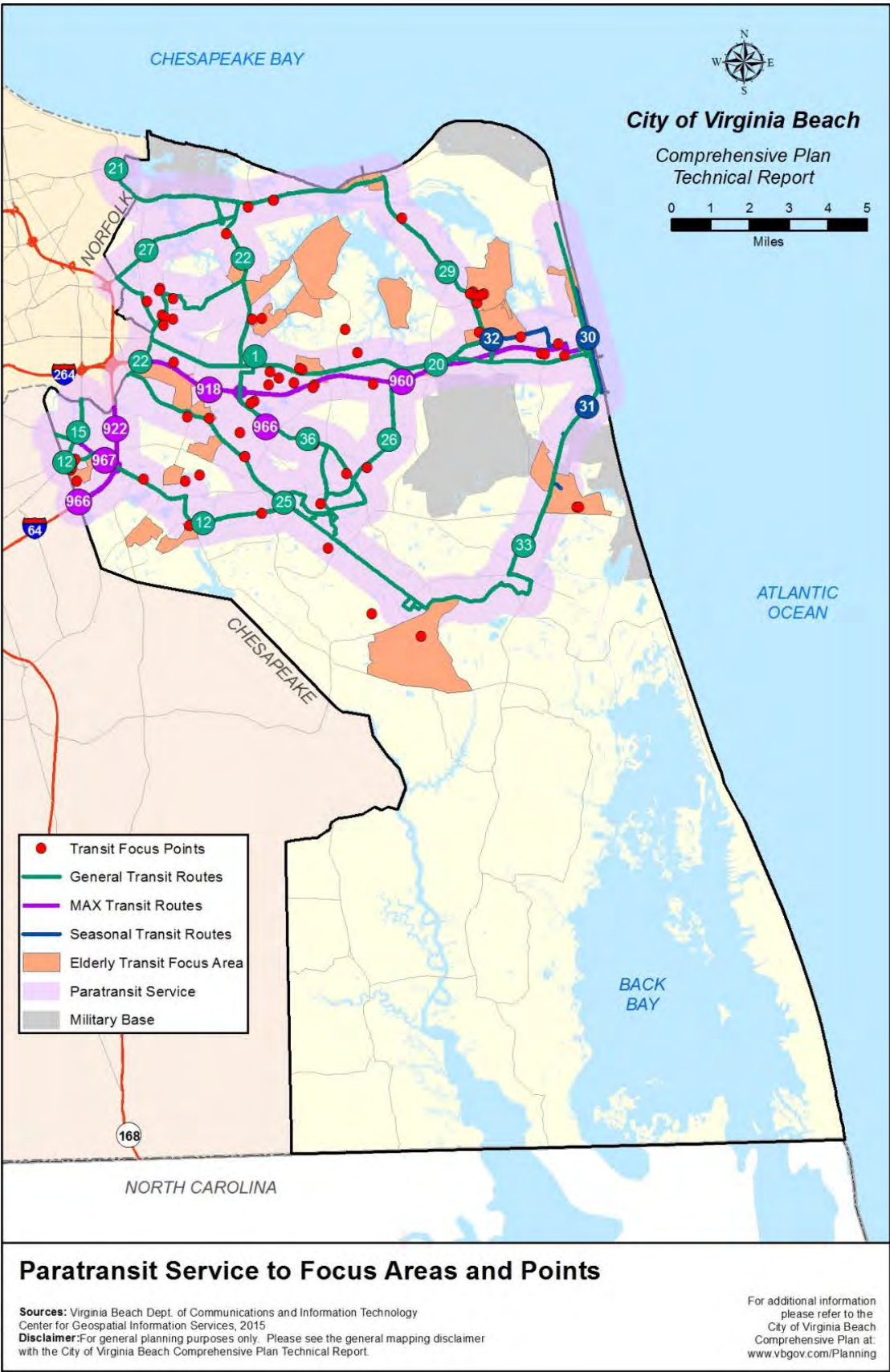


FIGURE 7

REGIONAL TRANSIT PLANNING

Hampton Roads Transit is currently in the process of updating the region's long range transit plan with the Connect Hampton Roads (CHR) initiative. As part of this initiative a survey was conducted from June through October 2014, which found that:

- 78.5% of respondents travel by motorized vehicle
- Public transit does not make the commute more convenient
- Transit users want to feel safe at stops/station
- Transit users want reliable/consistent travel times
- Transit users want alternate transportation options and increased public transit routes

The CHR survey resulted in the development of the following six pillars to improve transit service:

- **Enhanced bus networks and transit hubs.** Enhanced fixed route bus network that provides comprehensive geographic coverage with frequent service, and a consistent service day and service week; Community-based service plans to meet local needs that are currently not being met; and a fully “open” system completely accessible to persons with disabilities.
- **High-capacity transit network.** Wide range of technologies that generally operate on a fixed guideway and are free of the congestion delays since they do not have to wait in congested vehicular lanes.
- **Park-and-ride lots.** A comprehensive network of convenient park-and-ride lots for transit users and carpoolers. Currently, there are two park and ride lots in Virginia Beach. Silverleaf is located near the intersection of Holland Road and Independence Boulevard, near I-264 in the center of the City and Reon Drive, which is located just off I-64 near the western edge of the City.
- **Transit/Passenger Facilities and Amenities.** Passenger amenities that provide clean, safe, and comfortable waiting areas at transit stops with reliable “real-time” passenger information that enhance customer experiences. Shelters, benches, bus stop lighting, and other components are crucial to this this desired outcome.
- **Active Transportation.** Complementary Transportation Investments Integrating Modes of Travel. Linkages that address the “First-mile, Last-mile” at bus stops, transit hubs park-and-rides. Connectivity to bike lanes, bike and pedestrian pathways, and accessible sidewalks are key investments in this element.

ACTIVE TRANSPORTATION

The following map shows the great strides that the City has made in recent years with the development of bicycle/trail facilities as the City now has over 200 miles (not counting trails within the various City Parks).

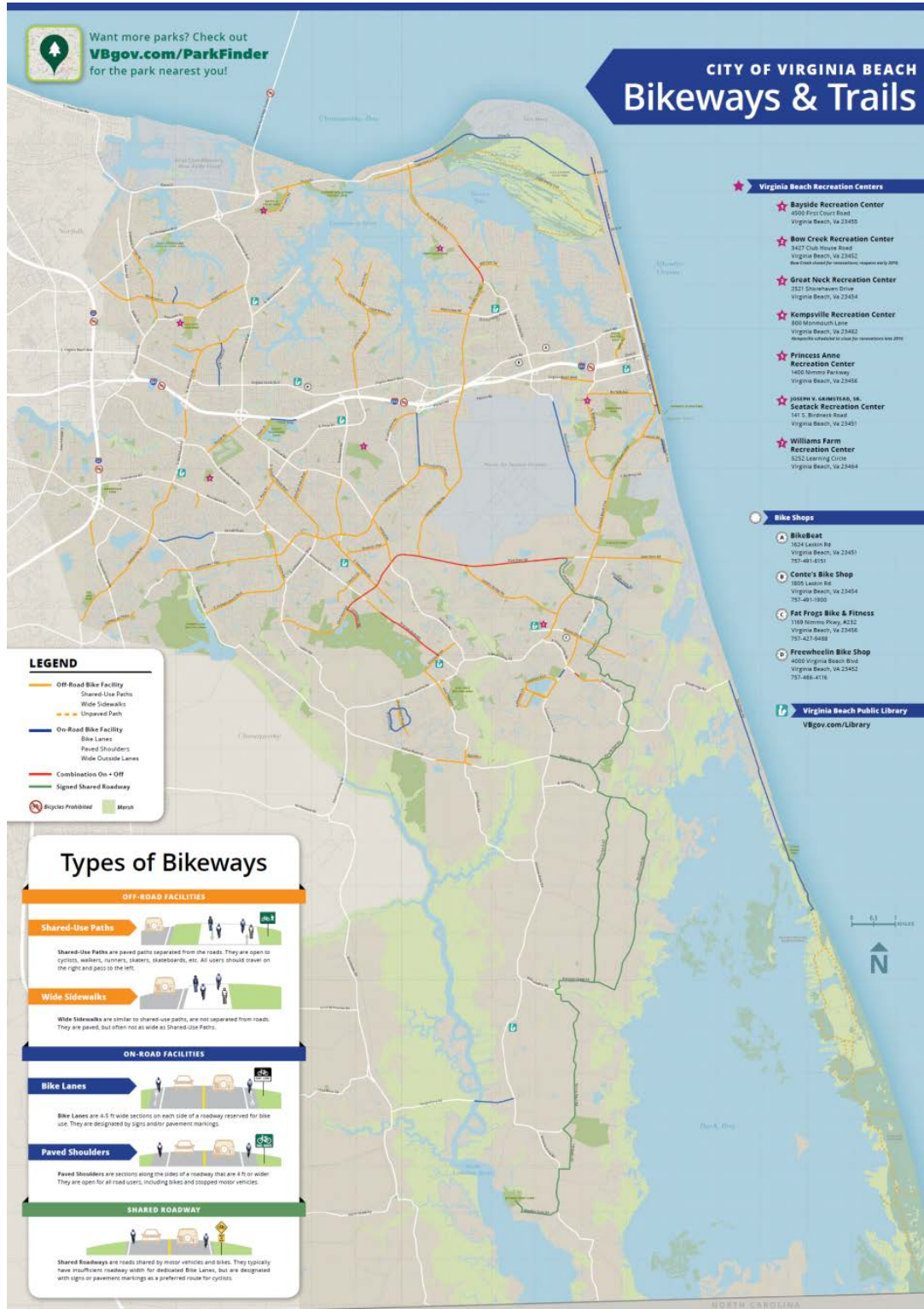


FIGURE 8

Factors affecting Active Transportation

Most cycling in Virginia Beach is recreational based and includes:

- Beach cruisers and hybrids are popular for short rides.
- Neighborhoods near the Oceanfront are known for the popularity of beach cruisers, often with baskets or surfboard frames.
- Road cycling is popular among a hardy group of fitness riders. They often gather for group rides on regular routes at regular times.
- Many people opt to ride bikes, rather than drive, to large events with limited car parking, such as music festivals on the beach.

The following factors are influencing the current/future levels of active transportation use within Virginia Beach:

- Some people walk or bike to commute to work, but it can be difficult. It can be hard to walk or ride to work if the work site has no facilities for showering.
- Work centers are scattered. Virginia Beach has no single downtown area that draws the majority of workers, so it is harder to match facilities to predictable work commutes.
- If work is not close to home, the commute can be long. Regionally, 46% of workers commute to work in a different city from where they live.
- It can be hard to walk or ride to work if the work site has no facilities for cleaning up before starting work.
- Young, and low-income workers might rely on biking and walking to work, because the costs of purchasing and operating motor vehicles can be out of reach to some.
- Increasing segments of the population nationwide are choosing to live where they can get to stores, jobs, restaurants, churches, and other places without having to drive. There are now various web sites that rate neighborhoods and cities for their walkability/bikeability. As an example, Walkscore.com bases its algorithms mostly on distances from residences to services. Virginia Beach received a walkscore of 31 and a bikescore of 46, both out of a possible 100 points. Walkscore.com says that Virginia Beach is the 45th most walkable large city in the United States out of the largest 108.

The City of Virginia Beach adopted its first Master Bikeway Plan, as a component of the Comprehensive Plan, in 1985. The Plan has been updated five times with the most recent update in 2011. The Plan document is considered a component of the Comprehensive Plan and can be found at the following link:

<http://www.vbgov.com/government/departments/parks-recreation/design-development-projects/Pages/bikeways-trails-plan.aspx>

The following three maps show the geographic distribution of facilities divided into the northern, central and southern sections of the city:

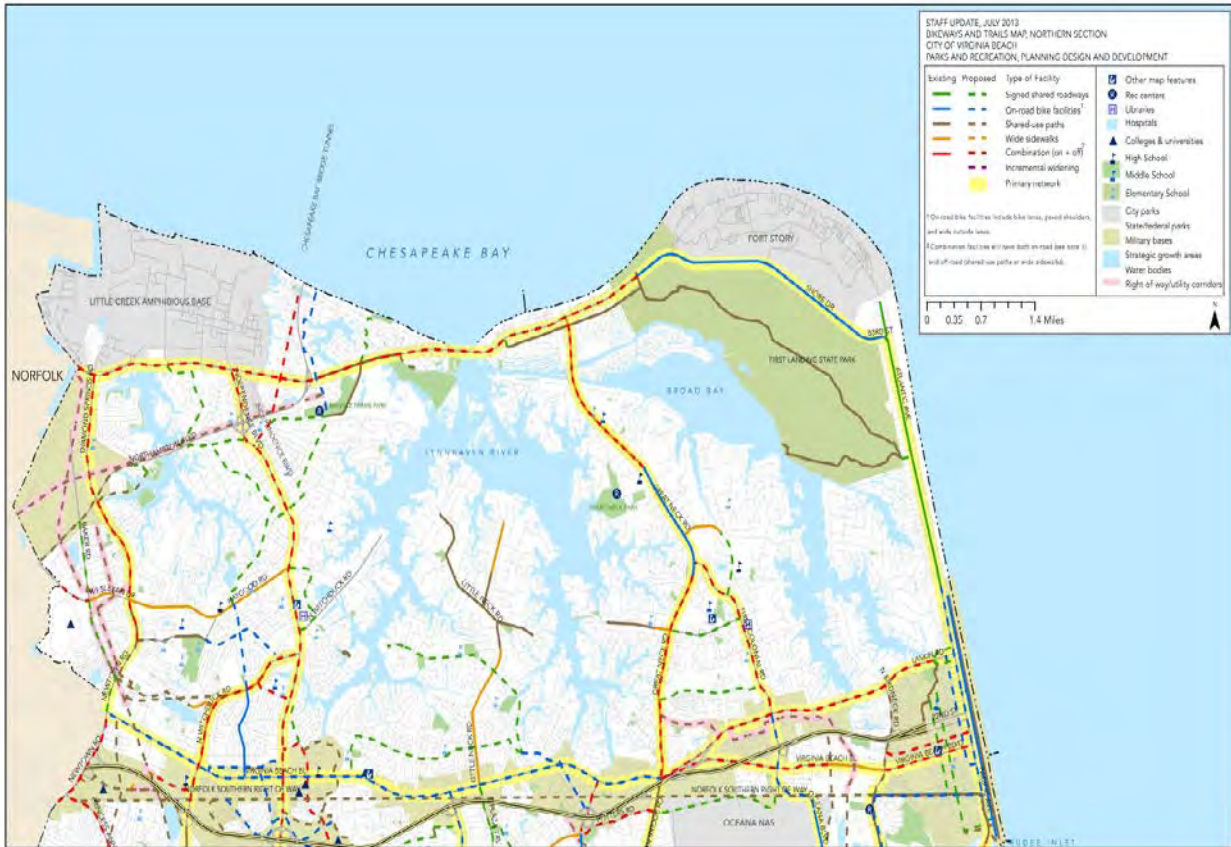


FIGURE 9



FIGURE 10

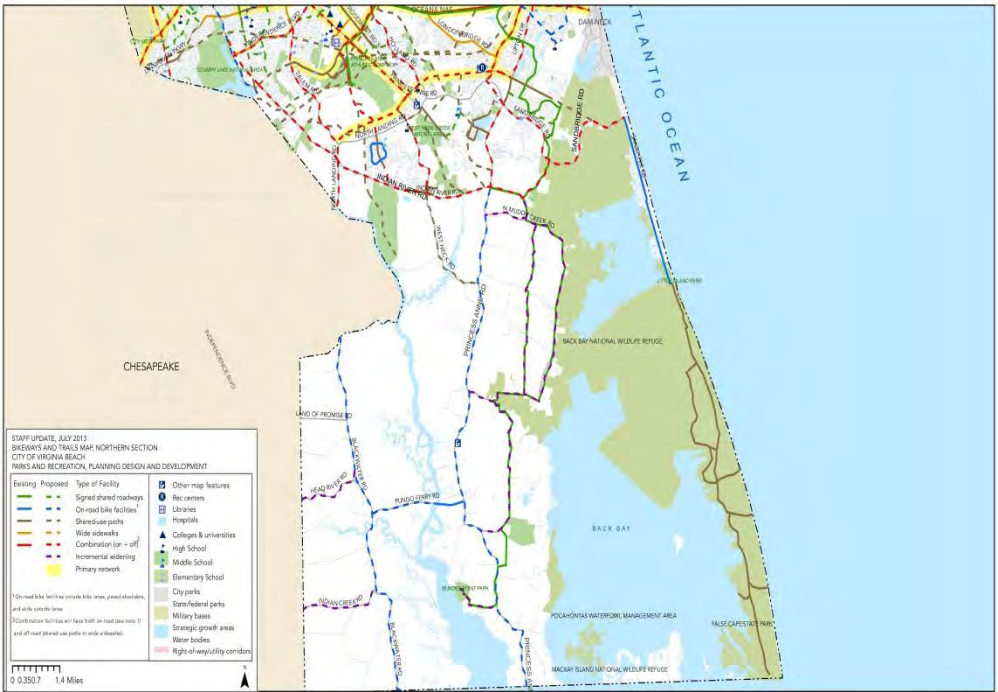
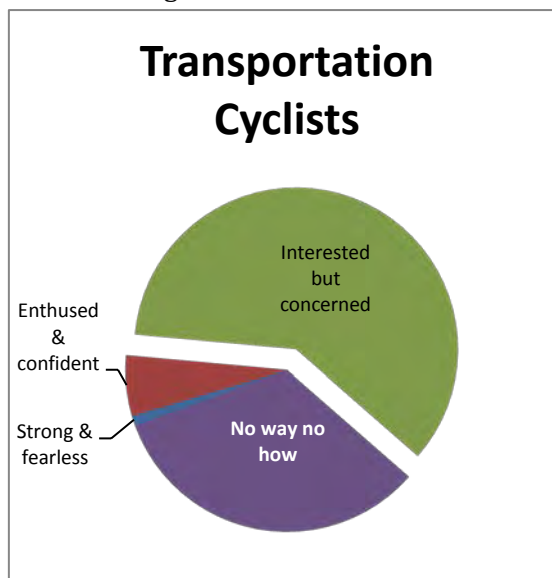


FIGURE 11

Future Trends that will impact Active Transportation

- Development of multi-modal systems that follow the “first Mile/last Mile” philosophy that recognizes that walking and cycling to transit stops are the first part and the last part of each transit trip.
- The City’s recent adoption of a Complete Streets policy reflects our endorsement of designing streets that consider all modes. “Green Streets” and “Living Streets” take the concept further, recognizing that streets are more than just transportation corridors. Streets are places for social interaction, stormwater management, landscaping, and more, and thus should include issues like participatory design, the creation of inviting places for people, rainwater capture, clean urban runoff, and sustainable plantings.
- Development of new and innovative guidelines such as those by NACTO (National Association of City Transportation Officials). These were developed to provide improved approaches for accommodating bikes and pedestrian in urban settings and include the following design features:
 - Road diets which improve the safety and flow of traffic by trading travel lanes for turn lanes, bike lanes, etc. Virginia Beach’s first road diet was on South Plaza Trail from Continental Street to the I-264 underpass.
 - Separated bike lanes, or cycle tracks (exclusive bikeways on or next to roadways but separated from both cars and pedestrians).
 - Bike boulevards (low speed streets, optimized for bike traffic)
 - Woonerfs (very low speed shared streets with traffic calming)
- More focus on the majority of adults who would ride more if they had better conditions. A model developed in Portland, Oregon categorizes transportation cyclists as follows:
 - The hardest cyclists (5-10%) will ride in almost every condition
 - The non-cyclist (30-40%) will not ride regardless
 - Focusing on accommodating the middle majority (50-65%) is most likely to increase the ability of people to ride/walk, whether for health, fun, ecology, economy, or utility. These riders usually prefer bike facilities that are separated from motor vehicles, so the focus is on providing off road paths and on road bike lanes. Many of these cyclists are hesitant to ride if parts of their trip are in conditions that they find too challenging or risky, like fast moving traffic or narrow bridges.



Technological Trends

The following technological trends are having a positive impact on Active Transportation:

- **Bikeshare systems.** Generally found in larger cities, these rely on dense urban situations that are not present in Virginia Beach. Bikeshare is spreading to more and more cities and spreading further within those cities.
- **Rideshare systems.** Relying less on density and more on smartphone apps, rideshare systems like Uber and Lyft, plus some new variations, are making a splash in how people can live modern lives without owning cars at all.
- **E-bikes.** Bikes with batteries and electric motors are breaking on the scene now, making it easier for people to go longer distances with less effort.
- **Industry.** Ford Motor Co is becoming a “mobility company”, acknowledging a changing world and new trends away from exclusive private car ownership.
- **Mobile Apps.** As briefly mentioned above, the following apps or programs reliant on apps are becoming popular with cyclists and pedestrians:
 - o **Uber and Lyft:** Transportation Network Companies (TNC) combine technology with ride sourcing. TNCs develop computing platforms connecting passengers who need a ride with drivers who have a car. The sharing economy service provides on-demand transportation via mobile apps. Its purpose is to create an open marketplace matching consumers with service providers.¹⁵
 - o **Waze:** While there are many GPS-based geographical navigation apps providing maps and directions, Waze goes a step further. It claims to be “the largest community of drivers on the planet.”¹⁶ Waze is a program based on crowdsourcing with community-driven map data and traffic information provided by its users. Much like a social networking service, users can share information with other users. For instance, users can modify existing maps for better accuracy and report accidents, traffic jams, and other travel related events.
 - o **Strava:** This app allows users to track athletic activity via GPS. While Strava may appear to be a fitness app, the company aggregates large volumes of data provided by users creating an understanding of cycling and pedestrians route preferences. Strava has been selling this data to planners to assist in making informed decisions regarding shared use paths.¹⁷
 - o **RideScout:** This app is a tool that provides the best way to arrive at your destination depending on circumstance and time of day. The app provides a comprehensive view of what type of transportation-related options are available. Options include rideshare (Uber, Lyft), taxis, transit, biking, and parking. The app offers a comparison between alternate transport modes versus driving that includes estimated cost and travel time.¹⁸

CHAPTER 6. ENVIRONMENT

¹⁵

http://www.naic.org/documents/committees_c_sharing_econ_wg_exposure_adopted_tnc_white_paper_1_5033_1.pdf

¹⁶ <https://www.waze.com/>

¹⁷ <http://www.forbes.com/sites/parmyolson/2014/07/07/why-google-waze-helps-local-governments-track-its-users/>

¹⁸ <http://www.ridescoutapp.com/about-us/>

Virginia Beach is uniquely located along the Atlantic Ocean straddling the two largest estuaries in the world, the Chesapeake Bay and the Albemarle and Pamlico Sounds. This physical location has resulted in a very special natural environment that supports numerous exemplary living resources. This location is further enhanced by extensive brackish lunar tidal areas, such as the Lynnhaven River and Elizabeth River systems, and expansive freshwater wind tidal areas, such as the North Landing River and Back Bay systems. Due to a combination of its geographic position on the mid-Atlantic coastline near the Gulf Stream's eastward departure from North America to the open Atlantic Ocean and proximity to two of the world's most productive and ecologically significant estuaries, the City serves as the southern range limit of many northern plant and animal species and the northern range limit of many southern plant and animal species. This environmental setting and resulting abundance of ecological diversity is unparalleled in Virginia and seldom encountered elsewhere in the United States. Many environmental characteristics and natural resources interact to give the City its unique identity and quality.

SUSTAINABILITY: ENVIRONMENTAL STEWARDSHIP

Adopt-A-Programs

The intent of the Adopt-A-Programs is to encourage citizen participation in litter cleanups of designated areas around the City at regular intervals. Individuals, families, organizations, or businesses agree to keep a designated area cleared of litter for a two-year period. Types of Adoption Programs currently available in the City include the following:

- Highway: 2 mile section of arterial roadway to include both sides
- Park
- Spot: any public area that needs attention
- Street: 1 mile residential street section to include both sides
- Trail: 1 mile Section to include 5-10 ft. on both sides
- Waterway: at least 1/2 mile section of a local waterway
- Landscape Maintenance: minimum of 300 sq. ft. with a submitted landscape plan

More information can be found at <http://www.vbgov.com/government/departments/parks-recreation/parks-trails/caring-for-our-parks/Pages/adopt-a-programs.aspx>.

Education and Public Outreach

Environmental Education and Public Outreach are key components of helping residents become informed environmental stewards. To better accomplish this objective, the City has formed the following initiatives:

- Oyster Heritage Trust Fund
- Maritime Forest Trust Fund
- Project Green Teens
- Virginia Beach Clean Community Commission
- Virginia Beach Beautification Commission

In addition, the City partners with community organizations such as Lynnhaven River NOW, the Chesapeake Bay Foundation, Rudee Inlet Foundation, Back Bay Restoration Foundation, and the Elizabeth River Project, as well as askHRgreen, a public awareness program run through the

Hampton Roads Planning District Commission to encourage environmental stewardship.

WATER RESOURCES PROTECTION AND MANAGEMENT

Water Quality

The Virginia Department of Environmental Quality (DEQ) maintains a network of water quality monitoring stations on waterways throughout Virginia Beach. Every two years DEQ publishes the Virginia Water Quality Assessment Report as required in accordance with Section 305 (b) of the Federal Water Pollution Control Act. The report summarizes the water quality conditions of the Commonwealth's waters during the reporting period. More detailed information regarding ambient water quality conditions associated with these monitoring locations is available in the DEQ "2014 305(b)/303(d) Water Quality Assessment Integrated Report, December 15, 2014" or online at [http://www.deq.virginia.gov/Programs/Water/WaterQualityInformationTMDLs/WaterQualityAssessments/2014305\(b\)303\(d\)IntegratedReport.aspx](http://www.deq.virginia.gov/Programs/Water/WaterQualityInformationTMDLs/WaterQualityAssessments/2014305(b)303(d)IntegratedReport.aspx).

In addition to the DEQ monitoring stations, the City undertakes field screening of stormwater in accordance with the City's Municipal Stormwater Permit, which is described under the Land Development and Stormwater Management part of this section of the Technical Report.

Surface Water - Watersheds

There are three primary watersheds in the City of Virginia Beach. The northern and more urbanized portions of the City drain to the Chesapeake Bay primary watershed, which includes the Lynnhaven River, Elizabeth River, Little Creek, Small Coastal North and Small Coastal West secondary watersheds. The central, southern and more rural areas of the City drain to the Southern Rivers primary watershed, which is comprised of the Back Bay, North Landing River and Northwest River secondary watersheds. The remaining portion of the City located along the coast drains to the Atlantic Ocean primary watershed and is comprised of the Owl's Creek – Rudee Inlet, Small Coastal East and Small Coastal South secondary watersheds.

Primary Watersheds

Primary Watershed	Approximate Acreage	Percent of City
Chesapeake Bay	61,000	31%
Southern Rivers	130,000	66%
Atlantic Ocean	5,500	3%
Total Area	196,500	100%

Source: City of Virginia Beach Department of Planning and Community Development

Secondary Watersheds

Secondary Watershed	Approximate Acreage	Percent of City
Lynnhaven River	41,300	21.0%
Little Creek	9,000	4.6%
Elizabeth River	9,300	4.7%
Small Coastal (North, South, East, West)	3,900	2.0%
Owl's Creek – Rudee Inlet	3,000	1.5%
North Landing River	63,000	32.1%
Northwest River	2,100	1.1%
Back Bay	64,900	33.0%
Total Area	196,500	100%

Source: City of Virginia Beach Department of Planning and Community Development

Figure 1 in this section of the Technical Report is a map providing the general locations of the primary and secondary watersheds in the City.

The natural beauty found on Virginia Beach's waterways is one of the key features that attracts residents and visitors to Virginia Beach. To allow residents and guests access to Virginia Beach's waterways, the City provides and maintains a number of water access points, which can be found on the map located at Figure 5 in this section of the Technical Report.



FIGURE 1

Chesapeake Bay Restoration

The Chesapeake Bay is the largest estuary in North America, extending over 64,000 square miles and touching Delaware, the District of Columbia, Maryland, New York, Pennsylvania, Virginia, and West Virginia. Since 1983, Virginia, Maryland, Pennsylvania, the District of Columbia, the federal government, and various non-profit organizations have worked together to restore the Chesapeake Bay, which continues to be impacted by water and air pollution, loss of natural buffers, diminished fisheries and population growth.

While some gains have been achieved since the adoption of the Chesapeake Bay Agreement in 1983, there remains a tremendous amount of work to be done before the states can achieve the kind of results that will make a measurable difference in the Bay waters. The most recent Chesapeake Bay Agreement was signed in 2014 and sets forth a series of goals and actions to be accomplished by Delaware, the District of Columbia, Maryland, New York, Pennsylvania, Virginia, and West Virginia. It can be found at http://www.chesapeakebay.net/documents/FINAL_Ches_Bay_Watershed_Agreement.withsignatures-HIres.pdf.

In an effort to encourage local participation and engagement in restoring the Chesapeake Bay, individuals in Virginia Beach founded the Clean the Bay Day initiative in 1989. Clean the Bay Day is an annual volunteer event that occurs in June.

Surface Water - Reservoirs

There are four reservoirs located in the City of Virginia Beach: Little Creek Reservoir, Lake Smith, Lake Lawson, and Stumpy Lake. Little Creek Reservoir, Lake Lawson, and Lake Smith are owned and managed by the City of Norfolk as part of a manmade reservoir system that helps supply water to the residents of Norfolk, Virginia Beach, and parts of Chesapeake. Figure 2 in this section of the Technical Report provides a map showing the locations of public water reservoirs in the City

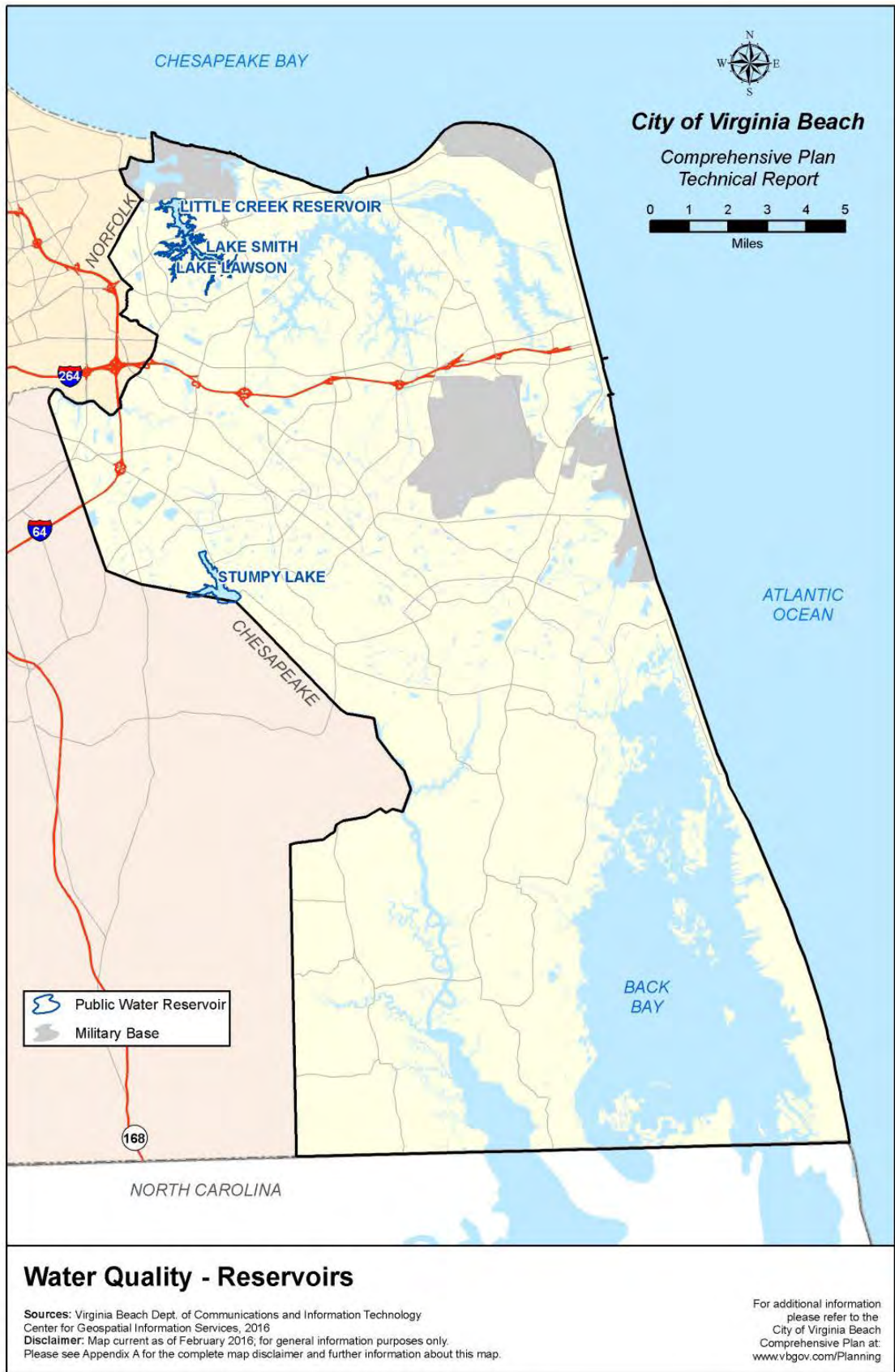


FIGURE 2

Groundwater

Four major aquifers provide fresh and brackish groundwater to the South Hampton Roads area, comprising the cities of Virginia Beach, Norfolk, Portsmouth, and Chesapeake. A brief summary of these aquifers and their use potential follows:

- **Shallow Aquifer** - This aquifer is capable of supplying small amounts of fresh, non-potable water for residential lawn watering and similar uses. Water quality is variable, with limitations due to pH and iron content. Water table levels can fluctuate with variations in seasonal rainfall.
- **Yorktown Aquifer** - The Yorktown Aquifer is the major fresh potable water aquifer underlying the area. While the geologic Yorktown Formation is 300 to 400 feet thick, the major water-bearing zones within this aquifer are found in the upper 50 to 150 feet. This aquifer is separated from the overlying Shallow Aquifer by a 20 to 40 foot thick bed of silt, clay, and sandy clay. The three major sand units that comprise this aquifer are referred to as the upper, middle and lower portions of the Yorktown Aquifer. Groundwater availability from this aquifer is variable, and the lower portions of the aquifer are brackish in many places.
- **Eocene-Upper Cretaceous Aquifer** - This aquifer is found at a depth of approximately 1,000 feet. Moderate supplies of brackish groundwater are available from this aquifer.
- **Lower Cretaceous Aquifer** - Groundwater availability in this aquifer is limited to the areas of northwestern Chesapeake, Portsmouth, and western Norfolk; however, fresh groundwater is available from this aquifer.

The Virginia Department of Environmental Quality (DEQ) issues permits for the withdrawal of groundwater equal to or in excess of 300,000 gallons per month. A map providing the location of DEQ permitted major groundwater withdrawal locations in the City is found on Figure 3 in this section of the Technical Report.

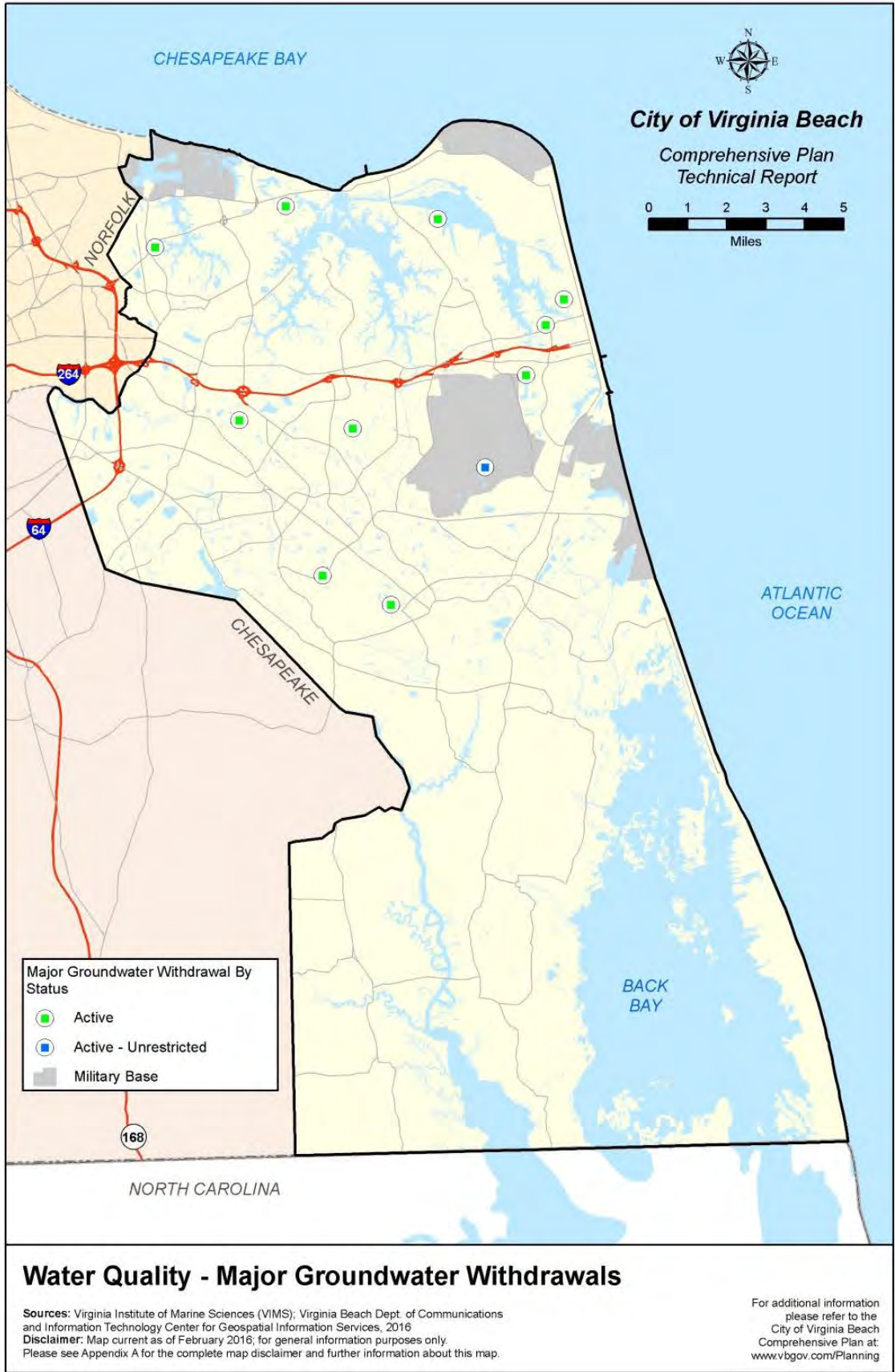


FIGURE 3
PARKS AND CONSERVED LANDS

City Open Space

The City of Virginia Beach has over 200 parks and over 4,000 acres of land designated as park land for recreation or as preserved open space. Much of the preserved open space protects valuable plant and animal habitats and areas vulnerable to flooding. A map providing the locations of open space owned by the City of Virginia Beach can be found at Figure 4 in this section of the Technical Report.

One of the key features that attracts residents and visitors to Virginia Beach are the abundant water resources. To allow residents and guests access to Virginia Beach's waterways, the City provides and maintains a number of water access points, which can be found on the map located at Figure 5 in this section of the Technical Report.

Waterfront Management Area. A map providing the locations of designated Federal, State and private open space areas in the City is found at Figure 6 in this section of the Technical Report.

Back Bay National Wildlife Refuge consists of 12,290 acres currently owned by the federal government, and also includes an additional 2,800 acres that are located within the federally approved expansion boundary that are eligible for acquisition from willing sellers in the future. A map providing the locations of current Back Bay National Wildlife Refuge lands and additional lands located within the expansion boundary in the City can be found at Figure 7 in this section of the Technical Report.

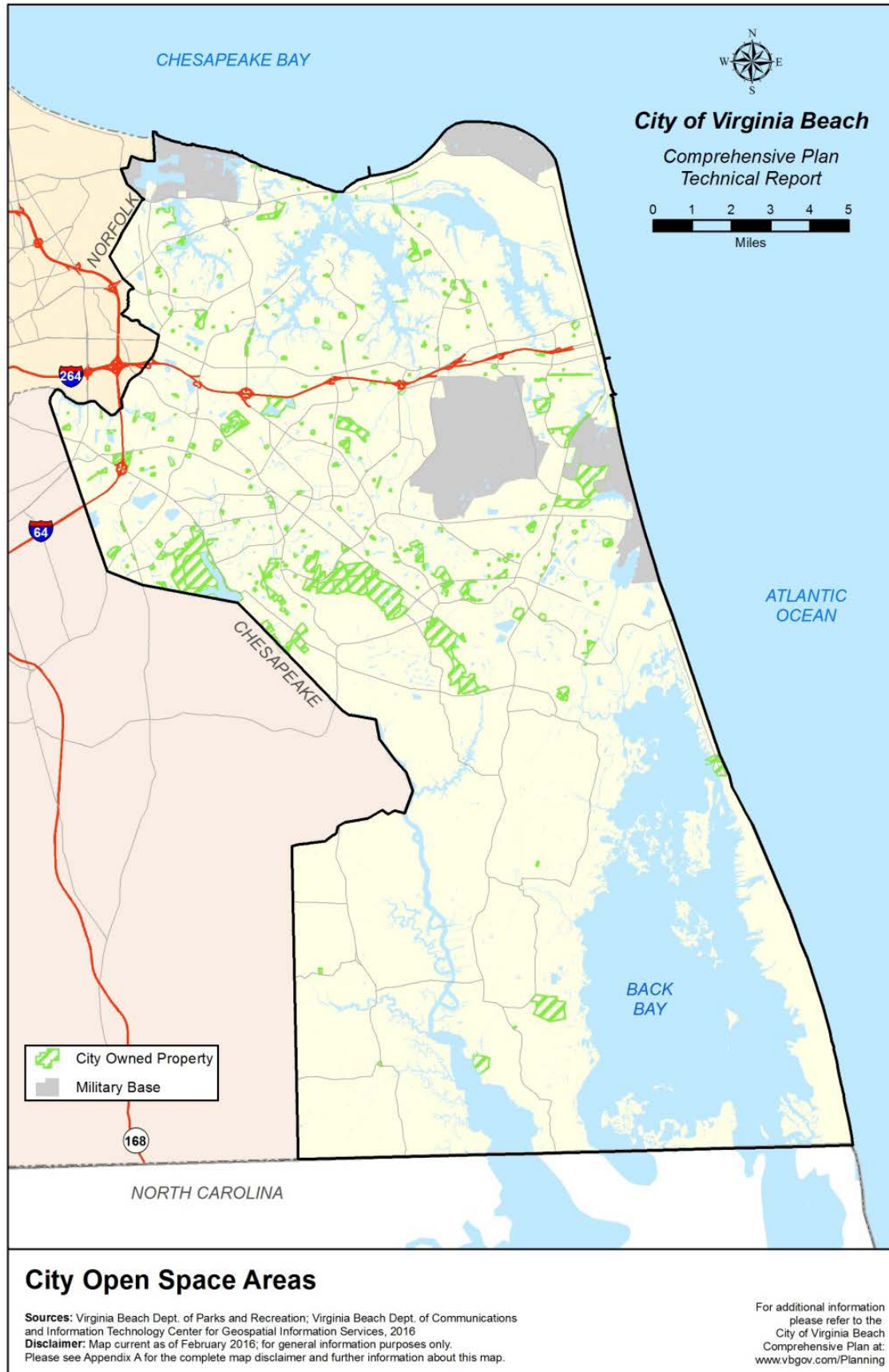


FIGURE 4

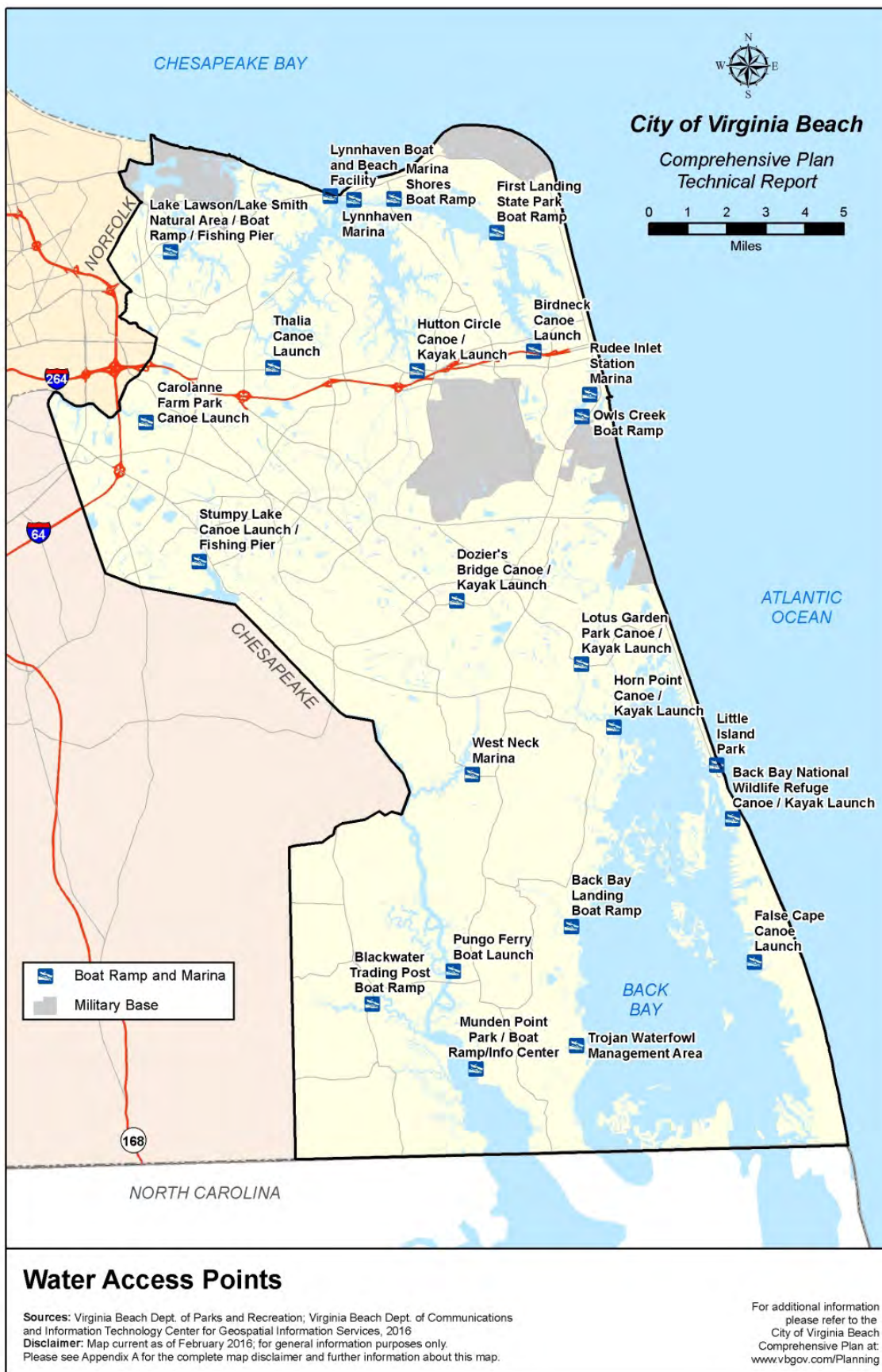


FIGURE 5

Federal, State, and Private Open Space

In addition to the extensive network of City owned open space, there is an abundance of land protected by both the Federal and State government and private entities such as The Nature Conservancy and the Virginia Outdoors Foundation. This land includes Back Bay National Wildlife Refuge, Mackay Island National Wildlife Refuge, First Landing State Park, False Cape State Park, North Landing River Natural Area Preserve, and Princess Anne.

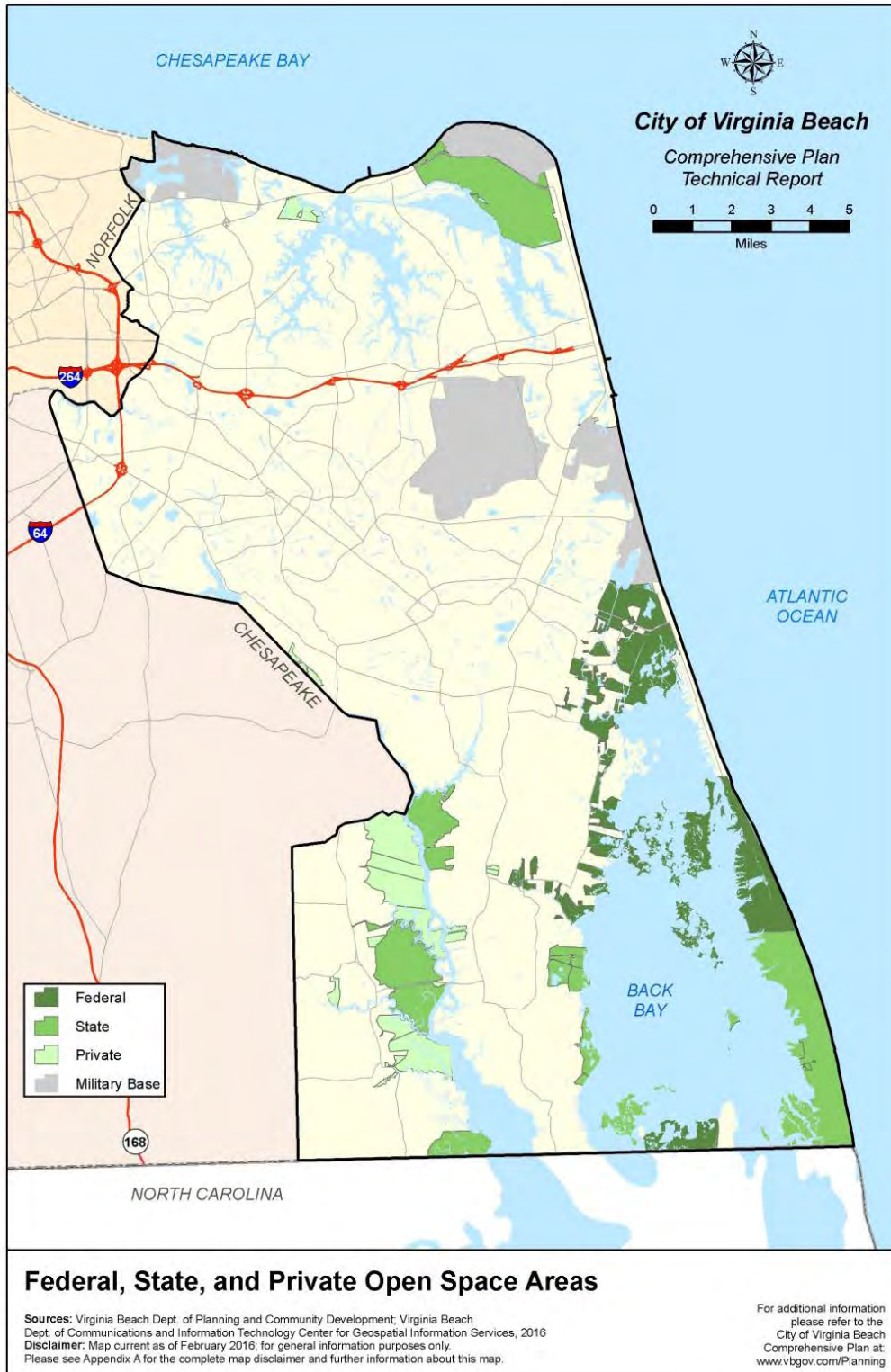


FIGURE 6

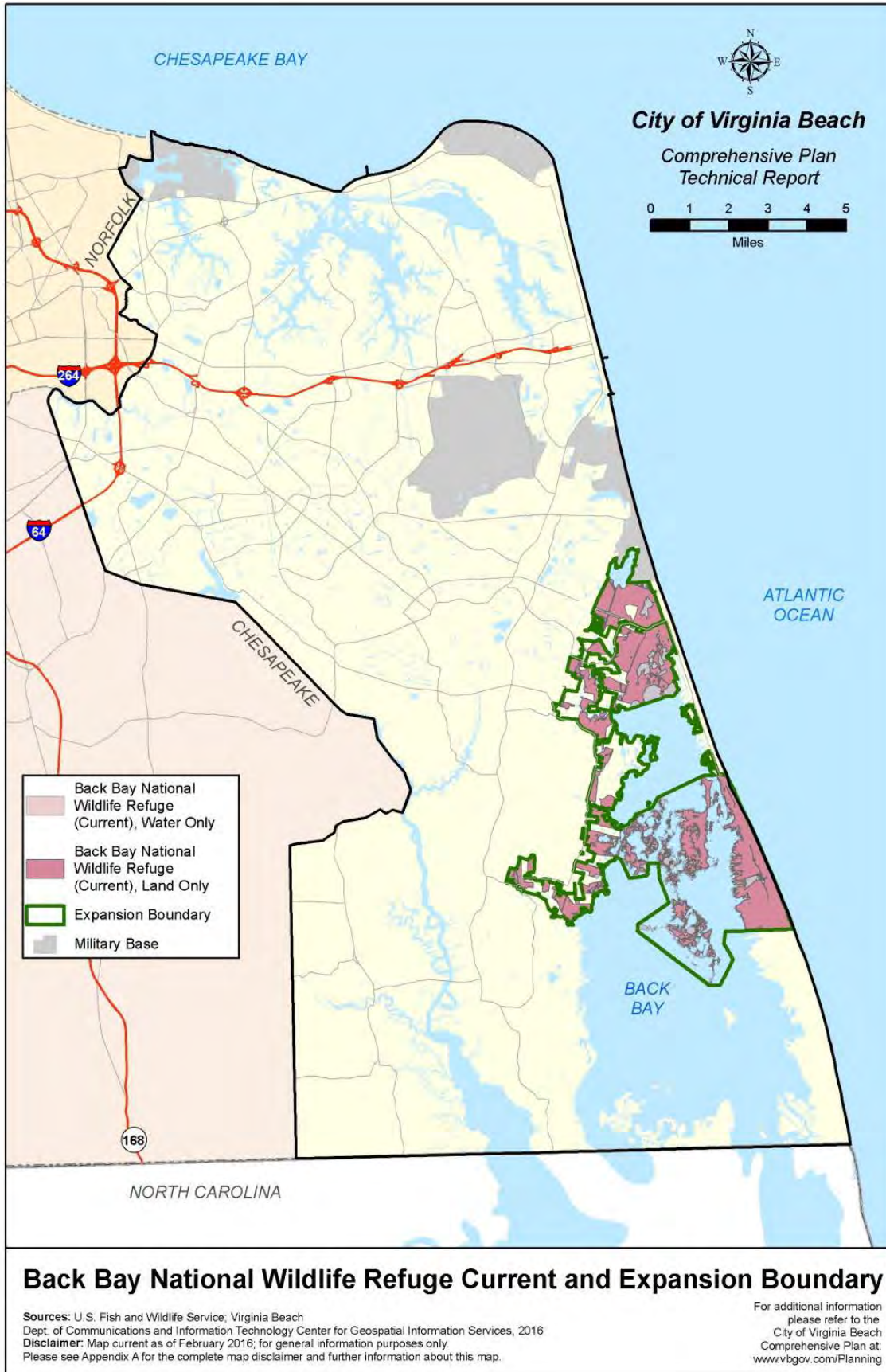


FIGURE 7

GREEN INFRASTRUCTURE

Currently, the *Virginia Beach Outdoors Plan* (<http://www.vbgov.com/government/departments/parks-recreation/design-development-projects/pages/outdoors-plan.aspx>) and the *Virginia Beach Bikeways and Trails Plan* (<http://www.vbgov.com/government/departments/parks-recreation/design-development-projects/pages/bikeways-trails-plan.aspx>) are the primary tools for implementation of our green infrastructure system. These plans identify opportunities for property acquisition and development, conservation easements, as well as specific projects for construction.

Additionally, the *Green Sea Blueway and Greenway Management Plan* develops a long-term management strategy for natural, cultural, and recreational resources along the Albemarle and Chesapeake Canal, the North Landing River, and Currituck Sound/Tulls Bay. The plan was adopted by the Cities of Virginia Beach and Chesapeake, Virginia and Currituck, County North Carolina in 2015. The adopted plan is available at <http://www.vbgov.com/government/offices/eso/north-landing-river-study/Documents/nlr-plan-final-2015.pdf>.

LIVING RESOURCES AND ECOSYSTEM PROTECTION MANAGEMENT

Urban Forestry

The City of Virginia Beach adopted the *Urban Forest Management Plan* in 2013 to guide actions that will achieve a sustainable urban forest into the future. The plan provides policy guidance, goals, and objectives for urban forest management. The City's current Urban Tree Canopy is 36%, with a goal of 45% within 20 years. A current map of the Urban Tree Canopy can be found at Figure 8 in this section of the technical report.

Large, mature trees are an important part of the Urban Tree Canopy. A map providing the locations of federal, state, and local Champion Trees in the City can be found at Figure 9 in this section of the Technical Report. A list of Champion Trees is maintained by Virginia Tech and can be accessed through the Virginia Big Tree Database available at http://bigtree.cnre.vt.edu/bigtree_search.cfm.

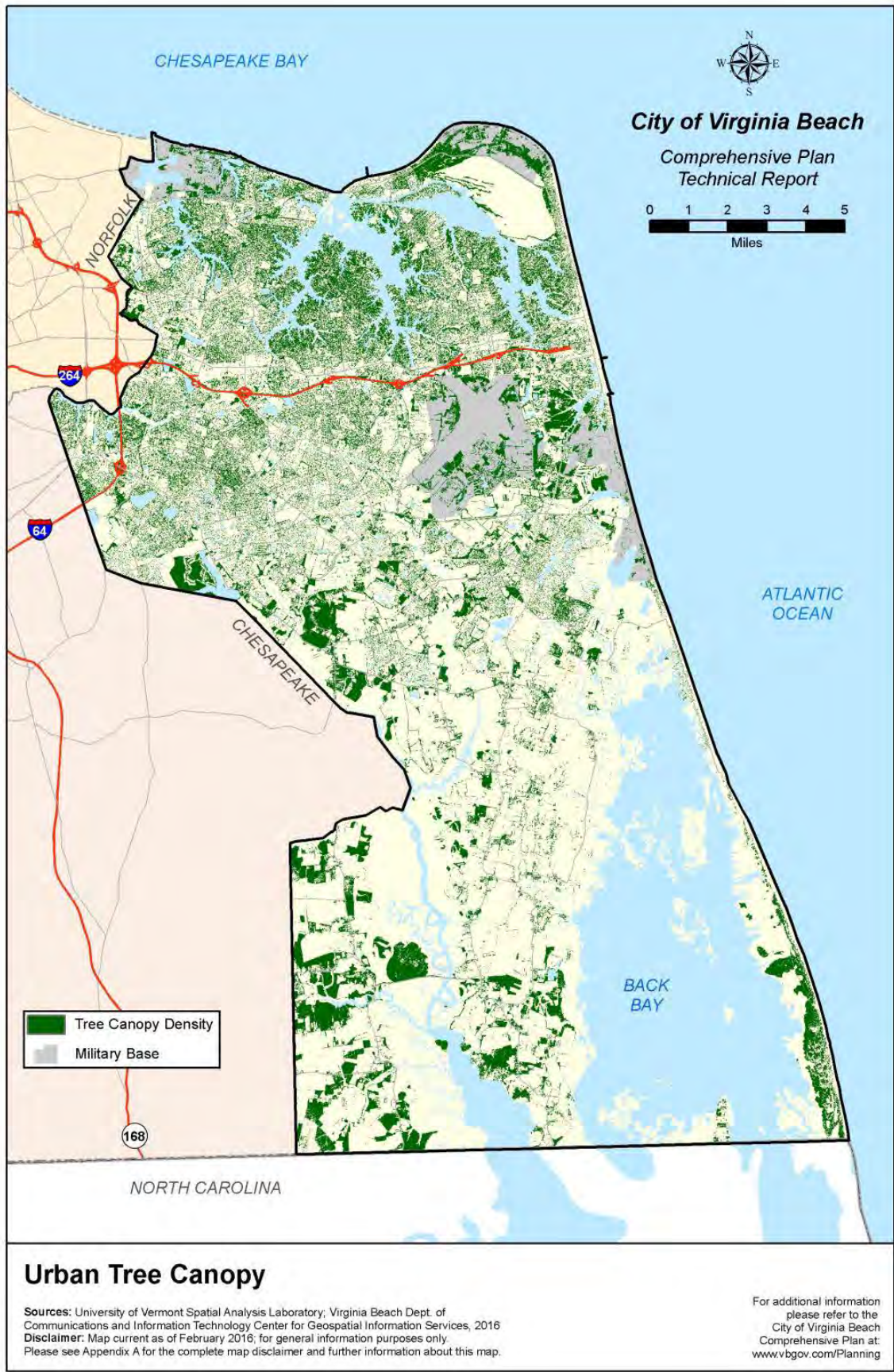


FIGURE 8

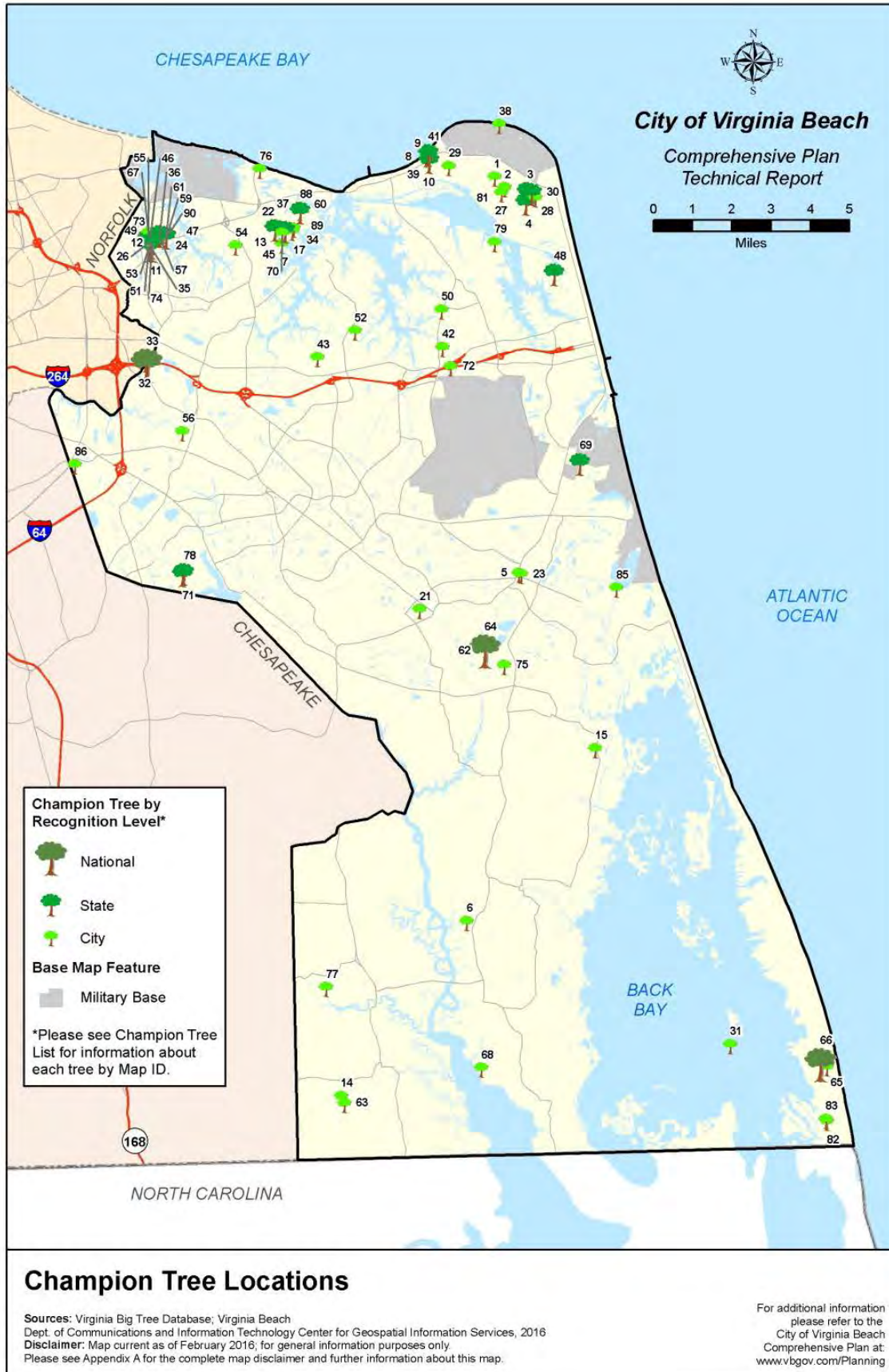


FIGURE 9

Living Shorelines

Living shorelines, a coastal erosion control technique that stabilizes a shoreline while maintaining the natural processes and connections between the uplands and aquatic areas, are the preferred alternative for shoreline stabilization in Virginia. The Virginia Marine Resources Commission was charged by the Commonwealth with developing a general permit, while the Virginia Institute of Marine Science (VIMS) was charged with developing policy and guidance for localities.

VIMS maintains a Comprehensive Coastal Resources Management Portal for each locality. The Virginia Beach Portal is available at http://ccrm.vims.edu/ccrmp/va_beach/ and includes Comprehensive Plan guidance, shoreline best management practices reflecting the preferred approach for erosion control for a particular shoreline based on observed shoreline conditions, a shoreline and tidal marsh inventory, and a county toolbox that includes an interactive map viewer of shoreline best management practices and the current shoreline condition.

Maps showing the current shoreline structure inventory, preferred shoreline buffer structure recommendation, and preferred shoreline protection recommendation can be found at Figure 10, Figure 11, and Figure 12, respectively, in this section of the Technical Report.

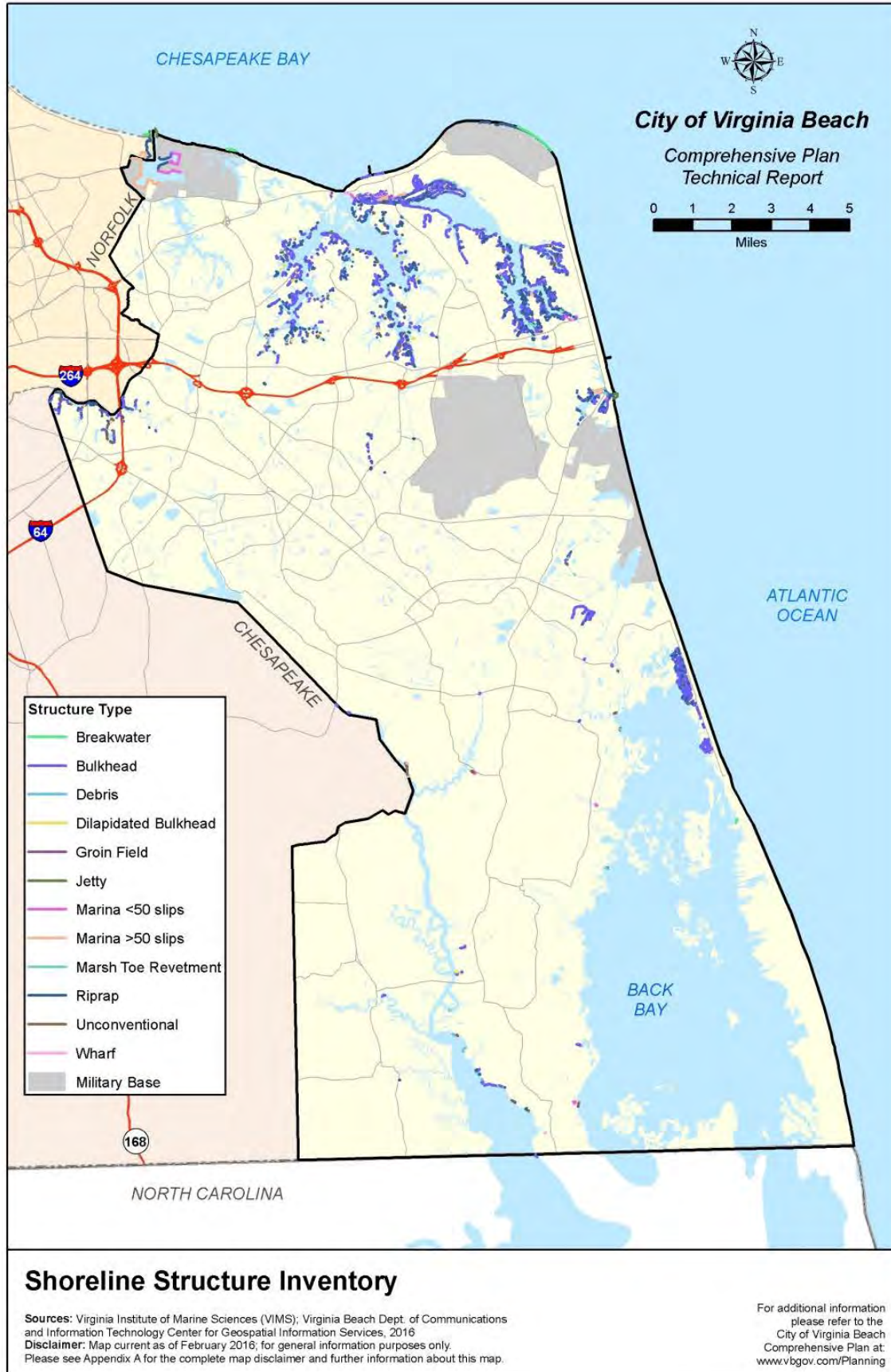


FIGURE 10

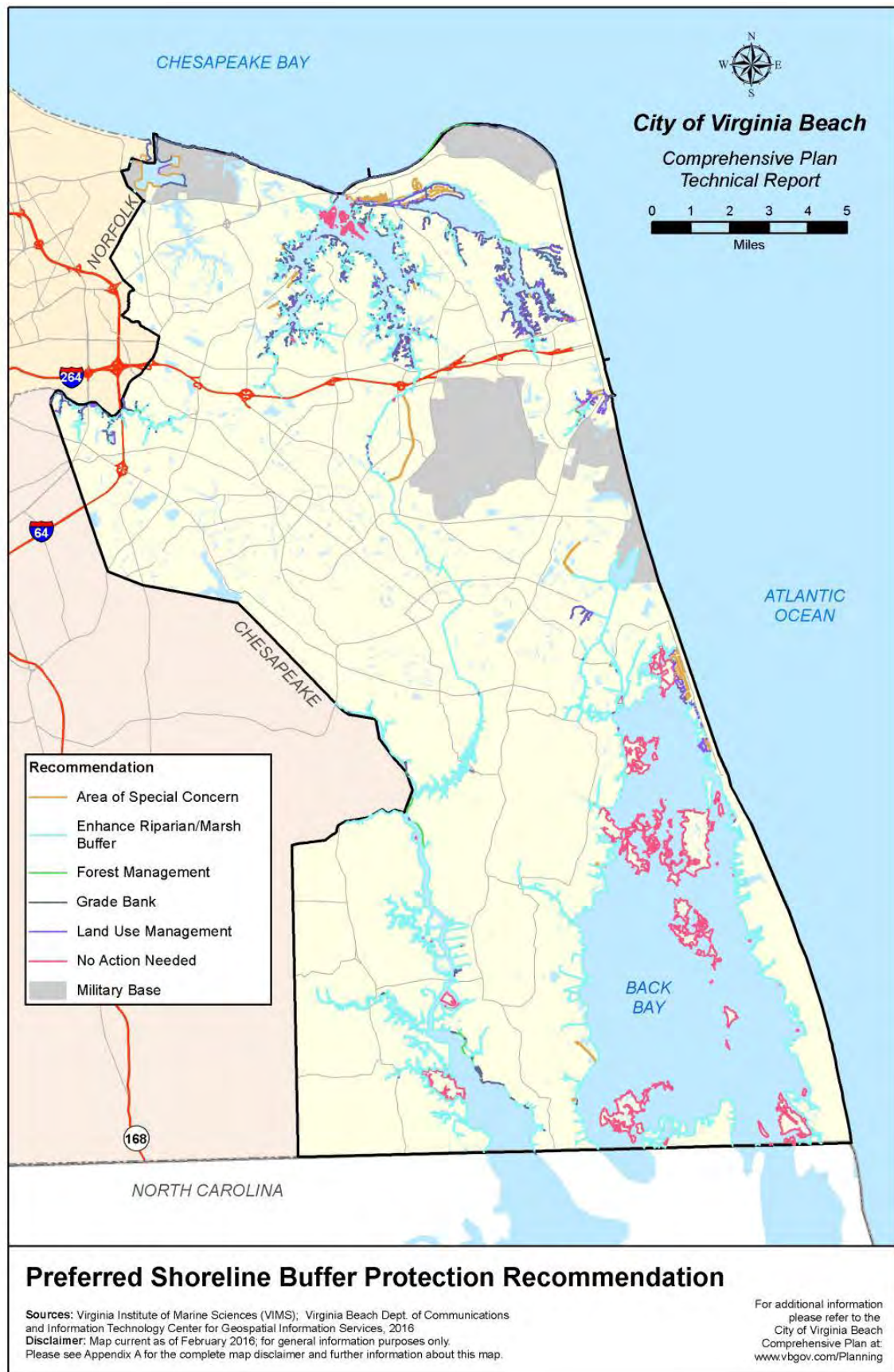


FIGURE 11



FIGURE 12

Unique Plant and Animal Habitats

Natural Heritage Areas

The Virginia Department of Conservation and Recreation maintains a Natural Heritage Program that works to conserve Virginia's biodiversity through inventory, protection, and stewardship. They maintain a statewide database of Natural Heritage resources that can be found at <https://vanhde.org/species-search>.

Within Virginia Beach, the Natural Heritage Resources Inventory has documented the following:

- Thirty-seven (37) rare animal species;
- Sixty-eight (69) rare plant species; and
- Twenty-six (26) types of natural communities of state-wide significance.

This list includes 4 species considered as threatened by the state, 3 species considered endangered by the state, and one species on the Federal Endangered Species List (loggerhead sea turtle). The Natural Heritage Program can conduct a project review to determine if any natural heritage resources will be impacted by the proposed project <http://www.dcr.virginia.gov/natural-heritage/infoservices#projrev>.

Much of the preserved open space along the North Landing River is designated as an area of ecological significance. In addition, the following ecologically significant areas are located in the City and managed by the State or Federal government:

- Back Bay National Wildlife Refuge;
- False Cape State Park;
- First Landing State Park and Natural Area;
- North Landing River Natural Area Preserve;
- Mackay Island National Wildlife Refuge; and
- Princess Anne Waterfront Management Area.

Additional Natural Heritage Areas are located on Federal military installations in the City. Collectively, these areas provide protection to unique and exemplary maritime forests, pocosins, freshwater wetlands, tidal marshes, and beach/dune ecosystems.

A map providing the locations of natural heritage areas in the City can be found at Figure 13 in this section of the Technical Report.

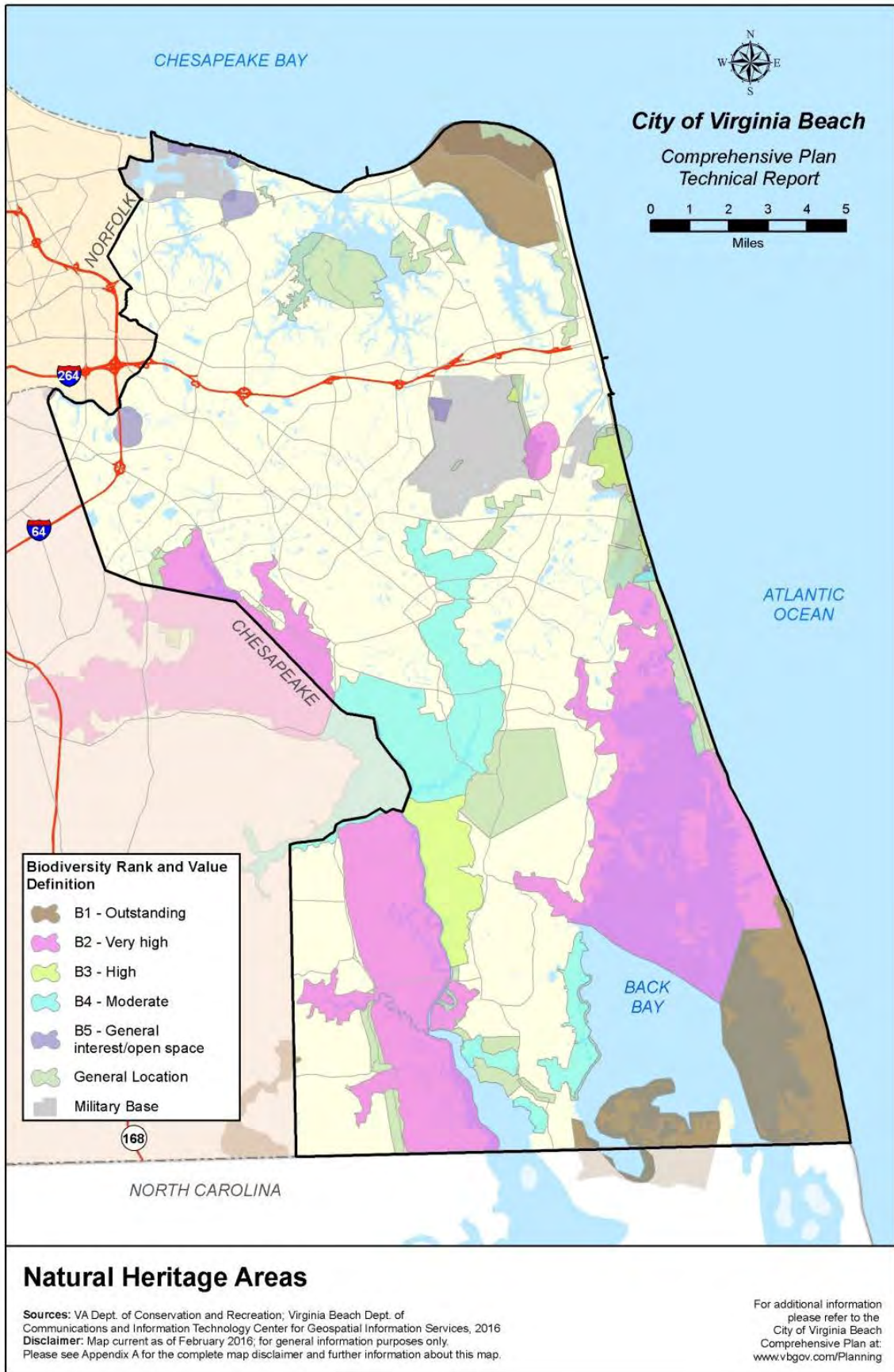


FIGURE 13

Managed, Threatened and Endangered Species

Virginia Beach is home to several managed, threatened, or endangered species including the long-eared bat, bald eagles and loggerhead sea turtles. The Virginia Departments of Conservation and Recreation and Game and Inland Fisheries, along with The U.S. Fish and Wildlife Service can review a proposed development project to determine if natural heritage resources, including managed, threatened or endangered species, are present on a site. Development activities that may impact federal or state managed, threatened, or endangered species may be subject to permit or mitigation requirements.

Bird Sanctuaries

[Section 5-31](#) of the City Code establishes areas of the City designated as a sanctuary for the protection of all birds. A map providing the locations of the bird sanctuary and conservation areas in the City is found at Figure 14 in this section of the Technical Report. It is unlawful for any person to kill or injure any bird, nest or eggs of any bird, except starlings, in the designated bird sanctuary. The restrictions do not prevent the lawful hunting of game birds under the authority of a permit issued pursuant to the provisions of [Section 38-3](#), nor do the provisions apply to the discharge of pellets from a shotgun when certain conditions are met.

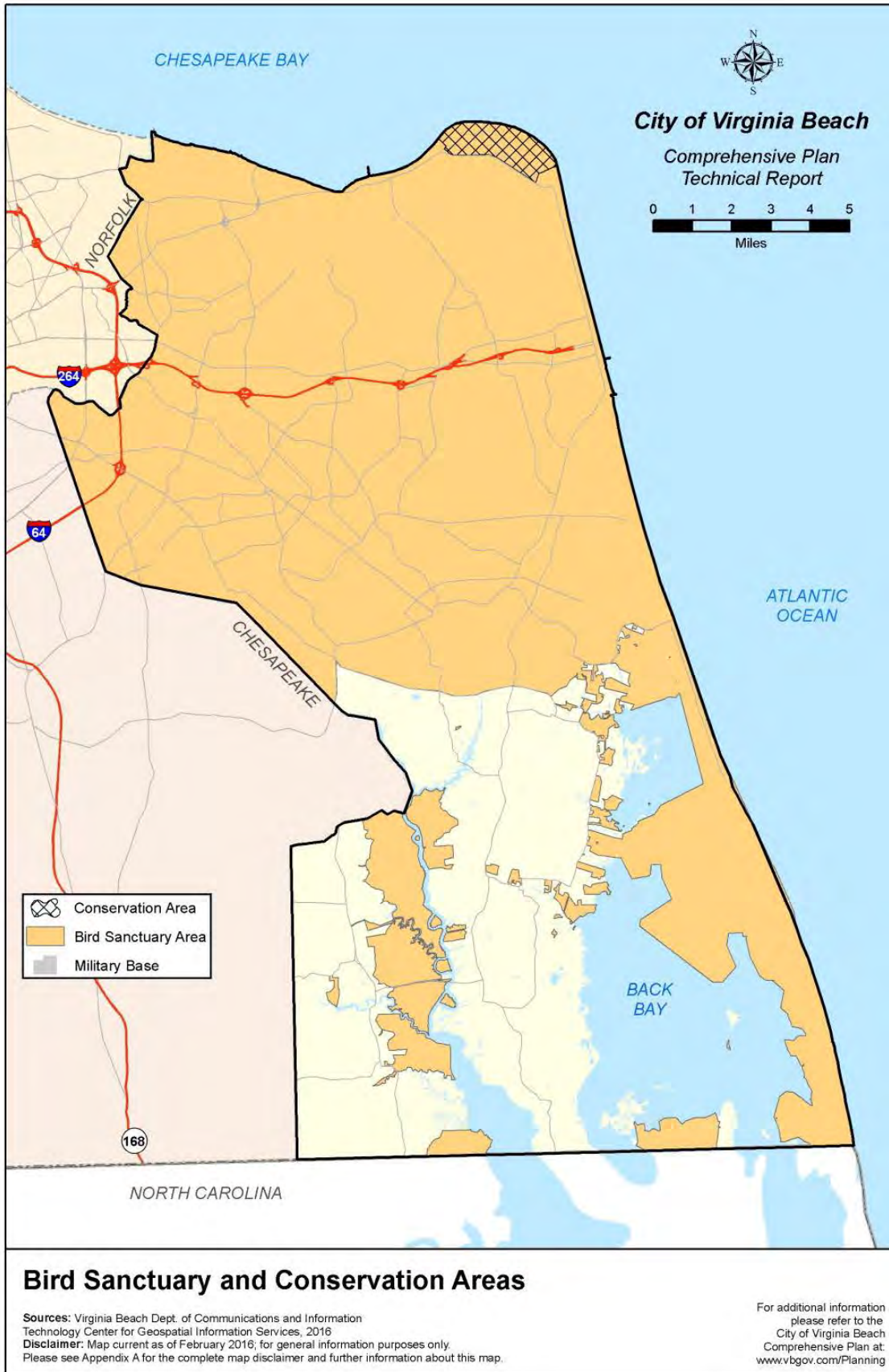


FIGURE 14

Oysters

In recent years, parts of the Lynnhaven River have been opened for Oyster aquaculture and harvesting. The areas available for harvesting are determined by the Virginia Department of Health's Shellfish Sanitation Division based on regional bacteria levels in the river. Today, 42% of the river is open to shellfish harvesting. This area includes some areas classified as conditionally condemned, which are closed after a significant rain event.

A map showing areas

with Private Oyster Leases, areas with an Oyster Ground Application, and areas currently closed for harvesting can be found on the Virginia Marine Resources Commission website at https://webapps.mrc.virginia.gov/public/maps/chesapeakebay_map.php. More details regarding the classification of shellfish growing areas and the current status of conditionally condemned shellfish harvesting waters can be found at the Virginia Department of Health website <http://www.vdh.virginia.gov/EnvironmentalHealth/Shellfish/>.

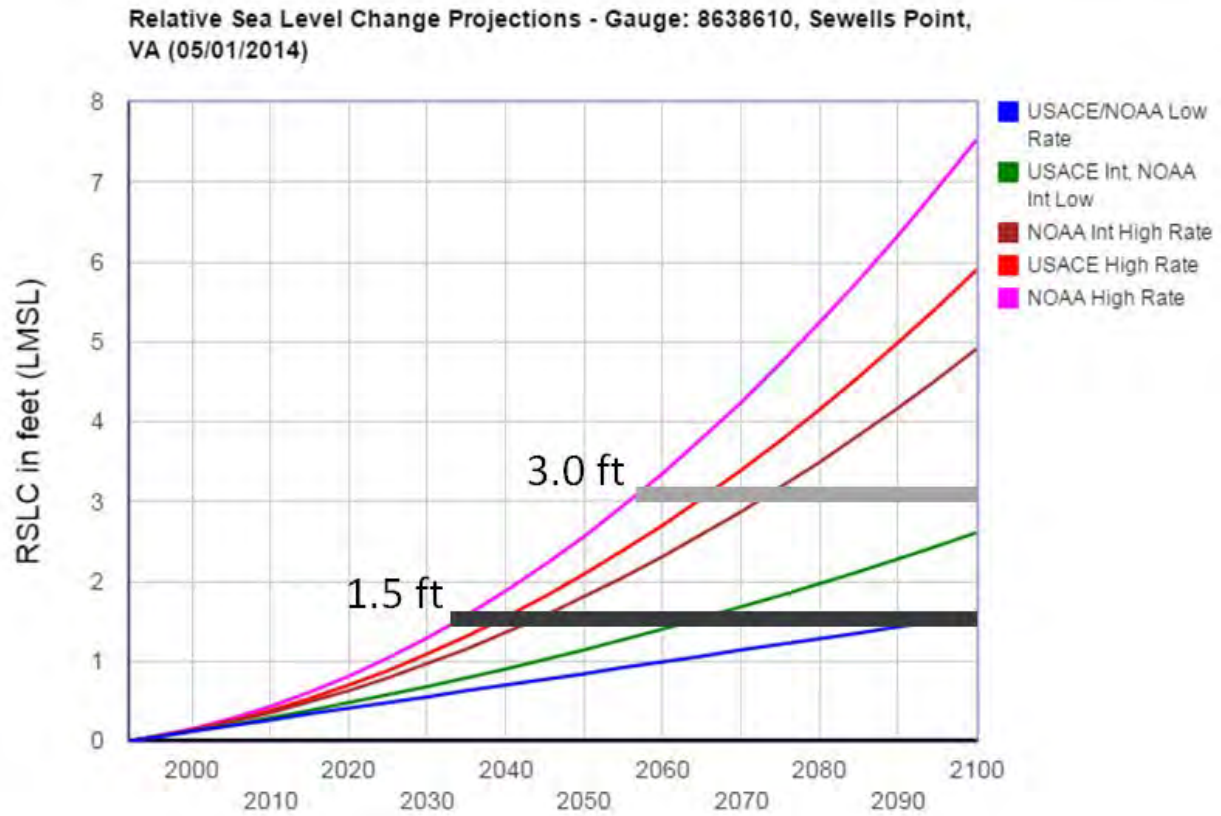
Invasive Plants and Animals

Invasive plants and animals are those intentionally or accidentally introduced to an area where they did not evolve and cause harm to natural resources, economic activity or humans. Examples include fire ants, beach vitex, kudzu, English ivy, and nutria, among others. Further information is available through the Virginia Invasive Special Council website <http://www.dcr.virginia.gov/natural-heritage/vaisc/>. The City of Virginia Beach currently has management programs for beach vitex and kudzu. Sightings of beach vitex should be reported to the Department of Planning and Community Development - Environment and Sustainability Office. Sightings of kudzu should be reported to the Department of Parks and Recreation's Landscape Management division.

SEA LEVEL RISE, RECURRENT FLOODING, AND HAZARD MITIGATION

Sea Level Rise and Recurrent Flooding

A key step in developing the *Comprehensive Sea Level Rise and Recurrent Flooding Response Plan* was selecting sea level rise planning horizons to allow the City's consultant to complete the vulnerability assessment and develop adaptation strategies. The two scenarios selected, 1.5 ft. and 3.0 ft., are based on their applicability to multiple sea level rise projections. A map depicting areas of the City at or below the selected elevations can be found at Figure 15 in this section of the technical report.



Source: Dewberry Presentation, September 2015

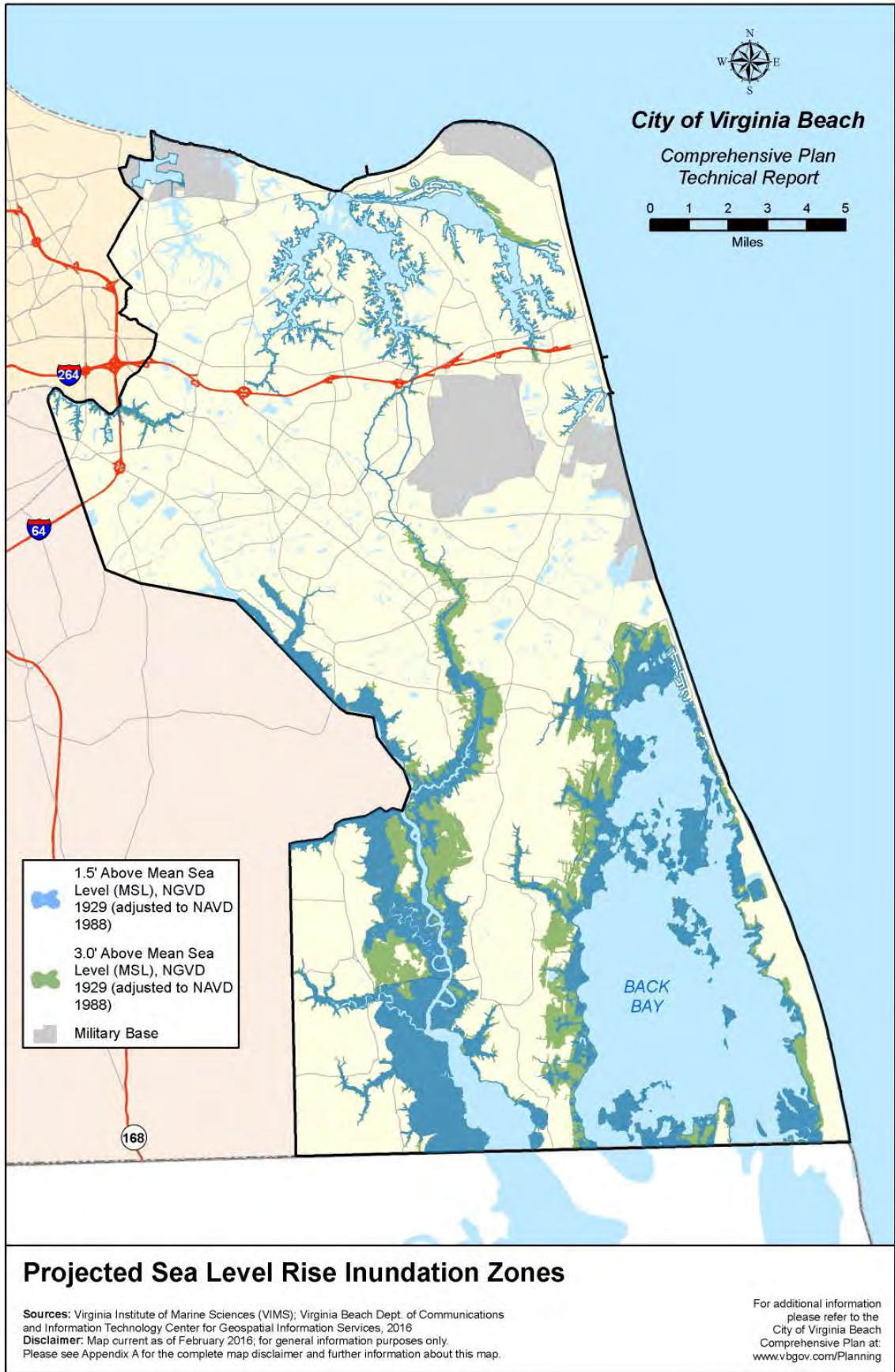


FIGURE 15

Floodplains

Virginia Beach has been a participant in the National Flood Insurance Program (NFIP) since the early 1970s. As a participant in the NFIP, the Federal Emergency Management Agency (FEMA) provides a Flood Insurance Study and Flood Insurance Rate Maps (FIRMs) showing areas of the City likely to be impacted by flooding. As better data and new mapping technologies emerge, FEMA will periodically update the FIRMs. The most recent update to the Virginia Beach FIRMs was in January 2016. The FIRMs and accompanying Flood Insurance Study are available at the FEMA Map Service Center (<https://msc.fema.gov/portal/>).

[Appendix K](#) of City Code formally adopts the FIRMs and establishes development regulations for all structures located in the 1% annual chance flood area, also known as the Special Flood Hazard Area. Due to limited topographic relief and poor drainage characteristics in the Special Flood Hazard Area in the Southern part of the City, [Section 4.10](#) establishes an area known as Floodplains Subject to Special Restrictions where additional development regulations regarding the use and placement of fill have been established to maintain floodplain drainage characteristics and ensure the safety of residents.

A map providing the location of the Special Flood Hazard Area and Floodplain Subject to Special Restrictions in the City is found at Figure 16 in this section of the Technical Report.

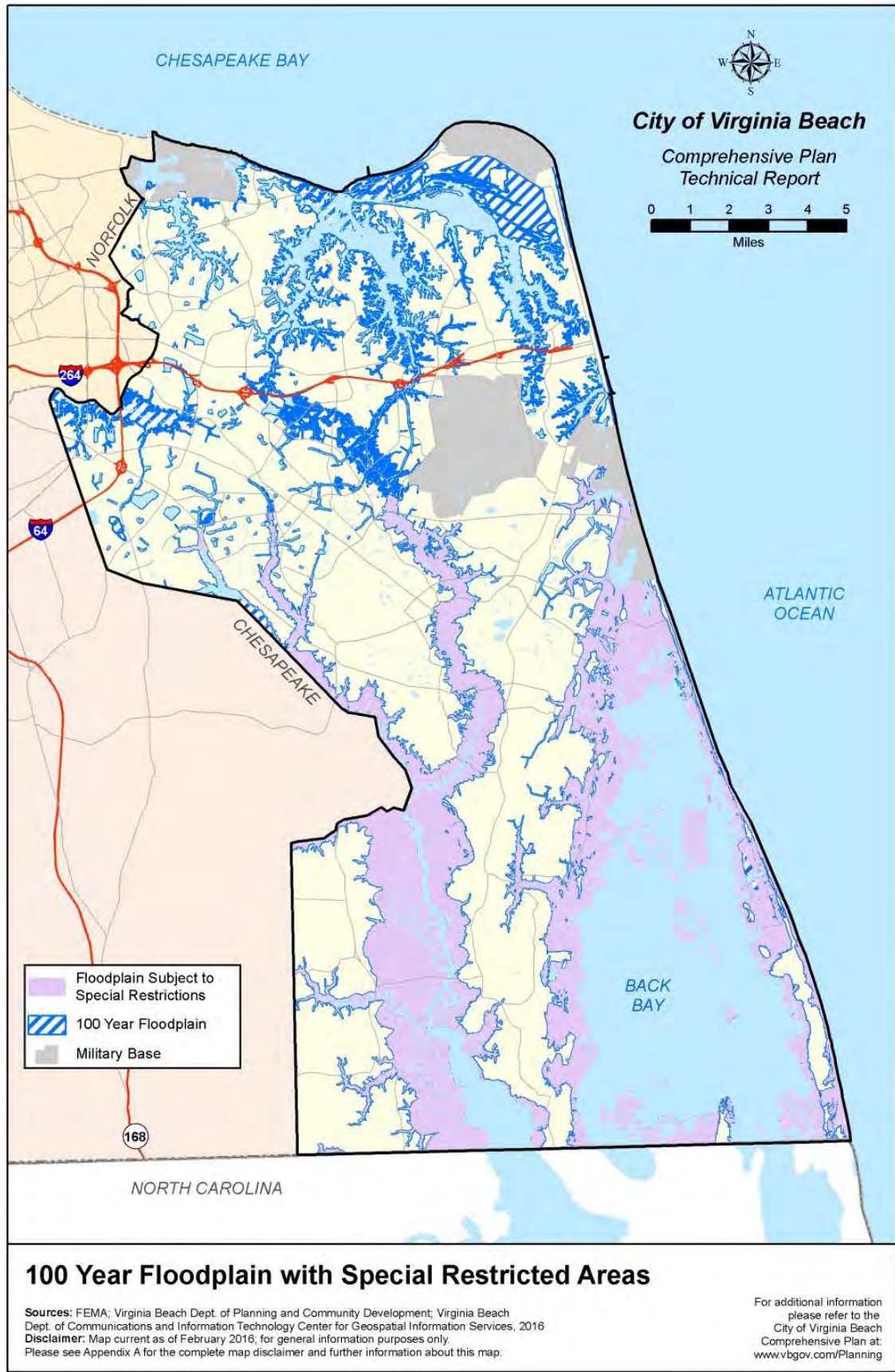


FIGURE 16

Hazard Mitigation

The Federal Disaster Mitigation Act of 2000 charged localities with the responsibility of identifying, assessing, and mitigating the risks within their communities to ensure that critical services would continue to function if a natural disaster were to occur. This requirement is fulfilled through the development and adoption of a Hazard Mitigation Plan. These plans develop mitigation priorities related to the natural hazards that could potentially impact a locality, and allow the City to be eligible to receive mitigation funding to implement these priorities. Hazard Mitigation Plans are required to be updated every 5 years. The existing plan for the City was adopted in 2011 and can be found at <http://www.vbgov.com/government/departments/fire/emergency-mgmt/Pages/emer-mgt-reg-mit-plan.aspx>. A new plan is anticipated in Fall 2016.

LAND DEVELOPMENT AND STORMWATER MANAGEMENT

Topography

The topographic relief exhibited in the City consists of three primary north-south ridges separated by low-lying flats. The easternmost Pungo Ridge has elevations of 10 to 20 feet above mean sea level; the central Oceana Ridge has elevations of 25 to 30 feet above mean sea level; and slightly higher elevations in the westernmost ridge in the City. Solitary dunes existing south of False Cape range up to 55 feet above mean sea level. The wooded dunes in and around the Cape Henry range from 20 to 85 feet above mean sea level. These ridges and flats are geological relics of previous coastlines and bays formed during events such as the last Ice Age.

Soils

Soil types that comprise the City generally consist of the following:

- Extensive fair to poorly drained loamy soils located north of the Virginia Beach Boulevard / I-264 corridor;
- Extensive fair to poorly drained loamy soils interspersed with poor to very poorly drained peaty soils located along headwaters of wind tidal areas south of the Virginia Beach Boulevard / I-264 corridor and north of the Indian River Road corridor; and
- Extensive very poor to excessively drained sandy and peaty soils interspersed with narrow ridges of fair to poorly drained soils on relict sand dunes and former ocean shorelines along the northernmost and easternmost boundaries of the City and south of the Indian River Road corridor to the Virginia-North Carolina state line.

Poorly drained soils in the City pose special problems for a number of development-related land uses. These soils generally exhibit high seasonal water tables, making these areas extremely difficult for maintaining functioning septic systems, or for supporting agricultural operations, without extensive engineered solutions such as ditching systems.

A map providing the locations of Southern Rural Area Soils is found in the Technical Report Appendix.

Mineral Resources

In Virginia Beach, the mining of sand and gravel is regulated by the Virginia Department of

Mines, Minerals, and Energy under the Virginia Minerals Other Than Coal Surface Mining Act. The Act recognizes potential impacts of mining on the natural environment by stating that uncontrolled mining of such minerals and the unreclaimed land can adversely affect the environment through the following ways:

- Destruction of vegetative cover
- Disruption of drainage patterns
- Increased siltation and sedimentation of streams as well as other forms of pollution
- Temporary and sometimes permanent destruction of scenic beauty and wildlife habitats

The City manages mining operations in the context of land use through its conditional use permit process. The sand and gravel mineral resources excavated from borrow pits in the City are commonly used for various road construction projects.

A map providing the locations of permitted borrow pits operating in the City is found at Figure 17 in this section of the Technical Report.



FIGURE 17

Beaches and Coastal Primary Sand Dunes

Coastal primary sand dunes were once a dominant natural feature adjoining the City's Chesapeake Bay and Atlantic Ocean shorelines. These resources serve as sand reserves to naturally replenish beaches following storm events, and are regulated by [Article 16 of the City's Zoning Ordinance](#). They also exhibit unique natural communities of plants and animals that thrive in this harsh environment. Development pressures in this high value area have resulted in the loss of much of this valuable resource, particularly in areas that have high erosion rates, such as Sandbridge and Chesapeake Beach.

In 2002, the City's Beaches and Waterways Advisory Committee completed a [Beach Management Plan](#), which includes recommendations based upon historical trends, coastal processes, environmental concerns, public benefits, and financial feasibility among other things. This report recognizes the impacts of natural erosion along the City's beaches and the potential impacts to shoreline development if left unchecked. The Plan recommends the following:

- Use of sand replenishment, along with dune construction and enhancement where appropriate, along all erosion beaches;
- Use of bulkheads and seawalls only in those instances where there is pending danger to developed property from a severely-eroded beach, or as part of the long-term hurricane protection plan for the intensely developed Resort Area beach; and
- Completion of a comprehensive review of the City's building codes in terms of engineering advances and construction methods in coastal hazard areas.

Many outcomes and recommendations of this Plan, such as those relating to public beach access, were previously incorporated into the City's Outdoors Plan. Other outcomes, such as the Beach Erosion and Hurricane Protection Project and the Sandbridge Beach Section 933 Project, have been approved by City Council and are included in the City's Capital Improvement Program.

Wetlands

The City relies upon the U.S. Environmental Protection Agency's (EPA's) National Wetlands Inventory (NWI) as a general guide to determine the presence of tidal and non-tidal wetlands within the City. Nontidal wetlands are further defined in the City's Chesapeake Bay Preservation Area and Southern Rivers Watershed Management Ordinances, as consisting of areas of the following soil types:

- Backbay Mucky Peat
- Corolla-Duckston Fine Sands
- Dorovan Mucky Peat
- Duckston Fine Sand
- Nawney Silt Loam
- Pamlico Mucky Peat, Ponded
- Pamlico-Lakehurst Variant Complex
- Pamlico Mucky Peat
- Pocaty Peat
- Rappahannock Mucky Peat, Strongly Saline

In addition to the NWI, the City relies on data from the Virginia Institute of Marine Science Tidal Marsh Inventory, available at http://ccrm.vims.edu/gis_data_maps/static_maps/gis/tmi_updated.html. A map providing the locations of both tidal and nontidal wetlands areas in the City is found at Figure 18 in this section of the Technical Report.

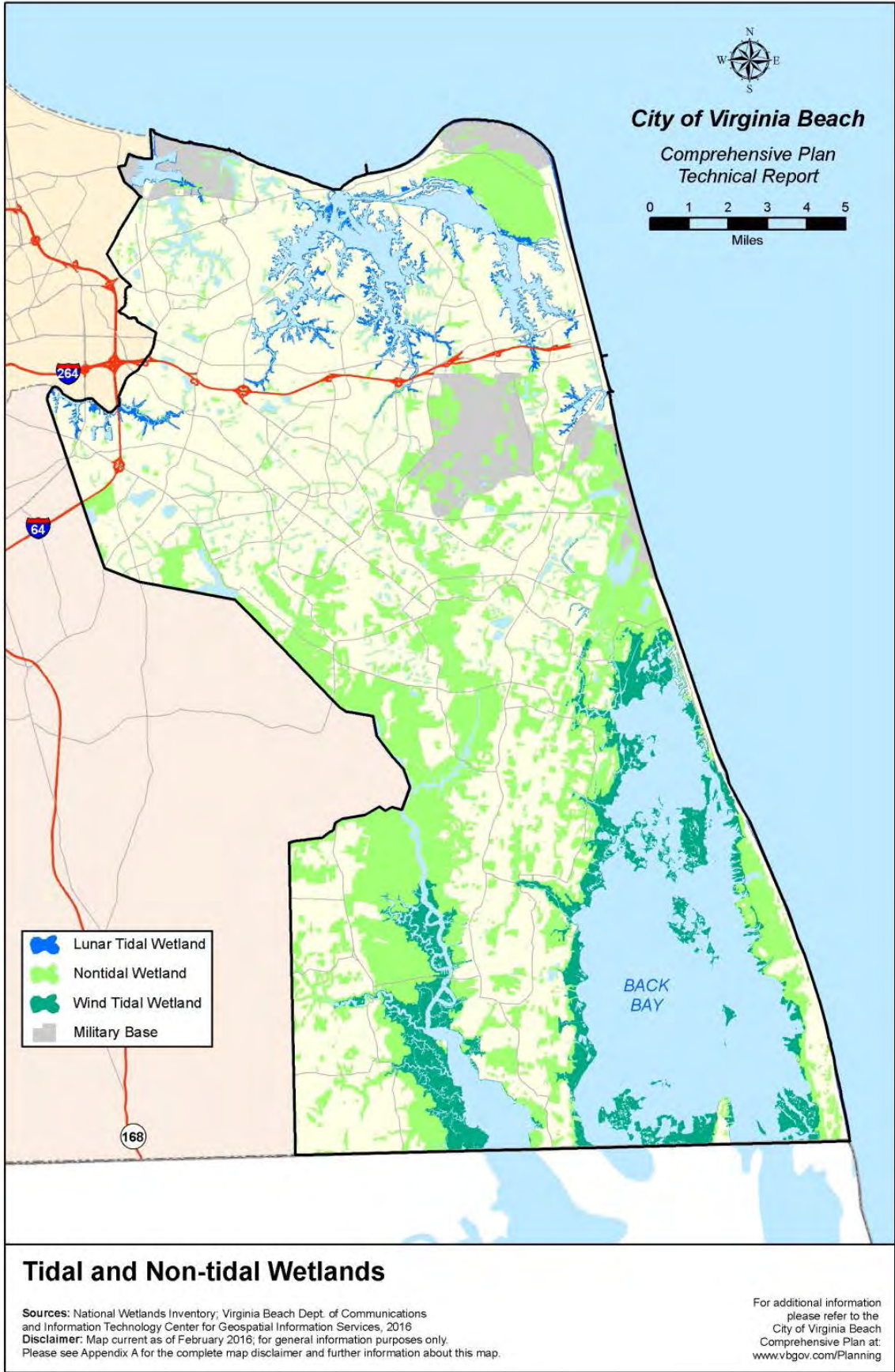


FIGURE 18

Chesapeake Bay Preservation Areas

The entire Chesapeake Bay Watershed is designated as a Chesapeake Bay Preservation Area (CBPA) and regulated by [Appendix F of City Code](#). The CBPA is further divided into Resource Protection Areas (RPAs) and Resource Management Areas (RMAs). RPAs are comprised of those lands located at or near the shoreline, which have an intrinsic water quality value or are sensitive to impacts that may result in significant degradation to state waters, and the location of RPAs is site specific.

Resource Protection Areas:

- Tidal wetlands;
- Nontidal wetlands adjacent to shorelines and tidal wetlands;
- Tidal shores; and,
- A variable width buffer area not less than 100 feet in width

Resource Management Areas:

- Comprise all other lands located within the Chesapeake Bay Watershed.

Southern Rivers Watershed Management Areas

The City's Southern Rivers Watershed Management Area consists of the North Landing River, Northwest River and Back Bay secondary watersheds and is regulated by [Appendix G of City Code](#). Waterways within the Southern Rivers Watershed Area are influenced by wind driven tides rather than lunar tides. The Southern Rivers Watershed features include:

- Tidal wetlands;
- Nontidal wetlands, as defined by soil type, adjacent to shorelines and tidal wetlands;
- A 50 foot wide vegetated buffer as measured from the landward limit of the above resources, as they exist at a specific site.

A map of the Southern Rivers Watershed Area is found in the Technical Report Appendix.

Landscaping and Tree Protection

The growth and development attracted to the City because of its natural beauty oftentimes results in the removal of trees and other plant material. The City presently administers a system of tree protection and landscaping ordinances designed to help offset losses. These ordinances include:

- [Appendix E](#), Tree Planting, Preservation and Replacement Ordinance as a means to ensure adequate tree cover in residential areas throughout City.
- [Appendix A, Article 2, Section G](#), Landscaping, Screening, and Buffering Specifications and Standards section of the Zoning Ordinance as a reference for persons who are tasked with performing work in accordance with City ordinances that regulate landscaping, screening, and buffering.
- [Appendix C, Section 5A](#), Parking Lot and Foundation Landscaping section of the Site Plan Ordinance, which includes the Foundation Planting Landscape Ordinance. The

ordinance applies to commercial and public buildings, display areas, dumpster and trash receptacle areas, loading docks, parking garages, and parking lots.

To assist developers with implementing the requirements of these ordinances, the draft Integrated Site Design Guide has been developed as a tool to combine landscape techniques with design components to meet the City site plan review requirements and provide examples of best management practices. The draft Guide can be found at <http://www.vbgov.com/government/offices/eso/Pages/integrated-site-guide.aspx>.

Stormwater Management

In accordance with the requirements of the Clean Water Act, the City has held an National Pollutant Discharge Elimination System (NPDES) Municipal Storm Water Permit since 1993 with the DEQ, known as the VPDES MS4 Permit. Elements of the permit include:

- Program Administration and Reporting;
- Operational Requirements;
- Stormwater Pollution Reduction;
- Infrastructure Data Management; and
- Public Outreach and Education

A Stormwater Utility Fee was implemented by the City in FY 1992/1993 as a way to fund the VPDES MS4 permit program, and other stormwater initiatives. The City's Stormwater Program consists of three main components that include Operations and Maintenance, Water Quality, and Flood Control. Redevelopment activities provide opportunities to retrofit the existing stormwater system, while new development provides opportunities to address larger issues such as regional stormwater management.

The City's stormwater system consists of a network of stormwater management facilities and collection and conveyance systems. This system currently includes ninety-six (96) regional stormwater management facilities, defined as those that equal or exceed five acres in size. Maps showing the City's Stormwater Drainage Basins and the locations of major stormwater management facilities and their corresponding service areas are found on Figures 19 and 20 in this section of the Technical Report.

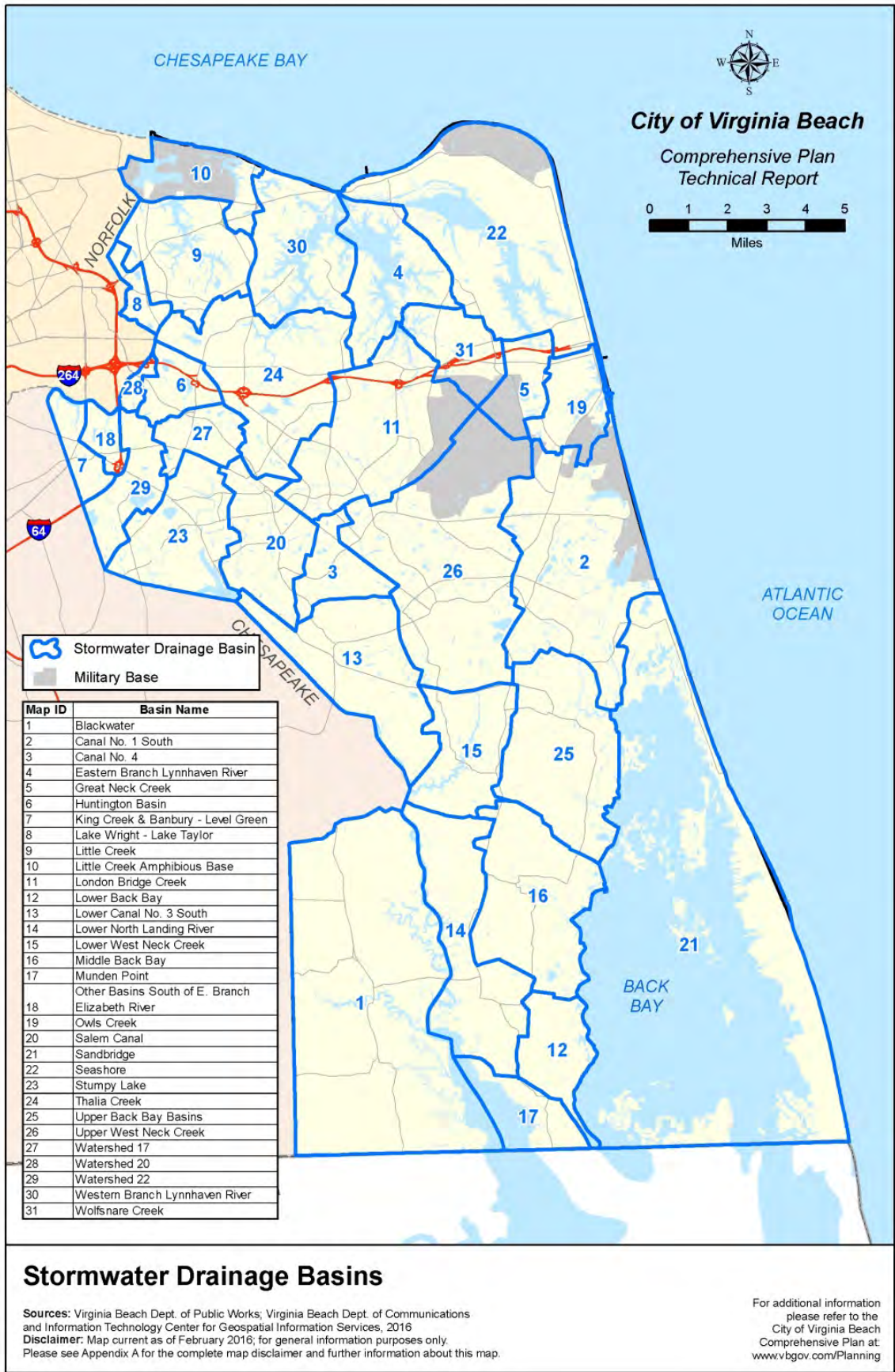


FIGURE 19

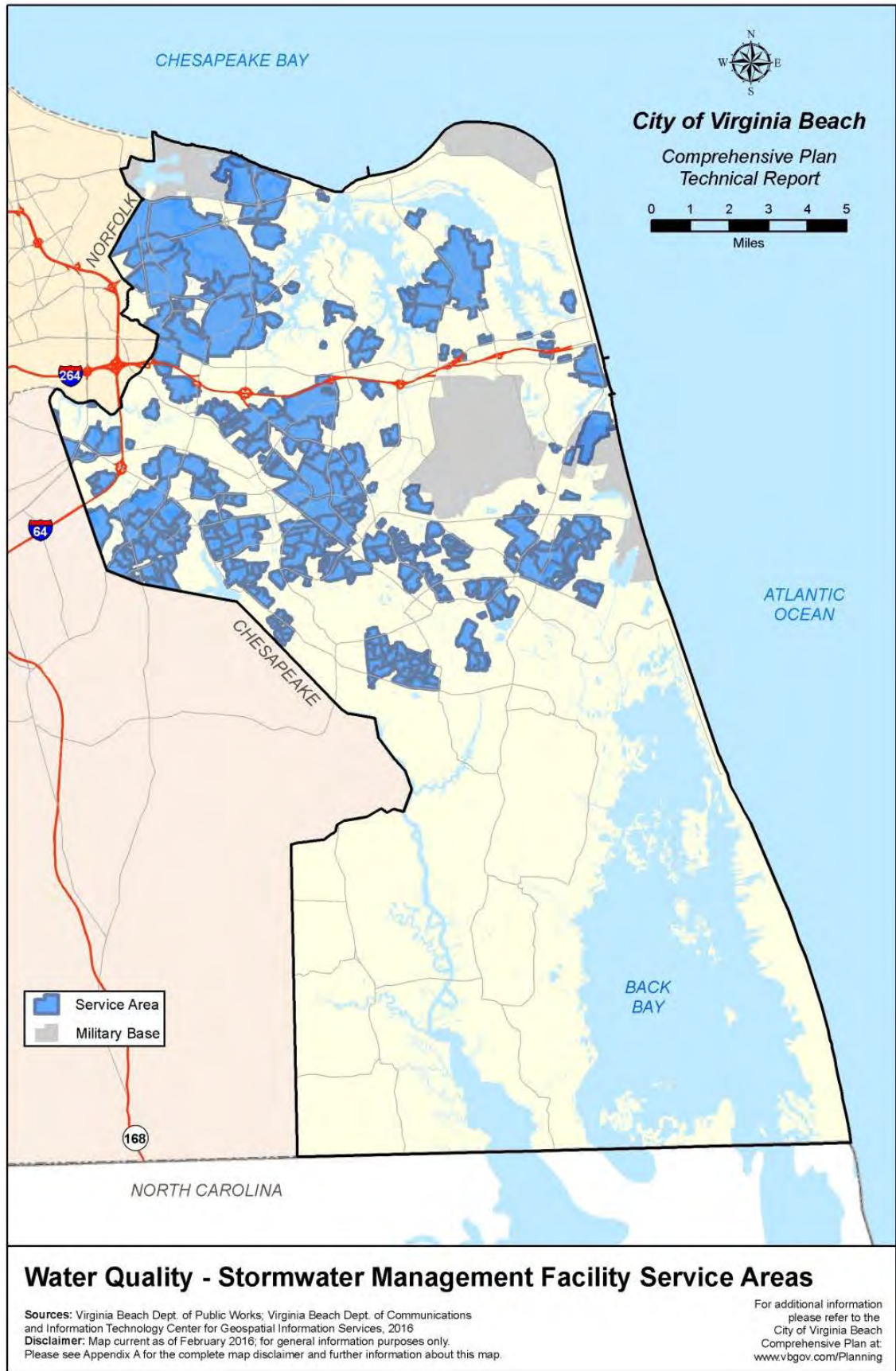


FIGURE 20

ENERGY

LEED Certification

The United States Green Building Council (USGBC) (LEED) program recognizes buildings that meet certain point thresholds based on various building credit criteria. LEED certified buildings save money and resources, have a positive impact on the health of occupants, and promote sustainable building practices. Currently, Virginia Beach has 57 LEED certified buildings including private buildings and public schools; a complete list can be found at <http://www.usgbc.org/projects>.

The following City-owned buildings are LEED certified:

1. Williams Farm Recreation Center (LEED "Silver")
2. Animal Shelter (LEED "Silver")
3. Chesapeake Beach Fire Station (LEED "Certified")
4. Town Center Fire Station Plan (LEED "Silver")
5. Bow Creek Recreation Center Plan (LEED "Certified")
6. Special Operations Building Plan (LEED "Certified")
7. Virginia Beach Convention Center (LEED "Gold" under LEED Operations & Maintenance)
8. Virginia Beach Visitor Information Center (LEED "Gold" under LEED Operations & Maintenance)

Additional LEED buildings on the horizon include:

1. Blackwater Fire Station is designed for LEED "Silver" certification (constructed)
2. Kempsville Recreation Center is designed for LEED "Silver" certification (under construction)
3. Housing Resource Center is being designed for LEED "Certified" certification, with the potential for LEED "Silver" certification
4. Parks and Recreation Administration Building is being designed for LEED "Silver" certification
5. Marine Animal Care Facility is being designed for LEED "Silver" certification
6. 4th Police Precinct is being designed for LEED "Silver" certification

Energy Star

In addition to pursuing LEED certification, commercial buildings and industrial plants can pursue ENERGY STAR certification if it performs higher in energy performance standards set by the EPA than at least 75% of similar buildings nationwide. In 2015, the Virginia Beach MSA was recognized as the #1 Mid-Sized City based on the number of building receiving ENERGY STAR certification. Current rankings and certified buildings can be found at <https://www.energystar.gov/buildings/topcities>.

NOISE, LIGHT, AND AIR POLLUTION MANAGEMENT

Noise Attenuation

The City adopted the Airport Noise Attenuation and Safety Ordinance ([Appendix I](#) of City Code) to protect the public health, safety, and welfare from excessive noise and potential accidents associated with proximity to aircraft operations. The ordinance establishes acoustical performance standards for noise attenuation in construction, disclosure requirements for purchasers or lessees of property within a noise zone, and boundaries for airport noise zones.

Noise attenuation measures are required by the Virginia Uniform Statewide Building Code for new residential and certain non-residential construction, including additions, located within noise zones 65 dB DNL (day/night average sound level) or greater. Additionally, the City Zoning Ordinance ([Appendix A](#) of City Code) allows a maximum density for property in the Interfacility Traffic Area (ITA) of one unit per fifteen acres of developable property (1:15) in the greater than 75 dB DNL Noise Zone and one unit per five acres (1:5) in the 70-75 dB DNL Noise Zone.

Additionally, [Article II of Chapter 23 of City Code](#) includes provisions regulating sounds considered to be a hazard to public health, welfare, peace and safety, and quality of life.

Air Quality Management

Air quality problems affecting the City are primarily associated with motor vehicle emissions and smoke from wood-burning fireplaces. The Hampton Roads Region has been classified as an air quality maintenance area by the EPA, a designation given to an area that was previously designated as a non-attainment area that later met the federal standard. The EPA has approved an air quality maintenance plan showing how the region will remain in attainment through 2018, which can be found on the Virginia Department of Environmental Quality website <http://www.deq.virginia.gov/Programs/Air/AirQualityPlans/OzoneandPM25RegionalPlanningActivities.aspx>.

The Virginia Department of Environmental Quality also maintains air monitoring sites throughout the state, including three in the Southside Hampton Roads region (1 in Norfolk and 2 in Suffolk). Current Regional air quality data can be found at <http://vadeq.tx.sutron.com/>.

Stationary Air Permit Locations

Air quality permits are required for industrial sites and facilities that emit regulated pollutants to ensure that their emissions do not cause harm to the public or the environment. The regulated air pollution point sources include uses such as dry cleaners, small manufacturing and fabrication industries, photocopying and photo processing shops. The Virginia Department of Environmental Quality issues permits and monitors permit holders to ensure compliance (<http://www.deq.virginia.gov/Programs/Air/PermittingCompliance.aspx>).

SOLID WASTE MANAGEMENT

The City of Virginia Beach offers a wide variety of recycling options including curbside pickup and drop-off locations. There are four (4) drop-off locations in Virginia Beach that can be found at <http://www.vbgov.com/government/departments/public-works/pw-waste-management/Pages/recycling-drop-off-sites.aspx>. The City's Landfill and Resource Recovery Center offers a one-stop shop where residents can bring recycling materials including household recycling, batteries, cooking grease and oil, electronics, household hazardous waste, metals, plastic bags, tires and yard debris along with any materials that cannot be recycled for disposal (<http://www.vbgov.com/government/departments/public-works/pw-waste-management/Pages/city-landfill.aspx>).

The following chart depicts the amount of waste collected per residence, including the percent recycled.

FY	Residences	Tons MSW per Residence	Tons Recycled per Residence	Percent Recycled	Percent Recycled (Incl Yard Debris)
10/11	123,919	1.17	0.29	19.87%	34.45%
11/12	124,171	1.11	0.28	20.25%	35.43%
12/13	124,547	1.08	0.28	20.70%	37.78%
13/14	124,653	1.04	0.28	20.90%	37.52%
14/15	124,840	1.07	0.26	19.60%	36.13%

NOTE:

MSW (Municipal Solid Waste) - Regular household trash, bulk collection, other departments' waste

Yard Debris - Curbside, yard waste containers, and other departments yard waste

Recycling - Curbside, drop-off centers, tires, white goods; batteries added FY13; electronics, rigid plastics, oil & antifreeze added FY14

Residences - Single family, duplex, townhomes - average number for the year provided by PU

Source: Department of Public Works, Waste Management

CHAPTER 7. HOUSING AND NEIGHBORHOODS

The following section presents further details and explanation of the existing conditions and trends of the housing types, age, condition, value, tenancy, and overall affordability that were summarized in the Comprehensive Plan's Policy Report Section 2.3 on Housing and Neighborhoods. Please note that data from the Census Bureau American Community Survey (ACS) should be used to discern trends over time, or a general picture, rather than to obtain an exact individual data points. This is due to ACS using small sample sizes, which occasionally results in anomalies and non-meaningful year-to-year variations within the data.

EXISTING CHARACTERISTICS AND TRENDS IN HOUSING

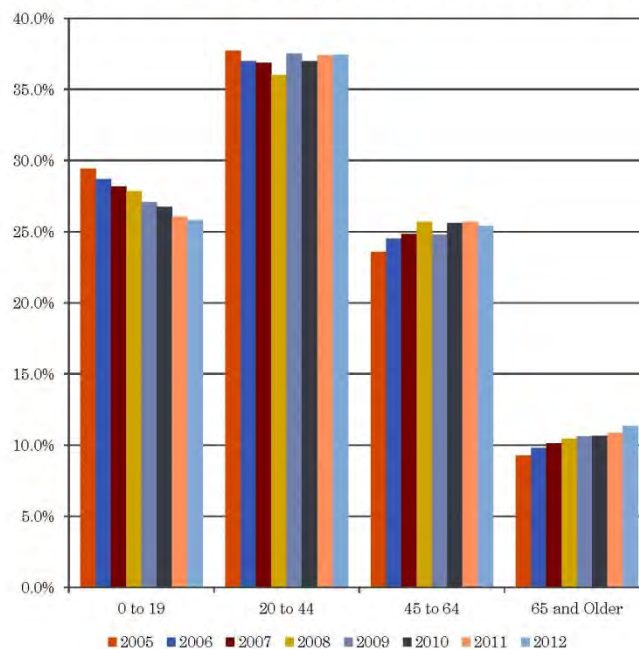
During the 1980s Virginia Beach had the distinction of being the fastest growing city in the country. In 1986, alone 8,000 new housing units were permitted. From the early 1990s through 2008, the housing stock increased an average of 1,200 housing units per year. Since then the housing growth has been significantly less than the boom development period. More recently the city has been growing at less than 1% per year. This is about 4,000 people and about 1,700 housing units per year.

Desirability Standards for Housing

As indicated in Graph 1, the Census Bureau American Community Survey (ACS) reports that residents between birth and age nineteen are declining as a percentage of Virginia Beach's population while those age 65 and older are the only population segment that grew consistently from 2005 to 2012. According to the Virginia Department of Aging (VDA) residents exceeding the age of 85, which numbered 5,630 in 2010 for Virginia Beach, will also likely increase dramatically. Overall, this age group will create additional demand for nursing home care. More on the City's population and demographics can be found on page 2 in this document.

Graph 1

AGE OF VIRGINIA BEACH RESIDENTS



Source: American Community Survey via Dept. of Housing and Neighborhood Preservation, March 2015

Housing Development

The predominant form of residential land uses consist of a low to medium density suburban character located in the northern and central portions of the City. Multifamily uses are typically concentrated along the City's main arterials and the Strategic Growth Areas (SGAs)

An interesting trend in housing development for Virginia Beach is that the citywide ratio of single family and multifamily is changing. Over the past few decades, the growth of housing has been dominated by the single family detached unit. More recently, however, the construction of single family homes has been declining. This declining rate of construction, as shown in Table 1, has been occurring since 2006 when 1,499 single family units were constructed, a number that has not been surpassed to date.

Table 1
New Construction of Housing Units 2006 - 2015

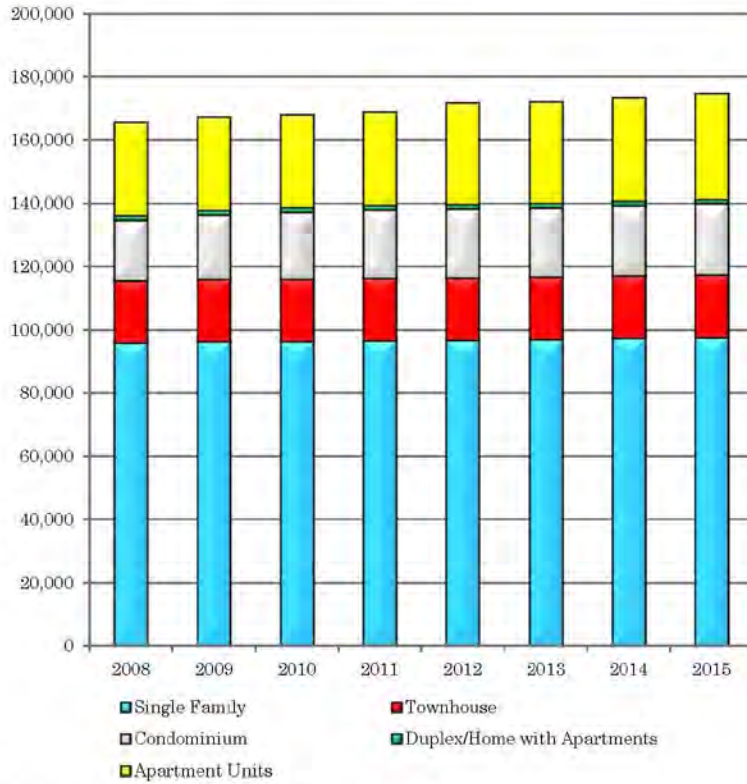
Year	Homes	Duplex Units	Apartment Units	Total Housing Units
2015	686	24	329	1,039
2014	542	10	912	1,464
2013	661	4	702	1,367
2012	532	6	570	1,108
2011	566	4	20	590
2010	541	20	716	1,277
2009	770	10	136	916
2008	1,050	22	586	1,658
2007	1,376	18	45	1,439
2006	1,499	16	398	1,913

Source: City Real Estate Assessor Report FY 2017

The number of single family detached units hovered around 60% for many years. Since 1996, however, the proportion of single family detached units dropped from 59% to 55%.

Graph 2

HOUSING BY TYPE



Source: Virginia Beach Real Estate Assessor

Dept. of Housing and Neighborhood Preservation, March 2015

While these are slight percentages, they reflect a shift toward more compact development. According to the city's Real Estate Assessor's 2017 report there are 176,902 total housing units in the city that can be categorized as:

- Single family detached: 98,081 units or 55%;
- Townhouses: 19,701 units or 11%;
- Condos and duplexes: 24,533 units or 14%
- Apartments: 34,587 units or 20%.

Table 1

Type	Number
Single Family	98,081
Townhouse	19,701
Low Rise Condominium	20,325
High Rise Condo/Co-op	2,842
Duplex/Home with Apartments	1,366
All Residences	142,315

Age of Housing Stock

The average age of housing units is increasing and will continue to increase through 2040. As of 2015, the City Real Estate Assessor's records indicate that 42 percent of the housing stock is 40 years old or older. Assuming an annual growth rate of 1,300 housing units, which is about the current rate, this percentage will increase to 70 percent by 2040. This is triple the percentage that we have today. Even more significant for this time period is that 60 percent of the housing stock will reach the age of 50 years old or older.

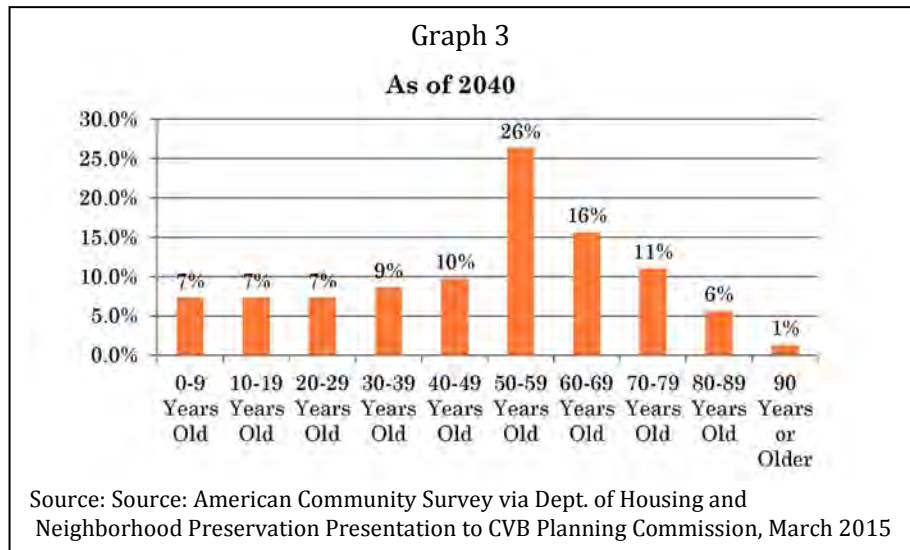
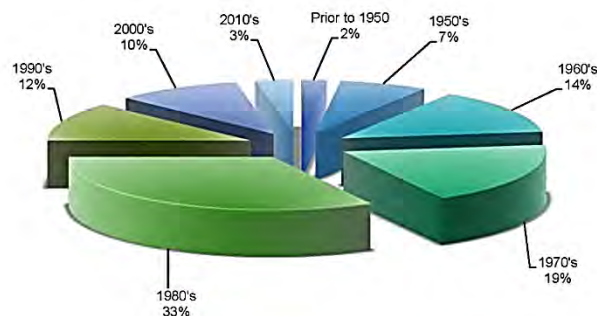


Table 3
RESIDENCES BY YEAR BUILT

Year Built	Number	Mean Assessment*
Prior to 1950	2,366	\$467,500
1950 to 1959	9,829	\$265,300
1960 to 1969	19,565	\$271,500
1970 to 1979	27,824	\$264,000
1980 to 1989	46,955	\$234,600
1990 to 1999	17,210	\$339,800
2000 to 2009	14,916	\$381,600
2010 to Present	3,650	\$444,600

*Rounded to nearest \$100

PERCENTAGE BY YEAR BUILT



Graph 3

Source: City Real Estate Assessor Report FY 2017

Physical Conditions of Housing

Housing Conditions Surveys

The method the City has used to gauge the physical condition of its housing stock began in 1990, when the City of Virginia Beach Department of Housing and Neighborhood Preservation (DHNP) began a system to obtain statistical data on housing conditions by periodically conducting citywide “windshield” surveys of dwelling units by teams of inspectors making observations from the public right-of-way.

The purpose is to provide a tool for determining a reasonable estimate of the condition of the City’s housing stock and identify any trends, geographic areas or characteristics (such as type, age, or assessed value of structure) which can assist the City in determining the need for additional programs or services. These results are considered to be a key indicator of the health of the city’s housing and neighborhoods and a direct reflection of our efforts to promote vibrant, blight-free neighborhoods.

These surveys recorded representative samples of housing units which are then rated based on the exterior of the buildings meeting code requirements. For example, if the exterior of a multifamily complex (apartment or condominium) was rated deficient, then all the dwelling units were also rated deficient.

Five surveys have been conducted as of 2014. All the surveys classified the unit’s exterior maintenance conditions by four categories:

- Standard – no exterior deficiencies with zero building maintenance code violations;
- Deficient – minor defects to be easily corrected in the course of regular maintenance;
- Deteriorated - structure defects of greater severity that is not normally repaired in the course of regular maintenance;
- Dilapidated - critical defects that are not feasible to repair and endanger the health or safety of occupants.

The first two surveys in 1990 and 2000 included single and multifamily residential and mobile home units, excluding those on military property. The 1990 and 2000 residential dwelling conditions survey results revealed the following:

- 79% of all the housing units were standard;
- 18% of the units were deficient;
- 3% of the units were deteriorated; and,
- Less than 1% of the structures were found to be dilapidated.

In 2004, the third survey was limited to the 6,085 multifamily buildings in the city, which comprised of 168 multifamily complexes varying in size from 1 building to 150 buildings. This category of dwelling units, at the time, accounted for 25% of all housing in the city. The survey revealed the following:

- 60% of all the multifamily units were standard;
- 36% of the units were deficient;
- 4% of the units were deteriorated; and,
- None of the structures were found to be dilapidated.

The fourth survey took place in 2006 and applied to a sample of approximately 2,500 single family units. These single family units included detached homes, townhomes, duplexes, and houses with apartments. The 2006 survey results revealed that:

- 80% of all the units in the sample were standard;

- 18% of the units were deficient;
- 2% of the units were deteriorated or were found to be dilapidated.

These findings are representative of the conditions of structures citywide at a 95% confidence level, meaning:

- 78-82% of the all the single-family residential structures in the city are standard;
- 16-20% of the all the single-family residential structures were deficient;
- 0-4% of the all the single-family residential structures were deteriorated or dilapidated.

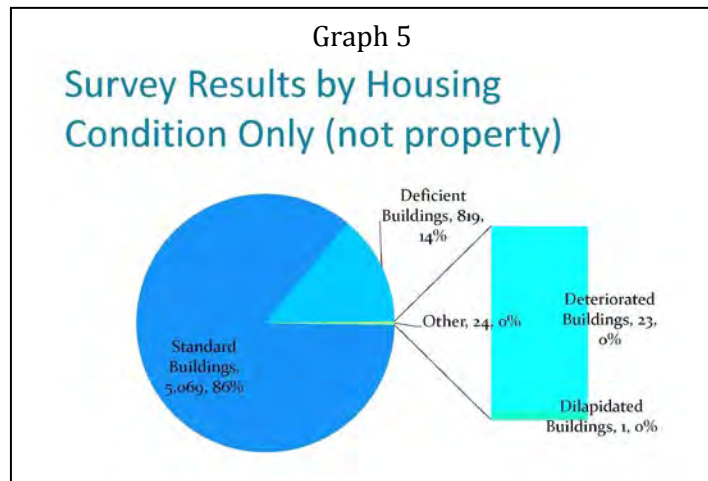
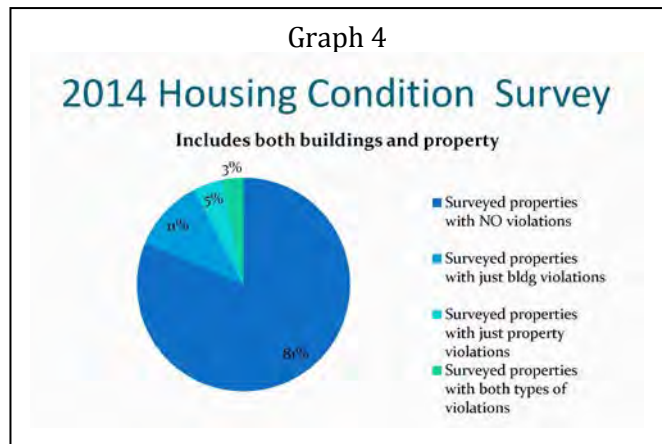
The fifth city-wide housing survey process was completed in 2014, eight years since the last survey was conducted in 2006. The 2014 survey use a randomly chosen sample of 5,912 single family units. The sample size was done to insure validity at the census tract level.

These single family units included detached homes, townhomes, duplexes, and houses with apartments. Multifamily apartments and condominiums were excluded.

Survey results indicate that the overall condition of housing has remained relatively constant, despite an increase in average age. Over eighty-six percent (86%) of the City's housing meets or exceeds the "standard" or acceptable level.¹⁹

Each structure and the surrounding exterior premises were assigned a rating. The 2014 Housing Condition survey results revealed the following:

- 86% of the units are in standard condition (5,069 units)
- 14% of the units are deficient (819 units)
- 0% of the units are deteriorated or dilapidated (24 units)



¹⁹ City of Virginia Beach, Department of Housing and Neighborhood Preservation, 2014.

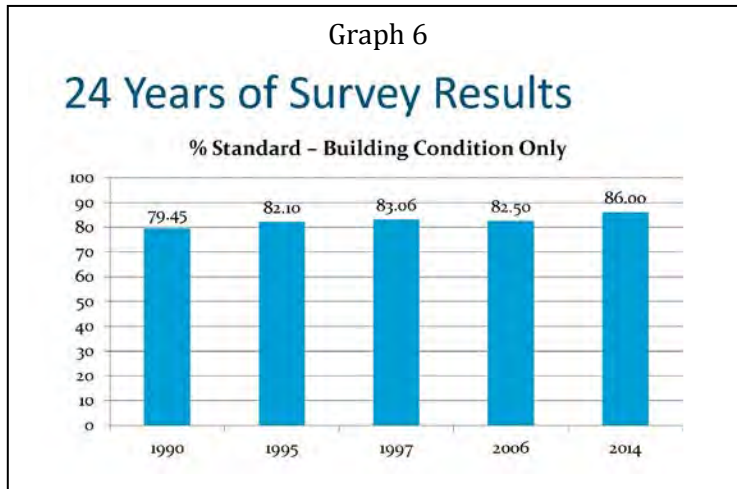
COMPARISON OF NON-STANDARD RESIDENTIAL UNITS

The following table provides a breakdown of the deficient residential units in the City between 1990 and 2014.

Non-Standard Residential Units between 1990 and 2014

CONDITION	1990 (single & multi-family, mobile homes)		2000 (single & multi-family, mobile homes)		2004 (multifamily)		2006 (single-family citywide)		2014 (single-family citywide)	
	%	units	%	units	%	bldgs	%	units	%	units
Deficient	18%	25,671	25%	35,463	36%	2,197	18%	21,600	14%	819
Deteriorated	3%	3,824	3%	4,567	4%	227	2%	2,400	0%	23
Dilapidated	1%	106	1%	1,544	0%	0			0%	1
Total	22%	29,601	29%	41,574	40%	2,424	20%	24,000	14%	5,912

Source: City of Virginia Beach Department of Housing and Neighborhood Preservation



Conclusions and Analysis

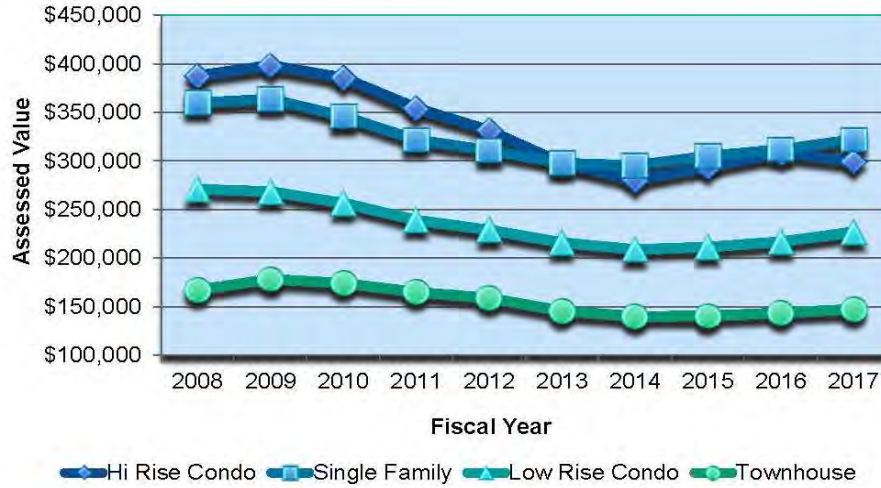
Assuming that the survey results are valid:

- In 1990, 79% of the housing stock were in standard condition
- In 2014, 24 years later, 86% were in standard condition

Housing Values

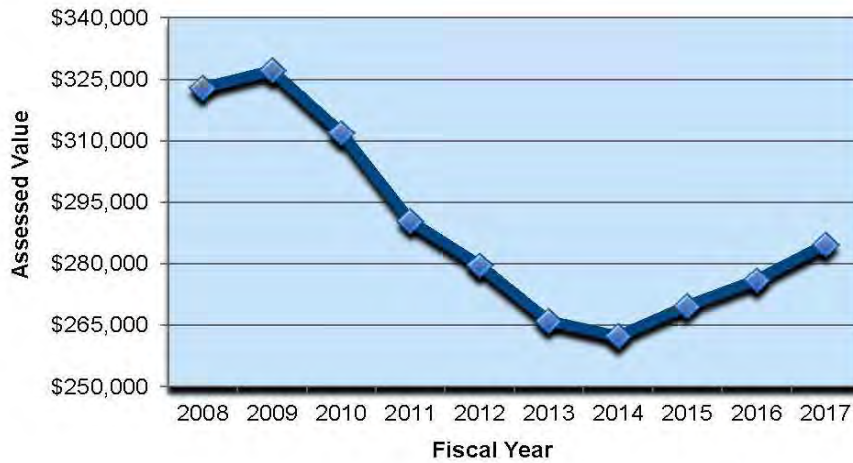
Graphs 7 and 8

AVERAGE ASSESSMENT BY HOUSING TYPE



AVERAGE HOME ASSESSMENT

All Residential Properties



Source: City Real Estate Assessor's Report FY 2017

Table 4

AVERAGE RESIDENTIAL VALUES

Type	Number	Median Assessment*	Mean Assessment*	Change in Mean	
Single Family	98,081	\$260,100	\$322,000	\$10,200	3.3%
Townhouse	19,701	\$134,500	\$147,300	\$ 3,700	2.6%
Low Rise Condominium	20,325	\$189,500	\$226,800	\$10,000	4.6%
High Rise Condo/Co-op	2,842	\$270,800	\$299,700	\$ -5,500	-1.8%
Duplex/Home with Apartments	1,366	\$312,000	\$448,000	\$21,900	5.1%
All Residences	142,315	\$230,900	\$284,800	\$ 8,700	3.1%

*Rounded to nearest \$100

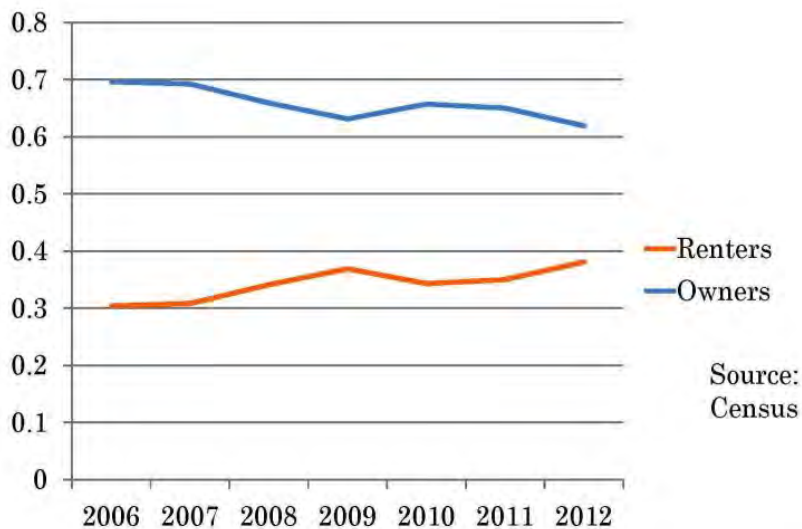
In addition to residences, there are **34,587** apartment units in multi-family complexes.

Source: City Real Estate Assessor's Report FY 2017

Tenancy

Graph 9

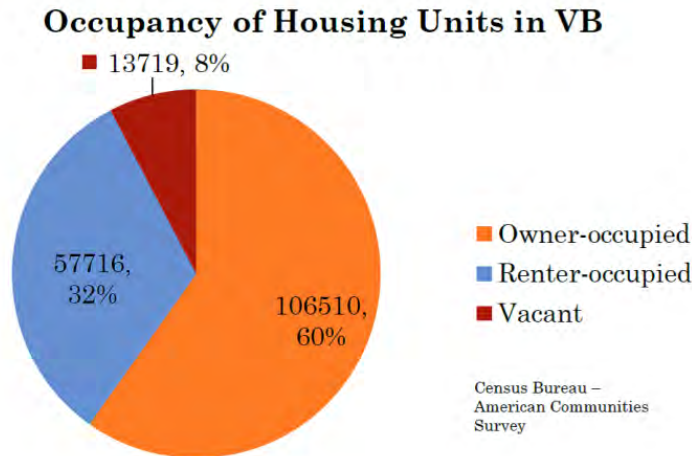
PERCENTAGE OF RENTERS IS INCREASING



Source: Dept. of Housing and Neighborhood Preservation, March 2015

Graph 10

HOUSEHOLDS BY TENURE: 177,945 ESTIMATED HOUSING UNITS



Source: Dept. of Housing and Neighborhood Preservation, March 2015

Housing Affordability

The conventional public policy indicator of housing affordability in the United States is the percent of income spent on housing. Housing expenditures that exceed 30% of household income have historically been viewed as an indicator of a housing affordability problem.

Housing Affordability Index measure affordability based on the ratio of median income to median housing cost. Reflects the affordability of the average unit for the average household consumer – *Housing Virginia*

‘Housing cost burden’ reflect the percent of income paid for housing by each household living in the geographic area reported. Although obviously related, housing cost burden *is a distinctly different measure* than the affordability indexes that are based on the typical housing cost and median income. The housing cost burden measure provides the actual “affordability outcome” of the housing choices made by individual households. Clearly these choices are constrained by each household’s income and preferences, as by the housing available in the community.

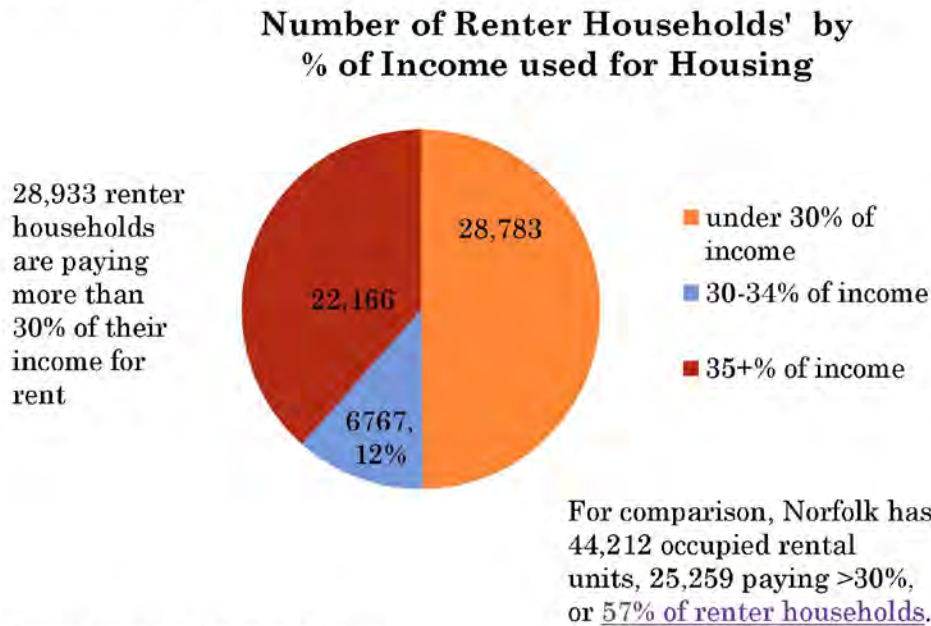
Fifty-three percent of renters spend more than 30% of their income for housing; 94% of households with incomes under \$35,000 pay more than 30% of their income for rent. Households in this situation are therefore financially unstable.

In Virginia Beach, of the estimated 84,737 households with a mortgage; 40.8 percent are considered housing cost burdened and of the estimated 56,234 households renters, 53.4 percent are considered housing cost burdened.

The following Graph 11 shows that for 2014, there were 57,716 total renters or 50.1% who were housing cost burdened

Graph 11

50% OF VB RENTER HOUSEHOLDS PAY LESS THAN 30% OF THEIR INCOME FOR RENT



Source: American Community Survey

Source: Dept. of Housing and Neighborhood Preservation, March 2015

From 2010 through 2014, the combined effect of the housing price increases and increased demand for rental housing elevated rents from \$1,200 to \$1,291, almost an eight 8% percent increase.

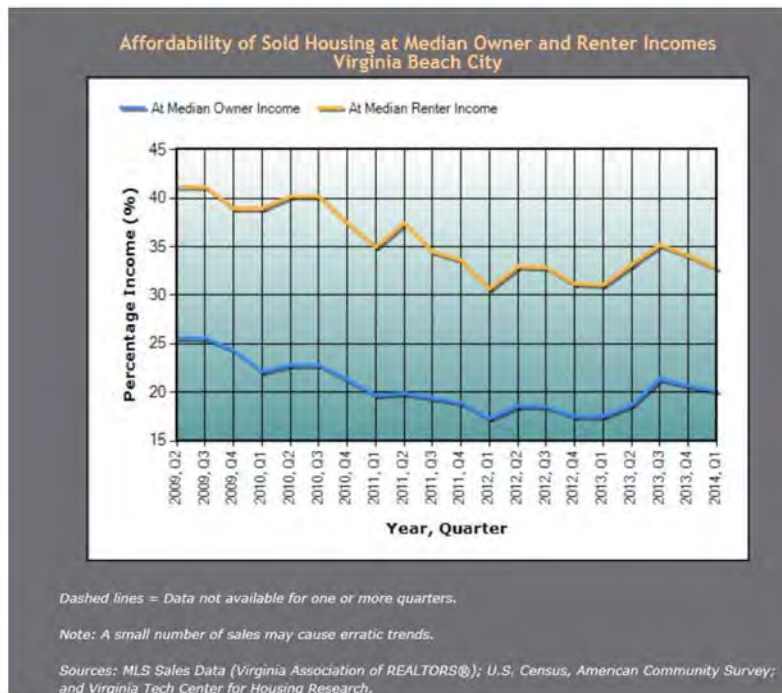
Incomes of low income renters declined compared to rental costs during the recession and have not recovered. Source: Housing Virginia Sourcebook/ Virginia Beach Families

The number of owner-occupied households is 106,510. The number of renter-occupied households is 57,716, which equates to 142,051 people. According to the U.S. Census, of the estimated 177,945 housing units in Virginia Beach, the number of owner-occupied is 106,510 or 60%. The number of renter-occupied housing units is 57,716 or 32%. Eight percent or 13,719 housing units are estimated to be vacant.²⁰

²⁰ Ibid: slide 6.

Graph 12

AFFORDABILITY OF OWNER AND RENTER OCCUPIED HOUSING



Source: Dept. of Housing and Neighborhood Preservation, March 2015

Census Bureau American Communities Survey (estimate):

- 448,479 People
- **177,945** Total housing units
 - 13,719 vacant
 - 106,510 owner-occupied
 - 57,716 Renter-occupied households –142,051 people;
- Real Estate Assessor's Report for 2014
 - 140,860 non-multifamily housing units
 - 32,644 multi-family units
 - **173,504** total housing units

Source: Dept. of Housing and Neighborhood Preservation, March 2015

Eligibility Requirements for Buyers

In order to be deemed an eligible buyer of a workforce housing unit, a household must meet all of the following criteria at the time of application and through the time of settlement:

- Must live or work full-time in Virginia Beach, or have a bona fide offer of full-time employment in Virginia Beach within 3 months of the time of application;
- Cannot own, or have a controlling interest in, other real estate property;
- Household's annual gross income must be between 80% and 120% of area median income (AMI), adjusted for household size (click here for the Workforce Housing Program Income Guidelines); and
- Net worth cannot exceed 50% of the sales price of the workforce housing unit.

**WORKFORCE HOUSING PROGRAM
INCOME GUIDELINES
Effective March 6, 2015**

Workforce Housing Program Income Guidelines								
Household Income	Number in Household							
	1	2	3	4	5	6	7	8
120% Area Median Income	\$59,556	\$68,064	\$76,572	\$85,080	\$91,886	\$98,693	\$105,499	\$112,306
110% Area Median Income	\$54,593	\$62,392	\$70,191	\$77,990	\$84,229	\$90,468	\$96,708	\$102,947
100% Area Median Income	\$49,630	\$56,720	\$63,810	\$70,900	\$76,572	\$82,244	\$87,916	\$93,588
90% Area Median Income	\$44,667	\$51,048	\$57,429	\$63,810	\$68,915	\$74,020	\$79,124	\$84,229
80% Area Median Income	\$39,704	\$45,376	\$51,048	\$56,720	\$61,258	\$65,795	\$70,333	\$74,870
70% Area Median Income	\$34,741	\$39,704	\$44,667	\$49,630	\$53,600	\$57,571	\$61,541	\$65,512
60% Area Median Income	\$29,778	\$34,032	\$38,286	\$42,540	\$45,943	\$49,346	\$52,750	\$56,153
50% Area Median Income	\$24,815	\$28,360	\$31,905	\$35,450	\$38,286	\$41,122	\$43,958	\$46,794
40% Area Median Income	\$19,852	\$22,688	\$25,524	\$28,360	\$30,629	\$32,898	\$35,166	\$37,435

The Area Median Income (AMI) for a Household of 4 as established by the U.S. Department of Housing and Urban Development (HUD) is \$70,900.

Homebuyers: To purchase a home under the Workforce Housing Program, a household's gross annual income cannot be less than 80% of the AMI or greater than 120% of the AMI, based on household size.

Renters: To rent an apartment under the Workforce Housing Program, a household's gross annual income cannot be less than 40% of the AMI or greater than 90% of the AMI based on household size. If the apartment building contains an elevator, the household's gross annual income cannot exceed, 100% of the AMI, based on household size.

Homebuyers: To purchase a home under the Workforce Housing Program, a household's gross annual income cannot be less than 80% of the AMI or greater than 120% of the AMI, based on household size.

Renters: To rent an apartment under the Workforce Housing Program, a household's gross annual income cannot be less than 40% of the AMI or greater than 90% of the AMI based on household size. If the apartment building contains an elevator, the household's gross annual income cannot exceed 100% of the AMI, based on household size.

Through the program, buyers at targeted incomes are given a chance to become homeowners when they would have otherwise been priced out of the market by enhancing the affordability of the housing unit by up to 25%. Program participants' mortgage interest is tax deductible and they experience increased wealth in the form of equity.

Programs and Opportunities for Renters And Homeowners

The Department of Housing and Neighborhood Preservation administers a variety of programs that are available to improve both the condition of the residential dwellings and housing opportunities in the City. Many of these programs have multiple sources of funding that could include:

- Grants and low interest loans provided by the City's Department of Housing and Neighborhood Preservation utilizing HUD and other sources of funding for emergency repairs and rehabilitation of deteriorated structures
- Section 8 Rent Subsidy Program and federal funding for security deposits for qualified renters
- Virginia Beach Community Development Corporation, a city assisted non-profit housing development organization that operates programs to increase housing opportunities for renters and homeowners citywide
- Low income housing tax credits
- Tax exempt bonds
- Funding from VHDA for homeownership and rehabilitation
- Workforce Housing as developed on a voluntary basis by private developers

Federally subsidized apartment complexes that provide several hundred reduced-rent units for eligible households, low-income families, the elderly and/or disabled persons are located around the City.

Housing Facilities for Seniors

Several types of housing developments for seniors exist in the City (see Figure ___ for locations). The three main categories of housing for seniors include:

- Independent Living Facilities - provide housing for senior residents that require little or no assistance with daily living activities.
- Assisted Living Facilities - provide housing for senior residents that are functionally impaired and require complete assistance with daily living activities.
- Nursing Facilities - provide housing for senior residents that are severely impaired and require 24 hour nursing care.

For purposes of this planning document, the term "Housing for Seniors" is limited to those facilities that were granted a conditional use permit by City Council and are age-restricted by definition of the City Zoning Ordinance. With the exception of the facility known as Silver Hill at Thalia, the age restriction or occupancy criteria is age sixty-two (62) for independent and assisted living facilities for those who are not disabled or ill.

The following table lists the senior housing facilities citywide that require a conditional use permit. Not listed are those facilities in the City that cater to seniors but did not apply for this special permitting process and therefore may have different age-restrictions.

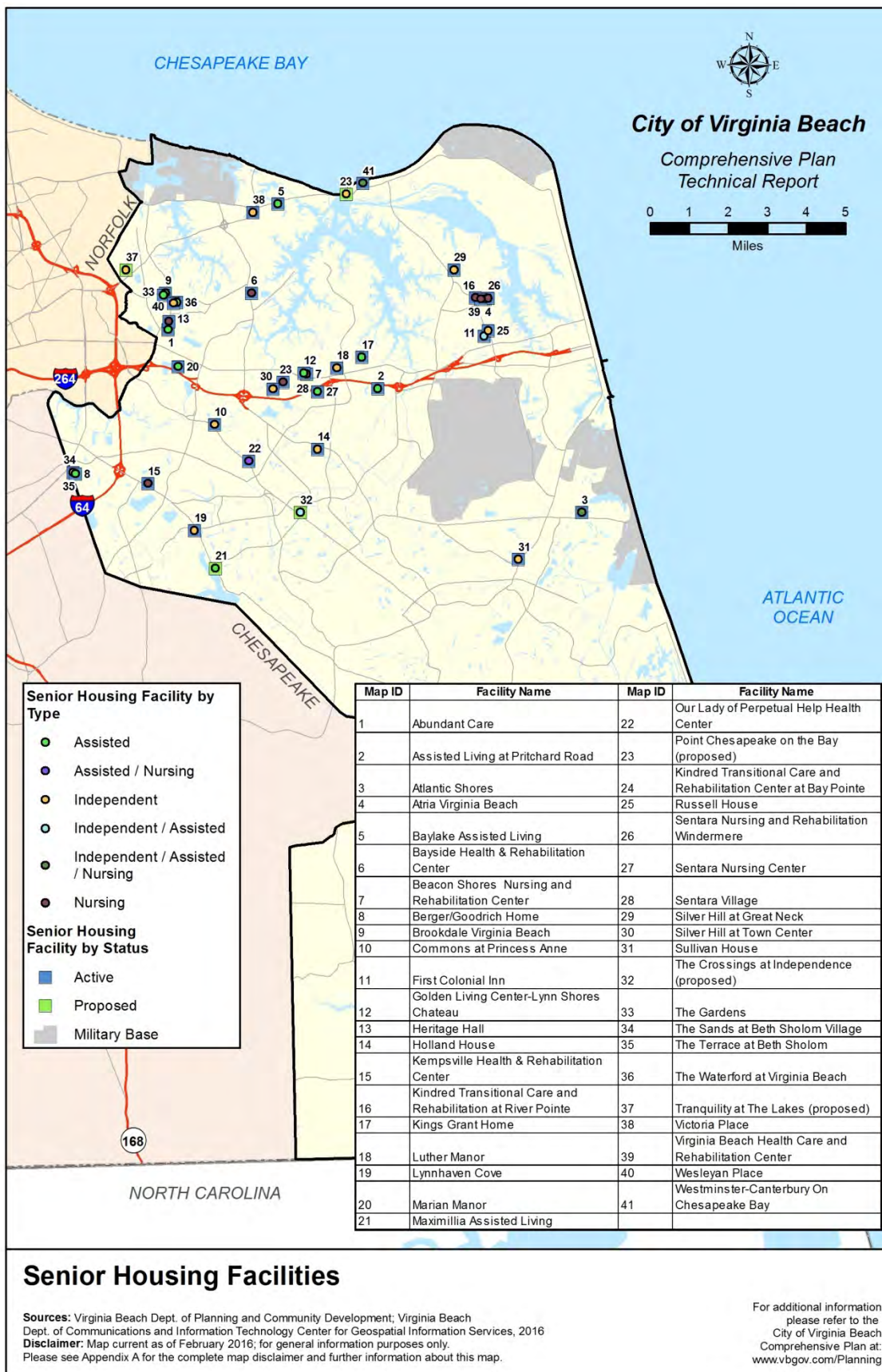


FIGURE 1

**Senior Housing Facilities
September 2016**

Map Number	Existing Facilities	Independent	Assisted	Nursing
1	Abundant Care		X	
2	Assisted Living at Pritchard Road		X	
3	Atlantic Shores	X	X	X
4	Atria Virginia Beach		X	
5	Baylake Assisted Living		X	
6	Bayside Health & Rehabilitation Care Center			X
7	Beacon Shores Nursing and Rehabilitation Center			X
8	Berger/Goodrich Home			X
9	Brookdale Virginia Beach		X	
10	Commons at Princess Anne	X		
11	First Colonial Inn	X	X	
12	Golden Living Center –Lynn Shores Chateau		X	
13	Heritage Hall			X
14	Holland House	X		
15	Kempsville Health & Rehabilitation Center			X
16	Kindred Transitional Care and Rehabilitation at River Pointe			X
17	Kings Grant Home		X	
18	Luther Manor	X		
19	Lynnhaven Cove	X		
20	Marian Manor		X	
21	Maximillia Assisted Living (proposed)		X	
22	Our Lady of Perpetual Help Center		X	X
23	Point Chesapeake on the Bay (proposed)	X		
24	Kindred Transitional Care and Rehabilitation at Bay Pointe			X
25	Russell House	X		
26	Sentara Nursing and Rehabilitation Center - Windermere			X
27	Sentara Nursing Center			X
28	Sentara Village		X	
29	Silver Hill at Great Neck	X		
30	Silver Hill at Town Center	X		
31	Sullivan House	X		
32	The Crossing at Independence (proposed)	X		
33	The Gardens	X	X	
34	The Sands at Beth Sholom Village	X		
35	The Terrance at Beth Sholom Village		X	
36	The Waterford at Virginia Beach		X	
37	Tranquility at The Lakes (proposed)	X		
38	Victoria Place	X		
39	Virginia Beach Health Care and Rehabilitation Center			X
40	Wesleyan Place	X		
41	Westminster–Canterbury On Chesapeake Bay	X	X	X

Sources: City of Virginia Beach Department of Planning and the City of Virginia Beach Senior Housing Guide, Mayor's Commission on Aging, October 2015

CHAPTER 8. ECONOMIC VITALITY

ISSUES AND TRENDS

After some tough years, the economy is slowly starting to improve. The Virginia Employment Commission's projections show, with the full impact of the recession hitting in Calendar Year (CY) 2009, that nonfarm place-of-work payroll employment lost 92,600 jobs, or 2.5 percent. While Virginia's CY 2009 job loss appears to be 2.5 percent, job loss in the nation in the similar period is projected to be 3.7 percent (source: VEC, Economic Assumptions For The United States and Virginia dated December 2009, page 25). Virginia Beach's 2012 unemployment rate of 5.9 is almost 2% lower than the U.S. rate, .4% lower than that of Chesapeake, the next lowest within the region, and .5% lower than the MSA rate. Per capita income levels in Virginia Beach are on par with the commonwealth and above the national average. The population, of 451,672, ranked 2nd in the state and the city's 2011 household income number of \$64,416 continues to have the highest household income number except for the City of Chesapeake within the Hampton Roads region. Virginia Beach, Norfolk, Newport News, Virginia/North Carolina, the state's second largest metropolitan statistical area (MSA), has fared the best of Virginia's three large metropolitan areas (source: VEC, Economic Assumptions For The United States and Virginia dated December 2009, page 25).

The City's economy continues to diversify. Efforts to diversify the economic base are ongoing, led by private enterprise, tourism, and a strong military presence. In addition, many international corporations have established headquarters in the region. Virginia Beach has nine major business districts, each with a distinct character and industry base; as well as nine business parks. Some districts are heavily populated, making them ideal for corporate and retail clusters others are located where major transportation corridors converge, providing ideal locations for industrial development.

Recognizing the crucial role these districts will play in the future growth of Virginia Beach; the city has designated eight of the nine major business districts as "strategic growth areas." This designation means the City plans to spur growth in these areas by investing in forward-thinking infrastructure and developing a distinct identity to foster continued growth and attract business to these districts.

The City's business parks, a majority of which fall within a major business district, allow companies to benefit from an advanced infrastructure and a synergy that's achieved by allowing companies in similar industries to locate in close proximity.

While this diversification is important the military presence still serves as a partially insulating force against cyclical economic trends. Retail and service industries continue to represent an important portion of the economy. This can be attributed to the strength of the tourism industry and the suburban nature of our community.

THE OVERALL SYSTEM

The City's functional links to the region need to be fully understood when local governments guide local business activity. The need for greater regional cooperation is essential to a healthy economy in our area, especially when collective economic powers are limited. The military installations, commercial ports, shipping facilities, state parks, tourist attractions and cultural facilities are assets in common for all of Hampton Roads.

Being the residential home to a large, commuting labor force has both benefits and drawbacks.

As the City matures the preferred kind of job development could naturally occur where the best schools are, which has proven to be essential in producing the best potential professional labor force. Virginia Beach offers excellent schools, a safe living and working environment, and an abundance of natural resources.

The City's proportion of local jobs per household has continued to grow despite the CY 2009 recession. Between 1990 and 2010, Virginia Beach's civilian employment grew from approximately 182,630 to around 207,139. The total employment figure increased from approximately 211,357 to 227,362, an annual increase of about 7.5%.

Economic development cannot occur by creating jobs alone, it must be in conjunction with a comprehensive strategy that proposes a more livable City and quality of life to attract new residents and tourists alike.

Human energy, information and skills are the most important raw materials needed for building an economy. The role of schools and learning must continue to expand in the community. Reports and studies done on healthy central business districts around the country have shown that great value is placed on face to face communications, even in this revolutionary age of communications technology. The incorporation of institutions of higher learning in land use planning of business parks and other significant employment bases could encourage a better interaction between the learners and the producers. For example, the Princess Anne Commons area has a vision to include educational, recreational and business development.

The City promotes four basic statements in relation to economic development policies. The main themes that occur throughout the key plans, documents and goal statements are:

- Improve workforce skills through technical training and higher education
- Market the City effectively, internally and externally
- Target businesses that support income growth
- Redevelop older parts of the City

INCOME

Household and per capita income levels are another area that Virginia Beach shows relative dominance within the Hampton Roads area. The following tables show various income levels for the City and the growth over the most recent period of 2000-2010. Virginia Beach is projected to continue to show household income growth for the next five years. Within the Hampton Roads region, Virginia Beach continues to have the second highest household income following the City of Chesapeake.

**Median Household Incomes
Virginia Beach and Surrounding Communities**

City	1990	2000	2010	2011	1990 – 2000	2000 – 2010
					Growth Rate	
Virginia Beach	\$36,271	\$48,681	\$64,212	\$64,416	34.21 %	31.90%
Norfolk	\$23,563	\$31,945	\$41,643	\$43,108	35.57%	30.35%
Chesapeake	\$35,737	\$50,745	\$68,955	\$66,563	41.99%	35.88%
Hampton	\$30,144	\$39,541	\$51,275	\$49,848	31.17%	29.67%
Portsmouth	\$24,601	\$33,782	\$43,674	\$42,647	37.31%	29.28%
Suffolk	\$26,125	\$41,114	\$69,294	\$64,334	57.37%	68.54%
Newport News	\$27,469	\$36,693	\$50,937	\$48,976	33.57%	38.81%
Regional MSA	\$30,742	\$42,698	\$57,315	\$57,356	38.89%	34.23%

Source of Data: U.S. Census Bureau

UNEMPLOYMENT

The Hampton Roads region maintains consistently lower unemployment levels compared to the Commonwealth and U.S. rates. The table below shows employment and unemployment levels for several cities within Hampton Roads. Within this comparison, Virginia Beach maintains the lowest unemployment rate of all the cities within the region.

**Hampton Roads Region Employment and Unemployment
March 2012**

Area Name	Civilian Labor Force	Employment	Unemployment	Unemployment %
Virginia Beach	230,529	217,756	12,773	5.9%
Chesapeake	119,148	112,068	7,080	6.3%
Hampton	66,190	61,250	4,940	7.9%
Newport News	91,266	84,886	6,380	7.6%
Norfolk	106,476	98,553	7,923	8.0%
Portsmouth	44,888	41,331	3,557	8.6%
Suffolk	42,759	39,913	2,846	7.1%
MSA	844,298	790,065	54,233	6.4%
Virginia	4,328,420	4,080,943	247,477	5.7%
U.S.	154,316,000	141,412,000	11,910,000	7.7%

Source: “Hampton Roads Data Book - June 2012”, Virginia Employment Commission

EMPLOYMENT

The number of jobs in the City has increased over the last two decades. From 1990 to 2010, employment in Virginia Beach grew at a rate of 7.5 %. In South Hampton Roads, only the City of Chesapeake exceeded that growth rate for the same period. The following table provides a summary comparison of the civilian and military employment trends between 1990 and 2010.

Civilian and Military Employment Trends Virginia Beach

	1990	1995	2000	2005	2010	1990-2010 Percent Change
Civilian	161,369	201,485	200,133	214,084	207,139	13.42%
Military	28,727	21,961	23,349	21,337	20,223	-29.60%
TOTAL	211,357	223,446	223,482	235,421	227,362	7.57%

Source: “Hampton Roads Data Book - June 2012”, Virginia Employment Commission & Bureau of Economic Analysis

Employment Statistics

- In 2011, Virginia Beach had a civilian labor force of 230,961 persons, of which an average of 217,179 was employed (“Hampton Roads Data Book - June 2012”, Virginia Employment Commission).
- By the year 2040, the City is forecast to have approximately 311,700 jobs along with a population of approximately 497,500 persons (Hampton Roads 2034 Socio-Economic Forecast, HRPDC).
- In 2012, the City’s unemployment rate was around 5.9%. This was slightly above the State’s unemployment rate of 5.7% and slightly below the Hampton Roads MSA rate of 6.4. The relatively low unemployment rates are due in part to the stabilizing influence of the military presence. See the following table for a comparison of the employment to population ratios for the South Hampton Roads area over the last two decades, and future forecasts.

Employment to Population Ratios

Employment to Population Ratios					Forecast	
				2040	2040	2040
	1990	2000	2010	Forecast	Population	Employment
Chesapeake	0.41	0.52	0.55	0.53	314,600	167,000
Norfolk	0.99	0.96	0.86	0.92	253,200	234,200
Portsmouth	0.57	0.53	0.60	0.71	98,200	70,400
Suffolk	0.40	0.41	0.40	0.34	182,700	62,900
Virginia Beach	0.48	0.56	0.54	0.62	497,500	311,700

Source: Hampton Roads 2040 Socioeconomic Forecast – October 2013, HRPDC http://hrtpo.com/uploads/docs/HR_2040_SocioeconomicForecast_TAZAllocation_Final_Report.pdf

NEW BUSINESS

Business growth and demand within the City of Virginia Beach has caused absorption of over 11.8 million square feet of office space, industrial space (i.e. warehouse space, production, and distribution space), flex space (office/warehouse space), retail space, and hotel space.

**Virginia Beach Distribution of Facility Space for
New Businesses**

Facility Type	Square Feet	% of Total
Office	2,959,000	25.00%
Industrial	1,905,000	16.09%
Flex Space	513,000	4.33%
Retail	4,246,000	35.87%
Hotel	2,212,472	18.69%
TOTAL	11,835,472	100%

Source: Department of Economic Development, Costar, 2007-20014 Data

As the City matured, its ratio of jobs to housing continues to increase. Retail sales have also continued to grow over the last two decades. Virginia Beach has captured about 41% of all retail sales dollars in South Hampton Roads from 1995 through 2011. The following tables provide a summary comparison of the retail sales trends for South Hampton Roads over the last two decades.

Retail Sales for South Hampton Roads Cities

	1995	2000	2005	2010	2011
Chesapeake	\$1,565	\$2,247	\$2,723	\$2,914	\$2,927
Norfolk	\$1,925	\$2,285	\$2,452	\$2,555	\$2,589
Portsmouth	\$393	\$405	\$463	\$559	\$583
Suffolk	\$265	\$352	\$530	\$642	\$671
Virginia Beach	\$2,949	\$3,655	\$4,183	\$4,690	\$4,738
Total Retail Sales	\$7,097	\$8,944	\$10,351	\$11,360	\$11,508
Virginia Beach Captured	41%	41%	40%	41%	41%

Source: "Hampton Roads Data Book, June 2012" (Millions of Dollars), Virginia Department of Taxation

JOB SALARIES

A key economic development role in the City is the promotion of the kinds of jobs that will help to raise the income levels in the City. The distribution of jobs in the City comprises a very large retail and service component. The following table provides a summary of the wage and salary for select job categories in the City.

**Jobs by Salary for Virginia Beach
March 31, 2013**

(Wage and Salary Employment for Selected Categories)

Type Jobs	Average Emp. For Quarter	Average Weekly Wage
Agriculture, Forestry, Fishing & Mining	58	\$440
Construction	8,949	\$796
Transportation, Communication, & Utilities	1,740	\$760
Manufacturing	5,499	\$927
Wholesale & Retail Trade	26,131	\$569

Type Jobs	Average Emp. For Quarter	Average Weekly Wage
Financial, Insurance and Real Estate	12,455	\$1,258
Information	2,980	\$820
Services	77,242	\$391
Total Private	135,054	\$736
State Government	2,002	\$594
Local Government	20,760	\$747
Federal Government	6,612	\$1,243
Total Public	29,374	\$848
Military	18,474	\$1,810

Source: Virginia Employment Commission, Economic Information Services Division, Quarterly Census of Employment and Wages Report (QCEW).

Military Source: U. S. Bureau of Economic Analysis Online, 2013 Data

Virginia Beach contains about 14 million square feet of retail space, approximately 39% of the total retail space in the Southside submarket with an average rent for small shop space being \$16.92 per square foot. As of 2013, only 6.64% of the total retail space was vacant. The following table provides a summary of the vacancy rates for retail centers in Virginia Beach. The Hilltop submarket had a strong 2013 with vacancy decreasing from 3.27% in 2012 to 2.76% this past year and average small shop rents increasing from \$21.14 to \$21.83 per square foot, which is the highest asking rent of all Southside suburban submarkets (Source: “2014 Hampton Roads Market Survey”, Old Dominion University Real Estate Center, College of Business & Public Administration).

Vacancy Rates in Retail Centers

Virginia Beach Submarket	Average Number of Properties	Gross Leasable Area in SF	Vacant SF	% Vacant	Small Shop Rate PSF
Bay Front	6	304,258	25,654	8.43%	\$18.20
Birdneck/Oceanfront	6	225,350	-	0.00%	\$15.30
Dam Neck	8	1,520,256	42,640	2.80%	\$20.00
Hilltop/Great Neck	13	1,600,943	44,221	2.76%	\$21.83
Holland/Green Run	10	879,800	46,468	5.28%	\$13.93
Kempsville	12	1,246,748	128,377	10.30%	\$15.59
Little Neck	12	1,459,402	17,375	1.19%	\$17.06
Lynnhaven Road	8	1,822,511	205,452	11.27%	\$16.20
Newtown	11	607,596	82,714	13.61%	\$12.90
Pembroke	23	2,824,995	279,369	9.89%	\$17.88
Princess Anne Road	14	1,731,761	72,252	4.17%	\$17.23
Virginia Beach Total	123	14,223,620	944,522	6.64%	\$16.92
Southside Submarket Total	288	35,835,277	2,416,346	6.74%	\$16.56

Source: “2014 Hampton Roads Market Survey”, Old Dominion University Real Estate Center, College of Business & Public Administration

As of 2013, the City’s office vacancy rates were relatively low while rental rates remained competitive. The following table provides a summary of the office space availability by

submarket in South Hampton Roads with approximate leasable square footage, vacant square footage and percent vacate for each submarket.

**Southside Office Space Availability for Class A and Class B
By Sub-Market**

Sub-market	Net Leasable Area in SF	Vacant SF	% Vacate
Airport/Norhampton	774,713	99,312	12.81%
Central Norfolk	1,054,204	220,573	20.92%
Chesapeake/Greenbriar	3,215,189	358,432	11.14%
Corporate Landing	106,500	73,833	69.33%
Downtown Norfolk	3,588,018	704,318	19.62%
Hilltop/Oceanfront	696,847	87,671	12.58%
Kempsville	374,995	27,304	7.22%
Little Neck	407,381	17,103	4.20%
Lynnhaven	1,580,714	251,324	15.89%
Military Circle	568,766	133,223	23.42%
Newtown/Witchduck	1,552,209	373,609	24.06%
Pembroke/Central Business District	2,320,712	274,992	11.84%
Portsmouth	395,376	99,484	25.16%
Suffolk	1,270,030	230,967	18.18%

Source: “2014 Hampton Roads Office Market Survey”, Old Dominion University Real Estate Center, College of Business and Public Administration.

The following table provides a summary profile of the City's office and industrial parks.

Virginia Beach Office and Industrial Parks

Office and Industrial Park	Acres
Airport Industrial Park	250
Castleton Commerce Park	43
Centre Pointe	25
Commerce Park	70
Convergence Center	26
Corporate Center	26
Corporate Landing	325
Corporate Woods	30
Lakeview Corporate Park	23
London Bridge Commerce Center	18
Lynnhaven Industrial Park	15
Oceana East Industrial Park	262
Oceana West Corporate Park	1,024
Oceana South Corporate Park	225
Reflections Office Park	19
Taylor Farms Commerce Park	40
Town Center	11.7
Westmoreland Office Park	21

Source: City of Virginia Beach Department of Economic Development, 2015

Note: Figures may include easements, wetlands, and right-of-way dedications

CHAPTER 9. PUBLIC FACILITIES

This section provides a collective view of all public facilities and services provided by the City. Public facilities and services discussed in this chapter include schools and other public buildings such as libraries, as well as police, fire and emergency medical services, water and sanitary sewer systems, solid waste management; parks and open space. Certain referenced maps may be found in other chapters of this Technical Report.

SCHOOLS

The Virginia Beach school system enrolled 68,011 students (grades K–12), as of September 30, 2014. The school system comprises the following facilities:

- 1 Alternative Education School for grades 2-8, (see Figures 1 and 2 for location).
 - Old Donation School, the Edward E. Brickell Academy for Advanced Academics and Arts
- 56 Elementary Schools Grades K-5, (see Figure 1 for locations).
- 15 Middle Schools Grades 6-8, (see Figure 2 for locations). Includes:
 - Middle School Academic Program at Renaissance Academy, a citywide alternative campus
- 16 High Schools, Grades 9-12, see (Figure 3 for locations). Includes:
 - Renaissance Academy,
 - Technical and Career Education Center, a citywide center offering technical and vocational classes
 - Adult Learning Center, a citywide adult program
 - Advanced Technology Center, a citywide center offering technology classes
 - Virginia Beach Juvenile Detention Center/Education Program
 - Green Run Collegiate

The student membership total for the Virginia Beach City Public Schools has decreased since the last Comprehensive Plan adoption. Over the last five years, student membership has declined at the middle and high school levels, but has increased slightly at the elementary school level. Schools are considered overcapacity if the student membership for that school exceeds its capacity by 10%. As of September 2015, there were four (4) elementary schools that were 10% overcapacity. None of the middle schools or high schools reached that level of overcapacity. The following Tables 1 and 2 summarize the September 30th student membership for each school in 2015 and 2016 compared these figures with the school's capacity. The completion date of each school's modernization or replacement, if applicable, is also listed.

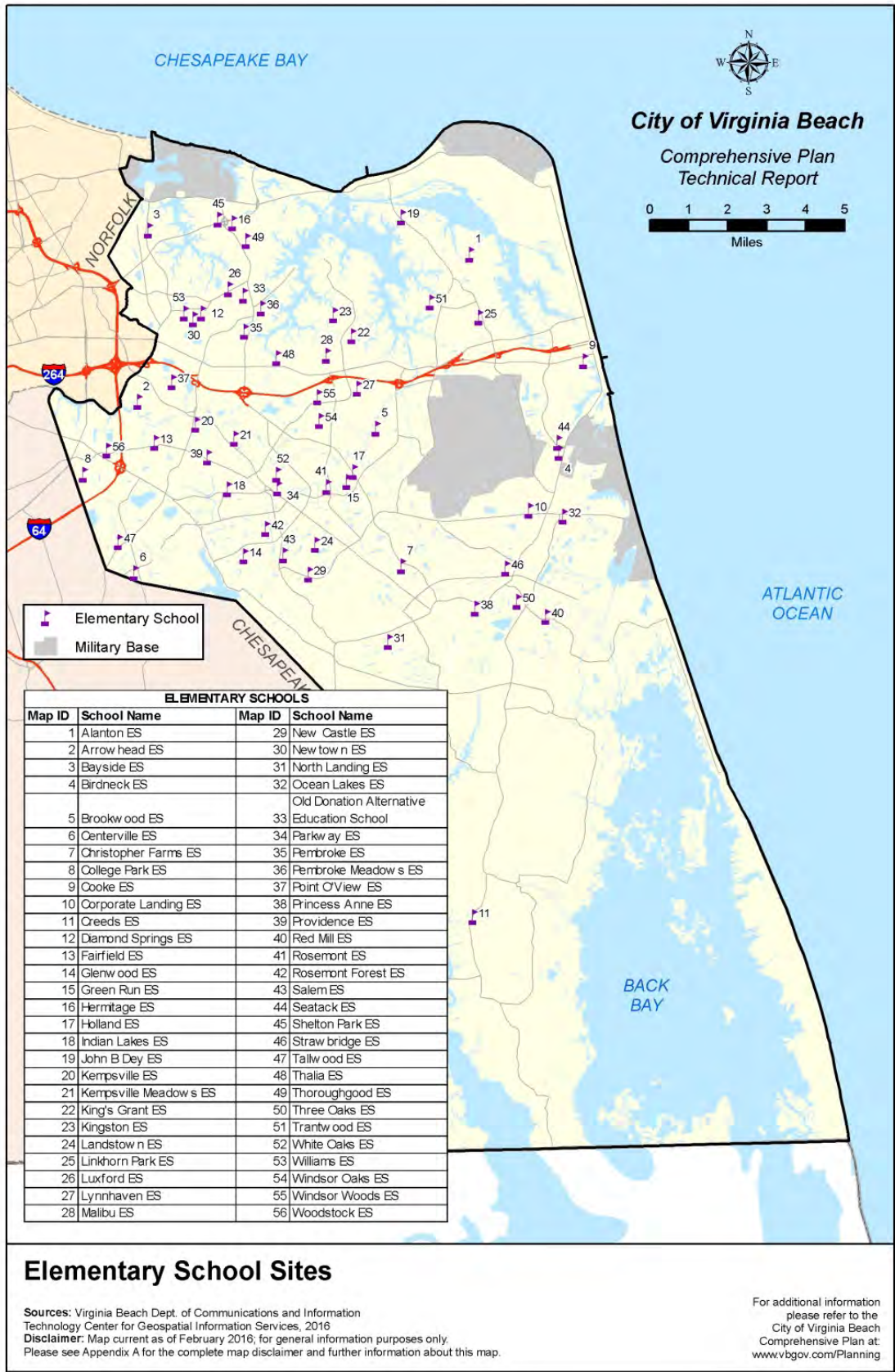


FIGURE 1

**Virginia Beach City Public Schools
2015-2016 Building Utilization - Elementary Schools**

Elementary Schools	Modernization/ Replacement Completion Date	Membership September 30, 2015	Optimum Capacity 2015-2016	Number Over/(Under) Capacity	Percent Over/(Under) Capacity	Total Portables On Site
Comprehensive						
Alanton		662	764	-102	-13.4%	0
Arrowhead	2004	451	597	-146	-24.4%	0
Bayside	2000	518	599	-81	-13.6%	0
Birdneck		634	732	-98	-13.4%	0
Brookwood	2007	720	586	134	22.8%	5
Centerville		739	602	137	22.8%	6
Christopher Farms		636	701	-65	-9.3%	0
College Park	2011	502	500	3	0.5%	0
Cooke	1999	501	673	-172	-25.6%	0
Corporate Ldg		437	598	-161	-26.9%	0
Creeds	2001	315	395	-80	-20.3%	0
John B. Dey	Projected 2019/20	834	756	78	10.2%	6
Diamond Springs	2008	587	537	50	9.2%	0
Fairfield		513	561	-48	-8.5%	0
Glenwood		898	945	-47	-5.0%	0
Green Run		403	446	-43	-9.7%	3
Hermitage	2005	645	641	4	0.7%	0
Holland		524	558	-34	-6.1%	1
Indian Lakes		539	546	-7	-1.3%	0
Kempsville	2003	454	513	-59	-11.5%	0
Kempsville Meadows	2002	506	509	-3	-0.5%	0
King's Grant		641	666	-25	-3.8%	0
Kingston		531	624	-93	-14.9%	0
Landstown		760	816	-56	-6.9%	0
Linkhorn Park	1998	685	689	-4	-0.5%	2
Luxford	2002	537	567	-30	-5.3%	0
Lynnhaven	2004	407	489	-82	-16.7%	0
Malibu	2003	374	414	-40	-9.7%	0
New Castle		763	824	-61	-7.3%	0
Newtown	2008	511	497	14	2.9%	0
North Landing		464	443	21	4.8%	2
Ocean Lakes		533	626	-93	-14.9%	0
Parkway		475	473	2	0.3%	4
Pembroke	2004	477	534	-57	-10.6%	0
Pembroke Meadows	2006	434	539	-105	-19.5%	0
Point O'View		717	765	-48	-6.3%	0
Princess Anne		531	563	-32	-5.6%	0
Providence		551	648	-97	-15.0%	0
Red Mill		679	734	-55	-7.5%	1
Rosemont		409	433	-24	-5.5%	0
Rosemont Forest		523	562	-39	-6.9%	0
Salem		435	514	-79	-15.4%	0
Seatack	1999	383	425	-42	-9.8%	3
Shelton Park	2001	372	428	-56	-13.0%	0
Strawbridge		694	692	2	0.3%	0
Tallwood		558	590	-32	-5.3%	0
Thalia	2001	625	728	-103	-14.2%	0
Thoroughgood	TBD	708	627	81	12.8%	5
Three Oaks		759	716	44	6.1%	0
Trantwood	2004	461	533	-72	-13.5%	0
White Oaks		651	688	-37	-5.3%	3
Williams		463	487	-24	-4.9%	1
Windsor Oaks	2009	559	591	-32	-5.5%	0
Windsor Woods	2007	357	433	-76	-17.5%	0
Woodstock	2002	688	752	-64	-8.6%	0
Elementary Totals		30,733	32,865	-2,132	-6.5%	42

10% or more over capacity
-10% or more under capacity

Demographics and Planning
12/3/2015

Table 1

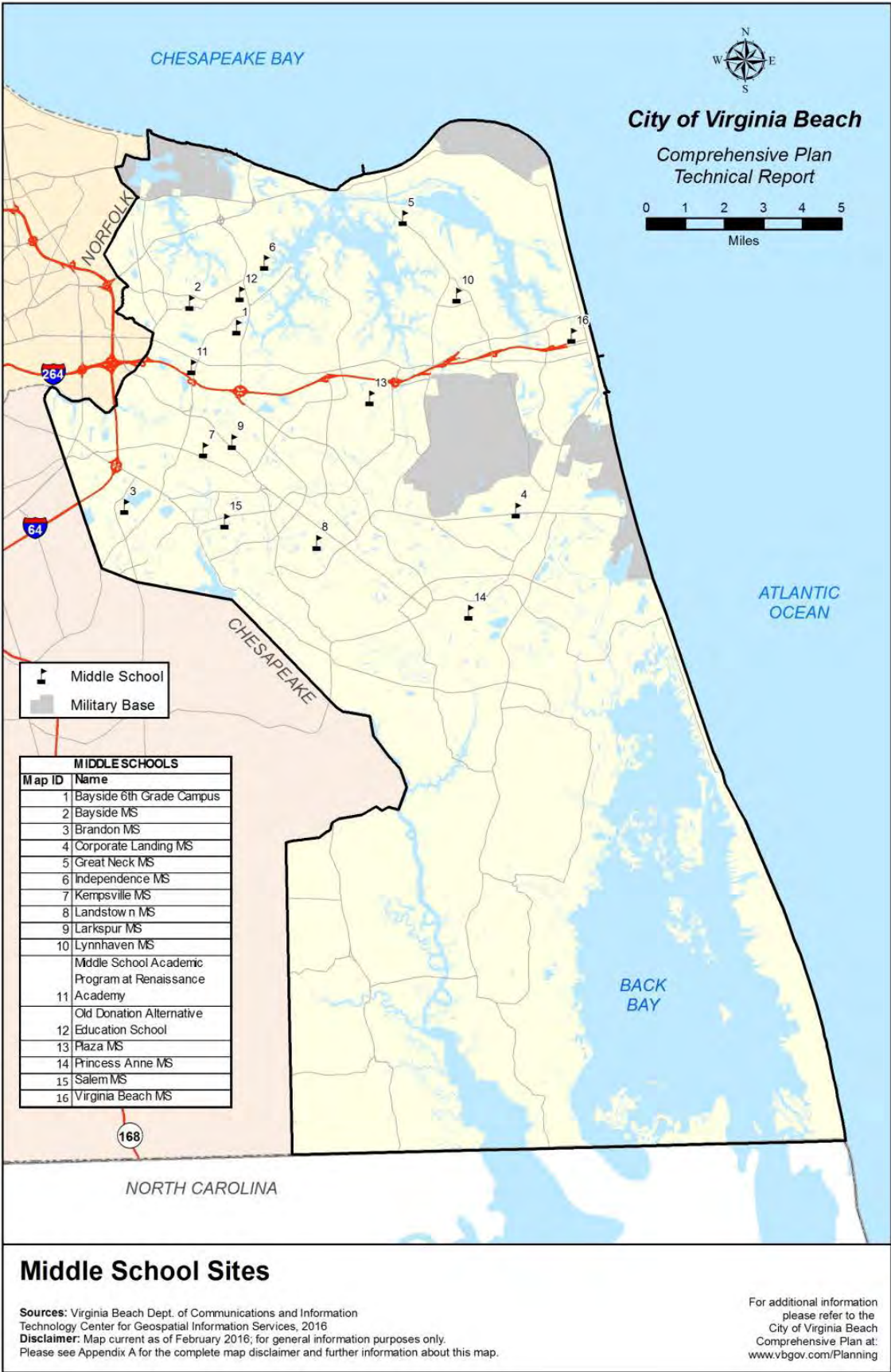


FIGURE 2

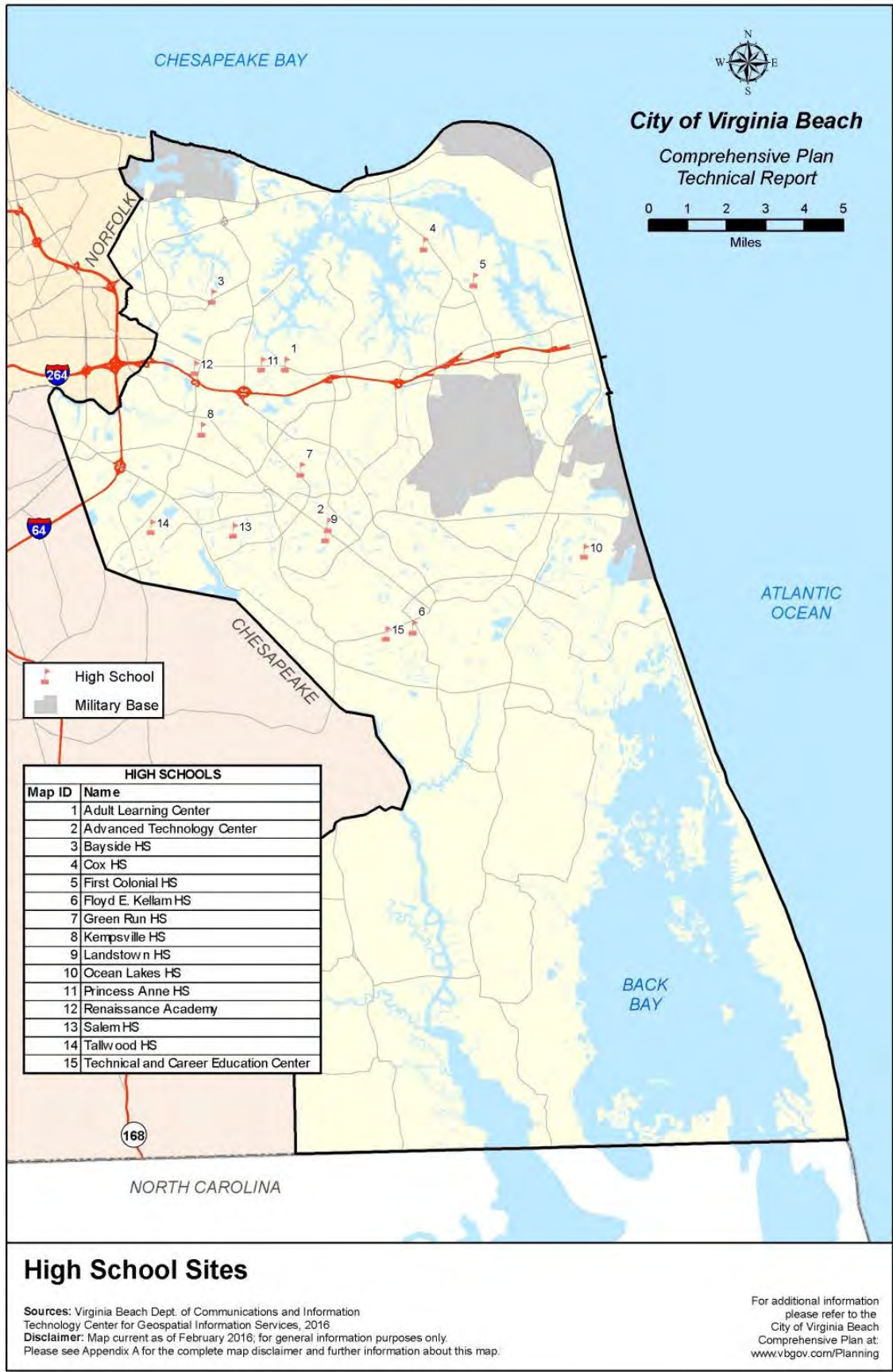


FIGURE 3

**Virginia Beach City Public Schools
2015-2016 Building Utilization - Middle and High Schools**

Middle Schools	Modernization/ Replacement Completion Date	Membership September 30, 2015	Optimum Capacity 2015-2016	Number Over/(Under) Capacity	Percent Over/(Under) Capacity	Total Portables On Site
Bayside		649	960	-311	-32.4%	0
Bayside 8th Grade		375	500	-125	-25.0%	2
Brandon		1,155	1,286	-131	-10.2%	2
Corporate Landing		1,268	1,538	-270	-17.6%	0
Great Neck	2011	1,161	1,460	-299	-20.5%	0
Independence		1,269	1,370	-101	-7.4%	3
Kempsville		805	868	-63	-7.3%	2
Landstown		1,464	1,634	-170	-10.4%	2
Larkspur		1,520	1,910	-390	-20.4%	0
Lynnhaven		863	1,250	-387	-31.0%	0
Plaza		1,083	1,129	-46	-4.1%	6
Princess Anne	TBD	1,479	1,671	-192	-11.5%	0
Salem		1,044	1,070	-26	-2.4%	1
Virginia Beach	2010	839	1,040	-201	-19.3%	0
Middle School Totals		14,974	17,686	-2,712	-15.3%	18
*Middle school capacity of core classrooms has been calculated at a student/teacher ratio of 30:1						
High Schools	Modernization/ Replacement Completion Date	Membership September 30, 2015	Optimum Capacity 2015-2016	Number Over/(Under) Capacity	Percent Over/(Under) Capacity	Total Portables On Site
Bayside		1,825	1,912	-87	-4.5%	5
Cox		1,889	1,946	-57	-2.9%	4
First Colonial		1,923	1,813	110	6.1%	22
Green Run/GRC		1,810	1,956	-146	-7.5%	6
Kellam	2014	2,029	1,867	162	8.7%	0
Kempsville		1,465	1,985	-520	-26.2%	0
Landstown		2,208	2,385	-177	-7.4%	0
Ocean Lakes		2,126	2,586	-460	-17.8%	0
Princess Anne	TBD	1,800	1,737	63	3.7%	13
Salem		1,726	1,938	-212	-10.9%	7
Tallwood		1,956	2,233	-277	-12.4%	7
High School Totals		20,757	22,625	-1,868	-8.3%	64
*High school capacity of core classrooms has been calculated at a student/teacher ratio of 28:1						
Alternative Schools	Modernization/ Replacement Completion Date	Membership September 30, 2015	Optimum Capacity 2015-2016	Number Over/(Under) Capacity	Percent Over/(Under) Capacity	Total Portables On Site
Kemps Landing/Old Donation School	Proj 2017	1,109	1178	-69	-5.9%	10
Renaissance Academy	2009					
Middle School		76	446	-370	-82.9%	0
High School		362	751	-389	-51.8%	0
Alternative Schools Totals		1,547	2,375	-828	-34.8%	10
Division Totals						
		68,011	75,551	-7,540	-10.0%	134

10 % or more
over capacity

-10 % or more
under capacity

Table 2

PROJECTED SCHOOL FACILITY NEEDS

Virginia Beach City Public Schools September 30th Historical Student Membership and Projected September 30th Student Membership 5 Year Forecast Division Summary

Historical Student Membership						Projected Student Membership					
	Sept 30th Membership	Sept 30th Membership	Sept 30th Membership	Sept 30th Membership	Sept 30th Membership		Sept 30th Projections	Sept 30th Projections	Sept 30th Projections	Sept 30th Projections	Sept 30th Projections
	2011/12	2012/13	2013/14	2014/15	2015/16		2016/17	2017/18	2018/19	2019/20	2020/21
Elementary						Elementary					
K	5,047	4,810	4,914	4,697	4,541	K	4,718	4,734	4,532	4,586	4,606
1	5,476	5,697	5,397	5,376	5,302	1	5,079	5,277	5,294	5,069	5,141
2	5,359	5,336	5,523	5,346	5,325	2	5,249	5,028	5,224	5,242	5,018
3	5,248	5,298	5,384	5,498	5,282	3	5,293	5,224	5,004	5,199	5,216
4	5,208	5,196	5,326	5,299	5,433	4	5,237	5,254	5,179	4,961	5,154
5	5,355	5,163	5,210	5,315	5,332	5	5,451	5,254	5,271	5,186	4,977
Total	31,693	31,390	31,754	31,531	31,215	Total	31,033	30,770	30,504	30,263	30,112
Change from previous year	273	-303	364	-223	-316	Change from previous year	-290	-263	-266	-242	-150
% Change from previous year	0.87%	-0.96%	1.16%	-0.70%	-1.00%	% Change from previous year	-0.93%	-0.85%	-0.88%	-0.79%	-0.50%
Middle						Middle					
6	5,427	5,344	5,239	5,168	5,319	6	5,343	5,469	5,272	5,289	5,213
7	5,284	5,437	5,347	5,225	5,143	7	5,303	5,337	5,463	5,266	5,283
8	5,256	5,231	5,423	5,343	5,215	8	5,134	5,294	5,328	5,454	5,257
Total	15,967	16,012	16,008	15,736	15,677	Total	15,780	16,100	16,063	16,008	15,753
Change from previous year	105	45	-4	-272	-59	Change from previous year	50	320	-38	-54	-255
% Change from previous year	0.66%	0.28%	-0.02%	-1.70%	-0.37%	% Change from previous year	0.32%	2.03%	-0.23%	-0.34%	-1.58%
High						High					
9	5,865	5,740	5,781	5,818	5,656	9	5,600	5,551	5,766	5,803	5,939
10	5,482	5,372	5,304	5,396	5,467	10	5,284	5,201	5,192	5,355	5,389
11	5,207	5,212	5,128	5,023	5,101	11	5,183	5,024	4,945	4,937	5,091
12	5,063	4,896	4,894	4,926	4,895	12	4,906	4,918	4,767	4,692	4,884
Total	21,597	21,220	21,097	21,163	21,119	Total	20,972	20,734	20,670	20,786	21,104
Change from previous year	-452	-371	-123	66	-44	Change from previous year	-115	-239	-64	116	318
% Change from previous year	-2.23%	-1.72%	-0.58%	0.31%	-0.21%	% Change from previous year	-0.55%	-1.14%	-0.31%	0.56%	1.53%
Division						Division					
Total	69,251	68,622	68,859	68,430	68,011	Total	67,785	67,604	67,237	67,057	66,969
Change from previous year	-114	-629	237	-429	-419	Change from previous year	-226	-181	-367	-180	-88
% Change from previous year	-0.16%	-0.91%	0.35%	-0.62%	-0.61%	% Change from previous year	-0.33%	-0.27%	-0.54%	-0.27%	-0.13%

Department of School Division Services
Demographics and Planning

10/16/2015

Table 3

Over the next five years, as indicated in the table below, the student membership is projected to slowly decline at the elementary level, increase at the middle school level, and slowly decline at the high school level. Declining city wide student membership will also provide relief to overcapacity schools.

Based on these projected trends, the school division has no plans in the near future to add any new school facilities. Instead, through its Long Range Facilities Master Plan, the focus will be on maintaining its extensive infrastructure and modernizing or replacing older facilities. This will also serve to reduce some of the burden on the existing overcapacity schools. The Virginia Beach City Public School's Long Range Facilities Master Plan has a four phased approach for the modernization or replacement of its schools as shown on Figure 4.

The schools shown in Phase I have been funded and scheduled for replacement or modernization within the time frame from 2017 to 2025. The funding and scheduling of the schools in Phase II through Phase IV, however, will be programed for funding and completion at a later time frame.

Phase II

- Kempsville HS
- Kempsville MS
- Bettie F. Williams ES
- Princess Anne ES
- First Colonial HS
- King's Grant ES
- Plaza MS

Phase III

- North Landing ES
- Bayside HS
- Lynnhaven MS
- Green Run ES
- Independence MS
- Fairfield ES
- Kingston ES
- Bayside MS
- Alanton ES

Phase IV

- Technical & Career Education Center
- Holland ES
- Point O'View ES
- White Oaks ES
- Indian Lakes ES

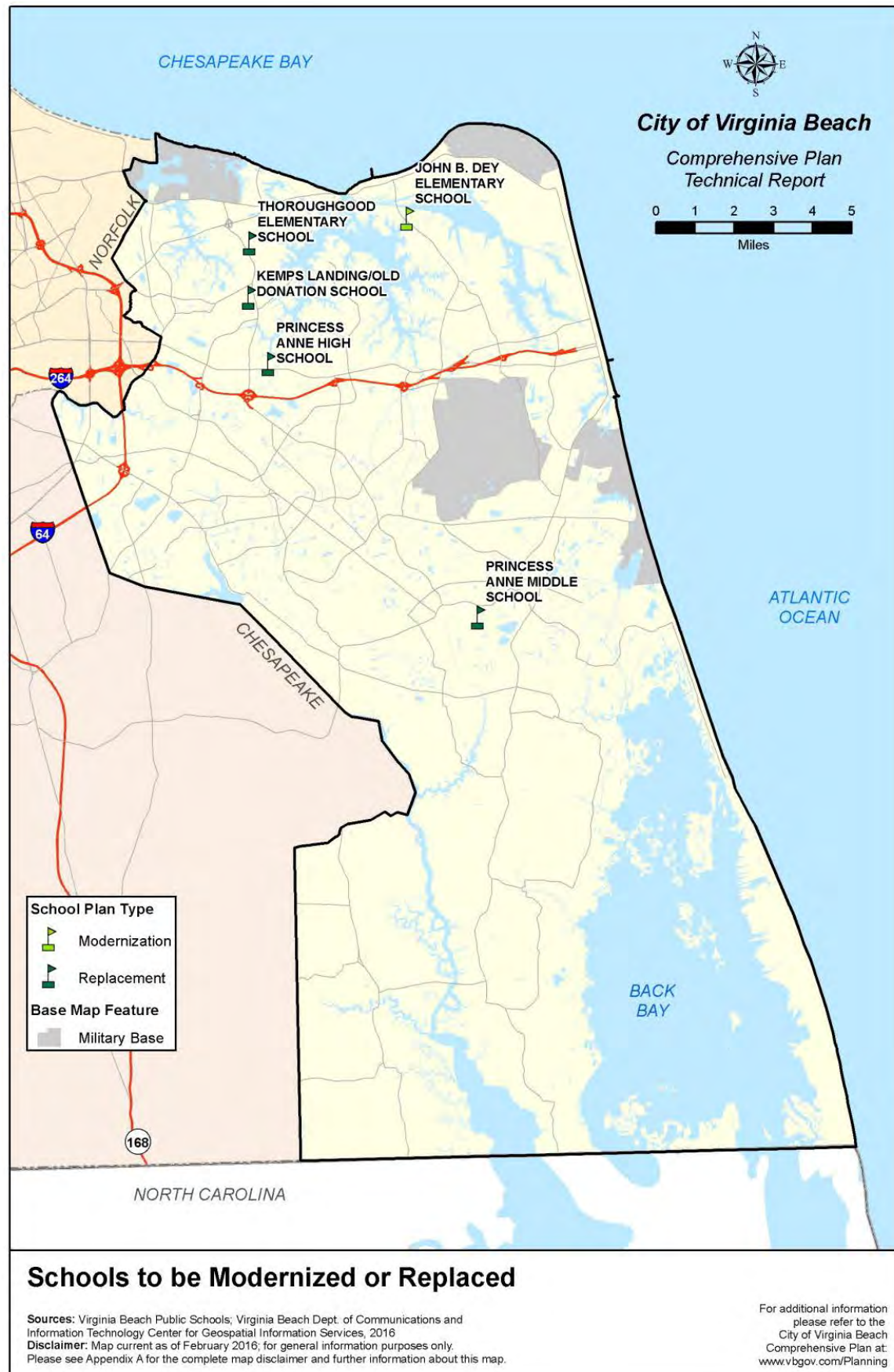


FIGURE 4

LIBRARIES

A community anchor for more than 50 years, Virginia Beach Public Library (VBPL) includes a central library, a joint-use library in partnership with Tidewater Community College (TCC), seven area libraries and a public law library. Services include workforce development and job search support, small business resources, computer and technology classes, early literacy classes and outreach, and local history archives and programs. In addition to books, music and magazines in tangible and digital formats, VBPL provides online research tools accessible from home or work, as well as movies, music and a variety of specialty collections.

The following Table 4 provides a list of the existing library facilities. See Figure 5 for the locations of the existing library facilities.

Table 4

Libraries	Square Footage
Meyra E. Oberndorf Central Library	95,000
Bayside Area & Special Services Library	18,638
Kempsville Area Library	22,000
Great Neck Area Library	11,820
Oceanfront Area Library	16,000
Princess Anne Area Library	15,858
Pungo-Blackwater Library	4,136
Windsor Woods Area Library	8,300
Wahab Law Library	5,000
Joint-Use Library (TCC/City of VB Joint-Use Library)	125,000
Total	321,752

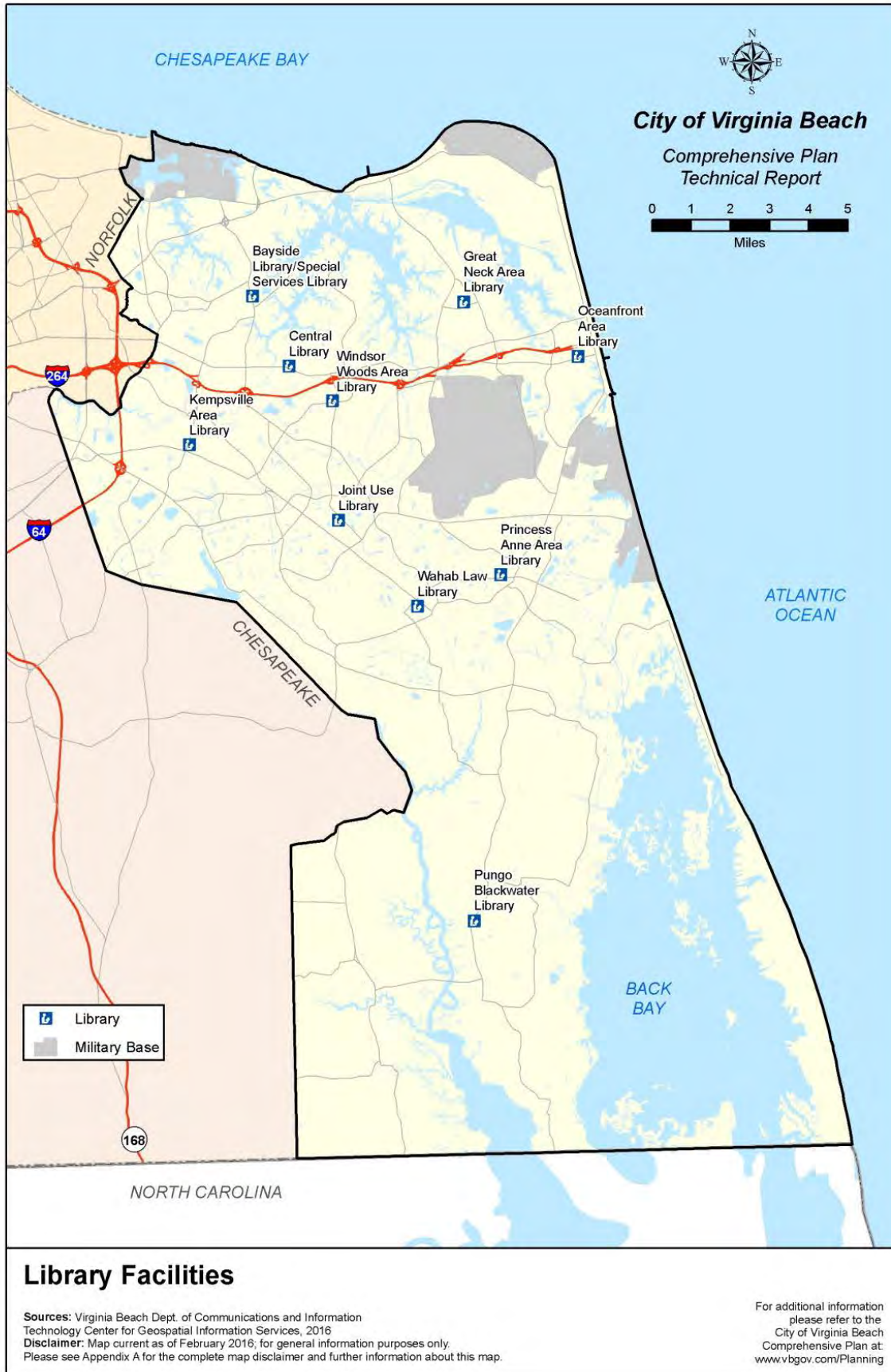


FIGURE 5

POLICE

The Virginia Beach Police Department is the largest municipal law enforcement agency in the Commonwealth of Virginia, with a total of 806 authorized sworn positions and 178 civilian personnel. Current sworn positions translate to a ratio of 1.8 officers per 1,000 residents. The agency has experienced a slight decrease in authorized sworn positions during the past ten years from 2013 to 2003. This combined with a slight increase in population results in a decrease in the overall ratio of officers per resident.

The **Operations Division** is the largest and most visible of the three divisions. It is broken down into the four police precincts, Special Operations, and Operations Administration. The four police precincts include:

First Precinct – Located at the City's Municipal Center and by geography is the largest of the precincts. The First Precinct covers a land area of roughly 210 square miles and serves approximately 106,000 residents. The precinct includes the Transition Area between the suburban northern area of the city and the primarily agricultural rural southern area of the city.

Second Precinct – Located at the 17th Street mini-municipal complex. The Second Precinct covers a land area of roughly 36 square miles and serves approximately 79,000 residents. The Second Precinct is unique in that it includes the Oceanfront and Shore Drive resort areas and provides service to over six million overnight visitors annually.

Third Precinct – Located on Independence Boulevard in the Bayside area of the city, this precinct covers roughly 34 square miles and serves approximately 105,000 residents. The Third Precinct has a large concentration of retail businesses along the major thoroughfares with light manufacturing industry in the Airport Industrial Park. Business development in Town Center continues to grow by offering residents and visitors cultural and entertainment opportunities such as theater, concerts, shopping, restaurants, and nightlife.

Fourth Precinct – Located on Kempsville Road in the Kempsville area of the city and by population is the largest of the precincts. The Fourth Precinct covers roughly 31 square miles and serves approximately 148,000 residents. The historically rich area shares its borders with the cities of Norfolk and Chesapeake and is a well-established and more densely populated area of the city comprising both residential and commercial properties.

For locations of these Precincts see Figure 6.

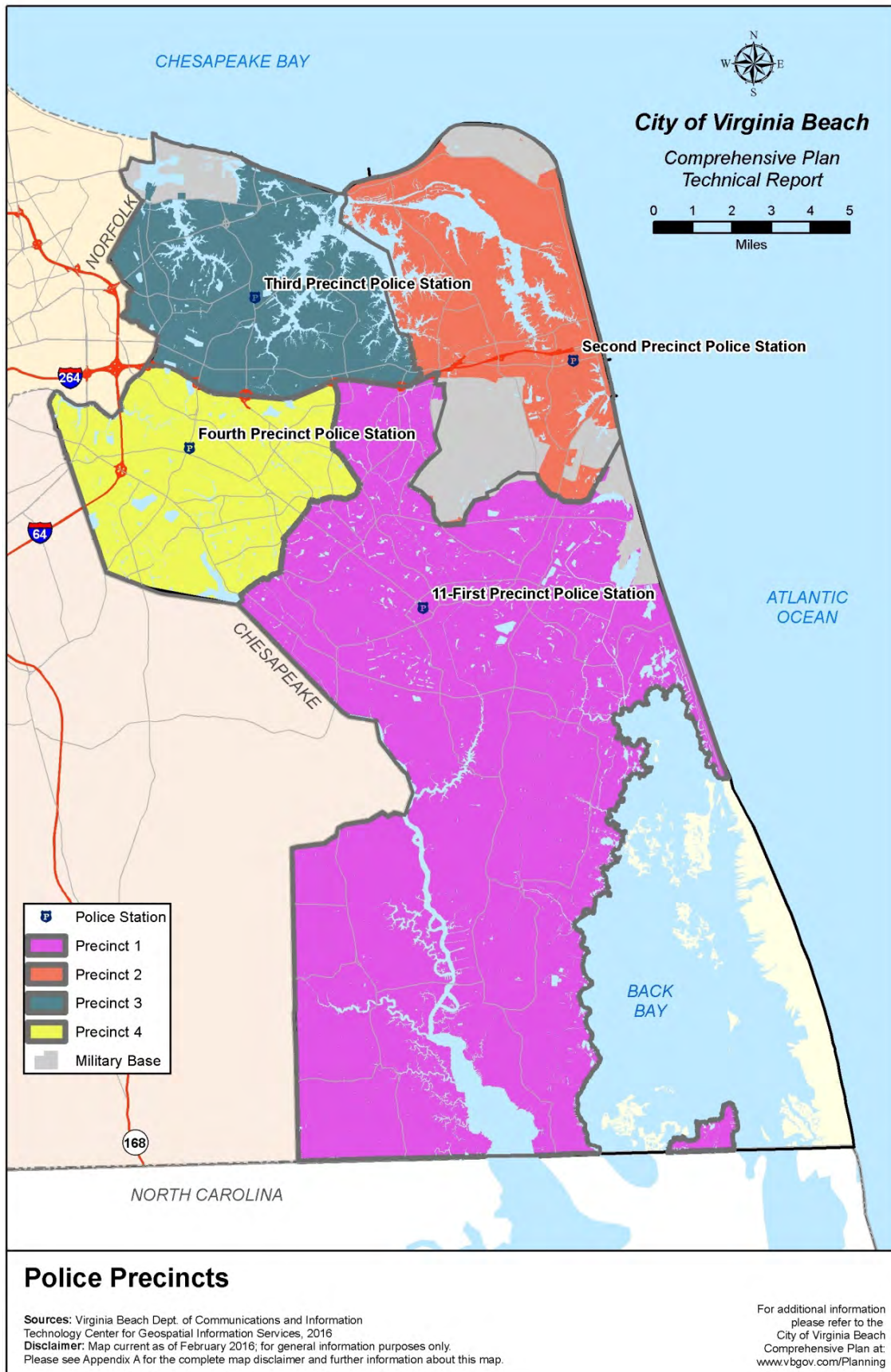


FIGURE 6

Special Operations supports the mission of the Operations and Investigative Divisions through the use of specially trained officers and specialized equipment. Units in Special Operations include: Aviation Unit, Bomb Squad, Canine (K9) Unit, Crisis Negotiation Team (CNT), Extradition Unit, Fatal Crash Team (FaCT), Hit and Run Unit, Homeland Security/Emergency Management, Marine Patrol Unit/Dive Team, Motor Carrier Safety and Environmental Crimes Unit, Motorcycle Unit, Mounted Patrol Unit, Special Weapons and Tactics Team (SWAT), and the Traffic Safety Unit.

Also falling under the umbrella of Special Operations is the Animal Enforcement Unit and the Animal Care and Adoption Center (ACAC). Comprised of two branches, enforcement and sheltering, each entity serves different functions while partnering to provide holistic animal services for the community. Virginia Beach completed the \$12.5 million building project for the Animal Care & Adoption Center in December 2011. This state of the art building houses both the sheltering & enforcement branches.

Finally, **Operations Administration** is the last command located within the Operations Division. This group is staffed by the Command Duty Office, the Crime Prevention Unit, and the Ready Response Team. The Crime Prevention Unit's goal is to engage the community in the prevention of crime by nurturing community responsibility that is directed at reducing the threat of crime and enhancing safety, thereby resulting in an environment where crime cannot flourish. The Ready Response Team's goal is to aggressively investigate, identify, arrest, and prosecute offenders associated with identified crime trends. The Team focuses on the "Big Six" crimes of robbery, burglary, auto theft, larcenies, gangs, and guns.

A majority of Special Operations units as well as the Forensics Unit and Property & Evidence storage are housed in the Police Special Operations, Forensics, and Property & Evidence Complex on Leroy Drive, completed in 2013. The new facility represents Phase IV of the Leroy Road Redevelopment Plan and cost approximately \$7.8 million to complete. The new facility is 32,000 square feet and includes a lobby and reception area, office space, a workout room, locker rooms with showers, an armory, muster room and training room. Additionally, the building has a floor-to-ceiling motorized evidence storage system, weapons storage, drug storage, forensics labs and vehicle processing garage. At the exterior of the building, the project also includes impound lots, a road kill incinerator, security control points, and road, water, and sewer improvements.

Table 5 summarizes the city's demographics as they relate to the Police Precinct breakdown.

Table 5

Virginia Beach Demographics by Precinct

Precinct	Estimated Population (Service Area)¹	Estimated Sq. Miles (Land Area)²
First	105,744	203
Second	79,362	39
Third	105,385	35
Fourth	147,503	31
TOTAL	437,994	308

Notes:

1. Estimated Population (Service Area) data are based on 2010 Census Tract data supplied by the City of Virginia Beach Center for GIS.
2. Total Estimated Square Miles (Land Area) figure includes those areas encompassed by water, Federal and State lands, and other governmental facilities.

Source: The Virginia Beach Police Department, Office of Planning and Analysis.

FIRE

As shown in Figure 7 a total of 23 fire and emergency medical service stations (EMS) facilities serve the City: eight (8) fire stations, two (2) EMS volunteer-owned facilities, and twelve (12) combined fire/EMS stations. Most of the facilities are located in the City with the exception being the facility located in Knotts Island, North Carolina. The Knotts Island station provides fire-fighting and EMS services to the City via an inter-jurisdictional agreement. Approximately 450 full-time fire fighters and approximately 50 volunteers serve the City.

The Department has developed formalized standards of response to more effectively evaluate the delivery of a variety of services including fire, non-fire service calls, emergency medical, marine, technical rescue, and hazardous materials. The following Table 6 provides a list of the current Fire, EMS and Fire/EMS stations.

No new fire station or EMS facilities are proposed. However, several existing Fire Department facilities are identified as being structurally and mechanically deficient. As a result of conditions that extend beyond reasonable structural or economic renewal, major building system replacements, upgrades, or complete building replacement improvements are programmed and/or funded in the current Capital Improvement Program (CIP), Fiscal Year (FY) 2015-2016. Those improvements include the following:

- Fire Facility Rehabilitation and Renewal. Project is for the repair and renewal of all existing fire facilities to ensure habitability. Because fire stations have employees living there on a 24-hour basis, an important need exists to ensure that these facilities are adequately maintained.
- The opening of the new Town Center Fire Station #7 and Fire Administration building located at 4817 Columbus Street completed the replacement phase of Thalia Station #7. The design of this Station was done to address ongoing development activity in and around the Town Center area by providing expanded services, additional personnel and larger truck equipment to this site. This new station now houses Engine 7, Ladder 7, and Rescue 2, with Fire Administration occupying the entire second floor of the Building with personnel previously located at the Municipal Center and several other fire stations across the City.
- The existing station on Thalia Road built in the 1950's, is now a Historical Register in the City of Virginia Beach. It is currently under a complete renovation to be utilized by the Department of EMS for ambulance response upon its completion.
- The new building at Chesapeake Beach Station #4 has been completed.
- The CIP Project for Blackwater Station #13 is in the final stages of completion with an anticipated opening projected for late May/early June 2015.

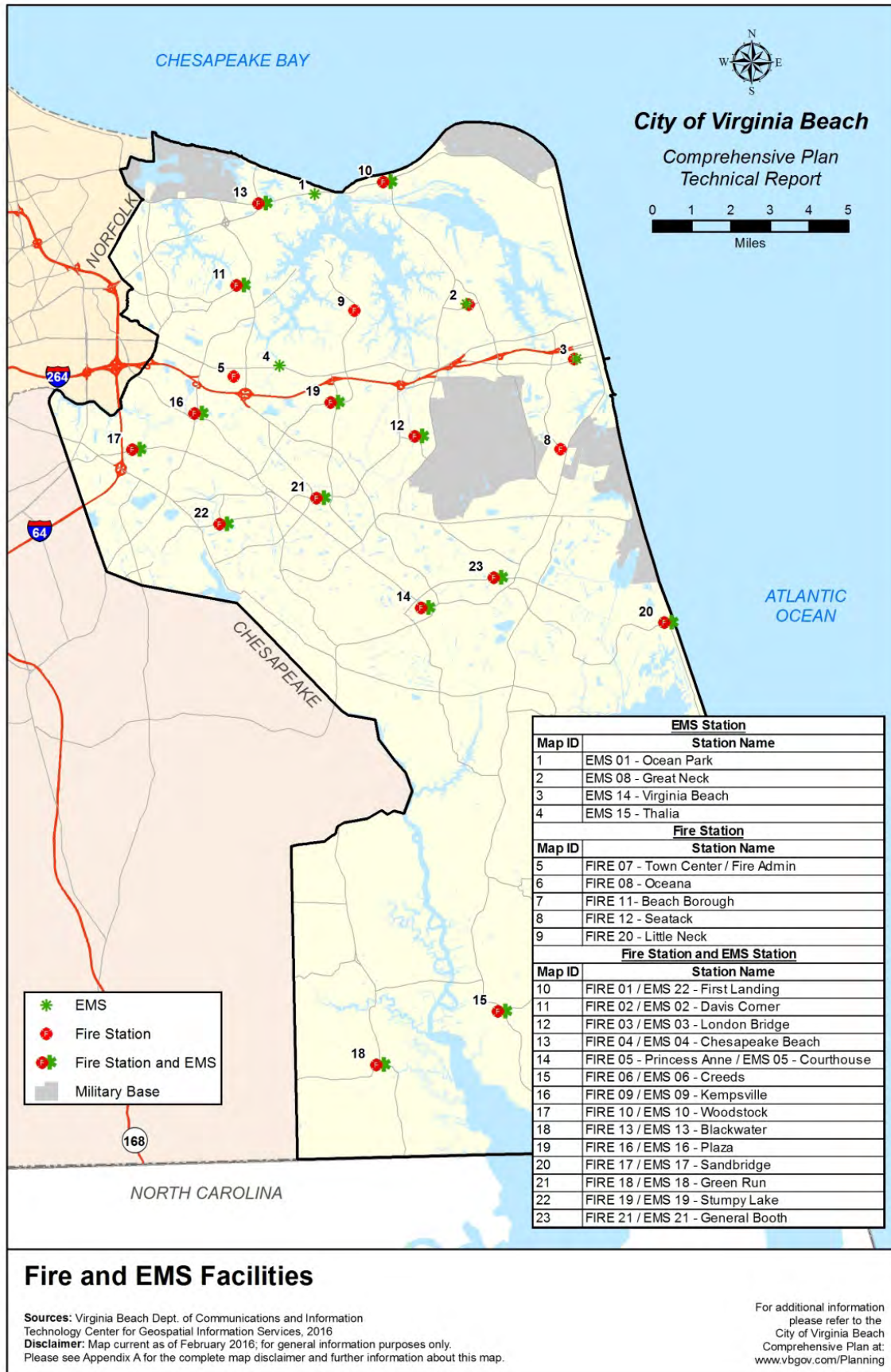


FIGURE 7

Table 6

EMS Station	
Map ID	Station Name
1	EMS 01 - Ocean Park
2	EMS 08 - Great Neck
3	EMS 14 - Virginia Beach
4	EMS 15 - Thalia
Fire Station	
Map ID	Station Name
5	FIRE 07 - Town Center / Fire Admin
6	FIRE 08 - Oceana
7	FIRE 11- Beach Borough
8	FIRE 12 - Seatack
9	FIRE 20 - Little Neck
Fire Station and EMS Station	
Map ID	Station Name
10	FIRE 01 / EMS 22 - First Landing
11	FIRE 02 / EMS 02 - Davis Corner
12	FIRE 03 / EMS 03 - London Bridge
13	FIRE 04 / EMS 04 - Chesapeake Beach
14	FIRE 05 - Princess Anne / EMS 05 - Courthouse
15	FIRE 06 / EMS 06 - Creeds
16	FIRE 09 / EMS 09 - Kempsville
17	FIRE 10 / EMS 10 - Woodstock
18	FIRE 13 / EMS 13 - Blackwater
19	FIRE 16 / EMS 16 - Plaza
20	FIRE 17 / EMS 17 - Sandbridge
21	FIRE 18 / EMS 18 - Green Run
22	FIRE 19 / EMS 19 - Stumpy Lake
23	FIRE 21 / EMS 21 - General Booth

Source: The City of Virginia Beach Fire Department.

The Fire Department has identified six geographic areas of service level concern for the next ten years as a result of increased residential and commercial growth, increased response time as a result of increased traffic congestion, lack of a municipal water system in the southern portion of the City, and development of the medical complex and surrounding residential and commercial development that have occurred in Princess Anne, Dam Neck and Salem Roads corridors. Those geographic areas include:

- Kempsville Road (almost completed);
- Centerville Turnpike;
- Northampton Boulevard and Diamond Springs Road;
- Princess Anne Road and Pleasant Ridge Road;
- Dam Neck Road and Salem Road.
- North End

EMERGENCY MEDICAL SERVICES (EMS)

Twelve (12) emergency medical service (EMS) stations currently operate in conjunction with designated fire stations around the City. These facilities are staffed by approximately 709 active volunteer rescue members, which is the largest volunteer-based rescue service in the nation. Two independent stations, Ocean Park Volunteer Rescue Squad (Station #1) and Oceanfront Volunteer Rescue Squad (Station #14) are the only two stations devoted solely to emergency medical and rescue operations.

See the above table entitled “Fire and EMS Facilities” for a list of the City’s EMS facilities that operate in conjunction with designated fire stations.

A map of the of the City’s EMS facilities that operate in conjunction with designated fire stations is provided in Figure 7 and are listed in Table 6.

PUBLIC WATER SYSTEM AND SANITARY SEWER SYSTEM

Public Water System

The City’s public water system serves the northern suburban and urban portions of the City. The southern rural portion of the City is not served by the public water system. The public water system consists of approximately 1,692 miles of potable water transmission and distribution mains, 9,973 fire hydrants, 12 storage tanks and 8 pumping stations.

Virginia Beach also owns and/or has water rights in two raw water sources: Lake Gaston in Brunswick County and Stumpy Lake in Virginia Beach. However, Virginia Beach does not own any water treatment facilities. Instead, it pumps water from Lake Gaston and Stumpy Lake into reservoirs owned by the City of Norfolk. Pursuant to a Water Services Contract, which runs through the year 2030, the City of Norfolk receives that water then stores, transmits, treats, and delivers to the master meters at the boundary between the two cities.

The following is a list of the primary water sources that supply water to the Norfolk-Virginia Beach water system:

Sources located outside of City of Norfolk and City of Virginia Beach:

- Lake Gaston: Water Rights held by City of Virginia Beach (intake located in Brunswick County)
- Nottoway River: Water Rights held by City of Norfolk (intake located in Southampton County)
- Blackwater River: Water Rights held by City of Norfolk (intake located in Isle of Wight County)
- Lake Prince: Owned by City of Norfolk (located in Isle of Wight County and City of Suffolk)
- Lake Brunt Mills: Owned by City of Norfolk (located in Isle of Wight County and City of Suffolk)
- Western Branch Reservoir: Owned by Norfolk (located in City of Suffolk)

Sources located in Norfolk:

- Lake Whitehurst: Owned by City of Norfolk
- Lake Wright: Owned by City of Norfolk
- Lake Taylor: Owned by City of Norfolk

Sources located in Virginia Beach are shown on page 114, Figure 2, Chapter 6 – Environment and listed below:

- Little Creek Reservoir: Owned by City of Norfolk
- Lake Lawson: Owned by City of Norfolk
- Lake Smith: Owned by City of Norfolk
- Stumpy Lake: Owned by City of Virginia Beach (partially located in City of Chesapeake)

The Water Services Contract also requires the City of Norfolk to design, construct and operate its facilities to provide seasonal water demands, including maximum day and maximum hour capacities. The following table lists the contract capacities that apply to the Lake Gaston project and compares them to Virginia Beach's current demand:

	Contract	Year 2014	Excess
Treated Water to Virginia Beach (Annual Avg.):	45 mgd	32 mgd	+41%
Treated Water to Virginia Beach (Max Day):	68 mgd	39 mgd	+74%
Treated Water to Virginia Beach (Max Hour):	90 mgd	64 mgd	+41%
Virginia Beach Distribution Capacity (Max Hour):	90 mgd	64 mgd	+41%

Note: mgd - million gallons per day

Source: City of Virginia Beach Public Utilities

PUBLIC SANITARY SEWER SYSTEM

The City of Virginia Beach is responsible for providing reliable, efficient sanitary sewer service to their customers and to ensure the City's future needs are met. Virginia Beach owns and operates a sanitary sewage collection system comprised of gravity mains, pumping stations, force mains, and vacuum sewer systems in the northern and urban areas of the City. This system consists of over 1,200 miles of gravity sanitary sewer mains (sizes 4" - 36"), over 31,000 sewer manholes, 40 miles of vacuum sanitary sewer (sizes 1 1/4" - 10"), 200 miles of force mains (sizes 2" - 24"), 406 sewage pumping stations, and 6 vacuum sanitary sewer systems. Sanitary sewage is collected and conveyed to the Hampton Roads Sanitation District (HRSD) facilities within the City for treatment. The six vacuum sewage collection systems in the City are Sandbridge South, Sandbridge North, Alanton, Dozier's Bridge, Salem Road and Little Neck.

The HRSD owns and operates two wastewater treatment plants (WWTP) within the City of Virginia Beach, which handle flows generated by the citizens, Military facilities, and other adjacent municipalities that convey sewage to HRSD's collection system. HRSD's Atlantic WWTP, located along Firehall Drive at the oceanfront, has a treatment capacity of 36 million gallons per day (MGD). The Chesapeake-Elizabeth WWTP, located adjacent to the Little Creek Amphibious Base, has a treatment capacity of 24 MGD. In addition, HRSD has two pumping stations (Newtown Road and Arctic Avenue) that receive flows directly from citizens of Virginia Beach. Expansion—under construction

SOLID WASTE MANAGEMENT

The city provides a weekly residential waste collection service and a biweekly recycling collection service for its approximately 124,800 residences, collecting approximately 135,000 tons per year. Private refuse companies under contract with the city, collect solid waste from multiple-family residential locations. The regional solid waste disposal authority known as the Southeastern Public Service Authority or SPSA handles a large percentage of that total volume. Under a service contract with the city, SPSA provides waste hauling from SPSA's transfer stations located in the city and operates the regional landfill. For Virginia Beach, depending on where the collection of solid waste occurs on a scheduled pickup day, the city's Waste Management trucks go to the nearest SPSA transfer station to deposit the waste material. Solid waste from the SPSA transfer stations is trucked either to SPSA's regional landfill in the city of Suffolk, or to Wheelabrator's Waste-to-Energy facility. Materials delivered to the Waste-to-Energy facility is incinerated to create steam and electricity.

SPSA operates two transfer stations in the city, located at 2025 Virginia Beach Boulevard (Great Neck Area) and 1825 Concert Drive (Holland Area). Figure 9 shows locations of the city's existing landfill and the Southeastern Public Service Authority (SPSA) solid waste transfer stations.

Since 1971, the city has also operated a landfill and resource recycling center near Centerville Turnpike. The volume of solid waste received at the city's landfill has substantially reduced since 1996 because of its service contract with SPSA. Without the contract with SPSA, this public facility would be the only place for waste disposal within the city of Virginia Beach. Currently, the city landfill accepts only household waste from Virginia Beach residents and could continue to accept household waste for 50 to 100 years. The city's landfill operation is subject to extensive Virginia Department of Environmental Quality and US Environmental Protection Agency regulations. Landfill operations staff maintains operational controls that minimize potential nuisance impacts such as noise, odor, litter, and dust. The Landfill and Resource Recovery Center section of the landfill manages receipt and disposal of recyclable materials along with household hazardous wastes.

The solid waste received at the city's landfill is primarily only those materials delivered to the site by private residents. Yard debris (tree and shrub trimmings and loose yard waste), furniture, appliances, and other bulky household items are picked up by the city, either through normal pickup or by special request.

As Table 8 indicates, the volume of solid waste received at the city's landfill has been substantially reduced over the years.

Table 9 provides a waste trend analysis for the city from 2011 to 2015.

Table 8

SOLID WASTE QUANTITY LANDFILLED FOR THE CITY'S LANDFILL 2011-2015

Year	Tons
2011	34,100
2012	24,100
2013	10,500
2014	12,300
2015	13,200

Source: City of Virginia Beach Department of Public Works, Solid Waste Management

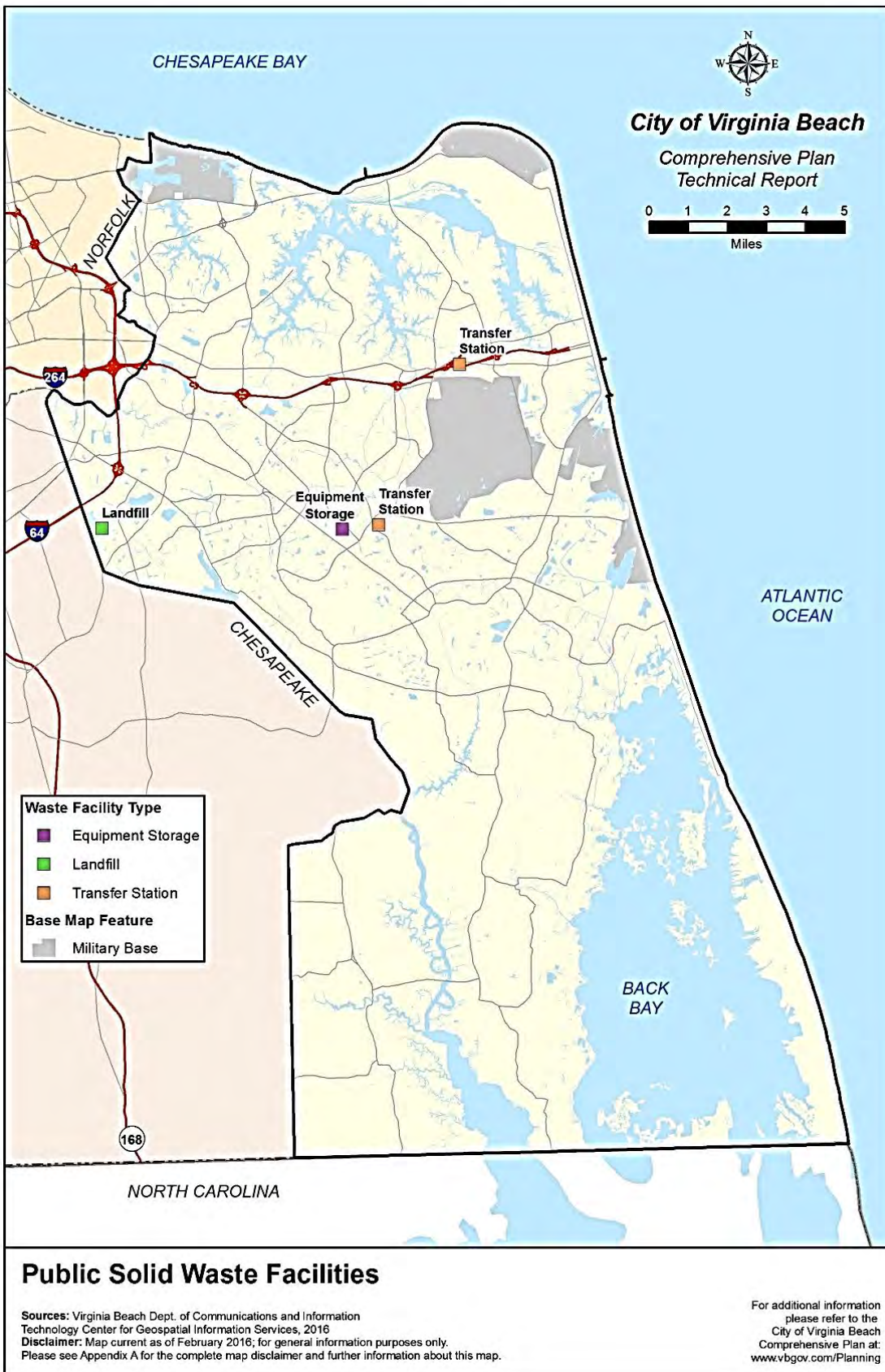


FIGURE 9

Recycling

Not all of the City's refuse and solid waste collected is treated as landfill. The State mandated in the mid-1990s that all localities recycle 25 percent of their total solid waste collected. Recycling has proven to be a sound and successful method to reduce and help manage solid waste in the City of Virginia Beach. The City offers a wide variety of recycling options including curbside pickup and drop-off locations. Curbside service is provided by private waste hauler companies under contract.

The City's commitment to recycling solid waste material reduces the volume dumped into landfills and, thus, lengthens the life of the facilities. The current recycle rate is 36% for the City of Virginia Beach. The direct landfill diversion rate is 91% or 74% including landfilled ash. Of the City's municipal waste, 55% goes to a Waste-to-Energy facility. The ash byproduct of this process is ultimately landfilled. Graph 8 and Table 9 show the total volumes of solid waste that has been collected, and recycled over the past years.

Table 7

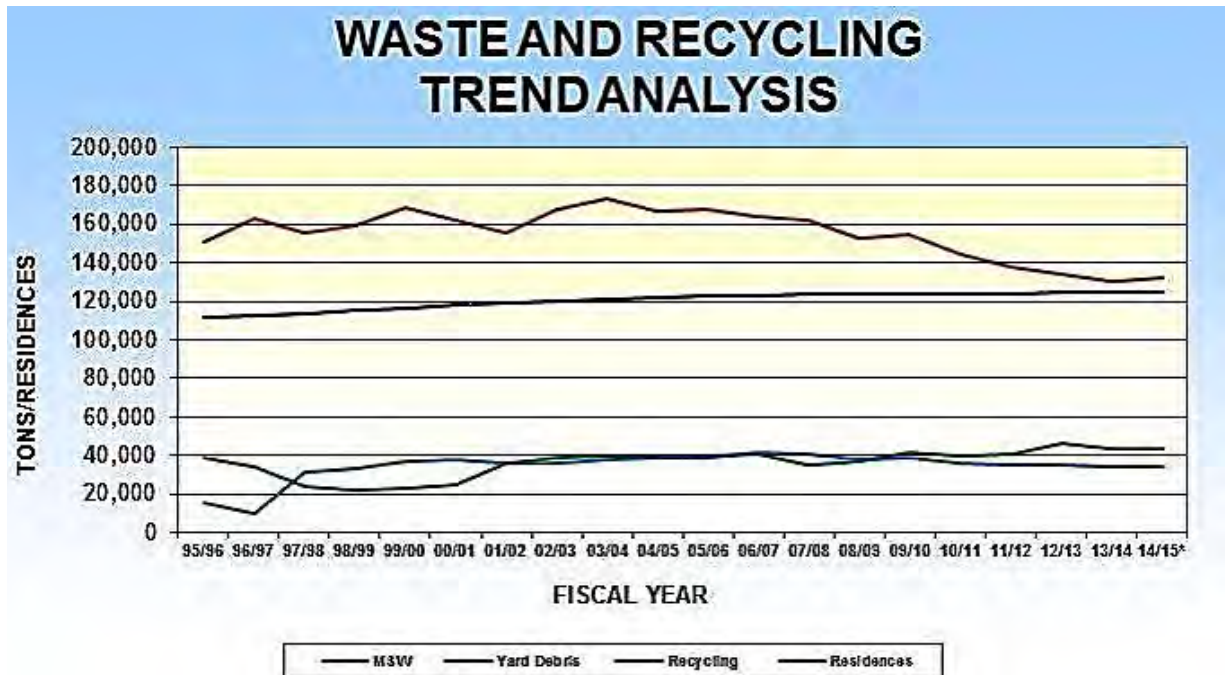


Table 9

DEPARTMENT OF PUBLIC WORKS
WASTE MANAGEMENT DIVISION
WASTE TREND ANALYSIS

FY	Municipal Solid Waste	Yard Debris	TOTAL WASTE	Recycling	Residences	Tons MSW per Residence	Tons Recycled per Residence	Percent Recycled	Percent Recycled (Inc. Yard Debris)
10/11	144,511	40,123	184,634	35,824	123,919	1.17	0.29	19.9%	34.4%
11/12	137,578	40,556	178,134	34,940	124,171	1.11	0.28	20.3%	35.4%
12/13	133,958	46,359	180,317	34,969	124,547	1.08	0.28	20.7%	37.8%
13/14	130,245	43,787	174,032	34,420	124,653	1.04	0.28	20.9%	37.5%
14/15	133,436	42,961	176,397	32,520	124,840	1.07	0.26	19.6%	36.1%

NOTE:

Municipal Solid Waste- Regular household trash, bulk collection, other departments' waste

Yard Debris - Curbside, yard waste containers, and other departments yard waste

Recycling - Curbside, drop-off centers, tires, white goods; batteries added FY13; electronics, rigid plastics, oil & antifreeze added FY14

Residences - Single family, duplex, townhomes - average number for the year provided by PU

Source: Department of Public Works, Waste Management

STORMWATER MANAGEMENT

The City's stormwater system consists of a network of stormwater management facilities and conveyance systems. An explanation of this network and accompanying maps are found in the Environment Chapter.

PUBLIC RECREATION FACILITIES/PARKS /OPEN SPACE

The vision of the Virginia Beach Parks and Recreation Department is to provide a balanced, sustainable and value-focused system of parks, recreation and public spaces that create a sense of community. The Department's priorities and work reflect statistically valid community input gathered in 2010, 2012 and 2015 that focus on:

- Community Access;
- Environment and Outdoors;
- Healthy Lifestyles and;
- Stewardship

The healthy profile of the City's open space and recreational system is the result of consistent commitments made by the City in its Capital Improvement Programs over the last two decades. These commitments have included efforts to provide an integrated system of recreation facilities throughout the City that enhance the physical, recreational, environmental, social and cultural well-being of its citizens and visitors alike. The City continues to make significant investments to improve and upgrade recreational facilities that have diminished in quality as a result of facility age and of increased user demands. The increasing demand for more facilities and services is indicative of the importance the citizens of the City have placed on these services.

Indoor Recreation Facilities

There are seven public community recreation centers in the City that are situated so that a majority of residents live within a short commute to at least one of these centers, as shown in Figure 11. These community centers provide opportunities and programs for all ages to participate in fitness, dance, aquatics, martial arts, athletic tournaments, therapeutic recreation and leisure activities. The centers are also available for community meetings and special events.



Williams Farm Recreation Center is the newest facility to open. It is the 7th Recreation Center in the City. Located at 5252 Learning Circle, Williams Farm Recreation Center is a 70,993 square foot, Silver LEED-certified facility located off Newtown Road between Diamond Springs and Newtown Elementary Schools.

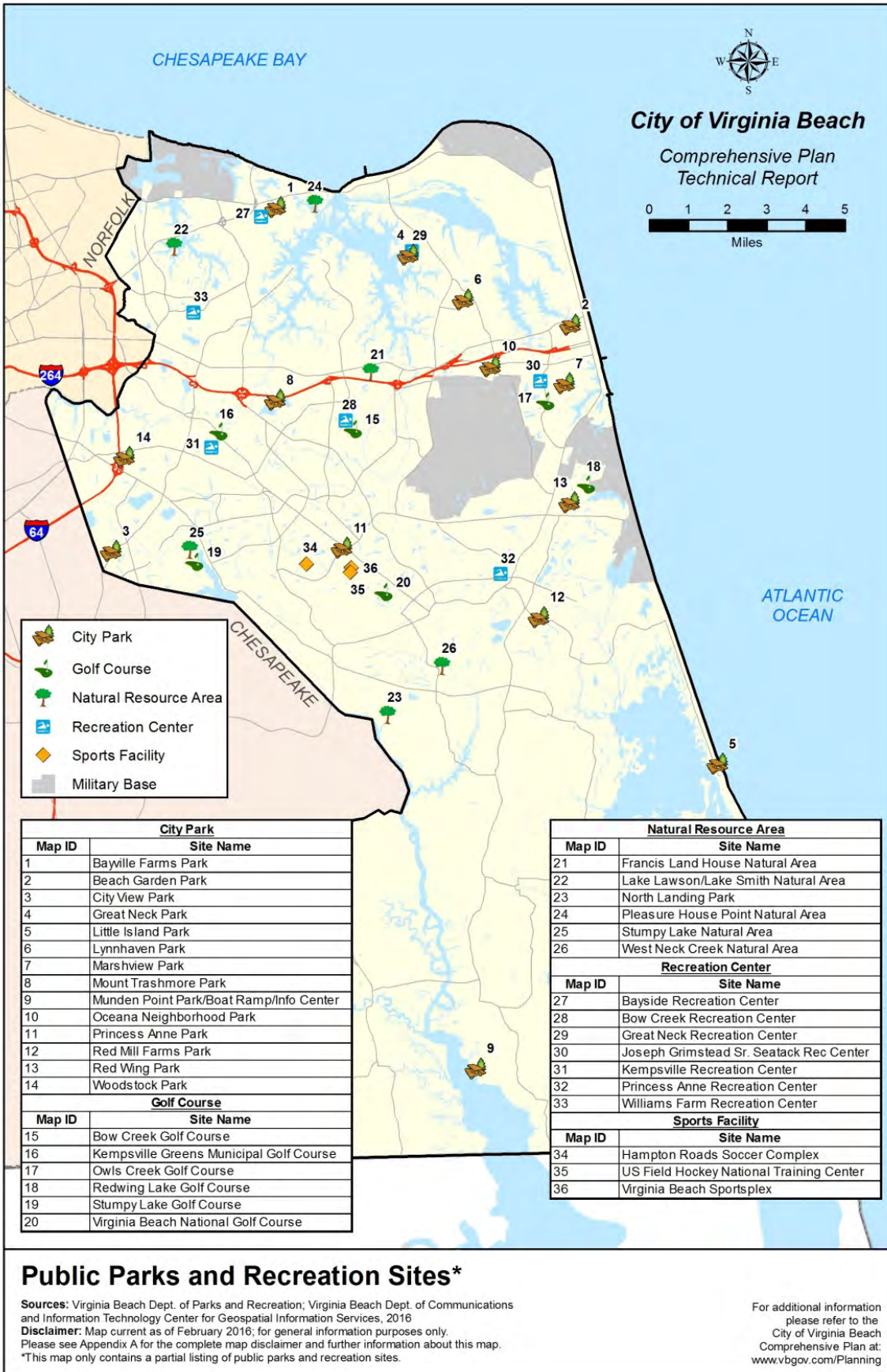


FIGURE 11

Outdoor Recreation Facilities

The City strives to provide a diverse array of outdoor recreational opportunities and open spaces that deliver multiple benefits all citizens. The City of Virginia Beach is recognized for being a leader in the nation in the number of neighborhood park playgrounds provided for public use. Other outdoor recreation facilities featured in this diverse array are municipal golf courses, natural areas and wildlife refuges, state and federal parks and various forms of open space. Open space is generally described as a wide range of outdoor areas and activities that are valued for their natural or nature-based setting. These areas and activities provide sensory relief and areas for active or passive enjoyment. Public open space areas are protected for public use via easements, rights-of-way, parks, golf courses, etc. Publicly-held areas protected by such mechanisms are typically more permanent than those properties defined as open space and held in private ownership without such protections. Figure 12 provides a listing of the City's recreation sites to give an overall view of the variety of parks, athletic complexes, golf courses and recreation centers. For detailed information please refer to the 2016 Virginia Beach Outdoors Plan.

City Open Space

The City of Virginia Beach has over 200 parks and over 4,000 acres of land designated as park land for recreation or as preserved open space. Much of the preserved open space protects valuable plant and animal habitats and areas vulnerable to flooding. A map providing the general locations of a variety of open space owned by the City of Virginia Beach can be found at Figure 13.

Federal, State, and Private Open Space

In addition to the extensive network of City owned open space, there is an abundance of land protected by both the Federal and State government and private entities such as The Nature Conservancy and the Virginia Outdoors Foundation. This land includes Back Bay National Wildlife Refuge, Mackay Island National Wildlife Refuge, First Landing State Park, False Cape State Park, North Landing River Natural Area Preserve, and Princess Anne Waterfront Management Area.

Back Bay National Wildlife Refuge consists of 12,290 acres currently owned by the federal government, and also includes an additional 2,800 acres that are located within the federally approved expansion boundary that are eligible for acquisition from willing sellers in the future. A map providing the locations of current Back Bay National Wildlife Refuge lands and additional lands located within the expansion boundary in the City can be found at Figure 7 in the Environmental section of the Technical Report. A map providing the locations of designated Federal, State and private open space areas in the City is found at Figure 14 in this section of the Technical Report.

Water Access

One of the key features that attract residents and visitors to Virginia Beach are the abundant water resources. To allow residents and guest access to Virginia Beach's waterways, the City provides and maintains a number of water access points, which shown on Figure 12.

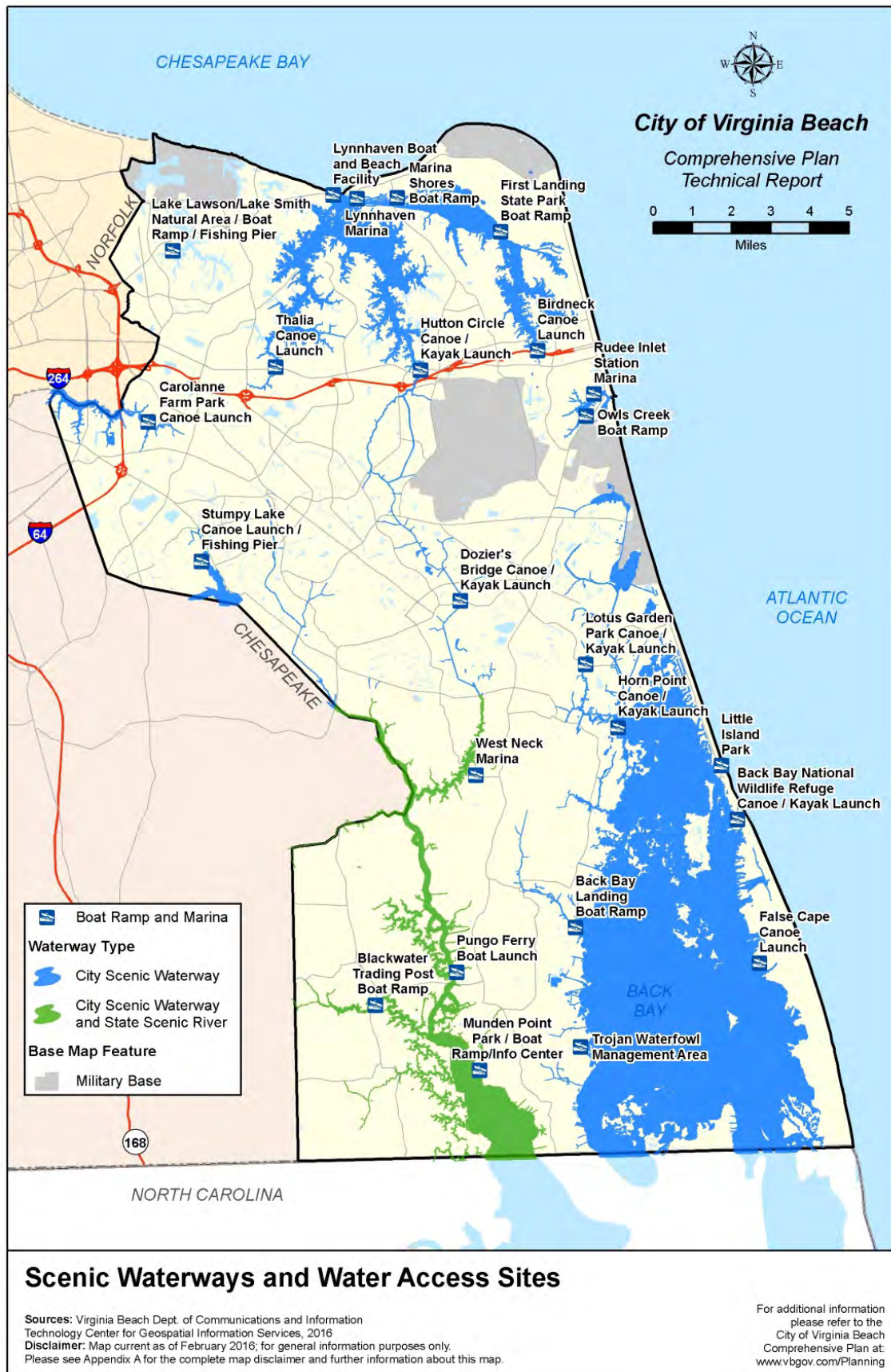


FIGURE 12

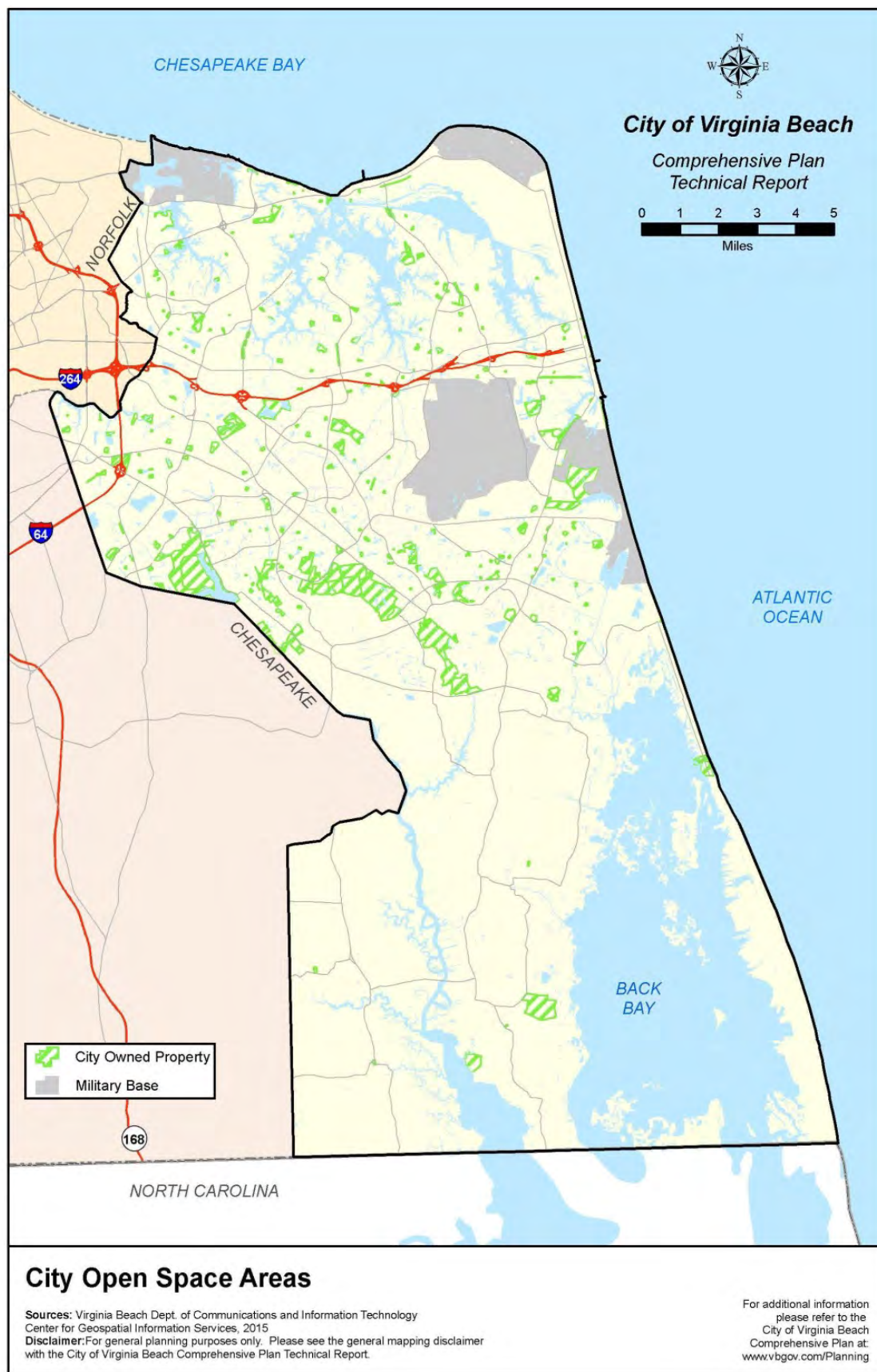


FIGURE 13

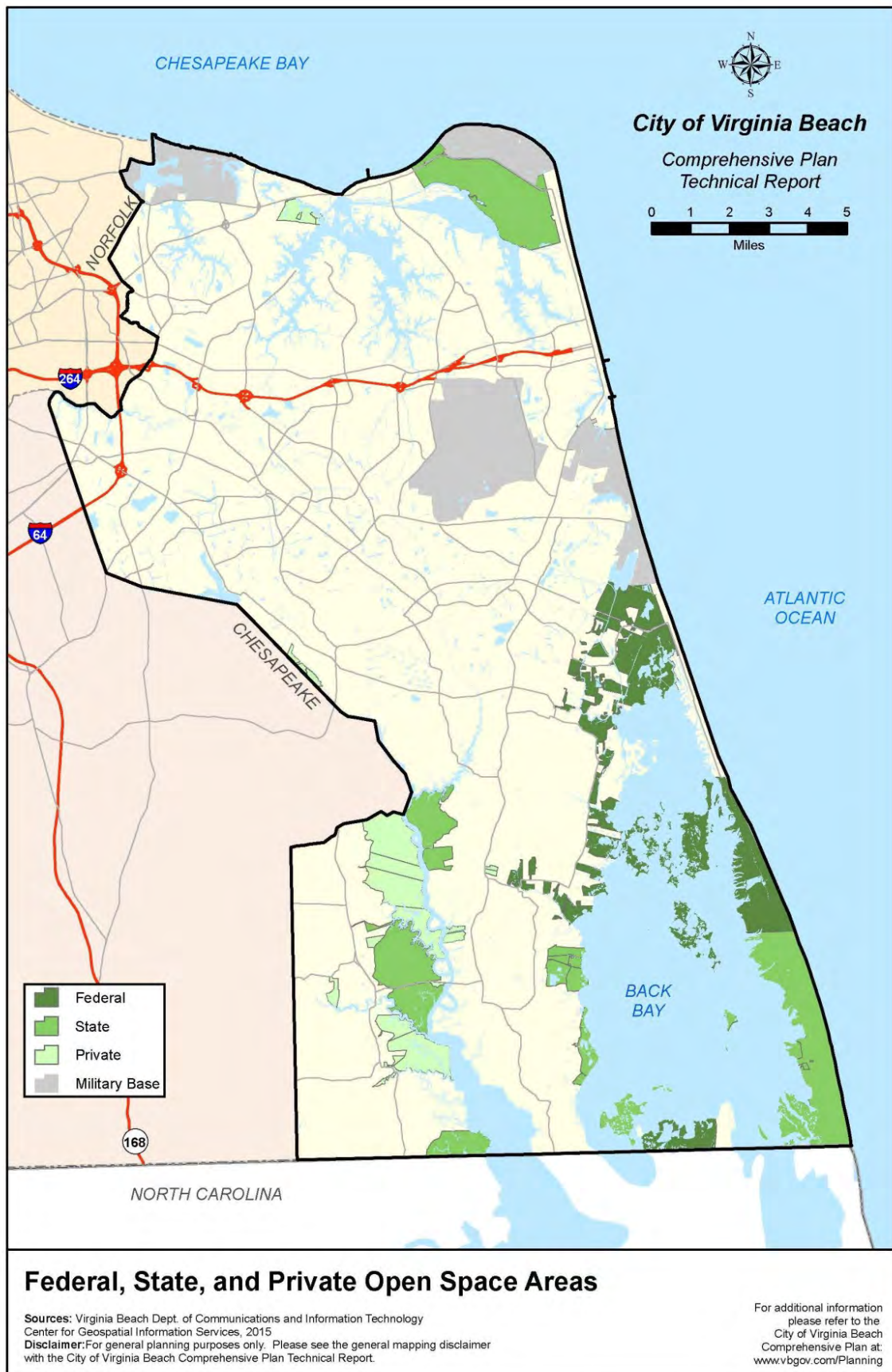


FIGURE 14

CHAPTER 10. HISTORIC RESOURCES

History

Prehistoric Settlement – Native peoples have utilized the natural resources found near the mouth of the Chesapeake Bay and along local inland waterways for perhaps 15,000 years. The nomadic life of following the migration patterns of various animal species eventually gave way to seasonal habitation as the climate changed and the coastline and environment followed. Eventually, the native people lived as tribes in relatively permanent villages. This is what the English encountered when they arrived as settlers in the early 17th century.

Artifacts dating to the Paleoindian period (9500 – 8000 B.C.), Archaic period (8000 – 1200 B.C.) and Woodland period (1200 B.C. – 1600 A.D.) have been discovered in various locations in Virginia Beach. Algonquian speaking tribes occupied the Tidewater area of Virginia and the Eastern Shore during the late Woodland period (900 – 1600 A.D.). Maps created by Englishman John White in the 1580s located the native villages of Apasus and Chesepiooc within the geographical areas of Virginia Beach.

In the late 16th century, the Chesapeake occupied the land from the Atlantic Ocean to the Elizabeth River. They tended to remain aloof from the Powhatan chieftain that controlled most of the other Algonquian speaking tribes in southeastern Virginia. The Chesapeake were eradicated by Powhatan just prior to English colonization. In the aftermath, the Nansemonds, who were settled to the west, spread to the east to occupy area in Norfolk and Virginia Beach.

English Colonization – Virginia Beach is the site of the landing of the Jamestown colonists on April 26, 1607 at Cape Henry. After a few days exploring the area they moved inland up the James River to settle. Permanent English settlement occurred in Virginia Beach in the 1630s when Adam Thoroughgood was provided a land grant of 5,350 acres along the western branch of the Lynnhaven River.

Eight shires (counties) were established in 1634 by the English government as the first administrative subdivisions in Virginia. Virginia Beach was originally part of Elizabeth City Shire. In 1636 New Norfolk County was created from Elizabeth City County and included the land area south of the James River and Chesapeake Bay. This new county was further divided in 1637 into Upper and Lower Norfolk counties. Lower Norfolk County was divided in 1691 into Norfolk County and Princess Anne County.²¹ The Princess Anne County boundaries coincided with the Lynnhaven Parish boundaries that had been established by the Church of England in 1643.²² Most of the Princess Anne County land area would eventually become the City of Virginia Beach in the twentieth century.

Agricultural pursuits provided the economic basis for Virginia Beach throughout the colonial, early national and antebellum periods. Subsistence level farms and small to medium size plantation operations were the typical forms seen in the landscape. The legendary Virginia tobacco staple did not grow particularly well in this area and a more diverse agricultural approach occurred very early in Virginia Beach. Wheat, oats and corn proved to be better cash crops in the eighteenth century in Virginia Beach.

²¹ http://www.lva.virginia.gov/whatwehave/local/county_formation/index.htm

²² *Colonial Churches in the Original Colony of Virginia: A Series of Sketches by Especially Qualified Writers* (Richmond, VA.: Southern Churchman Company) 1908.

Other industries developed around the abundance of natural resources. The most notable of these were the production of pitch, tar and turpentine for their maritime uses. A small port for ships called Kempes' Landing developed on the Elizabeth River and the town of Kempsville was officially established there in 1783.²³ A few other small settlements appeared elsewhere in the county but none grew much beyond a handful of houses and shops/services.

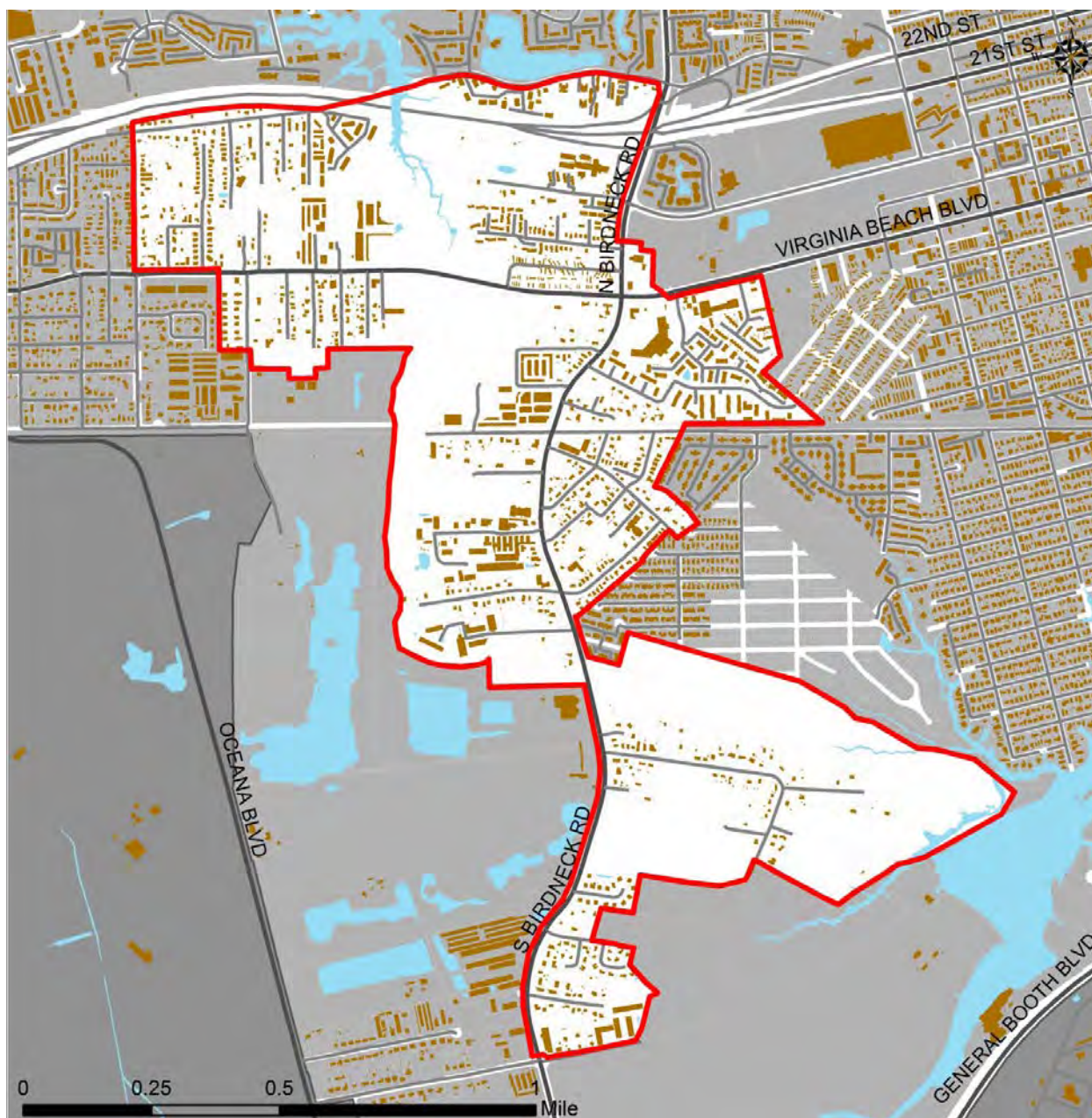
Post-Colonial – A skirmish in 1775 between British troops under British Royal Governor Lord Dunmore and a local militia occurred in Kempes Landing killing a militiaman, Francis Ackiss. A significant loyalist presence in the area and occasional British troop activities nearby made for an unsettled period during the Revolutionary War. British ships and troops were again active in the area during the War of 1812 and local militia companies provided what protection the residents had.

Plans to construct a lighthouse at Cape Henry during the colonial period were developed but never executed. The tricky navigation in the area required a constant physical assistance and the Cape Henry Lighthouse was finally built in 1792 as the first public works project of the new United States of America government.

Historic Seatack Community and Vicinity – A settlement of free people of African descent was established in the eastern area of northern Princess Anne County in the late eighteenth or early nineteenth century. Historic Seatack is located in the Beach District near the City's Oceanfront Resort Area. It is considered by area residents to be the oldest African-American community in Virginia and the United States, with original settlement by free men dating back to the late 1700s and early 1800s, and possibly as far back as the 1500s. The area eventually took its name from the words "Sea Attack," based on British Warship cannons along the coast firing inland during the War of 1812. Seatack men fishing in the Atlantic Ocean were known to pull people to safety after shipwrecks. U.S. Life Saving Station Seatack, Virginia No. 2, was ultimately established in the area, which was listed on the National Register of Historic Places in 1979. In 1908, the citizens of Seatack formed the "first school for Negro children" at the "mother church" of Seatack, Mt. Olive Baptist Church on Birdneck Road. In the 1920s, the parents of Seatack formed the Seatack Public School League of Princess Anne County, and Seatack citizens later provided land for the original Seatack Elementary School, which opened in 1952. Men of Seatack served in every war in which the United States was involved, and those returning from WWII organized and built the first black-owned and operated fire department, known as the Seatack Volunteer Fire Department. In 1985, Mr. Joseph Grimstead, Sr. dedicated the land for the Seatack Community and Recreation Center, which opened in 1997, and was later rededicated in honor of Mr. Grimstead. In October 2011, the Seatack Civic League, which is over 100 years old, organized a 200th "birthday" celebration for Seatack.

The area historically identified with "Seatack" was once much larger, described by the Seatack Community Civic League as extending north of Virginia Beach Boulevard, east to Cypress Avenue and Owl's Creek, and including not only the Seatack core neighborhood along Birdneck Road and Virginia Beach Boulevard, but also the area to the west referred to today as the "Atlantic Park" and "East Oceana Gardens" neighborhoods. New development per market trends and redevelopment with AICUZ-compatible uses for nearby NAS Oceana has occurred in Seatack over time, in some cases altering the character of this historic community. The area shown as "Historic Seatack Community" (see Figure 1) was recommended in 2016 by the Seatack Community Civic League. As such the area does not imply or intend special restrictions or land use limitations other than those currently regulating land uses in this area.

²³ *The Statutes at Large:: Being a Collection of All the Laws of Virginia, from the First Session of the Legislature, in the Year 1619. : Published Pursuant to an Act of the General Assembly of Virginia, Passed on the Fifth Day of February One Thousand Eight Hundred and Eight. : Volume I-XIII, (1823).*



Historic Seatack Community and Vicinity

FIGURE 1

Civil War –Princess Anne County (Virginia Beach) remained a mostly rural and agricultural locality well into the twentieth century. Much of the early success of the agricultural economy had been achieved through the use of enslaved laborers of African descent since the seventeenth century. The growing division between northern and southern states erupted in the American Civil War in 1861.

The strategic location near the mouth of the Chesapeake Bay made this an important area for the opposing sides to control and the United States forces were able to do so early on in the conflict. This was accomplished without a major battle and very little military engagement occurred in

Virginia Beach during the war. Despite federal occupation, the enslaved population remained in bondage and the Emancipation Proclamation, issued January 1, 1863, specifically noted that Princess Anne County was exempt from the executive order. The eventual surrender of the Confederate States of America and the ratification of the 13th Amendment to the U.S. Constitution in 1865 finally provided the enslaved people in the area with their freedom.

Post-Civil War –The most influential black leader in post-Civil War Princess Anne County was Willis Augustus Hodges. He had left the county for New York as a young man and returned during the war. He became the county's first black elected representative, serving in the 1867-68 state constitutional convention. The new constitution, which went into effect in 1870, changed the administration of the county from the justices of the peace to a board of supervisors. Hodges was elected to be the supervisor to represent the Kempsville District.²⁴

Other black citizens were voted into political office including Littleton Owens who was elected in 1879 to represent Princess Anne County in the House of Delegates. Some of the recently freed black citizens acquired land and small new communities, such as New Light and Burton Station, began to develop in the 1870s (see Figure 2).²⁵

Virginia Beach – In the 1880s, Colonel Marshall Parks erected a wooden clubhouse at the oceanfront, which was the first structure built on what is today called the “resort strip.” Parks, who is credited with naming Virginia Beach, and a group of investors formed the Norfolk and Virginia Beach Railroad and Improvement Company to acquire oceanfront property to build a hotel and pavilion and to construct a railroad. The first railroad service from Norfolk to Virginia Beach was initiated in July 1883. The resort grew into a small town and was incorporated as the town of Virginia Beach in 1906.²⁶

The small community of Oceana Gardens was platted west of the oceanfront in the early 1900s and it soon became a viable residential and commercial area that served much of the surrounding rural area. The first paved roadway between Norfolk and Virginia Beach was completed in 1920 and the automobile would eventually push the passenger railroad out of the city's landscape. Oceana sat strategically between the roadway (today's Virginia Beach Boulevard) and the rail line.

The Seaside Park amusement complex opened at the beach in 1912 and the Princess Anne Country Club was incorporated in 1916. A new concrete boardwalk was built along the Atlantic Ocean beach in 1926. Further investment by businessmen from Norfolk and Portsmouth resulted in the construction of the Cavalier Hotel at the oceanfront in 1927. Along with the growth of several hunt clubs, the Cavalier and its associated leisure activities attracted a wealthy clientele to Virginia Beach, even after the stock market crash of 1929.

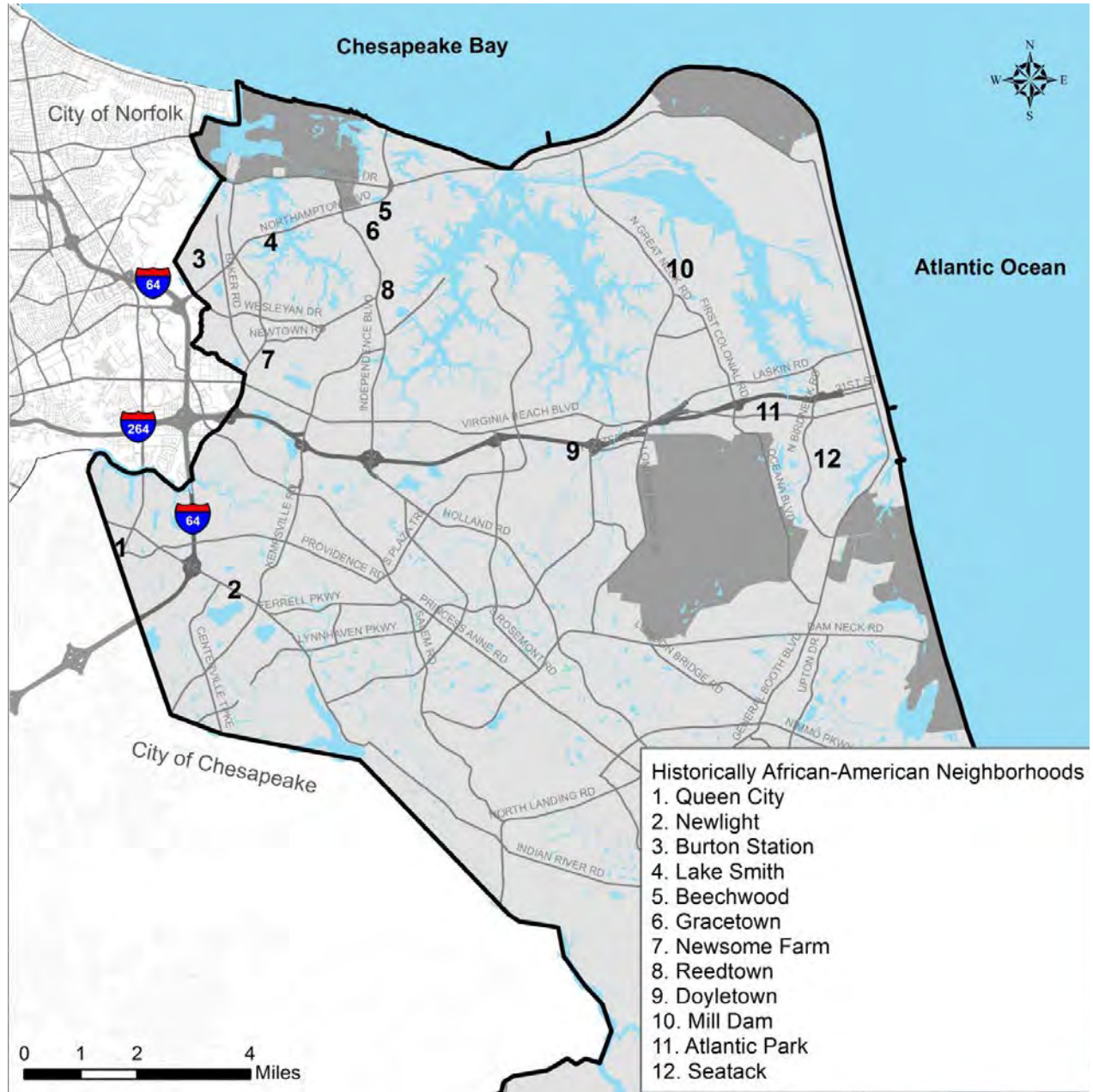
Cape Henry – Development occurred in the late nineteenth century at Cape Henry, as well. A United States Weather Bureau Observation Center was established there in 1873 and a United States Life Saving Station in 1874. A new lighthouse was built there in 1881 and it became operational in place of the nearly century old beacon. A group of investors created the Cape Henry Syndicate and they began buying land there in the 1890s and the resort they established became increasingly popular during the first decades of the twentieth century. By the 1920s, the civilian development of Cape Henry consisted of a small community of frame cottages,

²⁴ Stephen S. Mansfield, *Princess Anne County and Virginia Beach: A Pictorial History* (Virginia Beach, VA: The Donning Company, 1989), 68.

²⁵ Mansfield, 76.

²⁶ *The Beach: A History of Virginia Beach, Virginia*, Rev. ed. (Virginia Beach, VA: City of Virginia Beach, 1998), 81-84.

several hotels, a railroad station, O'Keefe's Casino and St. Theresa's Chapel.²⁷



Historically African-American Neighborhoods

FIGURE 2

The strategic nature and location of Cape Henry prompted the federal government to appropriate funds in 1913 to purchase land there and to build a military installation named for General John P. Story. Fort Story was operational during World War I and has served as an important training facility and coastal defense ever since.²⁸

²⁷ *Phase I Reconnaissance Survey of Architectural Resources at Fort Story*, Dutton + Associates, 2012.

²⁸ *The Beach*, 96.

World War II –Plans to establish a military airfield near the Oceana community began as early as 1938. Construction of a 2,500 foot runway began in 1941. The attack on Pearl Harbor accelerated the process and resulted in expanded plans and facilities for the Oceana Air Station. It was commissioned on August 17, 1943 and remained active through the war. In 1950, an expansion extended four runways to 8,000 feet making it a master jet base.²⁹

The military facility at Dam Neck was first organized as an anti-aircraft school during World War II and was called the Fleet Air Defense Training Center. The Amphibious Training Base at Little Creek came under construction in 1942 and was operational by August 1943.³⁰ The Tidewater Victory Memorial Hospital, a state tuberculosis sanitarium, and 22 acres around it were converted into Camp Ashby in 1943. This U.S. Army camp provided coastal defense shore patrols until June 1944. From September 1944 until April 1946, Camp Ashby served as a German Prisoner of War camp.³¹

County/City Merger – Post war Virginia Beach in the 1950s saw a movement of population from nearby Norfolk to Princess Anne County. Suburban neighborhoods, such as Aragona and Princess Anne Plaza, sprouted along route 58. As this was occurring, Norfolk began annexing sections of western Princess Anne County. On January 1, 1959, Norfolk annexed 13.5 square miles from the county and the 38,000 residents that lived within that area.

The local political machine, under the leadership of Sidney Kellam, saw such annexation as a threat and reasoned that more county land would soon be absorbed by Norfolk. In response, the consolidation of Princess Anne County and the City of Virginia Beach as a municipality began to take shape. Norfolk controlled the water supply to the county and Virginia Beach and tried to leverage that power to thwart the merger. The ploy backfired pushing the consolidation forward resulting in the establishment of the modern City of Virginia Beach on January 1, 1963.³²

With the establishment of the independent City of Virginia Beach came the establishment of the City Council/City Manager form of government. From 1963 to 1988, the mayor was selected by City Council from among their membership. In July 1988, Meyera E. Oberndorf became the first mayor of Virginia Beach to be directly elected by the public. She also became the first female to serve as mayor of the city.³³

Steady and rapid population growth characterized the first quarter century of the post-merger period. Virginia Beach grew into the most populated city in Virginia as large farming tracts in the northern half were developed primarily on a suburban model.

Virginia Beach's status as a vacation destination also grew during this period and the resort area was modernized and improved. A new boardwalk and seawall were constructed to both accommodate the growing tourist trade and to protect the oceanfront from storms. Development and modernization took its toll on historic resources with many early twentieth century buildings near the oceanfront and older farmhouses and related structures inland being lost during this period.

In 2000, plans for a downtown in the Pembroke area finally came to fruition. The first building in the new downtown, the Armada Hoffer Tower, opened in 2003. The Westin Virginia Beach Town

²⁹ *The Beach*, 97-98.

³⁰ *The Beach*, 98-99.

³¹ <http://www.northamericanforts.com/East/varoads.html#ashby>

³² *The Beach*, 101-107.

³³ Mansfield, 213.

Center & Residences was completed in 2007 and, at 38 stories, became the tallest building in Virginia.

Historic Resources – Surveys

The basic source for information that is currently known about historic resources in Virginia Beach is from formal surveys that are conducted either specifically for that purpose or to comply with state and federal requirements related to construction project environmental review.

The Historic American Buildings Survey (HABS) began during the Great Depression in December 1933, when Charles E. Peterson of the National Park Service submitted a proposal for one thousand out-of-work architects to spend ten weeks documenting "America's antique buildings." HABS became a permanent program of the National Park Service in July 1934 and was formally authorized by Congress as part of the Historic Sites Act of 1935. Several buildings in Princess Anne County were surveyed during this program's early years, many of which have not survived.³⁴

In Virginia, the statewide survey has been underway for over 45 years. Today the Virginia Department of Historic Resources (DHR) receives the great majority of its new surveys from two sources: survey projects that are carried out to fulfill requirements for environmental review under Section 106 of the National Historic Preservation Act and survey projects performed under DHR's Survey and Planning Cost Share Program, which was initiated in 1991.

The first city-wide historic resource survey project sponsored by Virginia Beach took place in the late 1980s. Performed by local historian Florence Turner and Susan Taylor, a city staff member, the *City of Virginia Beach Inventory of Historic Buildings and Sites* (1990) listed 320 historic buildings and additional archaeological sites. The survey provided important information about the existing resources at that time, but it was not performed consistent with state survey criteria.

Virginia Beach took advantage of the new state cost share program and partnered with DHR in 1992 for a survey of architectural resources in the northern half of the city. *The Reconnaissance Architectural Survey Report City of Virginia Beach* (1992), prepared by Frazier Associates, was designed to expand survey work that DHR had completed in Virginia Beach in the 1960s and 1970s and to build on the city's survey done in the late 1980s. Buildings on land belonging to the state and federal governments were not included. The Frazier survey recorded one hundred seventy (170) buildings at the reconnaissance level and thirty (30) buildings at the intensive level.

One year later, Virginia Beach again partnered with DHR through the cost share program to survey architectural resources in the southern part of the city. *The Survey of the City of Virginia Beach Phase II* (1993), prepared by Traceries, was designed to provide a comprehensive survey of historic buildings and structures in the southern half of the city to complete the geographical survey coverage initiated by Frazier Associates the previous year. The Traceries survey recorded one hundred forty-three (143) buildings at the reconnaissance level and thirty-two (32) buildings at the intensive level.

Virginia Beach participated in a third architectural survey effort through the DHR cost share program that focused on documenting mail order kit houses from the first half of the 20th century in south Hampton Roads (other participating cities were Chesapeake, Norfolk, Portsmouth and Suffolk). *The Kit House in Southeastern Virginia* (2006), prepared by the William and Mary Center for Archaeological Research, was designed to document houses built from kits manufactured by

³⁴ <http://www.loc.gov/pictures/search/?q=virginia%20beach&co=hh&sg=true>

Sears, Roebuck and Company and other known kit home manufacturers in the five cities. The project identified and surveyed thirty-seven (37) kits homes in Virginia Beach, nearly half of which were located in the Oceana Gardens neighborhood.

Compliance for environmental review for highway and other projects utilizing federal and state funds includes requirements for surveys of architectural and archaeological resources. Not all of the properties surveyed for such projects are considered historic resources, but they are assigned state identification numbers and survey reports are provided to DHR and to the locality. Data from the various project reports has not yet been integrated into a single source in Virginia Beach.

There have not been any city-wide assessments of archaeological resources in Virginia Beach.

National Register of Historic Places/Virginia Landmarks Register

The National Register of Historic Places is the official list of the nation's historic places worthy of preservation. It was authorized by the National Historic Preservation Act of 1966 and is maintained by the National Park Service. The register is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect America's historic and archeological resources.³⁵

The Virginia Landmarks Register was also established in 1966 and is managed by DHR. It is the state's official list of properties important to Virginia's history. The same criteria are used to evaluate resources for inclusion in the state register as are used for the National Register.³⁶

There are twenty-two (22) historic buildings or structures and two (2) historic districts in Virginia Beach currently listed on the Virginia Landmarks Register and the National Register of Historic Places (see Figure 1). These recognized resources are representative of the varied architectural periods and styles that represent the rich history of the city. They include residential buildings from the early eighteenth century, such as the Lynnhaven and Keeling houses, to the twentieth-century homes like Greystone Manor and Briarwood. The need for protection of mariners along the coast is represented in a U.S. Coast Guard station and two lighthouses at Cape Henry. A colonial church, Old Donation, and grand 1920s hotel, The Cavalier, illustrate the importance of religion and tourism to the city. The two districts, First Landing State Park and Camp Pendleton, highlight the beauty of the city's natural resources and strategic location for military activities.

National Historic Landmarks are nationally significant historic places designated by the Secretary of the Interior because they possess exceptional value or quality in illustrating or interpreting the heritage of the United States. This program is also maintained by the National Park Service. Two of the National Register sites have been designated as National Historic Landmarks. The Adam Thoroughgood House was constructed circa 1719 and is one of the oldest surviving brick homes in Virginia. The Cape Henry Lighthouse was constructed in 1792 and was the first public works project funded by the United States of America.

³⁵ <http://www.nps.gov/nr/>

³⁶ <http://www.dhr.virginia.gov/registers/register.htm>

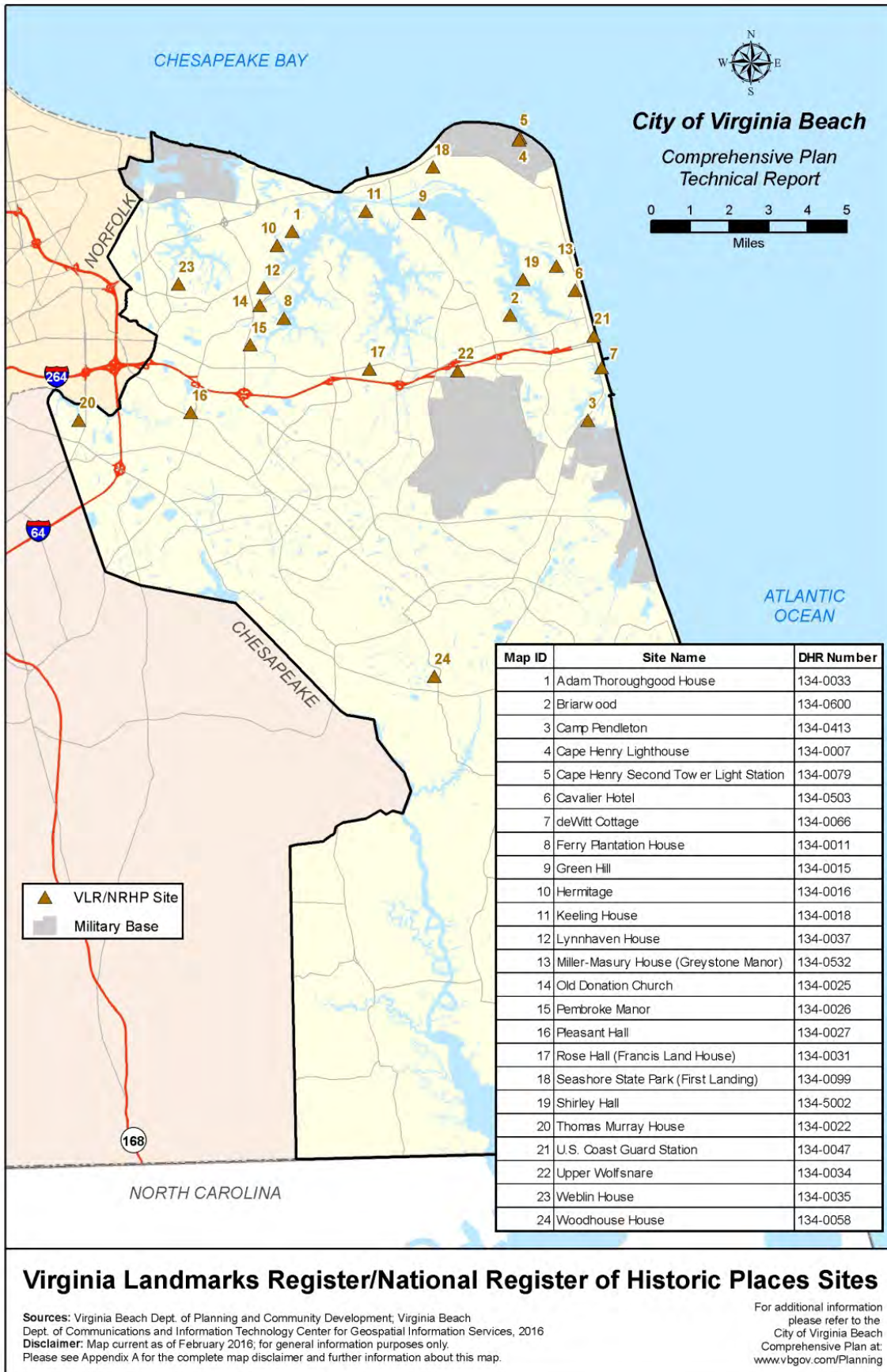


FIGURE 1

Historic Resources Management Plan

The data collected during the 1992 and 1993 architectural reconnaissance surveys served to enlighten city leaders about the volume and variety of historic resources that existed in Virginia Beach. A subsequent cost-share project with DHR was designed to develop a framework for strategies to encourage the retention of existing historic buildings.

The 1994 *Virginia Beach Historic Resources Management Plan* sought to create a framework that would:

- manage the preservation of historic resources to the mutual benefit of other City objectives (e.g., tourism, economic development, quality of life)
- increase the understanding and awareness of the wide range of significant historic resources which exist in the City
- involve the public in the process

Two public workshops were facilitated by PMA Consulting Services and involved citizens in the process of developing objectives and strategies for the plan. The plan is not a rigid set of guidelines or just a list of action items. It is a series of objective statements that are supported by strategic directions designed to form a management framework for the activities of the community and the municipal government.³⁷

The *Virginia Beach Historic Resources Management Plan* was adopted by reference as part of city's Comprehensive Plan. This plan can be viewed in the Department of Planning and Community Development online document library at www.vbgov.com/planning. It is scheduled for review and update beginning in 2016.

Virginia Beach Historical Register

One of the objectives stated in the *Virginia Beach Historic Resources Management Plan* is to initiate a program that recognizes significant historic resources and establishes a sense of public awareness and pride of how these resources relate to the history of the city and the region. The Virginia Beach Historical Register was established by City Council in 1999 to recognize buildings that are important to the history of Virginia Beach and its predecessor jurisdictions (*Virginia Beach City Code* Sec. 8-91). The program is voluntary and imposes no mandatory restrictions on the property or property owners.

Applications for consideration for placement of potentially historic properties on the Virginia Beach Historical Register can be found under related documents on the Historic Preservation Commission's page on the City's website at www.vbgov.com/historicpreservation.

Properties that qualify for the local register receive a certificate recognizing their placement on it and also receive a plaque that may be displayed on or near the historic building. A property may be removed from the register if changes are made to the building that compromises its historic nature and integrity or if it is demolished or destroyed.

There were 53 properties listed on the Virginia Beach Historical Register at the conclusion of the 2015 calendar year. The current list can be found under related documents on the Historic Preservation Commission's page on the City's website at www.vbgov.com/historicpreservation.

50 Most Historically Significant Houses and Structures in Virginia Beach

³⁷ *Virginia Beach Historic Resources Management Plan*, City of Virginia Beach, 1994

The Virginia Beach Historic Preservation Partnership was formed in 1999 to promote the preservation of historic places in Virginia Beach. The partnership was a combined effort of the Princess Anne County/Virginia Beach Historical Society, the Hampton Roads REALTORS® Association and the City of Virginia Beach. The primary goal of the organization was to establish a revolving fund to help preserve threatened historic properties. Although the fund never came to fruition, in 2008 the Preservation Partnership published an important booklet, *50 Most Historically Significant Houses and Structures in Virginia Beach*, to highlight the rich and varied architecture and history in Virginia Beach and to raise awareness of these valuable resources.

This publication can be found under related documents on the Historic Preservation Commission's page on the City's website at www.vbgov.com/historicpreservation.

Historic and Cultural Overlay Districts

First established by the Virginia Beach City Council in 1968, there are currently fourteen (14) Historic and Cultural Overlay Districts (see Figure 2). A district may include a general area or individual structures and premises officially designated as having historic or cultural significance. The City ordinance that addresses the Historic and Cultural Districts may be found in *Virginia Beach City Code* Appendix A - Zoning Ordinance Article 13.

The zoning ordinance states that it is the intent of the City Council to “protect the historic significance and integrity of the properties within historic and cultural districts that are or may be recognized for their association with historic events that have made a significant contribution to our history; are associated with historically significant persons; possess distinctive characteristics of a type, period, or method of construction or that represent the work of a master, possess high artistic values; or have the potential to yield significant archaeological or historical information.”³⁸

Protecting historical, architectural, archaeological and cultural resources in this manner is intended to “promote tourism and enhance local business and industry...; encourage sound stewardship of the city's historic resources and foster a sense of place in the city's residents; preserve and protect buildings, structures and properties which serve as visible reminders of the historic, cultural, and architectural or archaeological heritage of the City of Virginia Beach, the Commonwealth of Virginia, or the United States; and assure that, within the city's historic and cultural districts, new structures, additions, landscaping and related elements will be in harmony with their setting and environs.”³⁹

The majority of the current Historic and Cultural Districts encompass a single historic building and related buildings and structures. Two of the districts, Courthouse and Francis Land House, have multiple buildings, although only the Courthouse district contains more than one historically significant building. Maps of the individual districts can be found under related maps on the Historical Review Board's page on the City's website at <http://www.vbgov.com/government/departments/planning/boards-commissions-committees/Pages/historical-review-board.aspx>.

³⁸ *Virginia Beach City Code* Appendix A – Zoning Ordinance Sec. 1300(b)(1)

³⁹ *Virginia Beach City Code* Appendix A – Zoning Ordinance Sec. 1300(b)(2)-(5)

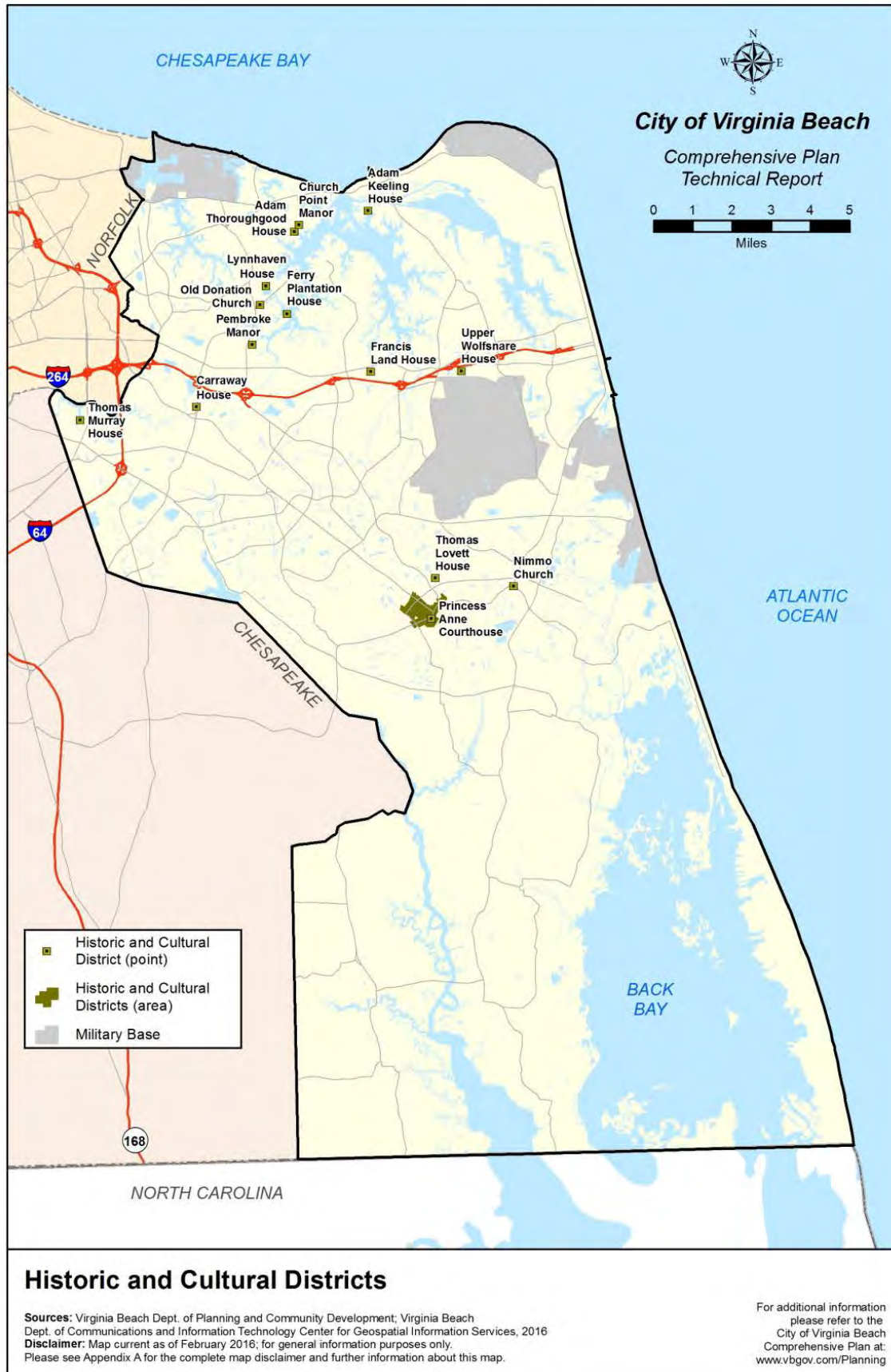


FIGURE 2

Historical Review Board

The Historical Review Board (HRB) is an 8-member body, appointed by the City Council, responsible for the review of requests for new development and exterior building changes within the Historic and Cultural Districts. The HRB determines when to issue a Certificate of Appropriateness, which is required before a building or demolition permit can be issued. The Historical Review Board evaluates the development proposal's compatibility in terms of design, materials and for consistency with adopted Historic District Design Guidelines.

Virginia Beach Historic Preservation Commission

The Virginia Beach Historic Preservation Commission (HPC) was established by City Council in 2008 for the purpose of advising the Council and the Departments of Museums and Planning and Community Development on all issues related to the preservation of historic buildings, structures, and sites located in the City of Virginia Beach. The mission of the commission is to preserve, protect and maintain the historic identity of Virginia Beach and the former Princess Anne County through a program of advocacy and increased public awareness and involvement.

The HPC is made up of citizens appointed by Council, as well as two student members from Virginia Beach high schools. It seeks public involvement in historic preservation. The HPC has hosted annual public meetings to inform interested citizens about historic preservation issues and to receive feedback from the public about their concerns regarding the city's historic resources.

The HPC has developed a network of historic property owners to discuss issues related to maintaining historic properties and share information about the availability of appropriate materials and skilled craftsmen for repair projects. It has utilized the network to promote Virginia Beach's history through an annual historic homes tour.

The HPC also assists the Department of Planning and Community Development in the management of the Virginia Beach Historical Register. The commission helps to promote the register to historic property owners. It reviews applications and determines what applicant properties are to be placed on the historical register.

Additional information about the HPC may be found on the City's website at www.vbgov.com/historicpreservation.

Financial Incentive Opportunities

The vast majority of historic resources in Virginia Beach are privately owned. In order to encourage the preservation of these resources and to reward property owners who take proper care of their historic properties, financial incentives have been established at the local, state and federal levels for the rehabilitation of qualifying buildings.

In Virginia Beach, property owners of buildings that are listed on the Virginia Landmarks Register automatically qualify for a reduction in the real estate tax on their historic building. In fiscal year 2015/16 the rate is \$0.52 on each \$100 of assessed valuation.⁴⁰ A partial tax exemption or abatement is also available for a fixed number of years for rehabilitation of historically significant buildings. To qualify for this program, the building must be listed on the Virginia Beach Historical

⁴⁰ *City of Virginia Beach Resource Management Plan Operating Budget (Adopted) FY 2015-16, Section 10 Budget Ordinances, Amount of Levy on Properties Listed in the Virginia Landmarks Register, 453.*

Register. The exemption for historically significant rehabilitated structures is established in *Virginia Beach City Code* Sec. 35-80.1.

Through the federal and state rehabilitation tax credit programs, property owners are given substantial incentives for private investment in preservation. Both the federal and state tax credit programs are administered in Virginia through the DHR. State tax credits are available for owner-occupied, as well as income-producing buildings. Federal tax credits are available for income-producing properties.⁴¹

Preservation Easements

Many owners of historic landmarks are concerned about the future of their properties and want to ensure the proper stewardship of these resources beyond their tenure. In 1966 the Commonwealth of Virginia instituted the Virginia Historic Preservation Easement Program, providing a tool that would enable historic landmarks to enjoy long-term legal protection while remaining in private ownership.

Through the easement program, a private owner has the opportunity to guarantee the perpetual protection of an important historic resource without giving up ownership, use, or enjoyment of the property. While the landmark remains in private hands and on the tax rolls, its existence and sympathetic treatment are secured for the benefit of future generations. Furthermore, the property owner can often take advantage of significant financial benefits associated with an easement donation.⁴²

As of 2016 there are six (6) historic properties in Virginia Beach that are protected by historic preservation easements held by the Commonwealth of Virginia (see Figure 3).

⁴¹ http://www.dhr.virginia.gov/tax_credits/tax_credit.htm

⁴² <http://www.dhr.virginia.gov/easement/easement.htm>

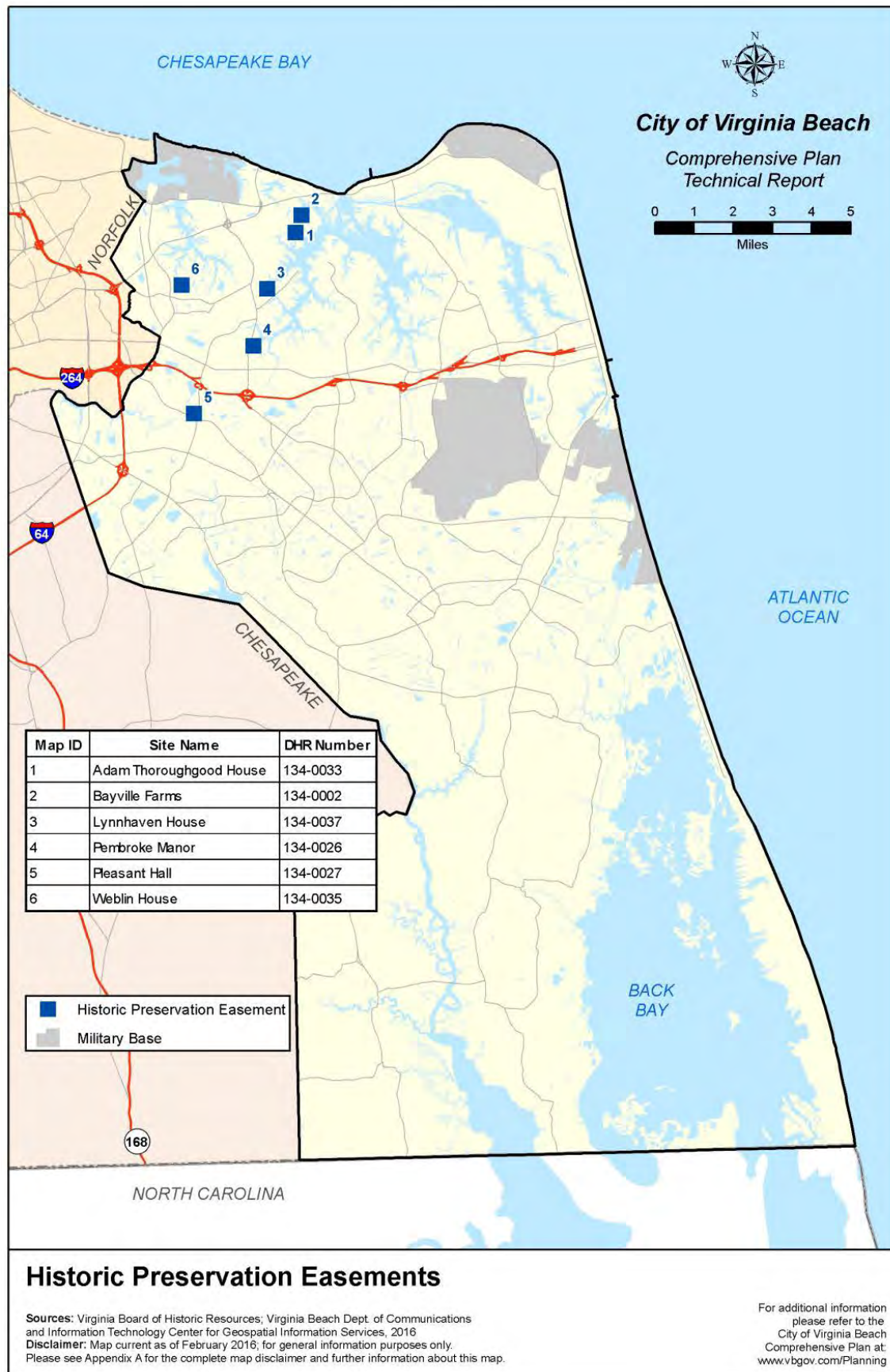


FIGURE 3

Virginia Century Farm Program

The Virginia Century Farm Program recognizes and honors those farms that have been in operation for at least 100 consecutive years, and the generations of Virginia farm families whose diligent and dedicated efforts have maintained these farms, provided nourishment to their fellow citizens and contributed so greatly to the economy of the Commonwealth. As of December 2015 the following Virginia Beach farms were recognized by this program:⁴³

- Aygarn Farm
- Dozier Farm
- Heritage Plantation
- Vaughan Farm

Princess Anne County/Virginia Beach Historical Society

The Princess Anne County/Virginia Beach Historical Society was chartered in February 1961, and the first full membership meeting was held on September 27, 1961. Later, the Society expanded its name to reflect the 1963 merger of Princess Anne County with the City of Virginia Beach, becoming “The Princess Anne County/Virginia Beach Historical Society.”

The Historical Society has been instrumental in the preservation of local historical sites. Other initiatives have included educational programs, neighborhood and community programs, support for historical publications, and participation in the Preservation Partnership.⁴⁴

Historical Documents Research

Additional information, historical documents and reference materials on local history and historic resources may be found in the following locations:

- a. Clerk of Virginia Beach Circuit Court, 2425 Nimmo Parkway Building 10, 3rd Floor
- b. The Meyera E. Oberndorf Central Library, 4100 Virginia Beach Boulevard, holds 11,000 books in its Local History and Genealogy Collection. The Virginia Beach Archives is also housed in this facility.
- c. The Stephen S. Mansfield Archives at Virginia Wesleyan College is located in the Henry Clay Hofheimer II Library on the college campus, 1584 Wesleyan Drive. It includes collections relevant to Virginia Beach history.
- d. The Sargeant Memorial Collection, located in the Slover Library, 235 E. Plume Street in Norfolk, is the region’s premier local history and genealogy collection. The photographs and other materials in the database are intended to help document the history and cultural heritage of Norfolk, the surrounding Hampton Roads region, the Commonwealth of Virginia, and northeastern North Carolina.

⁴³ <http://www.vdacs.virginia.gov/conservation-century-farms-virginia-beach.shtml>

⁴⁴ <http://virginiabeachhistory.org/societyhistory.html>

CHAPTER 11. CULTURAL ARTS

Named the best place to live in America by *USA Today Weekend*, Virginia Beach offers its residents, and the millions of tourists who visit annually, a lifestyle unmatched by any other major American city. Virginia Beach has a growing arts scene with distinctive cultural assets, emerging and exciting creative sector businesses, public art, outdoor music and arts festivals, and a new arts district. All of which bind our community together by creating shared experiences and a special place to live and visit.

The arts are an important industry in our City. A flourishing creative industry in Virginia Beach impacts much more than the employment of artists. It increases the city's tax base by generating admission, meal and hotel taxes. It improves the quality of life of its residents by offering unique experiences to residents and visitors and attracts a talented workforce to Virginia Beach.

Arts Plan 2030

In fall 2015, the Virginia Beach City Council adopted the *Arts Plan 2030* <http://www.vbgov.com/government/departments/cultural-affairs/Pages/Arts-Plan-2030.aspx>

culminating of a year-long process of listening to our community, assessing our cultural strengths and weaknesses, and analyzing forces, trends and models to provide a blueprint for Virginia Beach's cultural development over the next 15 years. Over just six months, hundreds of individuals contributed to the Plan through meetings, interviews, events and surveys through the City's website.

The Plan is more than a guide for city government – it's a Call to Action for the private sector, residents, civic leaders, local arts groups to adopt these recommendations to create a more vibrant Virginia Beach through arts and culture.

The following goals and strategies were identified in the *Arts Plan 2030*:

GOAL 1. Expand Public Art Programming

- High Priority: Public Art and Place-making

GOAL 2. Strengthen & Establish Different and Distinctive Cultural Districts

- High Priority: Advance ViBe as a Cultural and Creative District
- Medium Priority: Establish Town Center Arts & Entertainment District

GOAL 3. Encourage Culturally Relevant Programming

- High Priority: Multi Cultural Programming + Facilities

GOAL 4. Strengthen the Arts Community

- High Priority: Modify City Policy and Practices to support cultural development
- Medium Priority: Shared Resources

GOAL 5. Support Smaller- Scale Performance + Arts Education

- Medium Priority: Develop Small-scale Cultural Space at Town Center
- Low Priority: Develop Digital Media Facilities
- Medium Priority: Develop Facilities for Emerging Artists

GOAL 6. Improve the Value, Impact and Sustainability of the Sandler Center

- Medium Priority: Expand the Sandler Center

GOAL 7. Promote Virginia Beach as a Cultural and Creative Community

- Medium Priority: Position the Oceanfront as a Cultural Destination
- Medium Priority: Promote Identity as Cultural Community

GOAL 8. Expand Arts Infrastructure

- Cultural Affairs, Arts & Humanities Commission

GOAL 9. Increase Funding for Arts Development

- State, City, Private Sector

For more information about the City's various cultural arts facilities and programs, visit the Cultural Affairs Office online at: <http://www.vbgov.com/government/departments/cultural-affairs/Pages/default.aspx>

The ViBe Creative District

Recognizing that arts and cultural are imperative for economic growth and neighborhood revitalization, the City of Virginia Beach established its first arts and culture district in the Central Beach area of the Oceanfront in April 2015. The ViBe Creative District, focusing on local and regional working artists and related retail, has emerged as a vibrant center for the arts and culture in Virginia Beach that stimulates commerce and enhances the quality of life for citizens of Virginia Beach and visitors. See Figure 1 for a location map of the ViBe Creative District.

A number of newly created incentives are available for creative businesses and property owners interested in locating within the District.

What qualifies as a creative business?

- *Visual Arts & Performing Arts*
- *Architecture*
- *Culinary Arts*
- *Advertising & Graphic Design*
- *Fashion Design*
- *Film and other media*
- *Software*
- *Music*
- *Publishing*
- *Renewable Energy Technology*

The following incentives are available from the City to encourage the growth of the ViBe Creative Arts District:

- Reimbursement of business, professional and occupational license taxes
- Reimbursement of building code/zoning fees including conditional use permits and alternative compliance fees
- Partial real estate tax exemption for rehabilitated structures (for property owners)

For more information on the ViBe Creative District and incentives, visit: <http://www.vbgov.com/government/departments/cultural-affairs/Pages/ViBe-Creative-District.aspx> or contact the Virginia Beach Cultural Affairs Office.

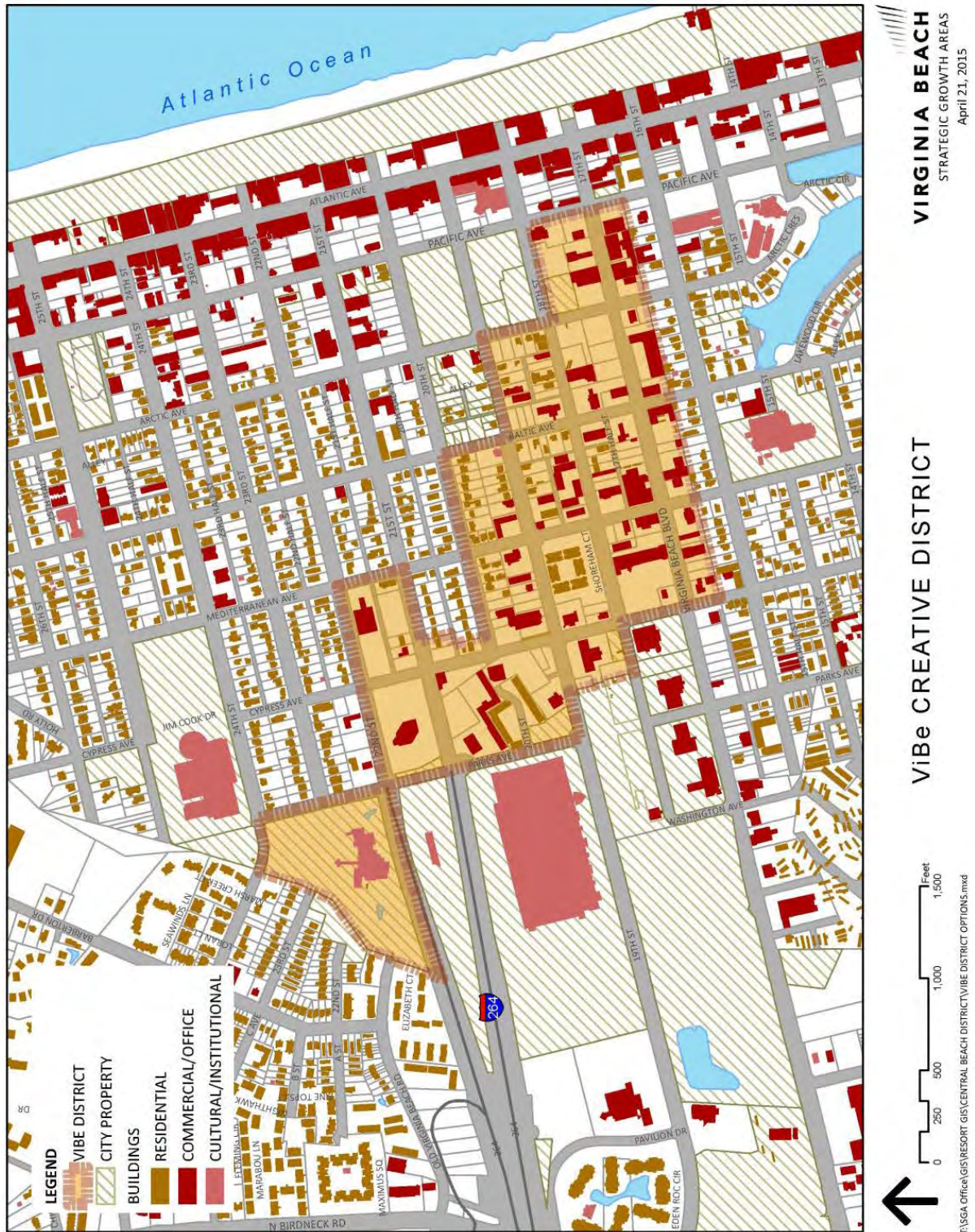


FIGURE 1

APPENDICES

Appendix A - Technical Report Map General Disclaimer and Source Information

Appendix B - Southern Rural Area Soils Map

Appendix C - Southern Rivers Watershed Map

APPENDIX A - TECHNICAL REPORT MAP INFORMATION

General Disclaimer

Maps and data contained in this report are provided “as is” and are for information purposes only. Therefore, the City of Virginia Beach expressly disclaims all warranties, UCC, and otherwise expressed or implied, including particular purpose, and further expressly disclaims responsibility for all incidentals, consequential or special damages arising out of or in connection with the use or performance of the data. The user acknowledges the disclaimer of warranty and waives all warranties expressed or implied and waives any right of claim for damages incidental, consequential, or special arising out of or in connection with the use or performance of the data.

Caution: These maps represent approximate locations and values and are subject to mapping projection and compilation error(s). These mapping products are not legal surveys and therefore cannot be used to determine private/public property locations, for engineering/construction site design or for final flood zones determination.

Source Information

The following information provides data sources for the maps contained in this Technical Report. The information shown on the map may be updated on a regular basis. Consult the map layer and data source(s) referenced for the most up-to-date information available on the map.

Agriculture

Map Name	Agricultural Reserve Program Enrolled Parcels
Map Layers	ARP Parcels as of Feb. 2016
Layer Sources	Virginia Beach Dept. of Agriculture
Data Source URL 1	http://gis.vbgov.opendata.arcgis.com

Economic Vitality

Map Name	Commerce Parks
Map Layers	Industrial and Business Parks
Layer Sources	Virginia Beach Dept. of ComIT
Data Source URL 1	http://gis.vbgov.opendata.arcgis.com

Environment

Map Name	100 Year Floodplain with Special Restricted Areas
Map Layers	100 Year Floodplain with Special Restricted Areas
Layer Sources	FEMA; Virginia Beach Dept. of Planning and Community Development
Data Source URL 1	https://msc.fema.gov/portal
Data Source URL 2	http://gis.vbgov.opendata.arcgis.com

Map Name	Active Borrow Pit Locations
Map Layers	Active Borrow Pit Locations
Layer Sources	Virginia Department of Mines, Minerals, and Energy
Data Source URL 1	https://www.dmme.virginia.gov/webmaps/DMM/

Map Name	Back Bay National Wildlife Refuge Current and Expansion Boundary
Map Layers	Back Bay National Wildlife Refuge Current and Expansion Boundary
Layer Sources	National Fish and Wildlife Service

Data Source URL 1	http://www.fws.gov/gis/data/CadastralDB/index_cadastral.html
Map Name	Bird Sanctuary and Conservation Areas
Map Layers	Bird Sanctuary and Conservation Areas
Layer Sources	City of Virginia Beach Code
Data Source	
URL	https://www.municode.com/library/va/virginia_beach/codes/code_of_ordinances?nodeId=CO_CH5ANFO_ARTVIBISA
Map Name	Champion Tree Locations
Map Layers	Federal, State, City Champion Trees
Layer Sources	Virginia Big Tree Database
Data Source URL 1	http://bigtree.cnre.vt.edu/bigtree_search.cfm
Map Name	City Open Space Areas
Map Layers	City Open Space Areas
Layer Sources	Virginia Beach Dept. of Parks and Recreation
Data Source URL 1	http://gis.vbgov.opendata.arcgis.com
Map Name	Federal, State, and Private Open Space Areas
Map Layers	Federal, State, and Private Open Space Areas
Layer Sources	Virginia Department of Conservation and Recreation
Data Source URL 1	http://www.dcr.virginia.gov/natural-heritage/clinfo#use
Map Name	Natural Heritage Areas
Map Layers	Natural Heritage Areas
Layer Sources	Virginia Dept. of Conservation and Recreation
Data Source URL 1	http://www.dcr.virginia.gov/natural-heritage/infoservices#digdata
Map Name	Preferred Shoreline Buffer Protection Recommendation
Map Layers	Preferred Shoreline Buffer Protection Recommendation
Layer Sources	Virginia Institute of Marine Science
Data Source URL 1	http://ccrm.vims.edu/ccrmp/va_beach/bmp.html
Map Name	Primary and Secondary Watersheds
Map Layers	Primary and Secondary Watersheds
Layer Sources	Virginia Beach Dept. of Planning and Community Development
Data Source URL 1	http://gis.vbgov.opendata.arcgis.com
Map Name	Projected Sea Level Rise Inundation Zones
Map Layers	1.5 and 3.0' Sea Level Rise Extents
Layer Sources	Sea Level Rise forecasts from Virginia Institute of Marine Sciences; mapping prepared by Virginia Beach ComIT CGIS and reviewed by Dept. of Public Works.
Map Description	This map depicts a simple 'bath tub' contour model of changes to the extent of surface waters in the event of a 1.5 foot and 3.0 foot rise in sea level. These elevated levels are consistent with the 2013 Virginia Institute of Marine Sciences report to the Virginia General Assembly "Recurrent Flooding Study for Tidewater Virginia (SJR 76, 2012). That report contained the recommendation that, based on available science, the Commonwealth should plan on a range of 1.5 to 3 feet of sea level rise by the year 2050. The

elevation used to represent the Sea Level Rise extent portrayed in this map is based on Mean Sea Level (MSL), National Geodetic Vertical Datum of 1929 (NGVD 29) (72 Adjustment) datum. As the current elevation datum employed by the City of Virginia Beach is based on North American Vertical Datum of 1988 (NAVD88) a conversion factor of -0.82' was used to determine the NAVD88 elevation for MSL. This conversion factor was determined by comparison of known differences between the two datum's at eleven locations spanning from north to south and east to west throughout the city. The arithmetic average of the differences computes such that NAVD88 is 0.82' lower than NGVD 29 (72 adj.) The differences varied no more than 0.10' from the average for any station. These elevations are estimates of surface conditions and are not verified.

Map Name	Shoreline Structure Inventory
Map Layers	Shoreline Structure Inventory
Layer Sources	Virginia Institute of Marine Sciences (VIMS)
Data Source URL 1	http://ccrm.vims.edu/gis_data_maps/shoreline_inventories/virginia/virginia_beach/va_bch_disclaimer.html

Map Name	Stormwater Drainage Basins
Map Layers	Stormwater Drainage Basins
Layer Sources	Virginia Beach Dept. of Public Works
Data Source URL 1	http://gis.vbgov.opendata.arcgis.com

Map Name	Tidal and Non-tidal Wetlands
Map Layers	Tidal and Non-tidal Wetlands
Layer Sources	National Wetlands Inventory, 2015
Data Source URL 1	http://www.fws.gov/wetlands/Data/Data-Download.html

Map Name	Urban Tree Canopy
Map Layers	Land cover with urban tree canopy
Layer Sources	University of Vermont Spatial Analysis Laboratory
Map Description	This land cover dataset was developed as part of the Urban Tree Canopy (UTC) Assessment for Virginia Beach, VA. As such, it represents a "top down" mapping perspective in which tree canopy over hanging other features is assigned to the tree canopy class.

Map Name	Water Access Points
Map Layers	Water Access Points
Layer Sources	Virginia Beach Dept. of Parks and Recreation
Data Source URL 1	http://gis.vbgov.opendata.arcgis.com

Map Name	Water Quality - Major Groundwater Withdrawals
Map Layers	Major Groundwater Withdrawals
Layer Sources	Hampton Roads Planning District Commission
Data Source URL 1	http://www.hrpdcva.gov/departments/waterresources/groundwater-research-&-analysis/

Map Name Water Quality - Stormwater Management Facility Service Areas
 Map Layers BMP Drainage Areas
 Layer Sources Virginia Beach Dept. of Public Works
 Data Source URL 1 <http://gis.vbgov.opendata.arcgis.com>

Historic Resources

Map Name Historic and Cultural Districts
 Map Layers Historic and Cultural Districts
 Layer Sources Virginia Beach Dept. of Planning and Community Development
 Data Source URL 1 <http://gis.vbgov.opendata.arcgis.com>

Map Name Historic Preservation Easements
 Map Layers Historic Preservation Easements
 Layer Sources Virginia Board of Historic Resources

Map Name Virginia Landmarks Register/National Register of Historic Places Sites
 Map Layers Historic Places Sites
 Layer Sources Virginia Landmarks Register/National Register of Historic Places Sites

Housing and Neighborhoods

Map Name Senior Housing Facilities
 Map Layers Senior Housing Facilities
 Layer Sources Virginia Beach Dept. of Planning and Community Development

Land Use

Map Name 2010 Land Use
 Map Layers Tax Parcels with Property Class Codes, Feb. 2010; Property Class Codes to Land Use Class Crosswalk
 Layer Sources Virginia Beach Dept. of Planning and Community Development; Virginia Beach Dept. of ComIT
 Map Description Property class codes associated with every tax parcel were assigned to land use classes. Water areas were excluded from parcel boundaries. Furthermore, parcel boundaries typically don't include right of ways.

Map Name Air Installation Compatible Use Zone (AICUZ) and Sub-Areas
 Map Layers Air Installation Compatible Use Zone (AICUZ) and Sub-Areas
 Layer Sources Virginia Beach Dept. of Planning and Community Development
 Data Source URL 1 <http://gis.vbgov.opendata.arcgis.com>

Map Name Current Land Use
 Map Layers Tax Parcels with Property Class Codes, Jan. 2016; Property Class Codes to Land Use Class Crosswalk
 Layer Sources Virginia Beach Dept. of Planning and Community Development; Virginia Beach Dept. of ComIT
 Map Description Property class codes associated with every tax parcel were assigned to land use classes. Water areas were excluded from parcel boundaries. Furthermore, parcel boundaries typically don't include right of ways.

Map Name	Noise Zones 65-70 dB DNL Sub-Areas
Map Layers	Noise Zones 65-70 dB DNL Sub-Areas
Layer Sources	Virginia Beach Dept. of Planning and Community Development
Data Source URL 1	http://gis.vbgov.opendata.arcgis.com

Public Facilities

Map Name	Elementary School Sites
Map Layers	Elementary School Sites
Layer Sources	Virginia Beach Public Schools
Data Source URL 1	http://gis.vbgov.opendata.arcgis.com

Map Name	Fire and EMS Facilities
Map Layers	Fire and EMS Facilities
Layer Sources	Virginia Beach Dept. of ComIT
Data Source URL 1	http://gis.vbgov.opendata.arcgis.com

Map Name	High School Sites
Map Layers	High School Sites
Layer Sources	Virginia Beach Public Schools
Data Source URL 1	http://gis.vbgov.opendata.arcgis.com

Map Name	Library Facilities
Map Layers	Library Facilities
Layer Sources	Virginia Beach Dept. of ComIT
Data Source URL 1	http://gis.vbgov.opendata.arcgis.com

Map Name	Middle School Sites
Map Layers	Middle School Sites
Layer Sources	Virginia Beach Public Schools
Data Source URL 1	http://gis.vbgov.opendata.arcgis.com

Map Name	Police Precincts
Map Layers	Police Precincts
Layer Sources	Virginia Beach Dept. of ComIT
Data Source URL 1	http://gis.vbgov.opendata.arcgis.com

Map Name	Public Parks and Recreation Sites
Map Layers	Public Parks and Recreation Sites
Layer Sources	Virginia Beach Dept. of Parks and Recreation
Data Source URL 1	http://gis.vbgov.opendata.arcgis.com

Map Name	Scenic Waterways and Water Access Sites
Map Layers	Scenic Waterways and Water Access Sites
Layer Sources	Virginia Beach Dept. of Planning and Community Development; Virginia Beach Dept. of Parks and Recreation

Map Name	Schools to be Modernized or Replaced
Map Layers	Schools to be Modernized or Replaced
Layer Sources	Virginia Beach Public Schools

Transportation

Map Name Carless Transit Focus Areas
 Map Layers General Transit Routes, Max Transit Routes, Seasonal Transit Routes, Carless Transit Focus Areas
 Layer Sources Hampton Roads Transit, U.S. Census American Community Survey
 Map Description Location of public transportation routes in relation “Carless Transit Focus Areas” (Census block groups with 150% or greater of the average of carless households for the City of Virginia Beach).

Data Source URL 1 www.gohrt.com
 Data Source URL 2 <http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml?ts=474564519295>

Map Name City of Virginia Beach Bikeways and Trails
 Map Layers Existing Facilities
 Layer Sources Virginia Beach Dept. of Parks and Recreation
 Data Source URL 1 <http://www.vbgov.com/government/departments/parks-recreation/parks-trails/Documents/bikeways-trails-map.pdf>

Map Name City of Virginia Beach Trails Plan central section
 Map Layers Planned Facilities
 Layer Sources Virginia Beach Dept. of Parks and Recreation
 Data Source URL 1 <http://www.vbgov.com/government/departments/parks-recreation/design-development-projects/Documents/BTP/06-central.pdf>

Map Name City of Virginia Beach Trails Plan northern section
 Map Layers Planned Facilities
 Layer Sources Virginia Beach Dept. of Parks and Recreation
 Data Source URL 1 <http://www.vbgov.com/government/departments/parks-recreation/design-development-projects/Documents/BTP/06-northern.pdf>

Map Name City of Virginia Beach Trails Plan southern section
 Map Layers Planned Facilities
 Layer Sources Virginia Dept. of Parks and Recreation

Map Name Elderly Transit Focus Areas
 Map Layers General Transit Routes, Max Transit Routes, Seasonal Transit Routes, Elderly Transit Focus Areas
 Layer Sources Hampton Roads Transit, U.S. Census American Community
 Map Description Location of public transportation routes in relation “Elderly Transit Focus Areas” (Census block groups with 150% or greater of the average of population 65 and older for the City of Virginia Beach).

Data Source URL 1 www.gohrt.com
 Data Source URL 2 <http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml?ts=474564519295>

Map Name Paratransit Service to Focus Areas and Points
 Map Layers General Transit Routes, Max Transit Routes, Seasonal Transit Routes, Elderly Transit Focus Areas, Transit Focus Points

Layer Sources Hampton Roads Transit, U.S. Census American Community
Map Description Location of public paratransit service in relation “Elderly Transit Focus Areas” (Census block groups with 150% or greater of the average of population 65 and older for the City of Virginia Beach) and “Transit Focus Points” (Identified adult daycares, assisted living, dialysis centers, hospitals, human services, nursing homes, and senior residences).

Data Source URL 1 www.gohrt.com

Data Source URL 2 <http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml?ts=474564519295>

Map Name Poverty Transit Focus Areas
Map Layers General Transit Routes, Max Transit Routes, Seasonal Transit Routes, Poverty Transit Focus Areas

Layer Sources Hampton Roads Transit, U.S. Census American Community

Data Source URL 1 www.gohrt.com

Data Source URL 2 <http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml?ts=474564519295>

Urban

Map Name Burton Station SGA - December New Building Permits, 1/01/2010 to 12/14/2015

Map Layers Building Permits, SGA Boundaries

Layer Sources Virginia Beach Dept. of Planning and Community Development
Permits and Inspections Division; Virginia Beach Dept. of ComIT CGIS

Data Source URL 1 <http://www.vbgov.com/government/departments/planning/permits-inspections/Pages/Virginia-Beach-Weekly-Construction.aspx>

Data Source URL 2 <http://gis.vbgov.opendata.arcgis.com>

Map Name Centerville SGA - December New Building Permits, 1/01/2010 to 12/14/2015

Map Layers Building Permits, SGA Boundaries

Layer Sources Virginia Beach Dept. of Planning and Community Development
Permits and Inspections Division; Virginia Beach Dept. of ComIT
CGIS

Data Source URL 1 <http://www.vbgov.com/government/departments/planning/permits-inspections/Pages/Virginia-Beach-Weekly-Construction.aspx>

Data Source URL 2 <http://gis.vbgov.opendata.arcgis.com>

Map Name Hilltop SGA - December New Building Permits, 1/01/2010 to 12/14/2015

Map Layers Building Permits, SGA Boundaries

Layer Sources Virginia Beach Dept. of Planning and Community Development
Permits and Inspections Division; Virginia Beach Dept. of ComIT
CGIS

Data Source URL 1 <http://www.vbgov.com/government/departments/planning/permits-inspections/Pages/Virginia-Beach-Weekly-Construction.aspx>

Data Source URL 2 <http://gis.vbgov.opendata.arcgis.com>

Map Name	Lynnhaven SGA - December New Building Permits, 1/01/2010 to 12/14/2015
Map Layers	Building Permits, SGA Boundaries
Layer Sources	Virginia Beach Dept. of Planning and Community Development Permits and Inspections Division; Virginia Beach Dept. of ComIT CGIS
Data Source URL 1	http://www.vbgov.com/government/departments/planning/permits-inspections/Pages/Virginia-Beach-Weekly-Construction.aspx
Data Source URL 2	http://gis.vbgov.opendata.arcgis.com
Map Name	Newtown SGA - December New Building Permits, 1/01/2010 to 12/14/2015
Map Layers	Building Permits, SGA Boundaries
Layer Sources	Virginia Beach Dept. of Planning and Community Development Permits and Inspections Division; Virginia Beach Dept. of ComIT CGIS
Data Source URL 1	http://www.vbgov.com/government/departments/planning/permits-inspections/Pages/Virginia-Beach-Weekly-Construction.aspx
Data Source URL 2	http://gis.vbgov.opendata.arcgis.com
Map Name	Pembroke SGA - December New Building Permits, 1/01/2010 to 12/14/2015
Map Layers	Building Permits, SGA Boundaries
Layer Sources	Virginia Beach Dept. of Planning and Community Development Permits and Inspections Division; Virginia Beach Dept. of ComIT CGIS
Data Source URL 1	http://www.vbgov.com/government/departments/planning/permits-inspections/Pages/Virginia-Beach-Weekly-Construction.aspx
Data Source URL 2	http://gis.vbgov.opendata.arcgis.com
Map Name	Resort Area SGA - December New Building Permits, 1/01/2010 to 12/14/2015
Map Layers	Building Permits, SGA Boundaries
Layer Sources	Virginia Beach Dept. of Planning and Community Development Permits and Inspections Division; Virginia Beach Dept. of ComIT CGIS
Data Source URL 1	http://www.vbgov.com/government/departments/planning/permits-inspections/Pages/Virginia-Beach-Weekly-Construction.aspx
Data Source URL 2	http://gis.vbgov.opendata.arcgis.com

Map Name	Rosemont SGA - December New Building Permits, 1/01/2010 to 12/14/2015
Map Layers	Building Permits, SGA Boundaries
Layer Sources	Virginia Beach Dept. of Planning and Community Development Permits and Inspections Division; Virginia Beach Dept. of ComIT CGIS
Data Source URL 1	http://www.vbgov.com/government/departments/planning/permits-inspections/Pages/Virginia-Beach-Weekly-Construction.aspx
Data Source URL 2	http://gis.vbgov.opendata.arcgis.com

Appendix C – Southern Rivers Watershed Map

Map Name	Southern Rivers Watershed
Map Layers	Southern Rivers Watershed Boundary
Layer Sources	Virginia Beach Dept. of Planning and Community Development
Data Source URL 1	http://gis.vbgov.opendata.arcgis.com

Map Name	Southern Rural Area Soils
Map Layers	Soil Areas
Layer Sources	USDA NRCS, Virginia Beach Dept. of Planning and Community Development

APPENDIX B - SOUTHERN RURAL AREA SOILS

SOIL AREA #1

This soil area generally includes the following soil types:

- Bojac fine sandy loam
- Munden fine sandy loam
- State loam, 0 - 2 percent slopes
- Tetotum loam

This area consists of nearly level Well Drained and Moderately Well Drained soils. The seasonal high water table ranges from 1.5 to more than 4 feet. These characteristics are consistent with soil types identified in General Soil Area #1. Bojac and State soils generally are suitable for conventional septic systems on one acre lots. Munden and Tetotum soils may be suitable for septic systems on one acre lots installed using available technologies, such as elevated sand mounds and sand filters. In every case, a site specific evaluation is required by the Virginia Department of Health.

SOIL AREA #2

This soil area generally includes the following soil types:

- Acredale silt loam
- Augusta loam
- Dragston fine sandy loam
- Hyde silt loam
- Nimmo loam
- Portsmouth loam
- Tomotley loam

This area is dominated by nearly level, Somewhat Poorly, Poorly and Very Poorly Drained soils. The seasonal high water table ranges from 0 to 1.5 feet. These characteristics are consistent with the soil types identified within General Soil Area #2. These soils are usually appropriate for Soil Drainage Management, sometimes called "Land Management."

SOIL AREA #3

Includes General Soil Area #2 characteristics within the 100-year floodplain and generally below the 5' mean sea level elevation. Within this area, the Virginia Department of Health requires each lot to be evaluated to determine suitability for a septic system and the size and type of system to be installed. This evaluation is conducted by a Certified Soil Scientist and conformation borings are conducted by the Virginia Department of Health.

WET SOILS

Wet soils consist of non-tidal wetlands, as defined in the City of Virginia Beach Zoning Ordinance, Chesapeake Bay Preservation Area Ordinance, and the Southern Rivers Watershed Management Ordinance. Non-tidal wetlands are wetlands other than tidal wetlands that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that

under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions identified or referred to in the City of Virginia Beach Soil Survey by soil names as follows:

- Backbay mucky peat
- Duckston portion of Corolla-Duckston fine sand
- Dorovan mucky peat
- Duckston fine sand
- Nawney silt loam
- Pamlico mucky peat
- Pamlico-Lakehurst variant complex
- Pocaty peat
- Rappahannock mucky peat, strongly saline
- any other lands which under normal conditions are saturated to the ground surface and connected by surface flow and contiguous to tidal wetlands or adjacent to waterbodies with perennial flow

Wet soils are unacceptable for development and septic field use.

Notes:

1. Assign density potential based on land area and soil quality in the following manner through the use of conditional use permits. In areas comprising high quality soils (Soil Area #1), maximum rural residential development is calculated at 1 dwelling unit for every 5 acres of land. Within areas of lesser quality soils (Soil Area #2), this density is calculated at 1 dwelling unit for every 10 acres of land. A map depicting the general location of these soil areas is available from the Department of Planning. Should site specific differences occur between the location of soils shown on this map and actual field test results, the City will recognize as valid such field test findings, when certified by a qualified soil scientist and confirmed by the Department of Health.
2. Broad areas of soils are shown on the general soil map and the location of each soil is shown on the detailed soil map, both of which are presented in the 1985 issue of the Virginia Beach Soil Survey. Since soils are natural bodies, a given designation may actually contain a variety of soil types. On site evaluation by a Certified Soil Scientist may be needed to determine the exact soil boundaries on a given tract of land.

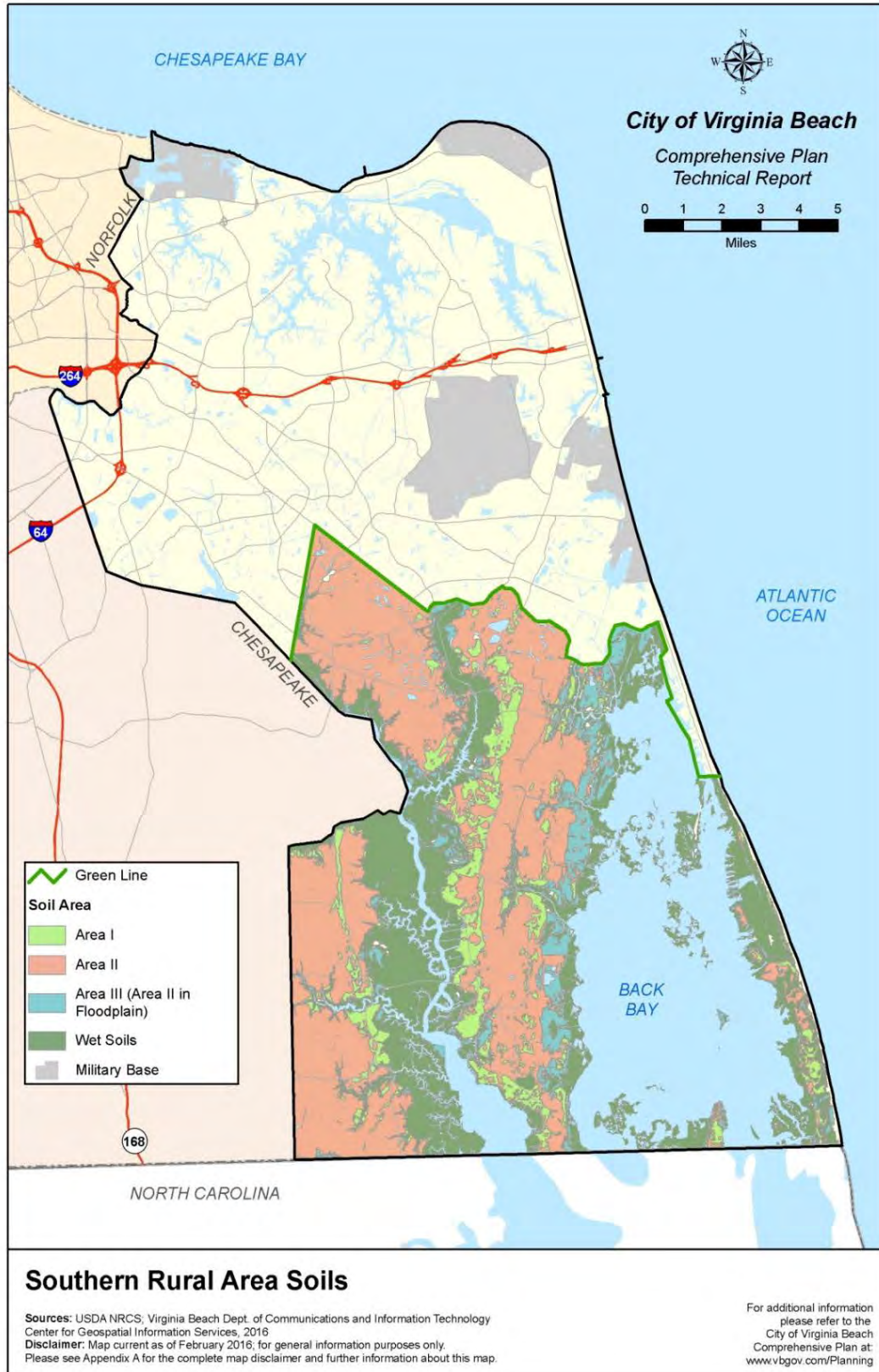


FIGURE 1

APPENDIX C - SOUTHERN RIVERS WATERSHED MAP

FIG
UR
E 2

