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Shore Memorial Hospital

2016 Community Health Needs Assessment and Implementation Plan

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This Community Health Needs Assessment and Implementation Strategy for Riverside Shore Memorial Hospital was conducted and developed between February 17, 2016 and August 1, 2016 to fulfill the requirements described in section 501(r)(3) of the Internal Revenue Code. It was formally approved and adopted by the Riverside Shore Memorial Hospital Board of Directors on August 23, 2016.

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COMMUNITY HEALTH NEEDS ASSESSMENT

Introduction

Riverside Shore Memorial Hospital is part of Riverside Health System, with a mission to "care for others as we would care for those we love." While Riverside cares for its patients every day, it recognizes that caring for others can often mean those who are not in our hospital. As the only hospital on Virginia's Eastern Shore, Riverside Shore Memorial Hospital understands it has a unique and important role in caring for the health of its community. Conducting a Community Health Needs Assessment allows Riverside to see the community as a broader population, and better understand the unique needs, concerns and priorities of the community it serves.

Community Health Needs Assessment Process

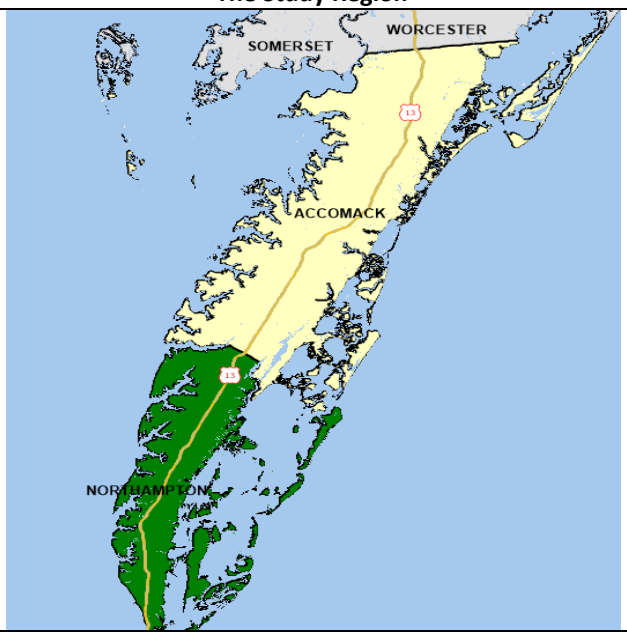
A Community Health Needs Assessment (CHNA) and Implementation Strategy for Riverside Shore Memorial was conducted between February 17, 2016 and August 1, 2016 in fulfillment of the requirements described in section 501(r)(3) of the Internal Revenue Code. The CHNA was conducted with the assistance of Community Health Services, Inc. of Richmond, VA who collected the health indicator data and facilitated the community survey process.

The CHNA process consisted of four phases: data collection (quantitative), community input (qualitative), analysis and prioritization. The quantitative data is summarized below, and represents a broad assessment of demographic and health indicators. The data sources are noted within each section. The community input data was gathered through an electronic survey process from February 17 – March 20, 2016. The survey recipients and respondents of the survey are noted below. Riverside's Marketing, Strategy and Development team worked with Community Health Services, Inc. to analyze the data and present it in summary form for review by the community stakeholders. In July of 2016, a group of community stakeholders came together at the Eastern Shore Chamber of Commerce to review the data, ask questions, discuss area solutions and prioritize the needs to be addressed. The details of that meeting are below in the report.

Community Served by the Hospital

The community served by Riverside Shore Memorial Hospital is a geographic region that covers the entire Eastern Shore of Virginia (Accomack and Northampton Counties).

The Study Region



Community Indicators

The community indicators present a wide array of quantitative community health indicators for the study region. To produce the profiles, Community Health Solutions analyzed data from multiple sources. By design, the analysis does not include every possible indicator of community health. The analysis is focused on a set of indicators that provide broad insight into community health, and for which there were readily available data sources. Detailed reviews follow below, but to summarize:

- **Demographic Profile.** As of 2014, the study region included an estimated 45,375 people. The total population is projected to remain relatively stable over the five-year period from 2014 through 2019, with 15 percent growth in the population age 65 or older being offset by declines in younger age groups. Focusing on race and ethnicity, significant growth is projected for the Asian, Other or Multi-Race, and Hispanic populations. Compared to Virginia as a whole, the study region is more rural, older, has proportionally more Black/African American residents, and has lower levels of educational attainment among adults. These comparative patterns were also seen in the 2011 demographic profile reported in the 2012/2013 CHNA.

- **Mortality Profile.** In 2013, the study region had 627 total deaths. The leading causes of death were malignant neoplasms (cancer) and heart disease by a wide margin, followed by chronic lower respiratory diseases, cerebrovascular diseases and diabetes. Age-adjusted death rates were higher than the statewide rate for all deaths combined and for eight of the 14 leading causes of death. Cancer and heart disease were also the two leading causes of death in 2010 as reported in the 2012/2013 CHNA, although heart disease was the number one cause of death in that year, with cancer at number two.

- **Maternal and Infant Health Profile.** In 2013, the study region had 626 pregnancies, 512 total live births and five infant deaths. Compared to Virginia overall, the study region had higher rates of

low weight births, births without early prenatal care, non-marital births, teenage pregnancies and infant mortality. These patterns were also seen in the 2010 profile as reported in the 2012/2013 CHNA. Notable differences between the 2010 and 2013 profiles include a significant decline in teen pregnancy and an increase in the five-year infant mortality rate.

- **Preventable Hospitalization Discharge Profile**. The Agency for Healthcare Research and Quality (AHRQ) defines a set of conditions (called Prevention Quality Indicators, or 'PQIs') for which hospitalization should be avoidable with proper outpatient health care. High rates of hospitalization for these conditions indicate potential gaps in access to quality outpatient services for community residents. In 2013, residents of the study region had 603 PQI hospital discharges. The leading diagnoses for these discharges were congestive heart failure, chronic obstructive pulmonary disease (COPD) or asthma in older adults, diabetes, dehydration, and bacterial pneumonia. The age-adjusted PQI discharge rates for the study region were higher than the Virginia statewide rates for PQI discharges overall, and for diabetes and dehydration in particular. The leading causes of PQI hospitalization in 2013 were generally the same as in the 2011 profile reported in the 2012/2013 CHNA.

- **Behavioral Health Hospitalization Discharge Profile.** Behavioral health hospitalizations provide another important indicator of community health status. In 2013, residents of the study region had 188 hospital discharges from Virginia community hospitals for behavioral health conditions. The behavioral health discharge rates for the study region were lower than the statewide rates for all diagnoses where a rate could be calculated. The leading diagnoses for discharges were affective psychoses, schizophrenic disorders and alcoholic psychoses. These were also the leading diagnoses in 2011 as reported in the 2012/2013 CHNA.

- **Adult Health Risk Profile.** Local estimates for 2014 indicate that substantial numbers of adults (age 18+) in the study region have health risks related to nutrition, weight, physical inactivity, tobacco and alcohol. In addition, substantial numbers of adults have chronic conditions such as high cholesterol, high blood pressure, arthritis, diabetes and asthma. This health risk profile is generally comparable to the 2011 profile reported in the 2012/2013 CHNA.

- **Youth Health Risk Profile.** Local estimates for 2014 indicate that substantial numbers of youth (age 10-19) in the study region have health risks related to nutrition, weight, alcohol, mental health, tobacco and physical inactivity. As with the adult health risk profile, the 2014 youth health risk profile is generally comparable to the 2011 profile reported in the 2012/2013 CHNA.

- **Uninsured Profile.** An estimated 7,467 nonelderly residents of the study region were uninsured at a given point in time in 2014. This included an estimated 979 children and 6,488 adults. The estimated uninsured rate for the population under 65 was approximately 21 percent in 2014, which is comparable to the estimated rate in 2011 as reported in the 2012/2013 CHNA.

- **Medically Underserved Profile.** Medically Underserved Areas (MUAs) and Medically Underserved Populations (MUPs) are designated by the U.S. Health Resources and Services Administration as being at-risk for health care access problems. The designations are based on several factors including primary care provider supply, infant mortality, prevalence of poverty,

and the prevalence of seniors age 65+. Both Accomack County and Northampton County are designated as Medically Underserved Areas. This has not changed from the 2012/2013 CHNA.

Demographic Profile

Trends in health-related demographics are instructive for anticipating changes in community health status. Changes in the size, age and racial/ethnic mix of the population can have a significant impact on overall health status, health needs and demand for local services.

As shown in *Exhibit II-1*, as of 2014, the study region included an estimated 45,375 people. The total population is projected to remain relatively stable over the five-year period from 2014 through 2019, with 15 percent growth in the population age 65 or older being offset by declines in younger age groups. Focusing on race and ethnicity, significant growth is projected for the Asian, Other or Multi-Race, and Hispanic populations.

Exhibit II-1
Health Demographic Trend Profile for the Study Region, 2010-2019

Indicator	2010 Census	2014 Estimate	2019 Projection	% Change 2010-2019
Total Population	45,553	45,375	45,429	0%
Population Density (per Sq. Mile)	68.1	67.8	67.9	0%
Total Households	20,899	19,126	19,255	-8%
Population by Age				
Children Age 0-17	9,387	9,462	9,402	0%
Adults Age 18-29	5,822	5,758	5,727	-2%
Adults Age 30-44	7,246	7,107	6,949	-4%
Adults Age 45-64	13,981	13,643	12,835	-8%
Seniors Age 65+	9,117	9,405	10,516	15%
Population by Race/Ethnicity				
Asian	266	289	304	14%
Black/African American	13,831	13,736	13,906	1%
White	28,830	28,554	28,131	-2%
Other or Multi-Race	2,626	2,796	3,088	18%
Hispanic Ethnicity[1]	3,724	4,061	4,451	20%

Source: Community Health Solutions analysis of estimates from Alteryx, Inc. See Appendix C. Data Sources for details.

[1] Classification of ethnicity; therefore, Hispanic individuals are also included in the race categories.

Community health is driven in part by community demographics. The age, sex, race, ethnicity, income and education status of a population are strong predictors of community health status and community health needs.

Exhibit II-2 presents a snapshot of key health-related demographics of the study region. As of 2014, the study region included an estimated 45,375 people. Focusing on population rates as shown in the lower part of the Exhibit, compared to Virginia as a whole the study region is more rural, older, has proportionally more Black/African American residents, and has lower levels of educational attainment among adults. These comparative patterns were also seen in the 2011 demographic profile reported in the 2012/2013 CHNA. *Note: Maps 1-13 in Appendix A (page 37) show the geographic distribution of the population by zip code.*

Exhibit II-2
Health Demographic Snapshot Profile, 2014

Indicator		Accomack County	Northampton County	Study Region	Virginia
Population Counts					
Total Population	Population	33,296	12,079	45,375	8,282,921
Age	Children Age 0-17	7,082	2,380	9,462	1,889,338
	Adults Age 18-29	4,257	1,501	5,758	1,417,141
	Adults Age 30-44	5,374	1,733	7,107	1,678,713
	Adults Age 45-64	9,970	3,673	13,643	2,241,450
	Seniors Age 65+	6,613	2,792	9,405	1,056,279
Sex	Female	17,058	6,298	23,356	4,214,922
	Male	16,238	5,781	22,019	4,067,999
Race	Asian	184	105	289	486,905
	Black/African American	9,317	4,419	13,736	1,602,827
	White	21,672	6,882	28,554	5,616,313
	Other or Multi-Race	2,123	673	2,796	576,876
Ethnicity	Hispanic Ethnicity[2]	3,080	981	4,061	705,701
Income	Low Income Households (Households with Income < $25,000)	4,695	1,904	6,599	594,210
Education	Population Age 25+ Without a High School Diploma	4,740	1,586	6,326	662,369
Population Rates					
Total Population	Population Density (pop. per sq. mile)	72.6	57.3	67.8	206.1
Age	Children Age 0-17 pct. of Total Pop.	21%	20%	21%	23%
	Adults Age 18-29 pct. of Total Pop.	13%	12%	13%	17%
	Adults Age 30-44 pct. of Total Pop.	16%	14%	16%	20%
	Adults Age 45-64 pct. of Total Pop.	30%	30%	30%	27%
	Seniors Age 65+ pct. of Total Pop.	20%	23%	21%	13%
Sex	Female pct. of Total Pop.	51%	52%	51%	51%
	Male pct. of Total Pop.	49%	48%	49%	49%
Race	Asian pct. of Total Pop.	1%	1%	1%	6%
	Black/African American pct. of Total Pop.	28%	37%	30%	19%
	White pct. of Total Pop.	65%	57%	63%	68%
	Other or Multi-Race pct. of Total Pop.	6%	6%	6%	7%

[2] Classification of ethnicity; therefore, Hispanic individuals are also included in the race categories.

Ethnicity	Hispanic Ethnicity pct. of Total Pop.	9%	8%	9%	9%
Income	Low Income Households (Households with Income <$25,000) pct. of Total Households	34%	37%	35%	19%
Education	Pop. Age 25+ Without a High School Diploma pct. of Total Pop. Age 25+	20%	18%	19%	12%
Source: Community Health Solutions analysis of estimates from Alteryx, Inc. See Appendix C. Data Sources for details.					

Mortality Profile

Mortality is one of the most commonly cited community health indicators. As shown in *Exhibit II-3*, in 2013 the study region had 627 total deaths. The leading causes of death were malignant neoplasms (cancer) and heart disease by a wide margin, followed by chronic lower respiratory diseases, cerebrovascular diseases and diabetes. Age-adjusted death rates were higher than the statewide rates for all deaths combined, and for eight of the 14 leading causes of death. *Note: Maps 14-17 in Appendix A (page 43) show the geographic distribution of deaths by zip code.*

The 2013 mortality profile presented *Exhibit II-3* is generally comparable to the 2010 mortality profile reported in the 2012/2013 CHNA. Cancer and heart disease were also the two leading causes of death in 2010, although heart disease was the number one cause of death in that year, with cancer as number two. The remaining list of leading causes of death in 2013 mirror those in 2010, although the order has shifted for some conditions.

Exhibit II-3
Mortality Profile, 2013

Indicator	Accomack County	Northampton County	Study Region	Virginia
Total Deaths				
Deaths by All Causes	431	196	627	62,309
Deaths by Leading 14 Causes				
Malignant Neoplasms	118	50	168	14,348
Heart Disease	99	44	143	13,543
Chronic Lower Respiratory Diseases	26	15	41	3,168
Cerebrovascular Diseases	11	13	24	3,278
Diabetes Mellitus	15	6	21	1,618
Unintentional Injury	11	7	18	2,794
Alzheimer's Disease	7	8	15	1,634
Nephritis and Nephrosis	9	4	13	1,547
Septicemia	9	3	12	1,464
Parkinson's Disease	5	3	8	549
Influenza and Pneumonia	6	1	7	1,430
Chronic Liver Disease	4	1	5	836
Suicide	4	1	5	1,047
Primary Hypertension and Renal Disease	1	2	3	629
Age Adjusted Death Rates per 100,000 Population				
Total Deaths	910.4	979.3	928.6	720.1
Malignant Neoplasms	241.9	249.2	244.7	161.3
Heart Disease	200.7	192.4	198.7	155.9
Chronic Lower Respiratory Diseases	52.5	72.2	58.5	37.2
Cerebrovascular Diseases	27.7	58.8	37.8	38.5
Diabetes Mellitus	29.1	24.5	28.4	18.3
Unintentional Injury	31.5	56.7	37.9	33.0
Alzheimer's Disease	13.5	36.0	20.5	19.6
Nephritis and Nephrosis	17.5	15.8	16.8	18.0
Septicemia	27.2	24.7	26.5	17.7
Parkinson's Disease	9.7	13.6	10.8	6.7
Influenza and Pneumonia	14.1	3.7	11.3	16.8
Chronic Liver Disease	10.7	4.2	8.9	8.9

Suicide	11.7	14.3	12.1	12.2
Primary Hypertension and Renal Disease	2.0	8.4	3.6	7.2
Source: Community Health Solutions analysis of mortality data from the Virginia Department of Health. See Appendix C. Data Sources for details.				

Maternal and Infant Health Profile

Maternal and infant health indicators are another widely cited category of community health. As shown in *Exhibit II-4,* the study region had 626 pregnancies, 512 total live births and five infant deaths in 2013. Compared to Virginia as a whole, the study region had higher rates of low weight births, births without early prenatal care, non-marital births, teenage pregnancies and infant mortality. *Note: Maps 18-19 in Appendix A (page 45) show the geographic distribution of births by zip code.*

Comparing the 2013 profile in Exhibit II-4 to the 2010 profile reported in the 2012/2013 CHNA, there are notable similarities and differences. In both 2010 and 2013, the study region had higher rates of low weight births, births without early prenatal care, non-marital births, teenage pregnancies and infant mortality than seen in Virginia as a whole. One local difference from 2010 to 2013 is a decline in the teen pregnancy rate from 39.2 per 1,000 teenage female population to a rate of 20.8 in 2013. A second local difference is an increase in the five-year infant mortality rate per 1,000 live births from 7.1 in 2010 to 10.7 in 2013.

Exhibit II-4
Maternal and Infant Health Profile, 2013

Indicator	Accomack County	Northampton County	Study Region	Virginia
Counts				
Total Pregnancies	448	178	626	126,655
Induced Terminations of Pregnancy	49	22	71	19,724
Natural Fetal Deaths	32	11	43	4,954
Total Live Births	367	145	512	101,977
Low Weight Births (under 2,500 grams / 5 lb. 8 oz.)	36	12	48	8,178
Births Without Early Prenatal Care (No Prenatal Care in First 13 Weeks)	91	22	113	13,435
Non-Marital Births	223	84	307	35,289
Total Teenage (age 10-19) Pregnancies	34	14	48	7,447
Live Births to Teens Age 10-19	23	13	36	5,316
Live Births to Teens Age 18-19	20	11	31	4,073
Live Births to Teens Age 15-17	3	2	5	1,208
Live Births to Teens Age <15	0	0	0	35
Total Infant Deaths	2	3	5	632
Rates				
Live Birth Rate per 1,000 Population	11.1	12.0	11.3	12.3
Low Weight Births pct. of Total Live Births	10%	8%	9%	8%
Births Without Early Prenatal Care (No Prenatal Care in First 13 Weeks) pct. of Total Live Births	25%	15%	22%	13%
Non-Marital Births pct. of Total Live Births	61%	58%	60%	35%

Teenage (age 10-19) Pregnancy Rate per 1,000 Teenage Female Population	19.6	24.3	20.8	14.4
Five-Year Infant Mortality Rate per 1,000 Live Births 2009-2013	10.9	9.8	10.7	6.6
Source: Community Health Solutions analysis of data from the Virginia Department of Health. See Appendix C. Data Sources for details.				

Preventable Hospitalization Discharge Profile

The Agency for Healthcare Research and Quality (AHRQ) identifies a defined set of conditions (called Prevention Quality Indicators, or 'PQIs') for which hospitalization should be avoidable with proper outpatient health care. High rates of hospitalization for these conditions indicate potential gaps in access to quality outpatient services for community residents.

As shown in *Exhibit II-5*, residents of the study region had 603 PQI hospital discharges in 2013. The leading diagnoses for these discharges were congestive heart failure, chronic obstructive pulmonary disease (COPD) or asthma in older adults, diabetes, dehydration, and bacterial pneumonia. The age-adjusted PQI discharge rates for the study region were higher than the Virginia statewide rates for PQI discharges overall, and for diabetes and dehydration in particular. *(Note: Map 20 in Appendix A (page 46) shows the geographic distribution of Total PQI Discharges in 2013 by zip code.)*

The leading causes of PQI hospitalization in 2013 were generally the same as in the 2011 profile reported in the 2012/2013 CHNA. A more detailed analysis of ranks and rates between the two study years is not feasible due to changes in diagnostic definitions and other technical factors.

Exhibit II-5
Prevention Quality Indicator (PQI) Hospital Discharge Profile, 2013

Indicator	Accomack County	Northampton County	Study Region	Virginia
Counts				
Total PQI Discharges	352	251	603	76,860
Congestive Heart Failure	96	53	149	16,026
COPD or Asthma In Older Adults	77	58	135	18,239
Diabetes	59	41	100	11,867
Dehydration	40	32	72	7,743
Bacterial Pneumonia	33	36	69	9,938
Urinary Tract Infection	25	14	39	8,452
Hypertension	11	4	15	2,768
Asthma in Younger Adults	8	6	14	444
Angina	1	6	7	941
Perforated Appendix	6	1	7	1,189
Age Adjusted Rate per 100,000 Population				
Total PQI Discharges	847.1	1,488.0	1,021.8	897.9
Congestive Heart Failure	203.4	247.8	216.6	221.2
COPD or Asthma in Older Adults	153.6	303.8	195.1	194.3
Diabetes	186.6	320.3	222.9	134.6

Dehydration	87.0	165.4	108.8	93.9
Bacterial Pneumonia	87.2	215.3	122.2	143.9
Urinary Tract Infection	--	--	63.7	102.5
Hypertension	--	--	--	33.6
Asthma in Younger Adults	--	--	--	5.4
Angina	--	--	--	11.4
Perforated Appendix	--	--	--	14.4
Note: -- Rates are not calculated where n<30. The sum of the				
Source: Community Health Solutions analysis of hospital discharge data from Virginia Health Information, Inc. and local demographic estimates from Alteryx, Inc. See Appendix C. Data Sources for details.				

Behavioral Health Hospitalization Discharge Profile

Behavioral health (BH) hospitalizations provide another important indicator of community health status. As shown in *Exhibit II-6,* residents of the study region had 188 hospital discharges from Virginia community hospitals for behavioral health conditions in 2013. The leading diagnoses for these discharges were affective psychoses, schizophrenic disorders, alcoholic psychoses, senility with mention of psychosis, and alcohol dependence syndrome. The BH discharge rates for the study region were lower than the statewide rates for all diagnoses where a rate was calculated. *Note: Map 21 in Appendix A (page 47) shows the geographic distribution of BH discharges by zip code.*

The leading causes of behavioral health hospitalization in 2013 were generally the same as in the 2011 profile reported in the 2012/2013 CHNA. A more detailed analysis of ranks and rates between the two study years is not feasible due to changes in diagnostic definitions and other technical factors.

Exhibit II-6
Behavioral Health Hospital Discharge Profile, 2013

Indicator	Accomack County	Northampton County	Study Region	Virginia
BH Discharges				
Total BH Discharges by All Diagnoses	130	58	188	60,600
BH Discharges by Diagnosis				
Affective Psychoses	39	19	58	26,709
Schizophrenic Disorders	22	11	33	8,136
Alcoholic Psychoses Discharges	17	8	25	4,037
Senility Without Mention of Psychosis	10	8	18	1,688
Alcohol Dependence Syndrome	8	0	8	2,391
Depressive Disorder, Not Elsewhere Classified	5	1	6	3,503
Symptoms Involving Head or Neck	4	2	6	933
Other Nonorganic Psychoses	5	0	5	2,133
Neurotic Disorders	3	2	5	1,207
Adjustment Reaction	4	1	5	2,271
Drug Psychoses	3	2	5	2,121
Drug Dependence	2	0	2	816
Other Organic Psychotic Conditions-Chronic	0	1	1	795
Altered Mental Status	1	0	1	1,000
Non Dependent Abuse of Drugs	1	0	1	600
Crude Rates per 100,000 Population				

Exhibit II-6 Behavioral Health Hospital Discharge Profile, 2013				
Indicator	**Accomack County**	**Northampton County**	**Study Region**	**Virginia**
All Diagnoses	388.9	479.7	413.0	734.8
Affective Psychoses	116.7	--	127.4	323.9
Schizophrenic Disorders	--	--	72.5	98.7
Alcoholic Psychoses Discharges	--	--	--	49.0
Senility Without Mention of Psychosis	--	--	--	20.5
Alcohol Dependence Syndrome	--	--	--	29.0
Depressive Disorder, Not Elsewhere Classified	--	--	--	42.5
Symptoms Involving Head or Neck	--	--	--	11.3
Other Nonorganic Psychoses	--	--	--	25.9
Neurotic Disorders	--	--	--	14.6
Adjustment Reaction	--	--	--	27.5
Drug Psychoses	--	--	--	25.7
Drug Dependence	--	--	--	9.9
Other Organic Psychotic Conditions-Chronic	--	--	--	9.6
Altered Mental Status	--	--	--	12.1
Non Dependent Abuse of Drugs	--	--	--	7.3
Note: Rates are not calculated where n<30.				
Source: Community Health Solutions analysis of hospital discharge data from Virginia Health Information and demographic data from Alteryx, Inc. See details on methods in Appendix C. Rates are not calculated where n<30.				

Adult Health Risk Profile

This section examines health risks for adults age 18+. Prevalence estimates of health risks, chronic disease and health status can be useful in developing prevention and improvement efforts. *Exhibit II-7* shows 2014 estimates indicating that substantial numbers of adults in the study region have health risks related to nutrition, weight, physical inactivity, tobacco and alcohol. In addition, substantial numbers of adults have chronic conditions such as high cholesterol, high blood pressure, arthritis, diabetes and asthma. The 2014 profile generally reflects the health risk patterns found in 2011 as reported in the 2012/2013 CHNA. Available data are not sufficient to support a more detailed comparative analysis between the two study years. *Note: Maps 22-25 in Appendix A (page 47) show the geographic distribution of selected adult health risks by zip code.*

Exhibit II-7 Adult Health Risk Factor Profile (Estimates), 2014				
Indicator		**Accomack County**	**Northampton County**	**Study Region**
Estimates-Counts				
Estimated Adults age 18+		26,214	9,699	35,913
Risk Factors	Not Meeting Guidelines for Fruit and Vegetable Intake	21,758	8,438	30,196
	Overweight or Obese	17,301	6,304	23,606
	Not Meeting Recommendations for Physical Activity in Past 30 Days	12,583	4,656	17,238
	Smoker	3,408	1,067	4,475
	At-risk for Binge Drinking (males having five or more drinks on one occasion, females having four or more drinks on one occasion)	5,243	2,037	7,280

Chronic Conditions	High Cholesterol (told by a doctor or other health professional)	9,175	3,298	12,473
	High Blood Pressure (told by a doctor or other health professional)	8,388	3,201	11,589
	Arthritis (told by a doctor or other health professional)	7,078	2,522	9,600
	Diabetes (told by a doctor or other health professional)	2,621	1,164	3,785
General Health Status	Limited in any Activities because of Physical, Mental or Emotional Problems	5,505	2,231	7,736
	Fair or Poor Health Status	4,194	1,358	5,552
Estimates-Percent of Adults Age 18+				
Risk Factors	Not Meeting Guidelines for Fruit and Vegetable Intake	83%	87%	84%
	Overweight or Obese	66%	65%	66%
	Not Meeting Recommendations for Physical Activity in the Past 30 Days	48%	48%	48%
	Smoker	13%	11%	12%
	At-risk for Binge Drinking (males having five or more drinks on one occasion, females having four or more drinks on one occasion)	20%	21%	20%
Chronic Conditions	High Cholesterol (told by a doctor or other health care professional)	35%	34%	35%
	High Blood Pressure (told by a doctor or other health professional)	32%	33%	32%
	Arthritis (told by a doctor or other health professional)	27%	26%	27%
	Diabetes (told by a doctor or other health professional)	10%	12%	11%
General Health Status	Limited in any Activities because of Physical, Mental or Emotional Problems	21%	23%	21%
	Fair or Poor Health Status	16%	14%	15%

Source: Estimates produced by Community Health Solutions using Virginia Behavioral Risk Factor Surveillance System data and local demographic estimates from Alteryx, Inc. See Appendix C. Data Sources for details.

Youth Health Risk Profile

This section examines selected health risks for youth age 10-19. These risks have received increasing attention as the population of American children has become more sedentary, more prone to unhealthy eating and more likely to develop unhealthy body weight. The long-term implications of these trends are serious, as these factors place children at higher risk for chronic disease both now and in adulthood.

Exhibit II-8 shows estimates indicating that substantial numbers of youth in the study region have health risks related to nutrition, weight, alcohol, mental health, tobacco and physical activity. *Note: Map 26 in Appendix A (page 49) shows the geographic distribution of youth overweight or obese by zip code.* The 2014 profile generally reflects the health risk patterns found in 2011 as reported in the 2012/2013 CHNA. Available data are not sufficient to support a more detailed comparative analysis between the two study years.

Exhibit II-8
Youth Health Risk Factor Profile (Estimates), 2014

Indicator		Accomack County	Northampton County	Study Region
Estimates -Counts				
High School Youth Age 14-19				
Total Estimated High School Youth Age 14-19		*2,175*	*735*	*2,910*
	Not Meeting Guidelines for Fruit and Vegetable Intake	2,001	676	2,677
	Overweight or Obese	630	216	846

	Not Meeting Recommendations for Physical Activity in the Past Week	1,222	413	1,635
	Used Tobacco in the Past 30 Days	404	134	538
	Had at least One Drink of Alcohol At least One Day in the Past 30 Days	589	196	785
	Felt Sad or Hopeless (almost every day for two or more weeks in a row so that they stopped doing some usual activities)	542	180	180
Middle School Youth Age 10-14				
Total Estimated Middle School Youth Age 10-14		1,963	633	2,596
	Not Meeting Guidelines for Fruit and Vegetable Intake	1,472	475	1,947
	Not Meeting Recommendations for Physical Activity in the Past Week	1,287	419	1,706
	Used Tobacco in the Past 30 Days	75	24	99
Rates (Estimates)				
High School Youth Age 14-19				
	Not Meeting Guidelines for Fruit and Vegetable Intake	92%	92%	92%
	Overweight or Obese	29%	29%	29%
	Not Meeting Recommendations for Physical Activity in the Past Week	56%	56%	56%
	Used Tobacco in the Past 30 Days	19%	18%	18%
	Had at least One Drink of Alcohol at least One Day in the Past 30 Days	27%	27%	27%
	Felt Sad or Hopeless (almost every day for two or more weeks in a row so that they stopped doing some usual activities)	25%	24%	25%
Middle School Youth Age 10-14				
	Not Meeting Guidelines for Fruit and Vegetable Intake	75%	75%	75%
	Not Meeting Recommendations for Physical Activity in the Past Week	66%	66%	66%
	Used Tobacco in the Past 30 Days	4%	4%	4%
Source: Estimates produced by Community Health Solutions using Virginia Youth Risk Behavioral Surveillance System data and local demographic estimates from Alteryx, Inc. See Appendix C. Data Sources for details.				

Uninsured Profile

Decades of research show that health coverage matters when it comes to overall health status, access to health care, quality of life, school and work productivity, and even mortality. *Exhibit II-9* shows the estimated number of uninsured individuals by income as of 2014.[3] At a given point in time in 2014, an estimated 7,467 nonelderly residents of the study region were uninsured, including 979 children and 6,488 adults. The estimated uninsured rates were 10 percent for children age 0-18, 25 percent for adults age 19-64, and 21 percent for the population age <65. The estimated uninsured rate for the population under 65 is generally comparable to the estimated rate in 2011 as reported in the 2012/2013 CHNA. Available data are not sufficient to support a more detailed comparative analysis between the two study years. *Note: Maps 27-28 in Appendix A (page 50) show the geographic distribution of the uninsured population by zip code.*

Exhibit II-9
Uninsured Profile (Estimates), 2014

Indicator	Accomack County	Northampton County	Study Region
Estimated Uninsured Counts			
Uninsured Nonelderly Age <65	5,544	1,923	7,467
Uninsured Children Age 0-18	751	228	979
Uninsured Children Age 0-18 <=138% FPL	296	105	402
Uninsured Children Age 0-18 <=200% FPL	409	145	553
Uninsured Children Age 0-18 <=250% FPL	463	169	631
Uninsured Children Age 0-18 <=400% FPL	574	204	778
Uninsured Children Age 0-18 138-400% FPL	277	98	376
Uninsured Adults Age 19-64	4,793	1,695	6,488
Uninsured Adults Age 19-64 <=138% FPL	2,263	783	3,046
Uninsured Adults Age 19-64 <=200% FPL	3,082	1,096	4,178
Uninsured Adults Age 19-64 <=250% FPL	3,607	1,281	4,888
Uninsured Adults Age 19-64 <=400% FPL	4,341	1,526	5,867
Uninsured Adults Age 19-64 138-400% FPL	2,078	743	2,821
Estimated Uninsured Percent			
Children Age 0-18	10%	9%	10%
Adults Age 19-64	25%	25%	25%
Population Age <65	21%	21%	21%

Note: Federal poverty level (FPL) categories are cumulative.

Source: Estimates produced by Community Health Solutions using U.S. Census Bureau Small Area Health Insurance Estimates (2014) and local demographic estimates from Alteryx, Inc. See Appendix C for details on methods.

[3] For more information, please see: http://aspe.hhs.gov/poverty/12poverty.shtml

Medically Underserved Profile

Medically Underserved Areas (MUAs) and Medically Underserved Populations (MUPs) are designated by the U.S. Health Resources and Services Administration as being at-risk for health care access problems. The designations are based on several factors including primary care provider supply, infant mortality, prevalence of poverty and the prevalence of seniors age 65+.

As shown in *Exhibit II-10*, both Accomack County and Northampton County are designated as Medically Underserved Areas. This has not changed from the 2012/2013 CHNA. For a more detailed description, visit the U.S. Health Resources and Service Administration designation webpage at http://muafind.hrsa.gov/.

Exhibit II-10
Medically Underserved Areas Profile

Locality	MUA/MUP Designation	Census Tracts
Accomack County	Full	10 of 10 Census Tracts
Northampton County	Full	3 of 3 Census Tracts

Source: Community Health Solutions analysis of U.S. Health Resources and Services Administration data.

Community Input

In an effort to obtain community input for the study, a *Community Survey* was conducted with a broad-based group of community stakeholders identified by Riverside Shore Memorial Hospital. The survey participants were asked to provide their viewpoints on:

- Important health concerns in the community
- Significant service gaps in the community
- Vulnerable/at-risk populations in the community
- Vulnerable/at-risk geographic regions in the community
- Health assets within the community
- Health assets needed in the community
- Additional ideas or suggestions for improving community health

In an effort to broaden participation in the survey compared to the previous CHNA study in 2012/2013, RSMH sent the survey to many more people for the 2016 CHNA. The survey was sent to a group of 239 community stakeholders from public health, education, social services, business, local government and local civic organizations, among others. A complete list of the individuals and/or organizations who were invited to participate is listed in Appendix D (page 68). RSMH staff conducted outreach for community input via email, personal phone calls and in person at local events and meetings. As a result of this outreach effort, the number of respondents more than doubled from 31 respondents in the 2012/2013 CHNA to 65 respondents in the current study. The respondents to the 2016 survey provided rich insights about community health in the study region, as summarized below and detailed in the remainder of this section.

- **Community Health Concerns.** Respondents identified more than 40 specific health concerns, with the most commonly mentioned being obesity, mental health conditions, heart disease, cancer and diabetes. Obesity was also the most commonly identified concern in the 2012/2013 CHNA. Mental health conditions, heart disease, cancer and diabetes were also among the most commonly identified concerns in the 2012/2013 survey.

- **Community Service Gaps.** Respondents identified more than 30 specific community service gaps, with the most commonly mentioned being behavioral health services including mental health services, substance abuse services and services for individuals with intellectual/developmental disabilities. Behavioral health services were also the most frequently identified service gap in the 2012/2013 CHNA.

- **Vulnerable or At-Risk Populations.** Respondents identified a variety of vulnerable/at-risk populations in the community including children, seniors, homeless and low income populations, the uninsured/underinsured, migrant populations, ethnic/racial minorities and other populations with particular health concerns. Respondents also identified vulnerable/at-risk neighborhoods or geographic regions in the community.

- **Health Assets in the Community.** Respondents identified diverse health assets in the community including the natural environment, community outreach programs, hospital/medical care, recreational facilities, food, social services and rural health agencies.

- **Health Assets Needed in the Community.** Respondents identified health assets that could use enhancement, such as emergency medical services, mental health services, parks and recreational facilities, health education resources, community outreach programs, affordable care, transportation and funding.

- **Additional Ideas and Suggestions.** The respondents offered a variety of ideas and suggestions for improving community health. Ideas and suggestions included community coordination, education and prevention; community recreational facilities; home health care; lower cost services, resources for the uninsured/indigent population, mental health services and better food services.

Survey Respondents

Exhibit I-1 below lists the organizational affiliations of the survey respondents.

Exhibit I-1
Reported Organization Affiliation of Survey Respondents[4]

A & N Electric Cooperative	Eastern Shore Rural Health System (11)
Accomack County Board of Supervisors (4)	ESVA Chamber of Commerce
Accomack County Parks & Recreation	Heritage Hall Nursing and Rehabilitation Center
Accomack County Public Safety	Hermitage on the Eastern Shore (2)
Accomack County Public Schools	Northampton County
Accomack County Sheriff's Office	Northampton County Board of Supervisors
Accomack-Northampton Planning District Commission	Northampton County Public School (2)
American Family Services	Northampton County Sheriff's Office
Bayside Rehabilitation Inc.	Onancock Police Department
Caldwell Banker Harbour Realty	Onancock Senior Center
Chincoteague Police Department	Riverside Medical Group (8)
Eastern Shore Community College	Riverside Shore Memorial Hospital (12)
Eastern Shore Family YMCA	Town of Cape Charles (2)
Eastern Shore Health District	Virginia Department of Health - Eastern Shore Health District

[4]A count is provided for organizations with multiple survey respondents.

Community Health Concerns

Survey respondents were asked to review a list of common community health issues. The list of issues draws from the topics in *Healthy People 2020* with some refinements. The survey asked respondents to identify from the list what they view as important health concerns in the community. Respondents were also invited to identify additional issues not already defined on the list. As shown in Exhibit I-2, respondents identified more than 40 specific health concerns, with the most commonly mentioned being obesity, mental health conditions, heart disease, cancer and diabetes. These conditions were also among the most commonly identified concerns in the 2012/2013 survey.

Exhibit I-2
Important Community Health Concerns Identified by Survey Respondents

Note: When interpreting the survey results, please note that although the relative number of responses received for each item is instructive, it is not a definitive measure of the relative importance of one issue compared to another.

Answer Options	Response Percent[5]	Response Count
Obesity	77%	47
Mental Health (not including Substance Use)	75%	46
Heart Disease	72%	44
Cancer	67%	41
Diabetes	67%	41
High Blood Pressure / Hypertension	66%	40
Mental Health - Substance Use (prescription or illegal drugs)	64%	39
Alcohol Use	54%	33
Tobacco Use	54%	33
Accidents / Injuries	53%	32
Dementia / Alzheimer's Disease	51%	31
Mental Health - Intellectual/Developmental Disabilities	51%	31
Teen Pregnancy	49%	30
Stroke	44%	27
Prenatal and Pregnancy Care	43%	26
Respiratory Diseases (e.g. asthma, COPD, etc.)	43%	26
Violence – Domestic Violence	43%	26
Dental / Oral Health Care	39%	24
Drowning / Water Safety	39%	24
Chronic Pain	36%	22
Renal (kidney) Disease	33%	20
Hunger	30%	18
Orthopedic Problems	26%	16
Sexually Transmitted Diseases	26%	16
Violence – Other than domestic violence	26%	16
Environmental Health (e.g. pollution, mosquito control, water quality, etc.)	25%	15
Arthritis	23%	14
Neurological Conditions (e.g. seizures, multiple sclerosis, traumatic brain injury, etc.)	23%	14
Physical Disabilities	20%	12
Infectious Diseases	18%	11
Autism	15%	9
Bullying	12%	7
HIV/AIDS	8%	5
Other Health Problems (*see responses on the following page*)	21%	13

[5] Sixty-one (61) of the 63 survey respondents answered this question.

Exhibit I-2 Important Community Health Concerns Identified by Survey Respondents (continued)	
Response #	**Other Health Concerns (Open-Ended Reponses)**
1.	Access to health care
2.	Availability of affordable health care services
3.	Being in a rural community and with high aquaculture employment accidents are an issue. We have high rates of poor diet; with obesity, and related heart disease and stroke. Depression is high in our population. Lots of [residents with] untreated low economic dental.
4.	Cancer: For all sites cancer incidence, ES Health District ranks 35 out of 35 health districts for incidence; 34/35 for staging; 32/35 for mortality (VDH, 2014); Dental care ratio of patients to dentists for Accomack County 3,683:1 (VA 1,611:1)
5.	Emotional issues - hunger is a guess. We have a high poverty rate. I am sure, though, that there are more!
6.	Glaucoma, macular degeneration, other vision problems
7.	I think Tobacco Use and Obesity are at the top of the list.
8.	Lyme's Disease treatment, depression treatment
9.	Our #1 issue is poor overall health because of diet and lack of exercise. It is passed on generation after generation.
10.	Preventive mental health, healthy habits, exercise
11.	Social determinants of health metrics are low in the counties, across the board
12.	Suicide

Community Service Gaps

Survey respondents were asked to review a list of community services that are typically important for addressing the health needs of a community. Respondents were asked to identify from the list any services they think need strengthening in terms of availability, access or quality. Respondents were also invited to identify additional service gaps not already defined on the list.

As shown in Exhibit I-3, respondents identified more than 30 specific community service gaps, with the most commonly mentioned being behavioral health services (mental health services, substance abuse services and services for intellectual/developmental disabilities). Next in order were healthy lifestyle support, health insurance coverage, specialty medical care and transportation. These services were also among the most commonly identified service gaps in the 2012/2013 survey.

Exhibit I-3
Important Community Service Gaps Identified by Survey Respondents

Note: When interpreting the survey results, please note that although the relative number of responses received for each item is instructive, it is not a definitive measure of the relative importance of one issue compared to another.

Answer Options	Response Percent[6]	Response Count
Mental Health Services - Non Substance Use Behavioral Health Services	68%	43
Mental Health Services - Substance Use Services	64%	40
Mental Health Services - Intellectual/Developmental Disabilities	52%	33
Substance Abuse Services	52%	33
Healthy Lifestyle Support (e.g. nutrition, exercise, etc.)	46%	29
Health Care Insurance Coverage	44%	28
Specialty Medical Care Services (e.g. cardiologists, pulmonologists, etc.)	43%	27
Transportation Services	43%	27
Aging Services	40%	25
Primary Medical Care Services	37%	23
Health Promotion and Prevention Services	37%	23
Dental / Oral Health Care Services	33%	21
Early Intervention Services for Children	33%	21
Veterans Services	33%	21
Chronic Pain Management Services	32%	20
Cancer Services (e.g. screening, diagnosis, treatment, etc.)	30%	19
Services for Vulnerable Populations (e.g. uninsured/underinsured, migrant workers, homeless, etc.)	30%	19
Chronic Disease Services (e.g. diabetes, high blood pressure, etc.)	29%	18
Domestic Violence Services	27%	17
Hospital Services (e.g. inpatient, outpatient, emergency care, etc.)	27%	17
Long-Term Care Services	27%	17
Social Services	25%	16
Family Planning Services	21%	13
Food Safety Net (e.g. food bank, community gardens, school lunches, etc.)	21%	13
Home Health Services	18%	11
Maternal, Infant and Child Health Services	18%	11
Public Health Services	18%	11
School Health Services	16%	10
Workplace Health and Safety Services	13%	8
Public Safety Services	11%	7
Physical Rehabilitation	10%	6

[6] Sixty-three (63) of the 63 survey respondents answered this question.

Exhibit I-3 Important Community Service Gaps Identified by Survey Respondents		
Note: When interpreting the survey results, please note that although the relative number of responses received for each item is instructive, it is not a definitive measure of the relative importance of one issue compared to another.		
Answer Options	**Response Percent[6]**	**Response Count**
Environmental Health Services	8%	5
Hospice Services	6%	4
Pharmacy Services	5%	3
Other Services (*see responses below*)	13%	8

Exhibit I-3 Important Community Service Gaps Identified by Survey Respondents	
Response #	**Other Service Gaps (Open-Ended Reponses)**
1.	Adult day care/senior center/senior nutrition
2.	Affordable transportation services for long term care residents to and from physician appointments and for other diagnostic services. Ear, nose and throat services. Speech and occupational therapy availability to long term care facilities.
3.	Availability of non-emergency, “walk-in clinic” forms of services.
4.	Significant lack of local specialty care (ortho, endocrine, ID among others), we have high rates of uninsured and transportation is the single most significant factor for indigent population not being treated. Lack of social services to provide counseling for this population.
5.	Transportation and Health Education for those at or below the poverty line are much needed services.
6.	Transportation services, affordable housing, jobs
7.	Vision and hearing
8.	We fall short in almost every category of population health support, with "thin" to absent resources for each mentioned above. Pharmacy services are adequate. Chronic pain was not checked because the others overwhelm it.

Vulnerable and At-Risk Populations or Geographic Regions in the Community

Survey respondents were asked if there are particular populations within the community who are vulnerable/at-risk for health concerns or difficulties obtaining health services. Respondents were also asked if there are particular neighborhoods or geographic regions within the community where residents may be vulnerable/at-risk for health concerns or difficulties obtaining health services. Identified populations and regions include the following. Please see *Appendix B (page 53)* for a detailed listing. These survey items were not included in the 2012/2013 survey.

- Children
- Seniors
- Homeless
- Low Income
- Uninsured/ Underinsured
- Migrants and Ethnic/Racial Minorities
- Residents with Behavioral Health Conditions
- Residents with Chronic Conditions
- Residents of Particular Neighborhoods (see *Appendix B*)
- Residents without Transportation
- Residents in Isolated Areas
- Women

Health Assets in the Community

Survey respondents were asked to identify health assets within the community that promote a culture of health. *Exhibit I-4* summarizes the results. Respondents were also asked to identify health assets that the community needs, but may be lacking. These survey items were not included in the 2012/2013 survey.

Exhibit I-4
Health Assets in the Community as Identified by Survey Respondents

Assets that Promote a Culture of Health	Assets the Community Needs, but May be Lacking
• Natural Environment • Community Outreach Programs • Hospitals/Medical Care • Community Recreational Facilities • Food • Social Services • Rural Health Agencies	• EMS • Mental Health Services • Specialty Health Services • Parks and Recreation • Health Education Resources • Community Outreach Programs • Affordable Care • Transportation System • Funding

Note: Please see *Appendix B* (page 53) for a more detailed analysis of responses to the *Community Survey*.

Additional Ideas and Suggestions

Survey respondents offered open-ended responses with additional ideas and suggestions for improving community health. Common themes are listed below, and detailed responses are listed in *Appendix B (page 53)*.

- Community Coordination and Integration
- Education and Prevention
- Community Recreational Facilities
- Home Health Care
- Lower Cost Services
- Resources for the Uninsured/Indigent Population
- Mental Health Services
- Better Food Services

Progress Made From the 2013 Implementation Plan

An important component of the 2016 CHNA is to review the work accomplished since the 2013 Implementation Plan. There were five key focus areas as a part of the 2013 Implementation Plan for the Eastern Shore.

- ***Mental Health:*** Mental Health was identified as both a key community health concern and an important service gap. As a part of the implementation plan, Eastern Shore Rural Health and the Community Services Board worked together to increase availability.

- ***Alcohol and Substance Abuse and the Impact on Domestic Violence:*** Domestic abuse and sexual assault as a result of alcohol and substance abuse was noted as a key issue for the community. Part of the concern that was identified was the lack of a Sexual Assault Nurse Examiner (SANE Nurse) to support the victims of sexual assault through the prosecution of the assailants. As a result of the need identified in 2013, Riverside Shore Memorial Hospital contracted with Chesapeake Forensics to provide a SANE Nurse who responds to every sexual assault incident, assists the victim in the Emergency Department, collects the forensic evidence and provides the expert witness testimony throughout the legal process.

- ***Health Promotion and Prevention***: Unhealthy lifestyles and the resulting medical issues were identified as a key problem for the Eastern Shore community. Eastern Shore Health Communities has worked to insure access to healthy dining options at area restaurants and continues to work on building livable communities on the Eastern Shore.

- ***Aging Services and Hospice:*** One of the key areas identified in 2013 was the lack of services for the aging population on the Eastern Shore, as well as the lack of access to existing services due to transportation and other issues. Since 2013, Riverside and the Hospice and Palliative Care of the Eastern Shore have combined resources to better serve area residents.

- ***Awareness of Existing Services:*** A lack of awareness of community services was identified as a critical community issue in 2013. Many felt that while there were many programs available to residents, most people were not aware of what was available or how to access them. As a result, Riverside Shore Memorial developed a directory of services and maintains it online.

The hospital made every effort to solicit feedback from the community by providing a feedback mechanism on the hospital's website. However, at the time of this publication, no written feedback had been received on the 2013 CHNA and Implementation Plan.

Prioritization of the 2016 Significant Health Needs

In order to appropriately review the health indicator data and community survey input, a group of key community stakeholders came together on June 3, 2016 at the Eastern Shore Chamber of Commerce. Participants included: Rev. Monica Gould (Presbyterian Churches); Jean Hungiville (Eastern Shore Chamber of Commerce); Dr. John Matson, M.D. (Virginia Department of Health – Eastern Shore District); John Maher (STAR Transport); John Peterman (Riverside Shore Memorial Hospital); Carrie Schmidt (Riverside Health System); Mimi Sejdat (Eastern Shore Community Services Board); Nancy Stearns (Eastern Shore Rural Health); Dr. Linda Thomas-Glover (Eastern Shore Community College); Ann Williams (Riverside Shore Memorial Hospital); and Liz Williams (Riverside Health System).

The group reviewed the demographic and health indicator data as well as the community survey results. Additionally, there was a review and discussion of the 2013 CHNA Implementation Plan and the work that had been accomplished. There were multiple discussions about what the data actually reflected in the community, and which efforts had been working.

The prioritization was done by a voting process, with everyone except Liz Williams and Carrie Schmidt (the facilitators) participating. Health needs that could be voted for included the four focus areas from the 2013 CHNA Implementation Plan, top health issues from the 2016 health indicator data, top health concerns from the 2016 survey, and any additional issues the group wanted to add. Each participant was given five stickers and asked to place them on the issue(s) they felt were the most important. Individuals could place as many stickers on one issue as they wanted.

2013 CHNA Focus Areas	2016 Top Health Indicator Issues	2016 Top Health Concerns from the Survey	Additional Issues from Group
• Mental Health Issues • Alcohol and Substance Abuse, specifically in connection to Domestic Violence • Aging Services /Hospice • Awareness of Existing Services	• Cancer • Heart Disease • Chronic Respiratory Conditions • Stroke • Diabetes • 5 Year Infant Mortality • Mental Health • Healthy Lifestyle Concerns (Youth and Adults)	• Obesity • Mental Health (not including Substance Abuse) • Heart Disease • Cancer • Diabetes • High Blood Pressure • Mental Health – Substance Abuse (Prescription or Illegal Drugs)	• Reproductive Health

Results of the prioritization exercise were as follows (If the need is not listed, it received zero votes):

Health Need	**Number of Votes**
Mental Health (Substance Abuse and Non Substance Abuse combined)	14
Healthy Lifestyle / Obesity	9
Cancer	8
Diabetes	5
Awareness of Services	4
Infant Mortality	2
Heart Disease	1
Reproductive Health	1
Aging Services / Hospice	1

This identified the top five areas of focus as:

1. Mental Health
2. Healthy Lifestyle / Obesity
3. Cancer
4. Diabetes
5. Awareness of Services

IMPLEMENTATION STRATEGY

Strategy Process for Addressing Prioritized Health Needs

Following the prioritization of the health needs by the community stakeholder group, the next step was to develop an implementation strategy to impact these concerns in the community. In order to not duplicate existing efforts already underway, the group met again on July 21, 2016 (this time adding Patti Kiger of Eastern Shore Healthy Communities and Jane Duer from Riverside Shore Cancer Center to the existing group). The group then heard overviews of five key areas as well as an overview of area transportation, which was considered to be a critical component for accessing the available services. Each presentation touched on the current state of focus in their area, the future vision and obstacles faced. Following the presentations, the group had some significant discussion about the five focus areas and what additional work, if any, could be done to advance the efforts.

Through the conversation around the existing efforts, the team determined that the existing plans for addressing the key areas were strong, and that it was important to support the different community partners' efforts currently underway instead of creating parallel work plans for mental health, cancer, diabetes, obesity/healthy communities and transportation. That said, the group continued to come back to the issue of awareness of services as a critical and foundational issue that impacted all of the prioritized health needs. Due to the limited access to the internet across the Eastern Shore, the online directory service has not been a successful solution to the problem.

The community stakeholder team determined that the key focus area should be to create a service that would enable people to have access to the same directory of services via telephone instead of the internet. While the other focus areas continue to be of high priority, the team determined that the issue of Awareness of Services would be the key focus, specifically with the effort to develop a phone-based directory service to help Eastern Shore residents access existing services.

Significant Health Needs To Be Addressed

- Mental Health
- Healthy Lifestyle / Obesity
- Cancer
- Diabetes
- Awareness of Services

While all of the areas are on the "prioritized" list, Awareness of Services will be the focus of the effort to develop a phone-based directory of services.

Significant Health Needs Not Being Addressed

Not every need identified in the CHNA process can be addressed as a priority area.

Due to the limitation of resources, the size of the issue and the capacity of the existing organizations to impact the problem, the following issues were not identified as priorities:

- Chronic Respiratory Conditions
- Stroke
- Reproductive Health
- Infant Mortality
- Aging Services

Additionally, issues that did not rank as top health indicator problems in the quantitative analysis or noted as perceived community health issues in the survey are not going to be addressed as a part of Riverside Shore Memorial Hospital's 2016 CHNA and Implementation Strategy. Examples of these areas include:

- Environmental Health
- Drowning / Water Safety
- Autism
- HIV / AIDS
- Dental / Oral Care
- Neurological Problems
- Arthritis
- Hunger
- Chronic Pain
- Renal Disease
- Orthopedic Problems
- Sexually Transmitted Diseases
- Violence
- Physical Disabilities
- Bullying

Initial Implementation Strategy

For each area of focus, background information, action steps and anticipated resources are noted.

Awareness of Services

Background:
In 2013, Awareness of Services was an area of focus. RSMH attempted to address this issue by creating a printed directory and maintaining an online directory of services on its website. However, the 2016 CHNA process revealed that this was not an effective solution. Two of the key problems noted were maintaining the accuracy and contact information of all of the local agencies as well as limited internet access across the Eastern Shore. While many individuals are able to access the internet from smartphones while along the State Route 13 corridor, once they are a mile east or west of the road, the coverage is extremely limited.

Action Steps:
As part of the 2016 Implementation Strategy, the community stakeholder team determined that the lack of awareness of existing services was a key foundational issue that needed to be addressed in order to impact multiple health needs.

The concept that the group focused on is the idea of the telephone directory of services, known as 311 in some communities. This has been successfully implemented in other urban and rural communities and may be the appropriate model to utilize for the Eastern Shore of Virginia. However, to be successful, the model has to be thoroughly researched. Then a plan needs to be created detailing the funding, staffing, data upkeep and other operational details. The goal is to develop and finalize a feasible plan during 2017 that could be funded and implemented in 2018.

Resources:
In late 2016 / early 2017, Riverside will fund an independent contractor on the Eastern Shore to research the viability of such a program and create a business plan.

As the research has yet to be completed to determine the full costs of such a program, it is too early to know the anticipated startup and annual operational costs of such a program. However, if the costs are too high for Riverside to fully fund, a financial plan could be created that combines Riverside, community funds and external grant funding to cover the anticipated costs. This will be determined once the plan is developed.

Mental Health

Background:
As in the rest of the country, mental health is perceived as an underserved health need on the Eastern Shore. While there is no inpatient behavioral health facility on the Eastern Shore, the Community Services Board supports multiple programs including preventive and crisis services, group homes and day programs for those with intellectual disabilities. There is a CIT Assessment Center, and mental health first aid is expanding across the area to include the public schools. Funding continues to be a problem with fewer funds coming directly from the state or from reimbursable services.

Action Steps:
Riverside will continue to be supportive of the Community Services Board and other organizations serving the mental health needs of the Eastern Shore population. As opportunities arise, Riverside may partner with the CSB and others to provide training or services to the community.

Resources:
Riverside will continue to participate with and support local and state organizations working to address behavioral health issues on the Eastern Shore.

Healthy Lifestyle / Obesity

Background:
As the health indicator data notes, the population on the Eastern Shore struggles with obesity and obesity-related conditions, such as hypertension and diabetes. Tobacco use is also very high in the region, which also contributes to health problems such as respiratory disease and cancer. Patti Kiger of Eastern Virginia Medical School leads Eastern Shore Healthy Communities (ESHC), which works to address the foundational issues impacting healthy lifestyle adoption on the Eastern Shore. ESHC is in the process creating its strategic plan to finalize the vision moving forward.

Action Steps:
Riverside will continue to participate with the Eastern Shore Healthy Communities group as it works to take a broader, population health focus to promoting better health on the Eastern Shore. In addition to supporting ESHC, Riverside will continue to support other organizations promoting healthy lifestyles.

Resources:
Riverside will continue to participate with and support local organizations working to address healthy lifestyle issues on the Eastern Shore.

Cancer

Background:
Cancer is consistently one of the top two causes of death for residents of the Eastern Shore. There is a complete array of cancer services, from diagnostics to treatment, on the Eastern Shore. The program has been certified by the Commission on Cancer since 2000. In January of 2017 the new Shore Cancer Center will open and will have the latest radiation therapy technologies.

Action Steps:
Riverside will continue to support a strong cancer program on the Eastern Shore and open the new cancer center in January 2017. The Cancer Services department will continue to work on community screening and awareness events as appropriate. Additionally, Riverside will continue to support and work with community partners, such as the American Cancer Society and Eastern Shore Rural Health to promote cancer prevention and early diagnosis. With tobacco use so high in the region, continued focus

on smoking cessation and prevention in the schools is important. And, with much of the area driven by the water, sunscreen utilization will continue to be emphasized for skin cancer prevention.

Resources:
Riverside has committed the funds for the region's only cancer treatment center, which will open in 2017. Additionally, it will continue to support the American Cancer Society.

Diabetes

Background:
There is a high need for diabetic care across the Eastern Shore. With no endocrinologist in the region, the care is managed by primary care, but patients with unmanaged diabetes seek care in the emergency department. Recognizing this, Riverside Shore Memorial Hospital and Eastern Shore Rural Health teamed up to work through a Taking Aim Grant funded by the Virginia Health Care Foundation to focus on the care of patients with diabetes (and asthma in a similar program).

Action Steps:
The program identifies at risk patients, or patients with uncontrolled diabetes, and connects them with a care manager. The care manager then works with them to help them stay healthy and avoid a visit to the emergency department in a diabetic crisis. The initial goal is to care for 100 patients, with each one graduating after one year of healthy management. The care manager will help them with tracking hemoglobin A1c, managing physician office visits, arranging appointments with diabetes educators and other available services.

Resources:
The current grant funds one year of the program. The goal is to be able to identify resources to continue the program after the grant expires, but it will depend on the outcomes produced through the program.

Questions, Comments and Copies

To view an electronic copy of this document, please visit www.riversideonline.com/community_benefit.

For questions or comments on this Community Health Needs Assessment and Implementation Plan, please contact Riverside's Marketing, Strategy and Development department at 757-534-7051 or via the comments section on www.riversideonline.com/community_benefit.

To obtain a paper copy, please visit the Administration Department of Riverside Shore Memorial Hospital's Administration Department or call 757-534-7051.

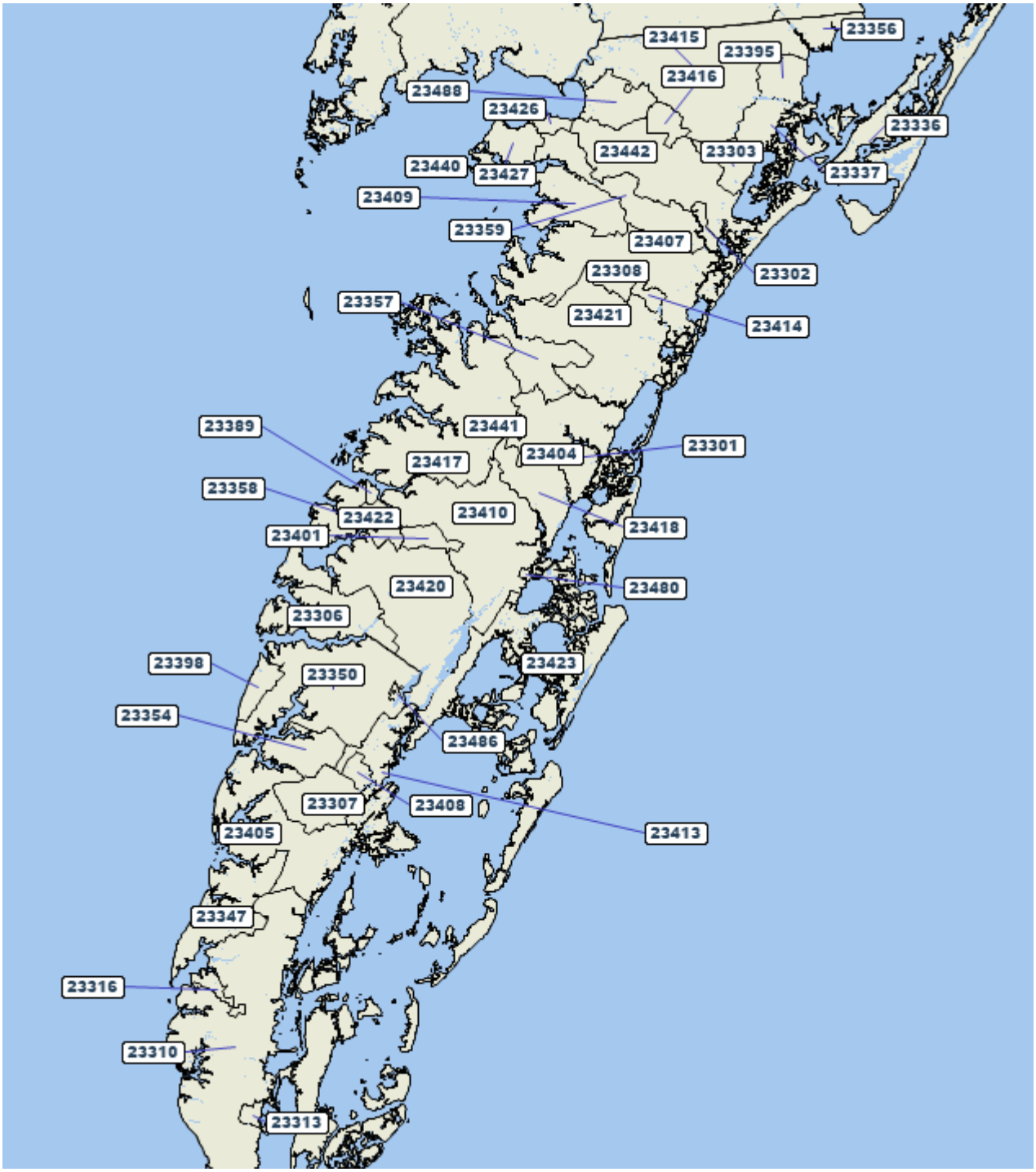
APPENDIX A. Zip Code-Level Maps for the Study Region

The maps in this section illustrate the geographic distribution of the zip code-level study region population on key demographic and health indicators. The results can also be used alongside the Community Survey Results and the Community Indicators to help inform plans for community health initiatives. The exhibits in this section include the following:

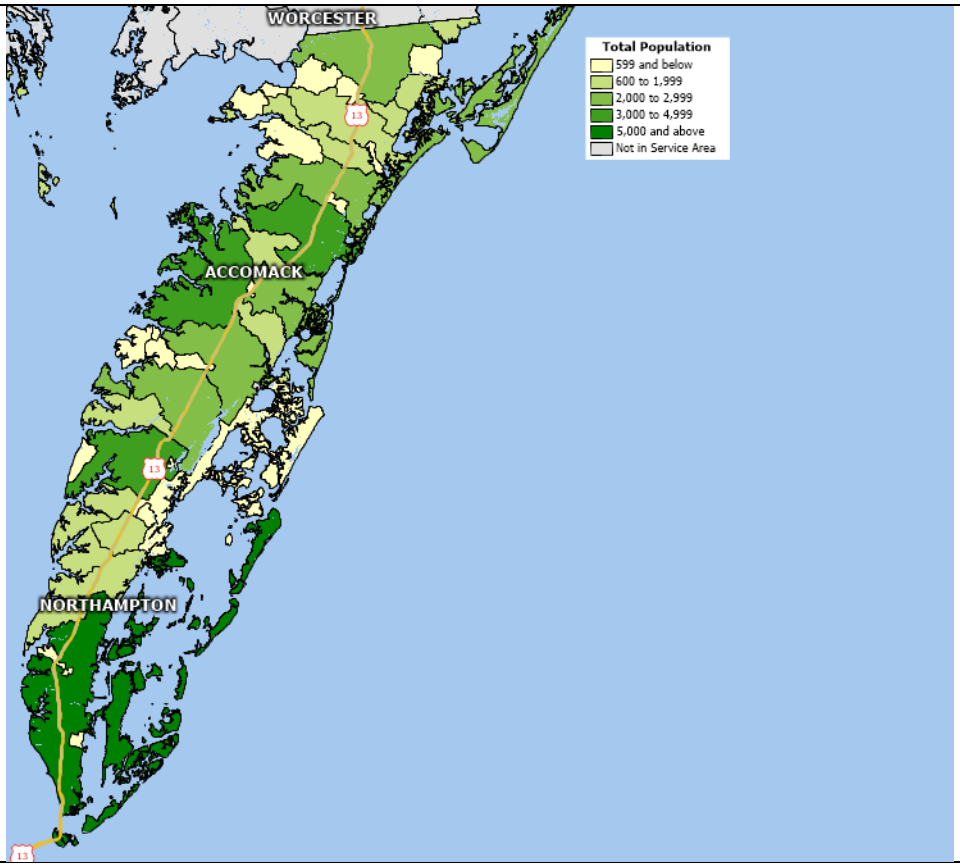
Technical Notes

1. The maps and data include 44 zip codes, as identified by Riverside Shore Memorial Hospital, all of which fall within Accomack and Northampton counties. Because zip code boundaries do not automatically align with city/county boundaries, there are some zip codes that extend beyond the county boundaries. Additionally, many residents of the Eastern Shore use P.O. boxes which are assigned to zip codes. Some data are unavailable for some of these zip codes, and cannot be mapped. Consequently, the combined zip code-level totals for population, deaths, births, hospital discharges, etc. differ from the locality-level study region totals listed throughout the body of the report.
2. A reference map is provided first, to assist the reader in locating the zip codes of interest, as the data maps do not have zip codes labeled for readability.
3. The maps show counts rather than rates. Rates are not mapped at the zip code level because in some zip codes the population is too small to support rate-based comparisons.
4. Data are presented in natural breaks.
5. Zip Code-Level Study Region zip codes with zero values are noted.

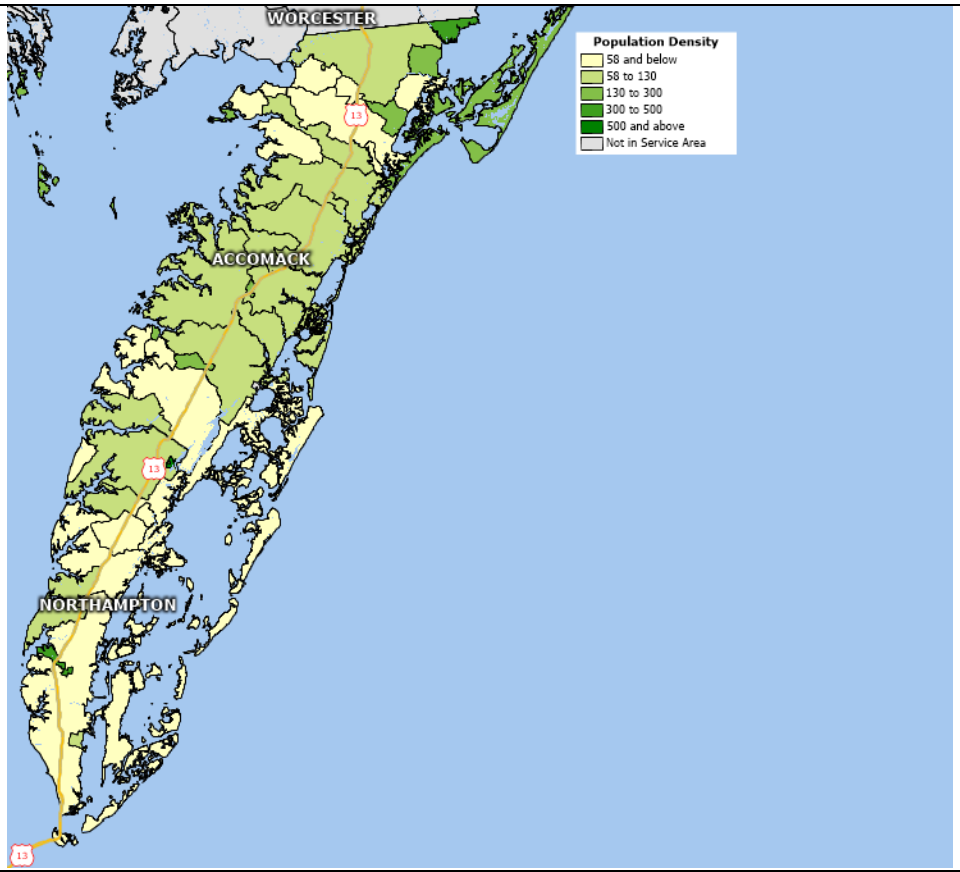
Zip Code Reference Map – Eastern Shore of Virginia



Map 1: Total Population, 2014

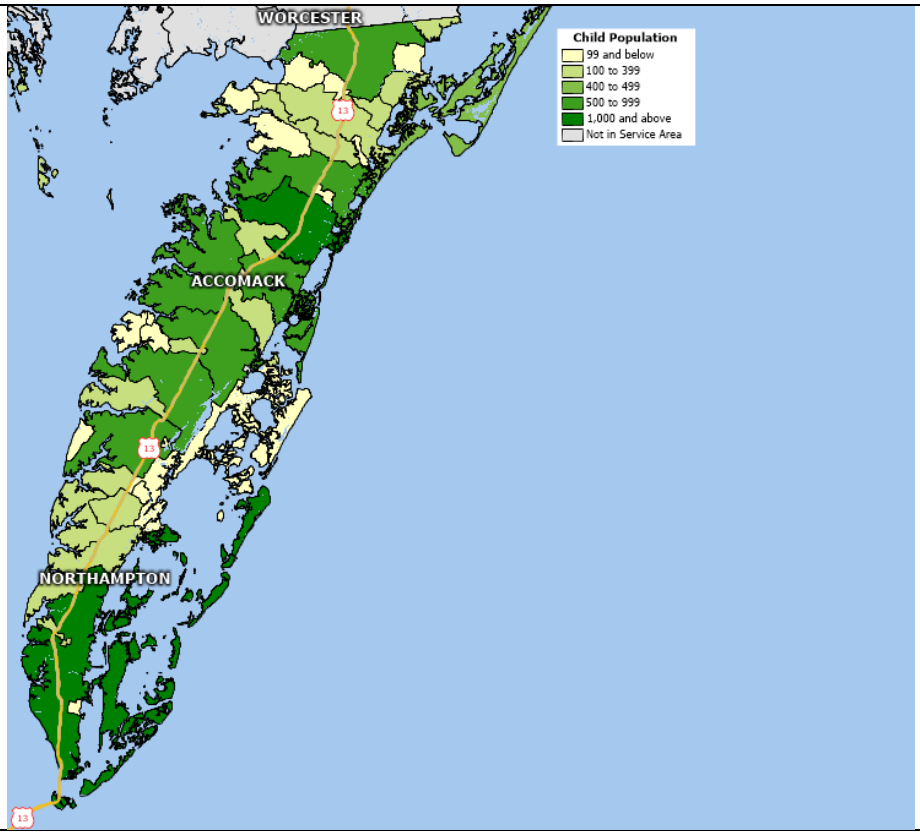


Map 2: Population Density (population per square mile), 2014

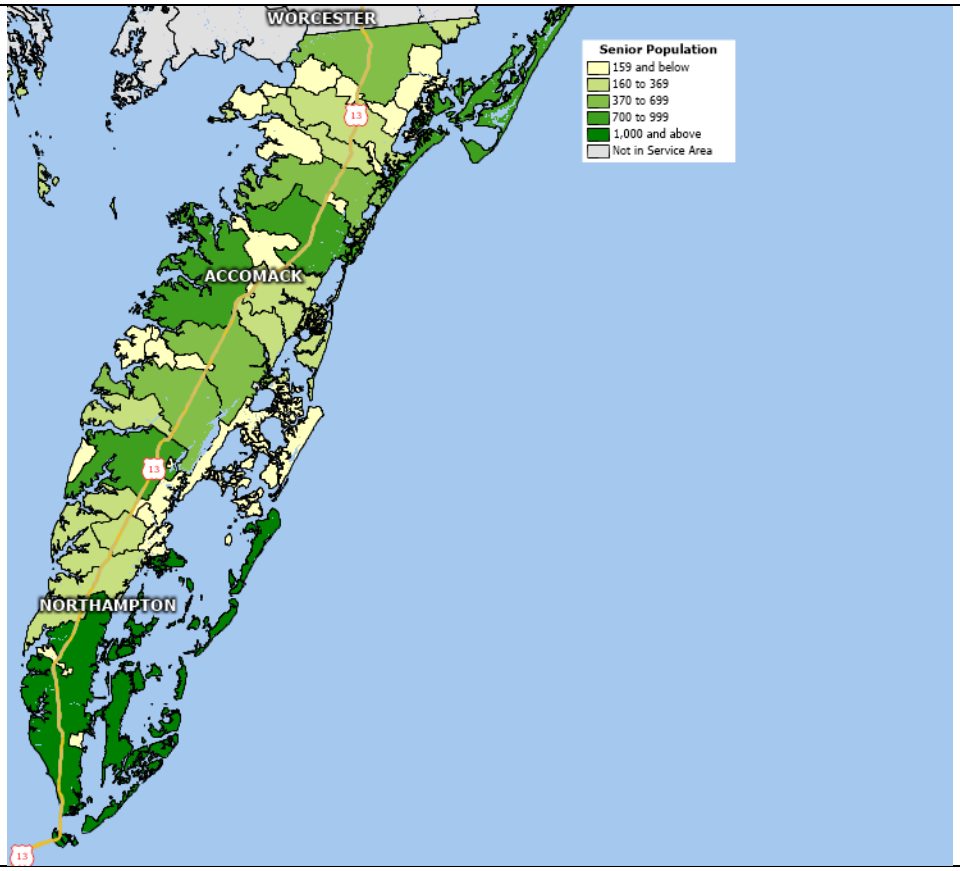


Source: Community Health Solutions analysis of estimates from Alteryx, Inc. See Appendix C. Data Sources for details.

Map 3: Child Population Age 0-17, 2014

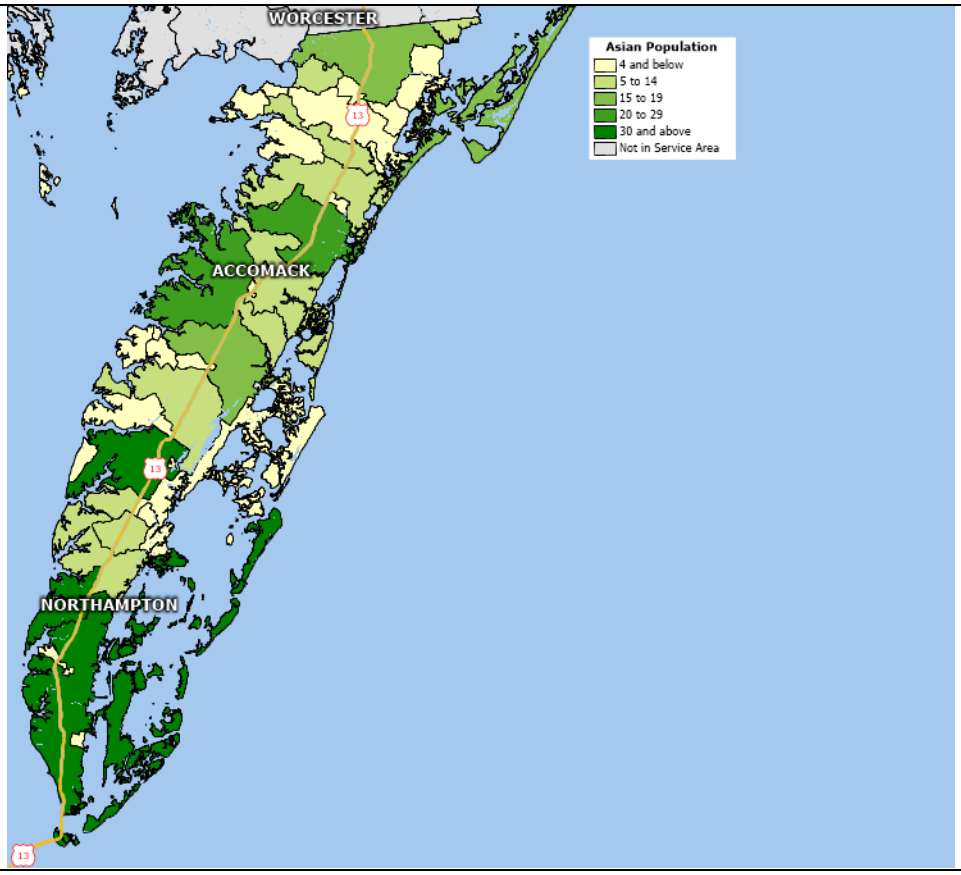


Map 4: Senior Population Age 65+, 2014

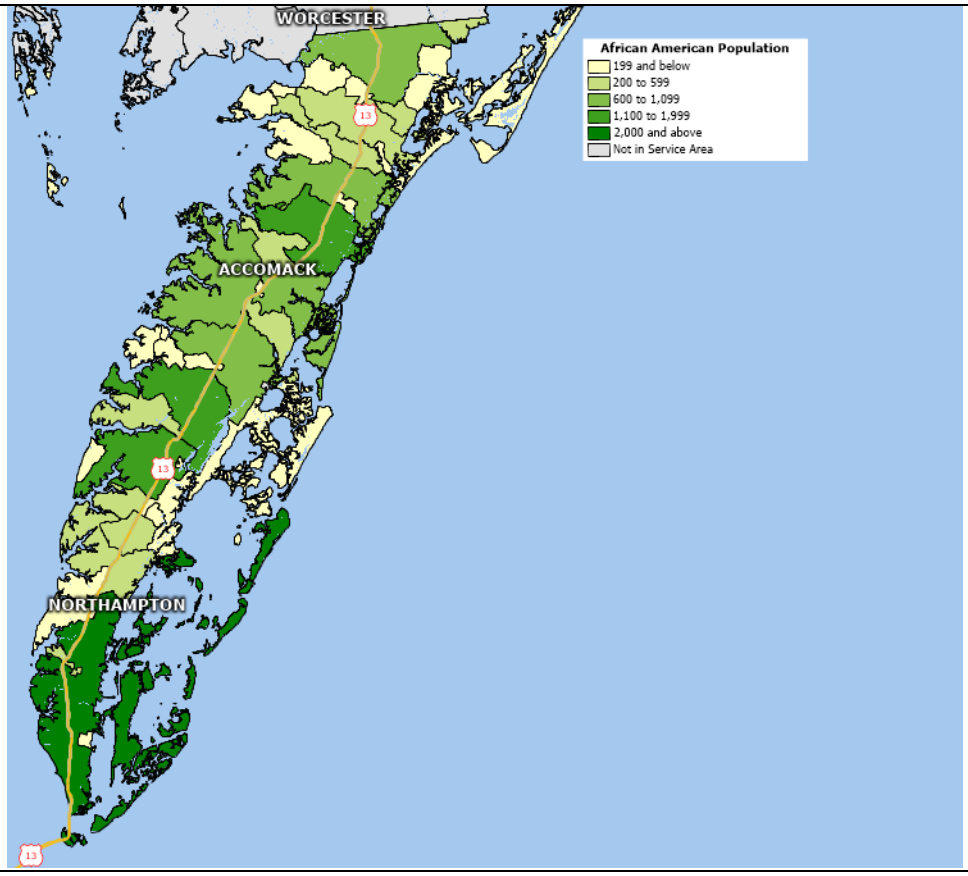


Source: Community Health Solutions analysis of estimates from Alteryx, Inc. See Appendix C. Data Sources for details.

Map 5: Asian Population, 2014

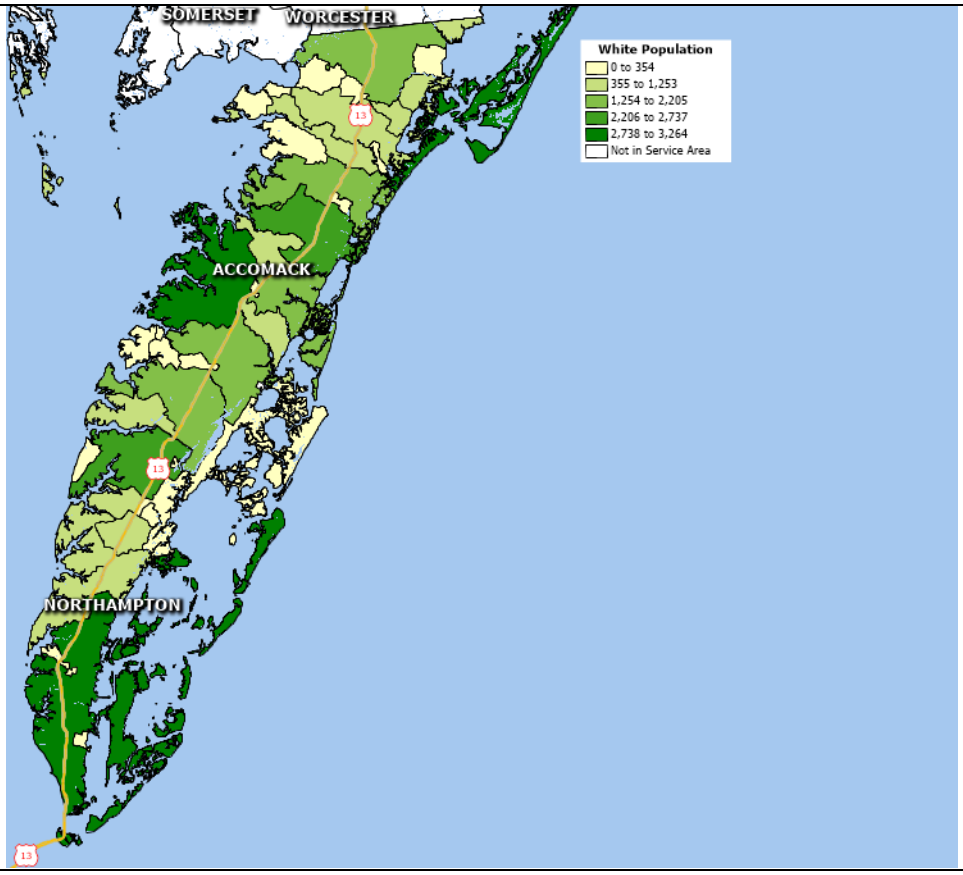


Map 6: Black/African American Population, 2014

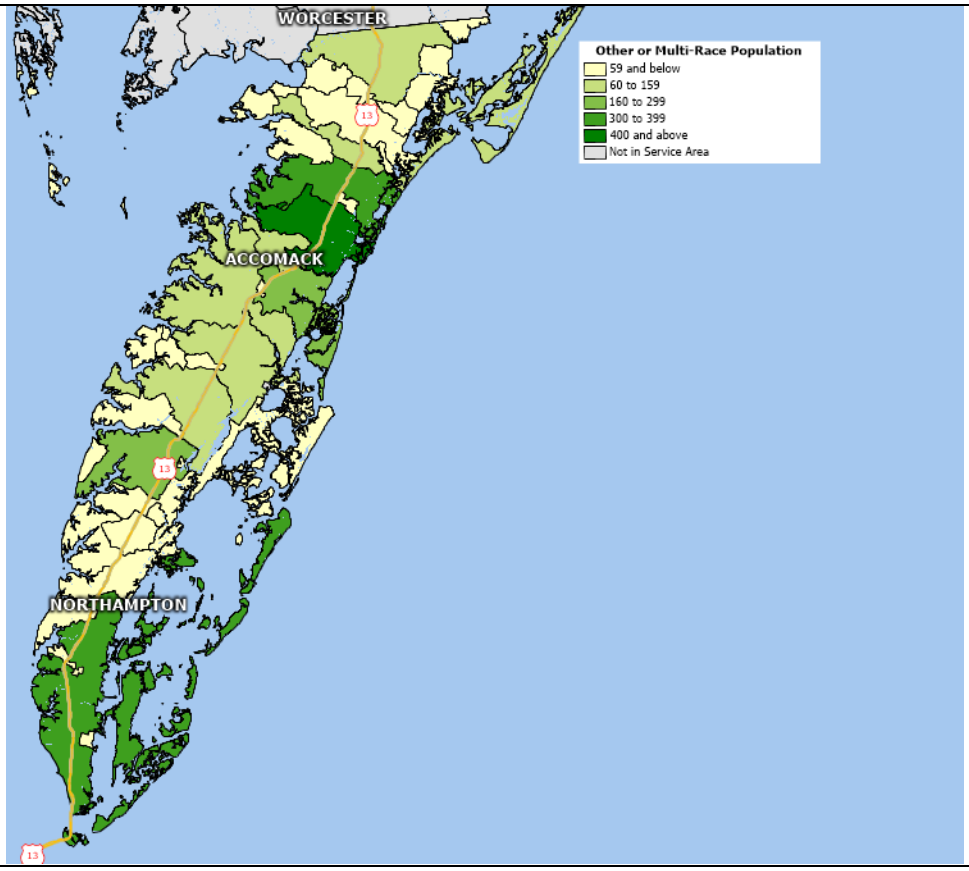


Source: Community Health Solutions analysis of estimates from Alteryx, Inc. See Appendix C. Data Sources for details.

Map 7: White Population, 2014

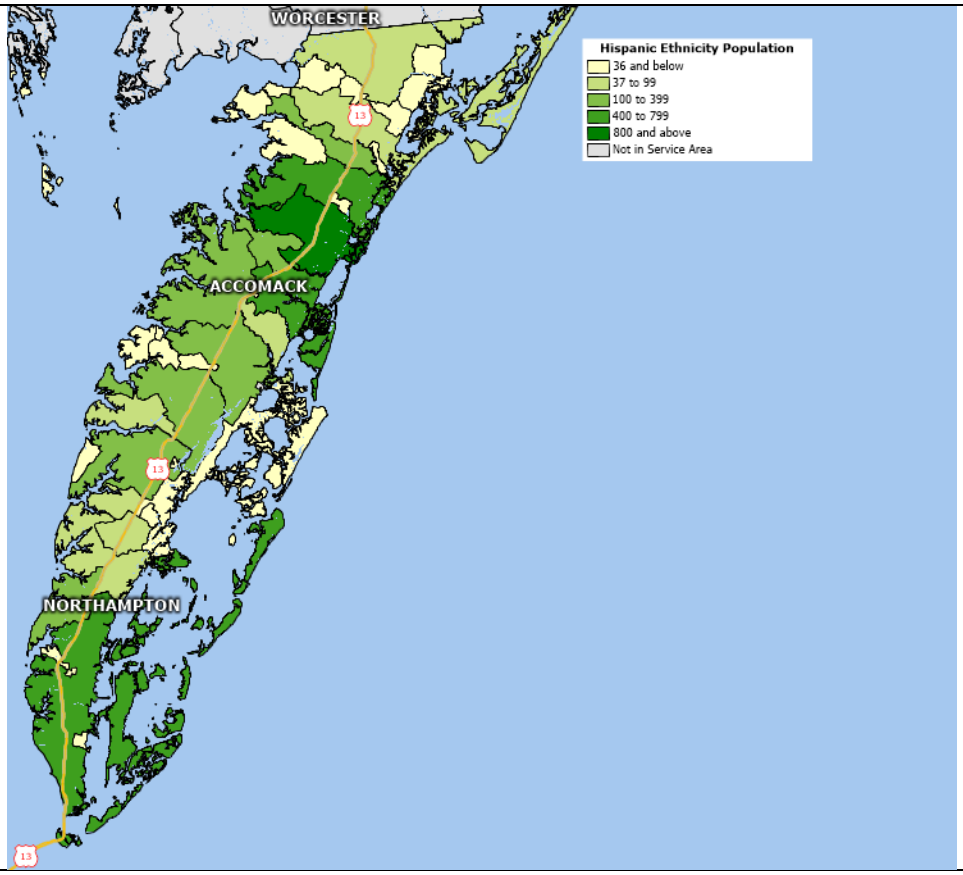


Map 8: Other or Multi-Race Population, 2014

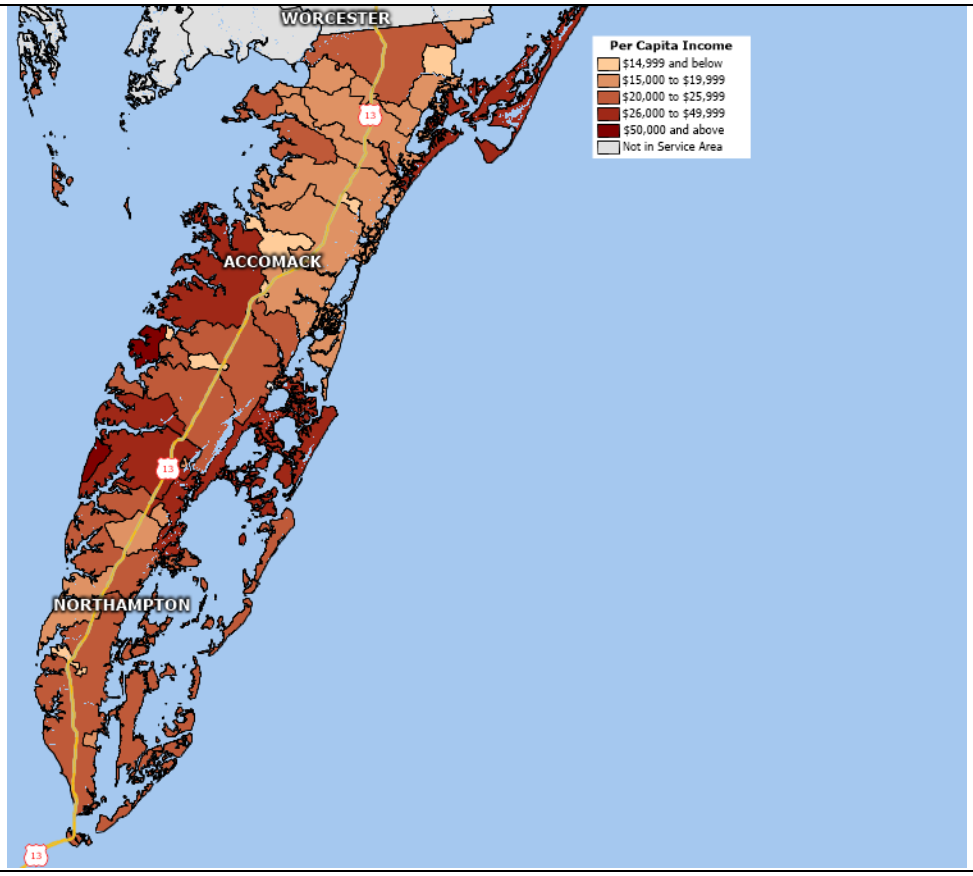


Source: Community Health Solutions analysis of estimates from Alteryx, Inc. See Appendix C. Data Sources for details.

Map 9: Hispanic Ethnicity Population, 2014

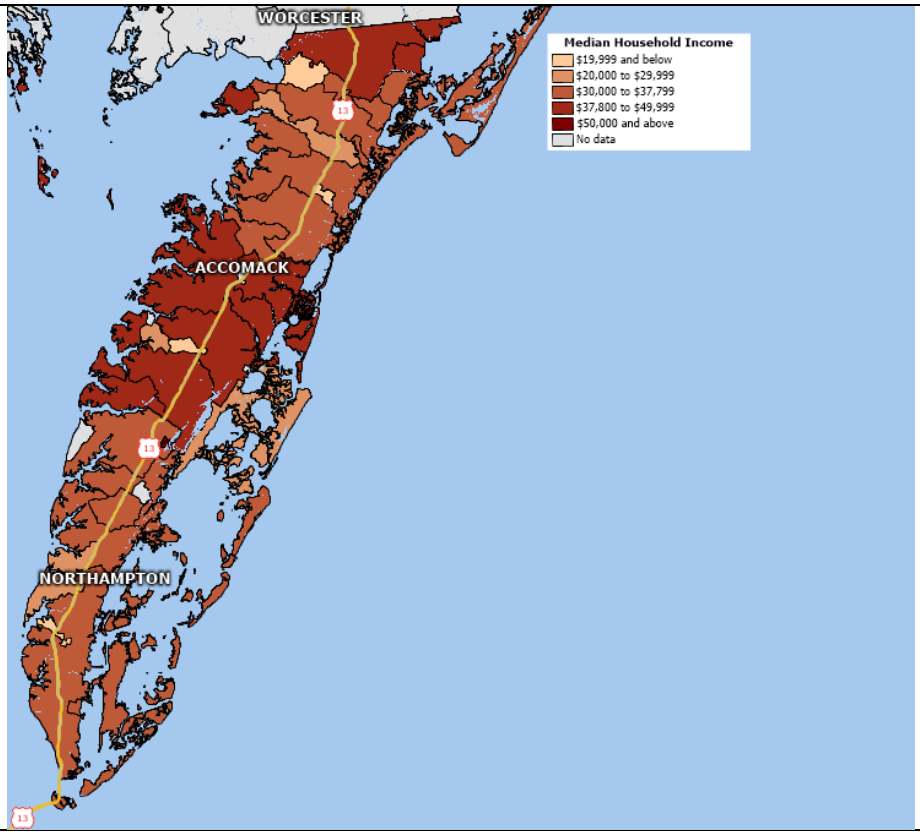


Map 10: Per Capita Income, 2014

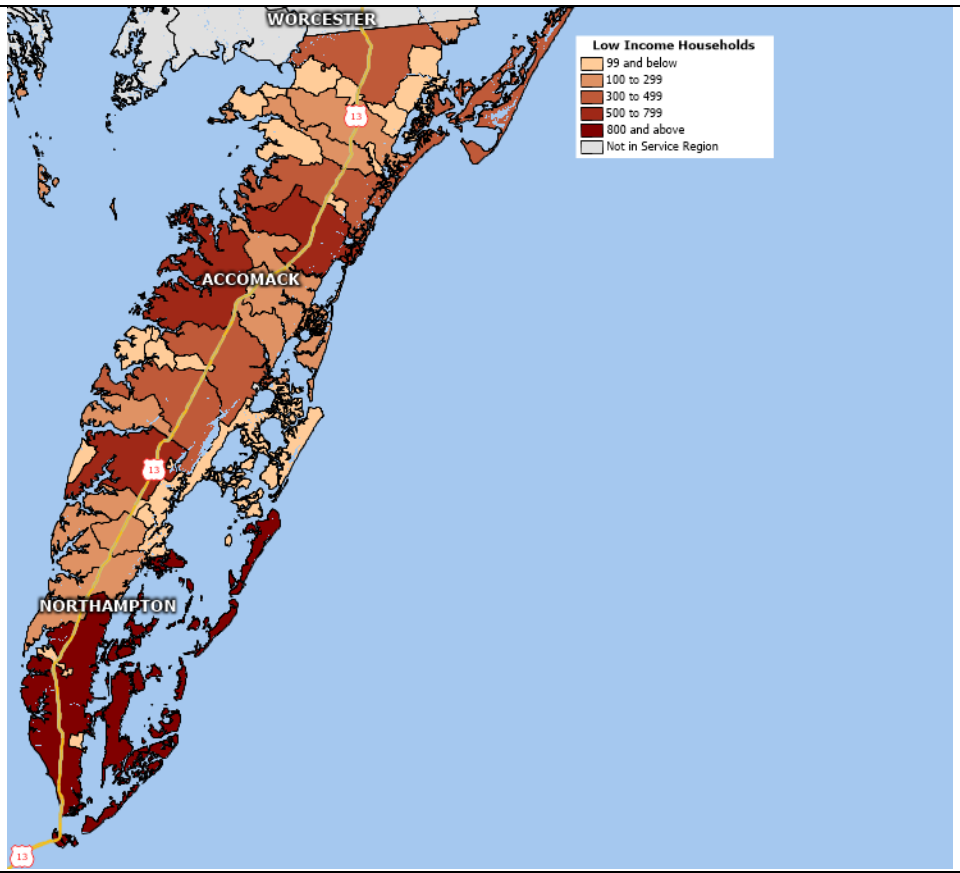


Source: Community Health Solutions analysis of estimates from Alteryx, Inc. See Appendix C. Data Sources for details.

Map 11: Median Household Income, 2014

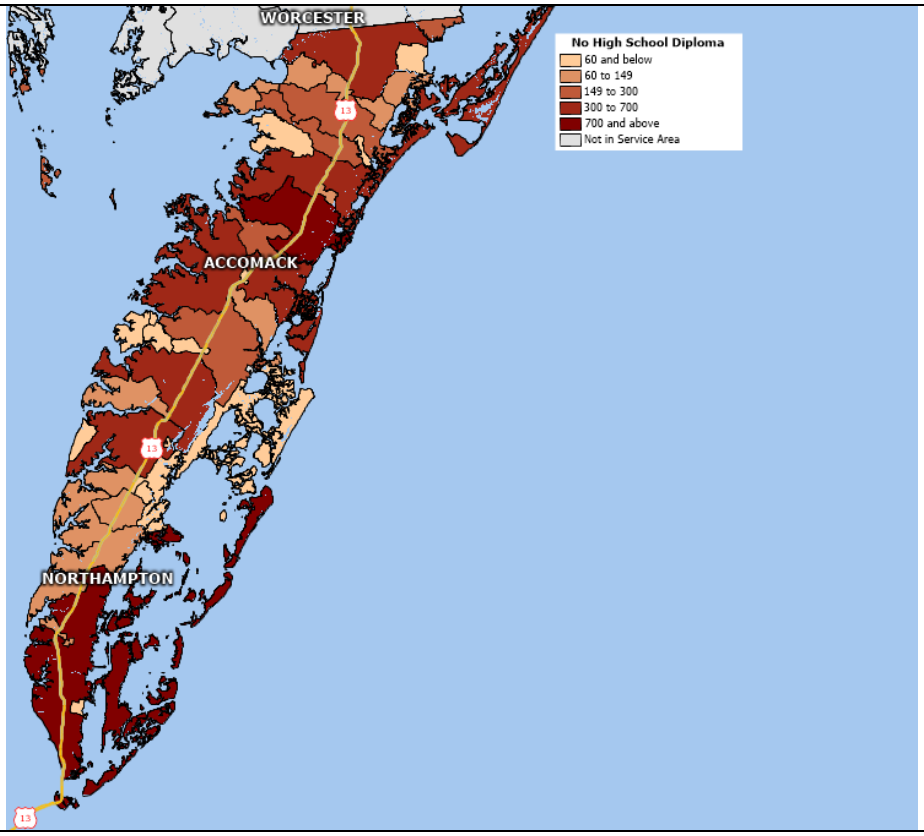


Map 12: Low Income Households (Households with Income <$25,000), 2014

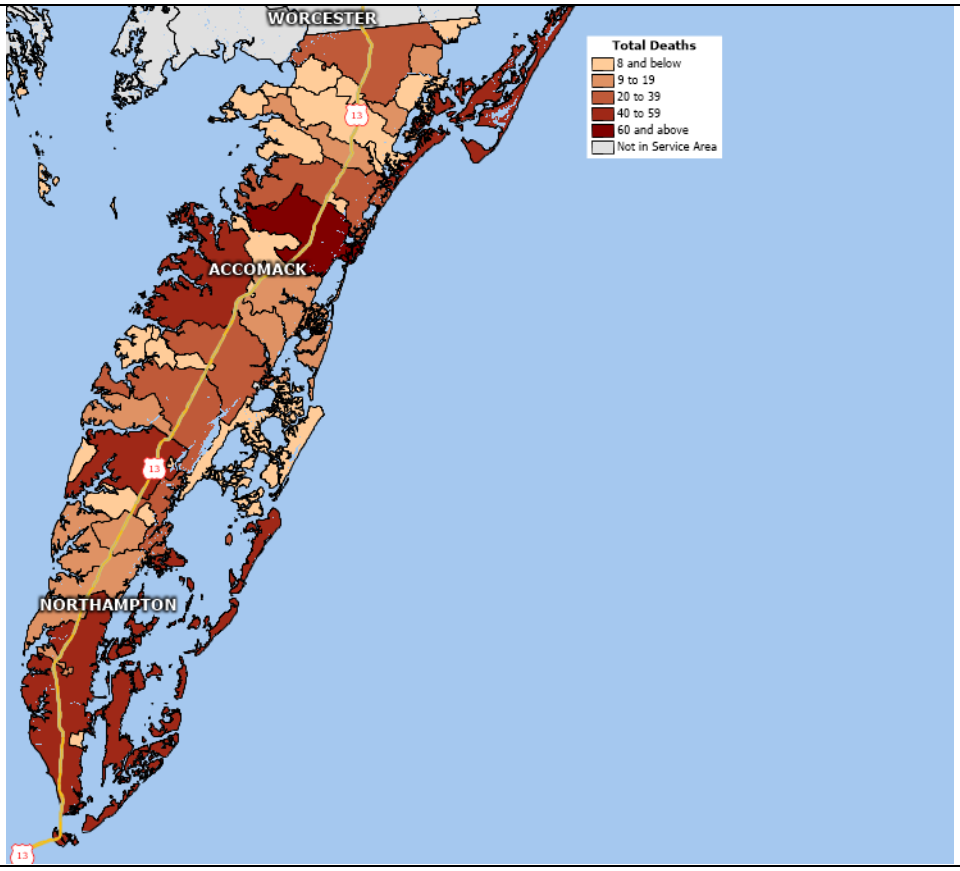


Source: Community Health Solutions analysis of estimates from Alteryx, Inc. See Appendix C. Data Sources for details.

Map 13: Population Age 25+ Without a High School Diploma, 2014

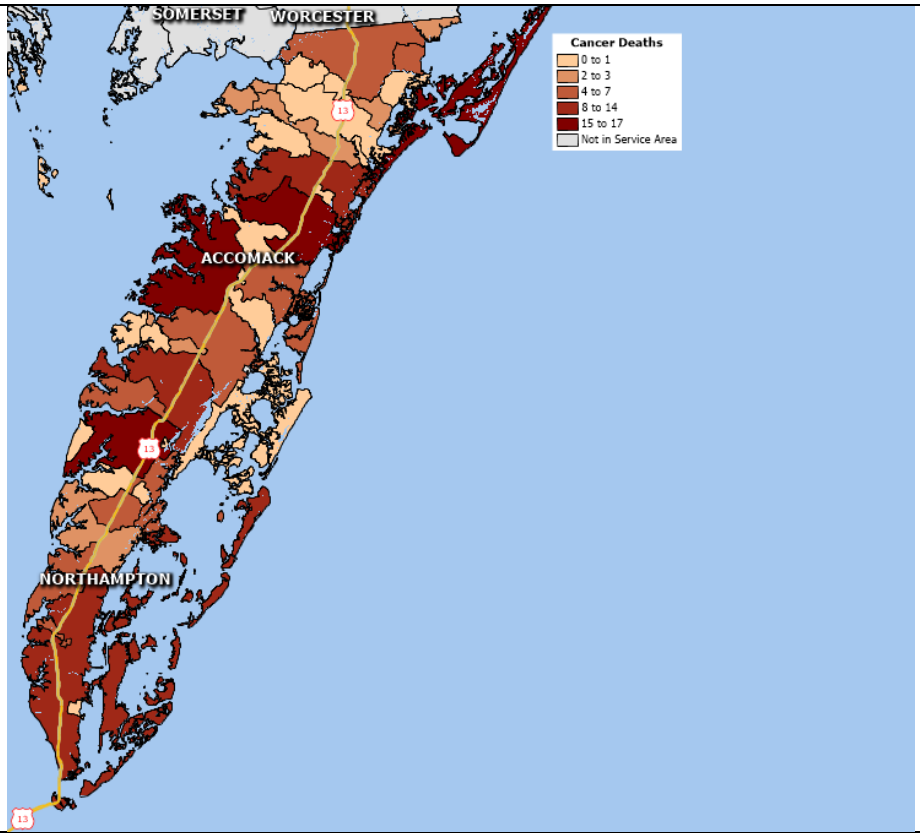


Map 14: Total Deaths, 2013*

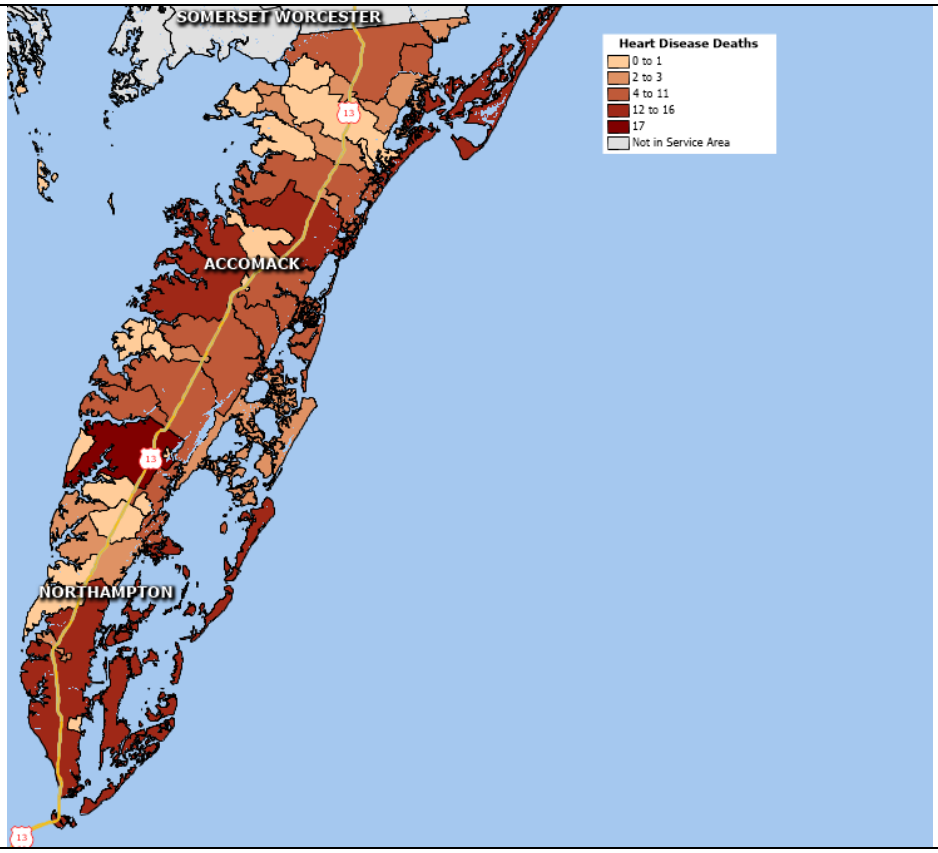


** There were no reported deaths for zip codes 23357, 23404, 23409 and 23398.*
Source: Community Health Solutions analysis of estimates from Alteryx, Inc. See Appendix C. Data Sources for details.

Map 15: Malignant Neoplasm (Cancer) Deaths, 2013*

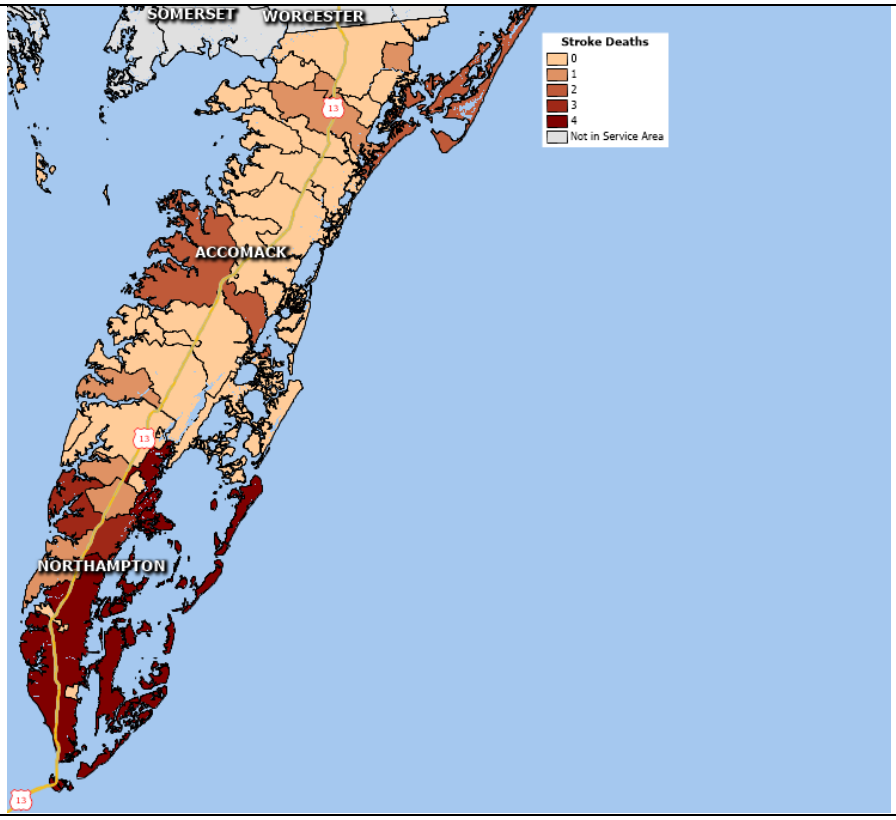


Map 16: Heart Disease Deaths, 2013**

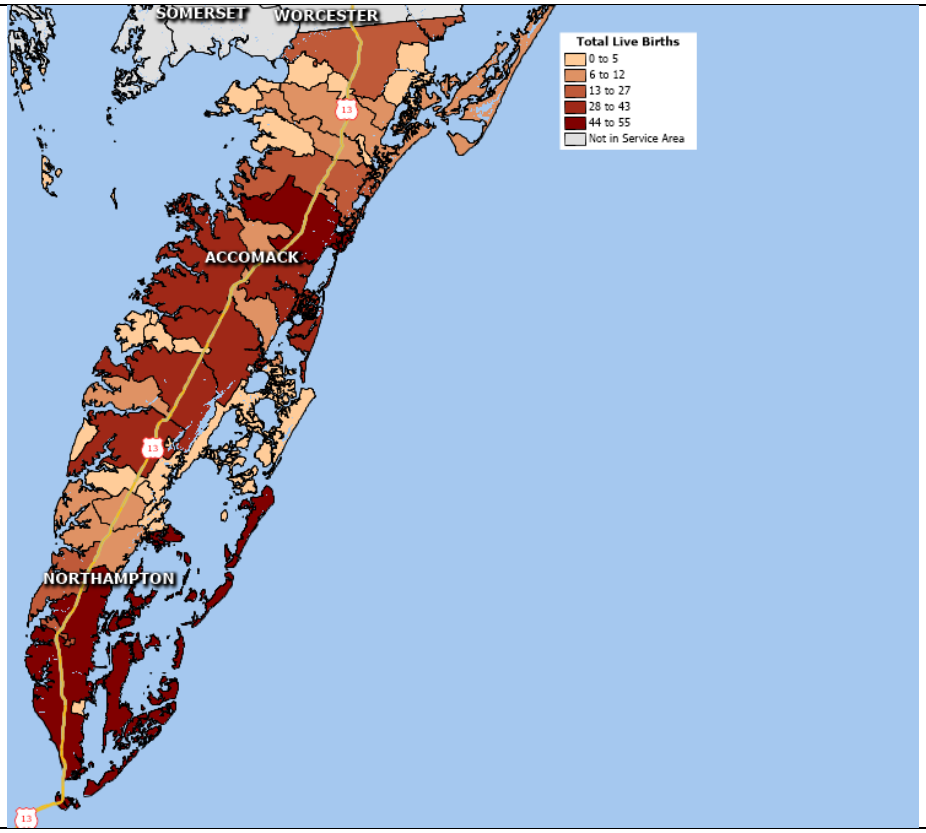


**There were no reported cancer deaths for 23313, 23337, 23357, 23398, 23404, 23409, 23414, 23422, 23423, 23440 and 23441. **There were no reported heart disease deaths for zip codes 23488, 23302, 23357, 23358, 23389, 23398, 23404, 23409, 23486. Source: Community Health Solutions analysis of data from the Virginia Department of Health. See Appendix C. Data Sources for details.*

Map 17: Cerebrovascular Disease (Stroke) Deaths, 2013*



Map 18: Total Live Births, 2013**

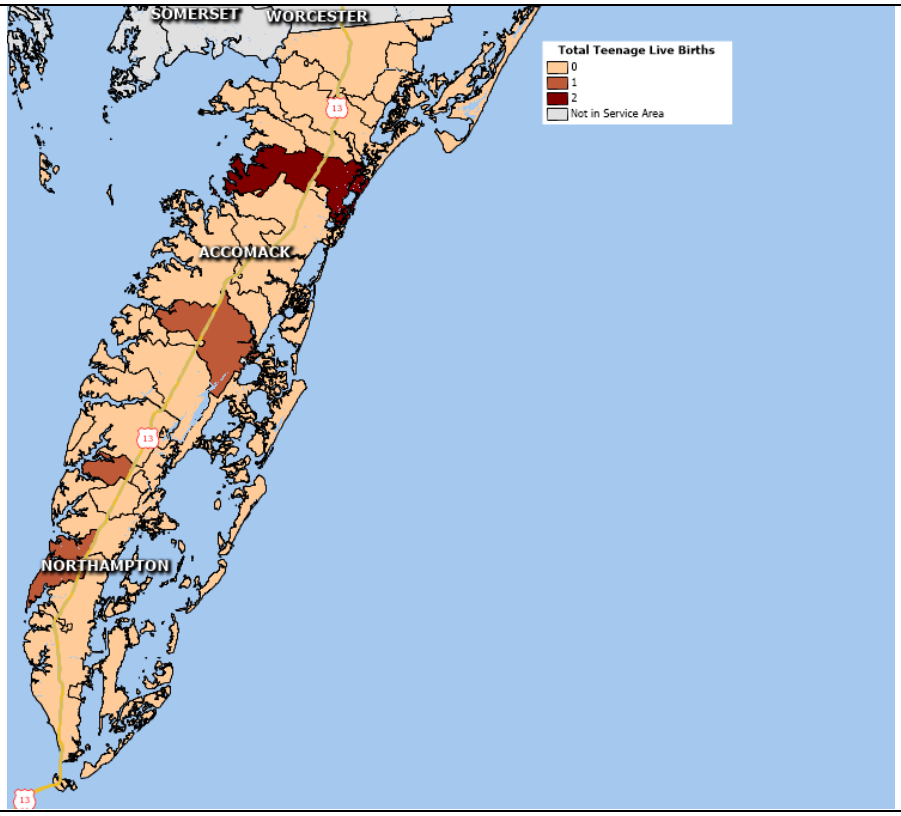


**There were no reported stroke deaths for zip codes 23301, 23302, 23303, 23308, 23313, 23316, 23337, 23350, 23356, 23357, 23358, 23359, 23389, 23398, 23401, 23404, 23408, 23409, 23410, 23414, 23415, 23420, 23421, 23422, 23423, 23426, 23427, 23440, 23441, 23486 and 23488.*

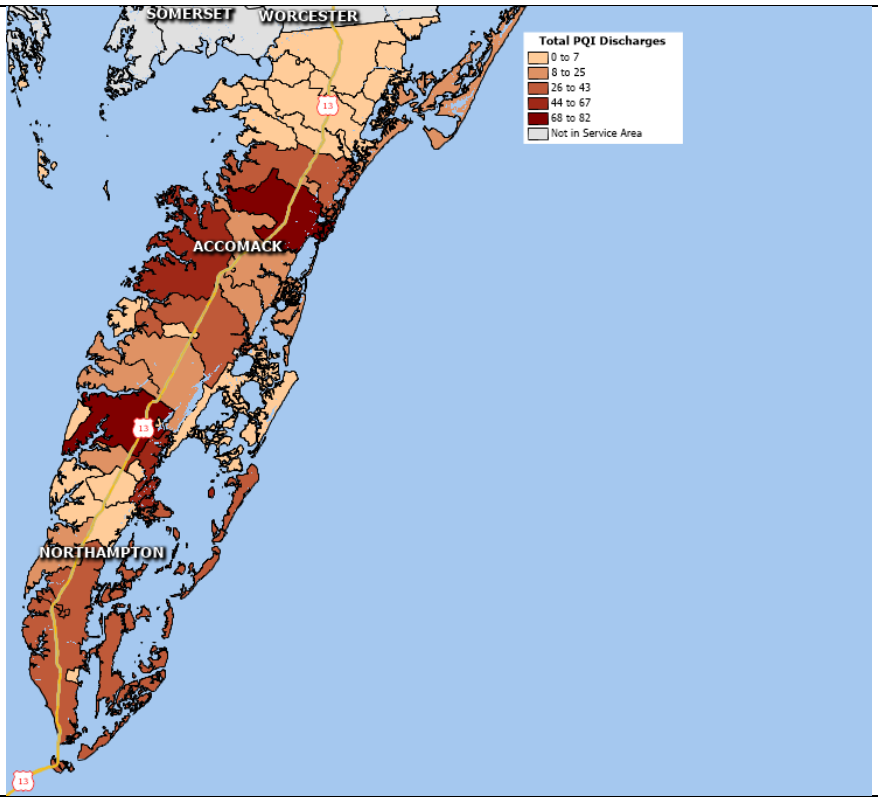
***There were no reported live births for zip code 23404, 23440, 23313 and 23389.*

Source: Community Health Solutions analysis of data from the Virginia Department of Health. See Appendix C. Data Sources for details.

Map 19: Total Teenage Live Births (age <18), 2013*



Map 20: Prevention Quality Indicator (PQI) Hospital Discharges, 2013**

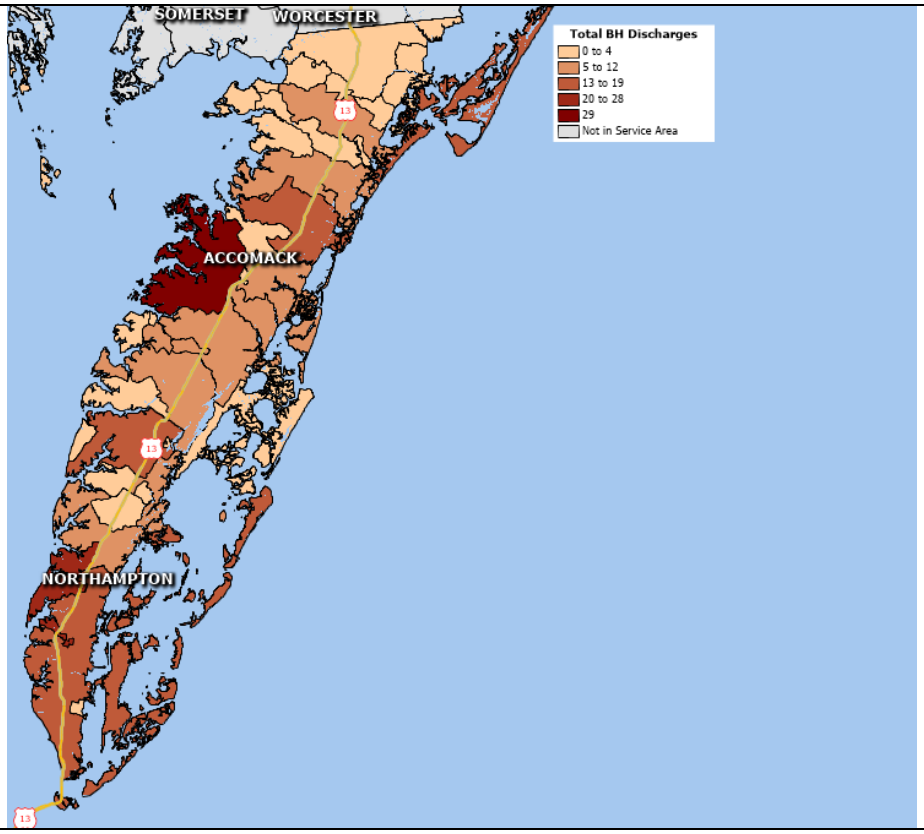


**There were no reported teenage live births (age <18) for zip codes 23301, 23302, 23303, 23306, 23307, 23310, 23313, 23316, 23336, 23337, 23350, 23356, 23357, 23358, 23359, 23389, 23395, 23398, 23401, 23404, 23405, 23408, 23409, 23413, 23414, 23415, 23416, 23417, 23418, 23420, 23421, 23422, 23423, 23426, 23427, 23440, 23441, 23442, 2348, and 23488.*

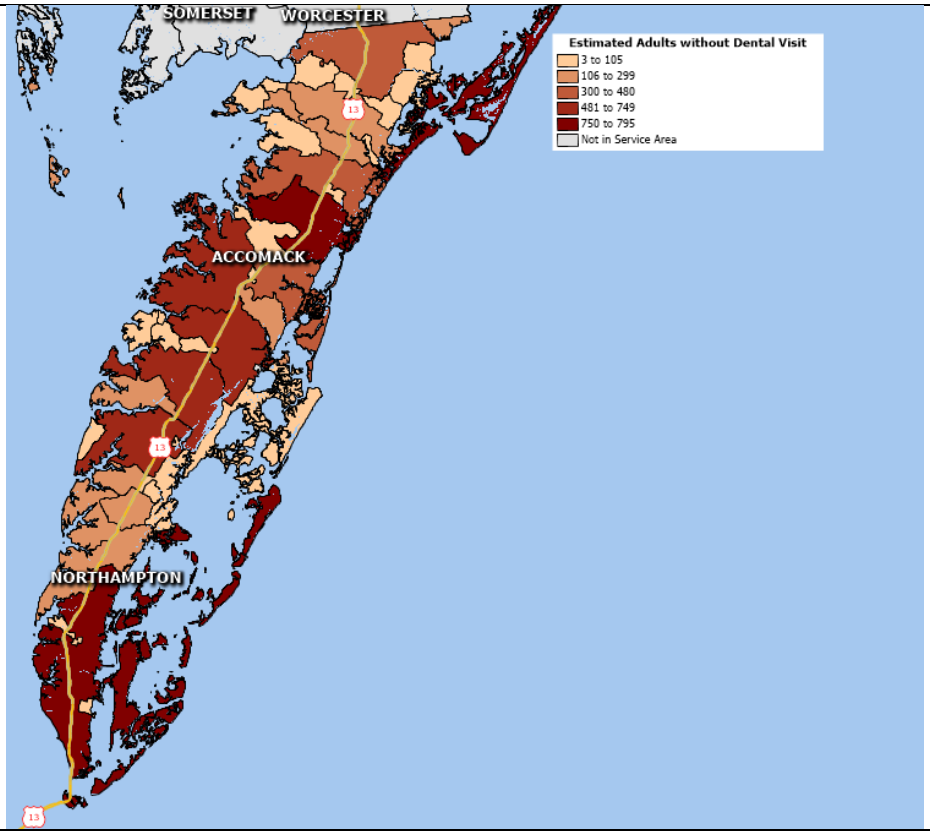
***There were no reported Prevention Quality Indicator (PQI) hospital discharges for zip codes 23302, 23356, 23358, 23404, 23440, 23427 and 23488.*

Source: Community Health Solutions analysis of data from the Virginia Department of Health. See Appendix C. Data Sources for details.

Map 21: Behavioral Health Hospital Discharges, 2013*

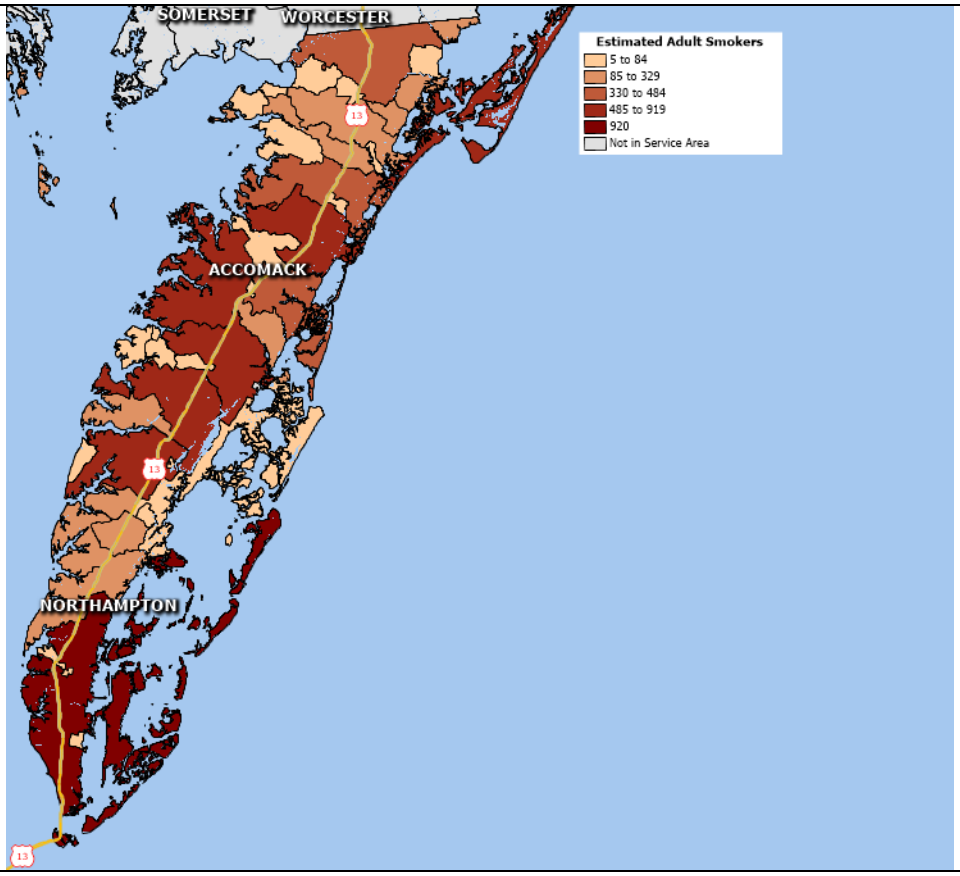


Map 22: Estimated Adults Age 18+ with No Dental Visit in the Last Year, 2014

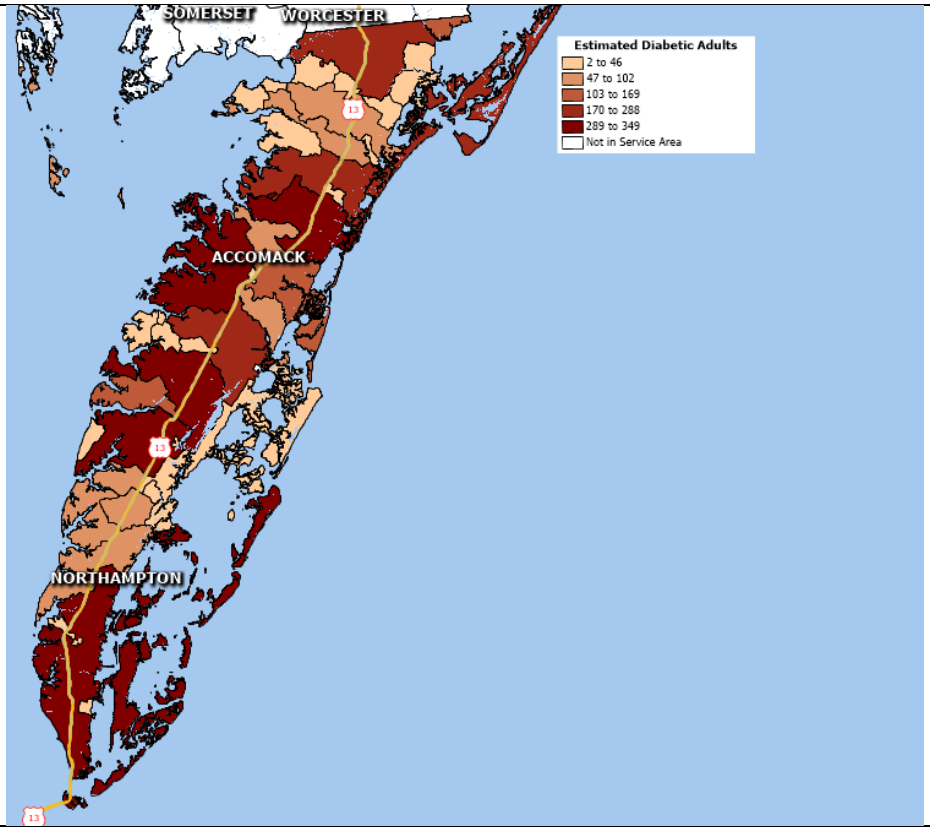


**There were no reported behavioral health discharges for zip codes 23302, 23337, 23358, 23395, 23404, 23426, 23398 and 23408.*
Source: Community Health Solutions analysis of hospital discharge data from Virginia Health Information, Inc. Estimates based on Community Health Solutions analysis of Virginia Behavioral Risk Factor Surveillance System data and estimates from Alteryx, Inc. See Appendix C. Data Sources for details.

Map 23: Estimated Adult Age 18+ Smokers, 2014

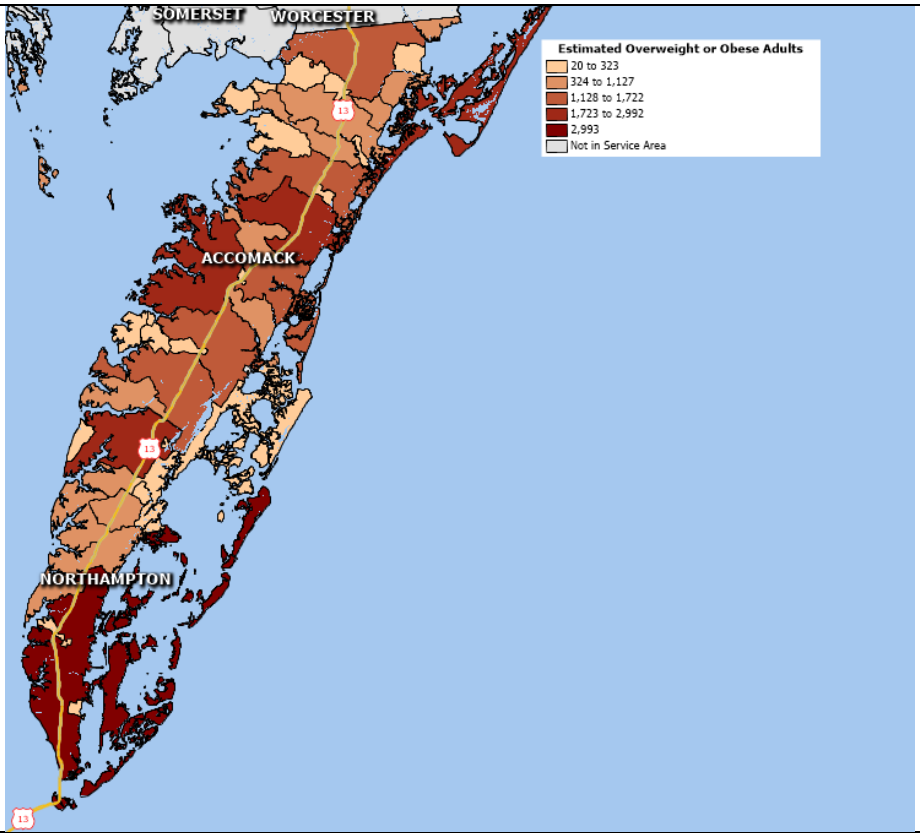


Map 24: Estimated Adults Age 18+ with Diabetes, 2014

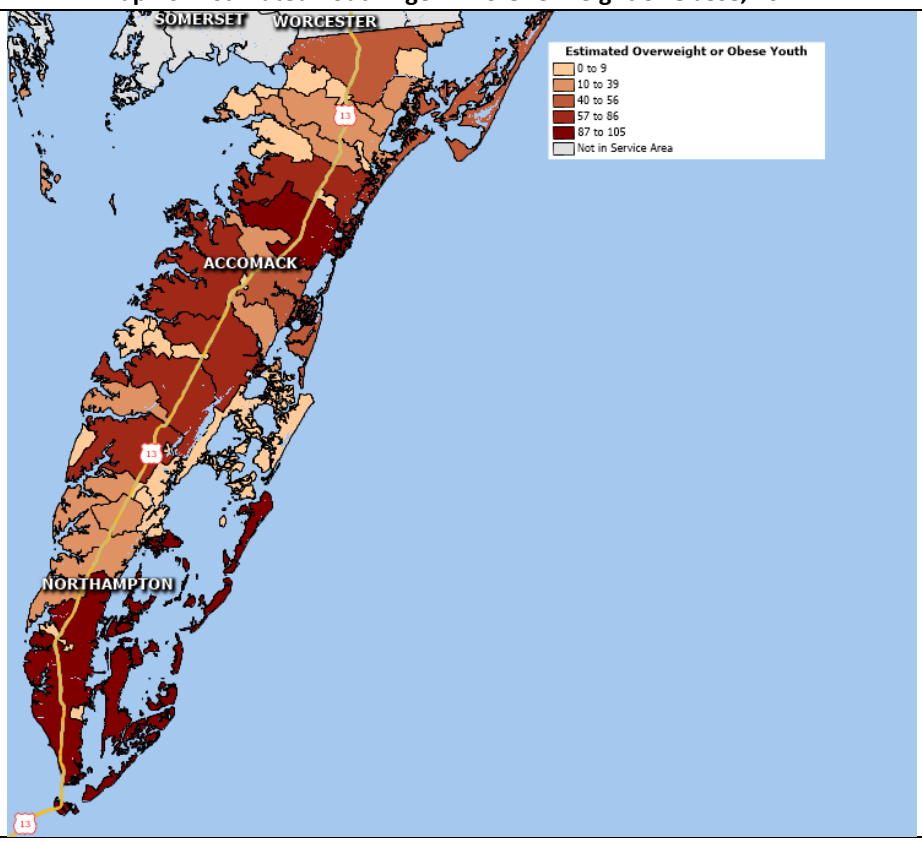


Source: Estimates based on Community Health Solutions analysis of Virginia Behavioral Risk Factor Surveillance System data and estimates from Alteryx, Inc. See Appendix C. Data Sources for details.

Map 25: Estimated Adults Age 18+ Overweight or Obese, 2014

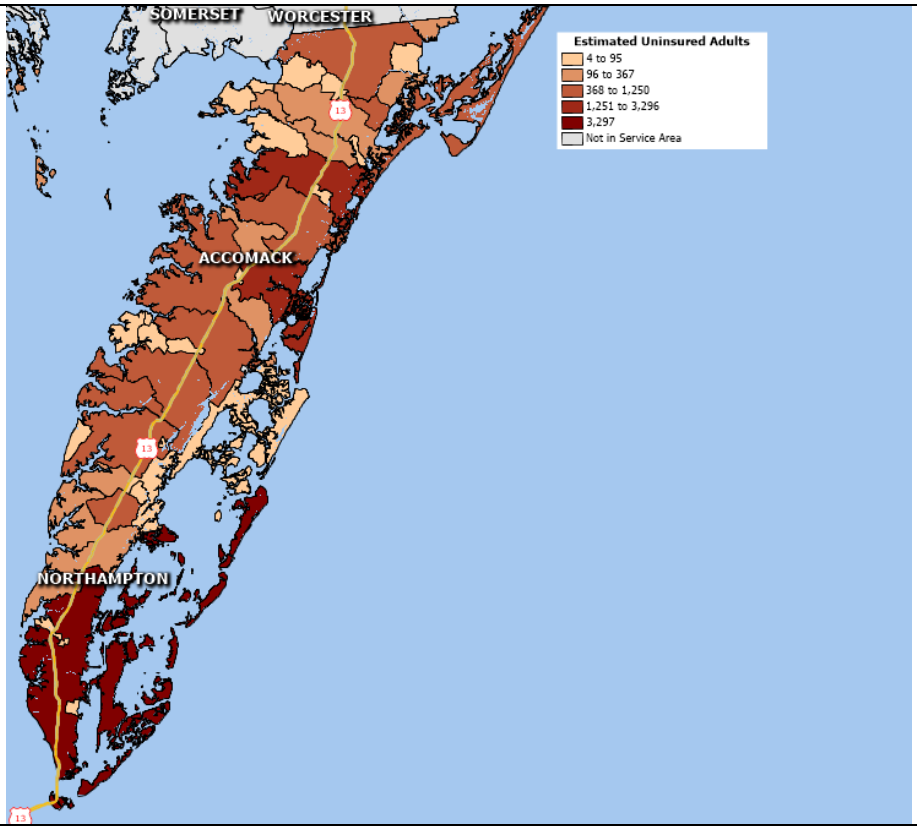


Map 26: Estimated Youth Age 14-19 Overweight or Obese, 2014*

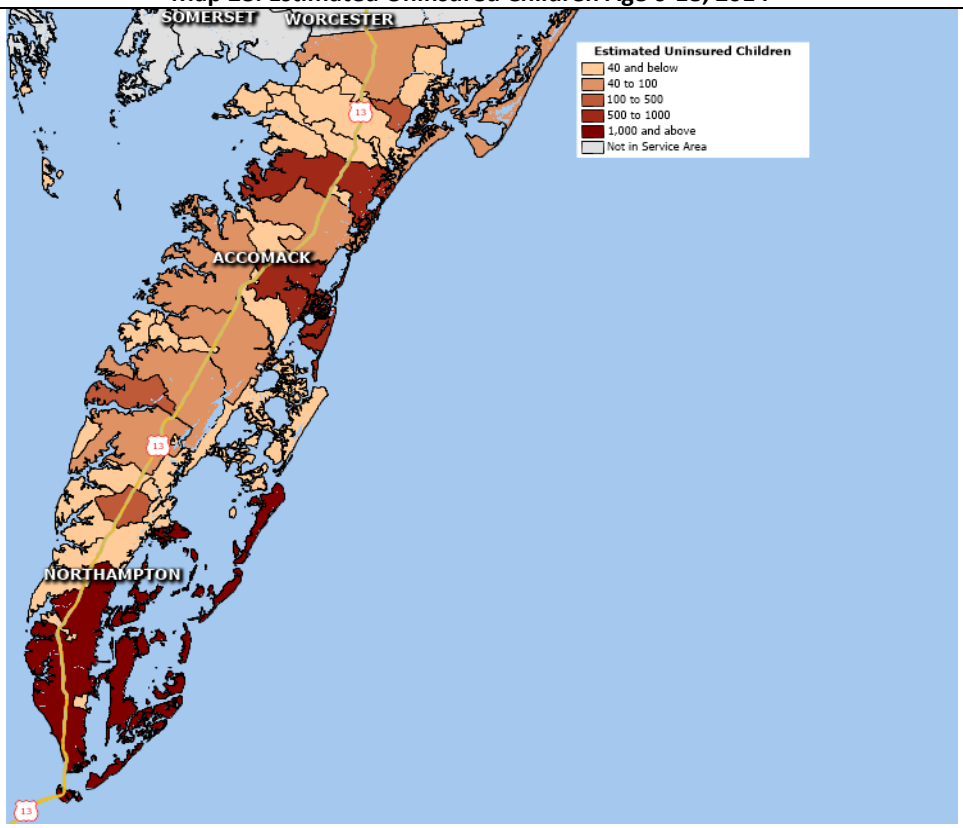


**There were no reported high school-aged youth (age 14-19) who are overweight or obese for zip codes 23889, 23398, 23404, 23408, 23441 and 23488. Source: Estimates based on Community Health Solutions analysis of Virginia Youth Risk Behavioral Surveillance System data and estimates from Alteryx, Inc. See Appendix C. Data Sources for details.*

Map 27: Estimated Uninsured Adults Age 19-64, 2014



Map 28: Estimated Uninsured Children Age 0-18, 2014*



**There were no reported estimated uninsured children age 0-18 for zip codes 23389, 23398, 23408, 23441 and 23488.*
Source: Estimates of uninsured are based on Community Health Solutions analysis of U.S. Census Bureau Small Area Health Insurance Estimates (2013) and demographic data from Alteryx, Inc. (2014). See Appendix C. Data Sources for details.

Zip Code Map Table

	Asian Population, 2014	Black/African American Population, 2014	Child Population Age 0-17, 2014	Hispanic Ethnicity Population, 2014	Low Income Households (Households with Income <$25,000), 2014	Median Household Income, 2014	Other or Multi-Race Population, 2014	Per Capita Income, 2014	Population Age 25+ Without a High School Diploma, 2014	Population Density, 2014	Senior Population Age 65+, 2014	Total Population, 2014	White Population, 2014
23301 Accomac	10	643	548	539	212	$38,054	216	$18,255	325	61.4	302	2,121	1,254
23302 Assawoman	0	27	18	6	15	$30,440	5	$23,025	14	40.2	12	78	45
23303 Atlantic	2	206	129	25	83	$33,400	28	$17,377	125	151.1	109	612	376
23306 Belle Haven	2	432	227	57	137	$40,769	36	$26,718	129	63.9	229	1,117	648
23307 Birdsnest	10	372	176	51	118	$31,588	38	$17,291	99	39.4	189	843	422
23308 Bloxom	11	730	631	453	365	$33,844	327	$16,664	385	82.0	372	2,540	1,475
23310 Cape Charles	42	2,011	1,168	592	862	$36,396	384	$24,132	717	51.5	1,180	5,701	3,264
23313 Capeville	0	0	0	0	12	$31,563	0	$19,428	16	65.3	16	80	80
23316 Cheriton	0	361	188	0	83	$14,886	0	$11,191	80	314.6	52	441	80
23336 Chincoteague Island	18	27	424	52	481	$33,843	98	$27,127	332	161.6	853	2,902	2,756
23337 Wallops Island	3	179	129	22	73	$36,440	25	$16,387	116	29.8	120	622	414
23347 Eastville	34	185	166	183	139	$28,542	10	$19,166	141	67.0	201	790	561
23350 Exmore	36	1,226	661	222	615	$36,456	168	$27,787	517	102.8	945	3,634	2,206
23354 Franktown	5	339	150	57	112	$32,500	35	$24,585	106	75.4	213	776	398
23356 Greenbackville	11	277	257	37	157	$41,633	47	$19,918	205	332.3	270	1,266	930
23357 Greenbush	6	320	217	188	118	$33,052	127	$13,524	149	77.4	113	807	355
23358 Hacksneck	0	15	9	1	9	$47,113	0	$59,613	6	19.3	13	50	34
23359 Hallwood	6	307	250	173	204	$28,702	116	$16,536	176	66.7	169	1,067	637
23389 Harborton	0	14	0	0	37	data unavailable	0	$14,236	0	211.7	109	123	109
23395 Horntown	2	50	47	7	18	$41,633	9	$12,674	37	165.2	49	228	168
23398 Jamesville	0	0	0	0	0	data unavailable	0	$66,931	0	12.7	28	51	51
23401 Keller	0	144	141	0	83	$2,500	0	$6,890	20	132.8	29	298	154
23404 Locustville	0	14	7	2	6	$42,119	2	$33,598	2	21.3	9	40	24
23405 Machipongo	10	388	178	46	155	$32,099	36	$22,982	112	38.5	211	882	447
23408 Marionville	0	0	0	0	7	data unavailable	0	$15,566	0	17.6	18	32	32
23409 Mears	0	21	31	11	21	$37,189	11	$21,922	20	11.9	21	122	90
23410 Melfa	18	1,004	566	125	341	$39,225	107	$21,846	242	74.9	554	2,767	1,637
23413 Nassawadox	2	85	49	13	41	$35,922	11	$28,442	34	43.2	52	246	147
23414 Nelsonia	0	122	0	0	52	$11,154	0	$12,214	66	93.1	13	135	13
23415 New Church	15	868	579	71	400	$40,948	91	$24,011	412	58.9	455	2,569	1,593
23416 Oak Hall	1	129	78	12	46	$35,315	14	$17,172	68	35.5	59	351	205
23417 Onancock	26	843	633	132	518	$43,402	129	$29,581	383	89.3	966	3,735	2,738
23418 Onley	7	277	182	73	117	$41,537	65	$24,647	103	98.4	183	906	560
23420 Painter	10	1,198	677	219	445	$39,932	131	$24,961	317	41.9	569	2,998	1,660
23421 Parksley	27	1,368	1,028	802	609	$34,378	472	$17,962	755	115.1	765	4,299	2,433
23422 Pungoteague	0	102	8	0	85	$22,326	0	$25,201	4,048	51.2	89	214	112
23423 Quinby	0	11	58	30	53	$25,595	0	$26,448	33	8.1	109	275	264
23426 Sanford	2	41	42	9	45	$32,204	11	$18,986	70	53.7	58	246	194
23427 Saxis	0	0	24	0	41	$42,500	3	$22,796	83	43.1	78	216	213
23440 Tangier	4	5	136	2	112	$37,821	6	$20,907	176	217.8	165	723	708
23441 Tasley	0	111	38	0	28	data unavailable	0	$9,949	13	179.0	17	111	0
23442 Temperanceville	4	336	236	60	156	$33,530	52	$16,427	190	48.4	192	1,117	725
23486 Willis Wharf	0	8	71	0	11	$59,702	0	$17,906	7	533.2	41	209	201
23488 Withams	9	82	0	7	91	$10,528	7	$15,615	89	17.1	108	124	26

Zip Code Map Table (continued)

	Total Deaths, 2013	Malignant Neoplasms (Cancer) Deaths, 2013	Heart Disease Deaths, 2013	Cerebrovascular Disease (Stroke) Deaths, 2013	Total Live Births, 2013	Total Teenage Live Births (age<17), 2013	Total Prevention Quality Indicator Hospitalization Discharges, 2013	Total Behavioral Health Hospitalization Discharges, 2013	Estimated Adult Age 18+ Smokers, 2014	Estimated Adults Age 18+ with Diabetes, 2014	Estimated Adults Age 18+ with No Dental Visit in the Last Year, 2014	Estimated Adults Age 18+ who are Overweight or Obese, 2014	Estimated High School-aged Youth (age 14-19) who are Overweight or Obese, 2014	Estimated Uninsured Adults, Age 19-64, 2014	Estimated Uninsured Children Age 0-18, 2014
23301 Accomac	17	6	5	0	28	0	13	9	346	103	392	1,129	40	1,251	568
23302 Assawoman	2	1	0	0	2	0	0	0	11	3	10	40	2	47	19
23303 Atlantic	11	2	2	0	7	0	2	2	93	20	83	324	12	368	135
23306 Belle Haven	14	5	5	1	8	0	12	2	181	119	199	554	23	645	243
23307 Birdsnest	11	5	1	1	11	0	3	2	139	73	148	443	16	468	186
23308 Bloxom	27	10	4	0	20	2	26	7	373	184	411	1,219	60	1,506	662
23310 Cape Charles	51	11	13	4	44	0	38	17	920	349	795	2,994	105	3,297	1,224
23313 Capeville	1	0	1	0	0	0	1	1	16	9	16	52	1	11	2
23316 Cheriton	12	4	3	0	16	0	31	22	52	28	51	166	8	63	9
23336 Chincoteague Island	49	15	12	2	10	0	9	13	660	191	751	1,723	40	431	41
23337 Wallops Island	3	0	2	0	5	0	1	0	86	32	75	330	11	99	12
23347 Eastville	12	4	1	1	14	1	20	20	128	69	125	409	15	113	17
23350 Exmore	58	15	17	0	37	0	82	17	520	289	483	1,948	58	478	70
23354 Franktown	5	1	1	1	3	1	9	1	168	53	198	436	16	97	16
23356 Greenbackville	8	3	3	0	13	0	0	2	144	105	107	660	19	196	24
23357 Greenbush	0	0	0	0	12	0	8	1	53	68	59	398	16	127	20
23358 Hacksneck	2	1	0	0	2	0	0	0	6	6	7	24	1	7	1
23359 Hallwood	9	3	2	0	6	0	3	1	111	78	139	521	19	173	23
23389 Harborton	6	3	0	0	0	0	3	1	25	14	25	81	0	18	0
23395 Horntown	17	5	4	1	4	0	1	0	26	13	20	118	3	35	4
23398 Jamesville	0	0	0	0	3	0	1	0	10	6	10	33	0	7	0
23401 Keller	7	2	2	0	3	0	3	5	32	17	31	103	6	43	6
23404 Locustville	0	0	0	0	0	0	0	0	6	3	4	23	0	6	1
23405 Machipongo	11	2	2	3	8	0	3	5	156	47	168	468	17	116	19
23408 Marionville	3	1	1	0	2	0	1	0	7	4	6	21	0	5	0
23409 Mears	0	0	0	0	2	0	0	1	14	10	16	58	3	18	3
23410 Melfa	23	6	4	0	31	1	28	9	516	170	481	1,550	58	436	54
23413 Nassawadox	27	6	4	4	4	0	56	7	36	24	38	128	4	34	5
23414 Nelsonia	6	0	2	0	7	0	14	9	28	15	27	88	3	19	3
23415 New Church	21	5	5	0	18	0	5	1	330	216	301	1,290	42	407	54
23416 Oak Hall	6	1	3	1	1	0	3	1	53	21	52	180	6	57	7
23417 Onancock	59	17	13	2	38	0	44	29	608	340	540	2,055	59	568	60
23418 Onley	13	1	4	2	12	0	16	8	166	80	169	467	20	143	17
23420 Painter	20	8	5	0	29	0	21	7	485	307	541	1,466	68	462	65
23421 Parksley	69	16	12	0	55	0	68	15	697	344	792	2,126	87	664	97
23422 Pungoteague	6	0	1	0	3	0	34	6	42	23	41	135	4	31	5
23423 Quinby	6	0	3	0	5	0	3	1	44	24	43	142	5	39	6
23426 Sanford	6	3	2	0	1	0	2	0	40	26	54	135	3	39	4
23427 Saxis	4	2	1	0	1	0	0	2	39	21	38	126	4	31	5
23440 Tangier	4	0	1	0	0	0	0	1	106	81	144	408	12	113	13
23441 Tasley	5	0	1	0	7	0	10	4	15	8	15	48	0	16	0
23442 Temperanceville	4	1	1	1	10	0	7	7	143	75	149	592	21	183	22
23486 Willis Wharf	3	1	0	0	1	0	4	3	28	15	28	90	4	30	4
23488 Withams	2	1	0	0	3	0	0	4	25	14	25	81	0	18	0

Appendix B. Detailed Community Survey Responses

Exhibit B1. Vulnerable/At-Risk Populations in the Community	
Are there particular populations within the community who are vulnerable or at risk for health problems or difficulties obtaining health services?	
1	• Anyone needing specialist care. I work with seniors who have a lot of health issues, and obtaining specialist appointments is difficult, with long delays getting the appointments, cancellations and rescheduling by the offices, and sometimes long waits at the office. If people need to be seen quickly they're expected to use the emergency room, or wait weeks for an appointment.
2	• Behavioral Health • Elderly populations • Migrant workers
3	• Children (0-19) getting dental care is a real issue due to noncompliance of parents and transportation issues.
4	• Children and elderly are vulnerable and are at risk for oral health problems which contributes to overall health and have difficulties obtaining dental services. • People with mental health issues such as depression are vulnerable and have difficulties obtaining services. • People with substance abuse and pain management issues are at risk for health problems and can be a challenge for the community especially pertaining to crime rates.
5	• Elderly people in the area are more at risk than in more urban areas because of lack of readily accessible public transportation.
6	• Households that lack transportation, homeless families/persons who are living doubled and tripled up as well as those that are literally homeless.
7	• Huge obesity problem with the resultant health issues
8	• I observe low income families in our community who have young children who very obviously need early intervention in speech, behavior, dental and physical development and it doesn't appear they are receiving these services. I don't know if the breakdown is at their primary care level or with follow up or follow through on the family side. Having a M.Ed., it is saddening to me to see these children not get the help they need during the optimal time of rapid brain development, etc.
9	• In this community, there is a vast amount of income inequality. This creates barriers to care payment, educational resources, and prevention strategies. The impoverished in the community are the most at risk for poor chronic disease management, access to healthcare services, and prevention education.
10	• Indigent with transportation issues • Undocumented and documented migrant workers.
11	• Infants • Youth • Young adults/young parents
12	• It seems to me that those in the Hispanic community with limited English language skills are at the highest risk.
13	• Latino and Haitian
14	• Limited OB/GYN providers for high risk pre-natal/maternity care. • In-patient or intermediate in-patient behavioral health care not available locally • Some transportation barriers for low-income population and elderly.
15	• Low income. • Ethnic minorities. • Elderly. • Migrants.
16	• Low income/uninsured
17	• Mental health services. • Gero-psych services.
18	• Mental Health. All aspects. • Of course the poor, (But they don't count of course, they lower the payer mix)

Exhibit B1. Vulnerable/At-Risk Populations in the Community	
Are there particular populations within the community who are vulnerable or at risk for health problems or difficulties obtaining health services?	
19	• Non-English speaking persons and undocumented workers. Undocumented persons are afraid of deportation if they seek care.
20	• Old • Poor • Uninsured
21	• People who are uninsured cannot obtain specialty care that they need. • The same goes especially for undocumented immigrants.
22	• People who live in poverty (20% of population/70% of children on free and reduced lunch) have difficulty paying for and getting transport to services. This population struggles with multiple priorities (e.g. paying for medications, or food, or a warm coat to wear in winter).
23	• People with mental illness
24	• Pregnant patients
25	• Shore wide [there are] too many overweight people
26	• The difficulty experienced in my community is the distance we have to travel for services. Approximately an hour to get to services north or south of us.
27	• The elderly - with the rural nature of where we are, getting to health care services becomes problematic.
28	• The elderly are vulnerable in part because they may not have transportation to go to the doctor. Anyone with mobility issues that may have difficulty finding transportation to healthcare. Healthier, younger folks can catch the bus but if people live outside of town or are in a wheelchair they would have trouble getting to the health care provider.
29	• The elderly of our community are often victims of "ageism" and are often not taken seriously with regard to their health care. They are often put in a category of "being old" and their health problems not taken as seriously as they should be. Gerontology services would be of benefit. Also, for many, their limited income forces them to choose between taking medications and having heat in their homes.
30	• The elderly. • Poor and migrant families.
31	• The Hispanic and Latino populations • At-Risk African-American children
32	• The large number of uninsured and underinsured. • Older Medicare population who are underinsured (unable to afford co-pays). • African American population: high diabetes and cardiac disease rates.
33	• The poor and uneducated, which account for better than half of Northampton's population.
34	• The poor • Poorly educated • Uninsured
35	• The primary barrier to student achievement according to research as well as information conversations with school staff is the emotional issues with which students come to school. Schools do not have sufficient staff to address these issues. • Family services-In addition, lack of emergency care for older residents or any person in need of emergency care
36	• The unemployed have the majority of health problems and lack the ability to pay. They usually have transportation issues as well.

Exhibit B1. Vulnerable/At-Risk Populations in the Community	
Are there particular populations within the community who are vulnerable or at risk for health problems or difficulties obtaining health services?	
37	• There is a significant portion of our population that is at or below the poverty level. With that, there are significant limitations to transportation not only for health services but also for general life conditions (shopping, food access, employment) which make that segment of the population more at risk for health problems.
38	• There is an extremely poor group for whom care is available but they don't seem to know how to access it. We are very rural but most areas can reach proper care. Our EMS is good but could stand to be beefed up.
39	• This isn't only pertaining to one group of citizens but I see the increased need for more physicians that are involved in cardiac, respiratory, orthopedic, and cancer care. There are so many of the citizens traveling across the bay or into Maryland to seek medical care.
40	• Those who live below the poverty line • Migrant community
41	• Those with low incomes and/or under-insured. • Those with limited access to transportation to receive health care service • Those with physical limitations to travel to receive health care services.
42	• Under/uninsured patients. Lack of resources affects people's abilities to get the care they need.
43	• Uninsured/underinsured • Haitian and Mexican populations
44	• Uninsured • Elderly • African-American
45	• Very poor patients in need of specialty oral surgery procedures which are not available (except Salisbury and Va. Beach) and are beyond their reach financially so they live with badly infected teeth.
46	• Working people who make too much for Medicaid but cannot afford health insurance. Other uninsured. People with catastrophic health coverage but large deductibles that prevent them for seeking regular care.
47	• Working poor primarily. They are unable to obtain insurance and specialty services are unobtainable.
48	• Migrant workers; Hispanic and Haitian who don't speak English well and frequently don't have insurance or access to healthcare.
49	• Migrant and season workers • Low income lacking transportation • Un- or under-insured. • African-Americans • Latinos • Haitians
50	• The poor and working poor. These are disproportionately represented by the African-American population, but there are whites also have these issues.
51	• Young and uninsured

Exhibit B2. Vulnerable/At-Risk Regions in the Community	
Are there particular neighborhoods or geographic regions within the community where the resident population may be vulnerable or at risk for health problems or difficulties obtaining health services?	
1	• A band across the Shore centered at Exmore, where transportation, food, and other essentials of life are absent to minimal. • NW part of the E Shore, commonly said as "around Saxis", • The very southern tip of the shore, south of Custis Tombs, also called Cheapside • The area SE of Cheriton, called Bayview.
2	• A.S. West Road • Bay view • Fair View (NH) • Boston Road • Wachapreague Trailer Park • Dreamland 1&2 • Horntown • Macedonia road in Bloxom • Behind the fire house between School Street and Cross Street.
3	• All areas with the exception of larger cities and towns where most services are located.
4	• All of the Eastern Shore
5	• Entire eastern shore.
6	• Entire shore for mental health services.
7	• Especially people who live outside of town- where the buses don't go.
8	• In the Parksley area of Dreamland trailer park • The Rolling Acres area • The Boston/Pungoteague area • Horntown area
9	• Migrant worker camps (poor living conditions)
10	• Migrant workers
11	• Northampton County from Exmore to Cape Charles as these are the poorest and have the least education of anyone in either county.
12	• Northampton county: poverty, high older poorer population with many health issues. • Haitian community: lack of language services at all levels
13	• Northern Accomack County.
14	• Poverty is fairly evenly distributed throughout the shore, though not on either coasts. See Eastern Shore Health District WIC Data Book for map and data.

Exhibit B2. Vulnerable/At-Risk Regions in the Community	
Are there particular neighborhoods or geographic regions within the community where the resident population may be vulnerable or at risk for health problems or difficulties obtaining health services?	
15	• Pretty much throughout the county.
16	• Seasonal workers that go up and down the east coast
17	• Tangier Island has its barriers due to independence and isolation as an island not linked to the mainland. Residents in some assisted living facilities are potentially vulnerable.
18	• The entire community is rural, low income, and at risk
19	• The entire shore is vulnerable due to the distance they must travel to receive services with very limited public transportation.
20	• The people that live in out of the way necks who have no reliable transportation.
21	• There are many neighborhoods in Northampton County where there is a concentrated location of at-risk population • Bayview • Culls • Fairview • New Roads • Peter Cartright • Crispus Attacks
22	• There remains small population clusters that due to poor/inadequate housing, plumbing, heating, food and clothing remain at risk for health problems. Social determinants are prevalent in these neighborhoods.
23	• This is a rural area and there are multiple pockets of poverty. Public transportation is very weak.
24	• Those who reside in areas remote from health care service providers. Those in areas of limited or no economic growth to sustain health care facilities.
25	• We have transportation issues in most areas.
26	• While the demographic trends support Accomack county, it is the communities in Northampton County that have the greatest risk to interrupted health services. After relocation, the one local hospital in the area will no longer serve as a trauma triage center for residents in the lower portion of the county closest to Virginia Beach.
27	• Northampton County • Pockets of traditionally African-American populations • Trailer parks

Exhibit B3. Health Assets in the Community	
Think of health assets as people, institutions, programs, built resources (e.g. walking trails), or natural resources (e.g. beaches) that promote a culture of health. In your view, what are the most important health assets within the community?	
1	• Community fitness centers • Wildlife refuges
2	• A strong primary care facility with associated emergency response capabilities • Access to non-emergency health care • Good mental and environmental health care services • Excellent natural resources
3	• Assateaugue National Wildlife Refuge • Kiptopeake State Park • Eastern Shore Family YMCA • Eastern Shore Healthy Communities
4	• Beaches
5	• Beaches • Biking
6	• Diverse and active leaders in small communities/organizations • The Shore-wide coalition named Eastern Shore Healthy Communities
7	• Eastern Shore Rural Health System
8	• Eastern Shore Rural Health • Area Agency on Aging • Foodbank • Charity care through Riverside Hospital
9	• Employers that pay a living wage • Schools • Churches • Healthy options restaurants • Hospital • Eastern Shore Rural Health • CSB • Grocery stores • Libraries • Northampton County Education Foundation • Smart Beginnings Eastern Shore • Eastern Shore Healthy Communities • The Nature Conservancy • YMCA • Coalition Against Domestic Violence • Literacy Council • Food Bank • Community Partners of the Eastern Shore • Local, state and federal parks and trails • Night sky and quiet peacefulness • Walkable downtowns
10	• ESRH health care
11	• Foodbank
12	• Grocery stores • Gyms

Exhibit B3. Health Assets in the Community	
Think of health assets as people, institutions, programs, built resources (e.g. walking trails), or natural resources (e.g. beaches) that promote a culture of health. In your view, what are the most important health assets within the community?	
13	• Head Start • Community Services Board • Riverside Hospital • Rural Health
14	• Health and medical agencies • Organizations • Businesses • Medical providers (first responders to physicians) • Emergency dispatch and response systems • Community coalitions that promote and coordinate health and wellness • The Shore's nature and natural assets (rural living) • Businesses that promote wellness
15	• Healthy Coalition • Hiking available, but out of the way places • Beaches, again, at the extremes of the peninsula
16	• Hospital and physicians • Health department • Eastern shore rural health
17	• Hospital services
18	• Hospital run-walk events that promote healthy lifestyles and/or health issues
19	• Hospital • ES Rural Health • Access to fresh seasonal fruits/vegetables
20	• I would like to see more activities for the teenagers and more access to gyms on the Eastern Shore.
21	• Institutions, particularly Riverside and ESRH, provide a strong backbone for health care on the Shore.
22	• Little Hands/Little feet • ESRH • RSMH • Mosher Rehab and Bayside Rehab • Kiptopeke State Park • YMCA • PIPS
23	• Open space/ clean air • Excellent hospital, nursing staff and physicians • Collaboration between the ESRH and Riverside medical groups.
24	• Outdoor recreation (beaches)

Exhibit B3. Health Assets in the Community	
Think of health assets as people, institutions, programs, built resources (e.g. walking trails), or natural resources (e.g. beaches) that promote a culture of health. In your view, what are the most important health assets within the community?	
25	• Parks • Bike path • Running groups • YMCA • Parks and rec
26	• Riverside Health System • E.S. Rural Health System • E.S. Health Department
27	• Riverside, all services • Health Department • ESRSH
28	• RSMH • ESRH • CSB • ES Health District
29	• Rural Health • Area Agency on Aging • YMCA and other local fitness clubs
30	• The community offers vast resources of outdoor activities that can be of benefit to health, includes parks, beaches, and walking trails.
31	• The hospital has been a significant asset in our community. With its relocation to Accomack County, it is an unknown proposition as to its impact to our community at this point in time. • Other medical assets are the Rural Health Clinics in Franktown and Bayview, the two pharmacies, and the physician services in Cape Charles as well as the Cancer Center in Nassawadox. • The environmental health assets are the Cape Charles public beach, the start of the bike trail in lower Northampton County, the County managed Indiantown Park along with the recreational facilities at the former Middle School property and its various athletic programs, the Randy Custis Memorial Park, and the state campground at Kiptopeke.
32	• The hospital system and the school systems • We also have a very good emergency services system
33	• The most important assets we have are the hospital, rural health, schools, clubs and organizations who raise money and support local causes.
34	• The open areas around the schools where people can freely walk for exercise and biking on the local roads which are not over loaded with traffic.
35	• The town is very walkable.
36	• The water and the beaches.

Exhibit B3. Health Assets in the Community	
Think of health assets as people, institutions, programs, built resources (e.g. walking trails), or natural resources (e.g. beaches) that promote a culture of health. In your view, what are the most important health assets within the community?	
37	• The YMCA (except that the cost to join is higher than most people can afford; especially at-risk populations) • The Eastern Shore Community College • The bay (many boat or fish) • Healthy Communities Group
38	• The YMCA is a very important health asset in our community.
39	• There is a need for another dental unit in between the Nandua middle school and the high school. This would address the need and transportation issue. These children suffer through adulthood with consequences of lack of care as a child and teenager.
40	• Very few to none in upper Northampton County
41	• Walking trails • Beaches
42	• Walking trails • Playgrounds
43	• We have all of the above if people would just take advantage of them.
44	• We have always had a "We see everybody in our neighborhood" mentality.
45	• We live in a geographically pristine place: beaches, parks, harbors. There are a multitude of services on the Shore: most need investment of people and money. • Our public schools need an overhaul of priorities to be teaching students: example- health and wellness, food choices, physical activity, basic life skills. • The Shore needs safe walking trails, sidewalks etc. • Health care needs improved care coordination. Continued emphasis on healthy workplaces: tobacco free, healthy menu choices, safe walking/bike trails. • All these must be adopted and financially supported by County government.
46	• Well-trained, quality health workers • Access to safe walking places • Restaurants with a focus on healthy foods that are reasonably priced
47	• WIC • Health dept. • ESRH • RSMH
48	• YMCA
49	• YMCA
50	• YMCA in Northern/Upper Central part of Shore. Water on all sides but not accessible to general public and not many know how to swim. • Public bike trails lower Northampton County.

Exhibit B4. Health Assets Needed in the Community	
Are there any health assets that the community needs, but may be lacking?	
1	• A consensus, regularly meeting health services working group
2	• Effective, medical and non-medical determinants of health working group, focusing upon, for example, workplace wellness.
3	• Behavioral Health assets
4	• Bike • Walking trails
5	• Changing the culture and generational cycle of unhealthy habits is key. School age children are a captive audience where we may be able to create healthier habits earlier.
6	• Easily accessible and affordable fitness or wellness center options. The YMCA is expensive and too small for the geographic area to handle.
7	• Emergency medical care is currently weak. It will become much weaker once the hospital moves.
8	• Encouraging and teaching nutrition
9	• Funding for many identified health assets to further enhance activities is most commonly cited as a need. • Staffing and both human and physical resources are key to developing programs and activities supporting a culture of health.
10	• Health trails especially bicycle trails that are not in heavily trafficked areas
11	• Hiking/biking trails (for safe exercise)! Accessible recreational facilities and aqua therapy for seniors.
12	• Housing, especially for middle class workers • Better transportation system that can take people from their homes to grocery store, pharmacy, health appointments • After school programs for youth • Less reliance on wells and septic systems and extended water treatment facilities
13	• I feel we are lacking in the area of orthopedic services and in treating certain health conditions such as chronic Lyme's disease. I also think that our local community health centers are not able to accommodate an unexpected visit and so many will travel to Pocomoke, Md. to "Your Docs In" who will take you right in for treatment, at any time with no appointment.
14	• Increased access to specialty medicine
15	• Input psych beds-a few but not many • More surgeons willing to do surgery
16	• Local oral surgeon willing to treat Medicaid and other poor patients
17	• Mental health
18	• Mental Health facilities
19	• Money
20	• More affordable exercise facilities
21	• More affordable places for care, such as an urgent care facility instead of going to the hospital.

Exhibit B4. Health Assets Needed in the Community	
Are there any health assets that the community needs, but may be lacking?	
22	• More community activities aimed at health • More areas to gather for fitness/exercise
23	• More facilities for routine, non-emergency care.
24	• More parks and recreation centers bike paths
25	• More public gyms • Stronger use of public schools for physical activities for all people
26	• Our EMT services might need help, especially in Northampton County, in getting folks to our new hospital in Onley
27	• PACE
28	• Parks and places to walk/cycle
29	• Playgrounds for kids, community spots for older kids. • Something for teens to do to have fun, [and] be safe.
30	• Safe bike paths • Affordable health and wellness programs for middle class families
31	• Safe places to exercise outdoors. We need biking trails and walking trails that are easier to access than Chincoteague.
32	• Safe walking trails and sidewalks • Cheap/free transportation to/from primary care visits • Access to free water testing • Translation services for non-English speaking patients
33	• Specialty physicians • Mental health services
34	• Specialty physicians- GI, ortho, and urology.
35	• Speech therapy
36	• The absence of a community pool is glaring for a community that thrives on a water based economy and lifestyle as well as the limited public access to either the Chesapeake Bay or the Atlantic Ocean. In addition, the challenge in providing a more expansive and safe bike trail has hindered the expansion of this health asset. Due to our population constraints, there is limited access to residential mental health services and other disabled residential programs.
37	• The community would benefit from greater access to indoor recreational health promoting activities. Possibilities include: increased gyms with open court access for basketball, tennis, etc., indoor walking centers like a shopping mall or indoor track, recreational activity centers like bowling or skating rinks. The community would also benefit from other outdoor recreation increases: open air basketball courts, batting cages, tennis, and racquetball.
38	• The Eastern Shore community needs more areas to be developed as parks so more than one group of people can be accessing health needs.

Exhibit B5. Additional Ideas and Suggestions	
Optional: Please use the space below to share any additional ideas or suggestions for improving community health.	
1	• Better access to contraceptive counseling services.
2	• We have few if any that have basketball courts. • No public swim lessons.
3	• Riverside needs to offer fitness sites at considerable discounts to its employees. The unwashed masses are not likely to “embrace a culture of fitness".
4	• We desperately need opportunities for family fitness, health classes for parents, chronic disease case managers.
5	• It is my opinion that we need to invest more in our children. Healthy eating habits in school. Healthy activities at school that teach life lessons (i.e. swimming, walking, biking, nature, gardens, cooking, cleaning, hygiene, etc.) We have a captive audience that are little sponges that absorb all that is around them good and bad. Plant the seed of health habits. Proactive approach instead of a reactive approach.
6	• Major nonsmoking campaign. E cigarettes are becoming a problem.
7	• With our challenge of being so far from health services, we have adapted pretty well due to the home health care units that come to the Island.
8	• It has to start at home, and that is not happening in the majority of Northampton County, and to a slightly lesser degree in Accomack County, homes.
9	• We have made a good start, Medicaid expansion as envisioned by ACA would have been a huge help.
10	• We need a good system to promote the Affordable Care Act and CHIPS programs. We have so many people that are uninsured and it does not seem as though they are taking advantage of the options available. This may be that they do not know about them, or that they are illiterate and cannot fill out the paper work themselves.
11	• Contribute to the support of two positions: 1) a coordinator for a Shore-wide health services working group coordinator and 2) a coordinator, residing upon the Shore, for the Eastern Shore Health Communities Coalition.
12	• There is a need for more mental health services, particularly for children and adolescents, appropriately trained therapists. We are so fortunate to have Dr. Henderson on the shore, he needs help!
13	• I would continue to suggest a coordination of all leaders/providers of services and county/town government that would yield a "community plan and effort” to improve health outcomes. Commitment, use of technology and coordinated resource development efforts would be fundamental in the success of this concept.
14	• A community health needs assessment must assure that all constituencies have an opportunity to provide input and feedback from the person with significant health needs to the providers and institutions that provide support for those needs. Currently, multiple organizations and agencies conduct periodic community needs assessments. Ideally, it would be great for all these assessments to be coordinated (reducing duplication and effort and maximizing an overall community-wide assessment) and a consolidated Community Needs Assessment and Community Health Improvement Plan be adopted by a coalition of all the participating agencies and local governments.
15	• Minimize sugar / sweet intake and nutrition counseling.
16	• Poverty, which is entrenched and intergenerational, must be addressed for Eastern Shore Health to be improved. This must be addressed on multiple fronts: in the schools, in churches, doctors’ offices and hospitals, by town and county officials, and by inter-sectoral community partnerships.

Exhibit B5. Additional Ideas and Suggestions	
Optional: Please use the space below to share any additional ideas or suggestions for improving community health.	
17	• Recruit returning vets who have a medical background with incentives like reductions in property taxes and picking up whatever the V-A does not pick up relative to furthering their medical training. • Set up an "on-call" system where these people are able to respond out of their homes for emergencies when they are scheduled to be on-call so they could have the opportunity to be employed at another job if desired. • Improve the school system by adding: 1) Additional Social Workers; and 2) "Life Skills" courses that teach everything from nutrition, pregnancy avoidance and parenting skills to financial management skills (budgets, credit cards, checking accounts). Raise the level of education in the community and you will also raise its health.
18	• I feel health for the community would benefit through a true community partnership of health providers in the area. As a long term care provider, it would be beneficial to partner with other facilities and the local hospital to offer greater services and education to this community.
19	• One neurologist for 50,000 people? One? One cardiologist? No wonder people go elsewhere for health care.
20	• The coming together of the hospital and the primary care major provider with integration of records - this is underway, but needs to be encouraged and enhanced.
21	• Increase farmer's markets, make programs that subsidize purchasing local fresh produce more available and better advertised. • Improve the school lunch program; there are a lot of bad habits being reinforced in school cafeterias. • Consider a local tax on sodas and other sugary beverages if this is possible.
22	• Education continues to be needed with regard to improving community health. • Also, preventative programs would be of benefit. Having better access to one's health care provider when he/she is needed and not having such long wait times (both to get an appointment and when you arrive for an appointment) would be a huge change and very appreciated. Women's health services are lacking as well. As far as I know, there is only gynecologist that is not associated with the health department on the entire Eastern Shore. Perhaps another skilled care unit is also needed for rehab when one is injured and needs inpatient rehab.
23	• I believe more people would ride a bike if there were bike paths. Many of roads have no or very little shoulder and walking or riding a bike is dangerous. • Health education could be improved for high school students, or healthy activities could be offered-especially after school. This could delay or postpone adult obesity.
24	• I think that with all of the organizations we have, we do a pretty good job. Of course, more of everything would be welcomed.
25	• For the community at large, programs for teenagers (other than DARE). Students have the DARE Program in 5th Grade. It's important but the high risk teenage students have minimal reinforcement. Intergenerational programs and the creation of an Adult Day Care.
26	• Riverside needs to open their doors and allow other agencies to market to the patients in the hospital not just refer all the patients to their own facility. It is fraud to make people think that the ONLY choice they have is Riverside. I see this repeatedly in my line of work.

Appendix C: Data Sources

Section	Source
Part I. Community Survey Results	
1) Community Survey results as shown throughout Part 1.	Community Health Solutions analysis of *Community Survey* responses submitted by community stakeholders.
Part II. Community Indicator Profile	
1) Health Demographic Trend Profile 2) Health Demographic Snapshot (also Appendix A. Maps 1-13)	Community Health Solutions analysis of demographic estimates from Alteryx, Inc. (2014 and 2019). Alteryx, Inc., is a commercial vendor of demographic data. Note that demographic estimates may vary from other sources of local demographic indicators.
3) Mortality Profile (also Appendix A. Maps 14-17)	Community Health Solutions analysis of Virginia Department of Health death record data (2013). Locality-Level counts and rates were obtained from the Virginia Department of Health. The combined study region counts and rates were produced by Community Health Solutions.
4) Maternal and Infant Health Profile (also Appendix A. Maps 18-19)	Community Health Solutions analysis of Virginia Department of Health death record data (2013). Locality-Level counts and rates were obtained from the Virginia Department of Health. The combined study region counts and rates were produced by Community Health Solutions.
5) Preventable Hospitalization Profile (also Appendix A. Map 20)	Community Health Solutions analysis of hospital discharge data from the Virginia Health Information (VHI) 2013 dataset and demographic estimates from Alteryx, Inc. (2013). Data include discharges for Virginia residents from Virginia hospitals reporting to Virginia Health Information, Inc.) The analysis includes records of discharges of Virginia residents from Virginia hospitals excluding state and federal facilities. Data reported are based on the patient's primary diagnosis.
6) Behavioral Health Hospitalization Profile (also Appendix A. Map 21)	Community Health Solutions analysis of hospital discharge data from the Virginia Health Information (VHI) 2013 dataset and demographic estimates from Alteryx, Inc. (2013). Data include discharges for Virginia residents from Virginia hospitals reporting to Virginia Health Information, Inc.) The analysis includes records of discharges of Virginia residents from Virginia hospitals excluding state and federal facilities. Data reported are based on the patient's primary diagnosis.
7) Adult Health Risk Factor Profile (also Appendix A. Maps 22-25)	Estimates of chronic disease and risk behaviors for adults 18+ were produced by Community Health Solutions using: • A multi-year dataset (2006-2010) from the Virginia Behavioral Risk Factor Surveillance System (BRFSS). For more information on BRFSS visit: http://www.cdc.gov/brfss/about/index.htm • Local demographic estimates from Alteryx, Inc. (2014) Estimates are used when there are no primary sources of data available at the local level. The estimates are for planning purposes only and are not guaranteed for accuracy. The statistical model to produce the local estimates was developed by Community Health Solutions. In this model, state-level data were used to predict local counts and rates, with adjustments for local demographics. Consequently, differences between local rates and state rates may reflect estimation error rather than valid differences. Therefore, state-level estimates are not provided in this report. Because of data limitations, it is not possible to assign specific margins of error or levels of significance to these statistical estimates. Likewise, it is not possible to calculate the statistical significance of differences between local rates and state rates.

Section	Source
8) Youth Health Risk Factor Profile (also Appendix A. Map 26)	Estimates of risk behaviors for youth age 14-19 and 10-14 were produced by Community Health Solutions using: • Data from the Virginia Youth Risk Behavioral Surveillance System from the Centers for Disease Control (2013). For more information on YRBSS visit: http://www.cdc.gov/HealthyYouth/yrbs/index.htm • Local demographic estimates from Alteryx, Inc. (2014). Estimates are used when there are no primary sources of data available at the local level. The estimates are for planning purposes only and are not guaranteed for accuracy. The statistical model to produce the local estimates was developed by Community Health Solutions. In this model, state-level data were used to predict local counts and rates, with adjustments for local demographics. Consequently, differences between local rates and state rates may reflect estimation error rather than valid differences. Therefore, state-level estimates are not provided in this report. Because of data limitations, it is not possible to assign specific margins of error or levels of significance to these statistical estimates. Likewise, it is not possible to calculate the statistical significance of differences between local rates and state rates.
9) Uninsured Profile (also Appendix A. Maps 27-28)	Estimates of uninsured nonelderly age <65 were produced by Community Health Solutions using: • U.S. Census Bureau Small Area Health Insurance Estimates (2013). For more information, visit: http://www.census.gov/did/www/sahie/data/index.html. • Local demographic estimates from Alteryx, Inc. (2014) Estimates are used when there are no primary sources of data available at the local level. The estimates are for planning purposes only and are not guaranteed for accuracy. The statistical model to produce the local estimates was developed by Community Health Solutions. In this model, prior year locality-level rates were used to predict current year counts and rates, with adjustments for local demographics. Because of data limitations, it is not possible to assign specific margins of error or levels of significance to these statistical estimates. Therefore, state-level estimates are not provided in this report. Likewise, it is not possible to calculate the statistical significance of differences between local rates and state rates. Additionally, populations in group living quarters (e.g. colleges) and undocumented populations may not be adequately addressed in this model.
10) Medically Underserved Profile	Community Health Solutions analysis of U.S. Health Resources and Services Administration data. For more information, visit: http://muafind.hrsa.gov/.

Appendix D: Community Survey Recipients

The following organizations were included in the initial survey distribution. The list of those who responded is on page 19. It is possible that not every group received the initial survey due to challenges collecting correct contact information for all of the individuals. In many cases, multiple individuals at an organization were sent the survey. For example, every member of the Accomack and Northampton County Boards of Supervisors were sent the survey. Additionally, every physician, nurse practitioner and physician assistant at Riverside Medical Group and Eastern Shore Rural Health was sent a survey.

Category	Organization	Notes
FAITH COMMUNITIES	• Calvary Assembly of God • Atlantic Baptist Church • Bethel Baptist Church • St. Mary's Baptist Church • St. Andrew Catholic Church • St. Charles Borromeo Catholic Church • Accomack Christian Center • Cape Charles Baptist Church • Cornerstone Seventh Day Adventist Church • Drummondtown Baptist Church • Epworth UMC • Holy Trinity Episcopal Church • Hungers Episcopal Church • Johnson UMC • Kingdom Hall Jehovah's Witnesses • Miracle Center Deliverance Center • Mt. Olive Baptist Church • New Jerusalem Fait Church • New Mission United Methodist • Onancock Baptist Church • Parksley Baptist Church • Powelton Presbyterian Church • The House of Prayer • Pungoteague Community Church • Capeville UMC • Rock Church of the Eastern Shore	These individuals can represent both the needs of the local government as well as representing the input of the broader community, and in some cases the minority populations who attend the place of worship.
CHAMBERS OF COMMERCE	• Chincoteague Chamber of Commerce • Eastern Shore of Virginia Chamber of Commerce • Northampton County Chamber of Commerce	
PUBLIC HEALTH EXPERTS	• Eastern Shore District of the Virginia Department of Health • Community Services Board – Eastern Shore	

COUNTY / LOCAL GOVERNMENT	• Virginia Department of Rehabilitative Services • Accomack County • Accomack County Board of Supervisors • Accomack County Parks and Recreation • Accomack County Department of Social Services • Accomack County Office of Public Safety • Accomack County Sheriff • Cape Charles • Cape Charles Police • Chincoteague • Chincoteague Police • Eastern Shore of Virginia 911 Commission • Exmore • Exmore Police • Northampton County • Northampton County Board of Supervisors • Northampton County Department of Parks and Recreation • Northampton County Department of Social Services • Northampton County Sheriff • Onancock • Onancock Police • Onley	While sheriffs and first responders may represent public health issues, the intent is for the various representatives on the Boards of Supervisors to present their neighborhoods, including low income and minority members of their communities.
HEALTHCARE ORGANIZATIONS	• Accomack Optometric Center • AMR • Arcadia Nursing & Rehabilitation Center • Bayside Chiropractic • Bayside Rehab • Chesapeake Bay ENT • Independent Chiropractors • Eastern Shore Agency on Aging • Eastern Shore Optical Center • Eastern Shore Rural Health • Fresnius Medical Care • H&H Pharmacy • Hermitage on the Eastern Shore • Mosher Physical Therapy • Northampton County EMS • Rayfield's Pharmacy • Riverside Medical Group • Riverside Shore Memorial Hospital • Runninger's Pharmacy • Seashore Eyecare • TI Home Health	
LOCAL BUSINESSES / AREA EMPLOYERS	• A&N Electric Cooperative • Bayshore Concrete Products Group • New Ravenna • Perdue Foods • Tyson Foods • STAR Transport	

SCHOOLS	• Accomack County Public Schools (and Board Members) • Broadwater Academy • Eastern Shore Community College • Northampton County Public Schools (and Board Members)	
OTHER AREA COMMUNITY ORGANIZATIONS	• Eastern Shore YMCA • Citizens for a Better Eastern Shore • Delmarva Rural Ministries • Eastern Shore Healthy Coalition • Nature Conservancy • Shore Keepers	These organizations work to represent the medically underserved, low income, minority and broad populations across Virginia's Eastern Shore, as well as the health of the local environment on which the local economy is based.