RIVERSIDE

Walter Reed Hospital

2016 Community Health Needs Assessment and Implementation Plan

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This Community Health Needs Assessment and Implementation Strategy for Riverside Walter Reed Hospital was conducted and developed between March 9, 2016 and September 30, 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 Walter Reed Hospital Board of Directors on October 25, 2016.

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COMMUNITY HEALTH NEEDS ASSESSMENT

Introduction

Riverside Walter Reed 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 the hospital. Riverside Walter Reed 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

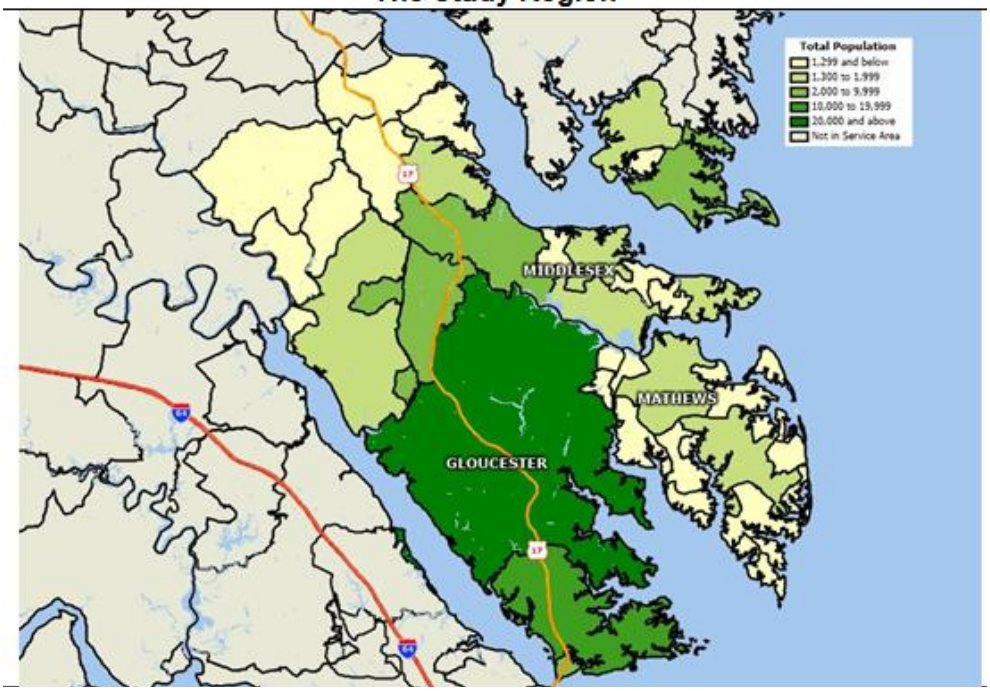
A Community Health Needs Assessment (CHNA) and Implementation Strategy for Riverside Walter Reed Hospital was conducted between March 9, 2016 and September 30, 2016 in fulfillment of the requirements described in section 501(r)(3) of the Internal Revenue Code. The CHNA was conducted with the assistance of Community Health Services, Inc. of Richmond, Virginia 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 in this report, 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 March 9 – April 18, 2016. The survey recipients and respondents of the survey are noted in the report. Riverside's Marketing, Strategy & Development team worked with Community Health Services, Inc. to analyze the data and present it in summary from for review by the community stakeholders. In August and September of 2016, a group of community stakeholders came together to review the data, ask questions, discuss area solutions and prioritize the needs to be addressed. Due to the overlap of services and organizations, the stakeholders from the Middle Peninsula and Northern Neck regions decided to work together to prioritize the issues and develop action plans. The CHNA implementation strategies for Riverside Walter Reed Hospital and Riverside Tappahannock Hospital were developed jointly. The details of those meetings appear in the report.

Community Served by the Hospital

The community served by Riverside Walter Reed Hospital is a geographic region that covers 37 ZIP codes across the counties of Gloucester, Mathews, Middlesex, Lancaster, and King and Queen.

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 65,508 people. The population is expected to increase slightly by 2019. Compared to Virginia as a whole, the study region is more rural, older, and less racially diverse. The study region also has a higher percentage of low income households than Virginia as a whole. 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 698 total deaths. The leading causes of death were malignant neoplasms (cancer) and heart disease, followed by chronic lower respiratory diseases, unintentional injury and cerebrovascular diseases. Death rates were higher than the statewide rate for all deaths combined, and for malignant neoplasms, heart disease, chronic lower respiratory diseases, unintentional injury, and cerebrovascular diseases deaths. Cancer and heart disease were also the two leading causes of death in 2010 as reported in the 2012/2013 CHNA.

- **Maternal & Infant Health Profile**: In 2013, the study region had 518 total live births. Compared to Virginia as a whole, the study region had higher rates of non-marital births and births to teens age 18-19. Additionally, the study region rates were higher than the statewide rates for teen pregnancy and lower for five-year infant mortality. Comparing the 2013 profile to the 2010 profile reported in the 2012/2013 CHNA, the study region had similar rates for

most maternal and infant health indicators, with the exception of non-marital births which declined in the 2013 data report. The study region rates also declined for teen pregnancy and for five-year infant mortality.

- **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 669 PQI hospital discharges. The leading diagnoses for these discharges were congestive heart failure, bacterial pneumonia, and chronic obstructive pulmonary disease (COPD) or asthma in older adults. The PQI discharge rates for the study region were higher than the Virginia statewide rates for all PQI discharges combined, and for congestive heart failure, bacterial pneumonia, COPD or asthma in older adults, and urinary tract infection. 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 (BH) hospitalizations provide another important indicator of community health status. In 2013, residents of the study region had 363 hospital discharges from Virginia community hospitals for behavioral health conditions. The leading diagnoses for these discharges were affective psychoses, schizophrenic disorders and depressive disorders. The BH discharge rate for the study region was higher than the statewide rate for schizophrenic disorders. The leading causes of behavioral health hospitalization in 2013 were generally the same as in the 2011 profile reported in the 2012/2013 CHNA.

- **Adult Health Risk Profile:** Local estimates 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. The 2014 profile generally reflects the health risk patterns found in 2011 as reported in the 2012/2013 CHNA.

- **Youth Health Risk Profile:** Local estimates indicate that substantial numbers of youth (age 10-14 and 15-19) in the study region have health risks related to nutrition, weight, alcohol, mental health, tobacco, and physical inactivity. The 2014 profile generally reflects the health risk patterns found in 2011 as reported in the 2012/2013 CHNA.

- **Uninsured Profile:** At any given point in time in 2014, an estimated 8,343 nonelderly residents of the study region were uninsured. This included an estimated 1,153 children and 7,190 adults. The estimated uninsured rates were 9 percent for children age 0-18, 19 percent for adults age 19-64, and 16 percent for the population age 0-64. 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.

- **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+. All five localities that overlap with the study region have been partially or fully designated as MUAs/MUPs (Gloucester, King and Queen, Lancaster, Mathews and Middlesex counties). 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 65,508 people. The total population is projected to increase slightly by 2019. Focusing on age groups, a decline is projected for all age groups except the 18-29 and 65+ age groups. Focusing on racial/ethnic background, growth is projected for all of the listed groups, with the exception of the White population. The Hispanic Ethnicity population is expected to grow by 14%.

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

Indicator	2010 Census	2014 Estimate	2019 Projection	% Change 2014-2019
Total Population	65,542	65,508	66,756	2%
Population Density (per Sq. Mile)	110.1	110.0	112.1	2%
Total Households	26,796	26,835	27,471	2%
Population by Age				
Children Age 0-17	13,037	12,502	12,196	-2%
Adults Age 18-29	7,698	8,002	8,316	4%
Adults Age 30-44	10,772	10,293	10,087	-2%
Adults Age 45-64	21,094	21,010	20,224	-4%
Seniors Age 65+	12,942	13,701	15,937	16%
Population by Race/Ethnicity				
Asian	389	437	469	7%
Black/African American	7,852	7,672	8,037	5%
White	55,388	55,321	55,827	1%
Other or Multi-Race	1,918	2,088	2,423	16%
Hispanic Ethnicity	1,353	1,586	1,809	14%

Note: Hispanic is a classification of ethnicity; therefore, Hispanic individuals are also included in the race categories.

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

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 65,508 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, and less racially diverse. The study region also has a higher percentage of lower income households than Virginia as a whole. These comparative patterns were also seen in the 2011 demographic profile reported in the 2012/2013 CHNA. *Note: Maps 1-13 in Appendix A (pages 35-42) show the geographic distribution of the population by zip code.*

Exhibit II-2
Health Demographic Snapshot Profile, 2014

Indicator		Study Region	Virginia
Population Counts			
Total Population	Population	65,508	8,282,921
Age	Children Age 0-17	12,502	1,889,338
	Adults Age 18-29	8,002	1,417,141
	Adults Age 30-44	10,293	1,678,713
	Adults Age 45-64	21,010	2,241,450
	Seniors Age 65+	13,701	1,056,279
Sex	Female	33,298	4,214,922
	Male	32,213	4,067,999
Race	Asian	437	486,905
	Black/African American	7,672	1,602,827
	White	55,321	5,616,313
	Other or Multi-Race	2,088	576,876
Ethnicity	Hispanic Ethnicity	1,586	705,701
Income	Low Income Households (Households with Income < $25,000)	5,701	594,210
Education	Population Age 25+ Without a High School Diploma	5,718	662,369
Population Rates			
Total Population	Population Density (pop. per sq. mile)	110.0	206.1
Age	Children Age 0-17 pct. of Total Pop.	19%	23%
	Adults Age 18-29 pct. of Total Pop.	12%	17%
	Adults Age 30-44 pct. of Total Pop.	16%	20%
	Adults Age 45-64 pct. of Total Pop.	32%	27%
	Seniors Age 65+ pct. of Total Pop.	21%	13%
Sex	Female pct. of Total Pop.	51%	51%
	Male pct. of Total Pop.	49%	49%
Race	Asian pct. of Total Pop.	1%	6%
	Black/African American pct. of Total Pop.	12%	19%
	White pct. of Total Pop.	84%	68%
	Other or Multi-Race pct. of Total Pop.	3%	7%
Ethnicity	Hispanic Ethnicity pct. of Total Pop.	2%	9%
Income	Low Income Households (Households with Income <$25,000) pct. of Total Households	21%	19%
Education	Pop. Age 25+ Without a High School Diploma pct. of Total Pop. Age 25+	12%	12%

Note: Hispanic is a classification of ethnicity; therefore, Hispanic individuals are also included in the race categories.

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 698 total deaths. The leading causes of death were malignant neoplasms (cancer) (175), heart disease (151), chronic lower respiratory diseases (47), unintentional injury (36) and cerebrovascular diseases (32). Study region death rates were higher than the statewide rates for all deaths combined, and for malignant neoplasms, heart disease, chronic lower respiratory diseases, unintentional injury, and cerebrovascular diseases deaths. *Note: Maps 14-17 in Appendix A (pages 42-44) 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 as reported in the 2012/2013 CHNA.

Exhibit II-3
Mortality Profile, 2013

Indicator	Study Region	Virginia
Total Deaths		
Deaths by All Causes	698	62,309
Deaths by Leading 14 Causes		
Malignant Neoplasms (Cancer)	175	14,348
Heart Disease	151	13,543
Chronic Lower Respiratory Diseases	47	3,168
Unintentional Injury	36	2,794
Cerebrovascular Diseases	32	3,278
Alzheimer's Disease	25	1,634
Nephritis and Nephrosis	20	1,547
Septicemia	17	1,464
Diabetes Mellitus	11	1,618
Influenza and Pneumonia	11	1,430
Chronic Liver Disease	9	836
Suicide	8	1,047
Parkinson's Disease	8	549
Primary Hypertension and Renal Disease	7	629
Crude Death Rates per 100,000 Population		
Total Deaths	1,067.6	755.5
Malignant Neoplasms (Cancer)	267.7	174.0
Heart Disease	231.0	164.2
Chronic Lower Respiratory Diseases	71.9	38.4
Unintentional Injury	55.1	33.9
Cerebrovascular Diseases	48.9	39.7
Alzheimer's Disease	--	19.8
Nephritis and Nephrosis	--	18.8
Septicemia	--	17.8
Diabetes Mellitus	--	19.6
Influenza and Pneumonia	--	17.3
Chronic Liver Disease	--	10.1

Suicide	--	12.7
Parkinson's Disease	--	6.7
Primary Hypertension and Renal Disease	--	7.6
Note: -- Rates are not calculated where n<30.		
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- 4A,* the study region had 518 total live births in 2013. Compared to Virginia as a whole, the study region had higher rates of non-marital births, and births to teens age 18-19. *Note: Maps 18-19 in Appendix A (pages 44-45) show the geographic distribution of births by zip code.*

Comparing the 2013 profile in *Exhibit II-4A* to the 2010 profile reported in the 2012/2013 CHNA, the study region had similar rates for most maternal and infant health indicators, with the exception of non-marital births which declined in the most recent survey.

Exhibit II-4A.
Maternal and Infant Health Profile, 2013

Indicators	Study Region	Virginia
Counts		
Total Live Births	518	101,977
Low Weight Births (under 2,500 grams / 5 lb. 8 oz.)	49	8,178
Births Without Early Prenatal Care (No Prenatal Care in First 13 Weeks)	51	13,435
Non-Marital Births	246	35,289
Live Births to Teens Age 10-19	38	5,316
Live Births to Teens Age 18-19	31	4,073
Live Births to Teens Age 15-17	7	1,208
Live Births to Teens Age <15	0	35
Rates		
Live Birth Rate per 1,000 Population	7.9	12.3
Low Weight Births pct. of Total Live Births	9%	8%
Births Without Early Prenatal Care (No Prenatal Care in First 13 Weeks) pct. of Total Live Births	10%	13%
Non-Marital Births pct. of Total Live Births	47%	35%
Live Births to Teens Age 10-19	10.4	10.3
Live Births to Teens Age 18-19	47.2	36.4
Live Births to Teens Age 15-17	5.8	8.0
Live Births to Teens Age <15	0.0	0.1
Source: Community Health Solutions analysis of data from the Virginia Department of Health.		

Exhibit II-4B below provides counts and rates of teen pregnancy and infant mortality for the five localities that include the study region. The study region rates were higher than the statewide rates for teen

pregnancy and lower for five-year infant mortality. Comparing the 2013 profile in *Exhibit II-4B* to the 2010 profile reported in the 2012/2013 CHNA, the study region rates declined for teen pregnancy and for five-year infant mortality.

Exhibit II-4B.

Teen Pregnancy and Infant Mortality, 2013

Indicators	Gloucester County	King and Queen County	Lancaster County	Mathews County	Middlesex County	Study Region	Virginia
Teen Pregnancy Counts and Rates							
Total Teenage (age 10-19) Pregnancies (2013)	31	8	8	3	11	61	7,447
Teenage (age 10-19) Pregnancy Rate per 1,000 Teenage Female Population (2013)	14.6	20.7	16.9	5.9	24	15.4	14.4
Infant Mortality Counts and Rates							
Total Infant Deaths (2009-2013)	4	1	3	4	3	15	3,402
Five-Year Infant Mortality Rate per 1,000 Live Births (2009-2013)	2.3	3.3	7.1	12.5	6.8	4.6	6.6

Note: Indicators are shown at the county level because teen pregnancy and five-year infant mortality data are not available at the zip code level.

Source: Community Health Solutions analysis of data from the Virginia Department of Health.

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 669 PQI hospital discharges in 2013. The leading diagnoses for these discharges were congestive heart failure (165), bacterial pneumonia (141), and chronic obstructive pulmonary disease (COPD) or asthma in older adults (140). The PQI discharge rates for the study region were higher than the Virginia statewide rates for all PQI discharges combined, and for congestive heart failure, bacterial pneumonia, COPD or asthma in older adults, and urinary tract infection. *Note: Map 20 in Appendix A (page 45) shows the geographic distribution of Total PQI Discharges 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	Study Region	Virginia
Counts		
Total PQI Discharges	669	76,860
Congestive Heart Failure	165	18,239
Bacterial Pneumonia	141	11,867
COPD or Asthma in Older Adults	140	16,026
Urinary Tract Infection	71	8,452
Diabetes	64	9,938
Dehydration	59	7,743
Hypertension	13	2,768
Angina	5	941
Perforated Appendix	4	1,189
Asthma in Younger Adults	4	444
Crude Rates per 100,000 Population		
Total PQI Discharges	1,023.2	932.0
Congestive Heart Failure	252.4	221.2
Bacterial Pneumonia	215.7	143.9
COPD or Asthma in Older Adults	214.1	194.3
Urinary Tract Infection	108.6	102.5
Diabetes	97.9	120.5
Dehydration	90.2	93.9
Hypertension	--	33.6
Angina	--	11.4
Perforated Appendix	--	14.4
Asthma in Younger Adults	--	5.4

Note: -- Rates are not calculated where n<30. The sum of the individual diagnoses may differ slightly from the Total PQI Discharges figure for technical reasons. See Appendix C for details.

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 363 hospital discharges from Virginia community hospitals for behavioral health conditions in 2013. The leading diagnoses for these discharges were affective psychoses (155), schizophrenic disorders (67), and depressive disorders (27). The BH discharge rate for the study region was higher than the statewide rate for schizophrenic disorders. *Note: Map 21 in Appendix A (page 46) 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	**Study Region**	**Virginia**
BH Discharges		
Total BH Discharges by All Diagnoses	363	60,600
BH Discharges by Diagnosis		
Affective Psychoses	155	26,709
Schizophrenic Disorders	67	8,136
Depressive Disorder, Not Elsewhere Classified	27	3,503
Drug Psychoses	16	2,121
Other Nonorganic Psychoses	15	2,133
Alcoholic Psychoses	14	4,037
Alcohol Dependence Syndrome	12	2,391
Senility Without Mention of Psychosis	9	1,688
Symptoms Involving Head or Neck	8	933
Adjustment Reaction	7	2,271
Neurotic Disorders	5	1,207
Other Organic Psychotic Conditions-Chronic	4	795
Altered Mental Status	3	1,000
Non Dependent Abuse of Drugs	2	600
Drug Dependence	2	816
Crude Rates per 100,000 Population		
All Diagnoses	555.2	734.8
Affective Psychoses	237.1	323.9
Schizophrenic Disorders	102.5	98.7
Depressive Disorder, Not Elsewhere Classified	--	42.5
Drug Psychoses	--	25.7
Other Nonorganic Psychoses	--	25.9
Alcoholic Psychoses	--	49.0
Alcohol Dependence Syndrome	--	29.0
Senility Without Mention of Psychosis	--	20.5
Symptoms Involving Head or Neck	--	11.3
Adjustment Reaction	--	27.5
Neurotic Disorders	--	14.6
Other Organic Psychotic Conditions-Chronic	--	9.6
Altered Mental Status	--	12.1
Non Dependent Abuse of Drugs	--	7.3
Drug Dependence	--	9.9
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.		

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. As shown in *Exhibit II-7*, estimates from 2014 indicate 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 (pages 46-48) show the geographic distribution of selected adult health risks by zip code.*

Exhibit II-7 Adult Health Risk Factor Profile (Estimates), 2014		
Indicator		**Study Region**
Count (Estimates)		
Estimated Adults age 18+		*52,735*
Risk Factors	Not Meeting Guidelines for Fruit and Vegetable Intake	42,529
	Overweight or Obese	34,142
	Not Meeting Recommendations for Physical Activity in the Past 30 Days	25,956
	Smoker	9,766
	At-risk for Binge Drinking (males having five or more drinks on one occasion, females having four or more drinks on one occasion)	8,824
Chronic Conditions	High Cholesterol (was checked, and told by a doctor or other health professional it was high)	19,000
	High Blood Pressure (told by a doctor or other health professional)	16,229
	Arthritis (told by a doctor or other health professional)	12,823
	Diabetes (told by a doctor or other health professional)	5,146
General Health Status	Limited in any Activities because of Physical, Mental or Emotional Problems	11,117
	Fair or Poor Health Status	8,377
Percent (Estimates)		
Risk Factors	Not Meeting Guidelines for Fruit and Vegetable Intake	81%
	Overweight or Obese	65%
	Not Meeting Recommendations for Physical Activity in the Past 30 Days	49%
	Smoker	19%
	At-risk for Binge Drinking (males having five or more drinks on one occasion, females having four or more drinks on one occasion)	17%
Chronic Conditions	High Cholesterol (was checked, and told by a doctor or other health professional it was high)	36%
	High Blood Pressure (told by a doctor or other health professional)	31%
	Arthritis (told by a doctor or other health professional)	24%
	Diabetes (told by a doctor or other health professional)	10%
General Health Status	Limited in any Activities because of Physical, Mental or Emotional Problems	21%
	Fair or Poor Health Status	16%
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.

As shown in *Exhibit II-8,* estimates from 2014 indicate that substantial numbers of youth in the study region have health risks related to nutrition, weight, alcohol, mental health, tobacco, and physical activity. 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: Map 26 in Appendix A (page 48) shows the geographic distribution of youth overweight or obese by zip code.*

Exhibit II-8 Youth Health Risk Factor Profile (Estimates), 2014	
Indicator	**Study Region**
Count (Estimates)	
High School Youth Age 14-19	
Total Estimated High School Youth Age 14-19	*4,656*
Not Meeting Guidelines for Fruit and Vegetable Intake	4,280
Overweight or Obese	1,213
Not Meeting Recommendations for Physical Activity in the Past Week	2,456
Used Tobacco in the Past 30 Days	875
Had at least One Drink of Alcohol At least One Day in the Past 30 Days	1,356
Felt Sad or Hopeless (almost every day for two or more weeks in a row so that they stopped doing some usual activities)	1,152
Middle School Youth Age 10-14	
Total Estimated Middle School Youth Age 10-14	*1,769*
Not Meeting Guidelines for Fruit and Vegetable Intake	1,364
Not Meeting Recommendations for Physical Activity in the Past Week	1,136
Used Tobacco in the Past 30 Days	40
Percent (Estimates)	
High School Youth Age 14-19	
Not Meeting Guidelines for Fruit and Vegetable Intake	92%
Overweight or Obese	26%
Not Meeting Recommendations for Physical Activity in the Past Week	53%
Used Tobacco in the Past 30 Days	19%
Had at least One Drink of Alcohol At least One Day in the Past 30 Days	29%
Felt Sad or Hopeless (almost every day for two or more weeks in a row so that they stopped doing some usual activities)	25%
Middle School Youth Age 10-14	
Not Meeting Guidelines for Fruit and Vegetable Intake	77%
Not Meeting Recommendations for Physical Activity in the Past Week	64%
Used Tobacco in the Past 30 Days	2%
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 in the study region as of 2014. At a given point in time in 2014, an estimated 8,343 nonelderly residents of the study region were uninsured, including 1,153 children and 7,190 adults. The estimated uninsured rates were nine percent for children age 0-18, 19 percent for adults age 19-64, and 16 percent for the population age 0-64. 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 49) show the geographic distribution of the uninsured population by zip code.*

Exhibit II-9
Uninsured Profile (Estimates), 2014

Indicator	Study Region
Estimated Uninsured Counts*	
Uninsured Nonelderly Age 0-64	8,343
Uninsured Children Age 0-18	1,153
Uninsured Children Age 0-18 <=138% FPL	374
Uninsured Children Age 0-18 <=200% FPL	579
Uninsured Children Age 0-18 <=250% FPL	711
Uninsured Children Age 0-18 <=400% FPL	945
Uninsured Children Age 0-18 138-400% FPL	571
Uninsured Adults Age 19-64	7,190
Uninsured Adults Age 19-64 <=138% FPL	2,633
Uninsured Adults Age 19-64 <=200% FPL	3,861
Uninsured Adults Age 19-64 <=250% FPL	4,654
Uninsured Adults Age 19-64 <=400% FPL	6,031
Uninsured Adults Age 19-64 138-400% FPL	3,398
Estimated Uninsured Percent	
Children Age 0-18	9%
Adults Age 19-64	19%
Population Age 0-64	16%

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.

Medically Underserved Profile

Medically Underserved Areas (MUAs) and Medically Underserved Populations (MUPs) are designations used by the U.S. Health Resources and Services Administration to identify populations 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*, all five localities that overlap with the zip code study region have been partially or fully designated as MUAs/MUPs (Gloucester, King and Queen, Lancaster, Mathews and Middlesex counties). 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
Gloucester County	Partial	1 of 8 Census Tracts
King and Queen County	Full	2 of 2 census tracts
Lancaster County	Full	3 of 3 Census Tracts
Mathews County	Full	2 of 2 Census Tracts
Middlesex County	Full	4 of 4 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 Walter Reed 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, RWRH sent the survey to many more people for the 2016 CHNA. The survey was sent to a group of 156 community stakeholders. The community stakeholder list included representatives from public health, education, social services, business, local government and local civic organizations, among others. Riverside Walter Reed staff conducted outreach for community input via email, through personal phone calls, and in-person at local events and meetings. A total of 49 stakeholders (31%) submitted a response (although not every respondent answered every question).

- **Community Health Concerns.** Respondents identified more than 40 specific health concerns, with the most commonly mentioned being mental health conditions, dementia/Alzheimer's Disease, high blood pressure/hypertension, obesity, alcohol use, and diabetes. These concerns, along with dental care/oral health 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 mental health services, chronic pain management, aging services, and substance abuse services. These services, as well as health care coverage and long term care, were also among the most commonly identified service gaps in the 2012/2013 survey.

- **Vulnerable or At-Risk Populations.** Respondents identified a variety of vulnerable/at-risk populations in the community including children, seniors, the uninsured, residents with mental health conditions, substance users, Hispanic migrant workers, the homeless population, low income populations, and other populations with particular health concerns. Respondents also identified vulnerable/at-risk neighborhoods or geographic regions in the community, including isolated areas, areas without healthcare providers, areas with low income households, and particular neighborhoods across the region.

- **Health Assets in the Community.** Respondents identified diverse health assets in the community including the biking trails, community educational programs, community organizations, faith-based organizations, healthcare organizations, the natural environment, parks, recreational facilities, and walking trails.

- **Health Assets Needed in the Community.** Respondents identified health assets that could use enhancement, such as hospice care; mental health services; parks and recreational facilities; primary healthcare services; programs/institutions to promote physical activity; services for seniors; specialty healthcare services; and transportation.

- **Additional Ideas and Suggestions.** Respondents offered a variety of ideas and suggestions for improving community health. Ideas and suggestions included behavioral health services; community recreational programs; health education and prevention programs; home-based health services; primary healthcare services; services for seniors; and substance abuse treatment services.

Survey Respondents

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

Exhibit I-1
Reported Organization Affiliation of Survey Respondents

Alzheimer's Association	Gloucester-Mathews Care Clinic
American Red Cross	King and Queen School Board
Bay Aging	King and Queen Social Services
Boundless Love Ministries	Mathews County (2)
Brain Injury Association of Virginia	Mathews County Board of Supervisors
Bridges Outpatient	Middle Peninsula Northern Neck Community Services Board
Gloucester County (2)	Middlesex Board of Supervisors (2)
Gloucester County Public Schools (3)	Middlesex Department of Social Services
Gloucester County School Board	National Alliance on Mental Illness Mid-Tidewater Affiliate
Gloucester County Sheriff's Office	Rappahannock Concrete Corp.
Gloucester Department of Emergency Management	Riverside Medical Group (13)
Gloucester Department of Social Services	Riverside Walter Reed Hospital (7)
Gloucester School Board	TPMG Urbanna Family Medicine

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: all 49 respondents answered this question. 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	Response Count
Mental Health - Non-Substance Abuse Behavioral Health Conditions (e.g. depression, anxiety, etc.)	78%	38
Mental Health - Substance Abuse (prescription or illegal drugs)	76%	37
Dementia / Alzheimer's Disease	65%	32
High Blood Pressure / Hypertension	61%	30
Obesity	61%	30
Alcohol Use	59%	29
Diabetes	59%	29
Violence – Domestic Violence	53%	26
Heart Disease	51%	25
Mental Health - Intellectual/Developmental Disabilities	51%	25
Tobacco Use	51%	25
Cancer	49%	24
Respiratory Diseases (e.g. asthma, COPD, etc.)	43%	21
Chronic Pain	41%	20
Stroke	41%	20
Accidents / Injuries	39%	19
Dental / Oral Health Care	37%	18
Arthritis	35%	17
Prenatal and Pregnancy Care	35%	17
Neurological Conditions (e.g. seizures, multiple sclerosis, traumatic brain injury, etc.)	31%	15
Orthopedic Problems	31%	15
Physical Disabilities	27%	13
Teen Pregnancy	27%	13
Drowning / Water Safety	25%	12
Renal (kidney) Disease	25%	12
Violence – Other than domestic violence	25%	12
Autism	22%	11
Environmental Health (e.g. pollution, mosquito control, water quality, etc.)	22%	11
Hunger	20%	10
Bullying	18%	9
Infectious Diseases	18%	9
Sexually Transmitted Diseases	18%	9
HIV/AIDS	6%	3
Other Health Problems (see responses on the following page)	4%	2

Continued on the following page

Exhibit I-2 Important Community Health Concerns Identified by Survey Respondents (continued)	
Response #	**Other Health Concerns (Open-Ended Reponses)**
1	• Alcohol in conjunction with prescription medications • Frequency of autism diagnosis • Increased application for Medicaid by persons diagnosed with cancer and unable to afford medication and treatment • Persons with chronic pain who are self-medicating and become addicted • More dementia seen in the increasing aging population where families are unable to meet the supervision and care needs of elderly once elderly is unable to meet their own needs • Dental needs seen several times per year in youth involved with child protective services as well as adults • Where methamphetamine use is prevalent although additional resources have become available through our free clinic.
2	• Assisted living
3	• Children without appropriate parental supervision
4	• Functional/Medical Needs • Shelter issues
5	• Heroin use/overdoses on the rise
6	• Prenatal care in the middle peninsula and northern neck is nonexistent now with no birthing facilities for many miles.
7	• The lack of psychiatrists and mental health care providers are critical concerns. • The lack of psychiatric beds is another critical concern.

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: 47 of 49 respondents answered this question. 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	Response Count
Mental Health Services - Substance Abuse Services	70%	33
Mental Health Services - Non Substance Abuse Behavioral Health Services	68%	32
Chronic Pain Management Services	57%	27
Aging Services	55%	26
Substance Abuse Services	53%	25
Primary Medical Care Services	49%	23
Specialty Medical Care Services (e.g. cardiologists, pulmonologists, etc.)	45%	21
Healthy Lifestyle Support (e.g. nutrition, exercise, etc.)	45%	21
Chronic Disease Services (e.g. diabetes, high blood pressure, etc.)	43%	20
Health Care Insurance Coverage	40%	19
Health Promotion and Prevention Services	38%	18
Mental Health Services - Intellectual/Developmental Disabilities	38%	18
Services for Vulnerable Populations (e.g. uninsured/underinsured, migrant workers, homeless, etc.)	36%	17
Dental / Oral Health Care Services	34%	16
Long Term Care Services	34%	16
Transportation Services	34%	16
Social Services	32%	15
Cancer Services (e.g. screening, diagnosis, treatment, etc.)	30%	14
Domestic Violence Services	28%	13
Hospice Services	26%	12
Hospital Services (e.g. inpatient, outpatient, emergency care, etc.)	23%	11
Maternal, Infant and Child Health Services	23%	11
Home Health Services	21%	10
Early Intervention Services for Children	19%	9
Public Health Services	19%	9
Veterans Services	19%	9
Food Safety Net (e.g. food bank, community gardens, school lunches, etc.)	17%	8
Physical Rehabilitation	15%	7
Continued on the following page		

Exhibit I-3 Important Community Service Gaps Identified by Survey Respondents		
Note: 47 of 49 respondents answered this question. 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**	**Response Count**
School Health Services	15%	7
Environmental Health Services	13%	6
Workplace Health and Safety Services	11%	5
Family Planning Services	9%	4
Public Safety Services	9%	4
Pharmacy Services	4%	2
Other Services (see responses below)	6%	3
Response #	**Other Service Gaps (Open-Ended Reponses)**	
1	• In-home parent educator • Hospice House respite facility	
2	• Transportation for elderly and disabled. • Support for caregivers and patients who want to remain at home	
3	• Pulmonary	

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. Community input included:

- Children
- Disabled
- Seniors
- Hispanic Migrants
- Homeless
- Low Income
- Residents in areas without Healthcare Providers
- Residents in Isolated Areas
- Residents with Mental Health Conditions
- Residents of particular neighborhoods (see *Appendix B*)
- Residents without Transportation
- Substance Users
- Uninsured

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.

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

Existing Assets that Promote a Culture of Health	Assets the Community Needs, but May Be Lacking
• Biking Trails • Community Educational Programs • Community Organizations • Faith-Based Organizations • Healthcare Organizations • Natural Environment • Parks • Recreational Facilities • Walking Trails	• Hospice Care • Mental Health Services • Parks and Recreational Facilities • Primary Healthcare Services • Programs/Institutions to Promote Physical Activity • Services for Seniors • Specialty Health Services • Transportation

Note: Please see *Appendix B* (page 46) 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)*.

- Behavioral health services
- Community recreational programs
- Health education and prevention programs
- Home-based health care services
- Primary health care services
- Services for seniors
- Substance abuse treatment 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 Middle Peninsula.

- ***Awareness and Navigation of Resources:*** Awareness and Navigation of Resources was identified as a key issue with many individuals unaware of existing services and resources available on the Middle Peninsula. As a part of the implementation plan, Riverside has participated in the Regional Resource Council. The Middle Peninsula Resource Council has added Riverside's listings to the northerneckconnection.org, Riverside has established an internal Riverside Middle Peninsula Resource Council to promote internal awareness of services, and Riverside now has active members participating with the Regional Resource Council.

- ***Resource Collaboration Around Care of Diabetics:*** The opportunity to enhance diabetic patient education through collaboration between organizations was identified in 2013. As a part of the implementation plan, RWRH and the Bay Rivers Telehealth Consortium and Three Rivers Health District have worked together to provide services for these patients. RWRH has worked with Three Rivers to provide diabetic education presentations. Additionally, there has been ongoing education to providers and caregivers on how to refer patients.

- ***Resource Collaboration Around Transitions of Care***: Opportunities were also identified relating to transitions of care. As a result, there has been sharing of contact and resource information between RWRH Care Management Team and Bay Aging. Referrals to counselors and coaches increased.

- ***Alzheimer's and Dementia:*** Another area identified was the opportunity to improve Alzheimer's and dementia care for area patients. There has been an ongoing training effort to educate EMS, law enforcement, providers and support groups in real times as opportunities have presented.

- ***Health Literacy:*** Opportunities to address health literacy were identified in both the Middle Peninsula and Northern Neck areas. RWRH, RTH and Three Rivers Health District worked together to assess the REALM tool. RWRH and RTH also reviewed the HEAL tool.

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 August 17, 2016 at the Middlesex County Public Meeting Room. It was determined that a joint action plan between the Middle Peninsula and Northern Neck regions would be appropriate, as the same organizations serve both regions. The meeting reflected key stakeholders from both the Middle Peninsula and Northern Neck Regions, as many organizations serve both areas. Participants included: Three Rivers Health District, Middlesex County Social Services, Community Services Board, Bay Agency on Aging, Alzheimer's Association, Gloucester Mathews Free Clinic, King William Behavioral Health, Riverside Walter Reed Hospital, Riverside Tappahannock Hospital, Riverside Complex Care, Riverside Orchard and Riverside Medical Group.

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 Plans 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 three 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**
• Awareness and Navigation of Resources • Resource Collaboration Around Care of Diabetics • Resource Collaboration Around Care Transitions • Alzheimer's and Dementia • Transportation and Access to Services • Wellness	• Cancer • Heart Disease • Stroke • Chronic Lower Respiratory Conditions • Unintentional Injury • Alzheimer's • Septicemia • Nephritis	• Mental Health (Substance Abuse and Non Substance Abuse) • Dementia and Alzheimer's • High Blood Pressure / Hypertension • Obesity • Cancer • Alcohol Use • Diabetes • Domestic Violence • Heart Disease • Mental Health (Intellectual Disabilities) • Tobacco Use	• Housing • Transitional Care • Economic Development / Jobs

		• Aging Services • Specialty Medical Services • Primary Care Services • Transportation • Chronic Pain Management • Healthy Lifestyle Support	

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

Health Need	**Number of Votes**
Mental Health (Substance Abuse and Non Substance Abuse combined)	20
Healthy Lifestyle Issues (Obesity, Tobacco, Diabetes, Healthy Living)	8
Healthy Aging	7
Transportation	5
Housing	5
Transitional Care	4
Chronic Pain	4

This identified the top three areas of focus as:

1. Mental Health
2. Healthy Lifestyle / Obesity / Diabetes
3. Healthy Aging

These three areas are also impacted by two key foundational issues:

1. Transportation
2. Housing

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 September 15, 2016. The group then heard overviews of three key areas as well as an overview of both transportation and housing, which were considered to be critical components for a healthy community. 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, healthy lifestyle / obesity / diabetes, housing and transportation.

Significant Health Needs To Be Addressed

- Mental Health
- Healthy Lifestyle / Obesity / Diabetes
- Healthy Aging
- Housing
- Transportation

While each of these areas is a prioritized health need, the overall determination of the team was that supporting existing community infrastructure was the most important way to address the needs.

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
- Cancer
- Reproductive health
- Infant mortality
- Hypertension

- Septicemia
- Nephritis
- Unintentional injury
- Domestic violence
- Chronic pain

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 Walter Reed 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
- 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.

Mental Health

Background:
As in the rest of the country, mental health is perceived as an underserved health need across the Middle Peninsula and Northern Neck regions. In Virginia, the Community Services Board (CSB) system is charged with serving the uninsured and seriously mentally ill across the commonwealth. Locally, the Middle Peninsula Northern Neck Community Services Board serves the ten county region from Colonial Beach to Gloucester Point. The CSB has identified the three largest obstacles to be a lack of funding, the lack of Medicaid expansion in Virginia ns a lack of qualified staff (and the long term funding to support them).

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. The CSB, Riverside and other community partners were encouraged to continue to participate in the Regional Resource Council in order to facilitate ongoing communications between and among organizations serving the county.

Resources:
Riverside will continue to support and participate with local and state organizations working to address behavioral health issues across the region. Riverside will work with its partners to ensure the Regional Resource Council continues to be an important opportunity for communication and collaboration.

Healthy Lifestyle / Obesity/ Diabetes

Background:
As the health indicator data notes, the population across the Middle Peninsula and Northern Neck regions struggles with obesity and obesity-related conditions, such as hypertension and diabetes. Many initiatives are currently in place to help educate the population about the importance of good nutrition and maintaining a healthy weight. Specifically, the team heard information about the 15 week healthy lifestyle program the CSB presents in the public schools (all except Mathews School District), as well as information from Riverside nutritionists about diabetes programs and pre-diabetes educational classes. The group discussed the issue of food access across the region as well. While there are not food deserts as seen in many regions, there is an issue with maintaining appropriate food stocks in the food pantries for diabetics. One of the key issues identified was the lack of community engagement and attendance at events focused on nutrition, weight loss and healthy lifestyle.

Action Steps:
Community partners will continue to collaborate around the issues of nutrition education, access to healthy food and healthy lifestyle habits. Riverside will continue to offer educational programs, and to support community events, such as Healthy Living Days. While no additional program or initiative will be established under this plan, the groups will continue to explore opportunities to work together to better leverage the resources currently dedicated to the issues.

Resources:
Riverside will continue to work with and support the local organizations focused on these issues in the community. Additionally, Riverside will explore ways to increase community engagement in this issue.

Healthy Aging

Background:
There are multiple programs in the region dedicated to assisting individuals and families with aging issues. Specifically, Bay Agency on Aging facilitates multiple services, including Meals on Wheels, insurance counseling, care transition services and clinical services including home care, adult day care, care management, hospice and respite services. Riverside also works closely with Bay Agency on Aging, including financial support of programs like the Eastern Virginia Care Transitions Programs, as well as by coordinating closely in individual patients, such as those in Riverside's Complex Care program based in Tappahannock. The Complex Care program offers services such as geriatricians, palliative care and a house calls program. The group also reviewed Alzheimer's programs in the area, but noted that this was not limited to the senior population and did not want to group it among "aging" issues as it would be a disservice to the population facing early-onset Alzheimer's. Again, the major obstacles noted were the lack of Medicaid expansion in Virginia combined with a lack of other funding.

Action Steps:
The group again determined that additional programs and initiatives would not provide added value to the problems at hand. While additional funding and Medicaid expansion would address a lot of issues, the team felt the controllable issue at hand was to promote ongoing collaboration and communication between agencies, providers and organizations. The group acknowledged that the Regional Resource Council was a great way to facilitate these interactions, though realized the group had lost some of its energy.

Resources:
Riverside offered to help re-invigorate the Regional Resource Council as a catalyst for cross-organization communications. How to best do this will be further explored within the structure of that meeting.

Transportation

Background:
Transportation was considered to be a critical community health issue. Without transportation, not only is someone not able to reach medical appointments, but they have limited access to grocery stores, medication and employment opportunities. As in many rural communities, access to public transportation is a challenge across the Middle Peninsula and Northern Neck regions. Bay Transit, operated under Bay Agency on Aging, provides the pubic transportation for the ten county region plus New Kent and Charles City County. While acknowledging that more fixed route services would be ideal, it is currently not feasible as individuals do not have a way to access the main roads (like routes 17 and 33). This forces the use of a para transit / demand and response model. They also operate a Med Carry program, which matches volunteers with individuals needing rides to appointments. Bay Transit is growing as funding allows, with an additional bus added to Middlesex in October, as well as a fixed route between Gloucester Courthouse and Gloucester Point. Bay Transit would like to add additional fixed routes, as well as a route between Gloucester, Tappahannock and Kilmarnock but does not have the funding to do so. Currently, Bay Transit

runs 6 am – 6 pm, Monday through Friday. Funding for the program is 50% federal funds, 15% state and 35% local money. Federal funds are only given as a match to local funds. This creates a challenge, as different localities are able to fund transportation at different levels. While one time gifts are welcome, they could not be used to add fixed routes, as that funding source must be sustainable.

Action Steps:
The group recognizes the important role transportation plays in the region and wants to ensure that Bay Transit continues to be a part of community health conversations. Bay Transit is a part of the Regional Resource Council, and again the team felt it was key that this regular interaction of organizations remain an important cornerstone in the community.

Resources:
As noted above, Riverside offered to help re-invigorate the Regional Resource Council as a catalyst for cross-organization communications. How to best do this will be further explored within the structure of that meeting. Riverside will continue to explore with the other participants how reliable transportation could be expanded in the community.

Housing

Background:
Housing had been noted as a critical community health issue as well. Bay Aging, in their CHNA in 2015, also noted housing was a key issue. Specifically, one of the key issues in the Middle Peninsula and Northern Neck regions is the lack of access to safe, affordable rental properties. And, it is even harder to find such properties that are not age-restricted. Notably, while approximately 40% of US households rent, only about 20% of the Middle Peninsula and Northern Neck market is available to rent. Bay Housing, operating as part of Bay Agency on Aging, plays an important role in the local housing market. They facilitate programs that include a weathering program, an indoor plumbing rehabilitation program and an emergency home repair program. All of the programs have a long waiting list. Another program works through Community Development Block Grants to help improve entire neighborhoods. Bay Housing is also the Section 8 Housing Authority in the region. While the wait list has not been opened since 2006, they anticipate that if it were opened, they would receive two to three thousand applicants for the wait list. Finally, Bay Aging also operates age restricted housing communities in the area, but not enough to meet current demand. The group also discussed the impact of homelessness in the area. It was noted that while it is often more visible in urban areas, homelessness is very much present in the Middle Peninsula and Northern Neck region.

Action Steps:
The group recognizes the important role safe and reliable housing plays in the region and wants to ensure that Bay Housing continues to be a part of community health conversations. Again, it was noted that the Regional Resource Council, which also includes Bay Housing, is an important catalyst of key communications between community organizations.

Resources:
As noted above, Riverside offered to help re-invigorate the Regional Resource Council as a catalyst for cross-organization communications. How to best do this will be further explored within the structure of

that meeting. Riverside will continue to explore with the other participants how to increase access to safe and reliable housing in the community.

Middle Peninsula/Northern Neck Regional Resource Council

Background:
While this was not initially noted as a focus area, the process of working through the various issues continued to highlight the importance of this existing community asset to the health of the region. The Middle Peninsula / Northern Neck Regional Resource Council was noted as an existing group that had the potential to continue to address all of these issues if attendance and participation was increased. The group meets regularly, alternating between locations on the Middle Peninsula and the Northern Neck. Various individuals noted that the group had been struggling with attendance, energy and focus. In order to reduce duplication, the group determined that additional conversation and planning should occur under the auspices of the Middle Peninsula Northern Neck Regional Resource Council.

Action Steps:
The next scheduled meeting of the Middle Peninsula Northern Neck Regional Resource Council is in November 2016 in Warsaw at the Bay Transit office. Riverside will participate and bring lunch to the meeting. That group will continue the conversations around how to leverage connections between the existing organizations and programs to better meet the needs of the community.

Resources:
Riverside will continue to participate in Middle Peninsula Northern Neck Regional Resource Council and will explore ways to reinvigorate the group.

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 Riverside Walter Reed 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.

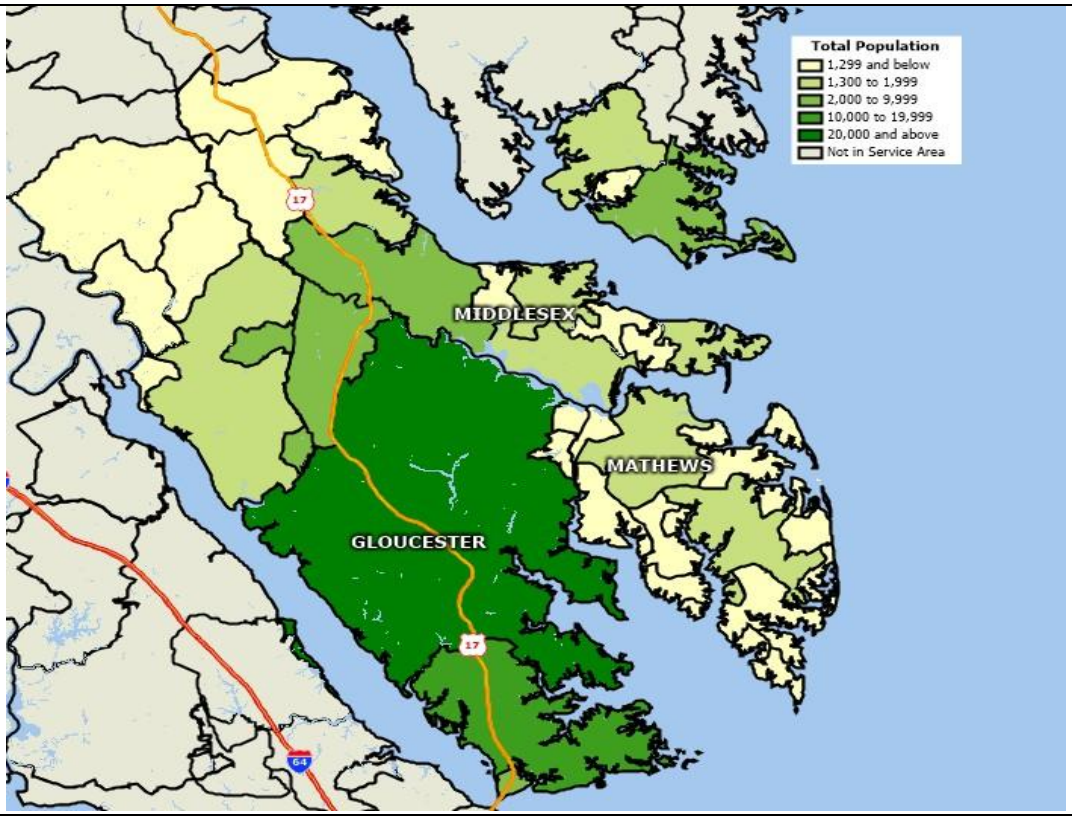
Zip Code Reference Map	Map 15. Malignant Neoplasm (Cancer) Deaths, 2013
Map 1. Total Population, 2014	Map 16. Heart Disease Deaths, 2013
Map 2. Population Density, 2014	Map 17. Cerebrovascular Disease (Stroke) Deaths, 2013
Map 3. Child Population Age 0-17, 2014	Map 18. Total Live Births, 2013
Map 4. Senior Population Age 65+, 2014	Map 19. Teenage (age <18) Live Births, 2013
Map 5. Asian Population, 2014	Map 20. Prevention Quality Indicator (PQI) Hospital Discharges, 2013
Map 6. Black/African American Population, 2014	Map 21. Behavioral Health (BH) Hospital Discharges, 2013
Map 7. White Population, 2014	Map 22. Estimated Adults Age 18+ with No Dental Visit in the Last Year, 2014
Map 8. Other or Multi-Race Population, 2014	Map 23. Estimated Adult Age 18+ Smokers, 2014
Map 9. Hispanic Ethnicity Population, 2014	Map 24. Estimated Adults Age 18+ with Diabetes, 2014
Map 10. Per Capita Income, 2014	Map 25. Estimated Adults Age 18+ Overweight or Obese, 2014
Map 11. Median Household Income, 2014	Map 26. Estimated Youth Age 14-19 Overweight or Obese,
Map 12. Low Income Households (Households with Income <$25,000), 2014	Map 27. Estimated Uninsured Adults Age 19-64, 2014
Mao 13. Population Age 25+ Without a High School Diploma, 2014	Map 28. Estimated Uninsured Children Age 0-18, 2014
Map 14. Total Deaths, 2013	Zip Code Map Table

Technical Notes

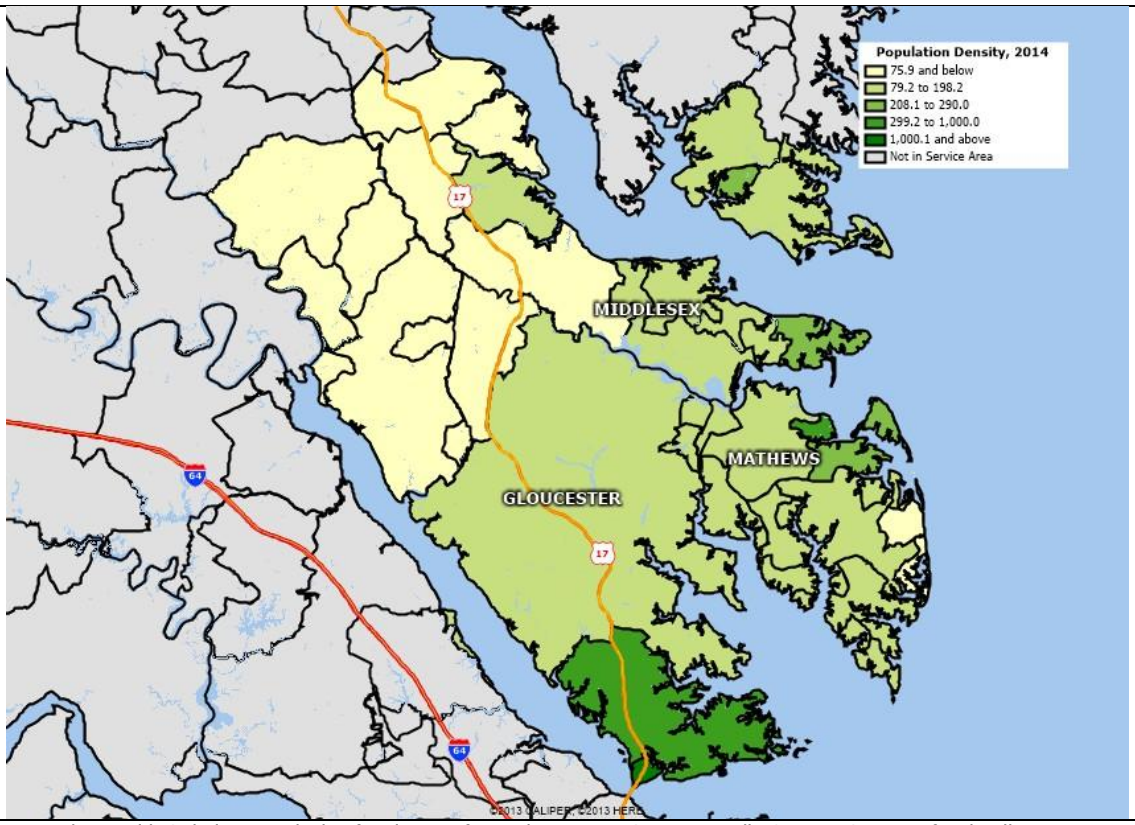
1. The maps and data include 37 zip codes, as identified by Riverside Walter Reed Hospital, most of which fall within Gloucester, King and Queen, Lancaster, Mathews and Middlesex counties. Because zip code boundaries do not automatically align with city/county boundaries, there are some zip codes that extend beyond the county boundaries.
2. A reference map is provided first, to assist the ready 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

Map 1: Total Population, 2014

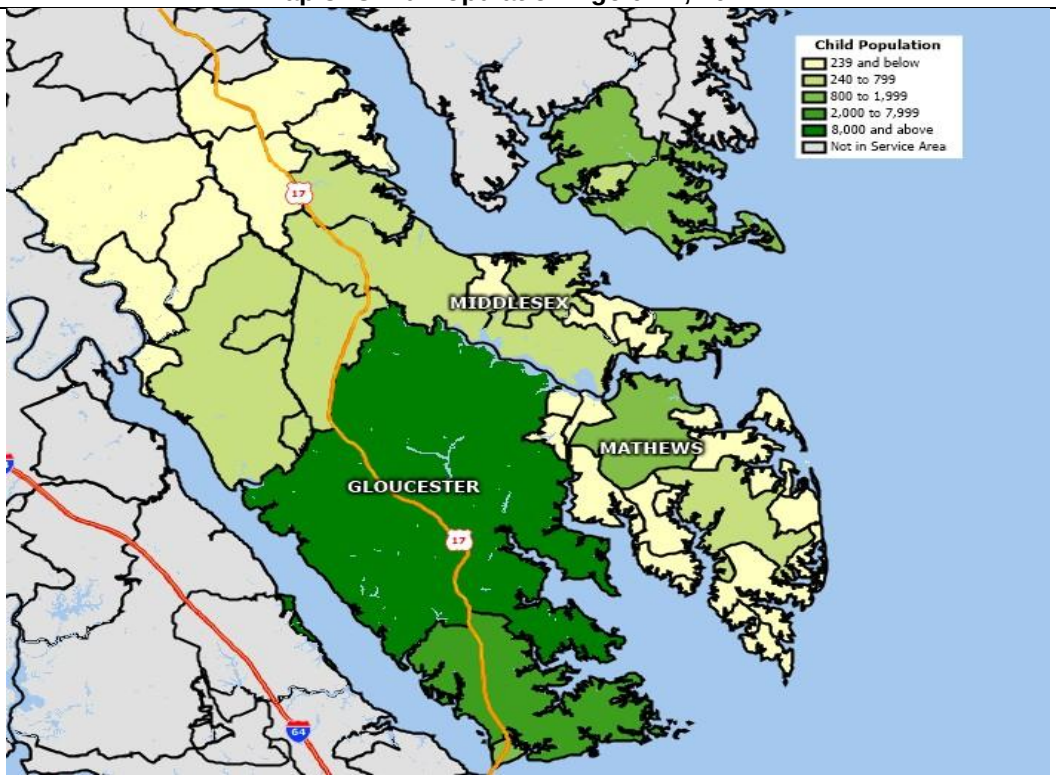


Map 2: Population Density (population per square mile), 2014

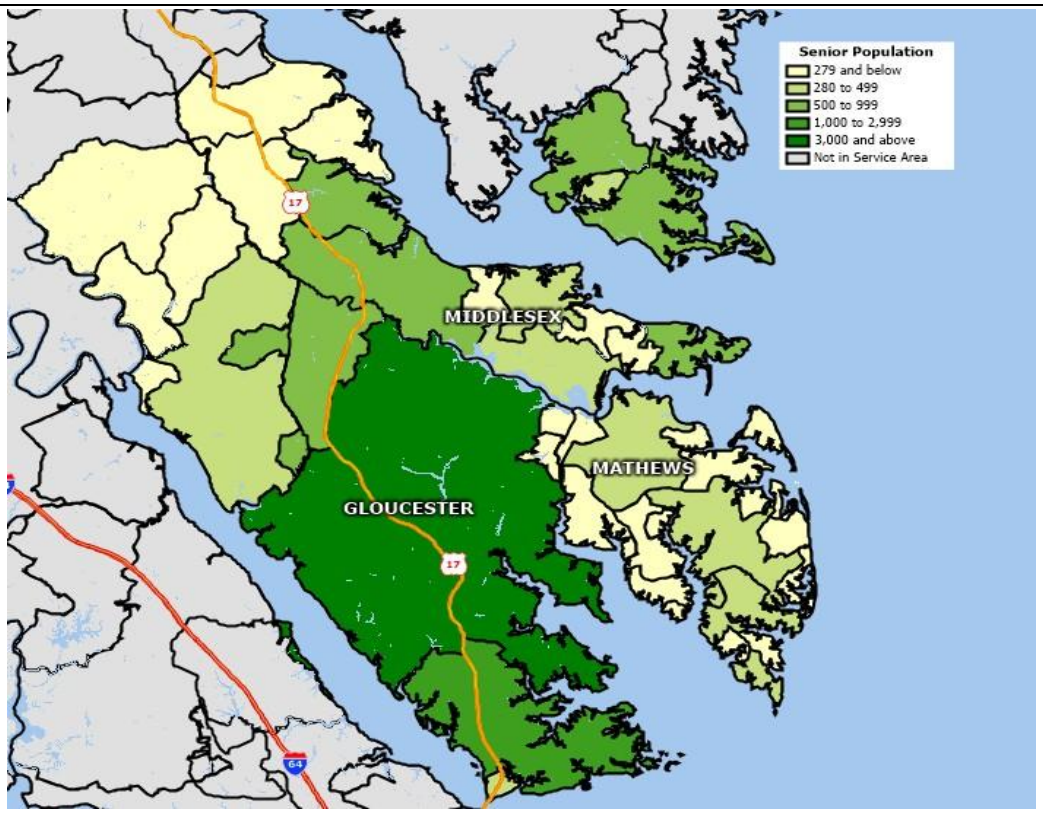


Source: Community Health Solutions analysis of estimates from Alteryx, Inc. See Appendix C. Data Sources for details.

Map 3: Child Population Age 0-17, 2014

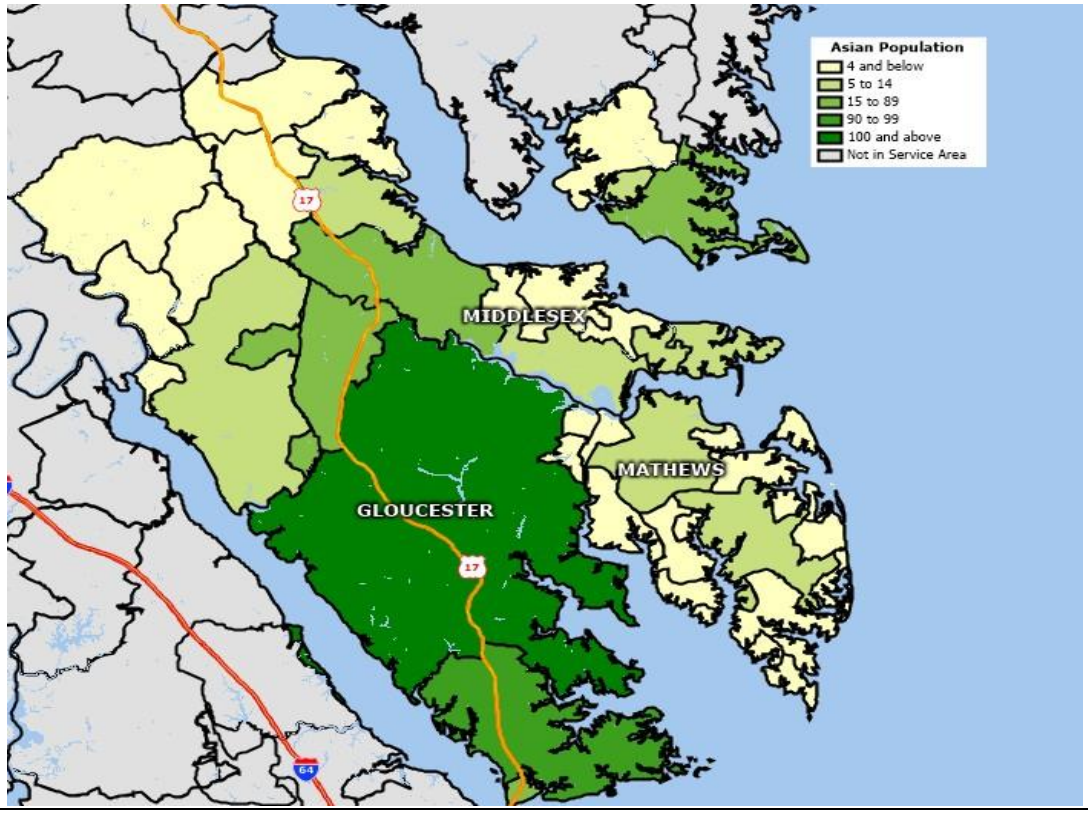


Map 4: Senior Population Age 65+, 2014

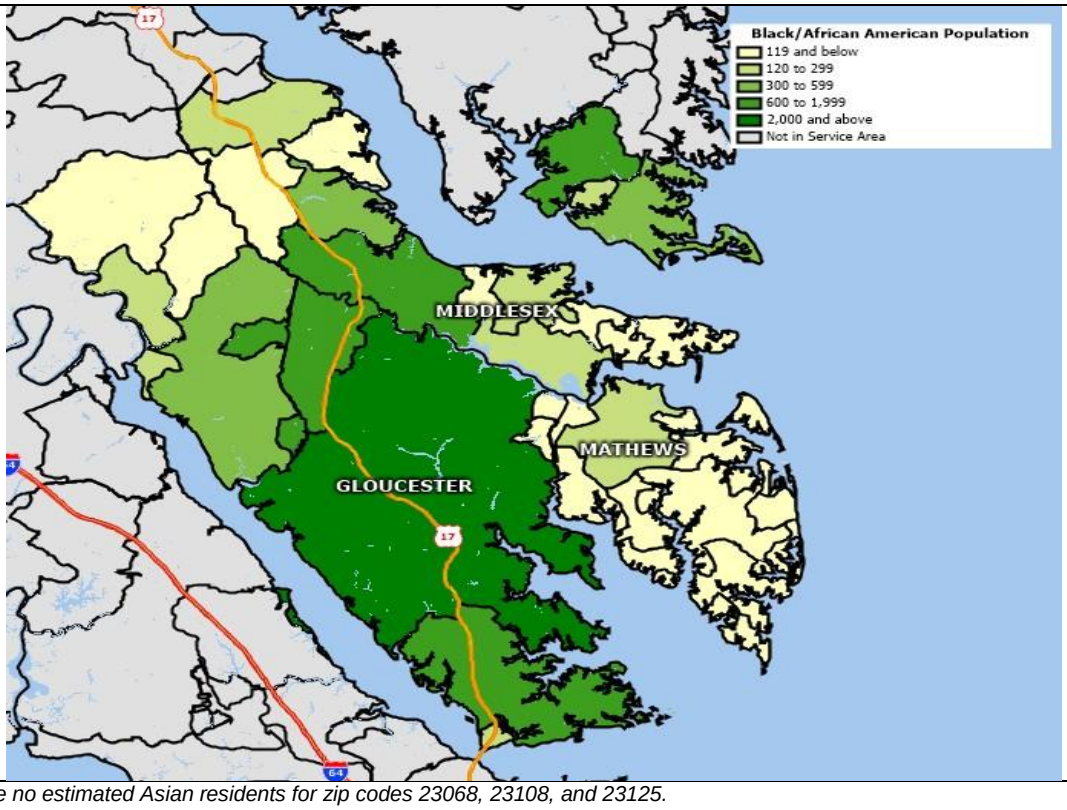


Source: Community Health Solutions analysis of estimates from Alteryx, Inc. See Appendix C. Data Sources for details.

Map 5: Asian Population, 2014

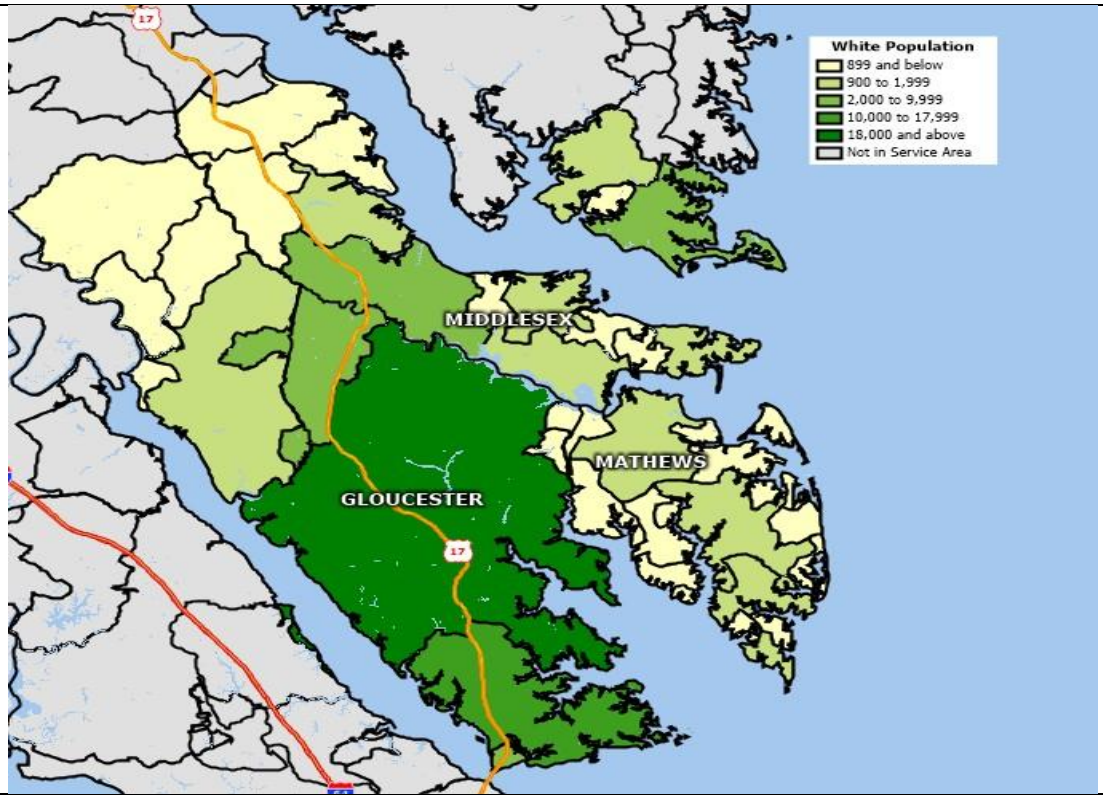


Map 6: Black/African American Population, 2014

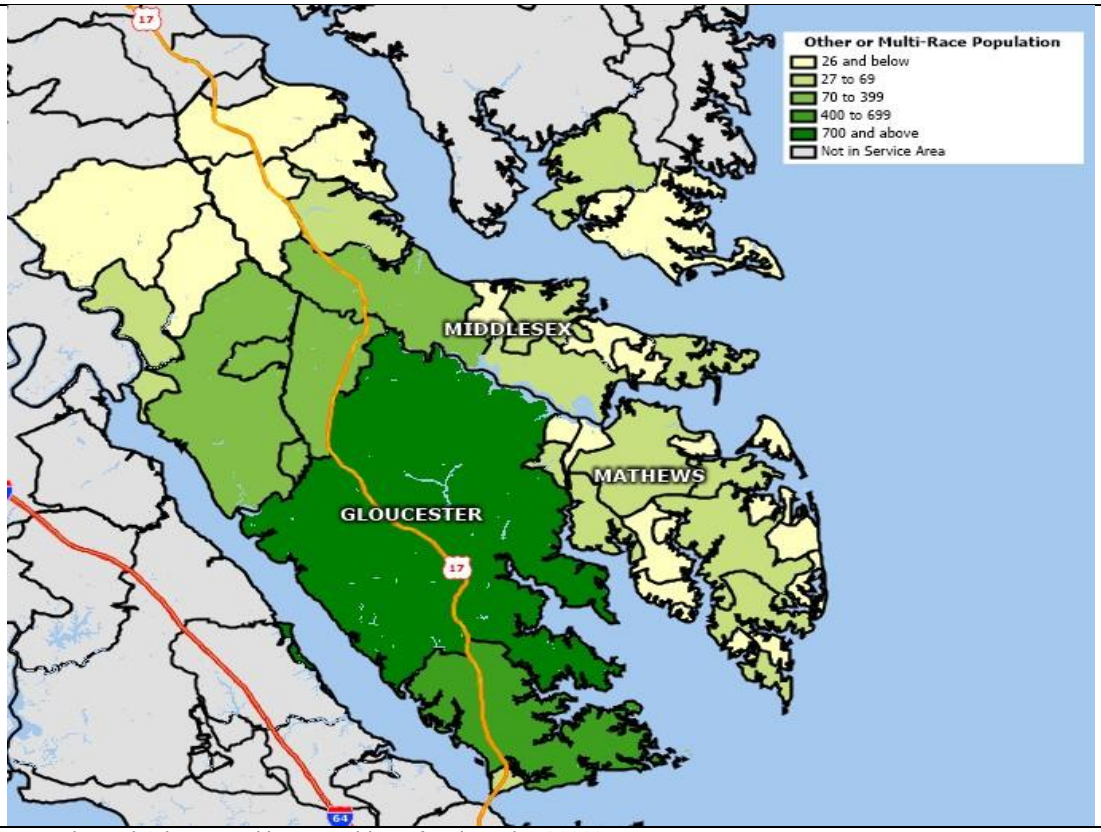


**There were no estimated Asian residents for zip codes 23068, 23108, and 23125.*
**There were no estimated Black/African Americans residents for zip code 23068.*
Source: Community Health Solutions analysis of estimates from Alteryx, Inc. See Appendix C. Data Sources for details.

Map 7: White Population, 2014

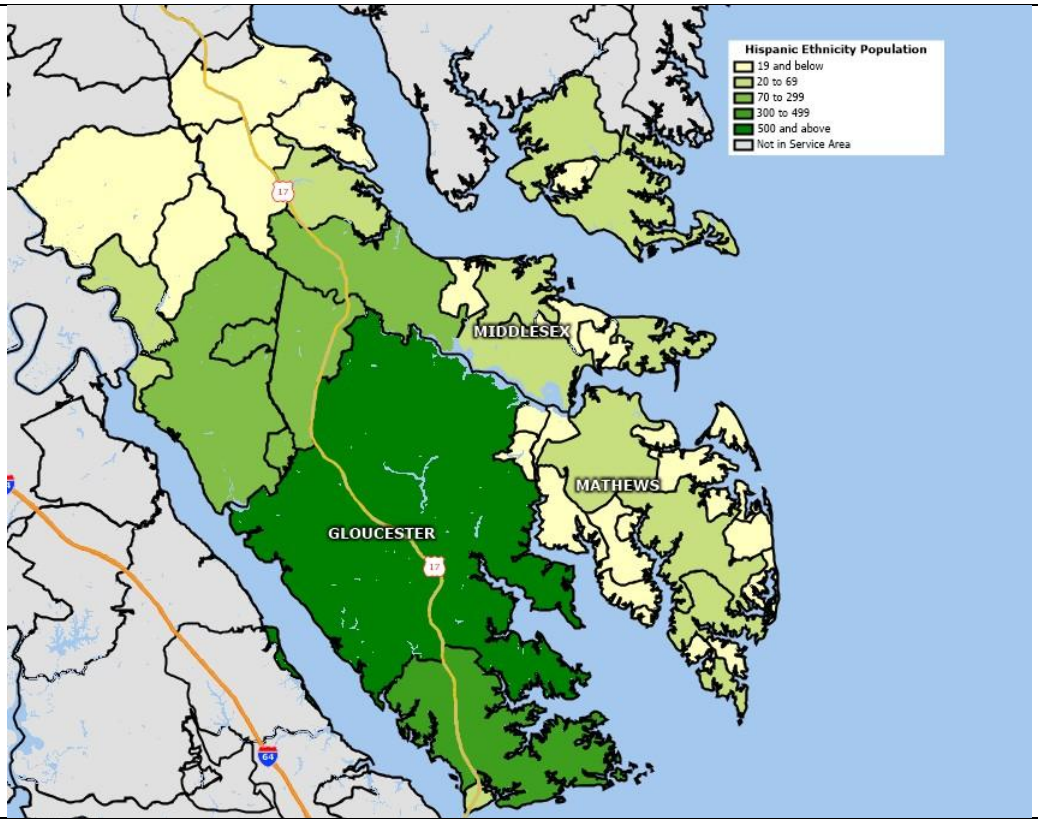


Map 8: Other or Multi-Race Population, 2014

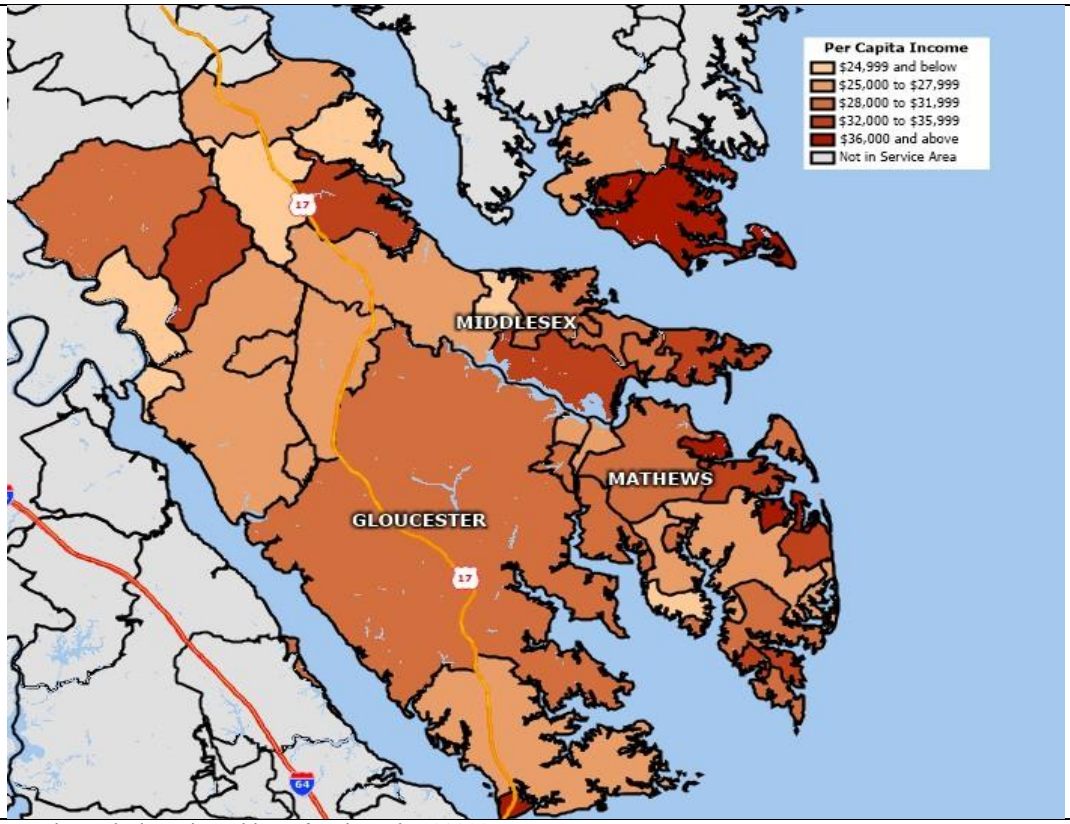


**There were no estimated Other or Multi-race residents for zip codes 23068.*
Source: Community Health Solutions analysis of estimates from Alteryx, Inc. See Appendix C. Data Sources for details.

Map 9: Hispanic Ethnicity Population, 2014

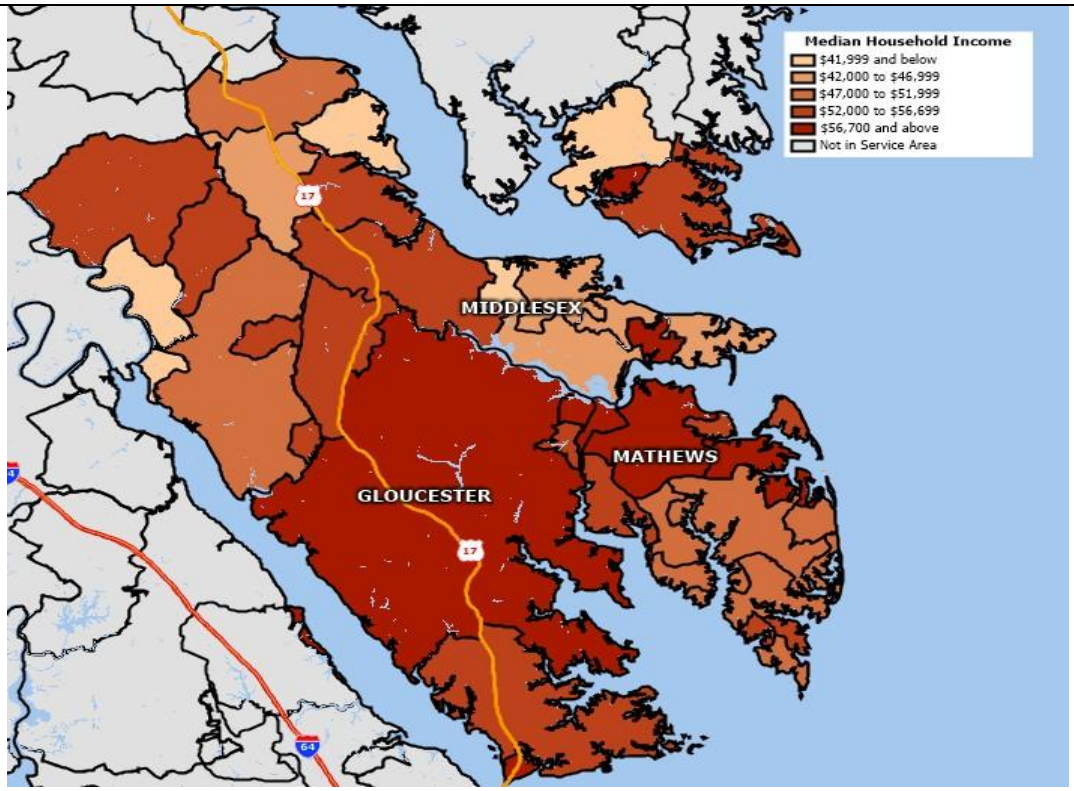


Map 10: Per Capita Income, 2014

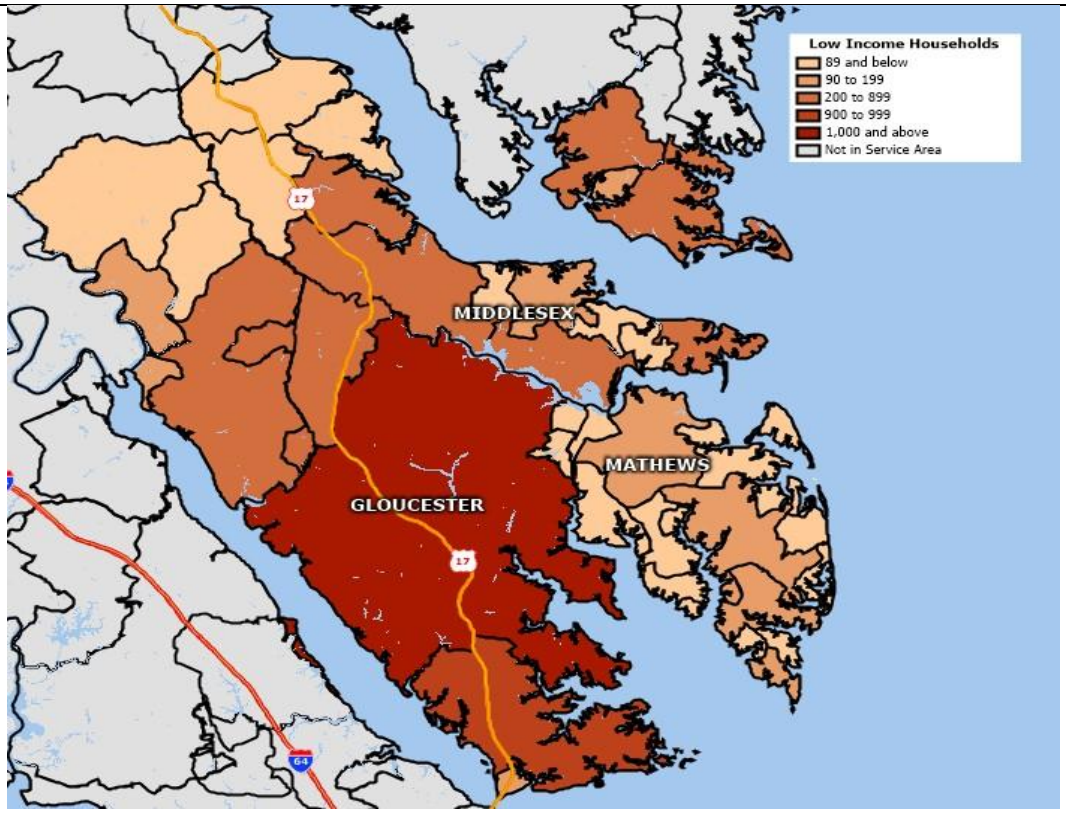


**There were no estimated Hispanic residents for zip codes 23068.*
Source: Community Health Solutions analysis of estimates from Alteryx, Inc. See Appendix C. Data Sources for details.

Map 11: Median Household Income, 2014

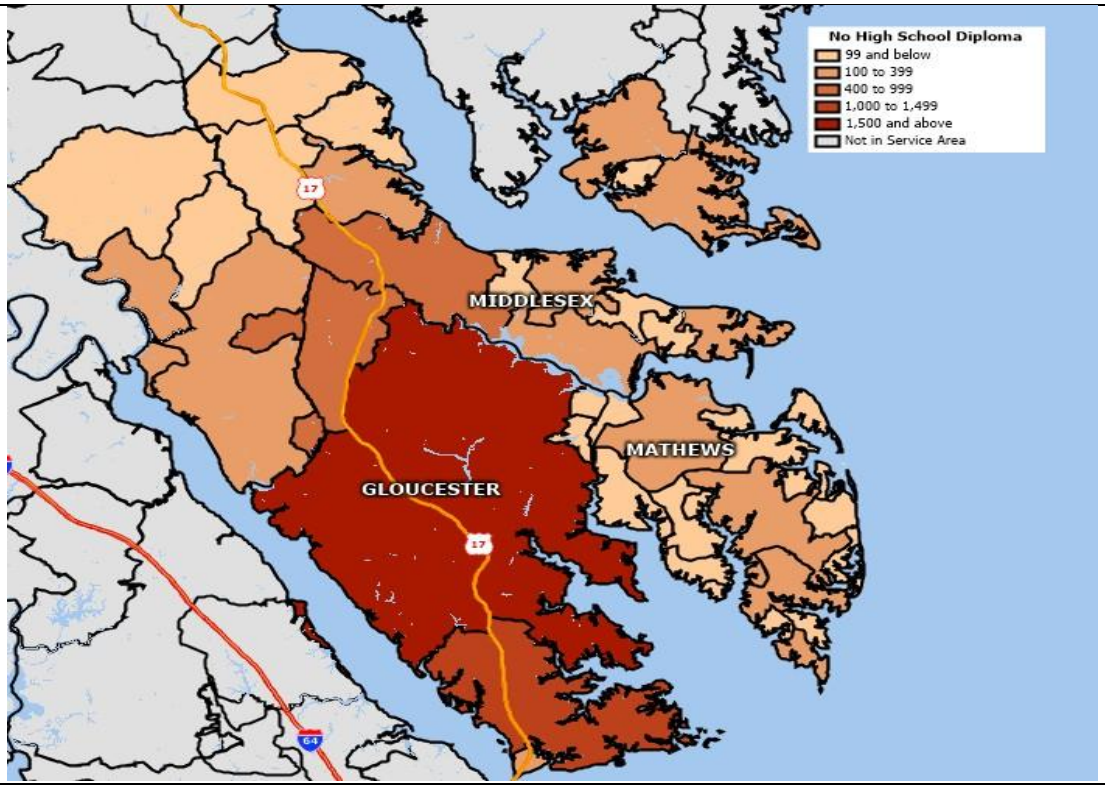


Map 12: Low Income Households (Households with Income<$25,000), 2014

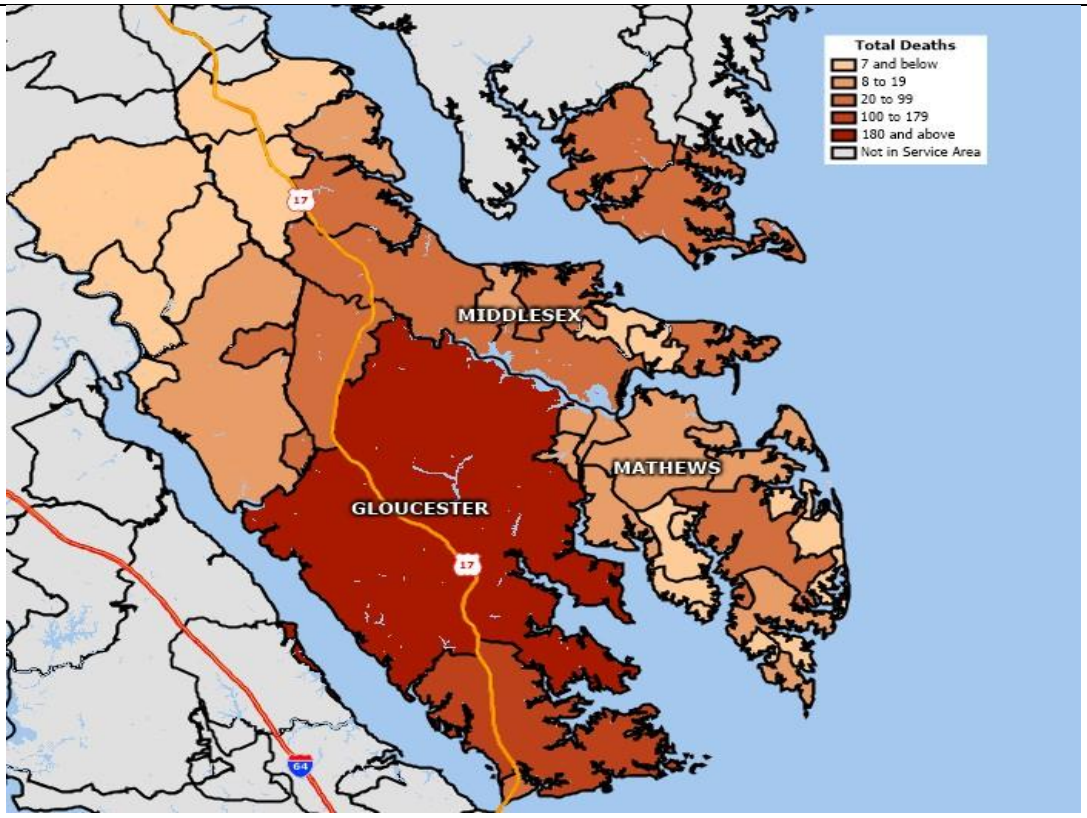


Source: Community Health Solutions analysis of estimates from Alteryx, Inc. See Appendix C. Data Sources for details.

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

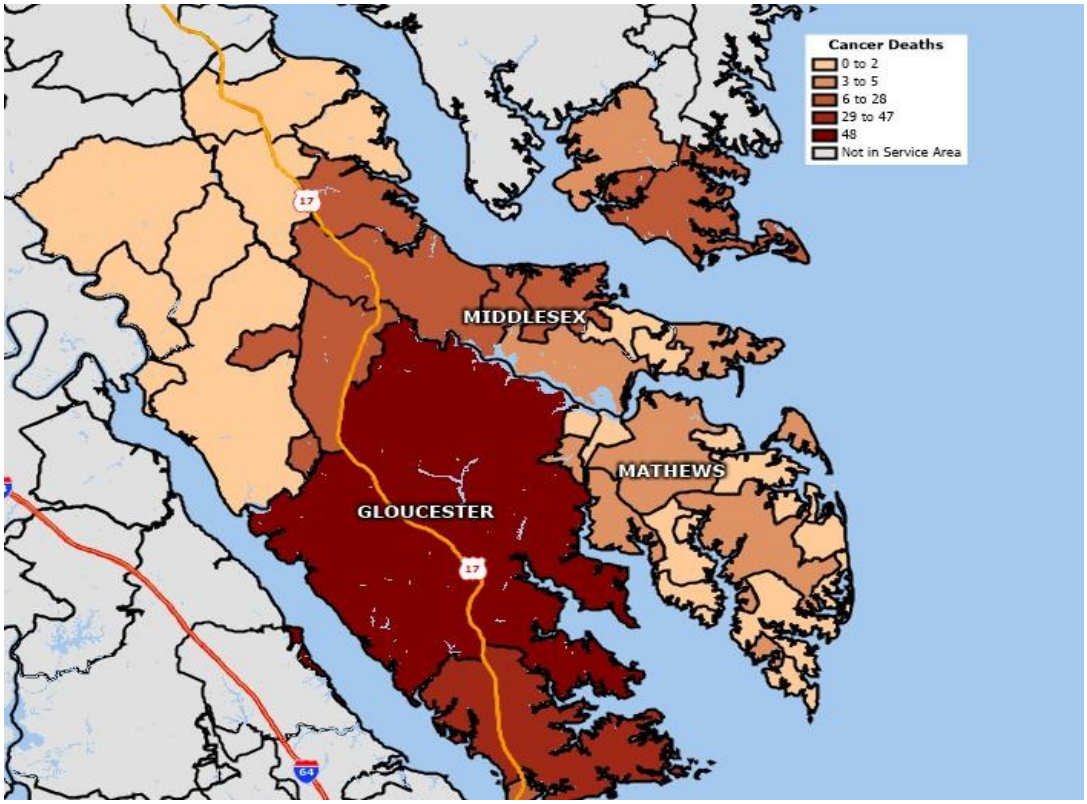


Map 14: Total Deaths, 2013*

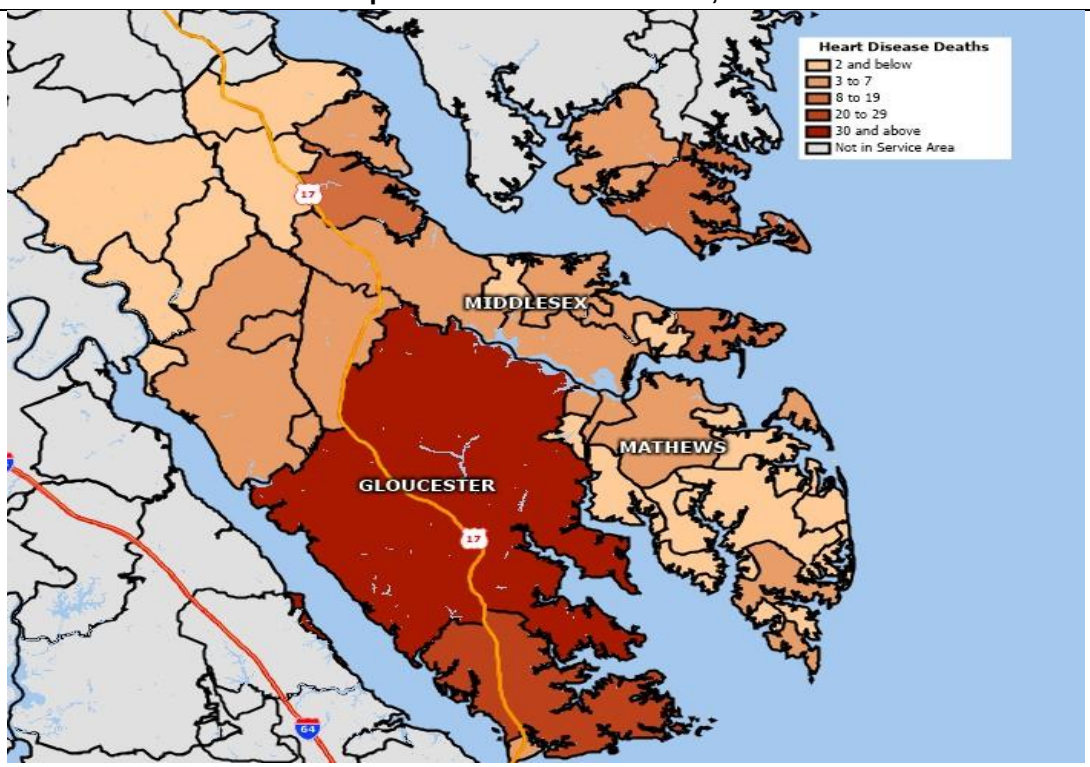


**There was no reported population age 25+ without a high school diploma for zip code 23068.*
**There were no reported deaths for zip codes 23045 and 23108.*
Source: Community Health Solutions analysis of estimates from Alteryx, Inc. See Appendix C. Data Sources for details.

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

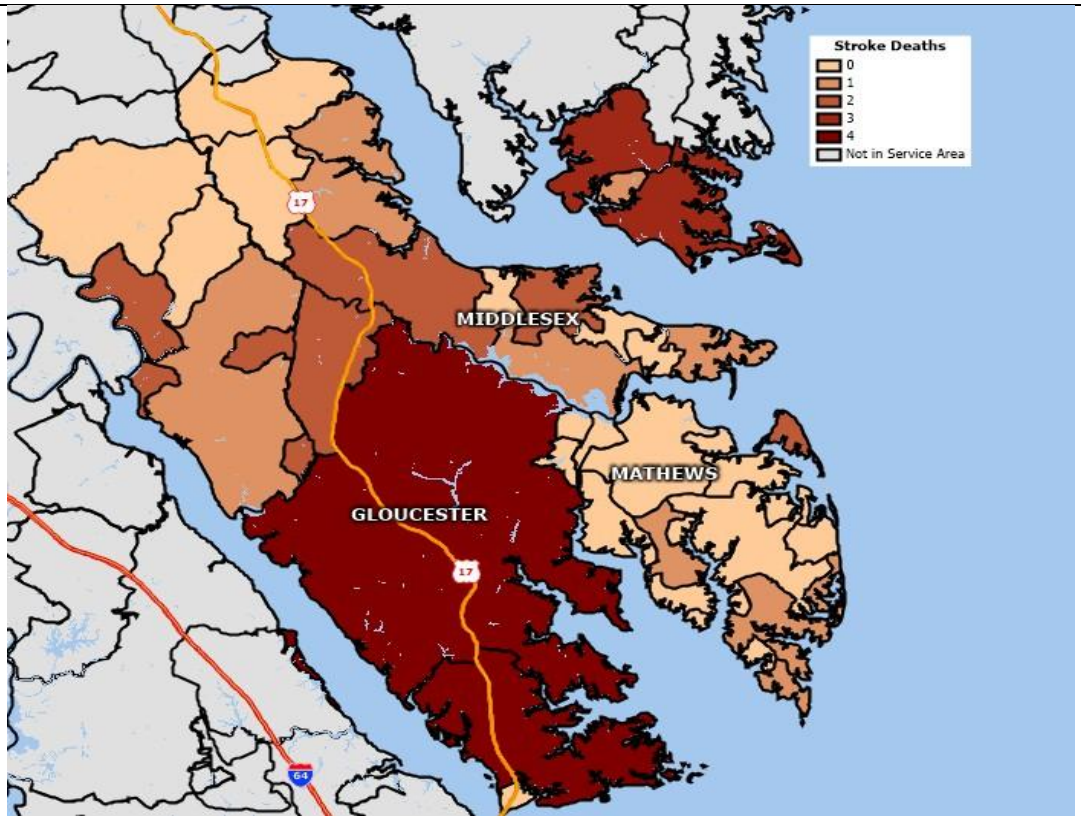


Map 16: Heart Disease Deaths, 2013*

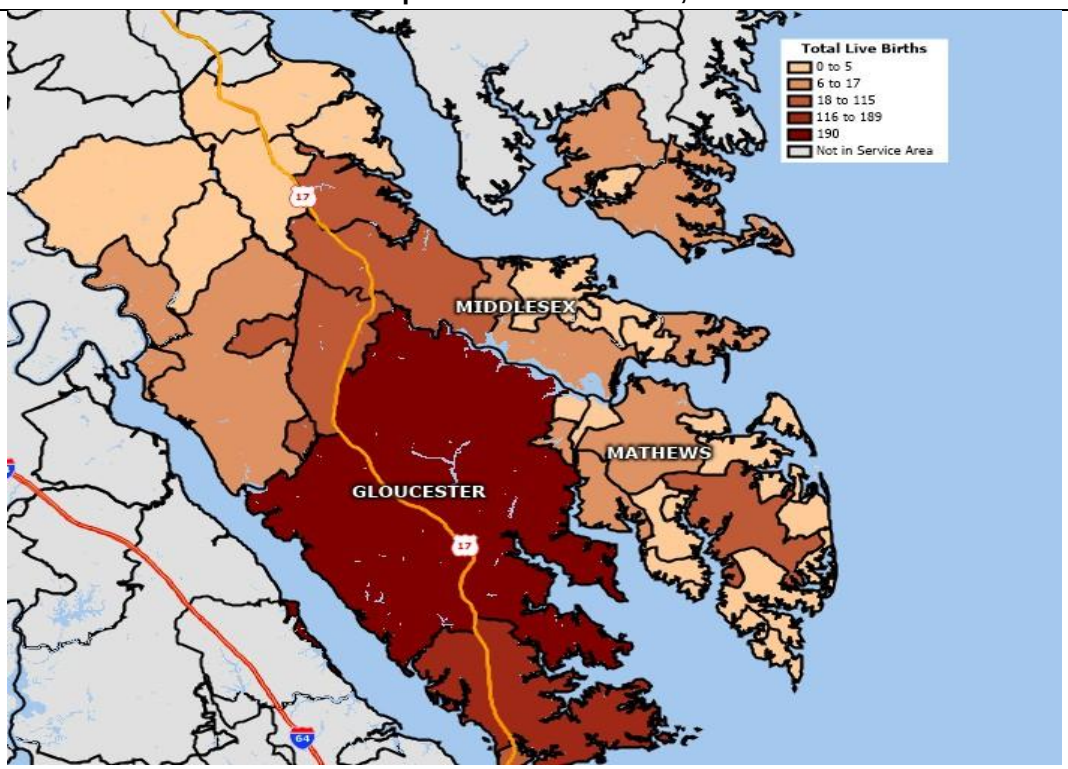


**There were no reported cancer deaths for 23021, 23025, 23045, 23056, 23079, 23108, 23119, and 23125.*
**There were no reported heart disease deaths for zip codes 23045, 23070, 23108, 23110, 23119, 23125, and 23130.*
Source: Community Health Solutions analysis of data from the Virginia Department of Health. See Appendix C. Data Sources for details.

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

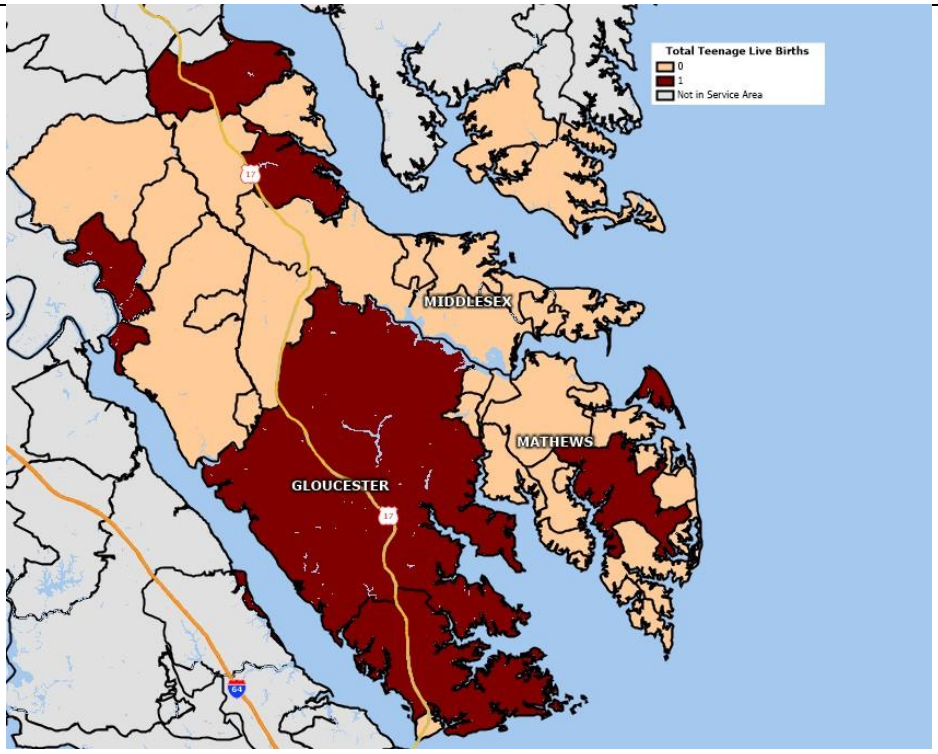


Map 18: Total Live Births, 2013*

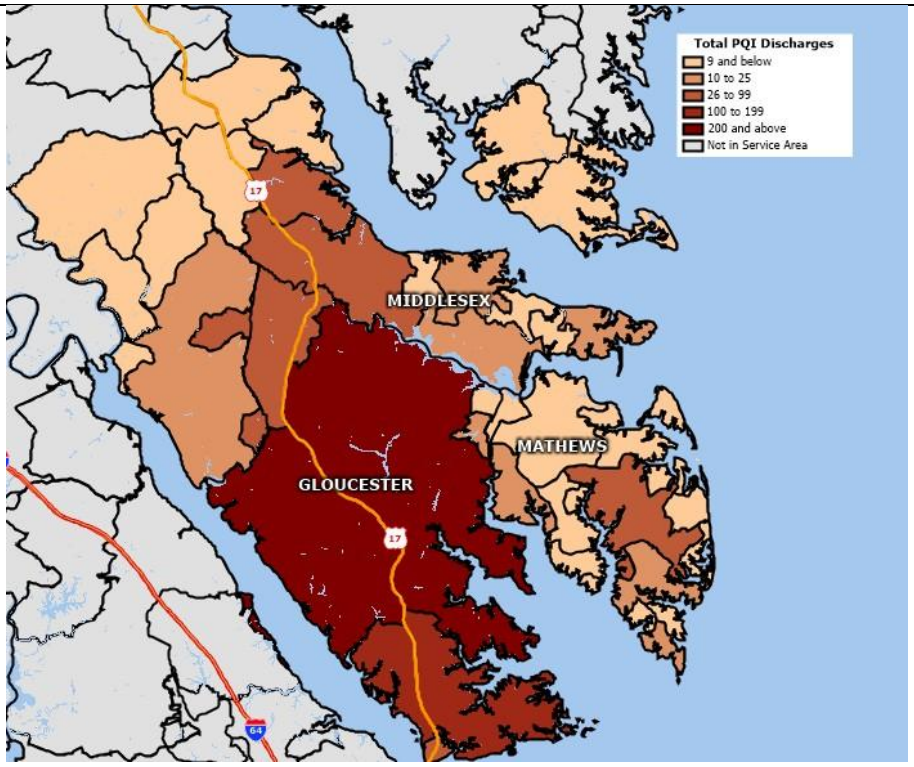


**There were no reported stroke deaths for zip codes 23021, 23032, 23035, 23045, 23050, 23056, 23062, 23068, 23070, 23076, 23079, 23091, 23092, 23108, 23109, 23119, 23128, 23163, and 23176.*
**There were no reported live births for zip code 23068, 23108, 23125, and 23130.*
Source: Community Health Solutions 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*

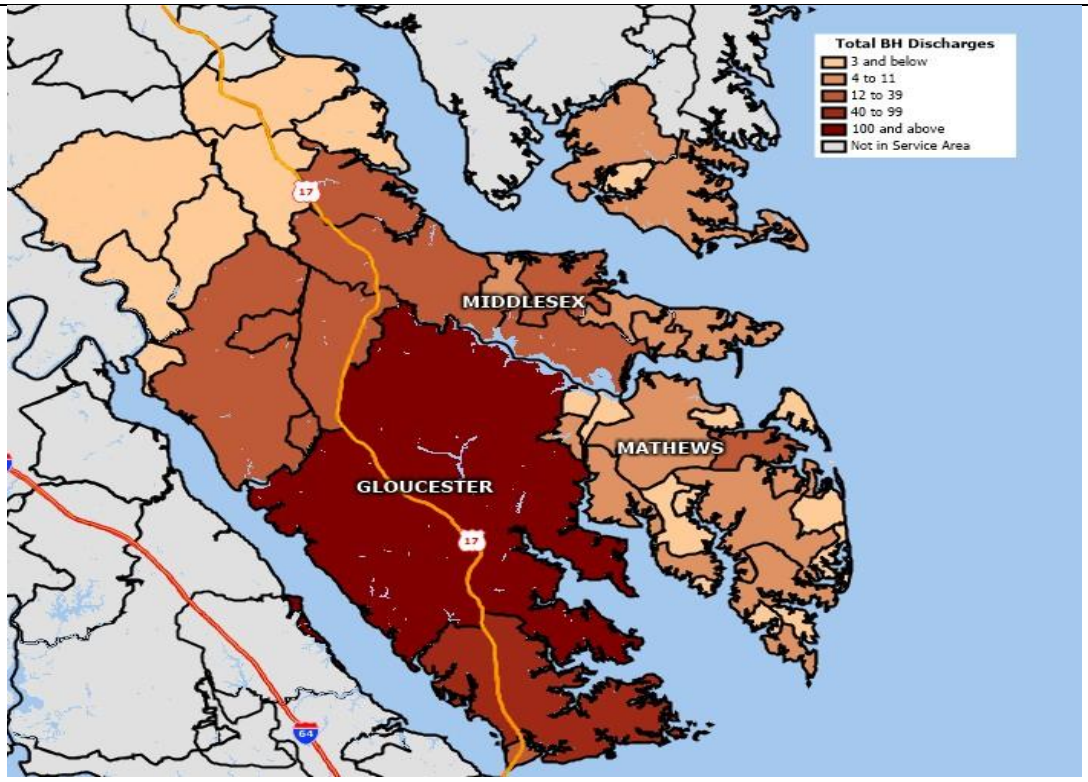


**There were no reported teenage live births (age <18) for zip codes 22480, 22576, 22578, 23021, 23025, 23032, 23035, 23043, 23045, 23050, 23056, 23062, 23068, 23070, 23071, 23076, 23091, 23092, 23109, 23119, 23125, 23128, 23130, 23138, 23149, 23156, 23163, 23169, 23176, and 23180.*

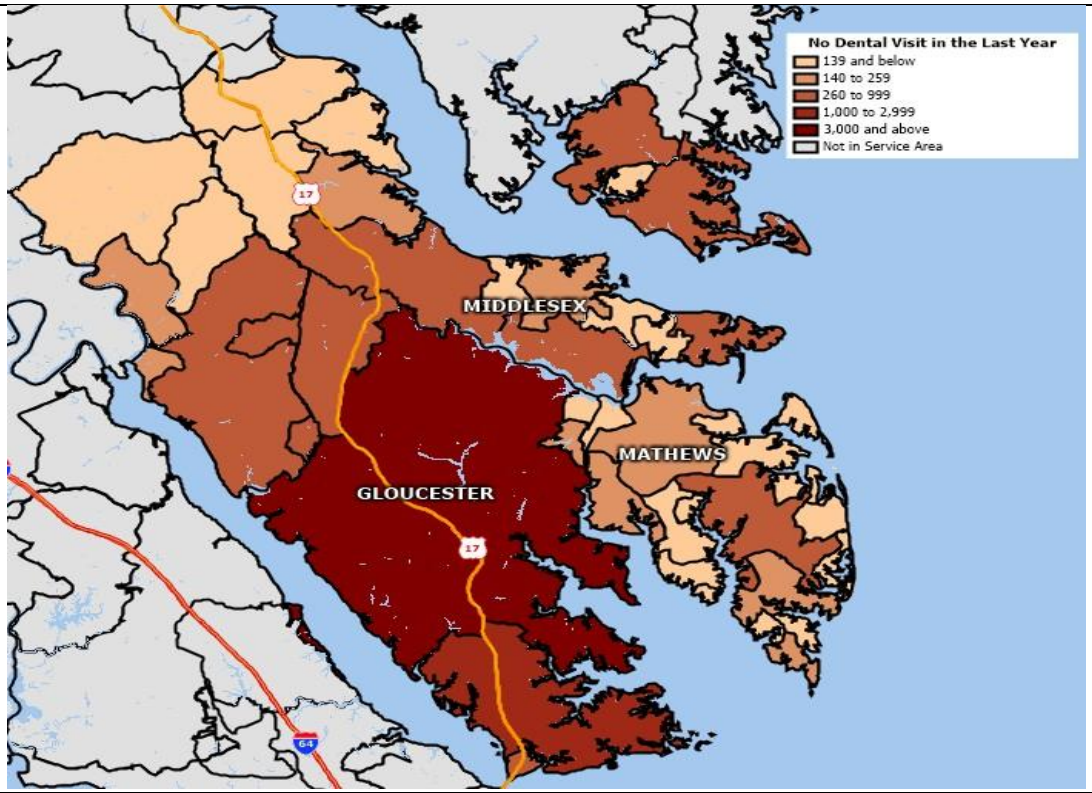
**There were no reported Prevention Quality Indicator (PQI) hospital discharges for zip codes 22480, 23025, and 23045.*

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*

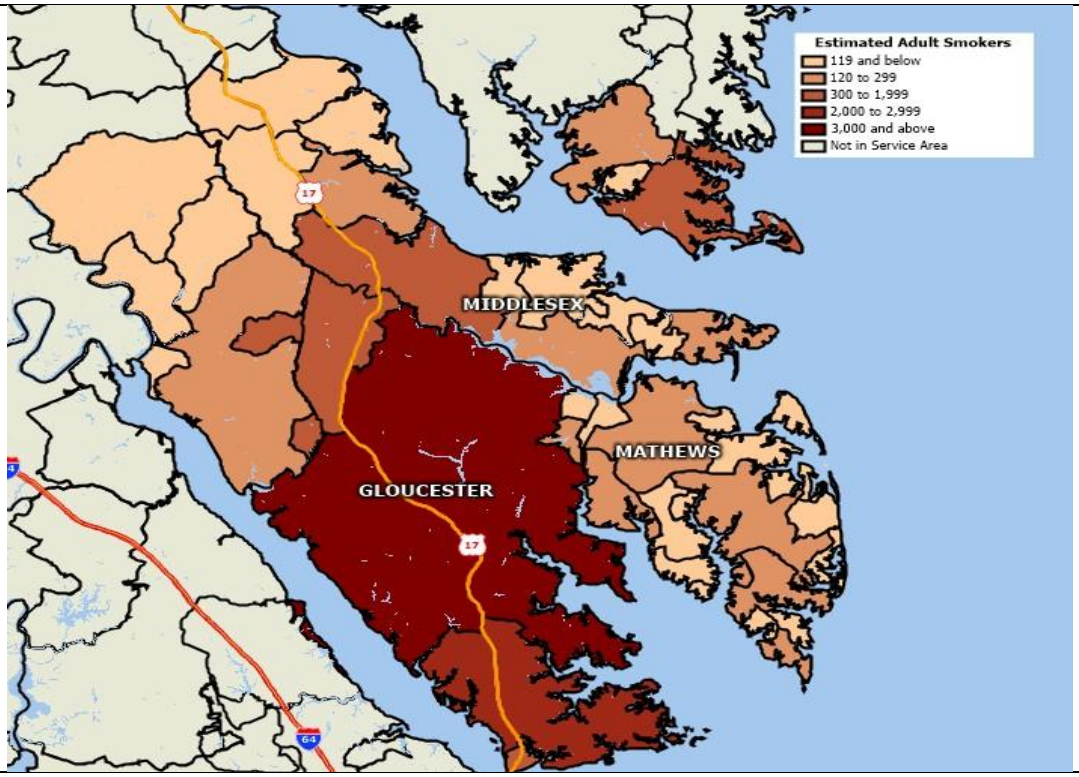


Map 22: Estimated Adults Age 18+ with No Dental Visit in the Last Year, 2014

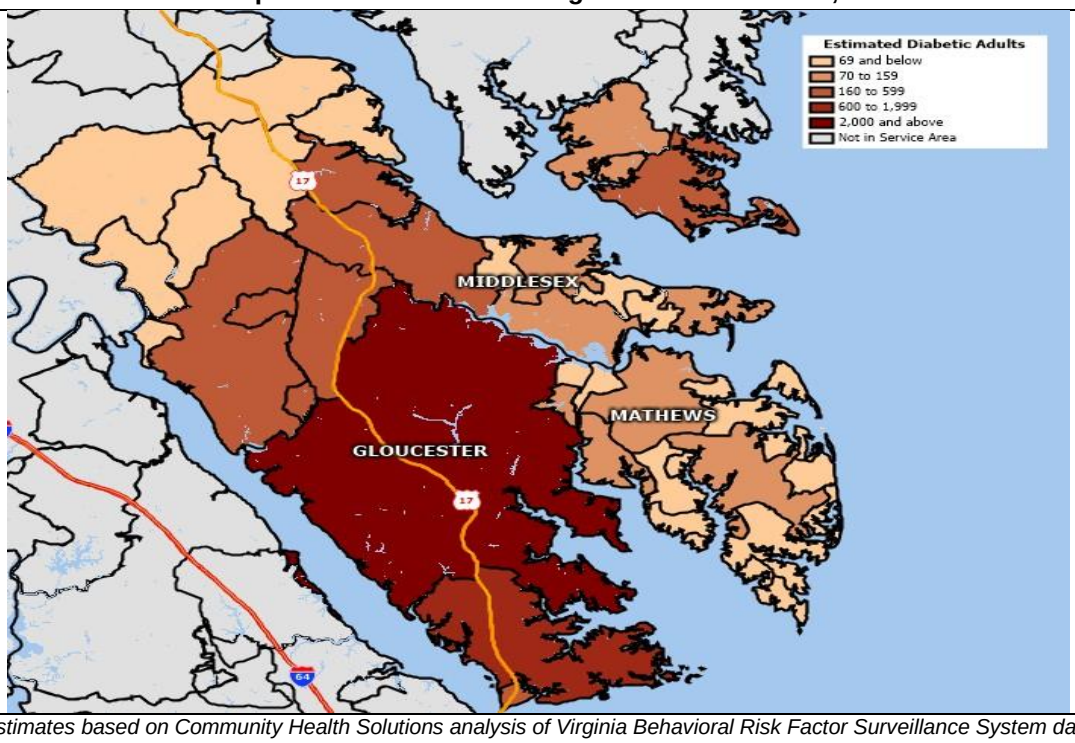


**There were no reported behavioral health discharges for zip codes 23025, 23032, 23045, 23066, 23091, 23108, and 23163.*
**There were no reported estimated adults with no dental visits in the last year for zip code 23108.*
Source: Community Health Solutions analysis of hospital discharge data from Virginia 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

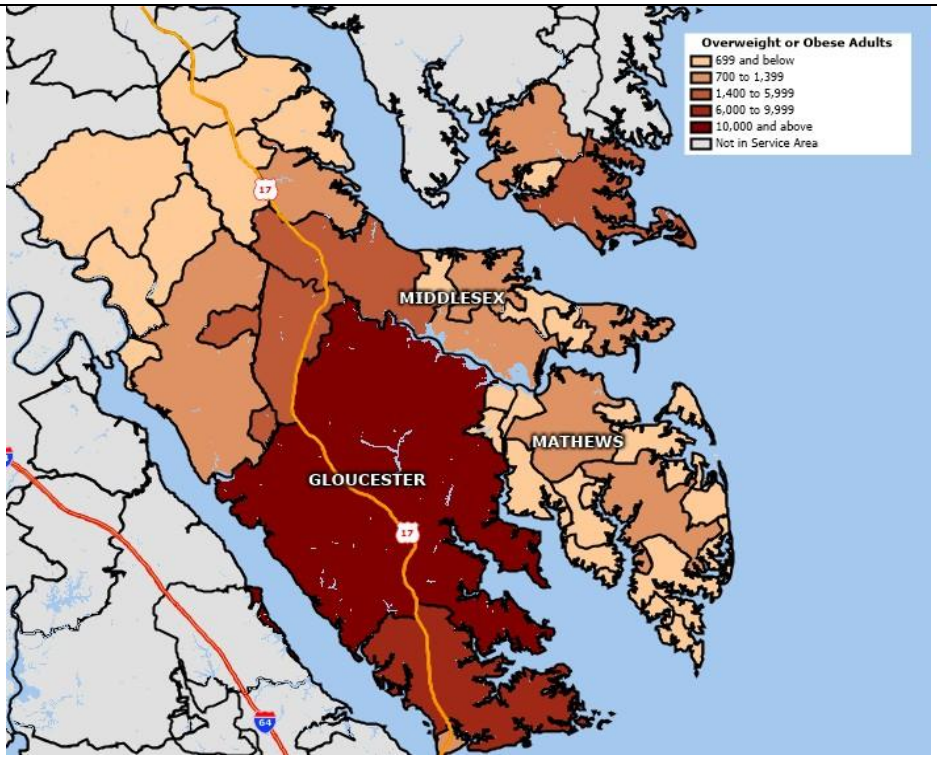


Map 24: Estimated Adults Age 18+ with Diabetes, 2014

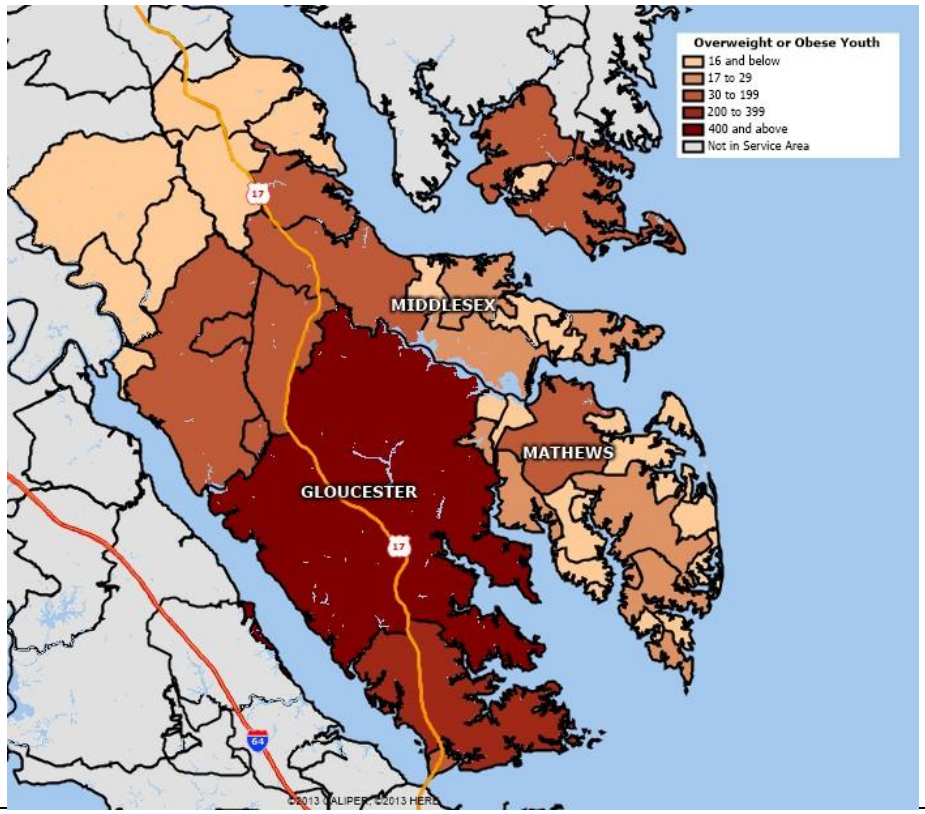


Source: Estimates based on Community Health Solutions analysis of Virginia Behavioral Risk Factor Surveillance System data and estimates from Alteryx, Inc. See Appendix C. Data Sources for details.

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

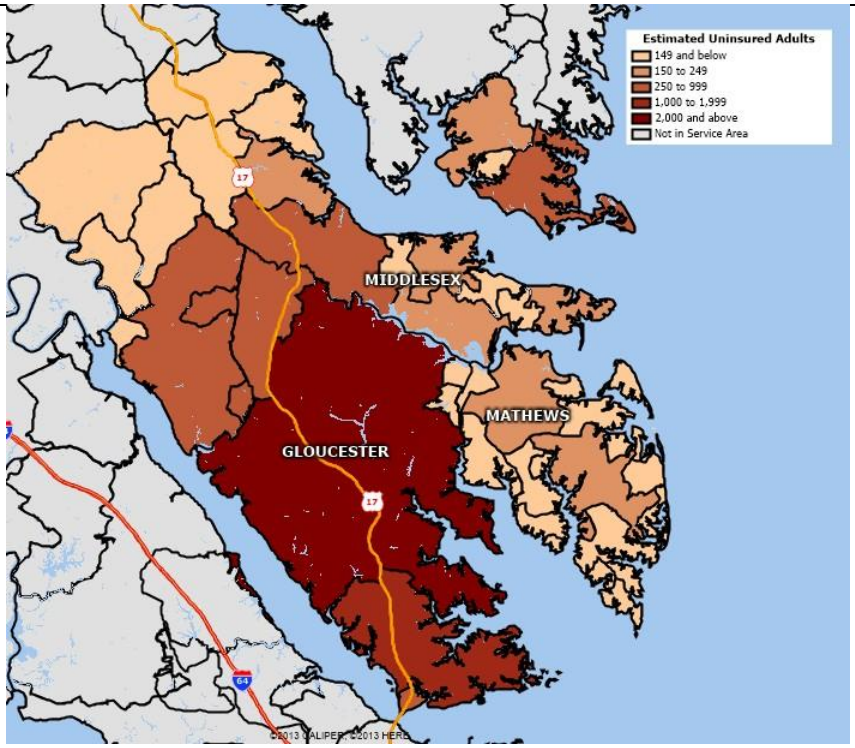


Map 26: Estimated Youth Age 14-19 Overweight or Obese, 2014*

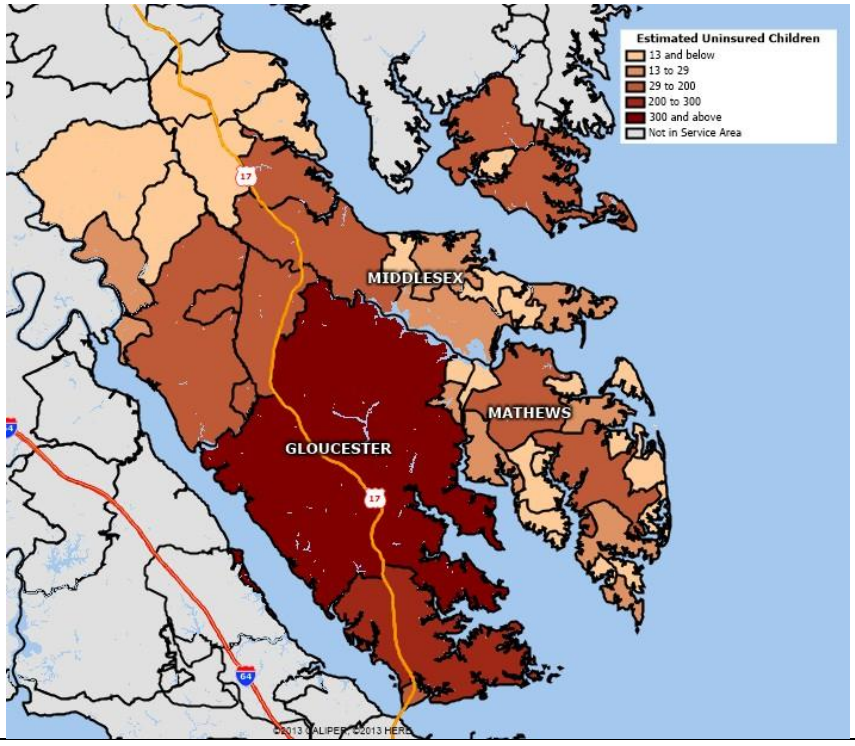


Source: Estimates based on Community Health Solutions analysis of Virginia Youth Risk Behavioral Surveillance System data and estimates from Alteryx, Inc. See Appendix C. Data Sources for details.

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



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



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

Locality	Total Population, 2014	Population Density, 2014	Child Population Age 0-17, 2014	Senior Population Age 65+, 2014	Asian Population, 2014	Black/African American Population, 2014	White Population, 2014	Other or Multi-Race Population, 2014	Hispanic Ethnicity Population, 2014	Per Capita Income, 2014	Median Household Income, 2014	Low Income Households (Households with Income <$25,000), 2014	Population Age 25+ Without a High School Diploma, 2014
22480	874	208.1	495	402	6	160	696	13	14	$40,432	$56,987	105	74
22576	1,969	149.1	846	633	4	609	1,318	41	23	$25,761	$36,022	298	245
22578	2,425	122.2	1,143	837	18	333	2,050	24	30	$37,116	$53,215	264	184
23021	246	75.9	82	63	1	38	201	7	5	$22,852	$49,236	19	22
23025	344	117.8	135	89	1	53	279	10	7	$27,013	$49,236	32	29
23032	315	23.9	113	65	1	97	210	9	6	$19,130	$45,794	30	33
23035	1,818	113.5	808	468	10	215	1,545	47	31	$31,135	$58,179	159	153
23043	1,540	216.6	802	530	9	34	1,468	31	30	$35,450	$44,540	235	170
23045	182	47.2	88	50	1	10	165	5	5	$33,487	$47,262	23	15
23050	552	79.2	210	119	3	60	471	17	10	$27,207	$59,814	36	40
23056	495	89.2	208	128	2	76	402	14	10	$28,802	$49,236	49	42
23061	21,399	135.6	8,046	3,349	179	2,053	18,427	741	580	$28,204	$60,989	1,356	1,506
23062	2,333	1,609.0	1,042	435	26	124	2,127	58	34	$37,444	$62,987	138	148
23066	319	259.3	147	111	2	6	295	17	7	$30,018	$55,887	27	11
23068	302	346.7	31	77	0	0	302	0	0	$36,740	$56,250	48	0
23070	541	125.2	58	193	5	21	506	11	14	$29,313	$58,184	46	57
23071	1,517	129.4	240	420	7	231	1,237	41	26	$33,069	$43,148	203	149
23072	11,615	299.2	2,398	1,854	99	772	10,290	454	346	$26,744	$54,157	909	1,057
23076	753	198.2	131	220	4	39	682	27	15	$32,662	$56,790	70	48
23079	462	19.4	93	100	1	146	304	13	11	$25,356	$48,509	57	54
23091	388	12.7	73	77	1	75	296	16	13	$29,134	$53,040	29	43
23092	469	132.1	78	116	1	93	359	14	11	$21,767	$38,433	50	33
23108	112	11.0	23	23	0	16	89	5	4	$33,629	$54,023	9	9
23109	1,606	123.4	277	429	6	98	1,453	49	36	$27,186	$51,334	151	128
23110	772	32.0	161	143	4	163	561	45	34	$23,316	$38,361	99	122
23119	165	99.4	30	42	1	9	151	4	3	$38,918	$58,156	19	12
23125	127	135.1	21	34	0	9	116	3	3	$32,284	$52,047	17	18
23128	945	92.1	182	204	3	111	799	31	18	$28,322	$55,870	79	76
23130	279	49.5	45	76	1	18	254	8	7	$27,000	$48,840	30	31
23138	1,050	99.2	171	285	3	69	949	29	25	$28,131	$49,616	121	127
23149	3,094	57.3	541	575	15	620	2,361	97	71	$25,671	$54,518	258	421
23156	1,949	41.0	371	382	9	440	1,419	79	81	$25,921	$47,105	207	214
23163	343	84.7	56	92	1	25	310	9	8	$33,682	$52,047	50	49
23169	1,362	127.2	257	314	2	223	1,094	40	25	$29,077	$42,706	165	115
23175	1,866	129.9	289	537	7	454	1,354	54	31	$32,820	$53,373	204	186
23176	648	140.9	114	172	3	76	555	16	10	$29,342	$46,329	69	72
23180	332	33.7	72	57	1	96	226	9	2	$21,767	$40,438	40	25

Zip Code Map Table (continued)

Locality	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<18), 2013	Total Prevention Quality Indicator Hospitalization Discharges, 2013	Total Behavioral Health Hospitalization Discharges, 2013	Estimated Adults Age 18+ with No Dental Visit in the Last Year, 2014	Estimated Adult Age 18+ Smokers, 2014	Estimated Adults Age 18+ with Diabetes, 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
22480	25	8	4	1	2	0	0	2	101	106	108	547	9	78	10
22576	21	5	5	3	9	0	2	6	320	217	142	1,081	36	204	37
22578	37	10	12	3	14	0	6	10	414	337	168	1,420	35	259	36
23021	2	0	2	0	1	0	2	5	53	36	20	137	6	26	5
23025	4	0	2	1	1	0	0	0	74	51	27	192	8	36	6
23032	2	1	1	0	5	0	5	0	40	27	36	153	5	37	7
23035	18	5	3	0	10	0	7	9	229	221	105	983	35	188	36
23043	28	3	8	1	6	0	21	5	287	189	116	977	17	165	19
23045	0	0	0	0	1	0	0	0	40	27	15	102	3	19	3
23050	8	2	3	0	2	0	7	3	77	70	34	289	12	60	12
23056	3	0	1	0	2	0	6	2	108	74	40	274	11	52	9
23061	181	48	36	4	190	1	225	127	3,745	3,713	2,032	10,261	460	2,363	394
23062	27	6	5	0	25	0	37	19	320	414	163	1,161	34	259	37
23066	10	3	3	2	4	1	9	0	43	24	39	177	4	29	5
23068	8	1	1	0	0	0	3	2	54	56	30	178	3	43	6
23070	3	1	0	0	1	0	6	6	117	83	61	338	6	57	6
23071	21	3	5	1	8	0	22	13	267	188	104	880	23	169	25
23072	103	29	20	4	116	1	122	42	1,962	2,009	637	6,049	219	1,298	204
23076	9	1	1	0	1	0	8	14	93	91	44	416	11	75	14
23079	4	0	1	0	1	1	6	1	44	34	49	229	8	53	10
23091	3	1	1	0	3	0	1	0	61	51	34	212	7	51	8
23092	11	6	2	0	6	0	5	5	74	51	17	285	8	54	8
23108	0	0	0	0	0	0	3	0	0	0	0	0	2	0	0
23109	23	5	2	0	18	1	29	6	291	222	116	893	25	168	29
23110	5	1	0	2	7	1	6	2	154	91	39	435	13	101	17
23119	3	0	0	0	1	0	4	4	21	20	9	90	2	17	3
23125	2	0	0	1	0	0	1	1	31	25	5	73	3	13	2
23128	12	3	2	0	9	0	13	6	177	133	71	503	21	104	19
23130	4	2	0	1	0	0	1	1	64	47	17	160	5	29	5
23138	9	1	4	1	3	0	13	8	239	181	60	600	18	110	19
23149	34	8	4	2	25	0	26	15	433	459	207	1,653	54	349	46
23156	13	2	5	1	13	0	17	14	265	169	212	1,031	34	259	39
23163	6	4	1	0	1	0	1	0	80	65	13	198	6	36	6
23169	20	7	3	2	5	0	17	14	144	112	83	783	24	155	27
23175	25	6	8	1	21	1	29	12	171	126	220	1,042	31	203	31
23176	5	2	3	0	4	0	3	6	95	64	63	365	11	71	12
23180	9	1	3	1	3	0	6	3	67	39	42	152	5	40	7

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	• Elderly
2	• Substance abuse
3	• Uninsured • Elderly • Mentally ill
4	• Elderly patient population with limited support system.
5	• The senior population may have difficulty in having access to health services.
6	• Substance Abuse citizens. Resources are limited and if these citizens are also parents, there is a hesitance to obtain help due to the fear of losing their children. • Mentally Ill - there are not enough resources or facilities to assist
7	• Children without appropriate parental supervision
8	• Uninsured • Elderly • Teens aging out of foster care
9	• Low income • Minority groups • Hispanic/migrant workers
10	• Elderly
11	• Our aging population residing in rural areas, especially those living alone.
12	• Uninsured
13	• Uninsured
14	• Low income groups who probably are in need of more adequate health insurance, including Hispanic, and other foreign nationals not necessarily illegals.
15	• In a rural area, the aging population who continue to live alone are at high risk.

Continued on the following page

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?	
16	• Persons who sustain brain injury are often left with chronic health conditions, and primary health providers need to understand the long term health conditions within the context of BI. We have so many people who tell us the doctors they see know nothing about brain injury. • Additionally, many of those we serve have mental health co-morbidities, and accessing behavioral health services can be incredibly difficult, particularly when someone is in crisis. Long terms support that keep folks in their homes are desperately needed, however, many of those with long term disabilities as a result of brain injury lack the insurance coverage necessary to provide an adequate array of assistance.
17	• Elderly (>80) without good social support.
18	• Elderly and homeless still in our area some with untreated psych issues.
19	• Low income and elderly Black neighborhoods
20	• Mathews has an aging population and high per capita below the poverty level.
21	• Seniors, particularly those with mental status issues, such as mild cognitive impairment and dementia.
22	• Yes, those working full time for minimum wage. The elderly living on social security and those that have spent their savings on long term care not covered by Medicare.
23	• Uninsured or underinsured • Seriously mentally ill individuals • Dental care among the mentally ill • Intellectually disabled populations
24	• Lots of self-employed with no insurance.
25	• The poor • Senior citizens
26	• Those without insurance
27	• The older citizens, especially those living on small, fixed incomes are especially vulnerable. Many times seniors do not have access (transportation) to health services, they cannot afford prescriptions and even nutrition is inadequate. There is often "pride" that prevents persons in need from requesting assistance. Much need is invisible unless there is an opportunity to visit in the home.
28	• Young children that are having children. • Senior community • Disability or functional needs clients
29	• There are populations who work who do not have health insurance from an employer and ACA insurance is too expensive for their budget. As a result, they are uninsured.
30	• Elderly with cognitive impairment.

Continued on the following page

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?	
31	• Everyone is at risk because we have almost no health services in the County. Everyone has to leave the County for services. • Transportation to services is a big issue.
32	• The aging with dementia • Those with poor insurance, and can't afford medications.
33	• Persons with mental illness and/or substance use disorders are a particularly vulnerable population. They are at increased risk for homelessness and incarceration. They often are uninsured or underinsured. They often lack transportation and family/community supports. They frequently have to wait an unacceptable time to receive treatment. The treatment then may not be adequate. There needs to be treatment for co-occurring disorders.
34	• Seeing increased mental health concerns in teen - 20-year-old females. • Increased substance abuse
35	• Single adults with no children in their households do not qualify for Medicaid.

Exhibit B2. Vulnerable/At-Risk Regions in the Community	
Are there particular neighborhoods or geographic regions within the community where the resident population may vulnerable or at risk for health problems or difficulties obtaining health services?	
1	• King & Queen County
2	• Guinea, Indian Road, campsites and marina year-rounders.
3	• More rural parts of our County such as Petsworth District and more culturally isolated areas such as Guinea.
4	• More legislative support is needed for Medicare and Medicaid funding to provide expanded services to those in need.
5	• Various locations within Gloucester that are not within a neighborhood, often no homes close by. At times in the far northern area of the County or down remote rural roads.
6	• Rural communities struggle with the issue of availability all the time.
7	• Likely in Guinea Bena area of Gloucester
8	• Throughout the counties
9	• Usually those counties that have the highest rates of poverty and children living in poverty
10	• Guinea & other watermen and farmers.
11	• The more rural areas have heightened issues due to the distance to healthcare, the lack of sufficient transportation options and fewer service providers.
12	• Gloucester County High School – students in Abingdon and Guinea
13	• The entire area of Lancaster and Northumberland county have the working poor who do not have insurance. Prescription drug abuse and misuse is widespread.
14	• Rural areas.
15	• Northern end of the County (Newtown District)
16	• All of the Middle Peninsula has this need.
17	• Middle Peninsula
18	• Middlesex County as a whole is underserved by health care providers.

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	• Walking trails • Bike trails
2	• The hospital • Community services board
3	• Preventive measures education
4	• The parks offering outdoor recreational activities
5	• Institutions and their involvement in the community • Parks
6	• The people within the community and facilities that afford people the opportunities to partake in healthy lifestyle activities.
7	• Recreational Sports • Wellness Center • YMCA • Beaverdam Park • Court House Area
8	• Schools • Parks • Libraries
9	• Wellness Center • YMCA • Beaverdam Park • School Playgrounds • Community education programs that utilize the school's afterhours
10	• Emergency response capability
11	• Riverside • Gloucester Free Care Clinic • Public parks
12	• Church groups
13	• Public parks and recreational facilities • Wellness Center • Boys & Girls Club • Beaches • Reservoir (Beaverdam) Park offering opportunity for fresh water fishing, boating, walking trails etc. • Active civic clubs promote numerous health related opportunities.
14	• Certainly the Wellness Center and the YMCA are available. • Main Street walking, our local parks are assets but safe walking areas for older citizens are lacking. • Bicycle riders in the County are taking risks in riding alongside traffic on County roads. • Our Parks, Rec. and Tourism Dept. offers many good, low cost courses but space to hold those are limited.
15	• Sidewalks and wider shoulders on roads to encourage safe walking and bicycling would help greatly.
16	• Built resources, something that someone can use to promote a culture of health
17	• Volunteer network
18	• Local YMCA and wellness center.
19	• Community buy in and attitude toward health. • Community norms which promote and stress good health are critical

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?	
20	• Walking trails around the hospitals (Riverside Regional has trails behind the hospital) • Fitbit for staff • Sidewalks for staff to walk on their lunch breaks without fear of accidents • Bike rack
21	• Riverside nursing home • Several health screening activities • dental care annual • Our many churches
22	• The WR gym, but it's hours are not very good for those with jobs.
23	• Hospitals • Health care professionals • Community sports leagues • YMCA • Parks and recreation • Schools
24	• Boys-Girls Club • YMCA
25	• I feel they are equally important to create an overall positive reputation with nonjudgmental people, available institutions and programs, and natural/built resources that are available. No one is more important within the overall team approach that would be needed.
26	• Riverside Health System is an asset. • The clean air and low population density make it feel healthier in this region.
27	• Wellness Center • YMCA • Walking trails
28	• There are few trails / parks to promote physical activity and few public beaches.
29	• Hospital and clinics • Parks • Long term care facilities
30	• This is very limited in our County.
31	• We have Beaverdam park, which has walking trails, but not the most stable.
32	• The Gloucester-Mathews Care Clinic • NAMI Mid-Tidewater education and support programs • YMCAs
33	• YMCA • Wellness Center • Boys and Girls club

Exhibit B4. Health Assets Needed in the Community	
Are there any health assets that the community needs, but may be lacking?	
1	• Mental illness treatment • Free clinic
2	• Outpatient complex care management
3	• Community use indoor swimming pool
4	• Local short term care for mentally ill
5	• More parks • Walking trails • Recreational facilities for children
6	• Primary Care Providers
7	• More bicycle trails • Corporate wellness programs through partnership with the Chamber of Commerce
8	• Safe walking trail
9	• More affordable housing for aging population.
10	• Prevention, mental health and substance abuse help
11	• Defined bicycle trails • Level outdoor, free areas where seniors can walk safely as well as additional space for indoor parks • Rec. & Tourism activities.
12	• There is also a need for Hospice respite care and an ongoing residential Hospice house which would contribute to improving not only the quality of care for persons in the end stage of life but also for the caregivers. Too many citizens go to Williamsburg for this service.
13	• Primary care, especially internal medicine.
14	• If there were some programs that facilitated or promoted walking; a lot of people don't walk because where they live, they don't feel safe walking on the road. If there were groups of even just 2 or 3 people who got together and walked somewhere safe in the evenings.
15	• Safe, multipurpose trails
16	• Bike Trails • Walking trails
17	• Transportation
18	• Affordable day care and facility care for the elderly is lacking and affects the entire family.
19	• A nicer sports complex to get kids and adults moving • Walking and bike trails would be nice
20	• Quicker timeframe to obtain a doctor's visit.
21	• Are there ever enough people or programs to keep up? I don't know that I have enough information to
22	• Additional fitness center in closer proximity to small towns and additional specialists.
23	• Senior communities, not assisted living centers.
24	• The biggest area to improve is adequate pain management resources and mental health resources to deal with chronic pain and narcotic issues respectively.
25	• Hospice house
26	• Walking trails • Public parks
27	• Psychiatric beds • Mental health care providers
28	• Mental health resources

Exhibit B5. Additional Ideas and Suggestions	
Optional: Please use the space below to share any additional ideas or suggestions for improving community health.	
1	• Bike and walking trails • Bike and walking groups would help promote healthy behavior and would be attractive to visitors and potential residents. Good for business also • Fitness programs nearby for indoor activities during inclement weather
2	• Delivery service from pharmacy • More free home visits for elderly to just check on them
3	• Good health starts in the home with active, involved parents. Strengthening the family is the key to good health.
4	• I think Gloucester has a good variety of facilities/services available if people utilize them.
5	• Healthy eating seminars or classes available at little or no charge.
6	• Overall, this population north of the York River needs access to Primary Care clinics which have been reduced in numbers over the past 11 years that I have been here in the area. Many very unhealthy life styles including poor diets leading to a high rate of diabetes with all of its ramifications, marked obesity especially in the youth and pediatric populations, high incidence of smoking in teens and young adults, excessive opiate use with long term habituation, and poorly controlled or untreated hypertension. As a result, a shorter than average life expectancy from years of poor health practices as above has been the result of all of this. Public awareness through health fairs and education at the teen level may be of some benefit.
7	• Population health will best be developed by closer partnership of health care providers with community based organizations that can help meet many of the health-support needs at cost effective prices. Patients will also be happier and healthier as they are empowered to take care of themselves. Health needs to happen in the home.
8	• The Centers for Disease Control estimate that 2% of the population is living with a long term disability as a result of brain injury; if you include conservative estimates (again based on CDC surveillance numbers) in the regions covered by the five Riverside hospitals, more than 13,5000 Virginians are dealing with lifelong effects of brain injury. How many of those people make it into one of your programs or affiliated hospitals?
9	• The volunteer rescue squads provide a great service at no cost to the community, this system is becoming over worked and under staffed to support the existing call volume. Help is need to sustain these volunteer systems.
10	• We need County Administration support to ban smoking in public places. We need to have obstetrics in hospital for deliveries.
11	• We need to continue to find ways to reduce and eventually eradicate poverty • We need a concerted focus on parenting programs and eliminate adverse childhood experiences or if not eliminate then significantly reduce them through early intervention. • Need to work with Prevention programs that offer evidenced based programming that address smoking, substance abuse, domestic violence and obesity to name but a few.
12	• With the increase in illegal substance use, more resources to provide hair follicle testing would be helpful to aide in the treatment of use/abuse of certain drugs.

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 County Boards of Supervisors were sent the survey. Additionally, every physician, nurse practitioner and physician assistant at Riverside Medical Group was sent a survey.

Category	Organization	Notes
FAITH COMMUNITIES	• Hospital chaplains	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	• Gloucester County Chamber of Commerce • Mathews County Chamber of Commerce	
PUBLIC HEALTH EXPERTS	• Three Rivers Health District of the Virginia Department of Health • Community Services Board	
COUNTY / LOCAL GOVERNMENT	• Gloucester County Board of Supervisors • Gloucester County Sheriff • Gloucester County Emergency Management • Gloucester County Social Services • Mathews County Board of Supervisors • Mathews County Sheriff • Mathews County Social Services • Mathews County Administrator • Middlesex County Board of Supervisors • Middlesex County Sheriff • Middlesex County Emergency Management • Middlesex County Social Services • Urbanna Administrator • Urbanna Mayor • King and Queen County Administrator • King and Queen County Emergency Services Administrator • King and Queen County Social Services • King and Queen County Sheriff • •	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	• Gloucester House • Peninsula EMS Council • Gloucester-Mathews Free Clinic • National Alliance on Mental Illness – Gloucester Chapter • Brain Injury Association of Virginia	These organizations work to represent the medically underserved, low income, minority and broad populations across Virginia's

	• Bay Aging • Alzheimer's Association • Bridge's Psychiatric • Rappahannock General Hospital • Department of Aging and Rehabilitative Services • The Samaritan Group • Gloucester TRIAD / SALT • Mathews TRIAD / SALT • Middlesex TRIAD / SALT • American Red Cross – local chapter • Independent local physicians affiliated with RWRH • Riverside Medical Group – Middle Peninsula physicians and advanced practice providers • Riverside Walter Reed Hospital Board Members • Riverside Walter Reed leadership	Middle Peninsula, as well as the health of the local environment on which the local economy is based.
SCHOOLS	• Rappahannock Community College • King and Queen County School Superintendent • King and Queen County School Board Members • Gloucester County Schools Superintendent • Gloucester County School Board Members • Mathews County School Superintendent • Mathews County School Board Members • Middlesex County School Superintendent • Middlesex County School Board Members	