

A Community Health Needs Assessment
Prepared for Rockingham Memorial Hospital
By Community Health Solutions
August 2012

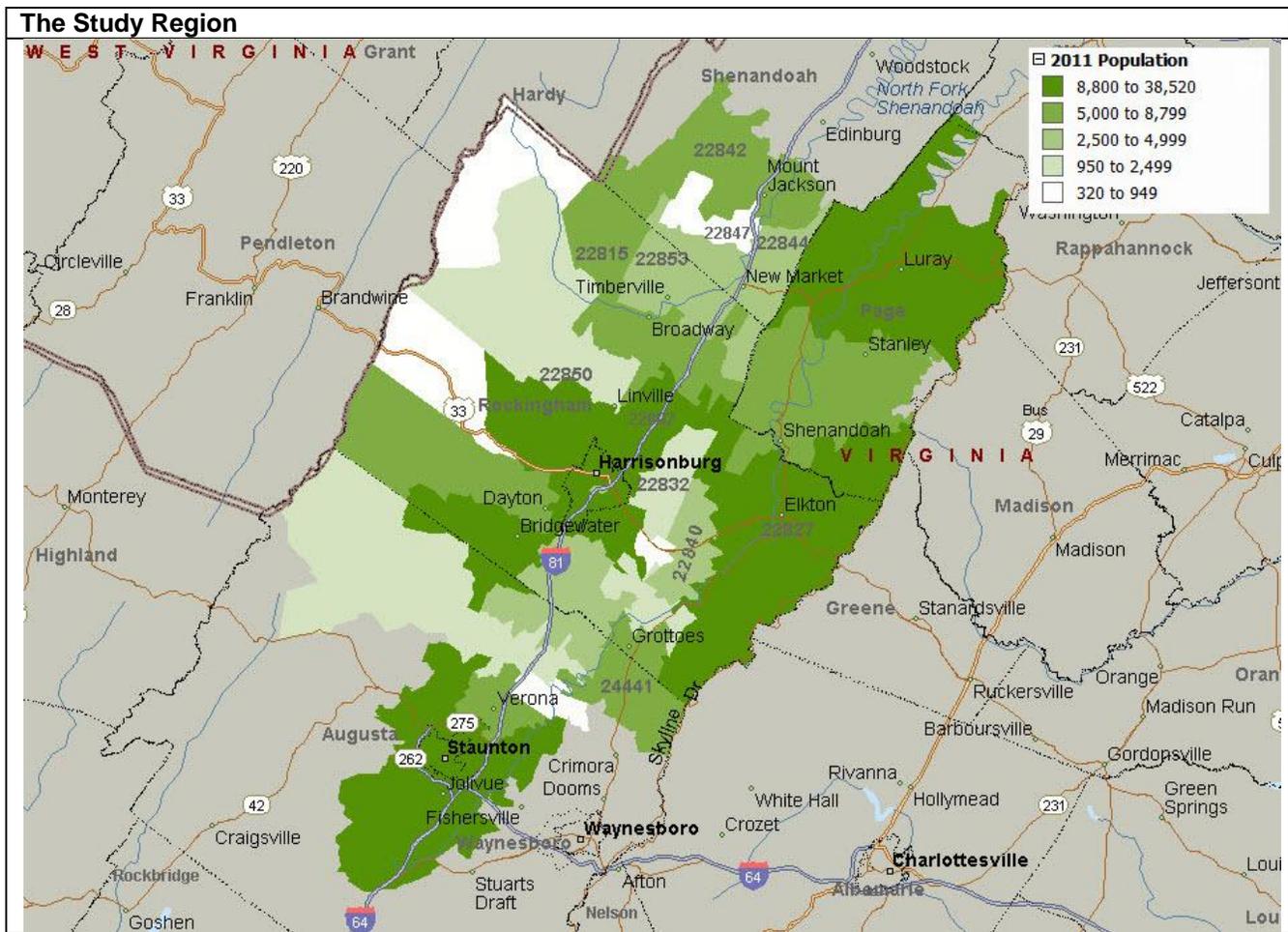
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Executive Summary

The mission of Rockingham Memorial Hospital (RMH) is "to improve health and promote wellbeing." With this mission in mind, RMH commissioned Community Health Solutions to conduct this community health needs assessment in 2012.

The study focuses on six localities identified by RMH as containing its total primary, and 90% of its secondary market: Augusta, Page, Rockingham and Shenandoah counties, and the cities of Harrisonburg and Staunton. The study region is shown in the map below. The results of the study include two primary components: a 'community insight profile' based on qualitative analysis of a survey of community stakeholders, and a 'community indicator profile' based on quantitative analysis of community health status indicators. This Executive Summary outlines major findings, and details are provided in the body of the report.



Part I. Community Insight Profile

In an effort to generate community input for the community health needs assessment, a Community Insight Survey was conducted with a group of community stakeholders identified by RMH. The survey participants were asked to provide their viewpoints on:

- Important health concerns in the community;
- Significant service gaps in the community; and
- Ideas for addressing health concerns and service gaps.

The survey was sent to a group of 123 community stakeholders identified by RMH. A total of 69 (56%) submitted a response (although not every respondent answered every question). The respondents provided rich insights about community health in the study region. To summarize:

- The respondents identified almost two dozen important health problems such as obesity, teen pregnancy, substance abuse-illegal drugs, diabetes, mental health conditions and more.
- The respondents reported more than two dozen specific community services in need of strengthening. Commonly identified services included behavioral health services; dental care/oral health services; health care coverage; early intervention services for children; homeless services and more.

Thirty-five respondents offered open-ended responses with additional ideas and suggestions for improving community health. These responses are listed in *Appendix B* on page 38.

Part II. Community Indicator Profile

The community indicator profile in Part II presents a wide array of quantitative community health indicators for the study region. To produce the profile, 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.^{1,2} To summarize:

- *Demographic Profile.* As of 2011, the study region included 294,662 people. The population is expected to increase to 315,129 by 2016. Compared to the Commonwealth of Virginia as a whole, the study region is more sparsely populated, and (proportionally) less racially diverse. The study region also has lower income levels and (proportionally) more adults without a high school education than Virginia as a whole.
- *Mortality Profile.* The study region had 2,480 total deaths in 2010. The leading causes of death were malignant neoplasm (cancer), heart disease, and cerebrovascular disease (stroke). The age-adjusted death rates for the study region were higher than the Virginia statewide rates for cerebrovascular, Alzheimer's Disease, unintentional injury and suicide deaths.
- *Maternal and Infant Health Profile.* The study region had 3,546 pregnancies and 3,012 total live births in 2010. Compared to Virginia as a whole, the study region had lower rates of live births, low weight births, non-marital births, pregnancies for teens age 10-19, and infant mortality (based on the five-year average rate). The study region also had higher rates of births without early prenatal care and pregnancies for teens age 15-17.
- *Preventable Hospitalization 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. PQI measures can be used with hospital inpatient discharge data to identify quality of care for "ambulatory care sensitive conditions."³ High rates of hospitalization for these conditions indicate potential gaps in access to quality outpatient services for community residents. Residents of the study region had 3,482 PQI hospital discharges in 2010.⁴ The leading diagnoses for these discharges were congestive heart failure, bacterial pneumonia and urinary tract infection. The age-adjusted PQI discharge rates for the study region were higher than the Virginia statewide rates overall, and for multiple PQI diagnoses.

¹ Unless otherwise noted, demographic data used in the report were acquired from Alteryx, Inc., a commercial vendor of such data. The Virginia Department of Health was the source for all of the birth and death data included in the report. Virginia Health Information, Inc. was the source of the hospital discharge data included in the report. Virginia Health Information (VHI) requires the following statement to be included in all reports utilizing its data: *VHI has provided non-confidential patient level information used in this report which was compiled in accordance with Virginia law. VHI has no authority to independently verify this data. By accepting this report the requester agrees to assume all risks that may be associated with or arise from the use of inaccurately submitted data. VHI edits data received and is responsible for the accuracy of assembling this information, but does not represent that the subsequent use of this data was appropriate or endorse or support any conclusions or inferences that may be drawn from the use of this data.*

² In addition, Community Health Solutions produced a number of indicators using 'synthetic estimation methods.' Synthetic estimation methods can be used when there are no readily available sources of local data to produce a community health indicator. Synthetic estimation begins with analysis of national and state survey data to develop estimates of the number of people with a particular health status (e.g. asthma, diabetes, uninsured) at the national or state level. The national and state data are then applied to local demographic data to produce estimates of health status in a local area. These kinds of synthetic estimates are subject to error. They are instructive for planning, but it is not possible for Community Health Solutions to guarantee their accuracy.

³ The PQI definitions are detailed in their specification of ICD-9 diagnosis codes and procedure codes. Not every hospital admission for congestive heart failure, bacterial pneumonia, etc. is included in the PQI definition; only those meeting the detailed specifications. Low birth weight is one of the PQI indicators, but for the purpose of this report, low birth weight has been included in the Maternal and Infant Health Profile. Also, there are three diabetes-related PQI indicators which have been combined into one for the report. For more information, visit the AHRQ website at www.qualityindicators.ahrq.gov/pqi_overview.htm

⁴ Data include discharges from Virginia hospitals reporting to Virginia Health Information, Inc. These data do not include discharges from state behavioral health facilities or federal (military) facilities. Data reported are based on the primary diagnosis.

- *Behavioral Health Hospital Discharge Profile.* Behavioral health (BH) hospitalizations provide another important indicator of community health status. Residents of the study region had 2,493 hospital discharges from Virginia hospitals for behavioral health conditions in 2010.⁵ The leading diagnoses for these discharges were affective psychoses, general symptoms, and schizophrenic disorders. The age-adjusted BH discharge rates for the study region were higher than the statewide rates overall, and for multiple BH diagnoses.
- *Adult and Child Health Risk Profiles.* The profiles contain a set of estimates of adult and child health risk. The local estimates indicate that substantial numbers of adults in the study region may have health risks related to nutrition, physical activity, weight, tobacco, and alcohol. It is also estimated that large numbers of children in the study region are not meeting recommendations for healthy eating, physical activity and healthy weight.
- *Uninsured Profile.* An estimated 37,144 (15%) nonelderly residents of the Virginia study region were uninsured at any given time in 2010. Among both children and adults, the large majority of uninsured residents were estimated to have incomes at or below 200% of the federal poverty level (FPL).
- *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+. Two localities (Harrisonburg City and Page County) in the study region have been fully designated as MUPs.

Accompanying File of City/County-Level Indicators

This report includes community health indicators for the study region as a whole. A separate Microsoft Excel file contains indicators for each city/county within the study region.

Appendix A: Maps

Appendix A provides a set of thematically colored maps displaying variation in community health indicators by zip code. The underlying data for these maps are provided in a separate Microsoft Excel file. *Please read the important note about zip code level data in the introduction to Appendix A.*

Appendix B: Community Insight Profile-Additional Ideas and Suggestions for Improving Community Health

Thirty-five survey respondents offered open-ended responses with additional ideas and suggestions for improving community health. These responses are listed in *Appendix B* on page 38.

Appendix C: Community Health Needs Assessment Data Sources

Appendix C provides a list of the data sources used in the analysis of this report.

⁵ Data include discharges from Virginia hospitals reporting to Virginia Health Information, Inc. These data do not include discharges from state behavioral health facilities or federal (military) facilities. Data reported are based on the primary diagnosis.

Part I. Community Insight Profile

In an effort to generate community input for the community health needs assessment, a Community Insight Survey was conducted with a group of community stakeholders identified by RMH. The survey participants were asked to provide their viewpoints on:

- Important health concerns in the community;
- Significant service gaps in the community; and
- Ideas for addressing health concerns and service gaps.

The survey was sent to a group of 123 community stakeholders identified by RMH. A total of 69 (56%) submitted a response (although not every respondent answered every question). The respondents provided rich insights about community health in the study region. The results are summarized in the remainder of this section.

1. Survey Respondents

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

**Exhibit I-1
Reported Organization Affiliation of Survey Respondents⁶**

Big Brothers Big Sisters	MillerCoors
Blue Ridge Area Health Education Center	New Bridges Immigrant Resource Center
Bridgewater Retirement Community	Office on Children and Youth, Institute for Innovation in Health and Human Services
Cargill	Our Community Place
Center for Marriage and Family Counseling	Pace Capital
Community Mennonite Church	Page County Government
Eastern Mennonite University	Retired Primary Care Physician
First Step: A Response to Domestic Violence	RMH Family Connection
Friendship Industries	RMH Luray Health Center
Generations Crossing	RMH Pharmacy
Harrisonburg Community Health Center	RMH Senior Advantage/Lifeline
Harrisonburg Fire Dept./Safe Kids Central Shenandoah Valley	RMH/RHC Board Member(6)
Harrisonburg Pregnancy Center	Rockingham County Public Schools(3)
Harrisonburg Redevelopment and Housing Authority	Rockingham Memorial Hospital(6)
Harrisonburg Rockingham Child Day Care Center	Shenandoah County Board of Supervisors
Harrisonburg Rockingham Free Clinic	Shenandoah County Schools
Harrisonburg Veterans Clinic	Skyline Literacy
Harrisonburg-Rockingham Chamber of Commerce	Smart Beginnings Shenandoah Valley
Harrisonburg-Rockingham Community Service Board(2)	The Community Foundation
Healthy Community Council Steering Committee	United Way of Harrisonburg and Rockingham County
Home Instead Senior Care	Valley Church
Infant & Toddler Connection of Harrisonburg-Rockingham	Valley Program for Aging Services
James Madison University	Virginia Department of Rehabilitative Services
Kline May Realty/Cottonwood Commercial	Virginia Mennonite Retirement Community
Lantz Construction Company	Wachovia Securities
Lenhart Obenshain	<i>Unknown Organization (5)</i>

⁶ Three respondents represented more than one organization.

2. 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. *Exhibit I-2* summarizes the results, including open-ended responses.

Exhibit I-2.

Important Community Health Concerns Identified by Survey Respondents

Answer Options	Response Percent ⁷	Response Count
Adult Obesity	78%	53
Childhood Obesity	74%	50
Teen Pregnancy	68%	46
Substance Abuse-Illegal Drugs	66%	45
Diabetes	62%	42
Mental Health Conditions	62%	42
High Blood Pressure	59%	40
Depression	56%	38
Alcohol Use	54%	37
Substance Abuse-Prescription Drugs	52%	35
Cancer	50%	34
Dental Care/Oral Health	47%	32
Heart Disease	47%	32
Infant and Child Health	46%	31
Tobacco Use	44%	30
Alzheimer's Disease	43%	29
Stroke	41%	28
Domestic Violence	40%	27
Prenatal & Pregnancy Care	40%	27
Autism	32%	22
Chronic Pain	31%	21
Asthma	29%	20
Intellectual/Developmental Disabilities	28%	19
Arthritis	22%	15
Physical Disabilities	22%	15
Suicide	22%	15
Injuries	21%	14
Orthopedic Problems	21%	14
Respiratory Diseases (other than asthma)	21%	14
Sexually Transmitted Diseases	21%	14
Renal (kidney) Disease	19%	13
Infectious Diseases	15%	10
HIV/AIDS	13%	9
Neurological Disorders (seizures, multiple sclerosis)	13%	9
Environmental Quality	7%	5
Other Health Problems (see open-ended responses)	24%	16

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

Continued on next page...

⁷ Sixty-eight (68) of the 69 survey respondents answered this question.

Exhibit I-2. (continued)

Open-Ended Responses
<ul style="list-style-type: none"> ADHD/ADD, headaches/migraines
<ul style="list-style-type: none"> Access to affordable mental health services pathophysiology, medication management, and counseling is very much lacking.
<ul style="list-style-type: none"> All of the above are problems but I just checked the ones which need more attention.
<ul style="list-style-type: none"> Although there are more problems in the community than the ones that I responded to, I checked the boxes of those health problems that I encounter on a regular basis.
<ul style="list-style-type: none"> As a provider of services to older adults, I see the primary concern as older adults with more than one chronic disease and who may not have the skills/knowledge or community/family supports needed and therefore may overuse the Emergency Department.
<ul style="list-style-type: none"> Because Harrisonburg has a higher percentage of illiterate adults than Virginia and the Nation, I believe this impacts people's ability to seek care and ability to understand prevention and treatment for many health issues even beyond those checked above. This impacts native and non-native speakers. For non-native speakers, cultural differences and low income often make access to healthcare challenging as well as ongoing treatment.
<ul style="list-style-type: none"> I advise using current and projected morbidity and mortality rates for ranking these health problems in our community.
<ul style="list-style-type: none"> I initially checked all, as they all are concerns for at least someone in our community. I have chosen the obesity issues to focus on an emerging epidemic.
<ul style="list-style-type: none"> Incapacity due to old age, dementias other than Alzheimer's
<ul style="list-style-type: none"> It would be difficult to rank these
<ul style="list-style-type: none"> Local orthopedic care providers do not have a good reputation
<ul style="list-style-type: none"> Other dementias
<ul style="list-style-type: none"> PTSD, caregiver strain
<ul style="list-style-type: none"> There are community members with intellectual and developmental disabilities but I do not see the disabilities as a health "problem" for them or the community.
<ul style="list-style-type: none"> Trauma related mental health concerns.
<ul style="list-style-type: none"> Unfortunately, there are far too many people in our community with multiple chronic diseases and they often have no insurance or minimal coverage. This means they often delay or limit the care and treatment.

3. 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. *Exhibit I-3* summarizes the results, including open-ended responses.

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

Answer Options	Response Percent ⁸	Response Count
Behavioral Health Services (including mental health, substance use and intellectual disability)	64%	43
Dental Care/Oral Health Services	48%	32
Health Care Coverage	48%	32
Early Intervention Services for Children	46%	31
Homeless Services	46%	31
Aging Services	45%	30
Transportation	45%	30
Patient Self Management Services(e.g. nutrition, exercise, taking medications)	39%	26
Maternal, Infant & Child Health Services	37%	25
Job/Vocational Retraining	36%	24
Health Promotion and Prevention Services	34%	23
Chronic Disease Services (including screening and early detection)	33%	22
Primary Health Care Services	33%	22
Family Planning Services	30%	20
Long Term Care Services	28%	19
Social Services	28%	19
Domestic Violence Services	27%	18
Food Safety Net (food bank, community gardens)	25%	17
Public Health Services	25%	17
Chronic Pain Management Services	22%	15
Home Health Services	22%	15
Cancer Services (screening, diagnosis, treatment)	19%	13
School Health Services	19%	13
Hospice Services	13%	9
Hospital Services (including emergency, inpatient and outpatient)	13%	9
Specialty Medical Care (e.g. cardiologists, oncologists, etc.)	10%	7
Pharmacy Services	9%	6
Physical Rehabilitation	9%	6
Environmental Health Services	8%	5
Workplace Health and Safety Services	8%	5
<i>Other Community Health Services (see open-ended responses)</i>	15%	10

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

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⁸ Sixty-seven (67) of the 69 survey respondents answered this question.

Exhibit I-3. (continued)

Open-Ended Responses
<ul style="list-style-type: none">Affordable after school care for all parents.
<ul style="list-style-type: none">As noted above, lack of insurance to enable people to manage multiple chronic diseases is, in my opinion, one of the most pressing problems. Also, a lack of transportation to affordable services (i.e.: UVA) is sorely lacking. I believe that perhaps THE single most important need in the community is scheduled public transportation trips (or subsidized private services) To Charlottesville (2-3 round trips daily) to permit indigent or near indigent patients to access UVA services. RMH hospital and physicians do provide discounts, but the discounted fees are still a major barrier for large numbers of low-income persons to getting care in a timely manner.
<ul style="list-style-type: none">Community mental health services available at a sliding fee scale.
<ul style="list-style-type: none">Education and options for less costly non-emergency care than use of RMH ER.
<ul style="list-style-type: none">From my own experience and from speaking to others in the community, there are a limited number of providers from medical specialties such as neurology, rheumatology, and endocrinology.
<ul style="list-style-type: none">Patient navigation and follow-up services provided by community health workers.
<ul style="list-style-type: none">Specialty medical care- specifically, orthopedics.
<ul style="list-style-type: none">Specifically getting children signed up for FAMIS insurance.
<ul style="list-style-type: none">There is NO public transportation in Rockingham County so timely access is a primary barrier to care; especially for older adults....What is also need is primary care that will go to the homes of homebound older adults.
<ul style="list-style-type: none">We need a diabetologist.

Part II. Community Indicator Profile

This section of the report provides a quantitative profile of the study region based on a wide array of community health indicators. To produce the profile, 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.

The results of this profile can be used to evaluate community health status compared to the Commonwealth of Virginia overall. The results can also be helpful for determining the number of people affected by specific health concerns. In addition, the results can be used alongside the Community Insight Survey results and the zip code level maps to help inform action plans for community health improvement. This section includes ten profiles as follows:

1. Health Demographic Trend Profile
2. Health Demographic Snapshot
3. Mortality Profile
4. Maternal and Infant Health Profile
5. Preventable Hospitalization Profile
6. Behavioral Health Hospital Discharge Profile
7. Adult Health Risk Factor Profile
8. Child Health Risk Factor Profile
9. Uninsured Profile
10. Medically Underserved Profile

1. Health Demographic Trend Profile

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

As shown in *Exhibit II-1*, as of 2011, the study region included 294,662 people. The population is expected to increase to 315,129 by 2016. It is projected that population growth will occur in all age groups, including a 9% increase in adults age 18-29. Focusing on racial background, growth is projected for all populations, including a 15% increase in both the Asian and Black/African American population. The Hispanic population is also expected to grow by 29%.

**Exhibit II-1.
Health Demographic Trend, 2000-2016**

Indicator	2000 Census	2011 Estimate	2016 Projection	% Change 2011-2016
Total Population	255,997	294,662	315,129	7%
Population Density (per Sq Mile)	95.2	109.6	117.2	7%
Total Households	96,617	114,029	124,836	9%
Population by Age				
Children Age 0-17	56,338	61,544	65,732	7%
Adults Age 18-29	48,481	57,718	62,988	9%
Adults Age 30-44	55,608	51,712	55,243	7%
Adults Age 45-64	59,841	78,301	83,171	6%
Seniors Age 65+	35,661	45,376	47,998	6%
Population by Race/Ethnicity				
Asian	1,928	3,132	3,587	15%
Black/African American	9,924	11,882	13,677	15%
White	237,868	265,339	282,218	6%
Other or Multi-Race	6,270	14,304	15,644	9%
Hispanic Ethnicity ⁹	8,134	18,094	23,422	29%

Source: Community Health Solutions analysis of data from Alteryx, Inc.

⁹ Classification of ethnicity; therefore, Hispanic individuals are also included in the race categories.

2. Health Demographic Snapshot

Community health is driven in large 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 2011, the study region included an estimated 294,662 people. Compared to the Commonwealth of Virginia as a whole, the study region is more sparsely populated, and (proportionally) less racially diverse. The study region also has lower income levels, and (proportionally) more adults without a high school education, than Virginia as a whole. *Note: Maps 1-13 in Appendix A show the geographic distribution of the population by zip code.*

**Exhibit II-2.
Health Demographic Snapshot, 2011**

Indicator	Study Region	Virginia
Population Counts		
Population	294,662	8,120,937
Children Age 0-17	61,544	1,910,883
Adults Age 18-29	57,718	1,367,779
Adults Age 30-44	51,712	1,687,883
Adults Age 45-64	78,301	2,139,219
Seniors Age 65+	45,376	1,014,213
Female	149,299	4,130,586
Male	145,357	3,990,349
Asian	3,132	446,480
Black/African American	11,882	1,575,045
White	265,339	5,568,689
Other or Multi-Race	14,304	530,708
Hispanic Ethnicity	18,094	684,450
Low Income Households (Households with Income < \$25,000)	30,039	561,807
Population Age 25+ Without a High School Diploma	36,857	697,401
Population Rates		
Population Density (pop. per sq. mile)	109.6	201.7
Children Age 0-17 pct. of Total Pop.	21%	24%
Adults Age 18-29 pct. of Total Pop.	20%	17%
Adults Age 30-44 pct. of Total Pop.	18%	21%
Adults Age 45-64 pct. of Total Pop.	27%	26%
Seniors Age 65+ pct. of Total Pop.	15%	12%
Female pct. of Total Pop.	51%	51%
Male pct. of Total Pop.	49%	49%
Asian pct. of Total Pop.	1%	5%
Black/African American pct. of Total Pop.	4%	19%
White pct. of Total Pop.	90%	69%
Other or Multi-Race pct. of Total Pop.	5%	7%
Hispanic Ethnicity pct. of Total Pop.	6%	8%
Per Capita Income	\$22,257	\$33,364
Median Household Income	\$44,393	\$63,002
Low Income Households (Households with Income < \$25,000) pct. of Total Households	26%	18%
Pop. Age 25+ Without a High School Diploma pct. Total Pop. Age 25+	19%	13%

Source: Community Health Solutions analysis of data from Alteryx, Inc.

3. Mortality Profile

As shown in *Exhibit II-3*, the study region had 2,480 total deaths in 2010. The leading causes of death were malignant neoplasm (cancer) (560), heart disease (545), and cerebrovascular disease (stroke) (150). The age-adjusted death rates for the study region were higher than the Virginia statewide rates for cerebrovascular disease, Alzheimer's Disease, unintentional injury and suicide deaths. *Note: Maps 14-17 in Appendix A show the geographic distribution of deaths by zip code.*

**Exhibit II-3.
Mortality Profile, 2010**

Indicators	Study Region	Virginia
Total Deaths		
Deaths by All Causes	2,480	58,841
Deaths by Top 14 Causes		
Malignant Neoplasms (Cancer) Deaths	560	13,958
Heart Disease Deaths	545	13,332
Cerebrovascular Disease (Stroke) Deaths	150	3,259
Chronic Lower Respiratory Disease Deaths	133	2,571
Alzheimer's Disease Deaths	125	1,842
Unintentional Injury Deaths	108	2,571
Diabetes Mellitus Deaths	67	1,527
Nephritis and Nephrosis Deaths	66	1,583
Septicemia Deaths	58	1,358
Influenza and Pneumonia Deaths	48	1,183
Suicide Deaths	37	982
Parkinson's Disease Deaths	29	519
Chronic Liver Disease Deaths	25	687
Primary Hypertension and Renal Disease Deaths	16	589
Age Adjusted Death Rates per 100,000 Population¹⁰		
Total Deaths	710.9	739.2
Malignant Neoplasms (Cancer) Deaths	159.4	170.9
Heart Disease Deaths	154.0	167.6
Cerebrovascular Disease (Stroke) Deaths	43.1	41.7
Chronic Lower Respiratory Disease Deaths	37.3	37.9
Alzheimer's Disease Deaths	34.8	24.4
Unintentional Injury Deaths	34.1	32.2
Diabetes Mellitus Deaths	17.1	18.7
Nephritis and Nephrosis Deaths	18.5	20.1
Septicemia Deaths	16.3	17.2
Influenza and Pneumonia Deaths	13.4	15.3
Suicide Deaths	13.0	11.9

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

¹⁰ 2010 Census data were used to calculate study region age adjusted rates. Rates are not calculated for causes where n<30.

4. Maternal and Infant Health Profile

As shown in *Exhibit II-4*, the study region had 3,546 pregnancies and 3,012 total live births in 2010. Of these, 204 were born with low birth weight, 626 were births without early prenatal care, 1,110 were non-marital births, and 300 were births to teens [with 86 involving younger teens age 15-17]. There were also 12 infant deaths in the study region during 2010. Compared to Virginia as a whole, the study region had lower rates of low weight births, non-marital births, pregnancies for teens age 10-19, and infant mortality (based on the five-year average rate). The study region also had higher rates of births without early prenatal care and pregnancies for teens age 15-17. *Note: Maps 18-21 in Appendix A show the geographic distribution of 2010 births by zip code.*

**Exhibit II-4
Maternal and Infant Health Profile, 2010**

Indicators	Study Region	Virginia
Counts		
Total Pregnancies	3,546	134,416
Induced Terminations of Pregnancy	322	24,892
Natural Fetal Deaths	212	6,590
Total Live Births	3,012	102,934
Low Weight Births (under 2,500 grams / 5 lb. 8 oz.)	204	8,487
Births Without Early Prenatal Care (No Prenatal Care in First 13 Weeks)	626	14,950
Non-Marital Births	1,110	36,532
Total Teen Pregnancies Ages 10-19	374	10,970
Total Teen Pregnancies Ages 15-17	111	2,936
Live Births to Teens Age 10-19	300	7,444
Live Births to Teens Age 18-19	211	5,418
Live Births to Teens Age 15-17	86	1,955
Live Births to Teens Age <15	3	71
Total Infant Deaths	12	695
Rates		
Live Birth Rate per 1,000 Population	10.4	12.9
Low Weight Births pct. of Total Live Births	6%	8%
Births Without Early Prenatal Care (No Prenatal Care in First 13 Weeks) pct. of Total Live Births	18%	15%
Non-Marital Births pct. of Total Live Births	31%	35%
Teenage (age 10-19) Pregnancy Rate per 1,000 Teenage Female Population	17.9	21.1
Teenage (age 15-17) Pregnancy Rate per 1,000 Teenage Female Population	21.2	18.8
Five-Year Average Infant Mortality Rate per 1,000 Live Births) 2006-2010	6.1	7.1

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

5. Preventable Hospitalization 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. PQI measures can be used with hospital inpatient discharge data to identify quality of care for "ambulatory care sensitive conditions."¹¹ 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 3,482 PQI hospital discharges in 2010.¹² The leading diagnoses for these discharges were congestive heart failure (945), bacterial pneumonia (752), and urinary tract infection (456). The age-adjusted PQI discharge rates for the study region were higher than the Virginia statewide rates overall, and for multiple PQI diagnoses. *Note: Map 22 in Appendix A shows the geographic distribution of PQI discharges by zip code.*

**Exhibit II-5.
Prevention Quality Indicator Hospital Discharges, 2010**

Indicators	Study Region	Virginia
Total PQI Discharges		
Total PQI Discharges by All Diagnoses	3,482	81,070
PQI Discharges by Diagnosis		
Congestive Heart Failure PQI Discharges	945	19,062
Bacterial Pneumonia PQI Discharges	752	14,845
Urinary Tract Infection PQI Discharges	456	10,331
Chronic Obstructive Pulmonary Disease (COPD) PQI Discharges	397	10,448
Diabetes PQI Discharges	371	11,166
Hypertension PQI Discharges	167	2,851
Adult Asthma PQI Discharges	156	6,313
Dehydration PQI Discharges	146	3,564
Perforated Appendix PQI Discharges	67	1,678
Angina PQI Discharges	25	812
Age Adjusted PQI Discharge Rates per 100,000 Population¹³		
All Diagnoses	1,029.7	999.1
Congestive Heart Failure	269.9	238.1
Bacterial Pneumonia	218.0	184.5
Urinary Tract Infection	135.2	131.8
Chronic Obstructive Pulmonary Disease (COPD)	113.7	125.6
Diabetes	116.4	134.0
Hypertension	50.4	34.6
Adult Asthma	51.1	76.0
Dehydration	44.1	44.2
Perforated Appendix	22.9	20.8

Source: Community Health Solutions analysis of hospital discharge data from Virginia Health Information, Inc.

¹¹ The PQI definitions are detailed in their specification of ICD-9 diagnosis codes and procedure codes. Not every hospital admission for congestive heart failure, bacterial pneumonia, etc. is included in the PQI definition; only those meeting the detailed specifications. Low birth weight is one of the PQI indicators, but for the purpose of this report, low birth weight is included in the Maternal and Infant Health Profile. Also, there are three diabetes-related PQI indicators which have been combined into one for the report. For more information, visit the AHRQ website at www.qualityindicators.ahrq.gov/pqi_overview.htm

¹² Data include discharges from Virginia hospitals reporting to Virginia Health Information, Inc. These data do not include discharges from state behavioral health facilities or federal (military) facilities. Data reported are based on the primary diagnosis.

¹³ 2010 Census data were used to calculate study region age adjusted rates.

6. Behavioral Health Hospital Discharge Profile

Behavioral health (BH) hospitalizations provide another important indicator of community health status. *Exhibit II-6* shows behavioral health hospital discharges for study region residents in 2010. Residents of the study region had 2,493 hospital discharges from Virginia hospitals for behavioral health conditions in 2010.¹⁴ The leading diagnoses for these discharges were affective psychoses (1,173), general symptoms (432) and schizophrenic disorders (265). The age-adjusted BH discharge rates for the study region were higher than the statewide rates overall, and for multiple BH diagnoses. *Note: Map 23 in Appendix A shows the geographic distribution of 2010 BH health discharges by zip code.*

**Exhibit II-6.
Behavioral Health Hospital Discharges, 2010**

Indicators	Study Region	Virginia
BH Discharges		
Total BH Discharges by All Diagnoses	2,493	63,936
BH Discharges by Diagnosis		
Affective Psychoses ¹⁵	1,173	27,220
General Symptoms ¹⁶	432	11,084
Schizophrenic Disorders	265	8,092
Alcoholic Psychoses	120	2,969
Depressive Disorder, Not Elsewhere Classified	119	2,819
Neurotic Disorders	70	1,210
Drug Psychoses	58	1,252
Adjustment Reaction	57	2,021
Alcoholic Dependence Syndrome	49	2,080
Other Nonorganic Psychoses	46	2,008
Age Adjusted BH Discharge Rates per 100,000 Population¹⁷		
All Diagnoses	858.3	791.9
Affective Psychoses	418.2	339.0
General Symptoms	130.8	138.2
Schizophrenic Disorders	92.4	97.4
Alcoholic Psychoses	43.3	35.5
Depressive Disorder, Not Elsewhere Classified	43.3	35.5
Neurotic Disorders	24.7	15.0
Drug Psychoses	18.6	15.5
Adjustment Reaction	20.0	25.4
Alcoholic Dependence Syndrome	17.9	25.0
Other Nonorganic Psychoses	16.1	24.9

Source: Community Health Solutions analysis of hospital discharge data from Virginia Health Information, Inc.

¹⁴ Data include discharges from Virginia hospitals reporting to Virginia Health Information, Inc. These data do not include discharges from state behavioral health facilities or federal (military) facilities. Data reported are based on the primary diagnosis.

¹⁵ Includes major depressive, bipolar affective and manic depressive disorders.

¹⁶ This diagnosis includes symptoms, signs, abnormal results of laboratory or other investigative procedures, and ill-defined conditions regarding which no diagnosis classifiable elsewhere is recorded.

¹⁷ 2010 Census data were used to calculate study region age adjusted rates.

7. Adult Health Risk Factor Profile

This section examines health risks for adults based on synthetic estimates developed by Community Health Solutions.¹⁸ As shown in *Exhibit II-7*, the estimates indicate that substantial numbers of adults in the study region may have health risks related to nutrition, physical activity, weight, tobacco and alcohol. In addition, substantial numbers of adults may have chronic conditions such as high cholesterol, arthritis, high blood pressure, asthma and diabetes. *Note: Maps 24-27 in Appendix A show the geographic distribution of selected adult health risks by zip code.*

**Exhibit II-7.
Adult Health Risk Factors (Synthetic Estimates) 2010**

Indicators	Study Region Estimates (count)	Study Region Estimates (percent)
Estimated adults age 18+	223,862	100%
Risk Factors. Adults Age 18+ estimated to...		
Eat Less Than Five Servings of Fruits and Vegetables Per Day	171,685	77%
Be Overweight or Obese	124,779	56%
Be a Smoker	50,476	23%
Have No Physical Activity in the Past 30 Days	47,636	21%
Be at Risk for Binge Drinking	36,685	16%
Chronic Conditions. Adults Age 18+ estimated to...		
Have High Cholesterol (told by a doctor or other health professional)	66,670	30%
Have Arthritis (told by a doctor or other health professional)	63,106	28%
Have High Blood Pressure (told by a doctor or other health professional)	58,763	26%
Have Asthma (told by a doctor or other health professional)	28,767	13%
Have Diabetes (told by a doctor or other health professional)	16,252	7%
General Health Status. Adults Age 18+ estimated to...		
Be Limited in any Activities because of Physical, Mental or Emotional Problems	41,630	19%
Have Fair or Poor Health Status	31,418	14%

Source: Community Health Solutions synthetic estimates.

¹⁸ Synthetic estimates are used when there are no primary sources of data available at the local level. In this case, synthetic estimates were developed by using national and state survey results to predict the prevalence of the listed conditions in the local population. The survey data came from the CDC's Behavioral Risk Factor Surveillance Survey. Local demographics estimates (race, age and income variables) were obtained from Alteryx, Inc. The statistical model to produce the estimates was developed by Community Health Solutions.

8. Child Health Risk Factor Profile

This section examines a set of health risks for children based on synthetic estimates developed by Community Health Solutions. The particular risk indicators involve nutrition, physical activity and weight-related risks. These risks have received increasing attention as the population of American children have become more sedentary, more prone to unhealthy eating and more likely to develop unhealthy body weight. The long-term implications of these trends are serious, as these factors place children at higher risk for chronic disease both now and in adulthood.

Exhibit II-8 shows the list of selected child health risk estimates for children age 10-17 in the study region. These estimates are based on statewide and regional survey data from a recent household survey on childhood obesity commissioned by the Virginia Foundation for Healthy Youth.¹⁹ The results of the survey were published in May 2010. The estimates were produced by applying the regional estimates for northwestern Virginia to the study region population estimates for 2010. Assuming that the survey estimates for northwestern Virginia reflect the behaviors of children in the study region today, it is estimated that large numbers of children in the study region are not meeting recommendations for healthy eating, physical activity and healthy weight. *Note: Maps 28 and 29 in Appendix A show the geographic distribution of selected child health risks by zip code.*

**Exhibit II-8.
Child Health Risk Factors (Synthetic Estimates) 2010**

Indicators	Study Region Estimates (count)	Study Region Estimates (percent)
Estimated Children Age 10-17	28,557	100%
Estimated to...		
Eat Less than the Recommended Intake of Fruits and Vegetables	25,130	88%
Be Less Physically Active than Recommended	9,709	34%
Watch Television Three or More Hours per Day	6,854	24%
Be Overweight or Obese ²⁰	5,140	18%
Play Video/Computer Games Three or More Hours per Day	4,569	16%

Source: Community Health Solutions synthetic estimates.

¹⁹ Synthetic estimates are used when there are no primary sources of data available at the local level. In this case, synthetic estimates were developed by using state and regional survey results to predict the prevalence of the listed conditions in the local population. The survey data came from Market Decisions' 2010 Obesity Survey commissioned by Virginia Foundation for Healthy Youth. Local demographic estimates (age) were obtained from Alteryx, Inc. The statistical model to produce the estimates was developed by Community Health Solutions.

²⁰ For children and adolescents (aged 2–19 years), the BMI value is plotted on the CDC growth charts to determine the corresponding BMI-for-age percentile. Overweight is defined as a BMI at or above the 85th percentile and lower than the 95th percentile. Obesity is defined as a BMI at or above the 95th percentile for children of the same age and sex.

9. 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 synthetic estimates of the number of uninsured individuals in the study region as of 2010.²¹ An estimated 37,144 (15%) nonelderly residents of the study region were uninsured at any point in time. This includes an estimated 5,809 children and 31,334 adults. Among both children and adults, the large majority of uninsured residents were estimated to have incomes at or below 200% of the federal poverty level (FPL).²² *Note: Maps 30-33 in Appendix A show the geographic distribution of the uninsured population by zip code.*

**Exhibit II-9.
Uninsured (Synthetic Estimates) 2010**

Indicators	Study Region
Estimated Uninsured Counts	
Uninsured Nonelderly Age 0-64	37,144
Uninsured Children Age 0-18	5,809
Uninsured Children 0- 200% Federal Poverty Level (FPL)	4,060
Uninsured Children <100% FPL	1,721
Uninsured Children 100-200% FPL	2,339
Uninsured Children 201-300% FPL	1,183
Uninsured Children 301%+ FPL	566
Uninsured Adults Age 19-64	31,334
Uninsured Adults 0-200% FPL	23,279
Uninsured Adults <100% FPL	13,456
Uninsured Adults 100-200% FPL	9,823
Uninsured Adults 201-300% FPL	5,032
Uninsured Adults 301%+ FPL	3,024
Uninsured Adults 19-64 under 133% FPL	14,673
Uninsured Adults 19-64 and 133-300% FPL	7,503
Estimated Uninsured Rates	
Uninsured Nonelderly Percent	15%
Uninsured Children Percent	8%
Uninsured Adults Percent	18%

Source: Community Health Solutions synthetic estimates.

²¹ Synthetic estimates are used when there are no primary sources of data available at the local level. In this case, synthetic estimates were developed by using state survey results to predict the prevalence of the listed conditions in the local population. The statewide uninsured estimates were obtained from a report produced for the Virginia Health Care Foundation by Urban Institute. Local demographic estimates were obtained from Alteryx, Inc. The statistical model to produce the estimates was developed by Community Health Solutions. The estimates do not explicitly account for either undocumented populations or acute drops in income due to the recession.

²² Two hundred percent of the federal poverty level is defined as an annual income of \$44,700 for a family of four. For more information, please see: <http://aspe.hhs.gov/poverty/11poverty.shtml>

10. Medically Underserved Profile

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

As shown in *Exhibit II-10*, two localities (Harrisonburg City and Page County) in the study region have been fully designated as MUPs. 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 Populations**

Locality	MUP designation	Census Tracts
Augusta County	None	--
Harrisonburg City of	Full	6 of 6 Census Tracts
Page County	Full	5 of 5 Census Tracts
Rockingham County	None	--
Staunton City of	None	--
Shenandoah County	None	--

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

APPENDIX A: Zip Code Level Maps for the Virginia Study Region

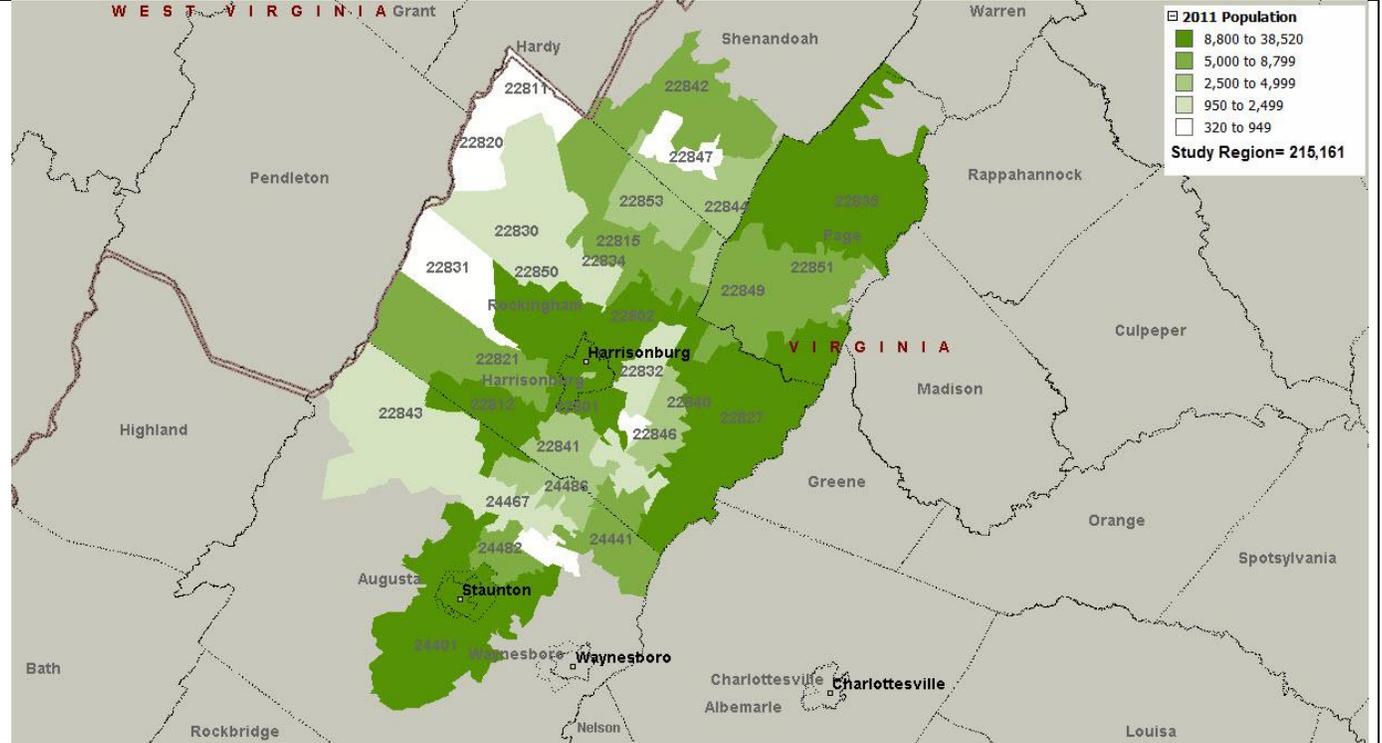
The zip code level maps in this section illustrate the geographic distribution of the zip code-level study region population on key demographic and health indicators. The results can also be used alongside the Community Insight Survey (Part I) and the Community Indicator Profile (Part II) to help inform plans for community health initiatives. The underlying data for these maps are provided in a separate Microsoft Excel file. The maps in this section include the following for 2010/2011:

1. Total Population, 2011	18. Total Live Births, 2010
2. Population Density, 2011	19. Low Weight Births, 2010
3. Child Population Age 0-17, 2011	20. Births Without Early Prenatal Care (No Prenatal Care in the First 13 Weeks), 2010
4. Senior Population Age 65+, 2011	21. Births to Teen Mothers Under Age 18, 2010
5. Asian Population, 2011	22. Prevention Quality Indicator (PQI) Hospital Discharges, 2010
6. Black/African American Population, 2011	23. Behavioral Health (BH) Hospital Discharges, 2010
7. White Population, 2011	24. Estimated Adults Age 18+ Overweight or Obese, 2011
8. Other or Multi-Race Population, 2011	25. Estimated Adult Age 18+ Smokers, 2011
9. Hispanic Ethnicity Population, 2011	26. Estimated Adults Age 18+ with Diabetes, 2011
10. Per Capita Income, 2011	27. Estimated Adults Age 18+ with High Blood Pressure, 2011
11. Median Household Income, 2011	28. Estimated Children Age 10-17 Overweight or Obese, 2011
12. Low Income Households (Households with Income <\$25,000), 2011	29. Estimated Children Age 10-17 Not Meeting Physical Activity Targets, 2011
13. Population Age 25+ Without a High School Diploma, 2011	30. Estimated Uninsured Nonelderly Age 0-64, 2011
14. Total Deaths, 2010	31. Estimated Uninsured Nonelderly Age 0-64 and Income 0-200% Federal Poverty Level, 2011
15. Malignant Neoplasm (Cancer) Deaths, 2010	32. Estimated Uninsured Children Age 0-18, 2011
16. Heart Disease Deaths, 2010	33. Estimated Uninsured Children Age 0-18 and Income 0-200% Federal Poverty Level, 2011
17. Cerebrovascular Disease (Stroke) Deaths, 2010	

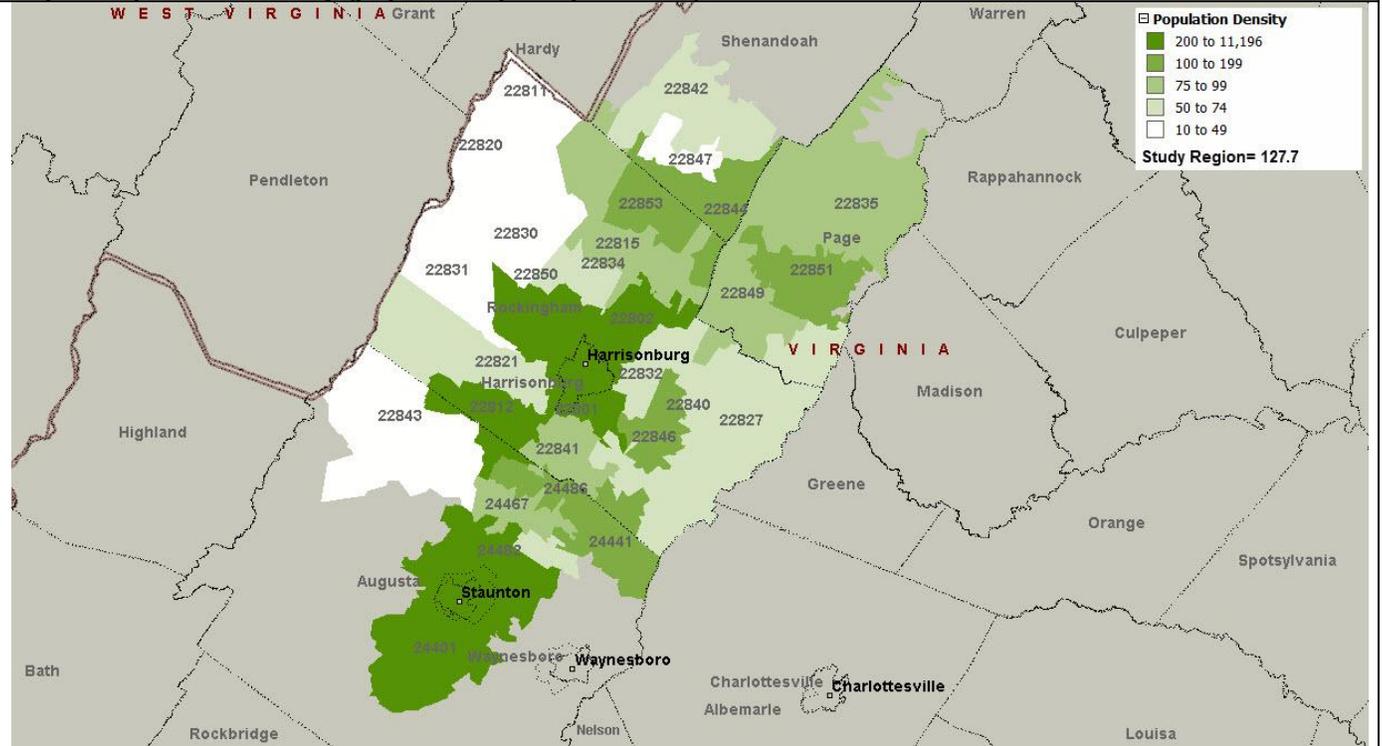
Technical Notes

1. The maps and data include 32 zip codes, as identified by Rockingham Memorial Hospital, most of which fall within Augusta, Page, Rockingham and Shenandoah counties; and the cities of Harrisonburg and Staunton. Because zip code boundaries do not automatically align with city/county boundaries, there are some zip codes that extend beyond the county boundaries. Consequently, the combined zip-code-level totals for population, deaths, births, hospitalizations, etc. differ from the study region totals listed throughout the body of the report.
2. With the exception of per capita income and median household income, 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.

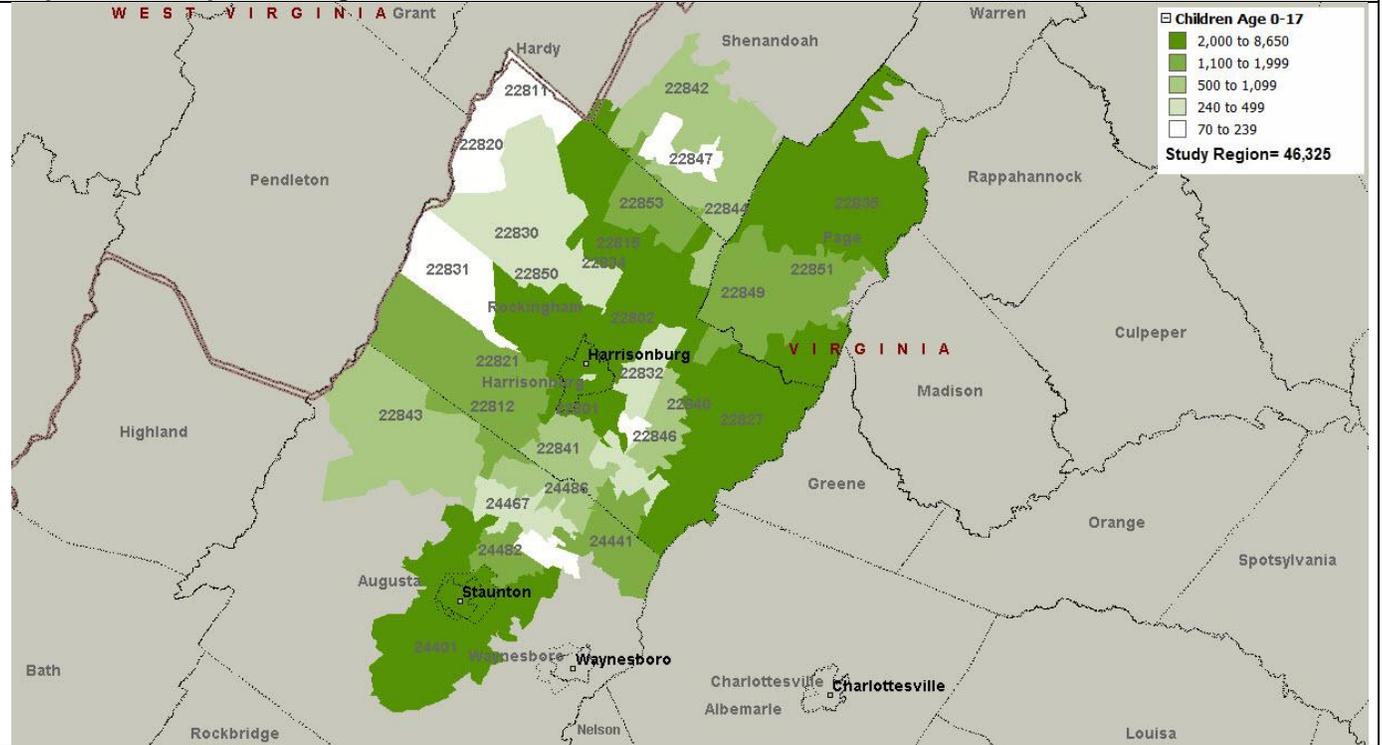
Map 1: Total Population, 2011



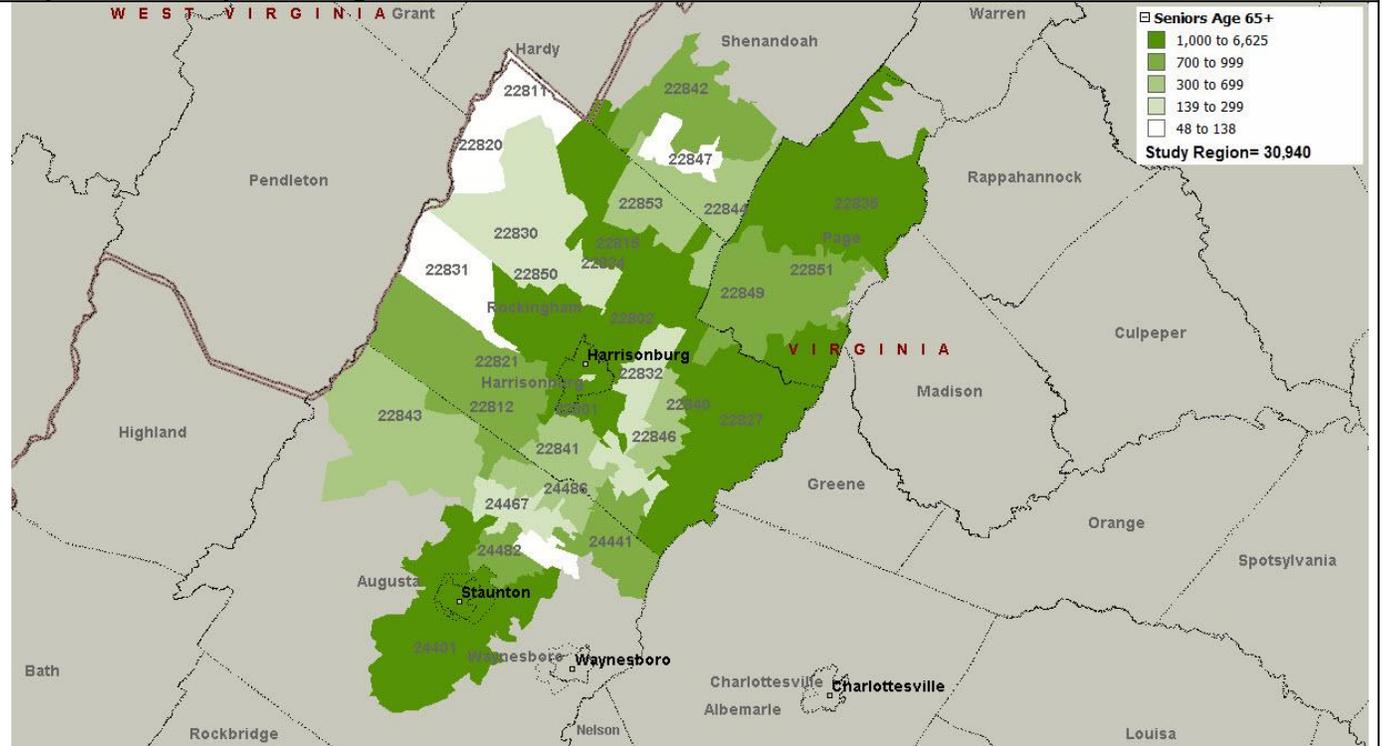
Map 2: Population Density (population per square mile), 2011



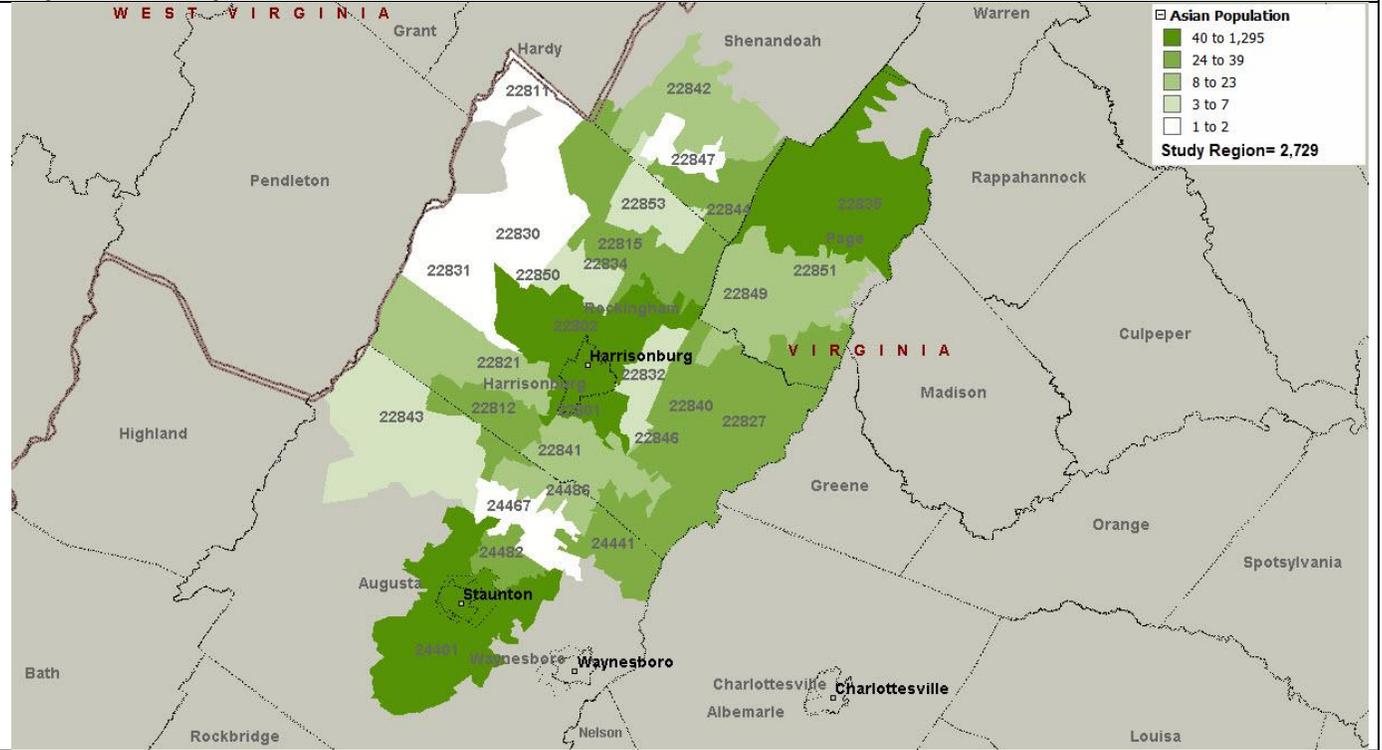
Map 3: Child Population Age 0-17, 2011



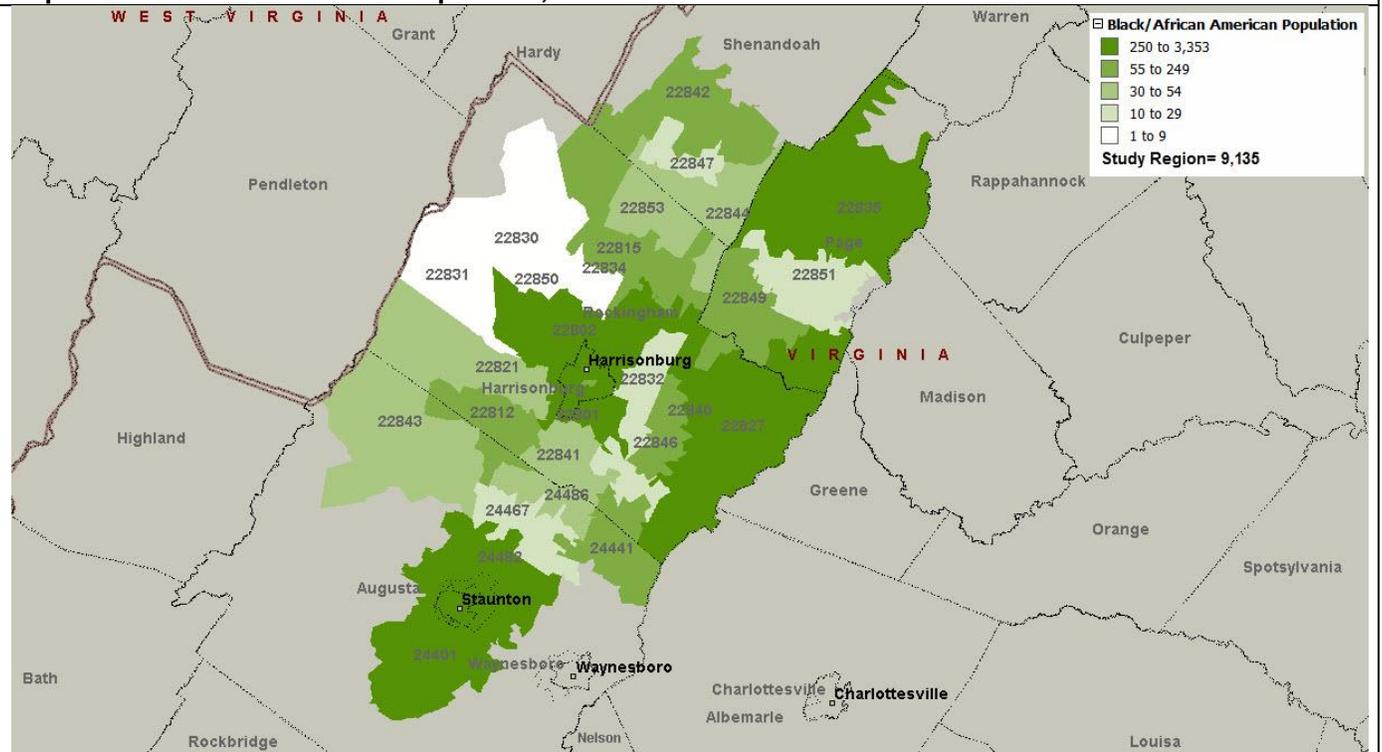
Map 4: Senior Population Age 65+, 2011



Map 5: Asian Population, 2011*

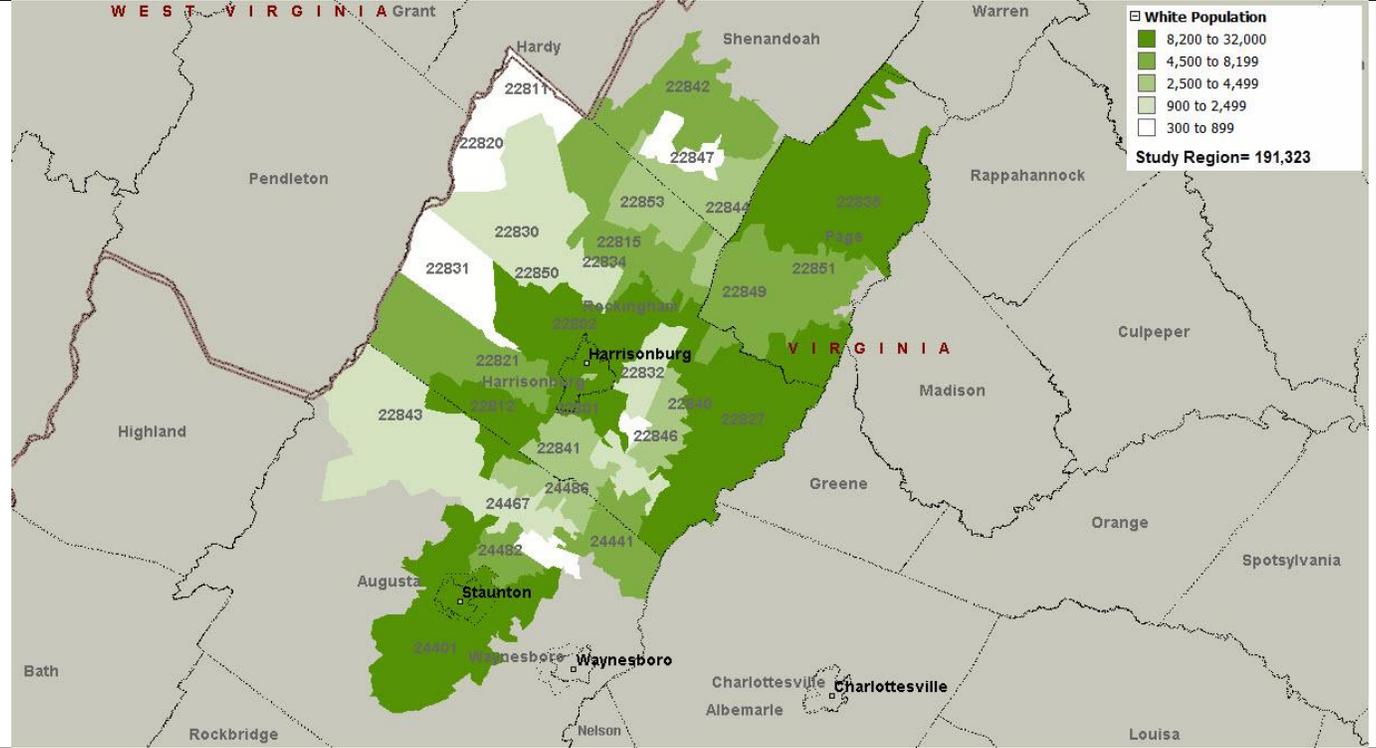


Map 6: Black/African American Population, 2011*

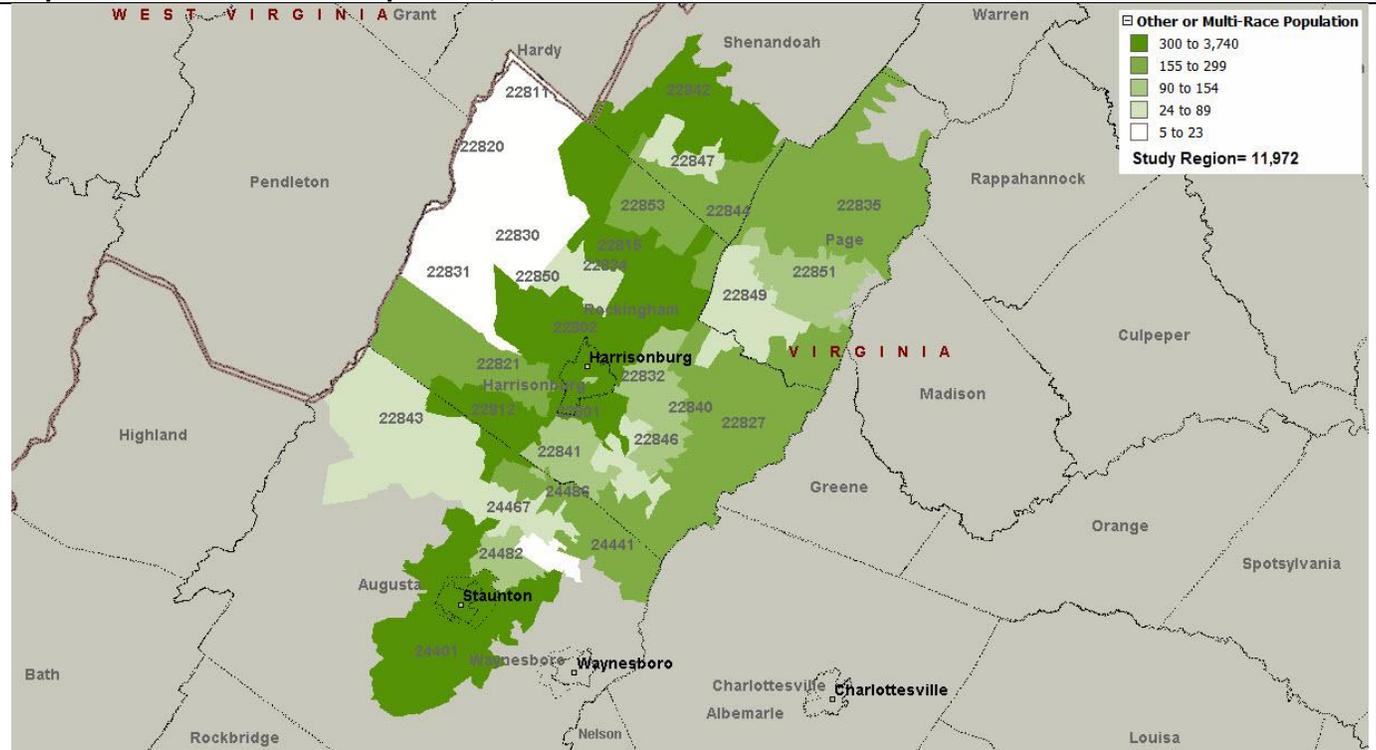


*Note: There were no estimated residents in these racial groups for zip code 22820.

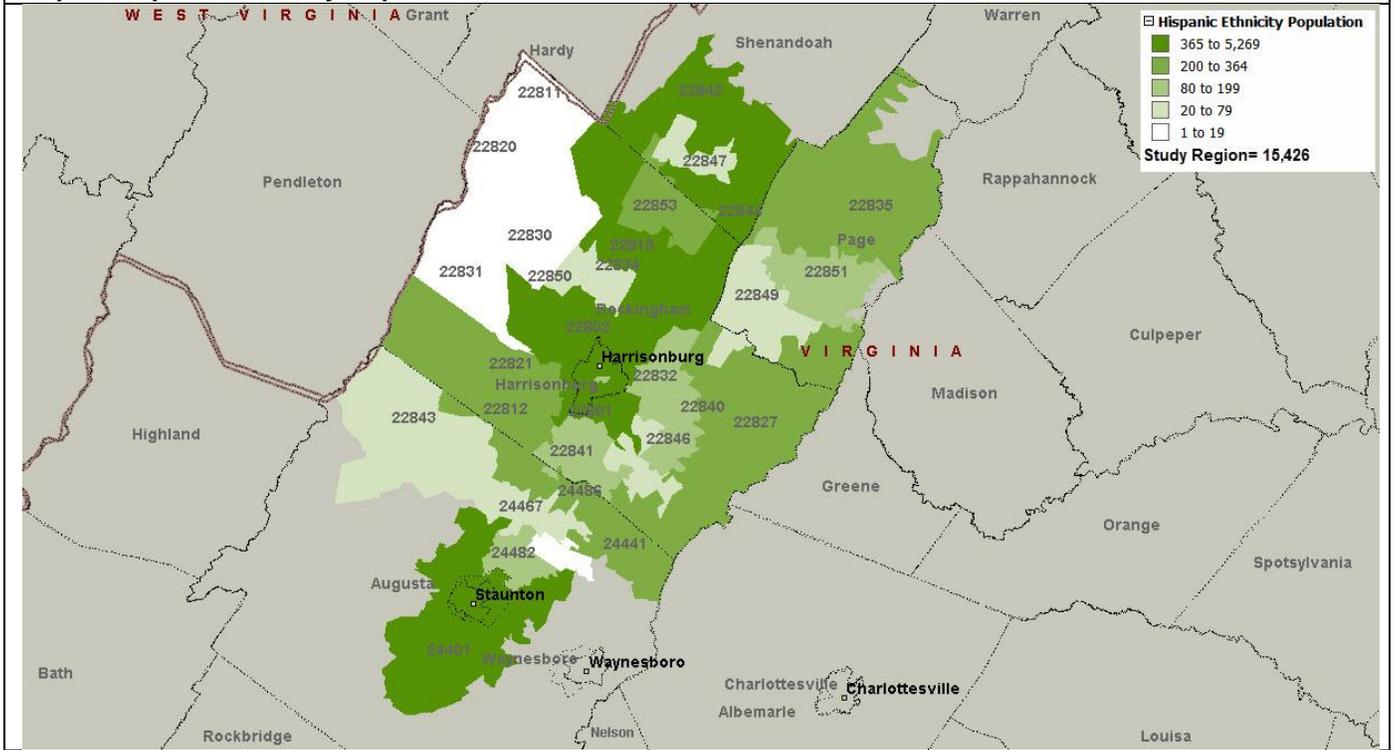
Map 7: White Population, 2011



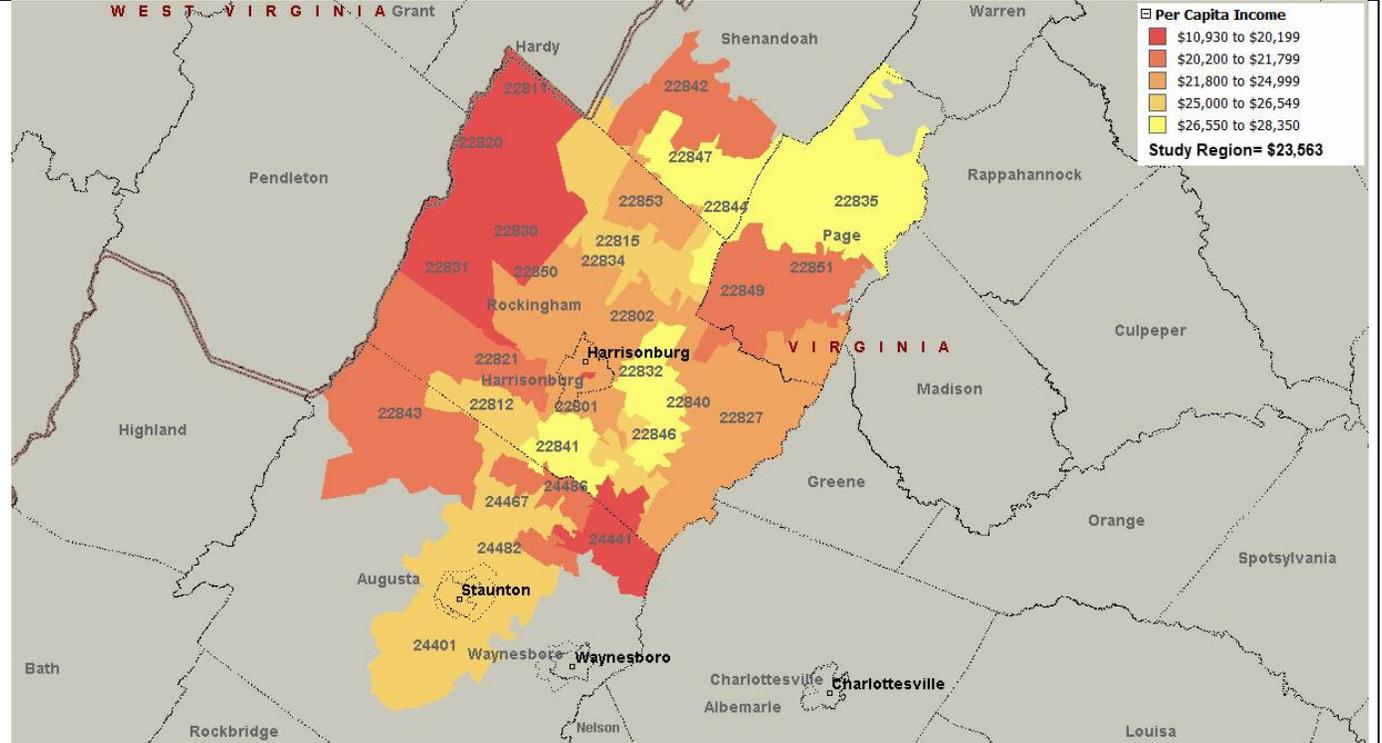
Map 8: Other or Multi-Race Population, 2011



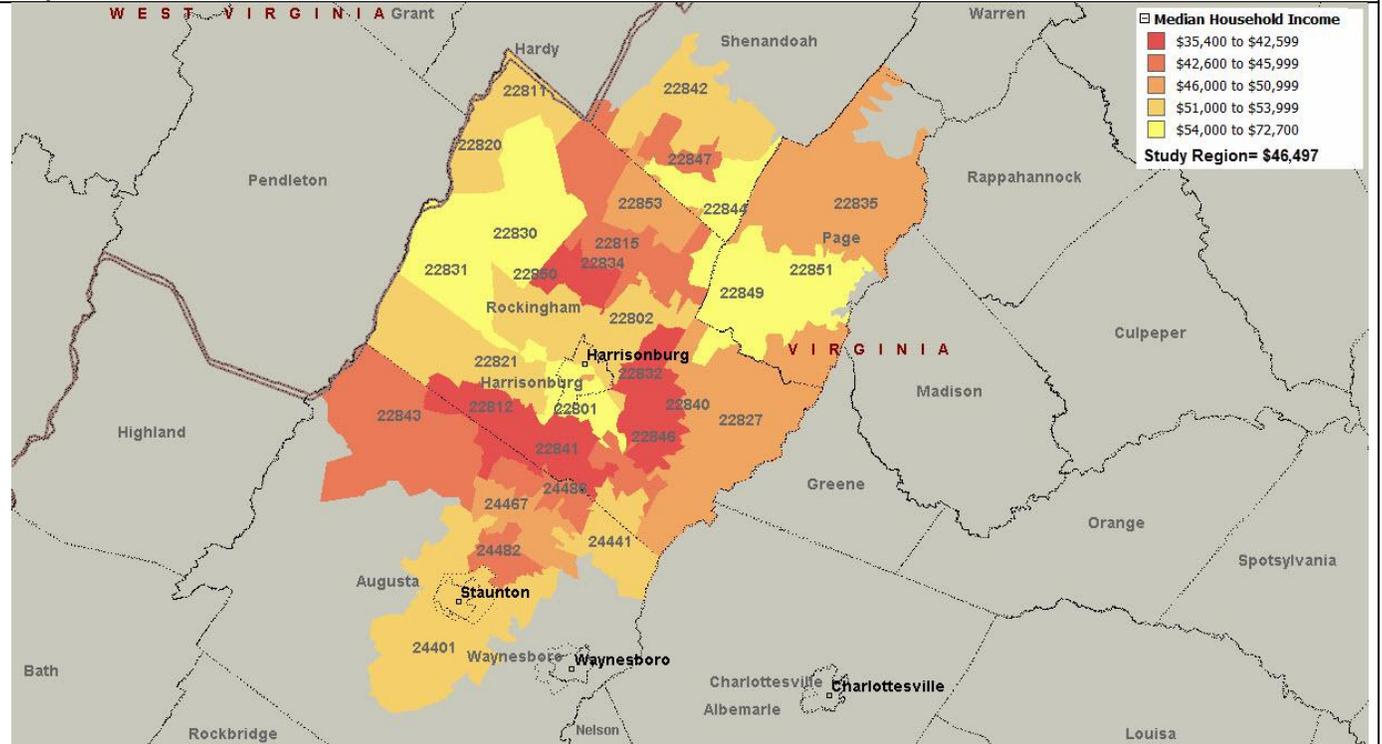
Map 9: Hispanic Ethnicity Population, 2011



Map 10: Per Capita Income, 2011*

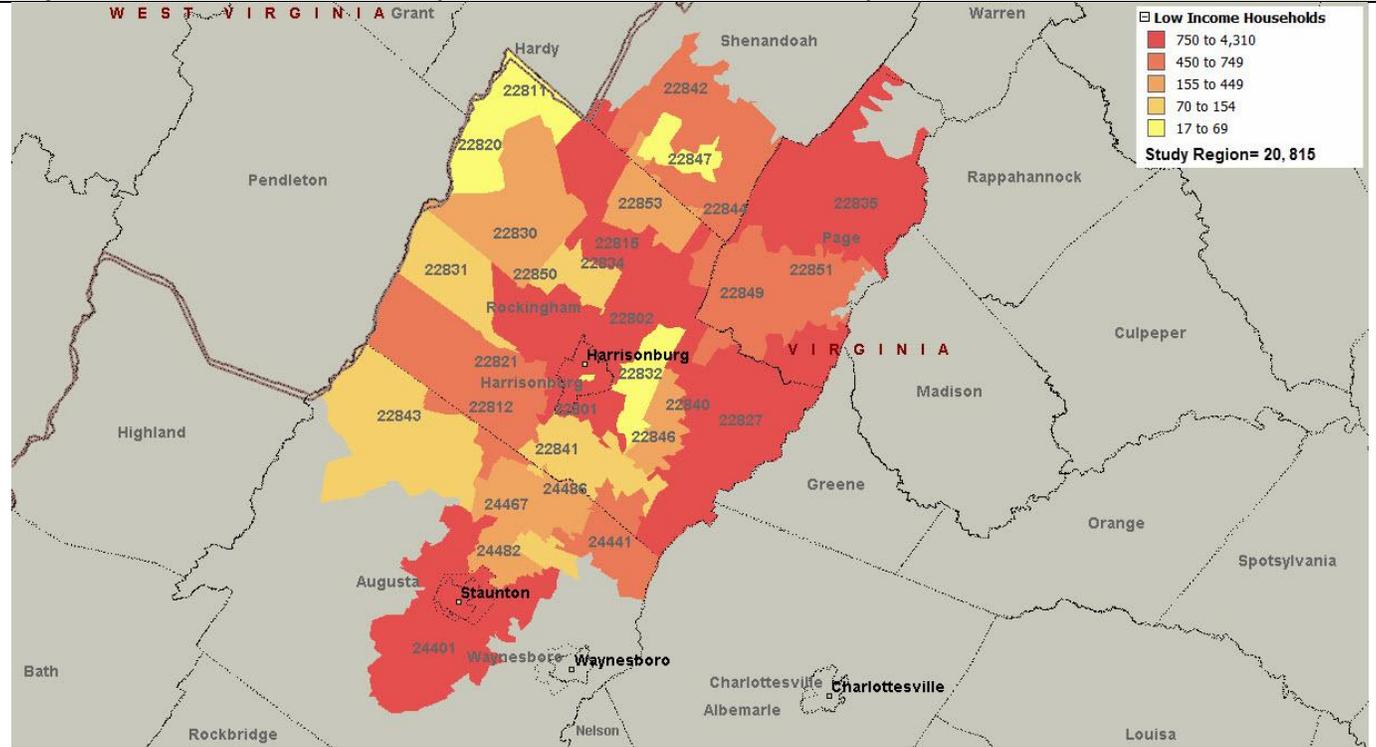


Map 11: Median Household Income, 2011*

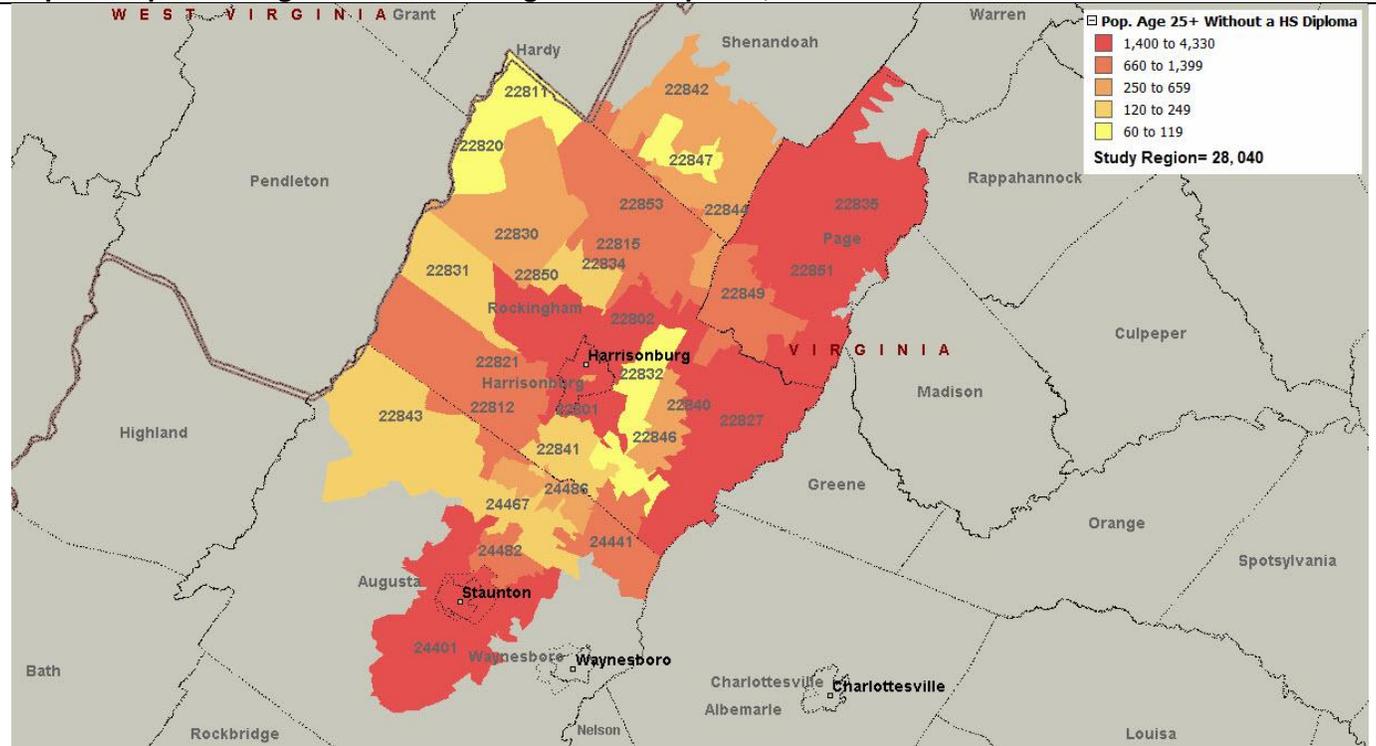


*Red indicates an area of higher risk on these maps.

Map 12: Low Income Households (Households with Income <\$25,000), 2011

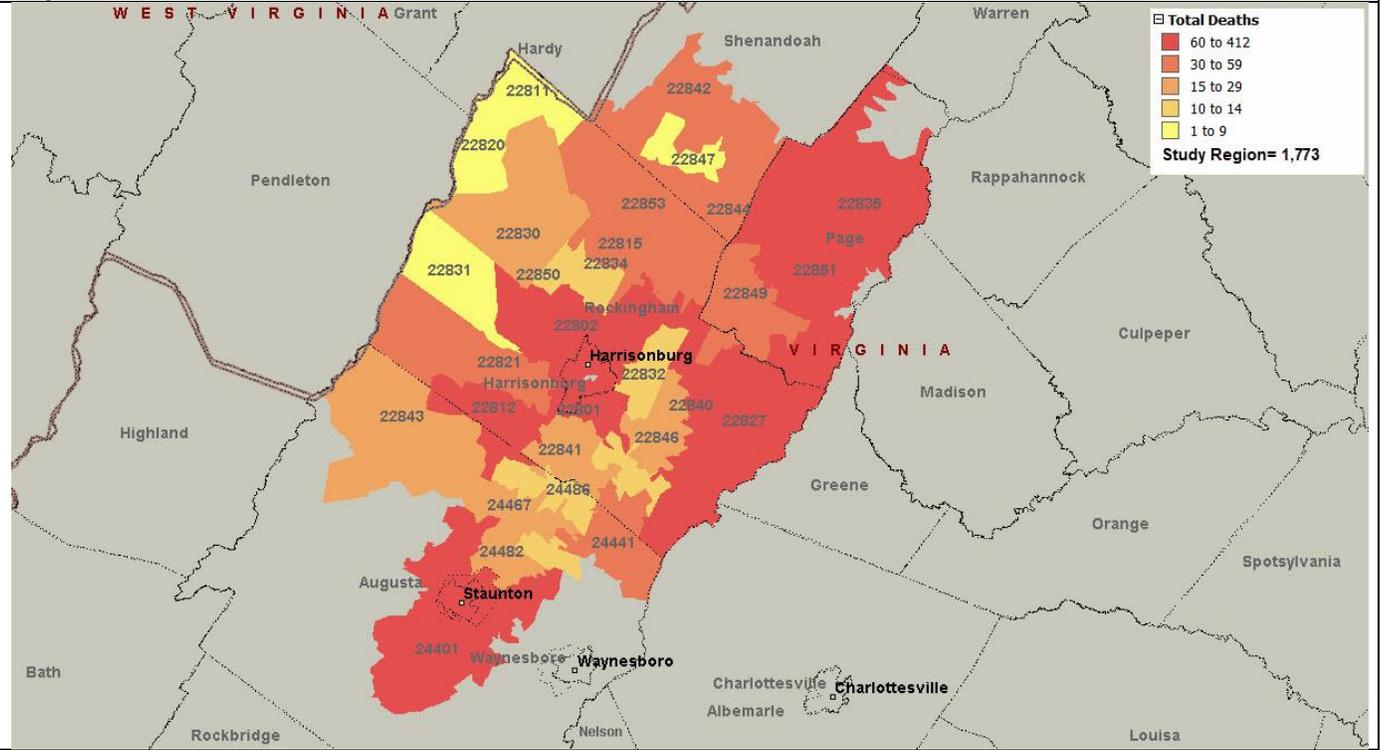


Map 13: Population Age 25+ Without a High School Diploma, 2011

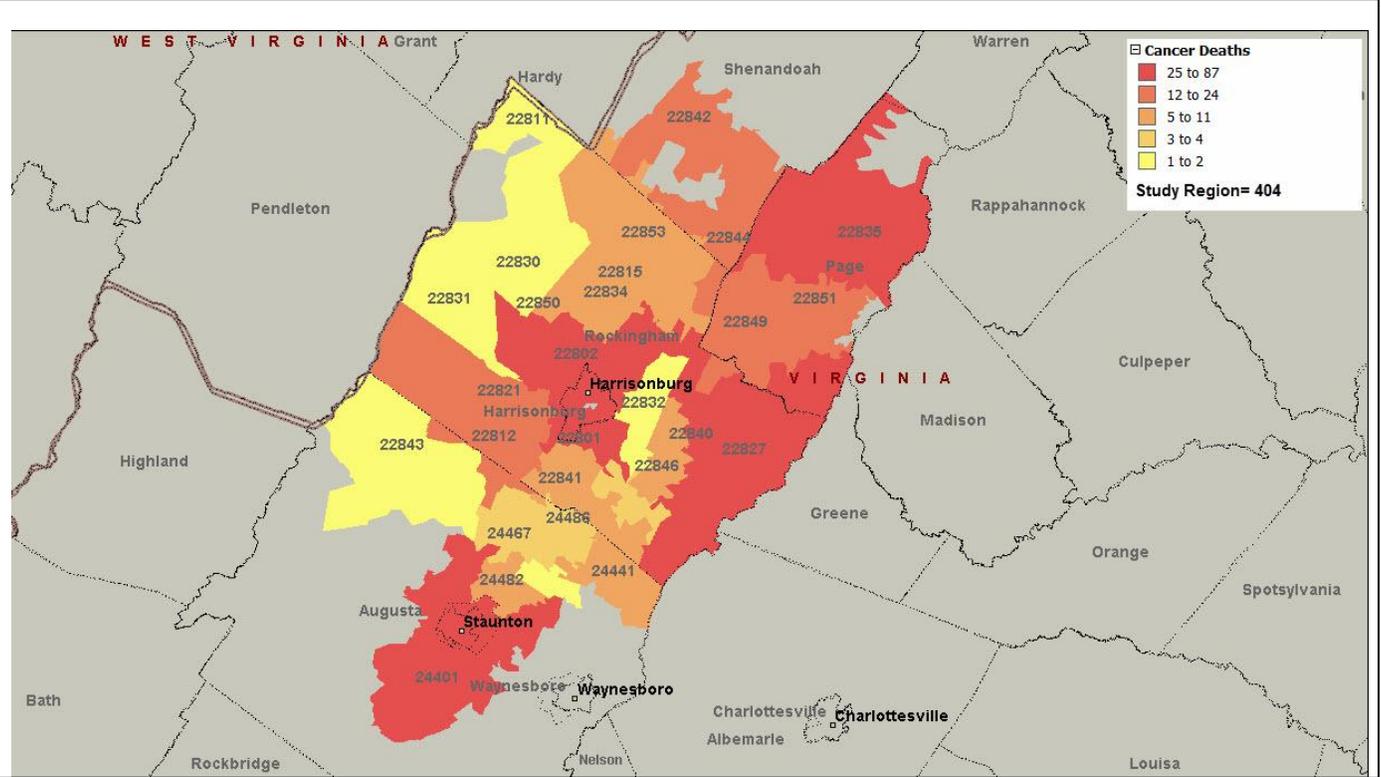


*Red indicates an area of higher risk on these maps.

Map 14: Total Deaths, 2010*



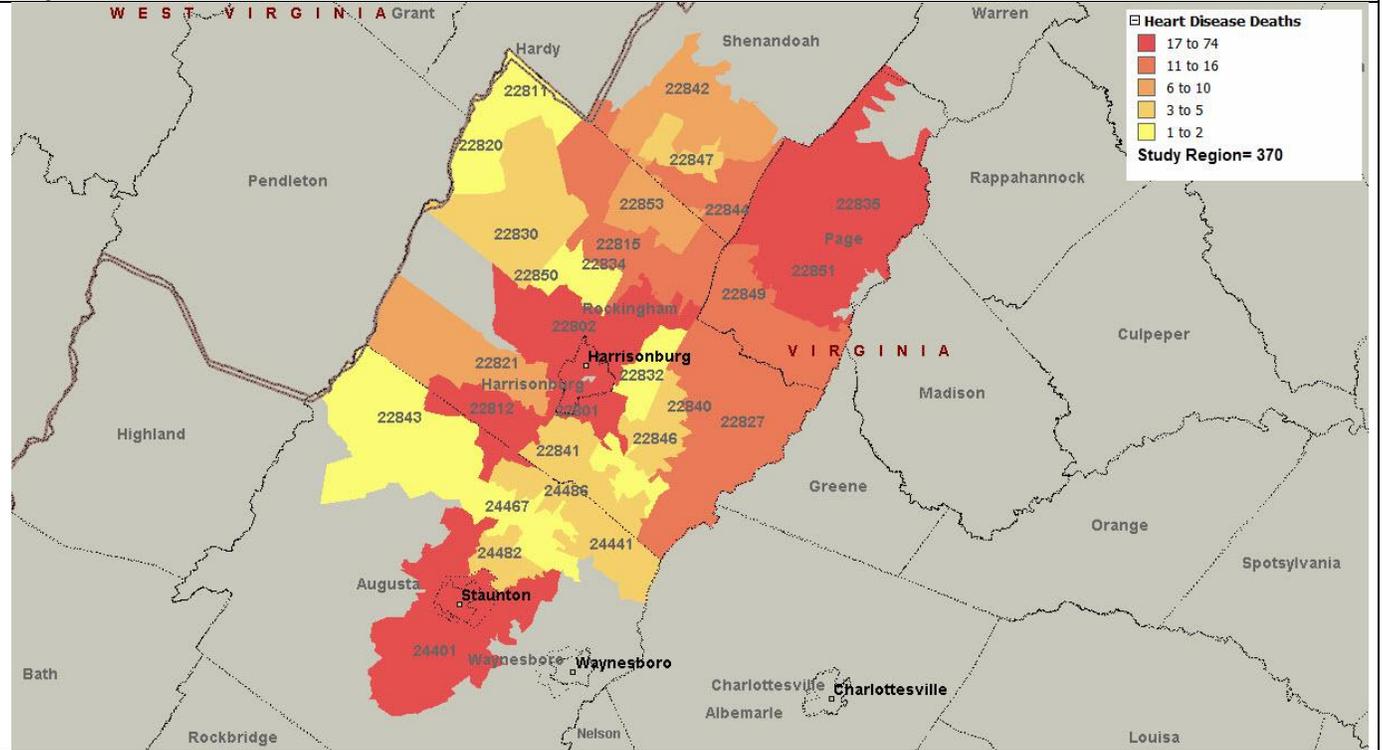
Map 15: Malignant Neoplasm (Cancer) Deaths, 2010**



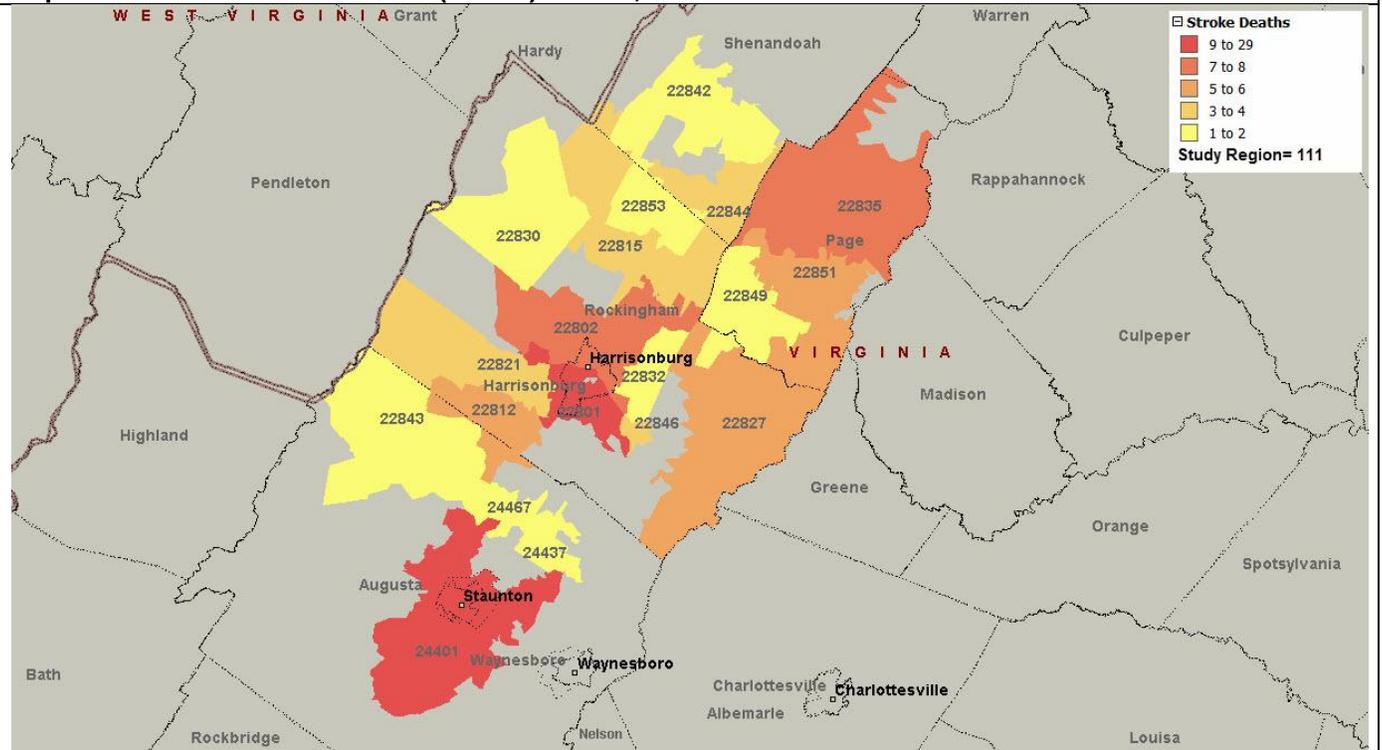
* There were no reported deaths for zip code 22807.

** There were no reported cancer deaths for zip codes 22820, 22807 and 2284.

Map 16: Heart Disease Deaths, 2010*



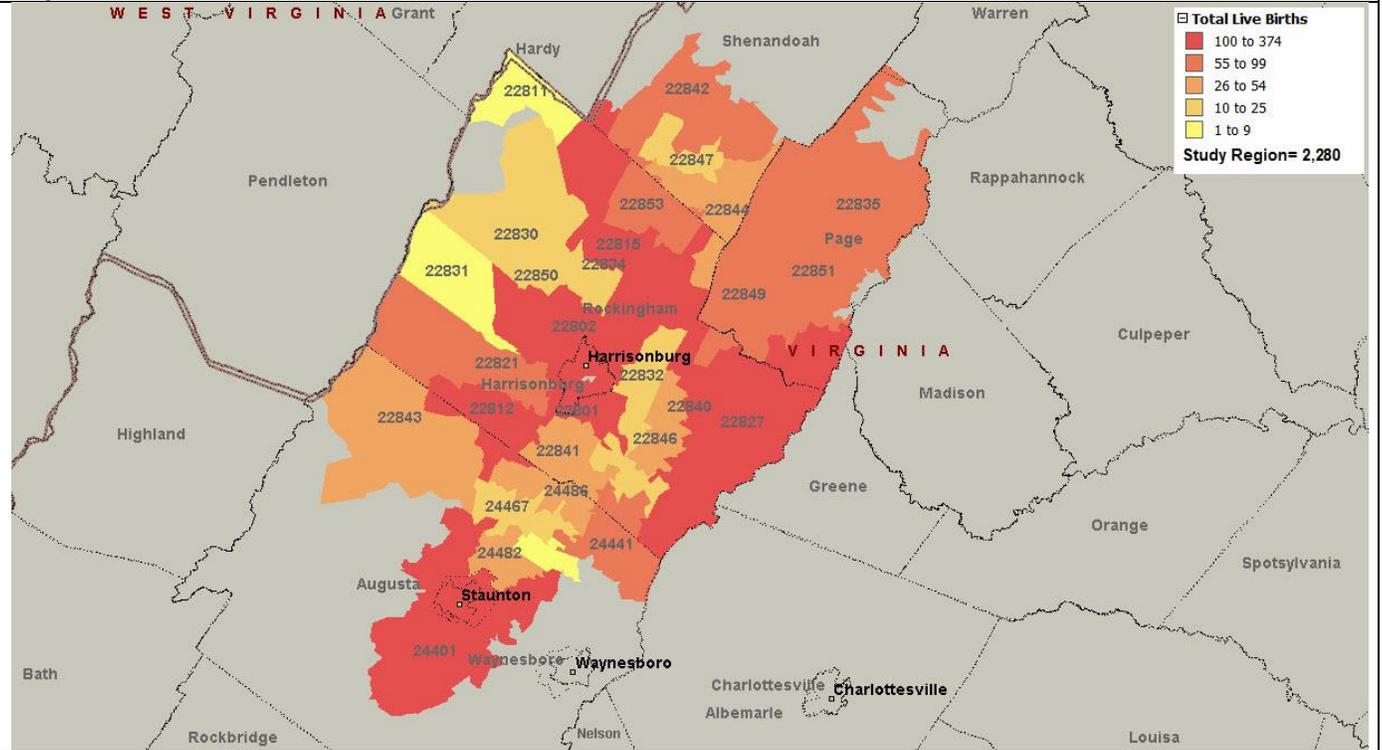
Map 17: Cerebrovascular Disease (Stroke) Deaths, 2010**



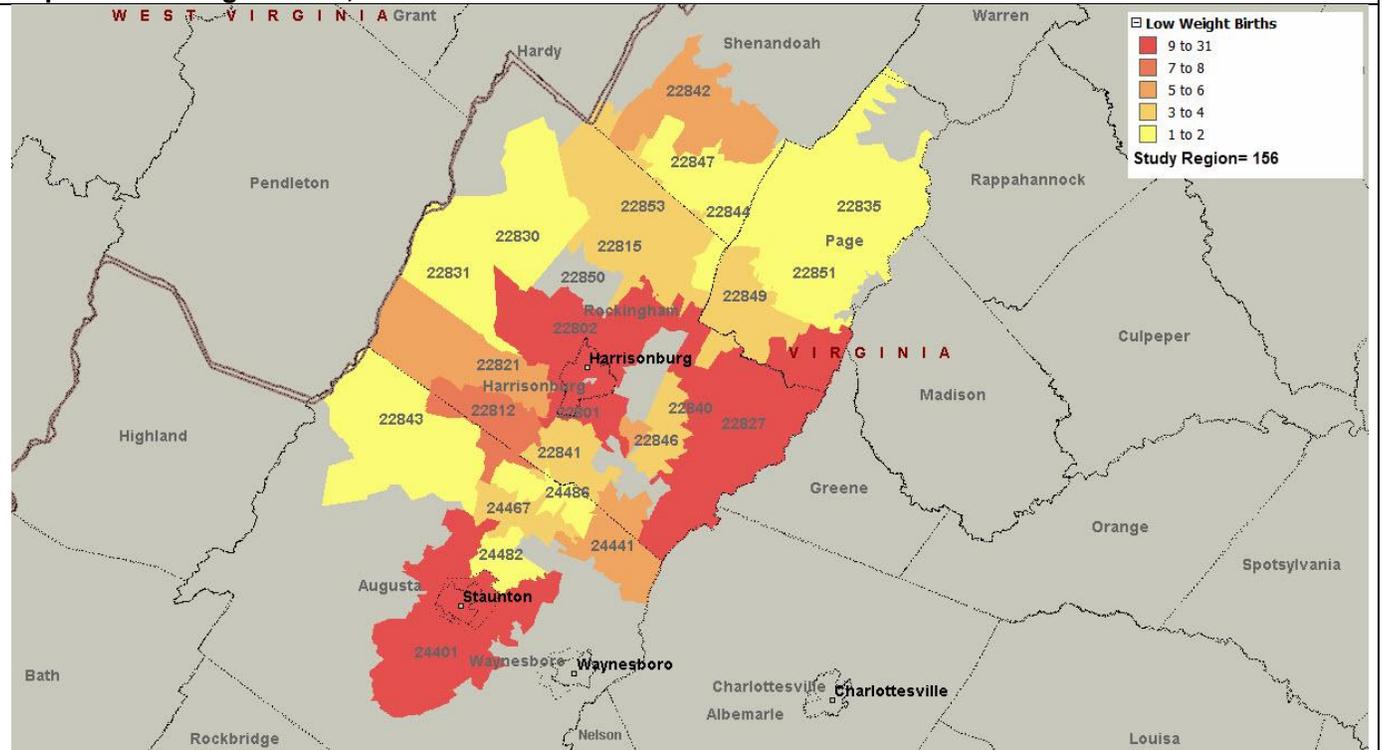
* There were no reported heart disease deaths for zip codes 22807 and 22831.

**There were no reported stroke deaths for zip codes 22807, 22831, 22820, 22811, 22850, 24471, 22834, 22847, 22841, 22840, 24486, 24441 and 24482.

Map 18: Total Live Births, 2010*



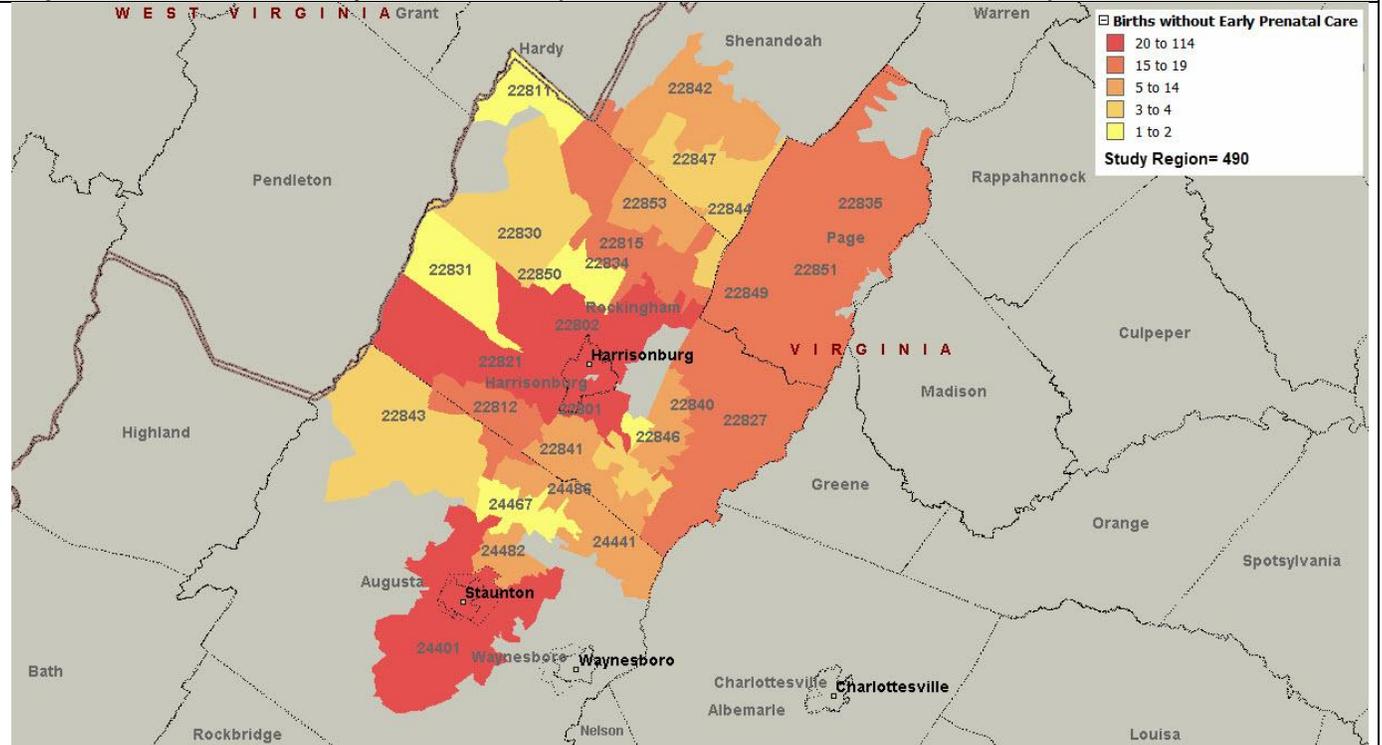
Map 19: Low Weight Births, 2010**



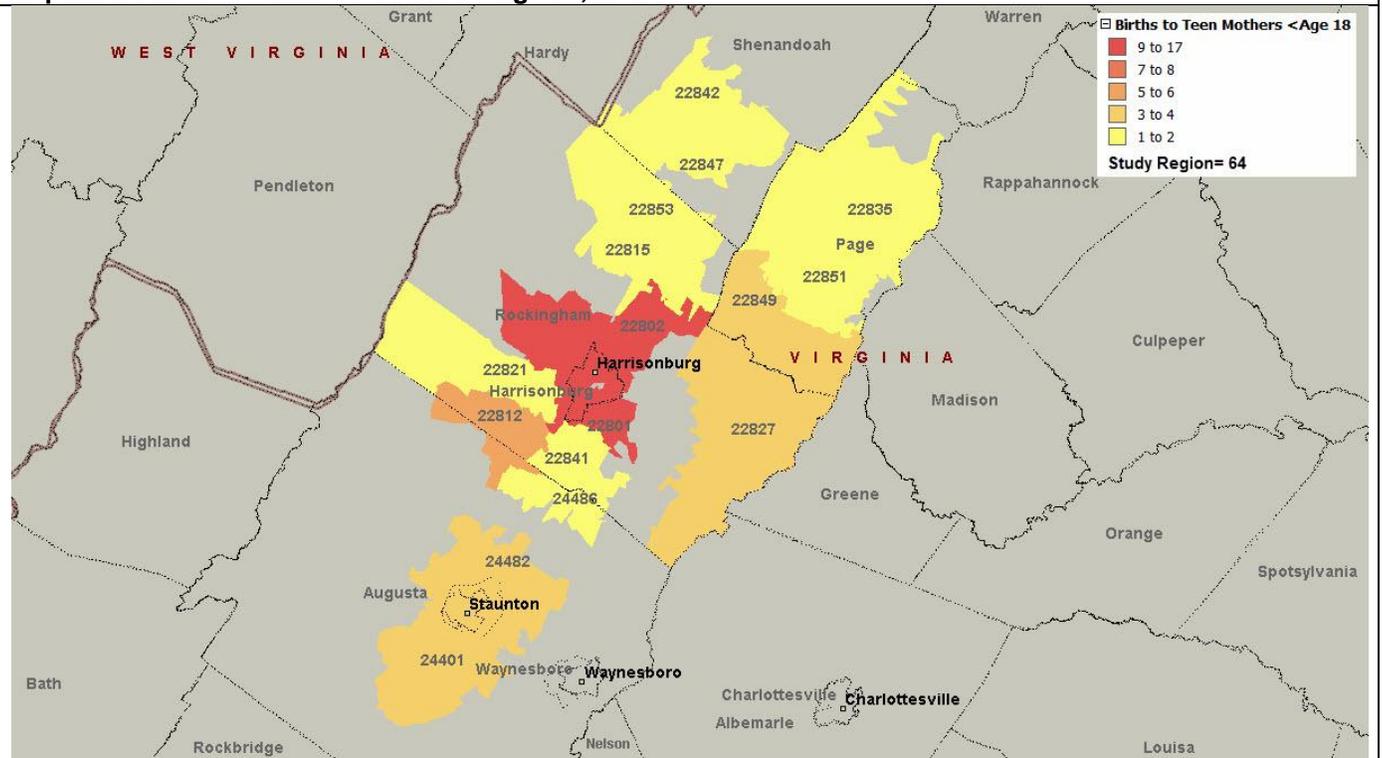
* There were no reported live births for zip codes 22807 and 22820.

**There were no reported low weight births for zip codes 22807, 22831, 22820, 22811, 22850, 4471, 22834, 22847, 22841, 22840, 24486, 24441 and 24482.

Map 20: Births Without Early Prenatal Care (No Prenatal Care in the First 13 Weeks), 2010*



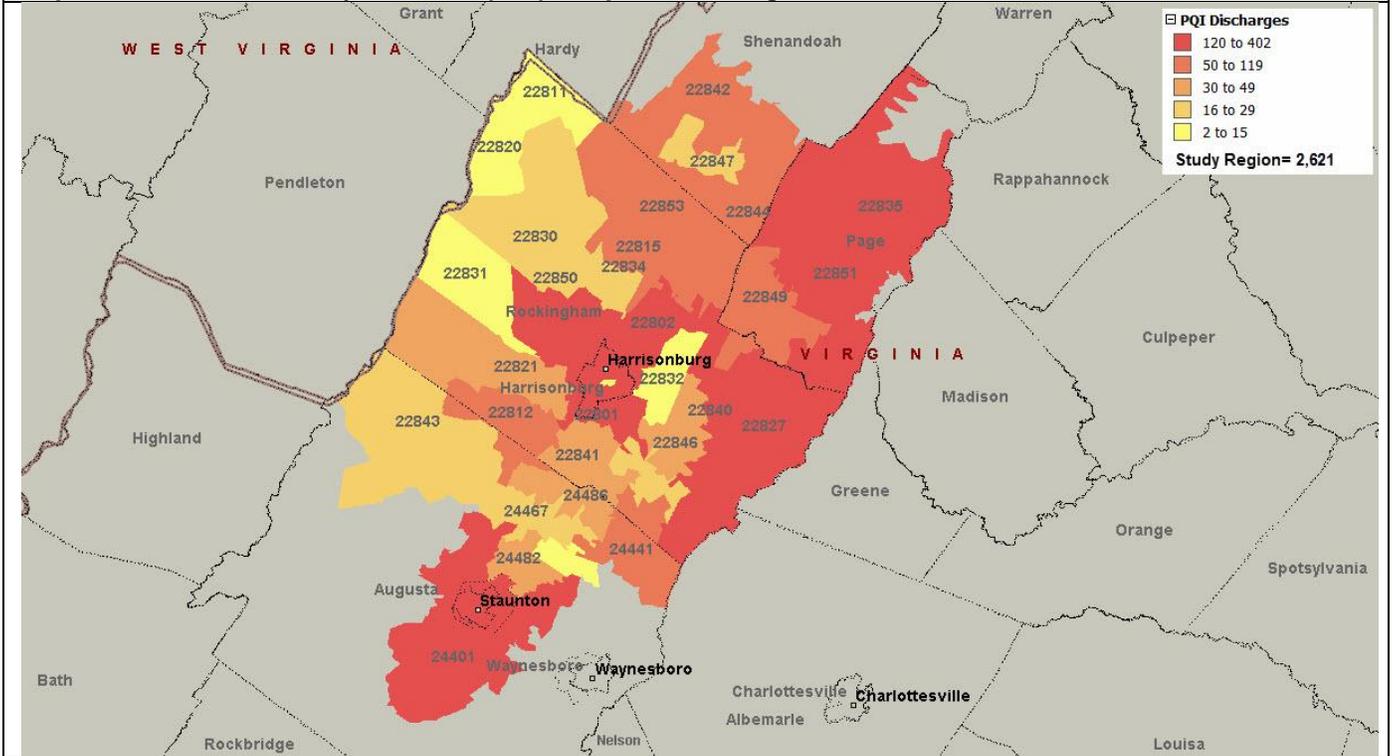
Map 21: Births to Teen Mothers Under Age 18, 2010**



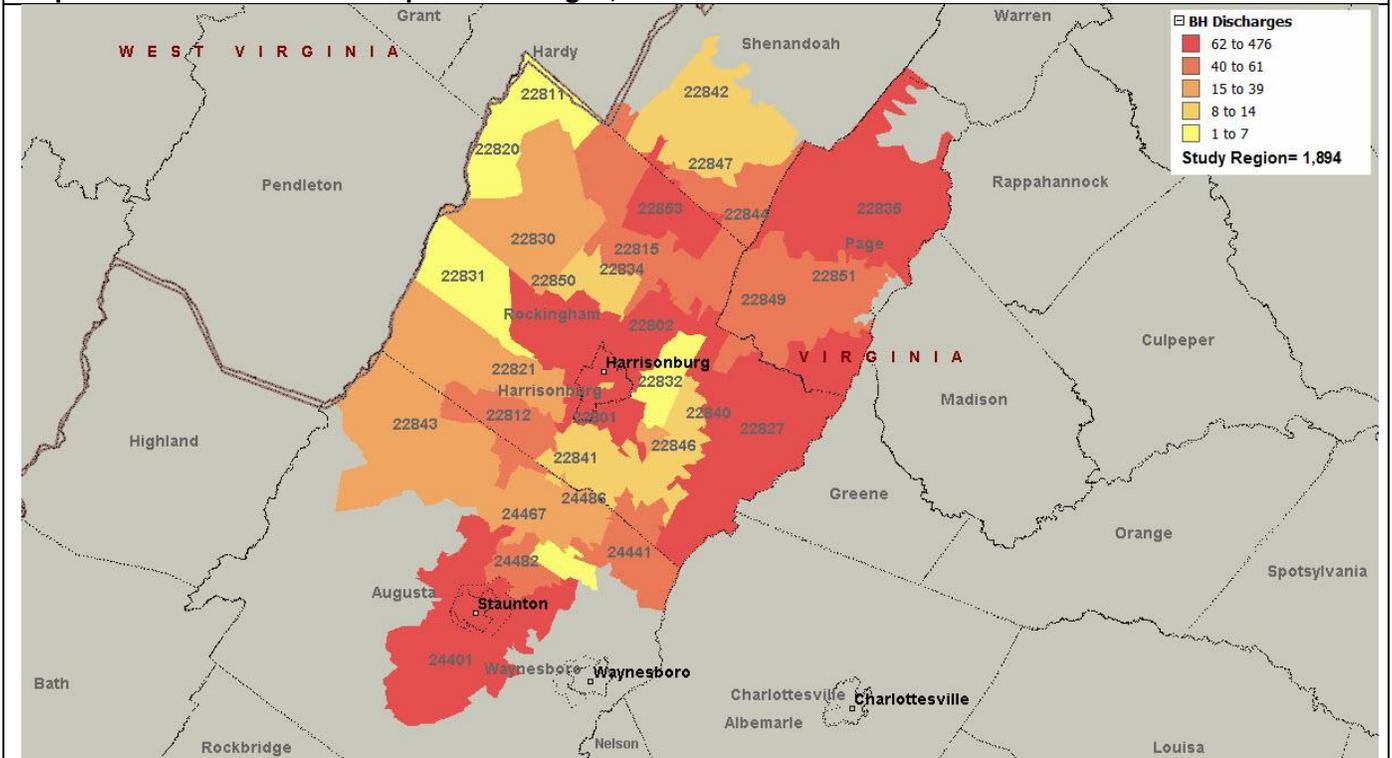
* There were no reported births without early prenatal care for zip codes 22807, 22820, 24437, and 22832.

**There were no reported births to teen mothers under age 18 for zip codes 22807, 22820, 24437, 22832, 22831, 22811, 22850, 22834, 24467, 22846, 22830, 24471, 22843, 22844, 22840, 24441.

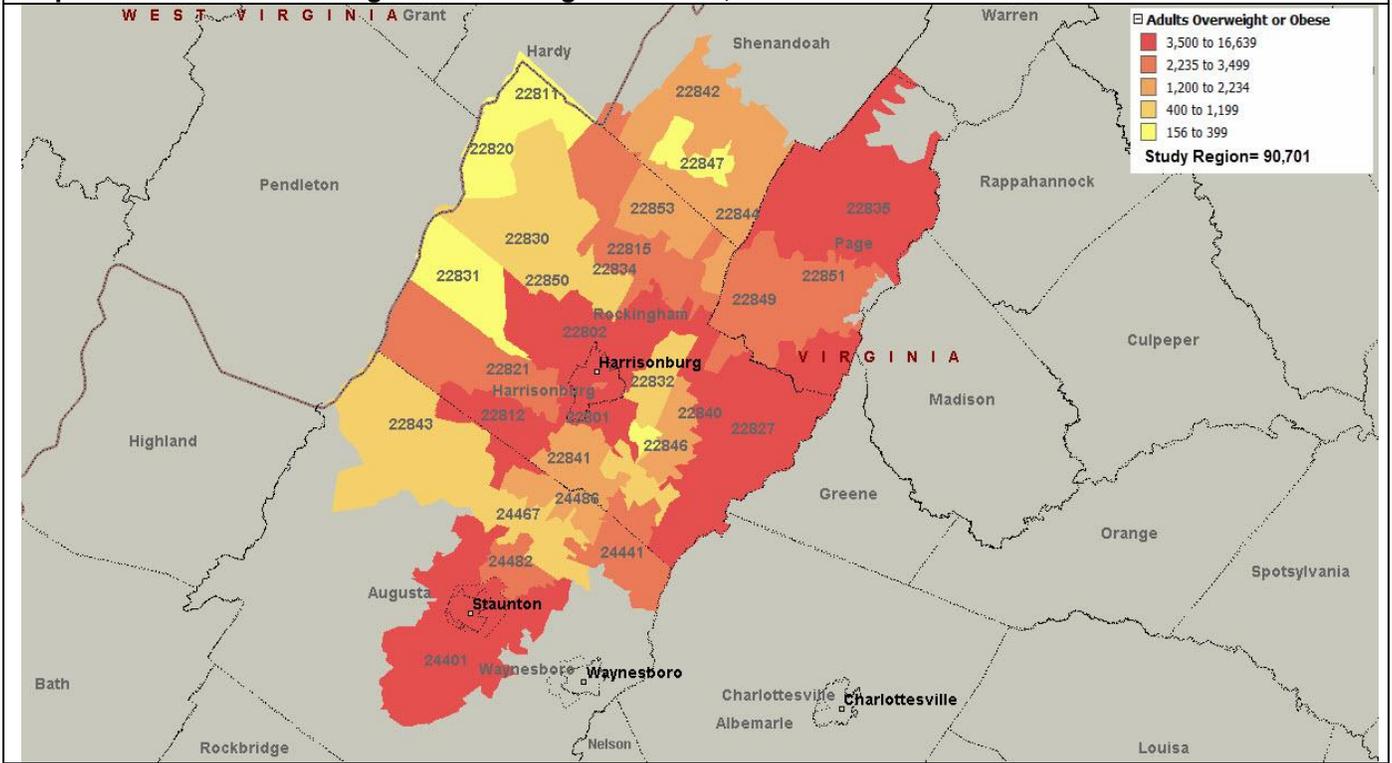
Map 22: Prevention Quality Indicator (PQI) Hospital Discharges, 2010



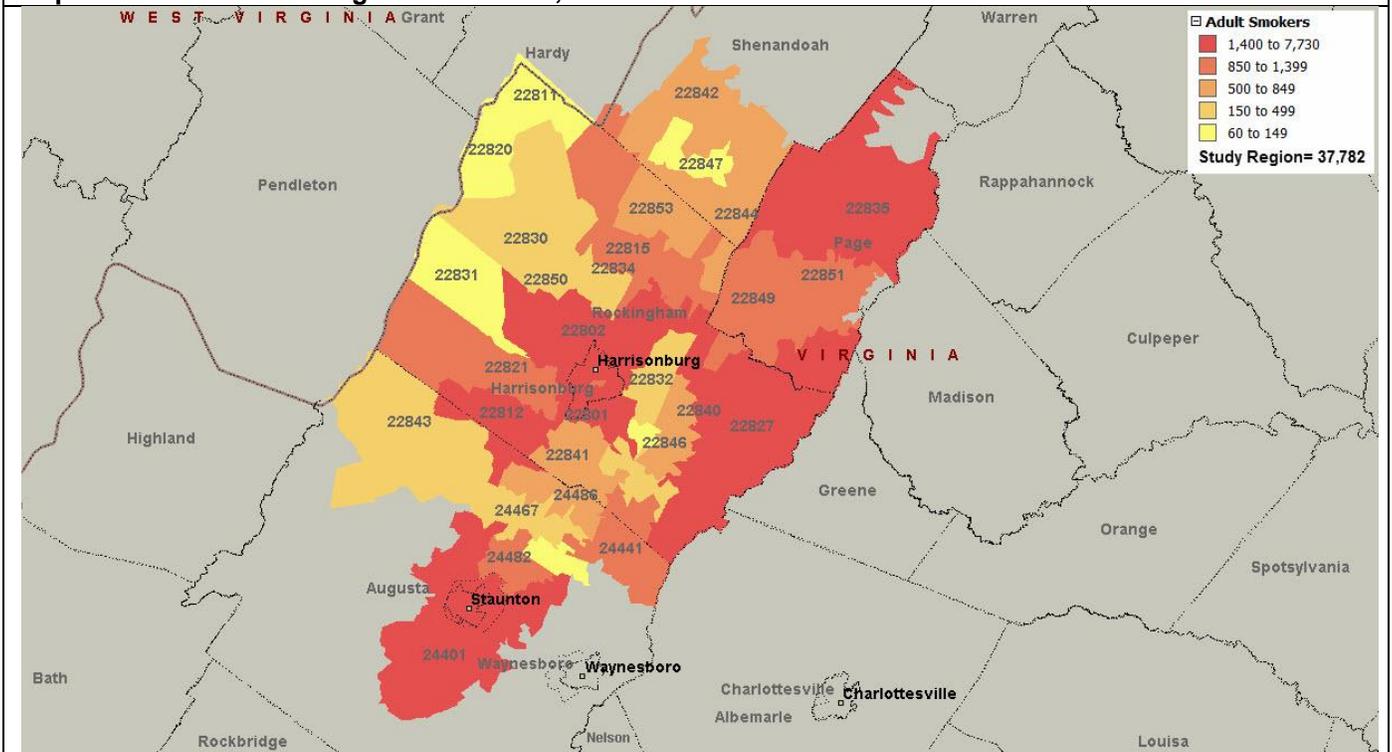
Map 23: Behavioral Health Hospital Discharges, 2010



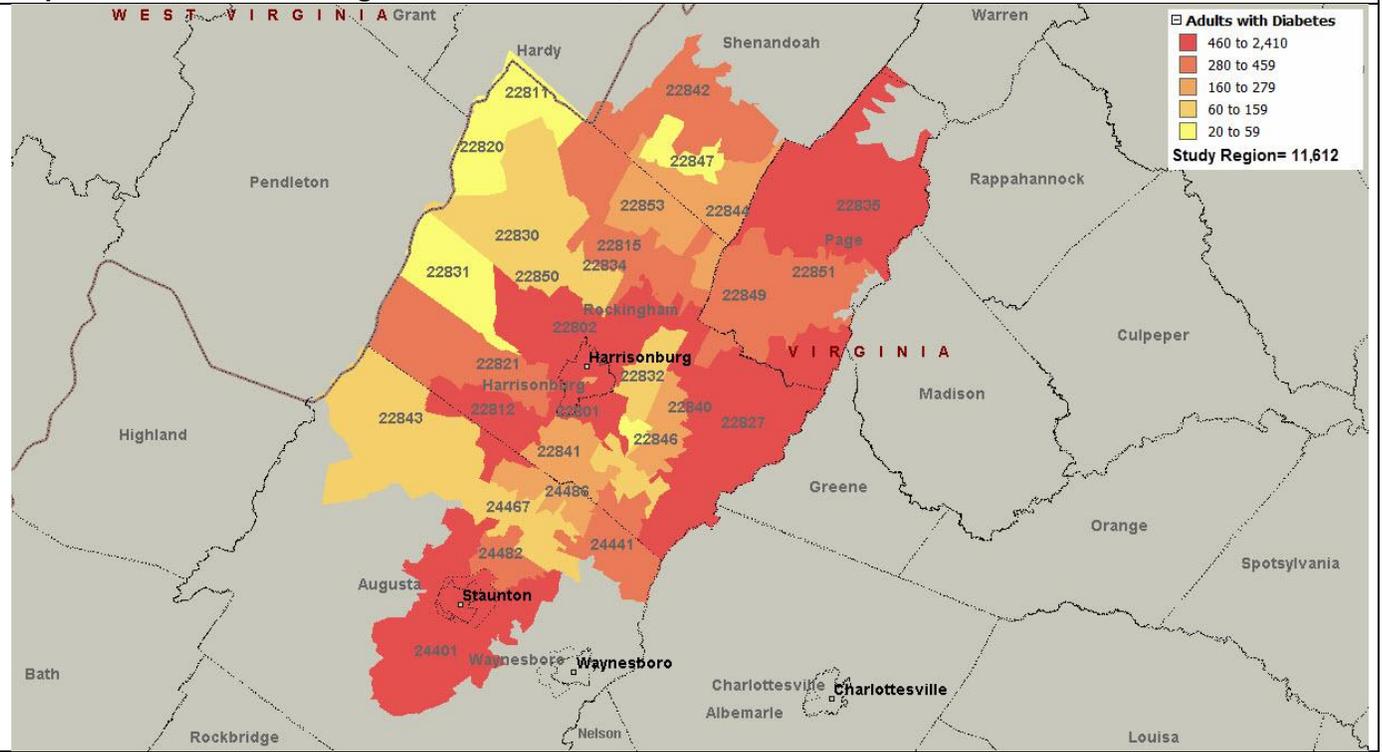
Map 24: Estimated Adults Age 18+ Overweight or Obese, 2011



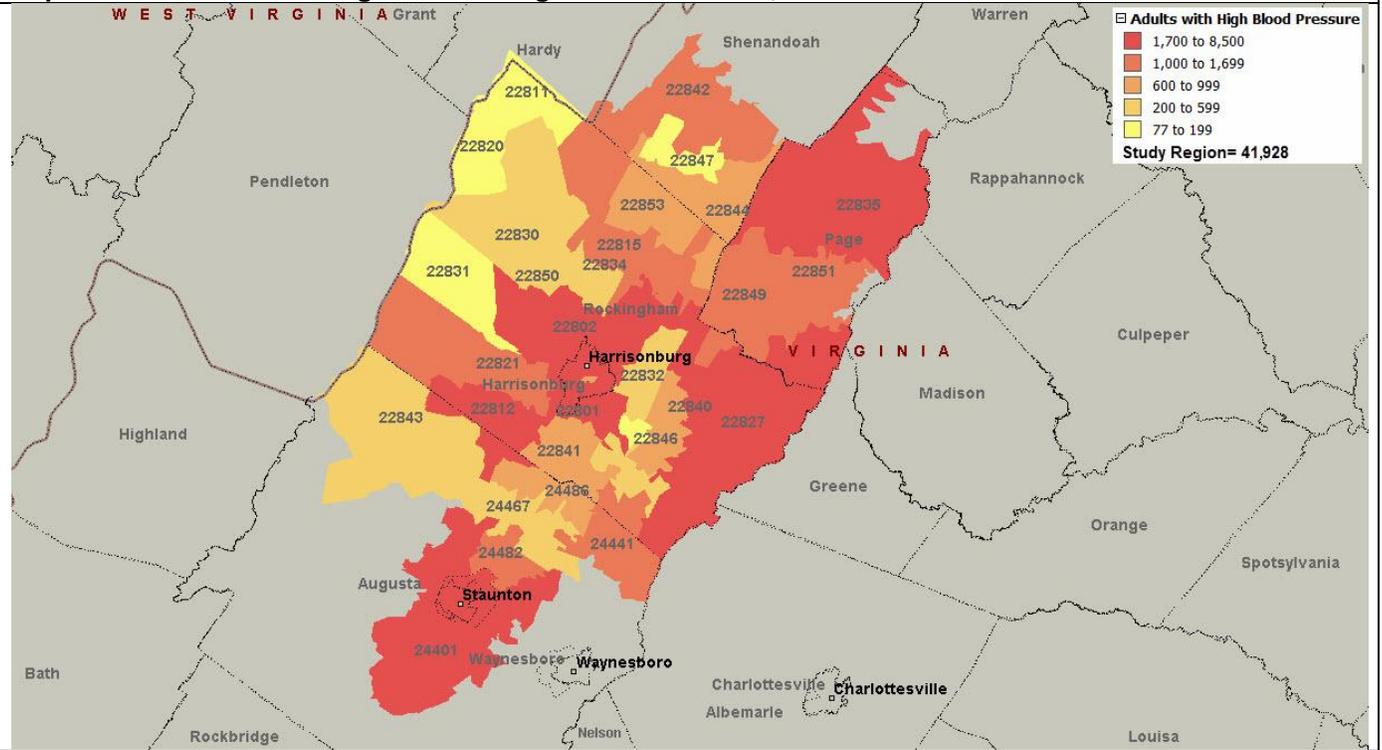
Map 25: Estimated Adult Age 18+ Smokers, 2011



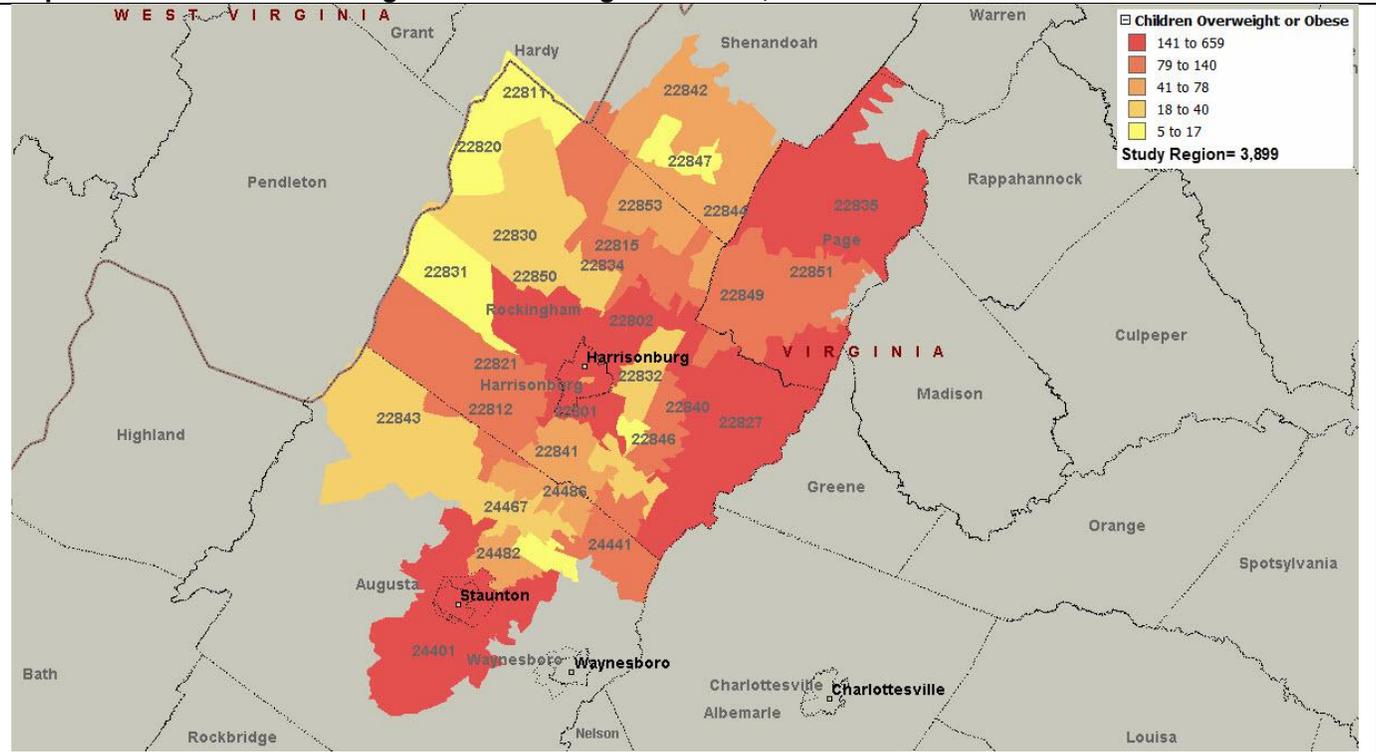
Map 26: Estimated Adults Age 18+ with Diabetes, 2011



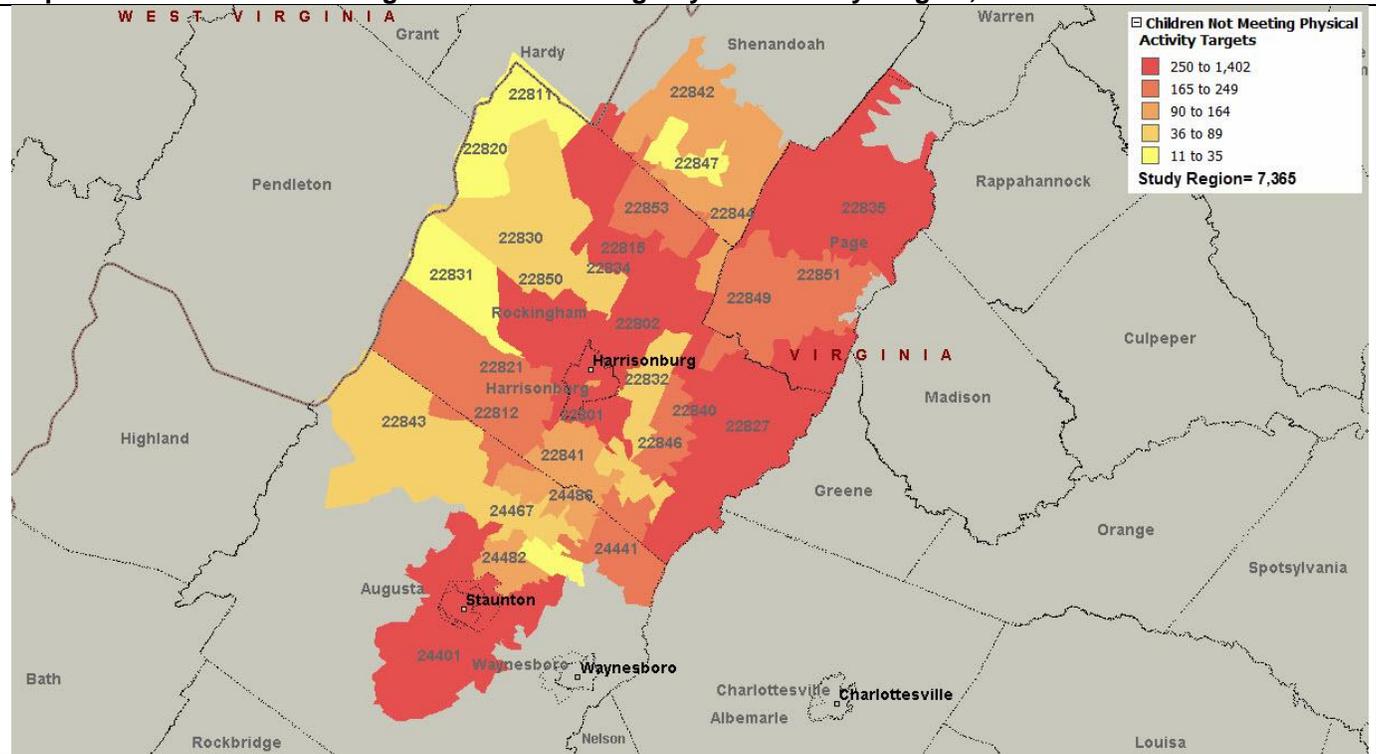
Map 27: Estimated Adults Age 18+ with High Blood Pressure, 2011



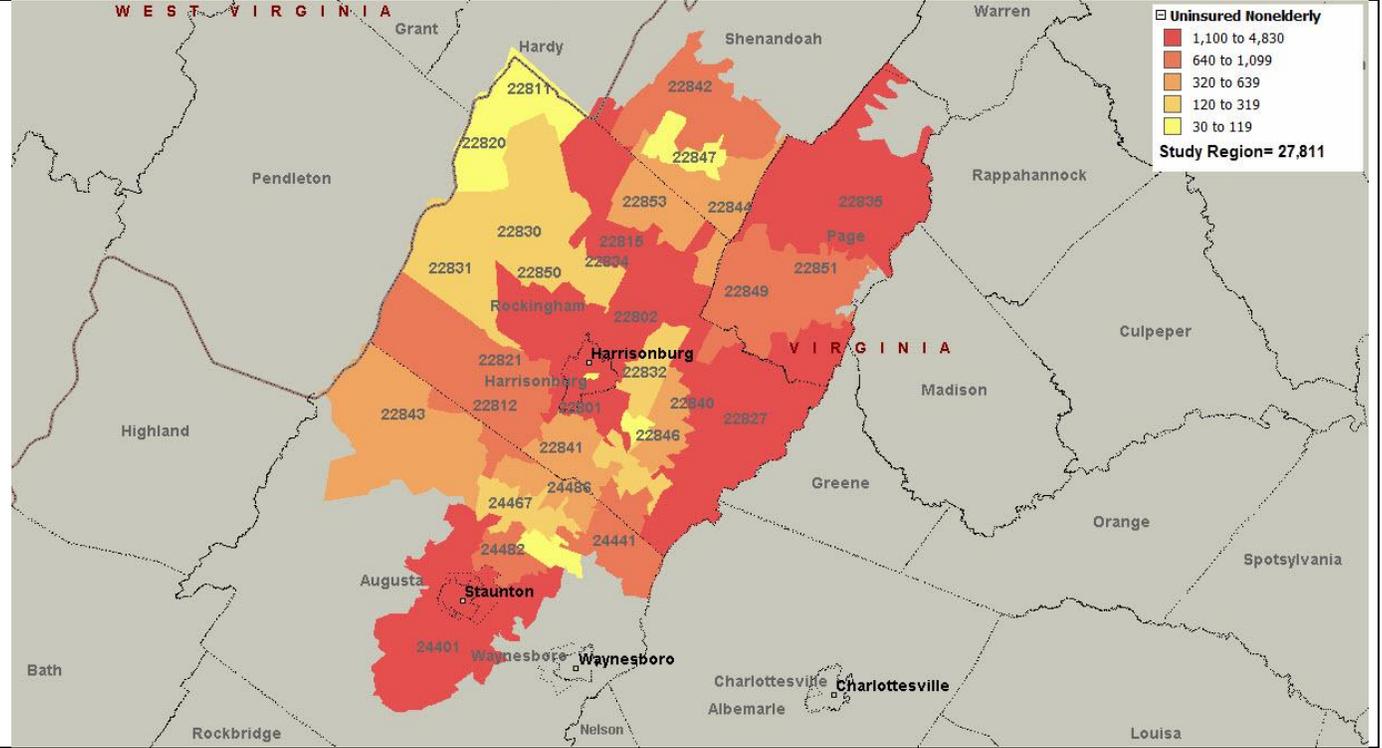
Map 28: Estimated Children Age 10-17 Overweight or Obese, 2011



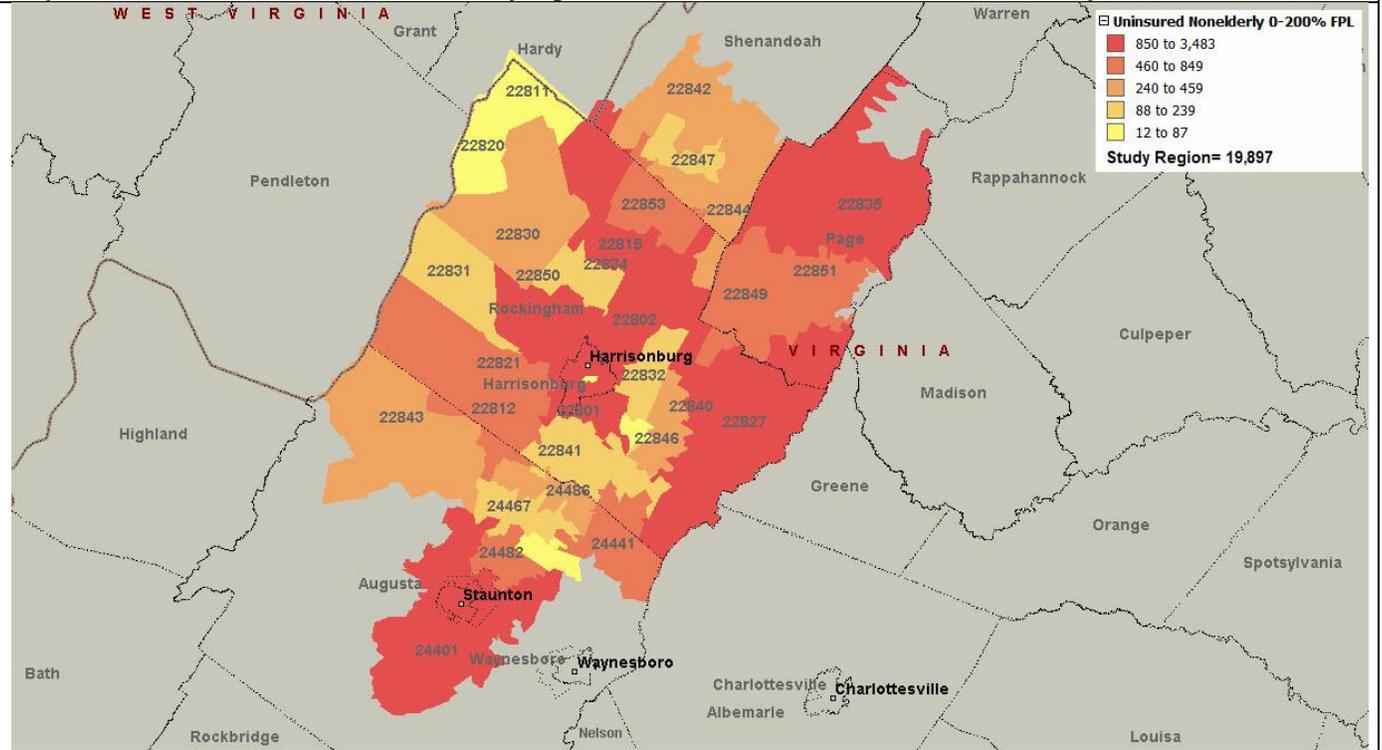
Map 29: Estimated Children Age 10-17 Not Meeting Physical Activity Targets, 2011



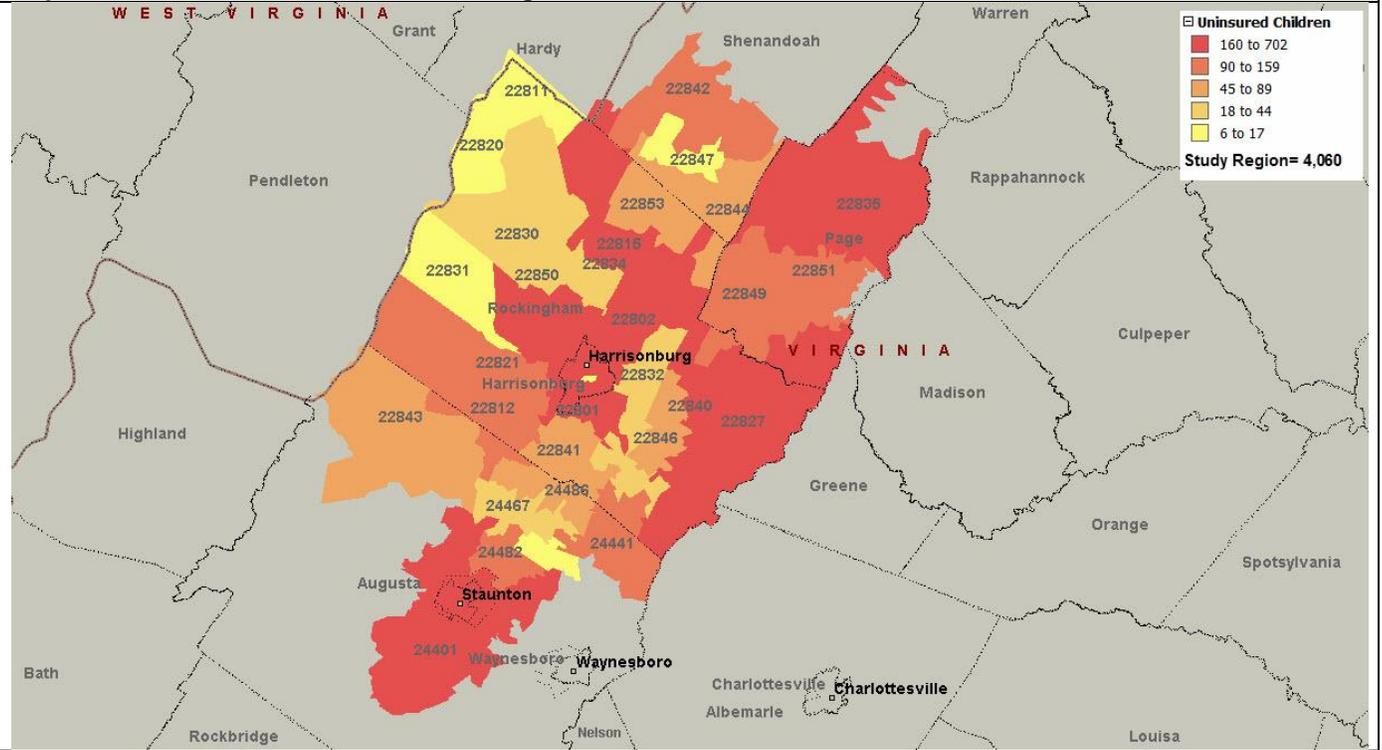
Map 30: Estimated Uninsured Nonelderly Age 0-64, 2011



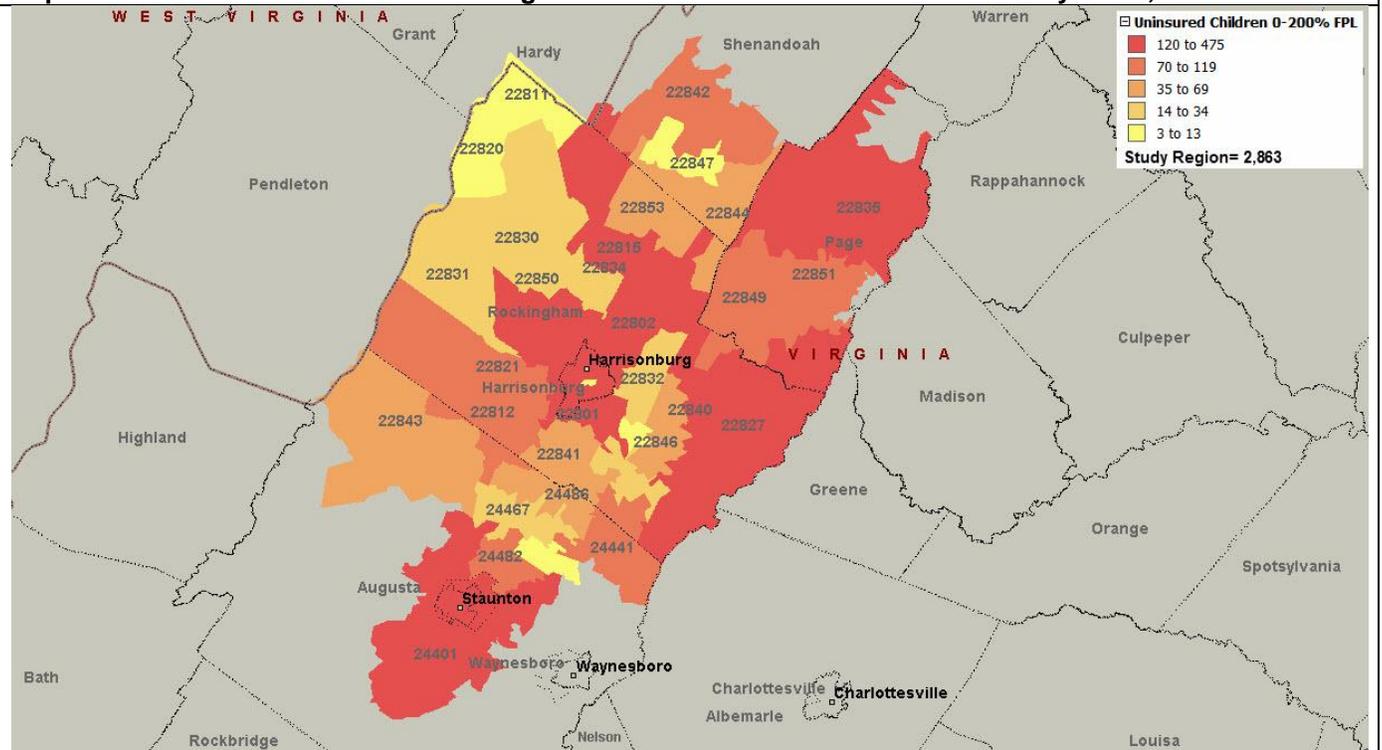
Map 31: Estimated Uninsured Nonelderly Age 0-64 and Income 0-200% Federal Poverty Level, 2011



Map 32: Estimated Uninsured Children Age 0-18, 2011



Map 33: Estimated Uninsured Children Age 0-18 and Income 0-200% Federal Poverty Level, 2011



APPENDIX B: Community Insight Profile-Additional Ideas and Suggestions for Improving Community Health

Survey respondents were given the option to submit additional ideas and suggestions for improving community health. The open-ended responses are listed below.

Ideas and Suggestions for Improving Community Health	
Response	
1	<p>1) It is important that persons in the community sense that they are empowered to lead healthy lives. That means the resources needed for that to happen need to be easily available and affordable. RMH cannot empower folks but it can help establish conditions in which persons can empower themselves. And it can help offer affordable accessible services. Too often hospital help is "top down" and feels like a scolding parent. The approach that the "doctor knows best" or the "nurse knows best" does not motivate people to live healthy lives. Health care providers need to think outside their normal boxes and professional worldviews.</p> <p>2) It would be helpful if RMH would include Advanced Practice Nurses, such as Nurse Practitioners in their emergency department to provide non-emergency services so physicians can focus on those truly needing the practice skills of emergency prepared physicians. It should decrease the waiting times and increase the quality of services. RMH's partnership with both the community health center and the free clinic are integral to the health of this community.</p>
2	As school nurses, are there things we need to do to improve student's health and thus learning in school? Are there any "roadblocks" or areas of difficulty with physician/pediatricians offices that we should be aware of or changes we need to make to "improve the health & promote well being" of our students?
3	Adding additional physicians to the RMH staff for neurological issues such as strokes would be helpful.
4	Keep doing what RMH has been doing in terms of focusing on and responding to the continuously changing needs of the community. Drug abuse is an area the entire community, including RMH, needs to address.
5	Need to target health outcomes and, where appropriate, channel extra dollars there.
6	I would like for the Hospital to find ways to move customer[s] through the system quicker. Someone at the top should go through the system just to see how slow [it is].
7	Continue to outreach to the community away from the RMH Campus. With the lack of a public transportation system in the county, many people find it difficult to access many of your services.
8	To provide more comprehensive services to persons who are low income and are not covered by health insurance.
9	I would like to encourage RMH in its commitment to disease prevention through strategic education and promotion of physical and emotional well being. I'd like to see RMH as the champions for wellness across the life span - beginning with youth children in the home setting, youth in the public schools, adults in workplaces and in retirement settings and aging in place. Show us what "health" looks like at every stage and engage community members in achieving those health levels! I would like to thank RMH for its partnerships and collaborations in the community that address the health needs of populations at risk due to income level, language barriers and age.
10	RMH has enjoyed a stellar reputation as being responsive to the community and the HCHC has been a benefactor of its support. As the healthcare marketplace evolves it is my sincere hope that RMH continues this tradition.
11	RMH is a positive influence at health fairs and other activities. I hope they will continue to be part of these types of programs.
12	Affordable wellness center memberships.
13	Improve hospital to home transition services, improve appropriate hospice referrals (this is getting better), [and] improve mental health/primary care integration.
14	I have heard many people talk about staph infections at RMH after surgery. I presume this is a challenge at any hospital, and it could be from the patient or the hospital. However, I think this is an issue where people (customers and staff) should be trained better in how to prevent such infections.
15	<p>1) Establish Emergency Care Centers strategically placed in RMH's service area to help take load off of RMH's emergency room and fend off competition.</p> <p>2) Strengthen and support [the] federally-funded health clinic to help provide services to the uninsured population.</p> <p>3) Strengthen and support [the] free clinic to help indigent population.</p>
16	Invest more resources in health and wellness education, early detection of and prevention of diseases, improving the public health of our community, and develop a strategy in collaboration with primary care providers to provide primary care access to all persons in our community.

17	It is old but true that "an ounce of prevention is worth a pound of cure", unfortunately our reimbursement system doesn't support this. The community could benefit from greater efforts with healthy eating and routine activity.
18	Improve access to primary care MDs and some specialty MDs.
19	There is a gap in services for those who are destitute - without any access to funds. There is a wealth of "reduced fee" options, but a lack of availability for those who have no money. These persons still are in need of services to improve health and well being.
20	Engage in the community. I feel at times that RMH is like an island all by itself and it wants to protect its island. It needs to reach out to the entire community not just certain parts of it.
21	Promote health care alternatives that reduce the unnecessary use of the RMH emergence care facilities, such as the community health center, the free clinic and insurance reform to reduce/eliminate the number of uninsured persons.
22	<p>1) I know that RMH has gotten a great deal of excellent PR on some high tech services the last few years, but I believe many people still see this hospital as a place to go if you aren't really all that sick. I, personally, had a couple of extremely bad experiences at RMH a few years ago and would be very hesitant to be treated there except for relatively minor problems. One of my experiences makes me question whether or not your Ethics Committee is really an active part of the organization or just something you have to convince JCAH that you have in place! My experience led me to believe that your medical staff either does not read, or they do not understand, the Patient Bill of Rights. I believe this is true of nursing to a lesser degree. I suggest that an article about your Ethics Committee would be a good article for your magazine that is mailed to the community periodically. I can't think of the name of the publication right now!</p> <p>2) That being said, I have a great deal of respect for the community outreach work done by RMH or supported by RMH. I think you really excel in this area. I, along with many others in the community, am curious to see the impact of the Sentara affiliation and what that will mean to our community, overall. A final comment: the new hospital is beautiful, but finding your way back to the correct road to get where you came from is much too challenging. Your shuttle drivers, by the way, are wonderful! Note: Please feel free to contact me if you'd like to discuss my comments.</p>
23	<p>1) In the past the RMH foundation has made great efforts to reach out and help support local non-profits as they focus efforts on meeting the needs in our community. With some recent changes our organization no longer qualifies for your support. Much more can be accomplished when agencies collaborate together.</p> <p>2) Also, finding ways to communicate the current community resources to the public.</p>
24	<p>1) I feel like access to care for mental health services is limited and cumbersome. I have had many Spanish-speaking clients with postpartum depression who would be interested in therapy. However, there are not many places that are low-cost and/or provide Spanish-speaking interpreters. In order to be seen by a counselor at the CSB one-on-one, you have to attend so many group sessions first which is a barrier to care.</p> <p>2) Lack of transportation is also a huge issue for many of the clients seen at the Health Department. If the child has Medicaid, they are able to use Medicaid transport, but for many adults who need to see the doctor for diabetes, prenatal care, etc. they have to rely on finding a ride with a friend or calling a taxi. This is especially problematic when the patient has been referred to UVA and doesn't have reliable transportation.</p> <p>3) I have also noticed a lack of affordable adult dental services here in Harrisonburg. Many adults avoid regular check-ups due to limited finances and then their teeth often get so bad that they end up having acute pain and severe decay which requires extensive dental work. The free clinic does offer some dental care to adults, but even so, the cost is often a barrier to receiving care.</p> <p>4) I think this community would greatly benefit from programs that help with vocational training. I have often had patients ask me where they can get a job and I often don't know where to send them other than the newspaper.</p> <p>5) Access to affordable housing has been and will continue to be an ever-present need in this community. Transitional and temporary housing is also in short-supply as Mercy House is often full as is Salvation Army. I think the Department of Social Services could greatly be strengthened through the hiring of more competent, friendly, respectful persons to work there. Many clients complain that their social worker will not return phone calls or respond promptly to their questions and concerns. There seems to be a lack of respect between clients and case workers.</p> <p>6) Finally, there should be more programs to support victims of domestic violence as First Step does not always have enough room. Persons are only allowed to stay for 6 months at First Step and often have a difficult time transitioning to another form of housing.</p>

25	Keep on providing the leadership and great services you are known for.
26	From a perspective of the ability to communicate through speaking, reading, and writing, I believe there are opportunities for RMH to partner with service organizations such as Skyline Literacy to ensure their non- or low-English speaking patient population has not just interpretation services but ongoing health literacy services so they can independently communicate with healthcare providers. Although a component of literacy instruction involves learning basic health terms, health literacy is a broad challenging area for adults with low literacy skills. Skyline has in the past collaborated to provide a standalone health literacy program and would be interested in doing so in the future.
27	Thank you for being there for this community. Unfortunately with the selling out of RMH, the community is feeling a disconnect with RMH. It is no longer the "community" hospital it was, but more a part of a piece from a very large health organization. This is sad because I have felt in the past a strong community connection with the "old" RMH.
28	Increase knowledge and improve coordination of services/resources so patients and community members are able to easily access what they need to improve their health and well being.
29	I would like to see RMH get more involved with youth development, because of the increasing number of one parent families where the parent is working and cannot be as supportive as necessary. Educating our youth on how to improve their health and well being will pay dividends for the next generation.
30	<p>1) With the growth of the older population coupled with the increasing number of chronic conditions that they have, I would really like to see the establishment of a geriatric service line which would include a few special rooms in the ED that are equipped for older patients (i.e. better mattresses, lighting, etc), an observation service for those who may need a day of care to be stable with a new medication or some other change, in-home primary care to those who cannot or should not leave their homes, an increased emphasis on Chronic Disease Self-Management Programs, In-Home Health Coaching, Home Health Services (RMH is excellent at this) and an increased marketing, and understanding of hospice.</p> <p>2) I would also like to see the eventual building of small hospice facility on the grounds of RMH with a warm and homey atmosphere for those who do not have the necessary support at home or who are simply afraid. It should include an additional expansion of educational services geared to exercise, nutrition, how to get the most out of your visit with your physician.</p> <p>3) It is time to look at existing services offered to older adults by RMH, coordinate and supplement with some of those from above to make a geriatric service line, market appropriately for broad appeal with the goal of making Sentara RMH the hospital of choice for caring quality services to older adults. Also, I would make an effort to "beef up" and engage vivacious older adults as providers in the community as well as in the hospital through an enhanced volunteer program.</p>
31	Continue to be a financial partner for agencies like ours that are non-profit and provide professional services to the indigent in Harrisonburg [City] and Rockingham County.
32	Identification of underserved populations and ensuring that resources are available, advertised, and set up in such a way that the underserved can truly access.
33	Continue/strengthen programs for community health education, preventive care services, and chronic disease management.
34	RMH needs to keep promoting well-being and fitness among employees. For example, being cared for by persons struggling with serious weight problems makes me think that the stress, demands and fitness education of RMH needs to be adjusted. How can RMH as an institution model stewardship of health and fitness?
35	I think RMH is a great service to the community. However, it has the ability to be the conduit to much more and needs to be the catalyst for larger grant funding opportunities to benefit agencies that participate in the community assessment process.

APPENDIX C: Community Health Needs Assessment Data Sources

Section	Source
Part I: Community Insight Profile	
1) Survey Respondents 2) Community Health Concerns 3) Community Service Gaps 4) APPENDIX B: Community Insight Profile-Additional Ideas and Suggestions for Improving Community Health	Community Health Solutions analysis of <i>Community Insight</i> survey responses submitted by community stakeholders.
Part II: Community Indicator Profile	
1) Health Demographic Trend Profile 2) Health Demographic Snapshot <ul style="list-style-type: none"> • Appendix A: Maps 1-13 	Community Health Solutions analysis of 2011 population estimates and 2016 projections from Alteryx, Inc. Alteryx, Inc. is a commercial vendor of demographic data.
3) Mortality Profile <ul style="list-style-type: none"> • Appendix A: Maps 14-17 	Community Health Solutions analysis of Virginia Department of Health 2010 death record data.
4) Maternal and Infant Health Profile <ul style="list-style-type: none"> • Appendix A: Maps 18-21 	Community Health Solutions analysis of Virginia Department of Health 2010 birth record data.
5) Preventable Hospitalization Profile <ul style="list-style-type: none"> • Appendix A: Map 22 6) Behavioral Health Hospitalization Profile <ul style="list-style-type: none"> • Appendix A: Map 23 	Community Health Solutions analysis of hospital discharge data from the Virginia Health Information (VHI) January 1-December 31, 2010 dataset. <i>NOTE: Virginia Health Information (VHI) requires the following statement to be included in all reports utilizing its data: VHI has provided non-confidential patient level information used in this report which was compiled in accordance with Virginia law. VHI has no authority to independently verify this data. By accepting this report the requester agrees to assume all risks that may be associated with or arise from the use of inaccurately submitted data. VHI edits data received and is responsible for the accuracy of assembling this information, but does not represent that the subsequent use of this data was appropriate or endorse or support any conclusions or inferences that may be drawn from the use of this data.</i>
7) Adult Health Risk Factor Profile <ul style="list-style-type: none"> • Appendix A: Maps 24-27 	Synthetic estimates by Community Health Solutions based on: 1) national and statewide Behavioral Risk Factor Surveillance Survey data from the Centers for Disease Control; and 2) demographic data from Alteryx, Inc.
8) Child Health Risk Factor Profile <ul style="list-style-type: none"> • Appendix A: Maps 28-29 	Synthetic estimates by Community Health Solutions based on: 1) statewide data from Market Decisions' 2010 Obesity Survey commissioned by Virginia Foundation for Healthy Youth; and 2) demographic data from Alteryx, Inc.
9) Uninsured Profile <ul style="list-style-type: none"> • Appendix A: Maps 30-33 	Uninsured indicators are synthetic estimates by Community Health Solutions based on: 1) Multiple national and statewide uninsured estimates and 2) demographic data from Alteryx, Inc.
10) Medically Underserved Profile	Community Health Solutions analysis of U.S. Health Resources and Services Administration data.