A Community Health Needs Assessment

Prepared for the Virginia Hospital Center

By Community Health Solutions

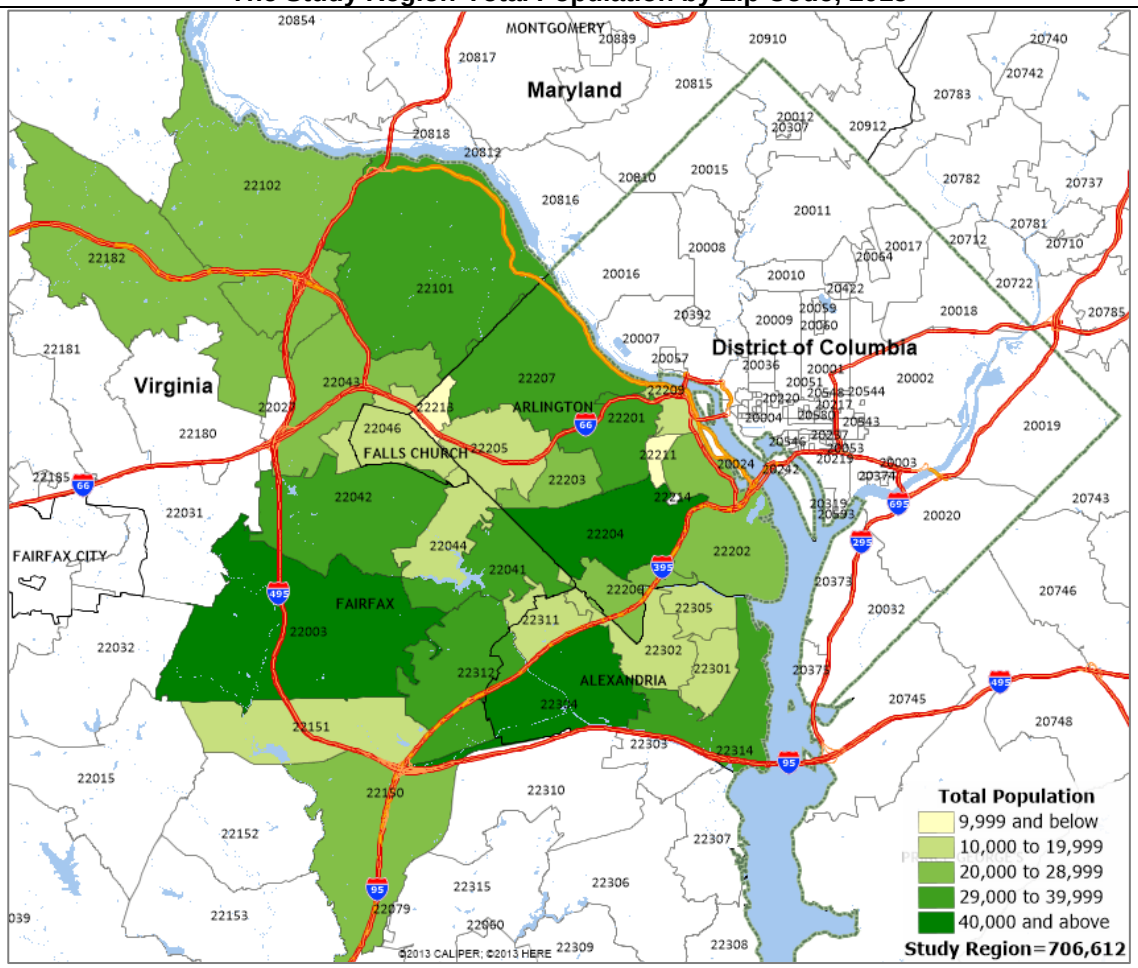
September 2017

Table of Contents

Executive Summary

This report presents the results of a community health needs assessment commissioned by Virginia Hospital Center. The study focuses on the Virginia Hospital Center service area of 28 zip codes, located within the counties of Arlington and Fairfax, and the cities of Alexandria and Falls Church. The study region is shown in the map below. The study results are presented in two parts, including the results of a *Community Survey* of a broad group of community stakeholders, and *Community Indicators* containing dozens of community health status indicator profiles. This Executive Summary outlines the major findings of the study. Details are provided in the body of the report, and the data sources and methods are described in *Appendix E*.

The Study Region-Total Population by Zip Code, 2015



Part I. Community Survey Results

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 Virginia Hospital Center. The survey participants were asked to provide their viewpoints on:

- Important health concerns in the community;
- Significant service gaps in the community;
- Barriers to preventive services in the community;
- Vulnerable/at-risk populations in the community;
- Vulnerable/at-risk geographic regions in the community;
- Existing health assets within the community;
- Health assets needed in the community; and
- Additional ideas or suggestions for improving community health.

The survey was sent to numerous community stakeholders. The community stakeholder list included representatives from public health, education, social services, business, local government and local civic organizations, among others. A total of 91 stakeholders submitted a response (although not every respondent answered every question). The respondents provided rich insights about community health in the study region, as summarized below.

- **Community Health Concerns.** Respondents identified more than 30 specific health concerns, with the most commonly noted being mental health-behavioral health conditions, substance abuse, alcohol use, obesity, heart disease and hypertension.

- **Community Service Gaps.** Respondents identified more than 30 specific community service gaps, with the most commonly noted being mental health-behavioral health services; services for vulnerable populations; substance abuse services; care coordination and transitions care; and health care insurance coverage.

- **Barriers to Preventative Services.** Respondents identified 11 preventative services where residents faced barriers to care, with the most commonly mentioned being colonoscopy, mammogram, clinical breast exam, and pap smear.

- **Vulnerable or At-Risk Populations.** Respondents identified a variety of vulnerable/at-risk populations in the community including caregivers, children, the disabled population, elderly/seniors, Hispanic residents, the homeless population, immigrant/undocumented residents, low income populations, the uninsured, residents with mental health conditions, substance users, 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 primary or specialty healthcare providers, and particular neighborhoods across the region.

- **Health Assets in the Community.** Respondents identified diverse health assets in the community including chronic disease management; community support; diversity; faith based community; good schools; health insurance availability; health safety net/public health; healthcare organizations; healthy food availability; housing; indoor and outdoor recreational facilities; engaged local government; prevention/wellness promotion; social services; and transportation.

- **Health Assets Needed in the Community.** Respondents also identified health assets that could use enhancement, such as access to healthcare for the underinsured/uninsured; care coordination among area health organizations; dental care; expanded hospital/specialty health services; hospice care services; immigrant services; long term care services; behavioral/mental health/substance use services; programs/institutions to promote physical activity; services for seniors; services for low income residents; transportation; and wellness promotion.

- **Additional Ideas and Suggestions.** Respondents offered a variety of ideas and suggestions for improving community health. Ideas and suggestions included behavioral health/substance use services; dental care; health promotion of available services; healthcare for low income residents; housing/homeless supports; immigrant/undocumented resident supports; regional collaboration; improved schools; specialty healthcare; and transportation.

Part II. Community Indicators

The *Community Indicators* in Part II 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. To summarize:

- **Demographic Profile.** As of 2015, the study region included an estimated 706,612 people. *Snapshot*- Compared to Virginia as a whole, the study region is more densely populated, is more racially and ethnically diverse, has a smaller population in poverty, and has higher educational attainment.

- **Mortality Profile**. In 2013, the study region had 3,484 total deaths. The leading causes of death were malignant neoplasms (cancer), heart disease, and cerebrovascular disease (stroke). The rates per 100,000 population were lower than the statewide rate for all age groups and leading causes of death.

- **Maternal and Infant Health Profile**. In 2013, the study region had 10,540 total live births. Compared to Virginia as a whole, the study region had a higher rate of live births, and a higher rate of births without early prenatal care. The teen pregnancy rate (calculated at the city/county level) was higher than statewide rate in the cities of Alexandria and Falls Church. The five-year infant mortality rate (calculated at the city/county level), was lower than the statewide rate for all four localities.

- **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 FY2015, residents of the study region had 3,382 PQI hospital discharges. The majority of PQI discharges were for residents age 65+.The leading diagnoses for these discharges were congestive heart failure, urinary tract infection, and chronic obstructive pulmonary disease (COPD) and asthma in older adults. The study region PQI discharge rates were lower or comparable to the statewide rates for all diagnoses.

- **Behavioral Health Hospitalization Discharge Profile.** Behavioral Health (BH) hospitalizations provide another important indicator of community health status. In FY2015, residents of the study region had 3,369 hospital discharges from Virginia community hospitals for behavioral health conditions.[1] The majority of BH discharges were for residents age 45-64. The leading diagnoses for these discharges were affective psychoses, alcoholic psychoses, and schizophrenic disorders. Rates for leading causes were lower than state for all BH discharges except alcoholic psychoses.

- **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, alcohol and tobacco. In addition, substantial numbers of adults have chronic conditions such as high cholesterol, high blood pressure, arthritis, diabetes and asthma.

- **Youth Health Risk Profile**. Local estimates indicate that substantial numbers of youth (age 10-19) in the study region have health risks related to nutrition, alcohol, weight, mental health, tobacco, and physical inactivity.

- **Uninsured Profile**. As of 2015, an estimated 79,825 (13%) nonelderly residents of the study region were uninsured. This included an estimated 9,307 children and 70,847 adults.

- **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+. Three of the four localities included in the study region (Arlington and Fairfax counties, and the City of Alexandria) have one or more census tracts designated as a Governor's Medically Underserved Population (MUP).

Additional Information

Additional information on study results and methods is provided as follows.

- **Accompanying File of Zip Code-Level Indicators.** This report includes community health indicators for the study region as a whole. A separate Microsoft Excel file contains indicators for each zip code within the study region.

- **Appendix A. Zip Code-Level Maps.** *Appendix A* provides a set of thematically colored maps displaying variation in selected community health indicators by zip code. The underlying data for these maps are

[1] Data include discharges for Virginia residents from Virginia community 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.

provided in a separate Microsoft Excel file. *Please read the important note about zip code-level data in Appendix A.*

- **Appendix B. Health Opportunity Index.** *Appendix B* provides a closer look at the study region through the lens of the Health Opportunity Index. The Health Opportunity Index (HOI) was developed by the Virginia Department of Health (VDH) to identify those geographic areas and populations that are most vulnerable to adverse health outcomes. The HOI is produced at the census-tract level, making it possible to identify pockets of vulnerability within the boundaries of larger cities and counties. When we apply the HOI to the study region, we find some of the most vulnerable census tracts in the Commonwealth of Virginia.

- **Appendix C. Summary Comparison of Indicators from the 2014 and 2017 Virginia Hospital Center Community Health Needs Assessments.** The 2017 Community Health Needs Assessment for Virginia Hospital Center (VHC) is the third community health needs assessment Community Health Solutions has conducted for VHC. The 2014 and 2017 reports contain some of the same community health indicators, and there may be interest in comparing the results from the two reports. *Appendix C* provides a summary to assist the audience in using the findings in both reports.

- **Appendix D. Community Survey: Detailed Results.** *Appendix D* contains a more detailed analysis of responses to the Community Survey.

- **Appendix E. Data Sources.** *Appendix E* provides a list of the data sources used in the analyses for this report.

Part I. Community Survey Results

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

- Important health concerns in the community;
- Significant service gaps in the community;
- Barriers to preventative services in the community;
- Vulnerable/at-risk populations in the community;
- Vulnerable/at-risk geographic regions in the community;
- Existing health assets within the community;
- Health assets needed in the community; and
- Additional ideas or suggestions for improving community health.

The survey was sent to numerous community stakeholders. The community stakeholder list included representatives from public health, education, social services, business, local government and local civic organizations, among others. A total of 91 stakeholders submitted a response (although not every respondent answered every question). The results are summarized in the remainder of this section.

1. Survey Respondents

Exhibit I-1A-B on the following page lists the geographical and organizational affiliations of the survey respondents.

Exhibit I-1A
Survey Respondents by Locality

Note: All 91 respondents answered this question. Because respondents could select more than one locality, the total does not equal 100. Respondents were asked to identify which parts of the region they view as part of their community, based on where they live, work, or both.

Answer Options	Response Percent	Response Count
Alexandria City	20%	18
Arlington County	87%	79
Falls Church City	23%	21
Fairfax City	15%	14
Fairfax County	37%	34
Other Localities (see responses below)	*13%*	*13*

Other Localities[2]

- Fauquier County
- Loudoun County (6)
- Manassas/Manassas Park City (2)
- Prince William County (5)
- Washington D.C.

[2]A count is provided for localities with multiple survey respondents.

Exhibit I-1B Survey Respondents by Organization[3]	
AHC Inc.	Community Volunteer
Alcova Height	Fairfax-Falls Church CSB (2)
Arlington County Community Services Board (4)	George Mason University
Arlington County (3)	Georgetown University
Arlington County Board	Kaiser Permanente (2)
Arlington County Commission on Aging	Linden Resources
Arlington County Dept. of Human Services	Marymount University (2)
Arlington County DHS/PHD	Meridian International Center
Arlington County Fire Department (2)	Neighborhood Health
Arlington County Government (3)	New Editions Consulting
Arlington County Medical Society	Northern Virginia Dental Clinic
Arlington County Police	Northern Virginia Family Service (2)
Arlington County Public Health Division	Northern Virginia Health Foundation (2)
Arlington Economic Development	Phoenix House Mid-Atlantic
Arlington Free Clinic	Psychosocial Education Initiative
Arlington Mental Health Alliance	Public Defenders Office for Arlington County and the City of Falls Church
Arlington Partnership for Affordable Housing (2)	Radnoc
Arlington Partnership for Children, Youth & Families (2)	Thompson Wildhack PLC
Arlington Pediatric Center	VHC Department of Obstetrics and Gynecology
Arlington Public Health Division	VHC Expansion Community Advisory Committee
Arlington Public Library Central	Virginia Hospital Center (8)
Arlington Public Schools	Virginia State Senate
A-SPAN (3)	Volunteers of America Chesapeake
Bridges to Independence	*Unknown Organization (19)*
Commission on Aging	

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

2. Community Health Concerns

Survey respondents were asked to identify important community health concerns. Respondents were also invited to identify additional issues not already defined on the list. *Exhibit I-2* summarizes the results, including open-ended responses. As shown in Exhibit *I-2*, respondents identified more than 30 specific health concerns, with the most commonly noted being mental health-behavioral health conditions, substance abuse, alcohol use, obesity, heart disease and hypertension.

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

Note: 87 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 - Behavioral Health Conditions (e.g. depression, anxiety, etc.)	91%	79
Substance Abuse (prescription or illegal drugs)	74%	64
Alcohol Use	55%	48
Obesity	51%	44
Heart Disease	49%	43
High Blood Pressure / Hypertension	49%	43
Dementia / Alzheimer's Disease	47%	41
Diabetes	41%	36
Dental / Oral Health Care	38%	33
Violence – Domestic Violence	38%	33
Infant and Child Health	37%	32
Cancer	34%	30
Bullying	30%	26
Physical Disabilities	30%	26
Prenatal and Pregnancy Care	30%	26
Chronic Pain	29%	25
Respiratory Diseases (e.g. asthma, COPD, etc.)	29%	25
Autism	26%	23
Sexually Transmitted Diseases	26%	23
Accidents / Injuries	24%	21
Hunger	24%	21
Intellectual / Developmental Disabilities	23%	20
Stroke	23%	20
Tobacco Use	23%	20
Infectious Diseases	21%	18
Violence – Other than domestic violence	21%	18
Neurological Conditions (e.g. seizures, multiple sclerosis, traumatic brain injury, etc.)	20%	17
Orthopedic Problems	20%	17
Environmental Health (e.g. pollution, mosquito control, water quality, etc)	18%	16
HIV/AIDS	18%	16
Renal (kidney) Disease	15%	13
Arthritis	14%	12
Teen Pregnancy	14%	12
Drowning / Water Safety	7%	6
Other Health Problems	*18%*	*16*

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	• All are valid, important concerns related to human health and well being
2	• Chronic Disease management
3	• Elderly care • Home care
4	• Excessive screen time among our youth
5	• Falls and mobility impairments
6	• Family caregiver support, the service available are that visible thus they struggle
7	• From the law enforcement perspective, substance abuse and mental health are the most pressing concerns.
8	• Investing in efforts that improve social determinants of health can maximize benefits across multiple areas noted above.
9	• Language barriers and transportation issues as they relate to accessing health care
10	• Marijuana / weed
11	• Occupational health issues
12	• Sickle Cell
13	• SMI folks are being discharged from state hospitals with little to no support resulting in high numbers returning to the hospital. With better discharge planning and same day access to services SMI folks have a better chance of stabilizing in the community versus frequenting the hospitals.
14	• Special concern for mental health, substance abuse and dental/oral healthcare
15	• While all of these issues listed are concerns of mine, I highlighted the major ones.
16	• Youth mental health

3. Community Service Gaps

Survey respondents were asked to review a list of community services and identify those that 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. As shown in *Exhibit I-3*, respondents identified more than 30 specific community service gaps, with the most commonly noted being mental health-behavioral health services; services for vulnerable populations; substance abuse services; care coordination and transitions care; and health care insurance coverage.

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

Note: 86 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 Heath - Behavioral Health Services	81%	70
Services for Vulnerable Populations (e.g. uninsured/underinsured, migrant	59%	51
Substance Abuse Services	58%	50
Care Coordination and Transitions of Care	50%	43
Health Care Insurance Coverage	49%	42
Aging Services	43%	37
Dental / Oral Health Care Services	37%	32
Long Term Care Services	36%	31
Early Intervention Services for Children	33%	28
Chronic Disease Services (e.g. diabetes, high blood pressure, etc.)	30%	26
Health Promotion and Prevention Services	30%	26
Home Health Services	30%	26
Intellectual / Developmental Disabilities Services	30%	26
Social Services	30%	26
Primary Care Medical Services	29%	25
Services for Caregivers	29%	25
Chronic Pain Management Services	27%	23
Food Safety Net (e.g. food bank, community gardens, school lunches, etc.)	24%	21
Transportation Services	22%	19
Self-Management Services (e.g. nutrition, exercise, taking medications)	21%	18
Public Health Services	20%	17
Veterans Services	20%	17
Domestic Violence Services	19%	16
Hospital Services (e.g. inpatient, outpatient, emergency care, etc.)	16%	14
School Health Services	16%	14
Cancer Services (e.g. screening, diagnosis, treatment, etc.)	14%	12
Hospice Services	10%	9
Maternal, Infant and Child Health Services	10%	9
Environmental Health Services	9%	8
Family Planning Services	9%	8
Public Safety Services	9%	8
Specialty Care Medical Services (cardiologists, oncologists, etc.)	8%	7
Physical Rehabilitation	7%	6
Pharmacy Services	3%	3

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

Note: 86 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
Workplace Health and Safety Services	2%	2
Other Services (see responses below)	*10%*	*9*

Response #	Other Service Gaps (Open-Ended Reponses)
1	• Access to youth mental health services
2	• Adequate and affordable housing • Access to care among underinsured and uninsured populations, and for all services - reaching residents of all our diverse cultures/languages as well.
3	• Advanced care planning-advance directives
4	• Impatient mental health facilities for children/adolescents
5	• In Arlington County, I don't think we have enough gerontologists.
6	• Information against marijuana usage
7	• Psychiatric beds for voluntary patients; early identification and access to mental health services for children and adolescents.
8	• Specialty care
9	• While the community has a very robust Department of Health and Human Services, there are still challenges facing the law enforcement community in dealing with long-term mental health issues. Many of the items listed above are well covered by the county or community based services.

4. Barriers to Preventative Services

Survey respondents were asked to review a list of clinical preventative services and identify those for which there may be obstacles to access. Respondents were also invited to identify additional preventative services not already defined on the list. *Exhibit I-4* summarizes the results, including open-ended responses. As shown in *Exhibit I-4*, respondents identified 11 preventative services where residents faced barriers to care, with the most commonly mentioned being colonoscopy, mammogram, clinical breast exam, and pap smear.

Exhibit I-4
Preventative Services with Barriers to Care Identified by Survey Respondents

Note: 45 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
Colonoscopy	76%	34
Mammogram	60%	27
Clinical Breast Exam	51%	23
Pap Smear (Pap Test)	49%	22
Prostate-Specific Antigen (PSA) test	40%	18
Shingles Vaccine	40%	18
Pneumonia Vaccine	36%	16
Cholesterol check	33%	15
HIV Test	27%	12
Tetanus Booster	24%	11
Flu Vaccine	13%	6
Other Services (see following page)	*38%*	*17*

Response #	Other Preventative Services (Open-Ended Reponses)
1	• All our age/gender appropriate preventive care has barriers to access due to cost, language/cultural norms, lack of coverage.
2	• Barrier could be related to education or cost
3	• Cataract surgery
4	• Dementia assessment and competency review
5	• For many of our immigrant and low income families, there are barriers to accessing all
6	• For the uninsured or low income community members I think the items listed above
7	• I have checked those services not covered by outside clinics or public health. For community members who have not insurance and are underinsured, these are difficult to obtain. Also, dental services are limited for children even with Medicaid and for adults without insurance, it is not affordable. We need more dental care for the uninsured and underinsured. It should not be a luxury to receive dental care!
8	• If you have insurance I don't see barriers. If you do not have health insurance I see barriers to all of them.
9	• Mental health and substance abuse inpatient care in this community - tragically residents many time have to go far away from home for this care and are away from their family supports.
10	• Mental Health Screening
11	• Mental health services
12	• Oral health screening
13	• Primary care
14	• Screenings for children and teens on depression and suicidality.
15	• Significant numbers of TDOs being turned away from psych services due to lack of beds.
16	• There are barriers to these services for low-income and/or uninsured persons
17	• Treatment for severe mental illness

5. Vulnerable/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. A general listing of identified populations and regions are provided below. Please see *Appendix D* for a detailed listing.

- Caregivers
- Children
- Disabled Population
- Elderly/Seniors
- Hispanic Residents
- Homeless
- Immigrant/Undocumented Residents
- Low Income
- Previously Incarcerated Residents
- Residents in areas without Primary/Specialty Healthcare Providers
- Residents with Behavioral Health Conditions
- Residents of particular neighborhoods (see *Appendix C*)
- Residents without Transportation
- Residents who are unware of services
- Substance Users
- Uninsured/Underinsured

6. 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
• Chronic Disease Management • Community Support • Diversity • Faith Based Community • Good schools • Health Insurance Availability • Health Safety Net/Public Health • Healthcare Organizations • Healthy Food Availability • Housing • Indoor and Outdoor Recreational Facilities • Engaged Local Government • Prevention/Wellness Promotion • Social Services • Transportation	• Access to healthcare for the Underinsured/Uninsured • Care Coordination among area health organizations • Dental Care • Expanded Hospital/Specialty Health Services • Hospice Care Services • Immigrant Services • Long Term Care Services • Behavioral/Mental Health/Substance Use Services • Programs/Institutions to Promote Physical Activity • Services for Seniors • Services for Low Income Residents • Transportation • Wellness Promotion

Note: Please see *Appendix D* for a more detailed analysis of responses to the *Community Survey*.

7. Additional Ideas and Suggestions

Survey respondents offered open-ended responses with additional ideas and suggestions for improving community health. Common themes included ideas for how the community can work to improve the following services. A detailed list of specific responses is provided in in *Appendix D*.

- Behavioral Health/Substance Use Services
- More Accessible Dental Care
- Health Promotion of Available Services
- Healthcare for Low Income Residents
- Housing/Homeless Supports
- Immigrant/Undocumented Resident Supports
- Regional Collaboration
- Improved Schools
- Specialty Healthcare
- Transportation

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 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 nine profiles as follows:

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

1. Health Demographic Snapshot Profile

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-1 presents a snapshot of key health-related demographics of the study region. As of 2015, the study region included an estimated 706,612 people. Focusing on population rates in the lower part of the Exhibit, compared to Virginia as a whole, the study region is more densely populated, is more racially and ethnically diverse, has a smaller population in poverty, and has higher educational attainment (based on the percent of adults age 25+ without a high school diploma). *Note: Maps 1-11 in Appendix A show the geographic distribution of the population by zip code.*

Exhibit II-1.
Health Demographic Snapshot Profile, 2015

Indicator		Study Region	Virginia
Population Counts			
Total Population	Population	706,612	8,256,630
Age	Children Age 0-17	140,963	1,864,668
	Adults Age 18-29	127,144	1,409,323
	Adults Age 30-44	182,691	1,665,350
	Adults Age 45-64	176,675	2,215,628
	Seniors Age 65+	79,139	1,101,661
Sex	Female	356,955	4,195,682
	Male	349,657	4,060,948
Race	Asian	96,524	492,973
	Black/African American	75,084	1,589,345
	White	465,084	5,695,147
	Other or Multi-Race	69,920	479,165
Ethnicity	Hispanic Ethnicity[4]	129,731	709,156
Poverty	Population in Poverty	56,974	921,822
Education	Population Age 25+ Without a High School Diploma	46,466	648,934
Population Rates			
Total Population	Population Density (pop. per sq. mile)	5,500.2	205.4
Age	Children Age 0-17 pct. of Total Pop.	20%	23%
	Adults Age 18-29 pct. of Total Pop.	18%	17%
	Adults Age 30-44 pct. of Total Pop.	26%	20%
	Adults Age 45-64 pct. of Total Pop.	25%	27%
	Seniors Age 65+ pct. of Total Pop.	11%	13%
Sex	Female pct. of Total Pop.	51%	51%
	Male pct. of Total Pop.	49%	49%
Race	Asian pct. of Total Pop.	14%	6%
	Black/African American pct. of Total Pop.	11%	19%
	White pct. of Total Pop.	66%	69%
	Other or Multi-Race pct. of Total Pop.	10%	6%
Ethnicity	Hispanic Ethnicity pct. of Total Pop.	18%	9%
Poverty	Population in Poverty pct. of Total Pop.	8%	12%
Education	Pop. Age 25+ Without a High School Diploma pct. of Total Age 25+ pop.	9%	12%

Source: Community Health Solutions analysis of US Census data and estimates from US Census Bureau, American Community Survey. See Appendix E. Data Sources for details.

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

2. Mortality Profile

Mortality is traditionally one of the most important indicators of community health status. As shown in *Exhibit II-2*, in 2013 the study region had 3,484 total deaths. Most deaths were for residents age 65+. The leading causes of death were malignant neoplasms (cancer) (849), heart disease (692), and cerebrovascular disease (stroke) (183). The rates per 100,000 population were lower than the statewide rate for all age groups, and for all leading causes of death.[5] *Note: Maps 12-15 in Appendix A show the geographic distribution of deaths by zip code.*

Exhibit II-2.
Mortality Profile, 2013

Indicator		Study Region	Virginia
Counts			
Total Discharges	*Deaths by All Age Groups and Causes*	*3,484*	*62,309*
By Age Group	Age 0-17, Deaths	60	927
	Age 18-29, Deaths	40	1,034
	Age 30-44, Deaths	95	2,130
	Age 45-64, Deaths	562	12,547
	Age 65+, Deaths	2,727	45,671
By Top 14 Causes	Malignant Neoplasms, Deaths	849	14,348
	Heart Disease, Deaths	692	13,543
	Cerebrovascular Diseases, Deaths	183	3,278
	Unintentional Injury, Deaths	133	2,794
	Chronic Lower Respiratory Diseases, Deaths	123	3,168
	Septicemia, Deaths	111	1,464
	Alzheimer's Disease, Deaths	101	1,634
	Influenza and Pneumonia, Deaths	98	1,430
	Diabetes Mellitus, Deaths	90	1,618
	Nephritis and Nephrosis, Deaths	74	1,547
	Suicide, Deaths	56	1,047
	Chronic Liver Disease, Deaths	42	836
	Primary Hypertension and Renal Disease, Deaths	41	629
	Parkinson's Disease, Deaths	40	549
Rates per 100,000 Population (see footnote)			
Total Deaths	*Total Deaths*	*493.4*	*755.5*
By Age Group	Age 0-17, Deaths per 100,000	43.3	49.0
	Age 18-29, Deaths per 100,000	30.3	73.3
	Age 30-44, Deaths per 100,000	52.1	127.2
	Age 45-64, Deaths per 100,000	315.0	559.1
	Age 65+, Deaths per 100,000	3,643.2	4,446.0
By Top 14 Causes	Malignant Neoplasms, Deaths	120.2	174.0
	Heart Disease, Deaths	98.0	164.2
	Cerebrovascular Diseases, Deaths	25.9	39.7
	Unintentional Injury, Deaths	18.8	33.9
	Chronic Lower Respiratory Diseases, Deaths	17.4	38.4
	Septicemia, Deaths	15.7	17.8
	Alzheimer's Disease, Deaths	14.3	19.8
	Influenza and Pneumonia, Deaths	13.9	17.3
	Diabetes Mellitus, Deaths	12.7	19.6
	Nephritis and Nephrosis, Deaths	10.5	18.8
	Suicide, Deaths	7.9	12.7
	Chronic Liver Disease, Deaths	5.9	10.1
	Primary Hypertension and Renal Disease, Deaths	5.8	7.6
	Parkinson's Disease, Deaths	5.7	6.7

Source: Community Health Solutions analysis of data from the Virginia Department of Health and local health demographic estimates from US Census Bureau, American Community Survey. See Appendix E. Data Sources for details

[5] Age adjusted death rates were not calculated for this study because the study region is defined by zip codes, and available data are not structured to support calculation of age adjusted death rates at the zip code level. Age group death rates are used as an alternative.

3. Maternal and Infant Health Profile

Along with mortality, maternal and infant health is another traditionally important indicator of community health status. As shown in *Exhibit II-3A,* in 2013, the study region had 10,540 total live births. Among these were 739 low weight births, 1,606 births without early prenatal care, 2,289 non-marital births and 225 births to teens. Compared to Virginia as a whole, the study region had a higher rate of live births overall; and a higher rate of births without early prenatal care. *Note: Maps 16-19 in Appendix A show the geographic distribution of births by zip code.*

Exhibit II-3A.
Maternal and Infant Health Profile, 2013

Indicator	Study Region	Virginia
Counts		
Total Live Births	10,540	101,977
Low Weight Births (under 2,500 grams / 5 lb. 8 oz.)	739	8,178
Births Without Early Prenatal Care (No Prenatal Care in First 13 Weeks)	1,606	13,435
Non-Marital Births	2,289	35,289
Live Births to Teens Age 10-19	225	5,316
Live Births to Teens Age 18-19	156	4,073
Live Births to Teens Age 15-17	67	1,208
Live Births to Teens Age <15	2	35
Rates		
Live Birth Rate per 1,000 Population	14.9	12.3
Low Weight Births pct. of Total Live Births	7%	8%
Births Without Early Prenatal Care (No Prenatal Care in First 13 Weeks) pct. of Total Live Births	15%	13%
Non-Marital Births pct. of Total Live Births	22%	35%
Live Births to Teens Age 10-19	7.2	10.3
Live Births to Teens Age 18-19	31.2	36.4
Live Births to Teens Age 15-17	6.7	8.0
Live Births to Teens Age <15	0.1	0.1

Source: Community Health Solutions analysis of data from the Virginia Department of Health and local health demographic estimates from US Census Bureau, American Community Survey. See Appendix E. Data Sources for details.

Exhibit II-3B and Exhibit I-3C below provide counts and rates of teen pregnancy and infant mortality for the counties of Arlington and Fairfax, and the cities of Alexandria and Falls Church.[6] The teen pregnancy rate was higher than statewide rate for the cities of Alexandria and Falls Church. The five-year infant mortality rate was lower than the state rate for all four localities.

Exhibit II-3B.
Teen Pregnancy Profile, 2013

Indicator	Virginia	Total Study Region	Alexandria City	Arlington County	Fairfax County	Falls Church City
Counts						
Total Teenage (age 10-19) Pregnancies (2013) #	7,447	622	120	51	432	19
Rates						
Teenage (age 10-19) Pregnancy Rate per 1,000 Teenage Female Population (2013)	14.4	7.3	24.8	6.3	6.1	19.9

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

Exhibit II-3C.
Infant Mortality Profile, 2013

Indicator	Virginia	Total Study Region	Alexandria City	Arlington County	Fairfax County	Falls Church City
Counts						
Infant Deaths Five Year Total (2009-2013) #	3,402	498	61	65	369	3
Rates						
Five-Year Average Infant Mortality Rate per 1,000 Live Births (2009-2013)	6.6	4.7	4.6	4.2	4.9	3.9

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

[6] Indicators are shown at the locality level because teen pregnancy and five-year average infant mortality data are not available at the zip code level.

4. 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.[7] High rates of hospitalization for these conditions indicate potential gaps in access to quality outpatient services for community residents. As shown in *Exhibit II-4*, residents of the study region had 3,382 PQI hospital discharges in FY2015 (July 1, 2014-June 30, 2015). The majority of PQI discharges were for residents age 65+.The leading diagnoses for these discharges were congestive heart failure (760), urinary tract infection (560), and chronic obstructive pulmonary disease (COPD) and asthma in older adults. The study region PQI discharge rate was slightly higher than the statewide rate for perforated appendix. *Note: Map 20 in Appendix A shows the geographic distribution of PQI discharges by zip code.*

Exhibit II-4.
Prevention Quality Indicator (PQI) Hospital Discharge Profile
FY2015 (July 1, 2014-June 30, 2015)

Indicator		Study Region	Virginia
Counts			
Total Discharges	*Discharges by All Diagnoses*	3,382	73,696
By Age Group	Age 18-29, PQI Discharges	144	2,820
	Age 30-44, PQI Discharges	273	5,767
	Age 45-64, PQI Discharges	825	21,713
	Age 65+, PQI Discharges	2,140	43,396
By Diagnosis	Congestive Heart Failure, PQI Discharges	760	19,935
	Urinary Tract Infection, PQI Discharges	560	7,863
	COPD or Asthma in Older Adults, PQI Discharges	536	14,177
	Bacterial Pneumonia, PQI Discharges	494	9,873
	Diabetes, PQI Discharges	483	10,995
	Dehydration, PQI Discharges	378	6,998
	Perforated Appendix, PQI Discharges	197	2,229
	Hypertension, PQI Discharges	125	2,608
	Asthma in Younger Adults, PQI Discharges	33	444
Rates per 100,000 Population (see footnote)			
Total Discharges	*Total Prevention Quality Indicator (PQI) Discharges*	*478.6*	*892.6*
By Age Group	Age 18-29, PQI Discharges per 100,000	113.3	200.1
	Age 30-44, PQI Discharge per 100,000	149.4	346.3
	Age 45-64, PQI Discharges per 100,000	467.0	980.0
	Age 65+, PQI Discharge per 100,000	2,704.1	3,939.1
By Diagnosis	Congestive Heart Failure, PQI Discharges	107.6	241.4
	Urinary Tract Infection, PQI Discharges	79.3	95.2
	COPD or Asthma in Older Adults, PQI Discharges	75.9	171.7
	Bacterial Pneumonia, PQI Discharges	69.9	119.6
	Diabetes, PQI Discharges	68.4	133.2
	Dehydration, PQI Discharges	53.5	84.8
	Perforated Appendix, PQI Discharges	27.9	27.0
	Hypertension, PQI Discharges	17.7	31.6
	Asthma in Younger Adults, PQI Discharges	4.7	5.4

Source: Community Health Solutions analysis of hospital discharge data from Virginia Health Information, Inc. and local demographic estimates from US Census Bureau, American Community Survey. See Appendix E. Data Sources for details.

[7] 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 four 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

5. Behavioral Health Hospitalization Discharge Profile

Behavioral health (BH) hospitalizations provide another important indicator of community health status. As shown in *Exhibit 5,* residents of the study region had 3,369 hospital discharges from Virginia community hospitals for behavioral health conditions in FY2015 (July 1, 2014-June 30, 2015). The majority of BH discharges were for residents age 45-64. The leading diagnoses for these discharges were affective psychoses (1,457), alcoholic psychoses (543), and schizophrenic disorders (471). The study region BH discharge rate was higher than the statewide rate for alcoholic psychoses. *Note: Map 21 in Appendix A shows the geographic distribution of BH discharges by zip code.*

Exhibit II-5.
Behavioral Health Hospital Discharge Profile, FY2015 (July 1, 2014-June 30, 2015)

Indicator		Study Region	Virginia
Counts			
Total	*Discharges by All Age Groups and Diagnosis*	*3,369*	*69,027*
By Age Group	Age 0-17, BH Discharges	348	9,451
	Age 18-29, BH Discharges	794	15,060
	Age 30-44, BH Discharges	871	16,794
	Age 45-64, BH Discharges	1,033	21,018
	Age 65+, BH Discharges	323	6,704
By Top 14 Causes	Affective Psychoses, BH Discharges [8]	1,457	32,345
	Alcoholic Psychoses, BH Discharges	543	6,053
	Schizophrenic Disorders, BH Discharges	471	9,139
	Other Nonorganic Psychoses, BH Discharges	204	2,629
	Depressive Disorder, Not Elsewhere Classified, BH Discharges	108	3,411
	Drug Psychoses, BH Discharges	107	2,712
	Alcohol Dependence Syndrome, BH Discharges	76	1,508
	Adjustment Reaction, BH Discharges	63	2,475
	Symptoms Involving Head or Neck, BH Discharges	49	767
	Neurotic Disorders, BH Discharges	43	1,231
	Altered Mental Status, BH Discharges	33	848
	Other Organic Psychotic Conditions-Chronic, BH Discharges	26	900
	Non Dependent Abuse of Drugs, BH Discharges	24	680
	Drug Dependence, BH Discharges	21	575
Rates per 100,000 Population (see footnote)			
Total	*Total Behavioral Health Discharges*	*476.8*	*836.0*
By Age Group	Age 0-17, BH Discharges per 100,000	246.9	506.8
	Age 18-29, BH Discharges per 100,000	624.5	1,068.6
	Age 30-44, BH Discharges per 100,000	476.8	1,008.4
	Age 45-64, BH Discharges per 100,000	584.7	948.6
	Age 65+, BH Discharges per 100,000	408.1	608.5
By Top 14 Causes	Affective Psychoses, BH Discharges	206.2	391.7
	Alcoholic Psychoses, BH Discharges	76.8	73.3
	Schizophrenic Disorders, BH Discharges	66.7	110.7
	Other Nonorganic Psychoses, BH Discharges	28.9	31.8
	Depressive Disorder, Not Elsewhere Classified, BH Discharges	15.3	41.3
	Drug Psychoses, BH Discharges	15.1	32.8
	Alcohol Dependence Syndrome, BH Discharges	10.8	18.3
	Adjustment Reaction, BH Discharges	8.9	30.0
	Symptoms Involving Head or Neck, BH Discharges	6.9	9.3
	Neurotic Disorders, BH Discharges	6.1	14.9
	Altered Mental Status, BH Discharges	4.7	10.3
	Other Organic Psychotic Conditions-Chronic, BH Discharges	--	10.9
	Non Dependent Abuse of Drugs, BH Discharges	--	8.2
	Drug Dependence, BH Discharges	--	7.0

Source: Community Health Solutions analysis of hospital discharge data from Virginia Health Information, Inc. and local demographic estimates from US Census Bureau, American Community Survey. See Appendix E. Data Sources for details.

[8] Includes major depressive, bipolar affective and manic-depressive disorders.

6. Adult Health Risk Factor Profile

This section examines health risks for adults age 18+. Prevalence estimates of health risks, chronic disease and health status can be useful in developing prevention and improvement efforts. *Exhibit II-6* shows estimates indicating that substantial numbers of adults in the study region have health risks related to nutrition, weight, physical inactivity, alcohol and tobacco. In addition, substantial numbers of adults have chronic conditions such as high cholesterol, high blood pressure, arthritis, diabetes and asthma. *Note: Maps 22-25 in Appendix A show the geographic distribution of selected adult health risks by zip code.*

Exhibit II-6.
Adult Health Risk Factor Profile (Estimates), 2015

Indicator	Study Region Estimates (Count)	Study Region Estimates (Percent)
Estimated Adults age 18+	565,649	100%
Risk Factors		
Less than Five Servings of Fruits and Vegetables Per Day	464,414	82%
Overweight or Obese[9]	338,614	60%
Not Meeting Recommendations for Physical Activity in the Past 30 Days	241,949	43%
At Risk for Binge Drinking (males having five or more drinks on one occasion, females having four or more drinks on one occasion)	104,482	18%
Smoker	95,334	17%
Chronic Conditions		
High Cholesterol (was checked, and told by a doctor or other health professional it was high)	200,795	35%
High Blood Pressure (told by a doctor or other health professional)	166,178	29%
Arthritis (told by a doctor or other health professional)	125,172	22%
Asthma (told by a doctor or other health professional)	49,446	9%
Diabetes (told by a doctor or other health professional)	44,507	8%
General Health Status		
Fair or Poor Health Status	94,197	17%
Limited in any Activities because of Physical, Mental or Emotional Problems	94,114	17%

Source: Estimates produced by Community Health Solutions using Virginia Behavioral Risk Factor Surveillance System data and local demographic estimates from US Census Bureau, American Community Survey. See Appendix E. Data Sources for details.

[9] According to the CDC, for adults 20 years old and older, BMI is interpreted using standard weight status categories that are the same for all ages and for both men and women. Overweight is defined as a BMI between 25.0 and 29.9. Obesity is defined as a BMI 30.0 and above. For more information: http://www.cdc.gov/healthyweight/assessing/bmi/adult_bmi/index.html#Interpreted

7. Youth Health Risk Factor Profile

This profile 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 7,* estimates from 2015 indicate that substantial numbers of youth in the study region have health risks related to nutrition, weight, alcohol, mental health, tobacco, and physical activity. *Note: Maps 26-27 in Appendix A show the geographic distribution of selected youth health risks by zip code.*

Exhibit 7.
Youth Health Risk Factor Profile (Estimates), 2015

Indicator	Study Region
Counts (Estimates)	
High School Youth Age 14-19	
Total Estimated High School Youth Age 14-19	*37,651*
Not Meeting Guidelines for Fruit and Vegetable Intake	34,312
Overweight or Obese	10,317
Not Meeting Recommendations for Physical Activity in the Past Week	21,771
Used Tobacco in the Past 30 Days	6,644
Had at least One Drink of Alcohol At least One Day in the Past 30 Days	9,617
Felt Sad or Hopeless (almost every day for two or more weeks in a row so that they stopped doing some usual activities)	9,908
Middle School Youth Age 10-14	
Total Estimated Middle School Youth Age 10-14	*34,024*
Not Meeting Guidelines for Fruit and Vegetable Intake	25,774
Not Meeting Recommendations for Physical Activity in the Past Week	22,954
Used Tobacco in the Past 30 Days	764
Percent (Estimates)	
High School Youth Age 14-19	
Not Meeting Guidelines for Fruit and Vegetable Intake	91%
Overweight or Obese	27%
Not Meeting Recommendations for Physical Activity in the Past Week	58%
Used Tobacco in the Past 30 Days	18%
Had at least One Drink of Alcohol At least One Day in the Past 30 Days	26%
Felt Sad or Hopeless (almost every day for two or more weeks in a row so that they stopped doing some usual activities)	26%
Middle School Youth Age 10-14	
Not Meeting Guidelines for Fruit and Vegetable Intake	76%
Not Meeting Recommendations for Physical Activity in the Past Week	67%
Used Tobacco in the Past 30 Days	2%

Source: Estimates produced by Community Health Solutions using Youth Risk Behavioral Surveillance System data and demographic estimates from US Census Bureau, American Community Survey. See Appendix E. Data Sources for details.

8. 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-8* shows the estimated number of uninsured individuals (by income as a percent of the federal poverty level) in the study region as of 2015.[10] At a given point in time in 2015, an estimated 80,155 (13%) nonelderly residents of the study region were uninsured. This included an estimated 9,307 children and 70,847 adults. Among uninsured children, an estimated 4,672 had income <= 200 percent of the federal poverty level, indicating that they could be income-eligible for coverage through the Virginia Medicaid or FAMIS program.[11] Among adults age 19-64, an estimated 25,944 had income <=138 percent of poverty, which could make them income-eligible for Medicaid if Virginia were to enact a Medicaid expansion.[12] *Note: Maps 28-29 in Appendix A show the geographic distribution of the uninsured population by zip code.*

Exhibit II-8.
Uninsured Profile (Estimates), 2015

Indicator	Study Region
Estimated Uninsured Counts* (FPL = Federal Poverty Level)	
Uninsured Nonelderly Age 0-64	80,155
Uninsured Children Age 0-18	9,307
Uninsured Children Age 0-18 <=138% FPL	3,019
Uninsured Children Age 0-18 <=200% FPL	4,672
Uninsured Children Age 0-18 <=250% FPL	5,738
Uninsured Children Age 0-18 <=400% FPL	7,629
Uninsured Children Age 0-18 138-400% FPL	4,610
Uninsured Adults Age 19-64	70,847
Uninsured Adults Age 19-64 <=138% FPL	25,944
Uninsured Adults Age 19-64 <=200% FPL	38,046
Uninsured Adults Age 19-64 <=250% FPL	45,859
Uninsured Adults Age 19-64 <=400% FPL	59,429
Uninsured Adults Age 19-64 138-400% FPL	33,485
Estimated Uninsured Percent	
Uninsured Nonelderly Percent	13%
Uninsured Children Percent	6%
Uninsured Adults Percent	15%
**FPL Categories are cumulative*	
Source: Estimates of uninsured are based on Community Health Solutions analysis of U.S. Census Bureau Small Area Health Insurance Estimates and demographic data from US Census Bureau, American Community Survey. See Appendix E. Data Sources for details.	

[10] For more information, please see: https://aspe.hhs.gov/2015-poverty-guidelines
[11] Other eligibility criteria apply in addition to income.
[12] Other eligibility criteria apply in addition to income.

9. 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-9* three of the four localities included in the study region have more or more census tracts designated as a Governor's Medically Underserved Population (MUP) (Arlington and Fairfax counties and the City of Alexandria). A MUP designation states that the population of specific census tracts are deemed as medically underserved. A Governor's MUP is an exceptional case where "unusual local conditions which are a barrier to access to or the availability of personal health services exist and are documented, and if such a designation is recommended by the chief executive officer and local officials of the State where the requested population resides."

For a more detailed description, visit the U.S. Health Resources and Service Administration designation webpage at http://www.hrsa.gov/shortage/mua/index.html.

Exhibit II-9.
Medically Underserved Profile

Locality	Medically Underserved Designation	Number of MUP Designated Census Tracts
Alexandria City	Governor's Medically Underserved Population (MUP)	1 of 37 total census tracts
Arlington County	Governor's Medically Underserved Population (MUP)	1 of 59 total census tracts
Falls Church City	None	None
Fairfax County	Governor's Medically Underserved Population (MUP)	9 of 258 total census tracts

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

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

The maps in this section illustrate the geographic distribution of the study region population on key demographic and health indicators by zip code. The maps 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:

1. Total Population, 2015	16. Total Live Births, 2013
2. Population Density (population per square mile), 2015	17. Low Weight Births, 2013
3. Child Population Age 0-17, 2015	18. Births Without Early Prenatal Care (No Prenatal Care in the First 13 Weeks), 2013
4. Senior Population Age 65+, 2015	19. Births to Teen Mothers Under Age 18, 2013
5. Asian Population, 2015	20. Prevention Quality Indicator (PQI) Hospital Discharges, FY2015
6. Black/African American Population, 2015	21. Behavioral Health (BH) Hospital Discharges, FY2015
7. White Population, 2015	22. Estimated Adults Age 18+ Overweight or Obese, 2015
8. Other or Multi-Race Population, 2015	23. Estimated Adult Age 18+ Smokers, 2015
9. Hispanic Ethnicity Population, 2015	24. Estimated Adults Age 18+ with Diabetes, 2015
10. Population in Poverty, 2015	25. Estimated Adults Age 18+ with High Blood Pressure, 2015
11. Population Age 25+ Without a High School Diploma, 2015	26. Estimated Youth Age 14-19 Overweight or Obese, 2015
12. Total Deaths, 2013	27. Estimated Youth Age 14-19 who had No Physical Activity in the Past Week, 2015
13. Malignant Neoplasm (Cancer) Deaths, 2013	28. Estimated Uninsured Children Age 0-18, 2015
14. Heart Disease Deaths, 2013	29. Estimated Uninsured Adults Age 19-64, 2015
15. Cerebrovascular Disease (Stroke) Deaths, 2013	

Technical Notes

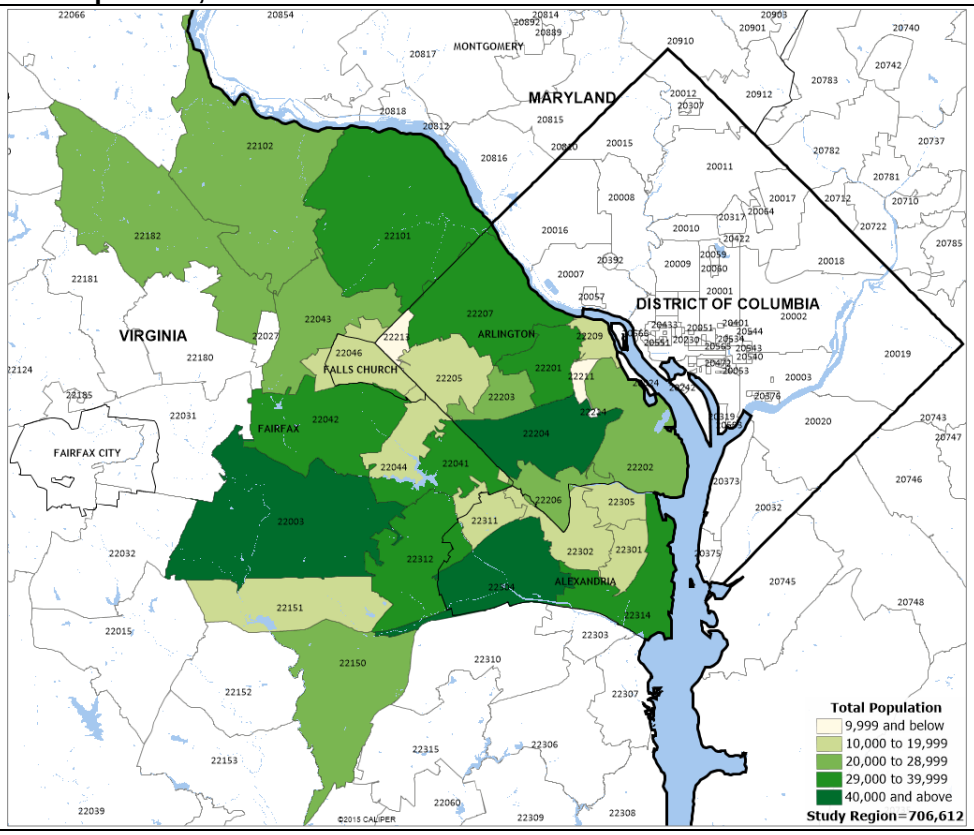
1. The maps focus on the Virginia Hospital Center service area of 28 zip codes, located in the within the counties of Arlington and Fairfax, and the cities of Alexandria and Falls Church. Because zip code boundaries do not automatically align with city/county boundaries, there are some zip codes that extend beyond the city/county boundaries. Additionally, not all zip codes in the counties of Arlington and Fairfax, and the cities of Alexandria and Falls Church were identified as part of the Virginia Hospital Center study region.

2. With the exception of population density, 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.

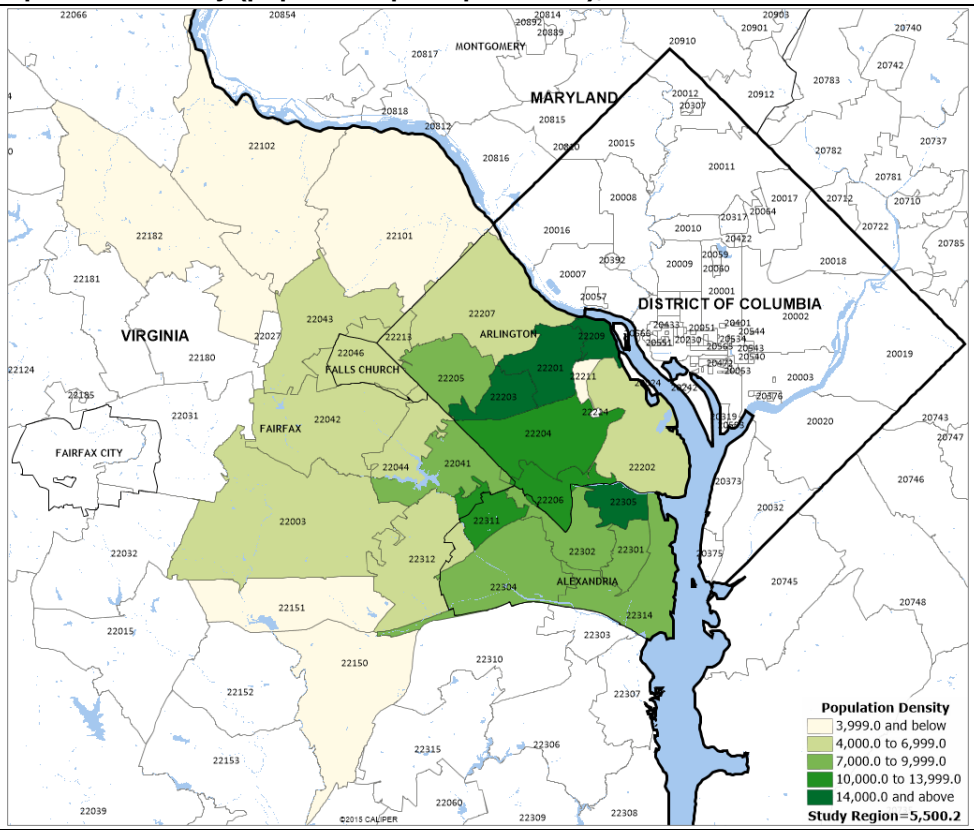
3. The maps are thematically shaded to show the zip code-level indicators in five groupings or 'quintiles'.

4. White shading indicates either zip codes not included in the Virginia Hospital Center study region, or zero values for zip codes that are included in the Virginia Hospital Center study region. The Virginia Hospital Center study region zip codes with zero values are noted.

Map 1: Total Population, 2015

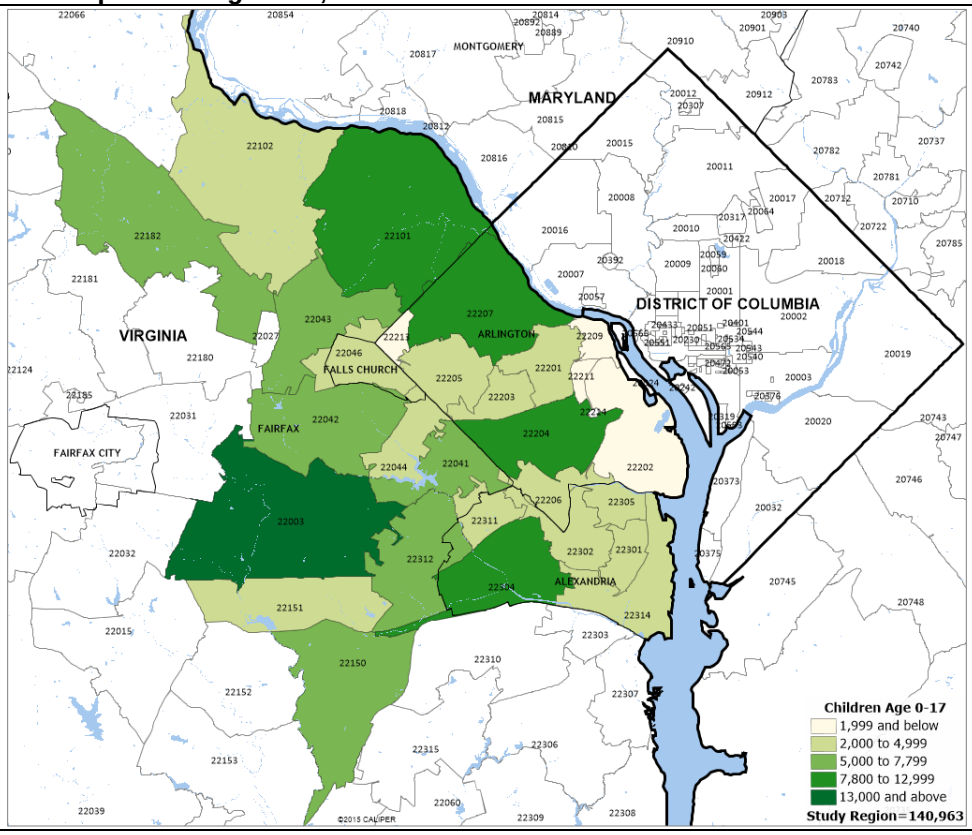


Map 2: Population Density (population per square mile), 2015

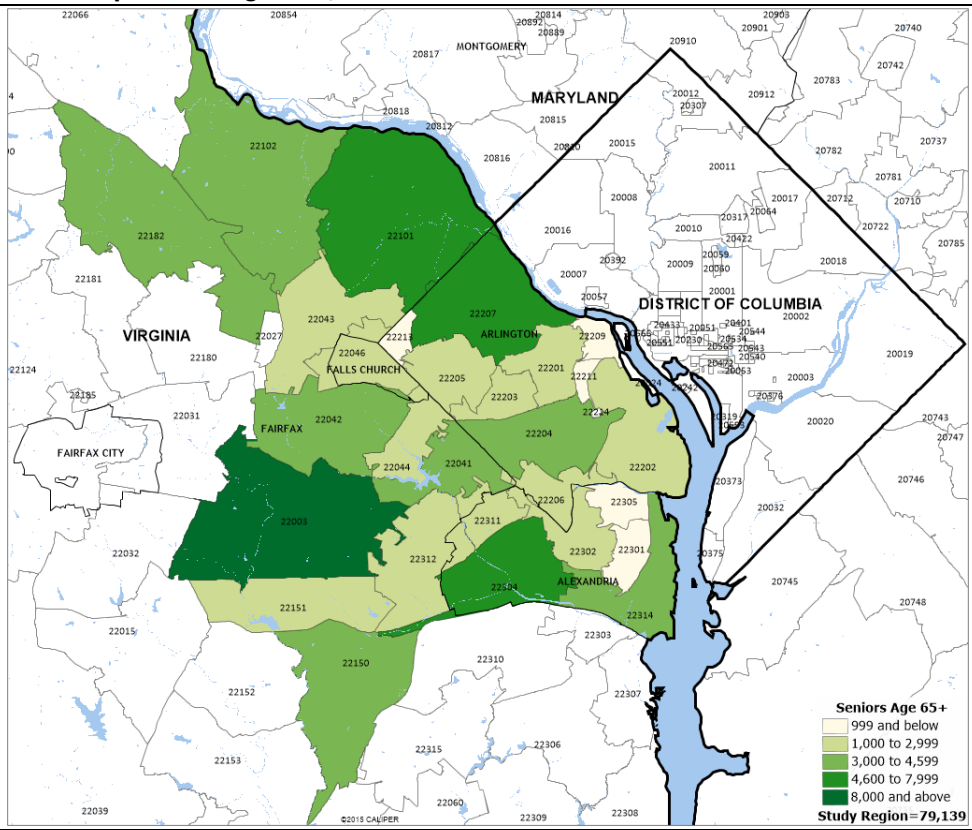


Source: Community Health Solutions analysis of estimates from US Census Bureau, American Community Survey. See Appendix E. Data Sources for details.

Map 3: Child Population Age 0-17, 2015



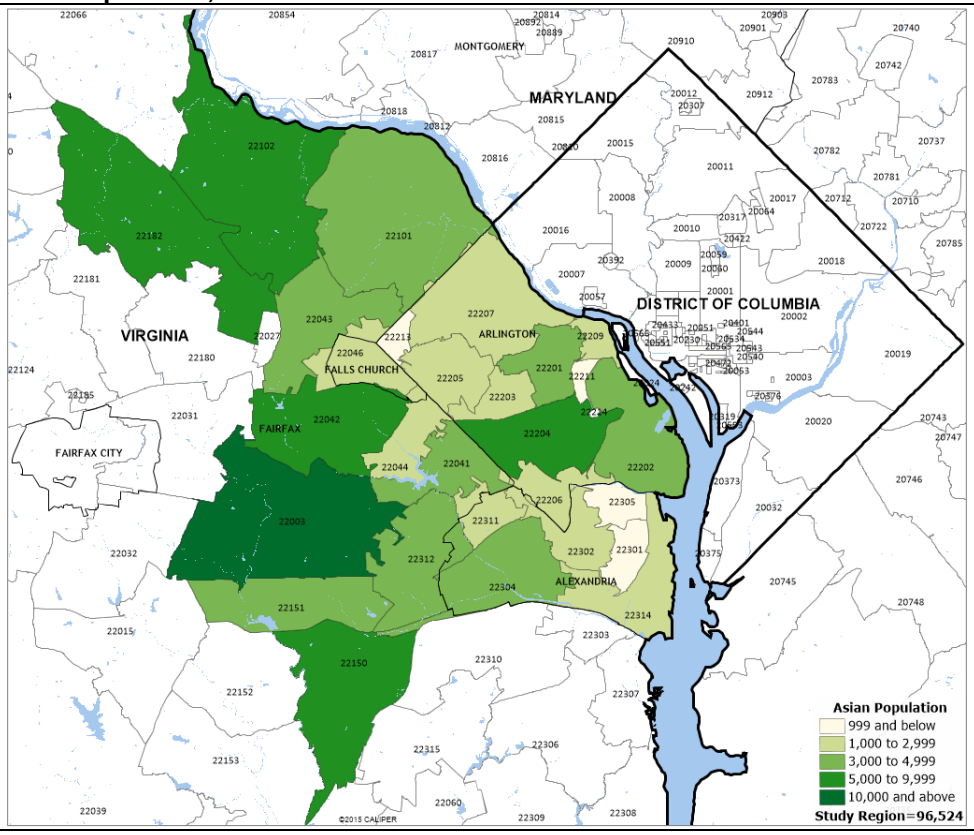
Map 4: Senior Population Age 65+, 2015



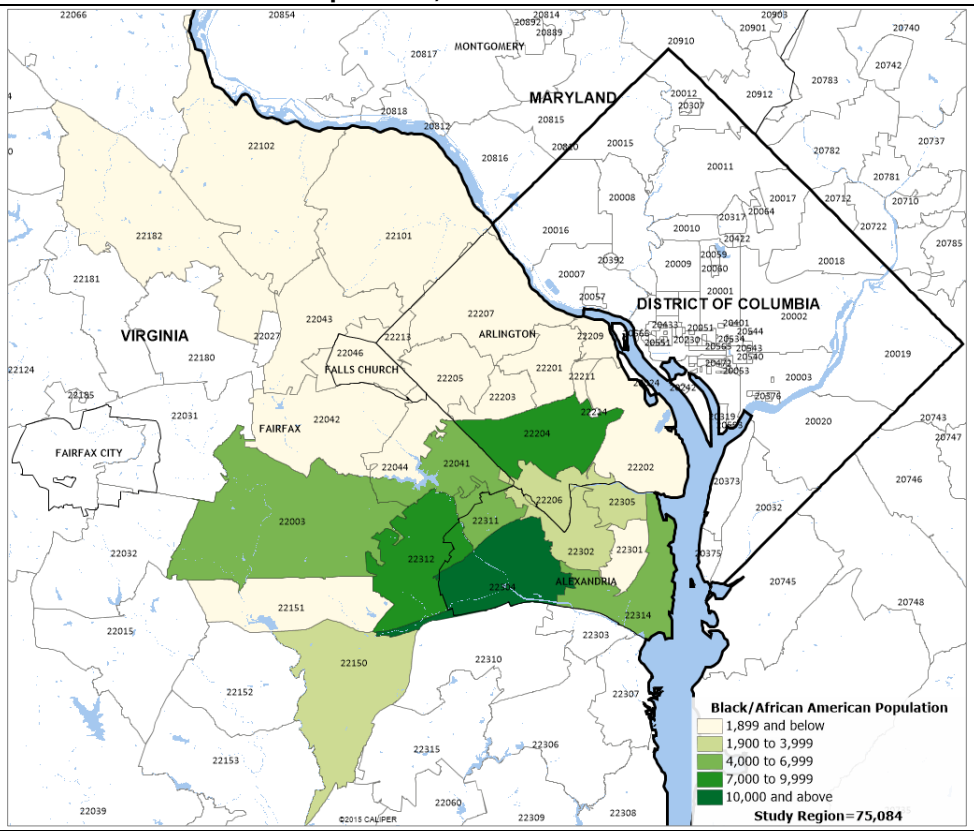
Source: Community Health Solutions analysis of estimates from US Census Bureau, American Community Survey. See Appendix E. Data Sources for details.

.

Map 5: Asian Population, 2015

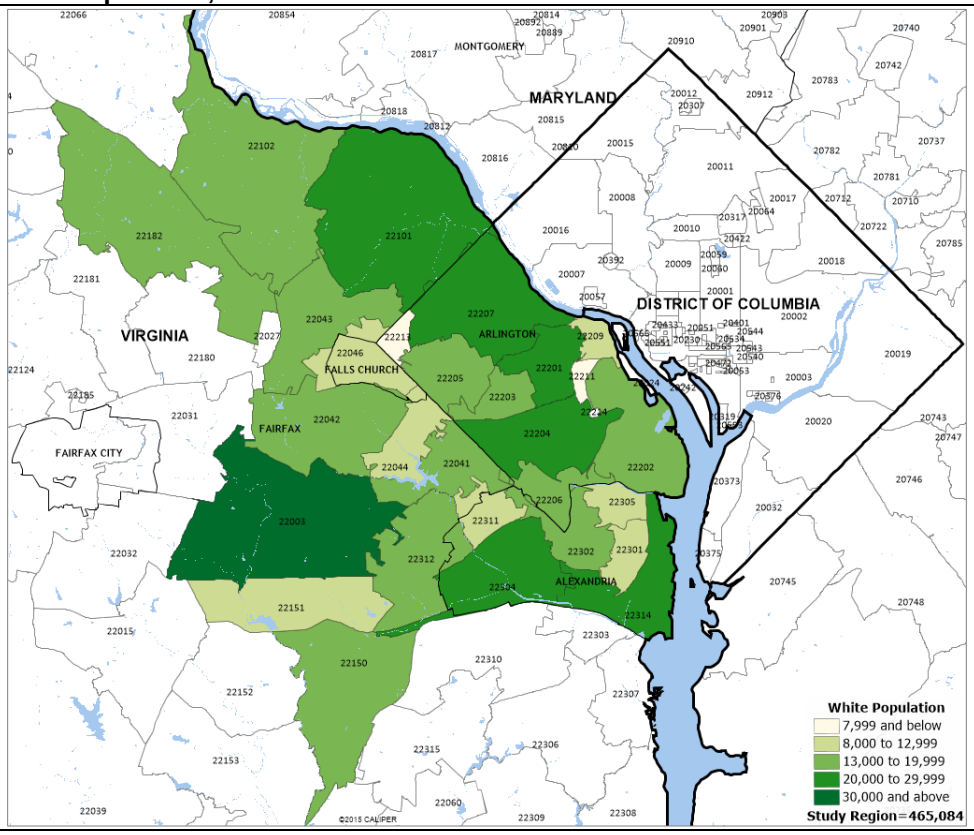


Map 6: Black/African American Population, 2015

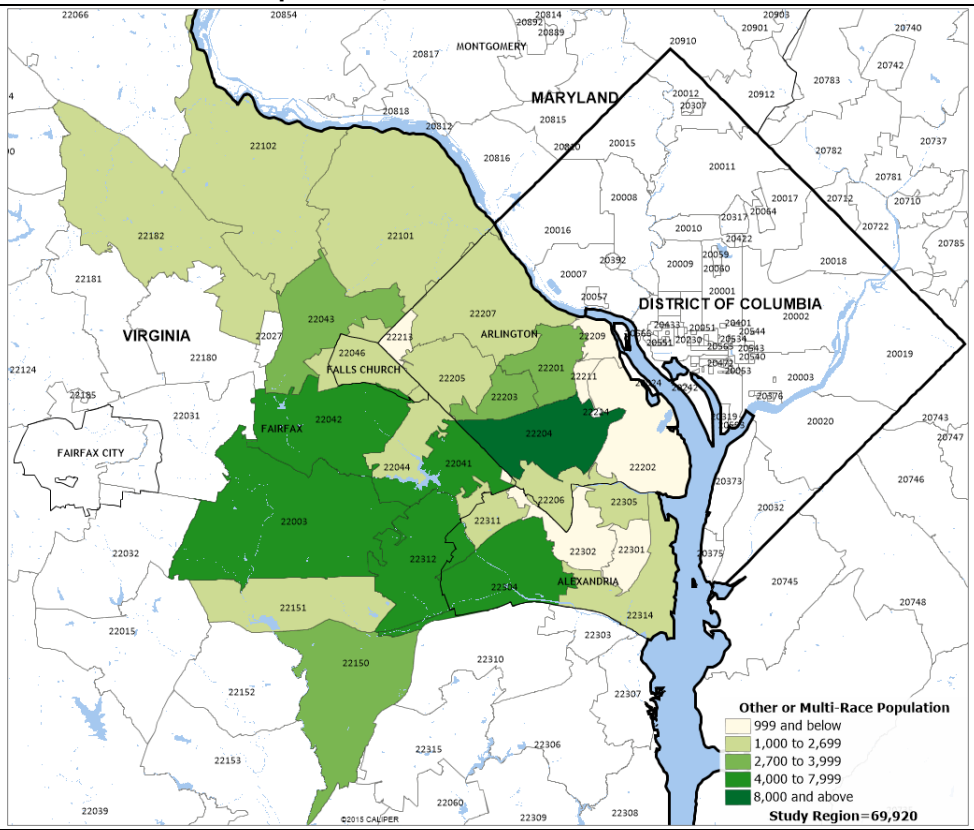


Source: Community Health Solutions analysis of estimates from US Census Bureau, American Community Survey. See Appendix E. Data Sources for details.

Map 7: White Population, 2015

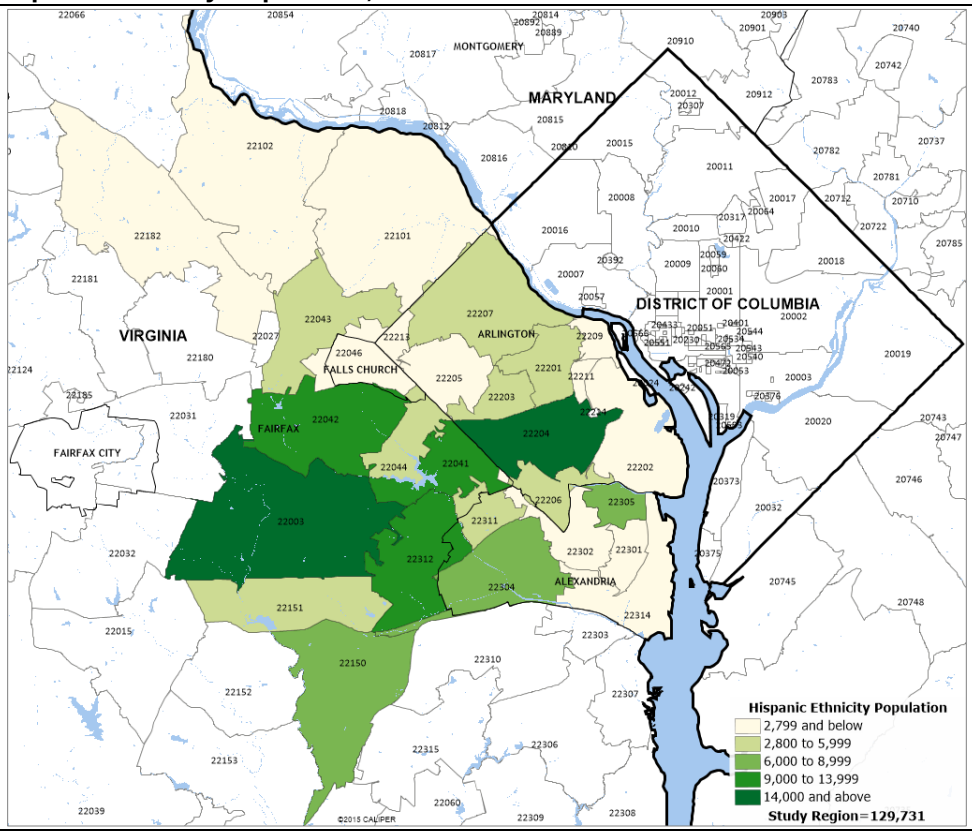


Map 8: Other or Multi-Race Population, 2015



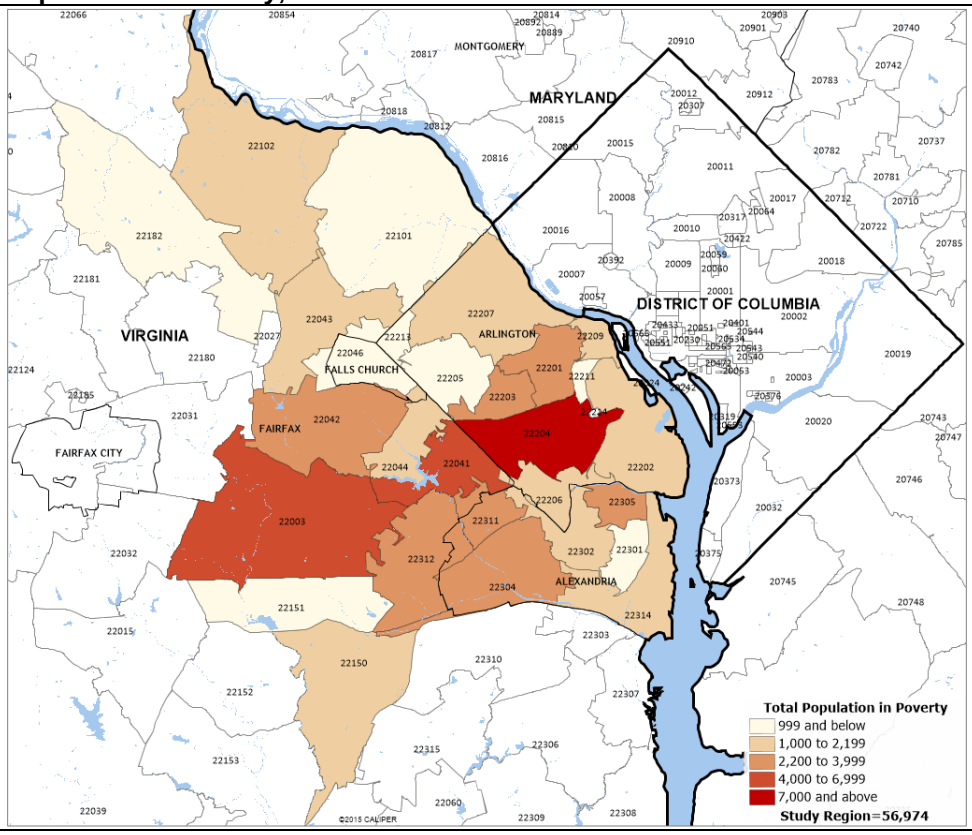
Source: Community Health Solutions analysis of estimates from US Census Bureau, American Community Survey. See Appendix E. Data Sources for details.

Map 9: Hispanic Ethnicity Population, 2015

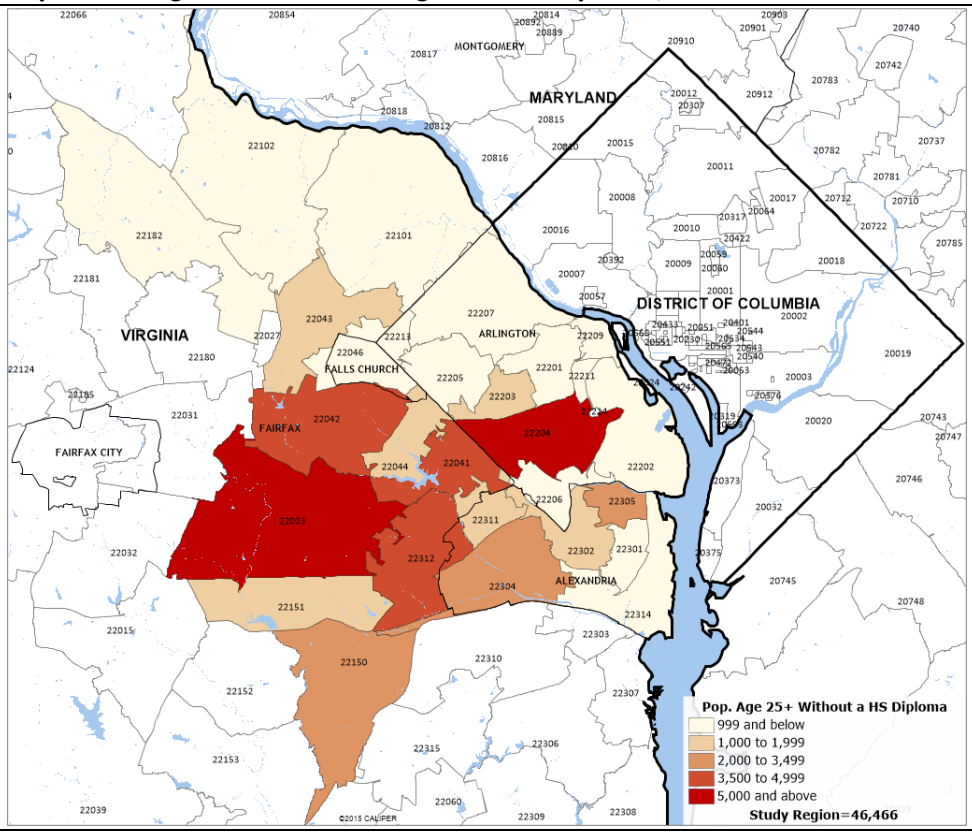


Source: Community Health Solutions analysis of estimates from US Census Bureau, American Community Survey. See Appendix E. Data Sources for details.

Map 10: Population in Poverty, 2015

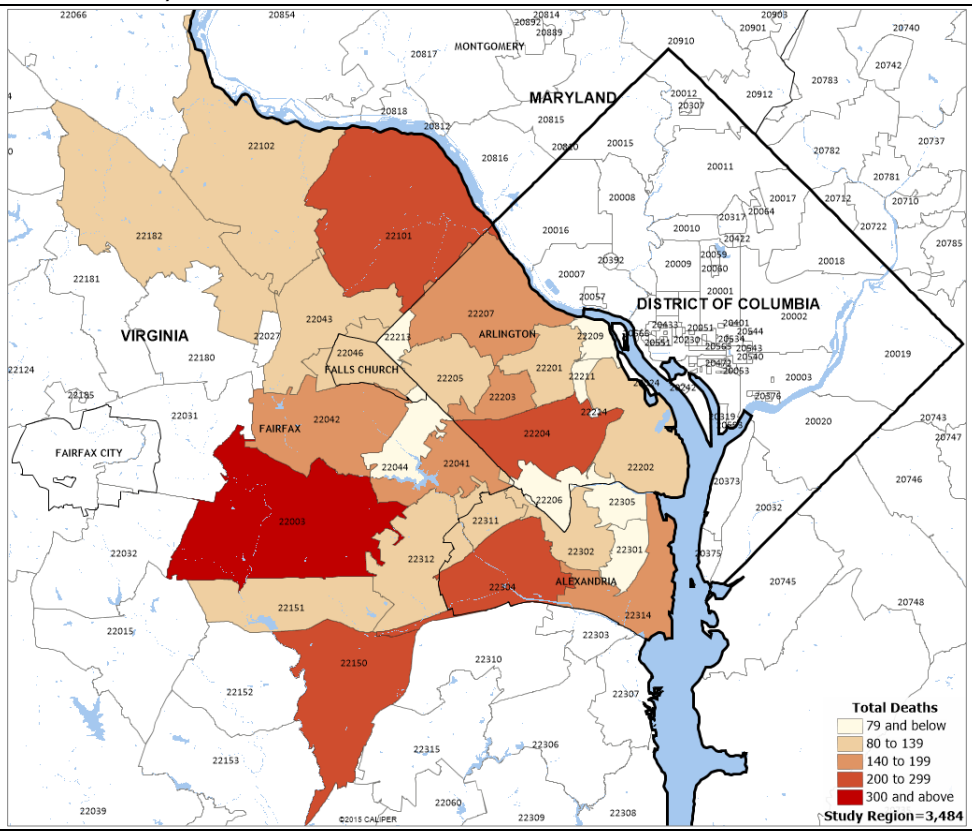


Map 11: Population Age 25+ Without a High School Diploma, 2015

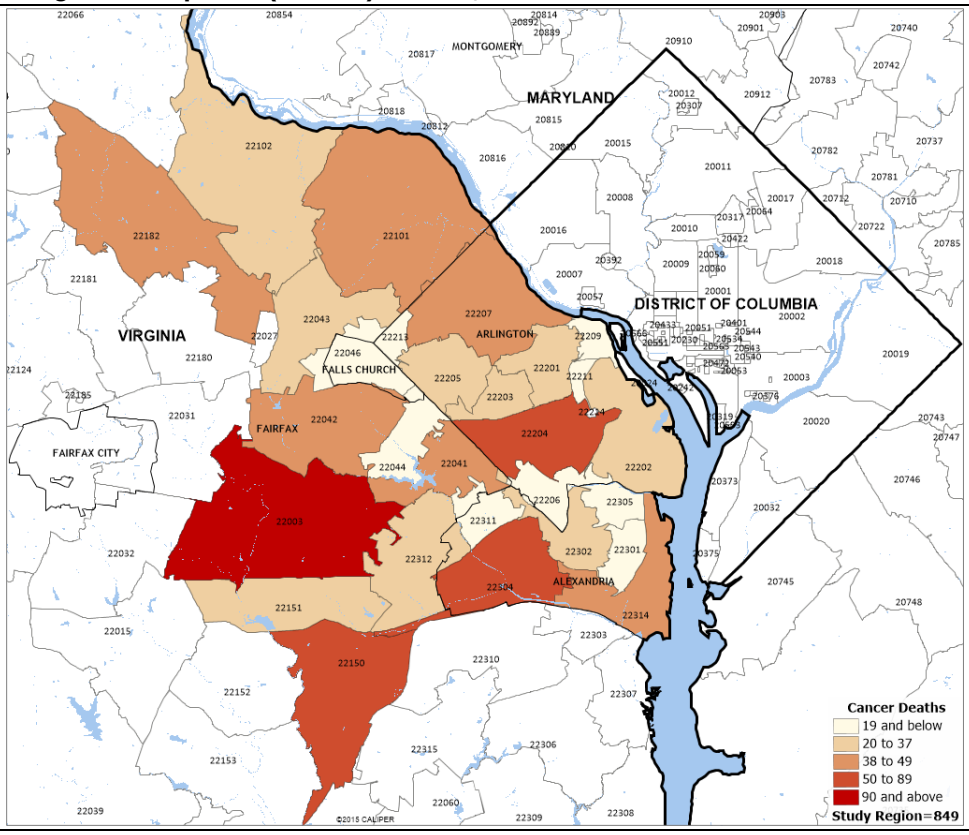


Source: Community Health Solutions analysis of estimates from US Census Bureau, American Community Survey. See Appendix E. Data Sources for details.

Map 12: Total Deaths, 2013

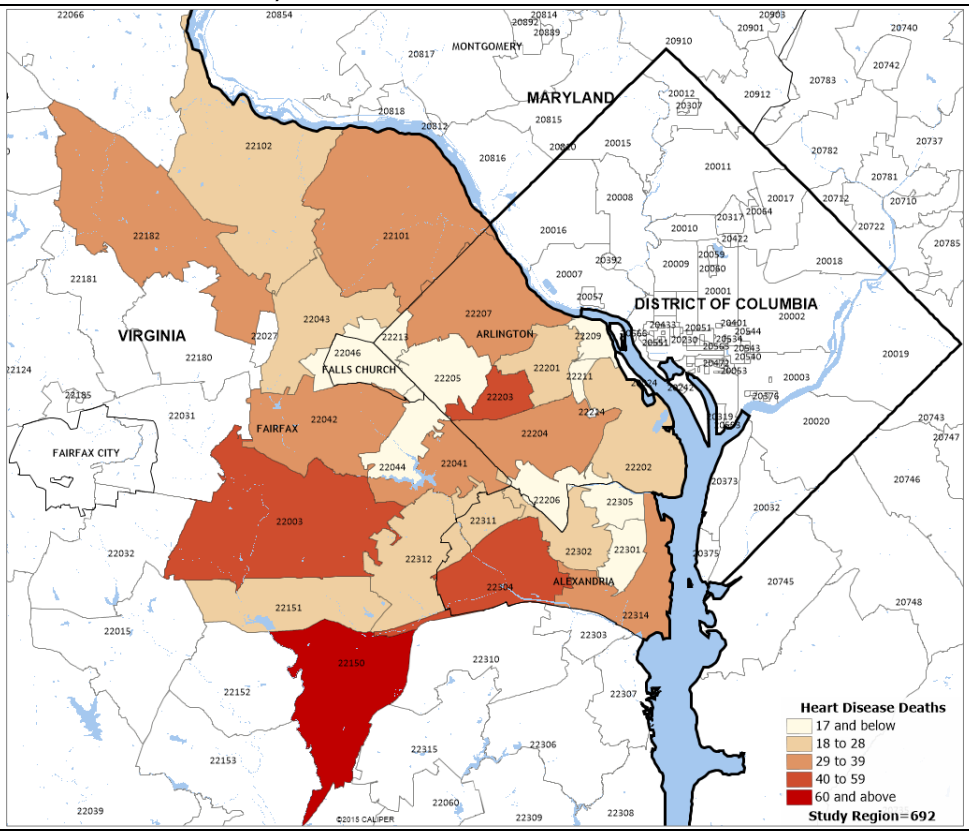


Map 13: Malignant Neoplasm (Cancer) Deaths, 2013*

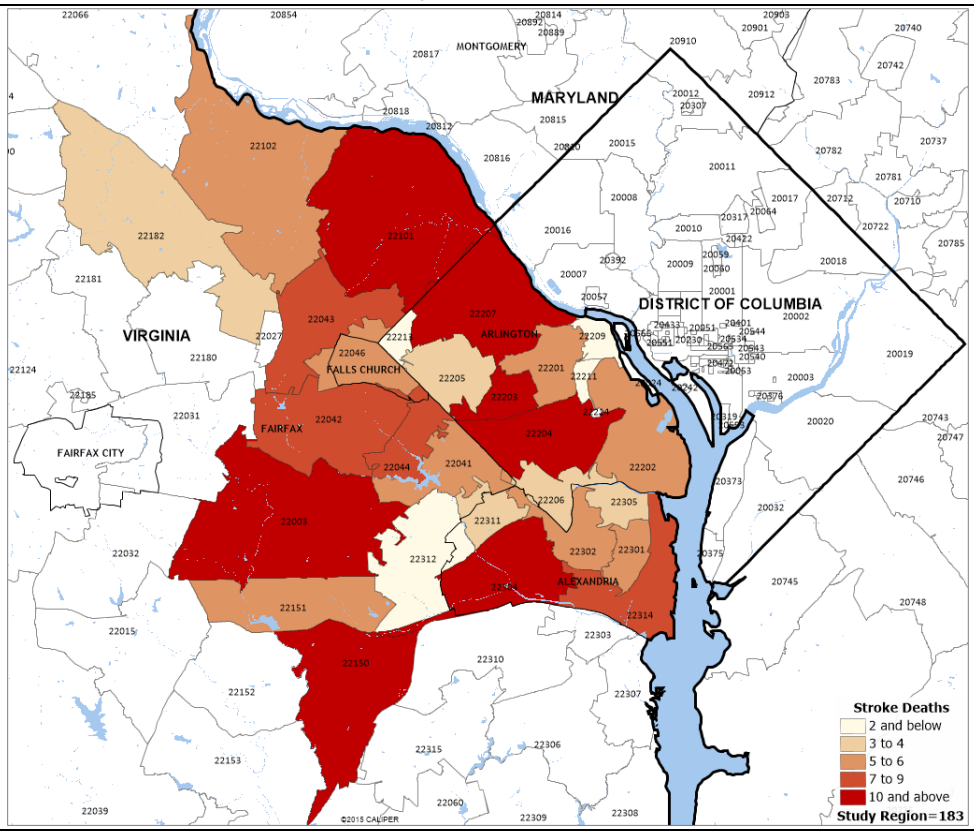


**There were no reported cancer deaths for zip code 22211. Source: Community Health Solutions analysis of data from the Virginia Department of Health. See Appendix E. Data Sources for details.*

Map 14: Heart Disease Deaths, 2013*



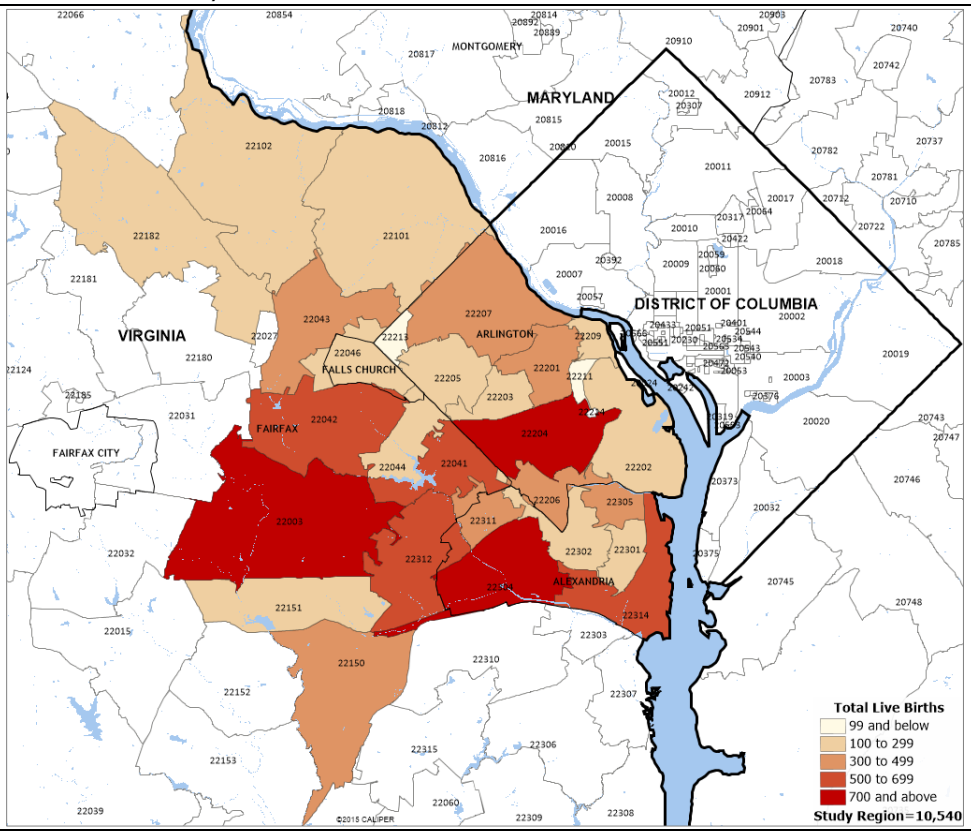
Map 15: Cerebrovascular Disease Deaths, 2013*



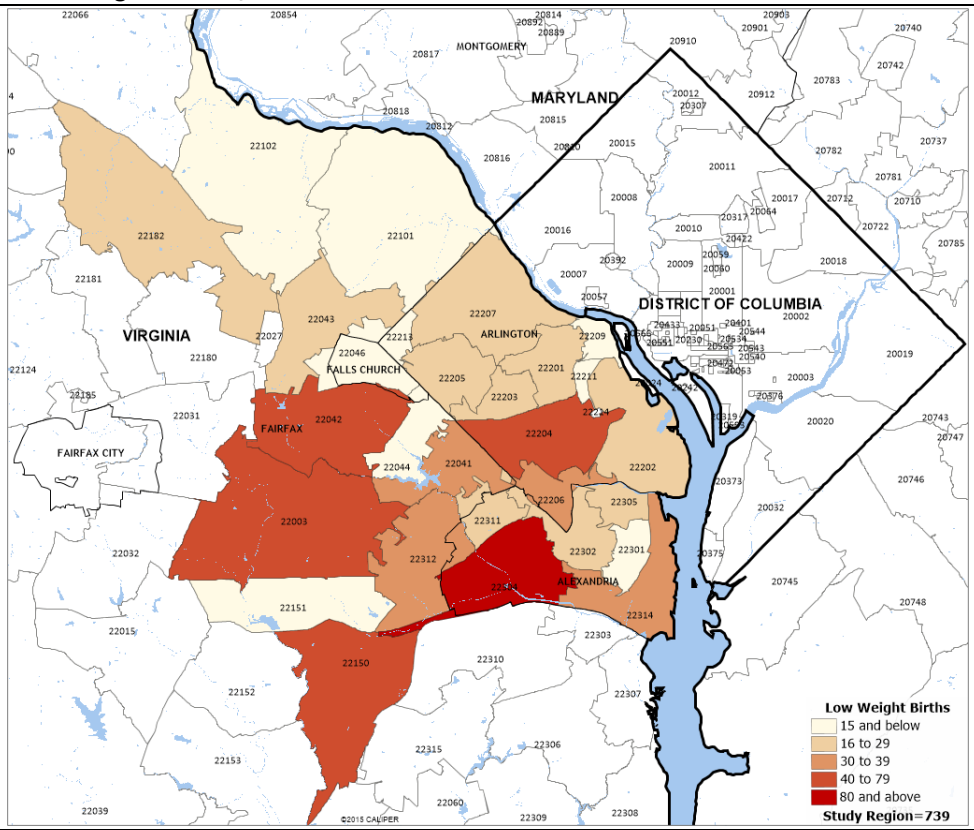
**There were no reported heart disease deaths for zip code 22211, and no stroke deaths for zip codes 22211, 22213, 22209 and 22312. Source: Community Health Solutions analysis of data from the Virginia Department of Health. See Appendix E. Data Sources for details*

.

Map 16: Total Live Births, 2013

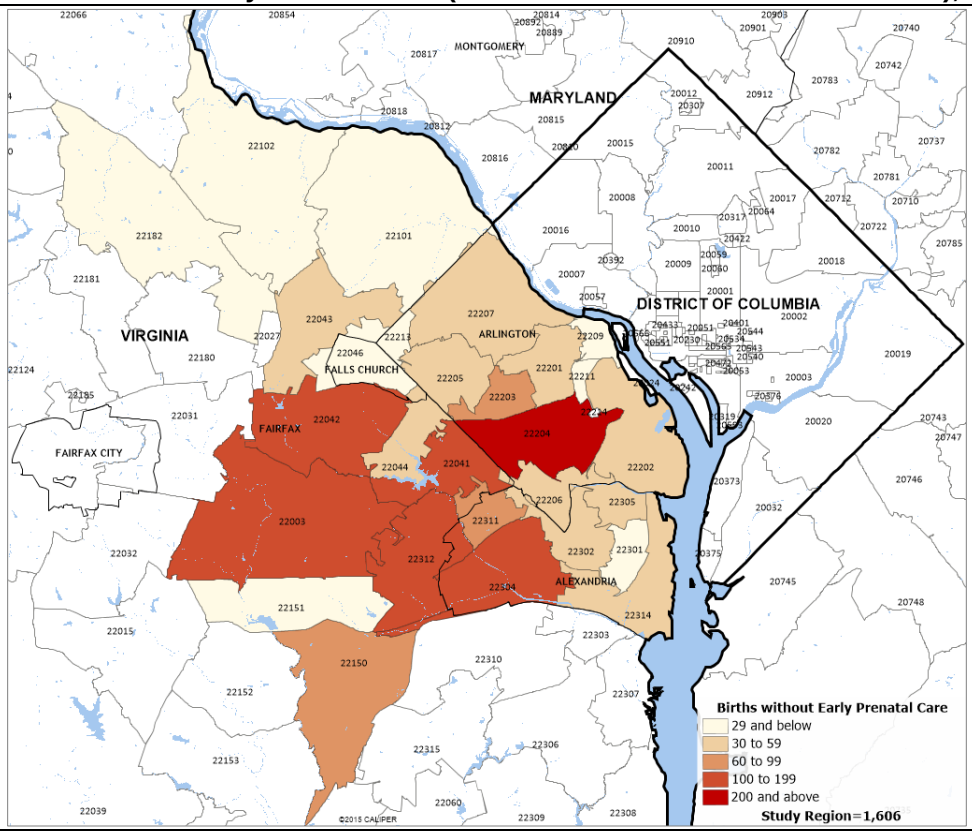


Map 17: Low Weight Births, 2013*

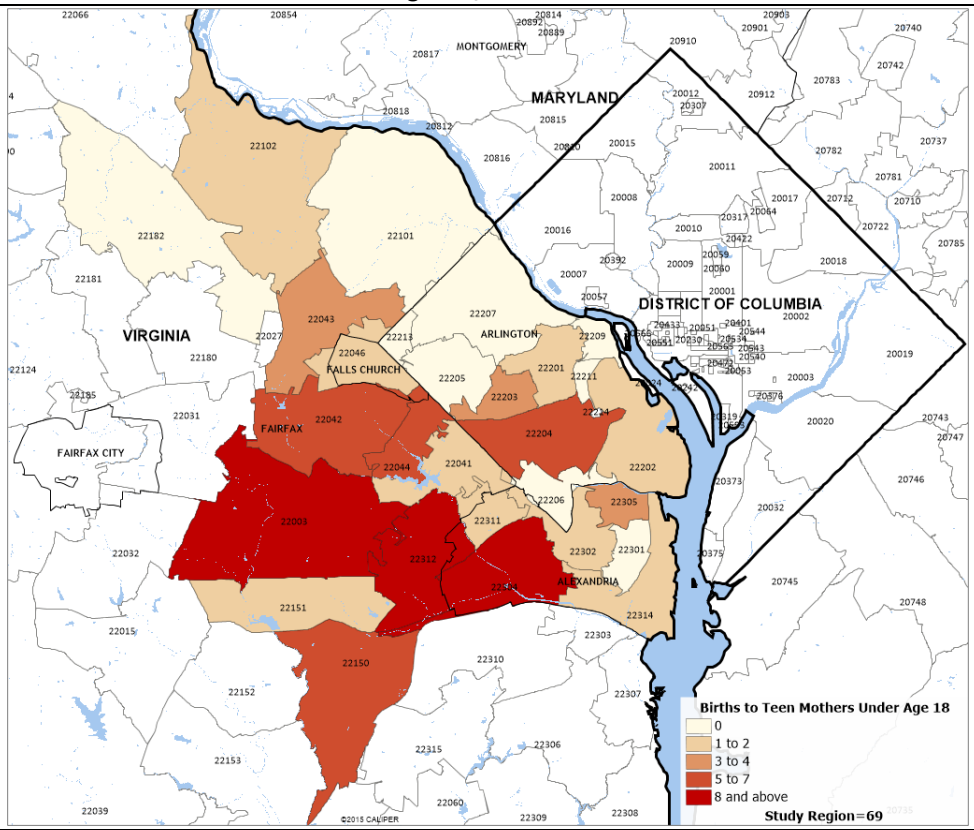


** There were no reported low weight births for zip code 22211. Source: Community Health Solutions analysis of data from the Virginia Department of Health. See Appendix E. Data Sources for details.*

Map 18: Births Without Early Prenatal Care (No Prenatal Care in the First 13 Weeks), 2013*

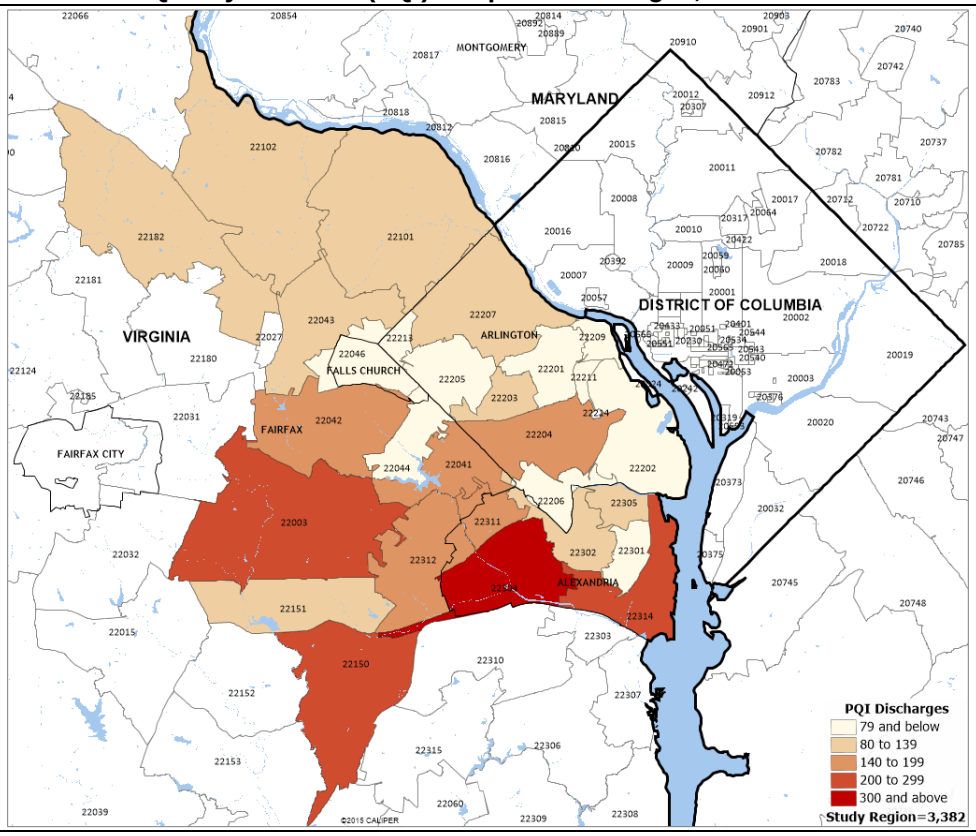


Map 19: Births to Teen Mothers Under Age 18, 2013*

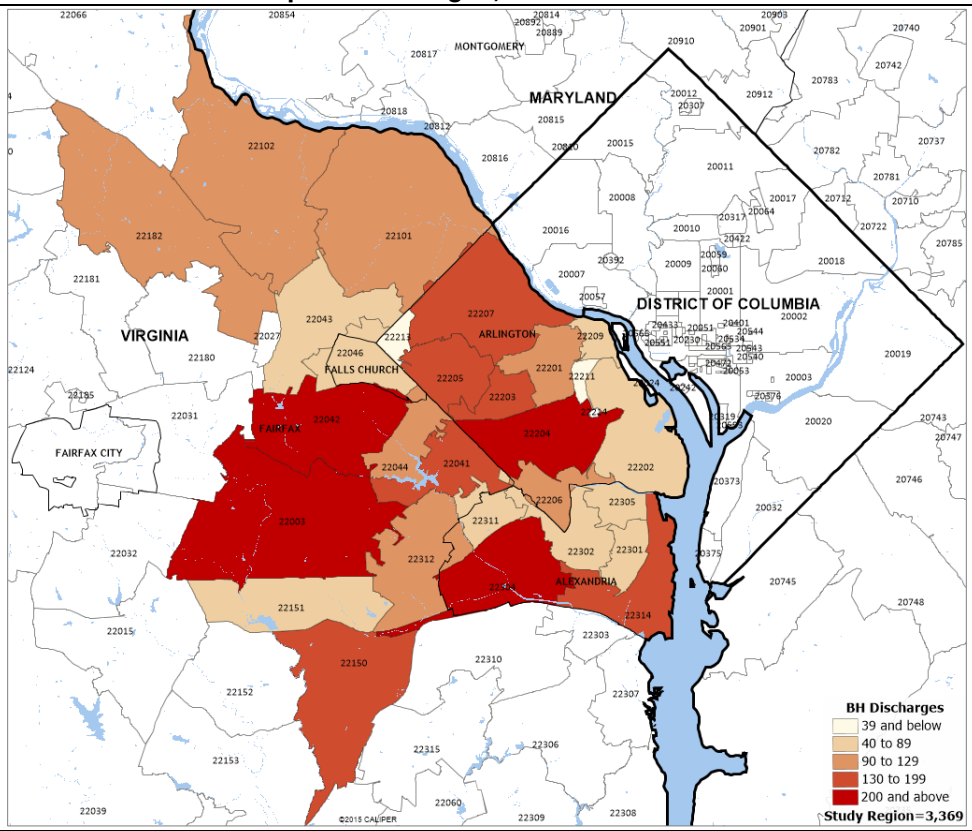


**There were no reported births without early prenatal care for zip code 22211. There were no reported births to teen mothers under age 18 for zip codes 22211, 22213, 22209, 22301, 22182, 22101, 22182, 22205, 22206 and 22207. Source: Community Health Solutions analysis of data from the Virginia Department of Health. See Appendix E. Data Sources for details.*

Map 20: Prevention Quality Indicator (PQI) Hospital Discharges, FY2015

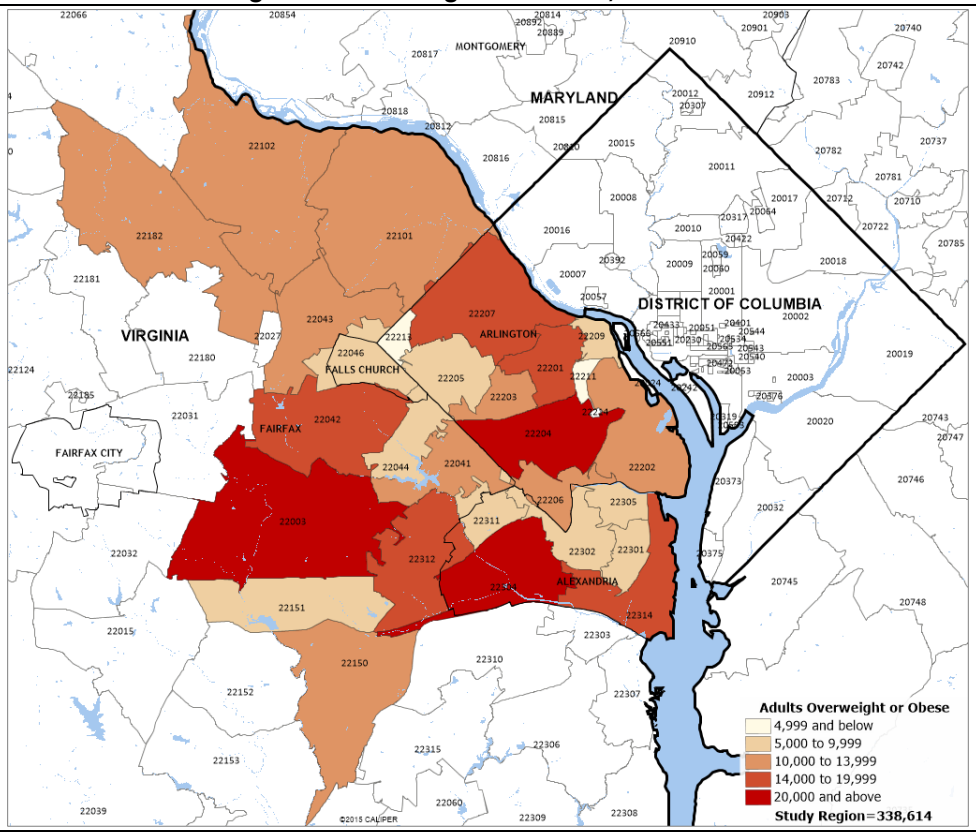


Map 21: Behavioral Health Hospital Discharges, FY2015

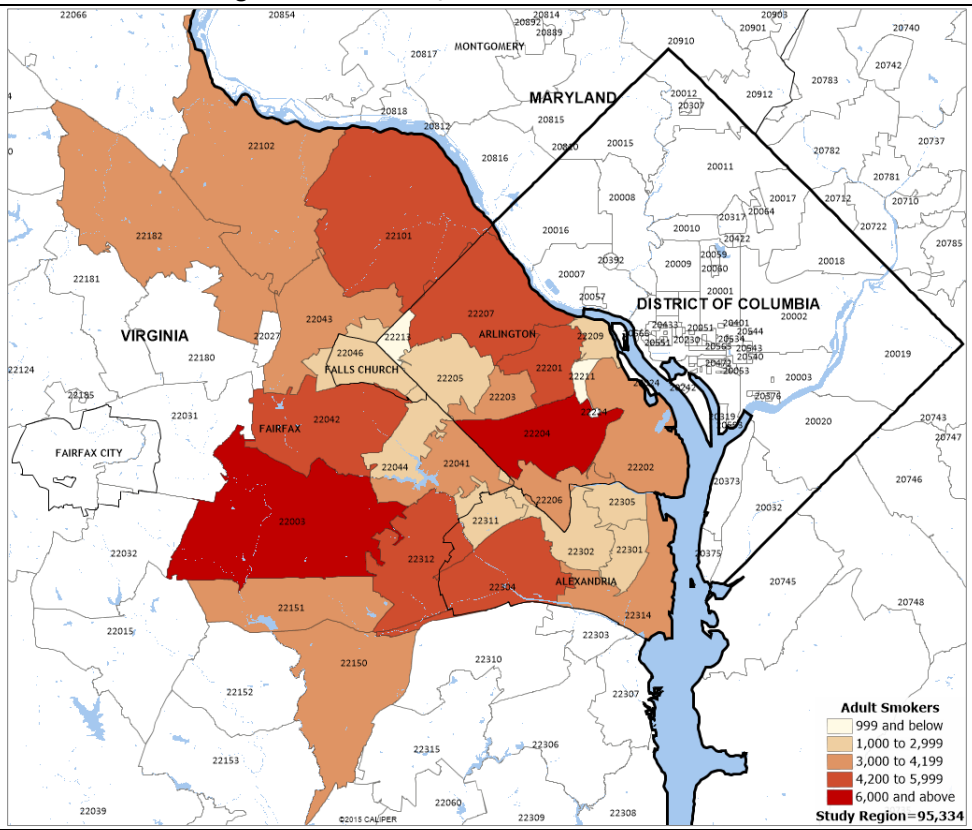


Source: Community Health Solutions analysis of hospital discharge data from Virginia Health Information, Inc. See Appendix E. Data Sources for details.

Map 22: Estimated Adults Age 18+ Overweight or Obese, 2015

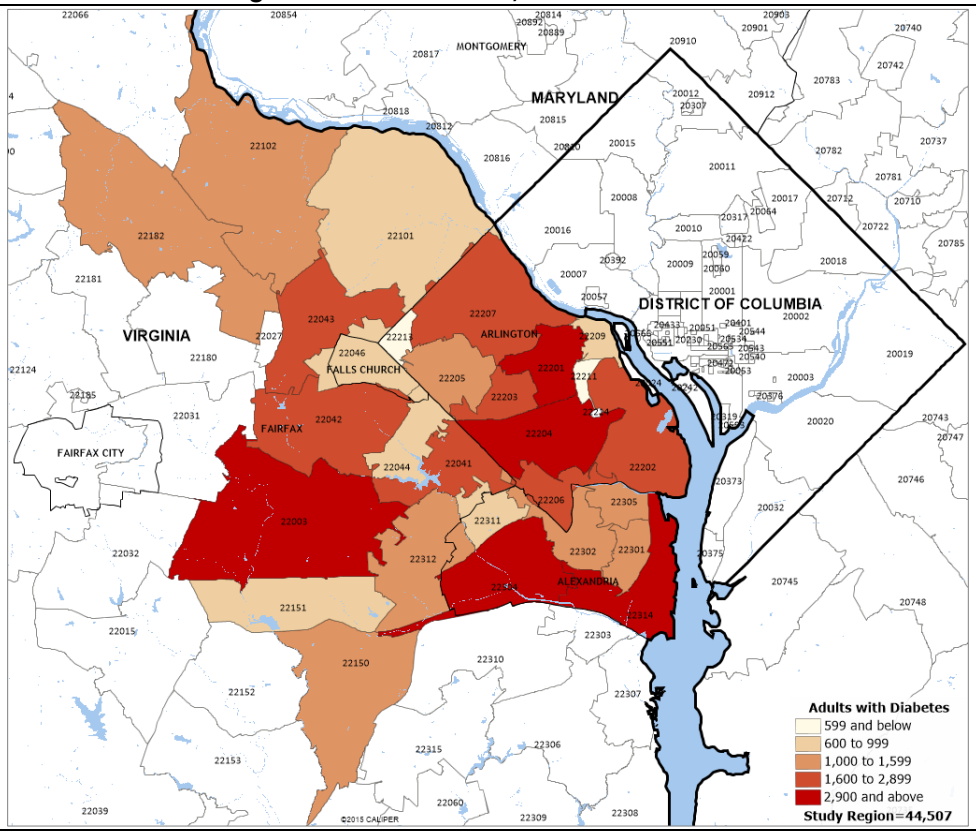


Map 23: Estimated Adult Age 18+ Smokers, 2015

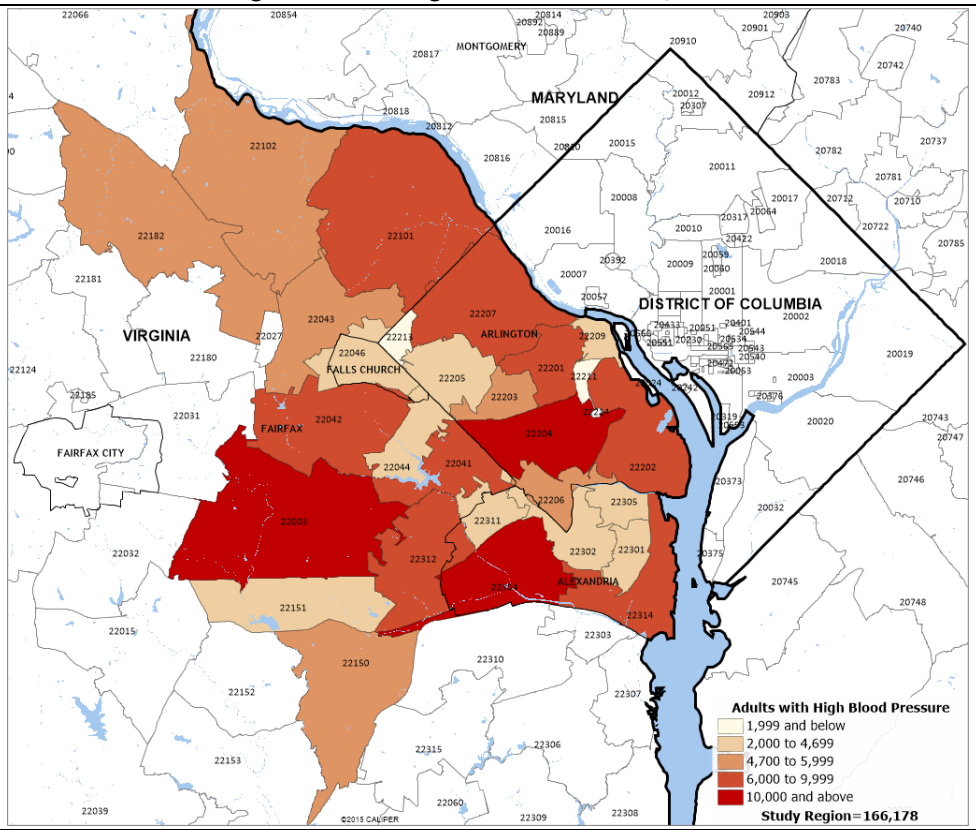


Source: Estimates based on Community Health Solutions analysis of Virginia Behavioral Risk Factor Surveillance System data and estimates from US Census Bureau, American Community Survey. See Appendix E. Data Sources for details.

Map 24: Estimated Adults Age 18+ with Diabetes, 2015

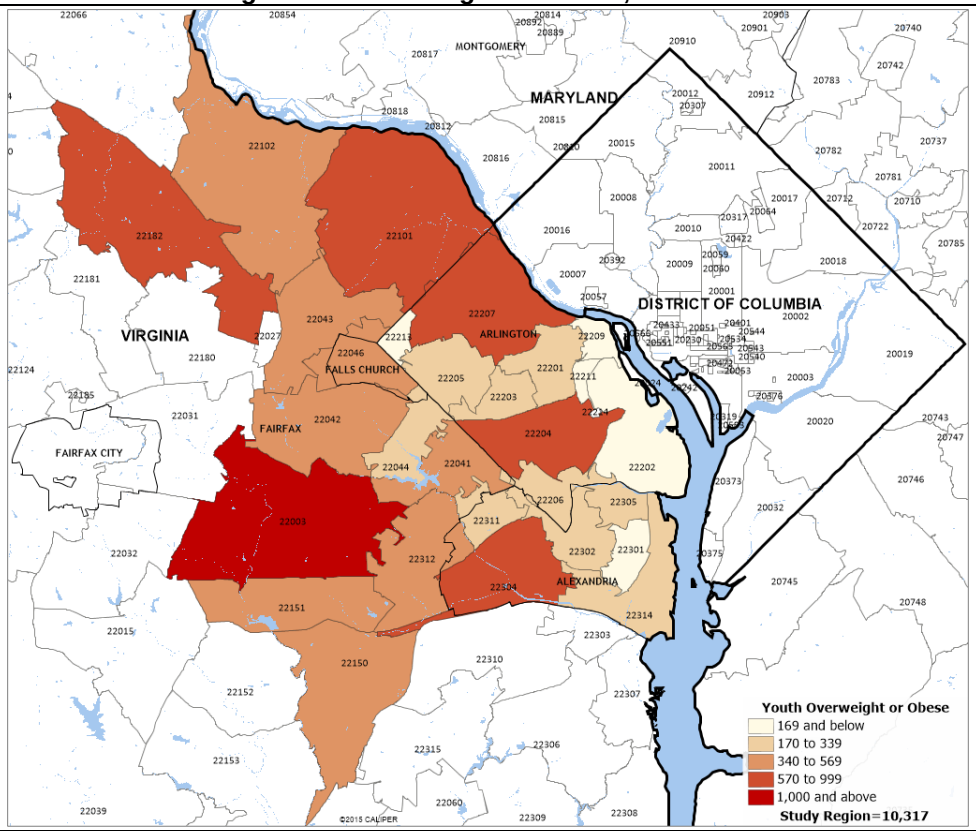


Map 25: Estimated Adults Age 18+ with High Blood Pressure, 2015

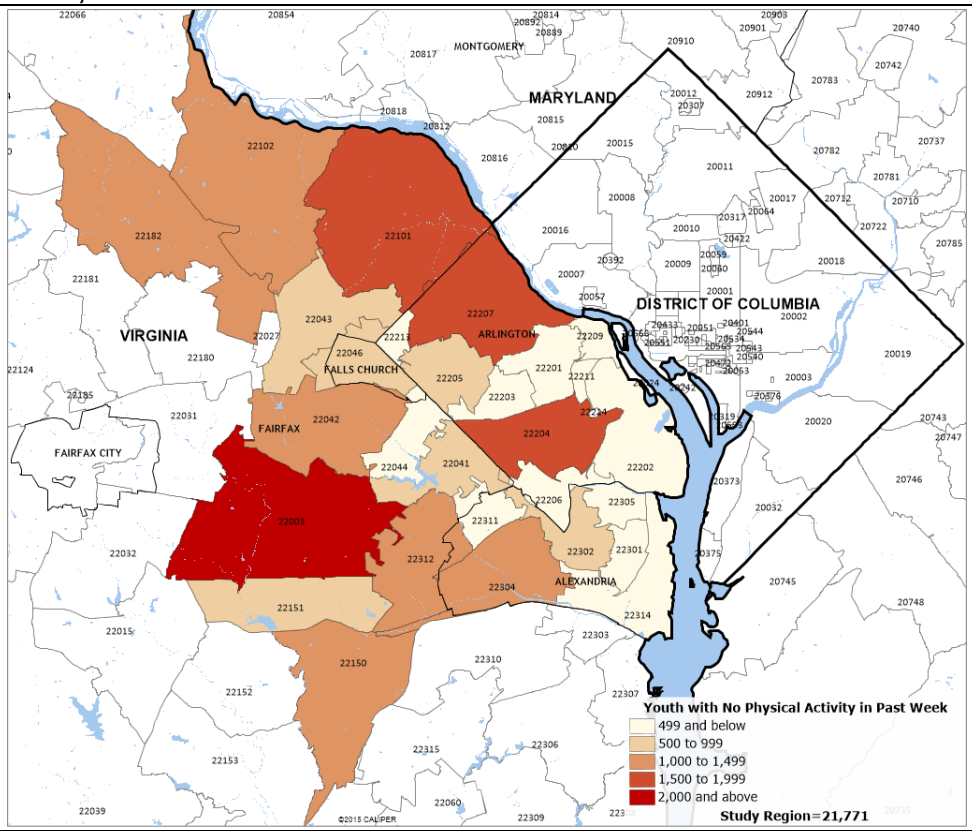


Source: Estimates based on Community Health Solutions analysis of Virginia Behavioral Risk Factor Surveillance System data and estimates from US Census Bureau, American Community Survey. See Appendix E. Data Sources for details.

Map 26: Estimated Youth Age 14-19 Overweight or Obese, 2015

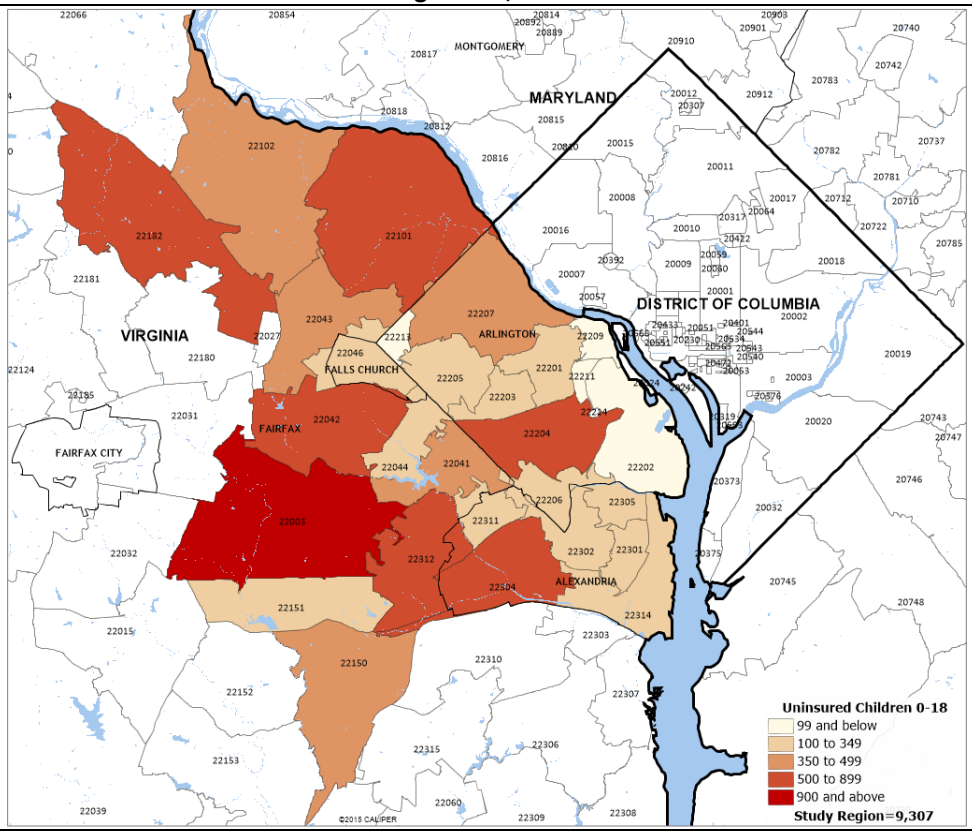


Map 27: Estimated Youth Age 14-19 Not Meeting Recommendations for Physical Activity in the Past Week, 2015

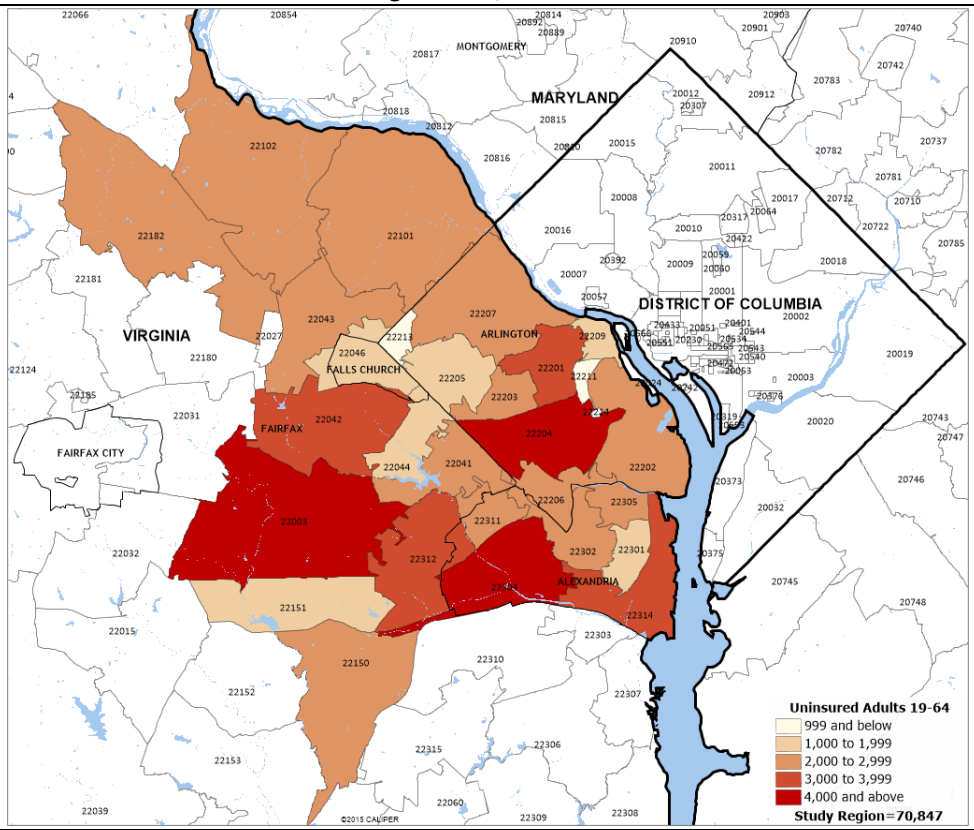


Source: Estimates based on Community Health Solutions analysis of Virginia Youth Risk Behavioral Surveillance System data and estimates from US Census Bureau, American Community Survey. See Appendix E. Data Sources for details.

Map 28: Estimated Uninsured Children Age 0-18, 2015



Map 29: Estimated Uninsured Adults Age 19-64, 2015



Source: Estimates based on Community Health Solutions analysis of Virginia Behavioral Risk Factor Surveillance System data and estimates from US Census Bureau, American Community Survey. See Appendix E. Data Sources for details.

Appendix B: The Health Opportunity Index

Appendix B provides a closer look at the localities that contain the study region (Alexandria City, Arlington City, Fairfax County, and Falls Church City) through the lens of the *Health Opportunity Index*. The Health Opportunity Index (HOI) was developed by the Virginia Department of Health (VDH) to identify those geographic areas and populations that are most vulnerable to adverse health outcomes. The HOI is produced at the census-tract level, making it possible to identify pockets of vulnerability within the boundaries of larger cities and counties. When we apply the HOI to these localities, we find some of the most vulnerable census tracts in the Commonwealth of Virginia.

About the Health Opportunity Index

The Health Opportunity Index (HOI) was developed by the Virginia Department of Health (VDH) to identify those geographic areas and populations that are most vulnerable to adverse health outcomes. In 2015, VDH published the HOI for each of 1,875 census tracts across Virginia. (Census tracts vary in size, but on average there are about 4,000 people within a census tract.) The HOI is comprised of thirteen indicators that reflect a broad array of social determinants of health within each census tract. Social determinants of health include a range of personal, social, economic, and environmental factors that can contribute to individual and population health. The thirteen indicators used to produce the HOI include the following.

1. **Air Quality Indicator**: Includes EPA measures of pollution, including on-road, non-road and non-point pollution, and EPA measures of neurological, cancer and respiration risk.

2. **Population Churning Indicator**: The amount of population turnover within a community. It measures the rate at which people both move into a community and move out of a community.

3. **Population Density Indicator**: A measure of population density that takes into account the density levels most people in the community experience.

4. **Walkability Indicator**: A measure of how walkable a community is based on residential and employment density, land use (destination) diversity, street connectivity and public transit accessibility.

5. **Affordability Indicator**: The proportion of a community's income spent on housing and transportation. This indicates how much income remains for other priorities, including food, health care and social activities.

6. **Education Indicator**: The average number of years of schooling among adults in the community. It can range from zero (those with no formal schooling) to 20 (those with a doctorate/professional degree).

7. **Food Accessibility Indicator**: A measure of access to food by low income people within a community. It measures the proportion of the low-income community that has a large grocery store within 1 mile in urban areas or 10 miles in rural areas.

8. **Material Deprivation Indicator**: Based on the Townsend Material Deprivation Index, it examines the private material resources available to households in a community. Four indicators make up Townsend:
   - overcrowding (>2 persons per room)
   - unemployment
   - % of persons no vehicle or car
   - % of person who rent

9. **Employment Accessibility Indicator**: A measure of the number of jobs accessible to members of the community. Accessibility is determined by distance: close jobs are more accessible than jobs farther away.

10**. Income Inequality Indicator**: The Gini Index, a common measure of income inequality, measures whether the income earned within a community is distributed broadly or concentrated within the hands of small number of households.

11. **Job Participation Indicator**: The percentage of individuals 16-64 years of age active in the civilian labor force. It includes both those currently working and those seeking work.

12. **Access to Care Indicator**: Whether community members have access to a primary care physician and the means to pay for care. It includes the proportion of uninsured residents and the number of physicians within 30 miles of the community.

13. **Segregation Indicator**: A measure of whether and how much people of different racial and ethnic backgrounds live together in diverse communities. It includes measures of both community diversity and the distance between communities with different racial or ethnic profiles.

These thirteen indicators are then organized into four profiles:

1. **Community Environmental**. This profile is a measure of the natural, built and social environment. It includes the air quality, population churning, population-weight density and workability indicators.
2. **Consumer Opportunity.** This profile is a measure of consumer resources available. It includes the affordability, education, food accessibility and material deprivation indicators.
3. **Economic Opportunity**. This profile is a measure of economic opportunities available, highlighting employment and income. It includes the employment access, income inequality and job participation indicators.
4. **Wellness Disparity**. This profile is a measure of disparate access to health services. It includes the access to care and segregation indicators.

The thirteen indicators and four profiles are statistically combined to produce a single indicator of health opportunity called the Health Opportunity Index, or HOI. To evaluate the HOI, VDH conducted a series of studies to test the relationship between the HOI and a set of widely used indicators of community health. Consequently, the HOI can be useful as a guide for identifying small geographic areas that are at relative risk for adverse health outcomes.

The Health Opportunity Index in Study Region

Exhibit B-1 provides a summary of the statewide rankings on the total HOI rank, and ranking for the four profiles for the study region as of 2015. The ranking is based on the 133 localities in Virginia; a higher number indicates a lower opportunity for health. As seen in *Exhibit II-1*, all three study region localities rank 'Very High' on the HOI overall, and "Very High' or "High' on most profiles. However, the Alexandria ranked 'Average' on the Wellness Disparity profile.

Exhibit B-1.
Study Region by Statewide Ranking on Health Opportunity Index (HOI) Profiles, 2015*

Indicator/Rank	Alexandria City		Arlington County		Fairfax County		Falls Church City	
Health Opportunity Index (Total)	*2*	*Very High*	*1*	*Very High*	*5*	*Very High*	*3*	*Very High*
HOI Profiles								
Community Environmental	2	Very High	1	Very High	22	Very High	3	Very High
Consumer Opportunity	8	Very High	2	Very High	3	Very High	1	Very High
Economic Opportunity	10	Very High	16	Very High	13	Very High	46	High
Wellness Disparity	68	Average	36	High	30	High	60	Average

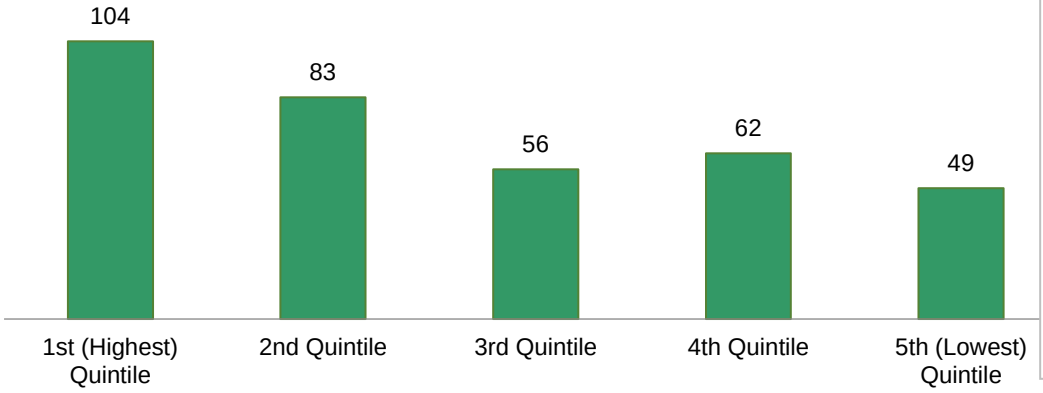
**Rank of 134 where a higher number= lower opportunity for health.*

Identifying Census Tracts with Low Scores on the Health Opportunity Index

Exhibit B-2-4 provide a summary of the statewide rankings on the HOI for 354 census tracts in the study region localities as of 2015. The exhibit shows the number of census tracts ranked in each quintile statewide (using 2010 US Census boundaries). A quintile represents 20 percent of the census tracts statewide. The first quintile includes the top 20 percent of census tracts, the second quintile includes the next best 20 percent, and so on. As shown, 187 (53%) census tracts in the region were ranked in the first or second quintile (best opportunity for health) of census tracts statewide on the HOI.

At the opposite end of the spectrum, 62 census tracts were ranked in the fourth quintile, and 49 census tracts are ranked in the fifth quintile (lowest opportunity for health) of census tracts statewide. These rankings indicate that substantial numbers of study region residents are vulnerable to adverse health outcomes based on social determinants of health. To put this in perspective, more than 496,045 residents (33% of the total study region population) live in the 111 census tracts ranked in the fourth and fifth quintile of census tracts statewide.

Exhibit B-2.
Study Region Census Tracts by Statewide Ranking on Health Opportunity Index (HOI), 2015



Community Health Solutions analysis of the 2015 Health Opportunity Index (using 2010 data) from the Virginia Department of Health, and 2015 population estimates from US Census Bureau, American Community Survey. See Appendix E. Data Sources for details.

Maps in *Exhibit B-3* and *Exhibit B-4* on the following page show census tracts for the four localities by HOI quintile.

Exhibit B-3. Health Opportunity Index by Census Tract-Large View, 2015

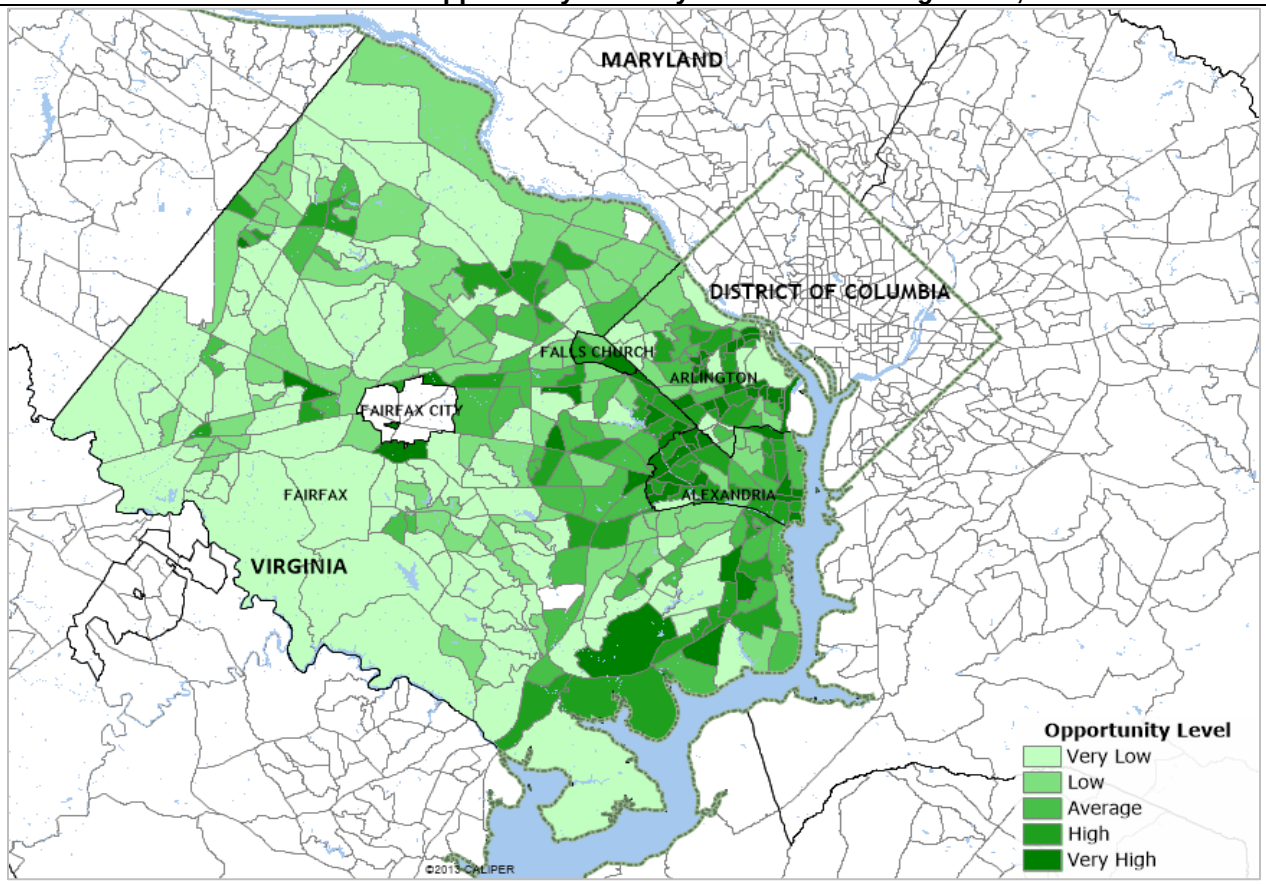
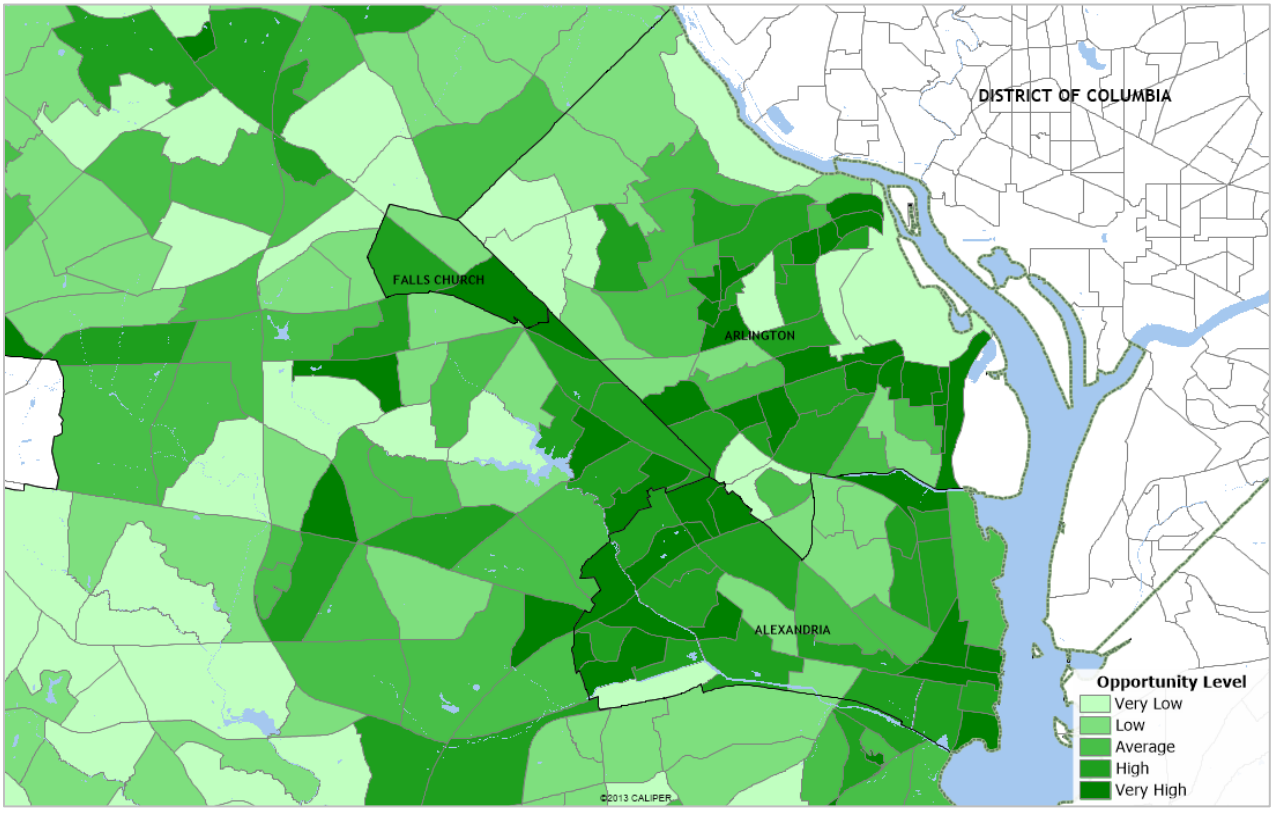


Exhibit B-4. Health Opportunity Index by Census Tract-Zoom View, 2015



Source: Community Health Solutions analysis of Health Opportunity Index data from the Virginia Department of Health. See Appendix E for additional detail.

Appendix C. Summary Comparison of Indicators from the 2014 and 2017 Community Health Needs Assessments

The 2017 Community Health Needs Assessment for Virginia Hospital Center (VHC) is the third community health needs assessment Community Health Solutions has conducted for VHC. The 2014 and 2017 reports contain some of the same community health indicators, and there may be interest in comparing the results from the two reports. The following table provides a summary to assist the audience in using the findings in both reports.

Note: The summary table below does not fully capture all findings and methodological descriptions from each community health needs assessment. A review of the detailed information provided in the full reports is recommended.

Exhibit C1. Summary Comparison of Indicators from the 2014 and 2017 Virginia Hospital Center Community Health Needs Assessments

Indicator Profile	Report Year	Author's Notes
Community Insight Analysis	Both	In both reports, respondents identified health concerns related to chronic disease, behavioral health, oral health, and more. The respondents also identified specific community services in need of strengthening including behavioral health services, aging services, dental care/oral health services for adults, health care insurance coverage, and other services. Respondents identified similar vulnerable populations (immigrants, low income, etc.) and regions (South Arlington).
Health Demographic Trend	2014 only	Comparable zip code level population projections were not available for this report.
Health Demographic Snapshot Profile[14]	Both	Both reports indicate that compared to Virginia as a whole, the study region is more urban, younger, and proportionally more racially and ethnically diverse. The study region also continues to have higher income levels, and higher educational attainment among adults age 25+ than Virginia as a whole.
Mortality Profile	Both	Both reports indicate that the study region continues to have lower age group level death rates than Virginia. Within the region, death rates have decreased overall, and for all age groups except seniors age 65+.
Maternal and Infant Health Profile	Both	Both reports indicate that the study region continues to compare favorably to Virginia overall for most maternal and infant health indicators. However, the study region continues to have higher rates than Virginia as a whole for births without early prenatal care. Within the study region, rates have remained relatively stable for live births overall, low weight births and non-marital births. Rates have decreased slightly for births without early prenatal care. The teen pregnancy rate and infant mortality rates for the region remain lower than that statewide rates. The study region teen pregnancy rate has decreased. The five-year infant mortality rate has remained relatively stable.

Exhibit C1. Summary Comparison of Indicators from the 2014 and 2017 Virginia Hospital Center Community Health Needs Assessments		
Indicator Profile	**Report Year**	**Author's Notes**
Preventable Hospitalization Discharge Profile	Both	Both reports indicate that the study region continues to have generally lower age group level rates than Virginia as whole for preventable hospitalizations. The study region PQI rates have decreased for all age groups.
Behavioral Health Hospitalization Discharge Profile	Both	Both reports indicate that the study region continues to have lower age group level rates than Virginia as whole for behavioral health hospitalizations overall. The study region behavioral health hospitalization rates have decreased for all age groups, except the 45-64 age group.
Adult Health Risk Factor Profile	Both	It is not possible to compare data between the two reports because the data are based on estimates.
Youth Health Risk Factor Profile	Both	It is not possible to compare data between the two reports because the data are based on estimates.
Uninsured Profile	Both	It is not possible to compare data between the two reports because the data are based on estimates.
Medically Underserved Profile	Both	Three of the four localities included in the study region (City of Alexandria, City of Arlington and Fairfax County) remain designated as a Governor's Medically Underserved Population (MUP). A MUP designation states that the population of specific census tracts are deemed as medically underserved.

Appendix D. Detailed Community Survey Responses

Exhibit D1. 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	• 1. Uninsured adults and children have a real lack of access to mental health care, in particular, psychiatry. They may be able to see a therapist but for medication therapy, it is very hard to access a psychiatrist. • 2. It is almost impossible to access pediatric psychiatric services for intellectually disabled or non-verbal autistic children in the community, even if they have Medicaid insurance. They cannot be seen by local department of health mental health/psych services if they are non-verbal.
2	• 1. Clients with mental health needs, dental health needs, substance abuse • 2. Immigrant populations • 3. Undocumented populations
3	• 11% of children living in Arlington live in poverty, many without health insurance and most without consistent dental care. I wish there was more that could be done for these children and their families.
4	• Access to health care is of prime importance. Pre-existing conditions must be covered. Health insurance laws must not be stripped to deny access to health insurance for pre-existing conditions. Congress cannot be allowed to take away the protections of the ACA.
5	• Adults voluntarily seeking access to psychiatric services, especially inpatient • Adults on a TDO, unable to find a psych bed at VHC • Children and adolescents in need of psychiatric support/services
6	• Aged and low-income residents • Non-English speakers
7	• Aging population, • 50 plus population with no insurance accessibility
8	• Aging who are not aware of services • Those without health insurance
9	• Clients returning to the community from incarceration
10	• Comprehensive mental health services for insured adults, adolescents and children are costly to access since many of the most effective services are not covered by insurance or are not available in the community (e.g., care coordination, step-down from hospitalization, treatment services for those with both addiction and mental illness). Most psychiatrists and therapists in our area do not accept insurance payments. Families must pay full fare and seek reimbursement from their insurance (which covers little of the actual charge).
11	• Elderly with travel barriers
12	• Elderly • Mentally disabled • Immigrants
13	• English as a Second Language; men and women who don't understand the language and/or don't understand the process. • Undocumented men and women who are unaware of their rights.

Exhibit D1. 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?	
	• Low income families who are unaware of services available, or unaware of how to apply for services.
14	• Folks low on SES and/or of uncertain immigration status
15	• Folks who are uninsured • Recent immigrants • Those living at or near the poverty level. • Of course, some individuals can be counted in each of the three categories noted.
16	• Hispanic population
17	• Homeless • Mentally challenged people.
18	• Homeless • Mentally ill • Hispanic population
19	• Homeless individuals • Individuals challenged by substance abuse, mental health, and developmental/intellectual disabilities.
20	• Homeless • Undocumented • Unsupported seniors with progressive diseases • Caregivers
21	• Homeless--obtaining any health care or services. • Seniors--living in facilities and without financial support • Low income persons/families
22	• I think there is a population of seniors who are living at home in unsafe conditions, and not getting the medical care they need.
23	• Immigrant • Undocumented • Low income • Frail elderly
24	• Immigrant population often goes undeserved and lack access to affordable health insurance. • Residents making under $40,000 annually may get Medicaid for their children but are unable to obtain medical services for themselves
25	• Immigrant population\undocumented
26	• Immigrant/refugee population with limited English • Underinsured or no insurance
27	• Immigrants who no longer feel free to move about the community are more at risk since the Trump administration began. They do not feel free to access services in the same way as before.
28	• Immigrants • Refugees

Exhibit D1. 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?	
	• Homeless
29	• In some cases, without extensive supports, people with disabilities have difficulty accessing healthcare and are vulnerable to further health problems. This population can also include veterans.
30	• Low income families with no insurance and unable to pay for services out of pocket.
31	• Low income residents cannot afford health insurance. Those that are able to enter in the ACA cannot afford the deductibles, thus they choose not to visit a physician and limit themselves to visit to emergency rooms and urgent care
32	• Low income, minors with compromised/no guardian support • Ethnic minorities with language barriers • Those with varied or little education • Aging population with little/no support • Those bearing cultural stigma for illnesses/conditions • Those with mental illness or addictions • Working adults/bread-winners with no (flexible) time to care for themselves
33	• Low income • Refugees, • Undocumented • People with mental health and substance abuse issues
34	• Low income • Underserved
35	• Low-income • Uninsured
36	• Low-income • Uninsured for oral health and specialty care
37	• Many seniors are finding it hard to locate a doctor in Arlington County that accepts Medicaid. They also are having trouble affording the co-pay for assisted or subsidized transportation. Many seniors tell me that their doctor has gone to a "concierge model" and in addition to regular fees they add on an addition fee to see them that insurance doesn't even consider part of the payment. They don't like this and can't afford it. They feel frustrated they have fewer options.
38	• Mental health and substance abused services for veterans I believe is a problem in terms of numbers of providers and access to appointments in a timely manner.
39	• Mental health issues; helping those affected to have a better, healing facility. Your facility is cramped and inhumane.
40	• More attention to mental health services required in schools.
41	• Non-English speaking • Uninsured • Undocumented
42	• Patients without health insurance need additional access to primary care and specialty care.

Exhibit D1. 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?	
43	• People who cannot afford insurance • People who do not have knowledge of avenues to care • Children and Adolescents
44	• People with mental disabilities. Crisis care is good, but pre-crisis care is woefully difficult to navigate.
45	• People with mental health conditions • Those with developmental disabilities.
46	• Residents with mental illness or substance abuse disorders that are in crisis and need inpatient help in their community where their families can also see them.
47	• The agency ceased some challenges with the aging population in our county. From a law enforcement perspective, many of the issues around dementia and Alzheimer's pose challenges as these individuals are more subject to theft from some of the scam artists that work for County. Providing any in-home support services did not only monitor their health, but have some sense of lifestyle issues could be beneficial. From a health perspective, those with opiate addictions are becoming a major problem for the county, which is consistent with the nation. Any services that can better coordinate treatment between our DHS, the hospitals, in our community services would be beneficial.
48	• The homeless population
49	• The homeless uninsured with mental health and medical comorbidities that do not qualify for Medicaid
50	• The uninsured and the undocumented. Recent arrivals have issues with access and paying for prescription drugs
51	• The working poor seem to be falling through the cracks in health care and at home care.
52	• There are far too few primary care and specialty care clinics and services for those who are low-income and/or uninsured.
53	• There are pockets of Arlington County that experience less ability to attain positive health outcomes. This is generally due to those things considered the social determinants of health for example, education, low income, poor or no access to primary, care, unstable housing, mental health issues, access to healthy foods etc. Health disparities can be looked at in many different ways and I would encourage VHC to partner with members of the local public health system to identify ways to improve health outcomes for residents.
54	• Those 14% in poverty
55	• Those experiencing homelessness have difficulty maintaining consistent care on a regular and ongoing basis. It would be nice to have a drop-in facility dedicated to medical care for those who don't qualify for Medicaid, can't access the Free Clinic and just need routine exams/preventative care until they can be connected to other resources.
56	• Those suffering from severe mental illness and lacking insight cannot access treatment.
57	• Those with behavioral health and substance use disorders that are uninsured
58	• Those with mental health issues have limited outpatient options to manage their conditions.

Exhibit D1. 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?	
59	• Those with serious mental illness and emotional disturbances and social and medical detox units.
60	• Underinsured\uninsured
61	• Underinsured/uninsured residents • Lower socio-economic status residents • Residents with behavioral health conditions (mental health and substance abuse)
62	• Undocumented citizens • Low income who do not qualify for Medicaid due to lack of Virginia Medicaid expansion
63	• Undocumented folks with chronic illnesses
64	• Undocumented individuals
65	• Undocumented residents
66	• Uninsured and underinsured • Non-English language speakers
67	• Uninsured • Immigrants • Low-income near poverty • Consider costs of prescriptions and other services like dental and vision care as those hidden costs that catch low-income or financially-challenged populations off guard and quickly impact budgets.
68	• Vulnerable adults with limited supports and no identified substitute decision maker. • Adults with mental health diagnoses. • Homeless adults with mental health and substance abuse issues.
69	• Yes, individuals with mental health and or substance abuse issues who need in patient care. Both adults and children. The needs for beds exceeds available resources.
70	• Yes, several; they are those who are uninsured or underinsured adults and children. • Those with mental health issues and Access to health care in this affluent area is extremely difficult for these populations. Health care should not be for only those who can afford it. We need to expand Medicaid and Medicare coverage. Our elderly population is lacking in adequate health care services, particularly dental. Being able to afford their medication has caused them not to take it as they should and even sell the pain medication to get money so they can afford to eat.
71	• Yes, young adults transitioning out of foster care or in the country without family member support. • Undocumented individuals fearful of deportation.

Exhibit D2. 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	• 22204
2	• 22204 zip code along Columbia Pike
3	• 22204, 22206 are quite vulnerable and in need of sustained access to health services in their community.
4	• All of Arlington County

5	• Areas of higher levels of poverty including;
	  ○ Bailey's Crossroads,
	  ○ West End of Alexandria
	  ○ Mt Vernon/Route 1 corridor in Fairfax County.

6	• Areas that are poorly served by public transportation
7	• Areas where the average household income is below the median household income and neighborhoods with large numbers of immigrants. T • he homeless population is very vulnerable and at-risk for health problems; therefore, shelters would be good places to offer health care services. There are apartment buildings and housing enclaves in Arlington and throughout the region that are designated affordable housing units, these buildings would be prime places to offer healthcare services
8	• Areas which have low socio-economic residents • People whose resident status is in question
9	• Arlington Mill, • Nauck • Carlin Springs • Randolph • I don't know the names of some of the other areas.
10	• As a shelter director, most of my clients come from southern Arlington and the Valley
11	• Bailey Crossroads • Falls Church City
12	• Columbia Pike Corridor and south
13	• Columbia Pike Corridor • Low income housing around R&B corridor
14	• Columbia Pike immigrant community
15	• Columbia Pike West
16	• Everyone's health care will be at risk if the government allows the ACA to collapse by refusing to stabilize the health insurance markets. Our biggest obstacle to health care is health insurance access at an affordable price for all.
17	• Folks in zip code 22204
18	• Fairfax south county

Exhibit D2. 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?	
	• FX west county
19	• Homeless
20	• I believe the concern persists through the county.
21	• I think the people living in South Arlington area and the corridor along Route 1 may have more difficulty getting good quality health care.
22	• I think you know where these areas are. 22204 has typically seen communities who struggle. There are others. Our immigrant population needs much support as well as our elderly. The obesity/overweight rate among entering kindergartners is 26%. This is pathetic for NOVA. It correlates primarily to children of low income.
23	• Low income areas • Senior communities • Can take place any where
24	• Lower income areas
25	• Mt. Vernon area in Alexandria • Falls Church • Culmore area
26	• Neighborhoods in South Arlington, in particular, have challenges with access to primary care e.g. those in the 22204 or 22206 neighborhoods. VDH and others have some pretty clear data in some cases to the census tract level that identifies those geographic areas most at risk.
27	• Patches of low income seniors that may live near an affluent neighborhood may find it hard for them to get home health aides that don't drive and there are no busses near them. They may themselves have limited resources to afford the copay for a subsidized taxi to get out of their neighborhood. Many seniors are house rich but cash poor so they have major struggles to pay for medical care.
28	• Parts of South Arlington and Columbia Pike corridor has a larger need for outreach and education, especially with self-management programs.
29	• Residents in the 22204 zip code • Residents in dedicated affordable housing throughout the county • AFAC clients • Pediatric Center clients • Free clinic clients
30	• South Arlington
31	• South Arlington • Alexandria
32	• South Arlington especially as it borders Falls Church in and around the Culmore community • Columbia Pike to Route 50/George Mason to just past Route 7. • Integrated within the Arlington community are an aging population that remain 'house rich' but are in need of a range of services for individual and caregivers as they age in place.
33	• South Arlington has many uninsured or underinsured (Medicaid) adults and children.

Exhibit D2. 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?	
34	• South Arlington
35	• South Arlington
36	• South Arlingtonians are at a disadvantage in terms of standards of living and difficulties obtaining health services.
37	• Southern parts of Arlington County -- not sure of particular neighborhoods.
38	• The Nauck neighborhood and parts of the 22204 area would benefit from more screening and wellness services for the elderly. Substance abuse programs and sexuality education would benefit adults especially young adults in the same communities.
39	• The South Arlington community
40	• There are many neighborhoods in each of these jurisdictions that are vulnerable
41	• There are pockets throughout each of the jurisdictions of our region which have a high density of vulnerable residents. I believe that City or County governments would be the most capable of identifying these neighborhoods or geographical areas.
42	• Those zip codes in Alexandria, Arlington, and Fairfax that have the highest rates of poverty.
43	• Undocumented citizens along Columbia Pike corridor
44	• Undocumented residents -- because of the fear in coming forward and they are not eligible for government health services • Insured, middle income residents -- because the public sector often disqualifies such children and adolescents from early intervention services and such services are not readily available in the community or mostly not covered by health insurance.
45	• Yes, along Columbia Pike, and down Route 1.
46	• Yes, Arlington county. VHC is our only hospital in the county and has insufficient numbers of inpatient beds for both mental illness and substance abuse consumers. There are no beds for children.

Exhibit D3. 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	• A strong health system with support of public health and health safety net programs.
2	• Abundant parks and recreation • Farmers' markets • Grocery stores • Hospital • Public health system • Limited safety net services • Generous local government
3	• Access to health food, even if poor. • Affordable transportation to access medical care. • In home health and assistance that keep people at home and not facilities. We often forget that out special services in the area are more abundant than other areas, so in general there are more resources and we should be proud but keep striving to help those in need.
4	• Access to housing • Health insurance • Ability to live life with natural supports within the community.
5	• An educated community • Excellent leadership and schools • Excellent infrastructure • Low unemployment • Desirable communities • Involved citizens
6	• Arlington Free Clinic
7	• Arlington Pediatric Center • Arlington Free Clinic • VHC • DHS • Other nonprofits
8	• Bike paths • Parks • Mass transportation
9	• Bus system especially routes that with few changes take residents North-South (Ballston central) and East-West (with stops at Arlington's Sequoia building. • TJ Community facility with health exercise facilities and classes at a reasonable community rate. • Culpepper Gardens senior affordable living.
10	• Community access programs • Community wellness outreach • Out-of-hospital interactions with health care providers to promote wellness and prevent hospitalizations
11	• Consciousness health care providers • Social services care coordinators.

Exhibit D3. 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?	
12	• DHS • Arlington Free Clinic • Arlington Pediatric Center • Carlin Springs Elementary School • Department of Parks & Rec's accessible parks, pools and sports programs, pedestrian and bike-friendly roads and sidewalks
13	• Diabetes and high blood pressure management • Healthy living
14	• Family/friends/neighborhood education/support • Education at schools • Peer support/workplace support • Public/private promotion of healthy living/prevention • High quality and access-friendly health institutions/clinics, highly trained/qualified physicians and healthcare givers, up-to-date medical resources, etc.
15	• Free clinic • Hospitals • Doctors who are take Medicaid and Medicare • Preventive education programs • Human services promotion for the underprivileged • Churches • Individuals who care
16	• Free or reduced medical resources accessible to those unfamiliar with programs due to limited English or newly arrived and don't know how to navigate systems, those without a social community or family to support them
17	• Having all Health providers work together for the common good; best way to do that is through the Health Dept. which can/should provide impartial leadership
18	• Health and Dental Clinics • Health Departments • Hospitals • Urgent Care • Mobile Health Clinics
19	• Health insurance coverage for preventive care. If people can afford preventive care, then health issues are much easier and cheaper to treat.
20	• Herd immunity, that is to say, a healthy and health conscious population.
21	• High quality HC providers • Excellent public health and safety net
22	• Hospital Cancer Services from prevention, screening, diagnosis, treatment (oncology surgeons), medical oncology, radiation oncology, survivorship programs, support services (registered dietician, navigators, counselors, social workers, palliative care, chaplain, home health, caregivers.
23	• Hospital

Exhibit D3. 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?	
	• Community centers • Parks
24	• Hospital • CSB • Parks • Schools • Public health services • Park and rec services • Bicycle trails • Public pools, • Gyms/YMCA
25	• Hospitals • Elected Officials • Health Care Leadership • County Community Services Board
26	• Hospitals • Primary care locations
27	• Human resources • Affordable public transportation • Shelter
28	• I believe recreational spaces, walking and bike trails and sports facilities are important health assets. • Public transportation is also an important asset since folks are more apt to walk if they are taking public transit. • Community Centers that offer exercise programs, art programs and civic discussion groups, especially for older individuals, play a critical role in the heath of a community
29	• I think some of the most important health assets within the community is the hospital and the community outreach programs they have the ability to provide. • I think the governmental programs that provide services to low income families, seniors etc. are also strong assets.
30	• Inpatient behavioral health for adult and youth populations • Medical detox for SA populations • Housing for the disabled.
31	• Need small urban parks; very small areas where people can gather, sit, etc. Ballston for example....
32	• Opioid overdose rapid response. Emergency services for both medical and mental health related instances.
33	• Our diversity and our location among other things
34	• Our entire local public health system is critical to providing the support needed to assure a healthy and well community- all have a role- based on community needs, different assets are more important to supporting activities to improve outcomes in our community

Exhibit D3. 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?	
35	• Outdoor activities and events that are inclusive and engaging to all populations, not always centered around food, and more focused on physical activity and promoting health.
36	• Parks • Bicycle/walking paths • Low-cost community centers
37	• Parks • Transportation • Community centers • Funding
38	• Programs offered by parks and recreation, at community centers all over the county • DHSVHC services for the public
39	• Providing affordable easy access to health care for all populations
40	• Public transportation
41	• Public transportation • Bike trails • Parks
42	• Resources and services for those in need
43	• Strong collaboration between hospital, medical professionals, nonprofit healthcare providers, and county health services.
44	• Strong community/neighborhood bonds
45	• The community feel of VHC; [it is] not as a large business but as a healthcare institution that is part of the community.
46	• The hospital and its clinics are the most important followed by transportation to clinics during operating times.
47	• The most important asset is the overall system. We are fortunate, in many ways, to have so many resources that are so close and accessible. However, there is a need for a gap analysis to see where we, as a system, are not responsive to community needs.
48	• The nonprofit community and safety net organizations are among the best health assets within the community for many at need or the county's must vulnerable
49	• The Pediatric Center • The Free Clinic • Arlington Food Assistance Center
50	• Variety of health care professionals of diverse backgrounds and languages, transportation resources, County services, community providers and partners.
51	• VHC outpatient clinic

Exhibit D3. 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?	
	• Arlington Free Clinic
52	• VHC • Arlington County • Nonprofit Providers
53	• VHC • Neighborhood Health • Behavioral Health Division at Arlington Co. • Arlington Free clinic • VHC outpatient clinic
54	• Virginia Hospital Center--there are no other high value (high quality at low cost) hospitals in the area.
55	• Walkable streets • Safe streets and parks • Strong schools • Good trails
56	• Walking paths and playgrounds • Access to supermarkets and farmers markets
57	• We have a lot of parks and now we have more bike lanes. This does help
58	• We have many parks and sidewalks that make Arlington walkable. • The Bike Share program is helpful.
59	• We have some very committed community based organizations that focus on different issues that contribute to better health outcomes. For example, AFAC, Phoenix House, Arlington Free Clinic, Arlington Pediatric Center, APAH, County departments such as Parks and Recreation (parks, walking and biking paths), Environmental Services (including transportation services), Human Services (Behavioral Health, Aging and Disability Services, Public Health) Arlington Public Schools. Building a systems approach so that decision makers are asking questions about equity and the impact on health outcomes would be a great goal.

Exhibit D4. Health Assets Needed in the Community	
Are there any health assets that the community needs, but may be lacking?	
1	• A primary and preventive care clinic in South Arlington would be helpful.
2	• Access to primary care for uninsured and underinsured residents. • Dental services - while seeing some improvement are still lacking. • Programs that help change the systems and environment so that it is easier for residents to make the healthy choices.
3	• Access [to] transportation
4	• Affordable dental care
5	• Affordable dental resources
6	• Affordable health care for working population with no insurance.
7	• Ample and appropriately situated psychiatric care beds in hospitals near resident homes.
8	• Assets are there, but access to them is often difficult or out-of-reach financially for low-income residents.
9	• Better mental health services • Nutritional counseling • Gyms for low income.
10	• Better transportation
11	• Careful on affordable senior living! Focus tends to be on enhancing healthy living among populations already driven to 'healthy choices' - need to ensure we still meet communities less likely to take advantage of those services. • Reliable transportation services for those with physical disabilities. Well-designed curb cuts to encourage community access for those with physical disabilities.
12	• Child/adolescent mental health services • Psychiatric care inpatient/outpatient for adults • Substance abuse prevention services for wider community
13	• Coordination among care providers for individuals with complex needs • Affordable long-term care options like home health services • More innovative inter-generational housing • Mental health beds in assisted-living facilities.
14	• Dental: limited access to specialized services such as dentures, caps, root canals
15	• Dietary guidance
16	• Even better collaboration, via technology, between hospital, medical professionals, nonprofit healthcare services, and county health services. This would include a common electronic health record system and common/shared application for safety net services.
17	• Expanded safety net • More collaboration/integration between safety net providers and those providing community health services • Expanded primary care for chronically mentally ill
18	• Expansion of hospital services

Exhibit D4. Health Assets Needed in the Community	
Are there any health assets that the community needs, but may be lacking?	
19	• Greater support of health safety net programs throughout our community.
20	• Having public health services outside of the Sequoia complex would be ideal. While a one-stop shop is nice, it is exclusionary to those that may not be able to get there.
21	• Help is available, but advertising/promotion is lacking.
22	• Hospice care in this community is terrible. Families should not be expected to take care of dying loved ones with only a few short visits from a nurse a week. Cancer patients have many needs. They are in terrible pain. To take care of a loved one in your home requires medical training which most people do not have. The current in-home hospice program requires family members to turn into medical professionals at a time when they are grieving and too upset to concentrate. We need more facilities like The Adler Center in Aldie, VA.
23	• In Fauquier County, there may be perceived access issues to larger health institutes due to increasing traffic on I66, lack of transportation that would directly bring those in need of services to our hospital, knowledge of our services. We don't appear to market in this area (Fauquier, Culpepper).
24	• Integration and alignment of our robust assets- they are in silos and would benefit from collaboration and partnerships to identify overlap, gaps, and building better efficiency to supporting our community.
25	• Making the default healthy behaviors easier for vulnerable populations to surmount. • Work on social determinants of health from all aspects of our health system. • A health in all policy orientation.
26	• Mental health facility
27	• Mental health screening is completely absent in the schools.
28	• Mental health services and in-patient beds for the mentally ill.
29	• Mobile mental health services for SMI
30	• More access to Arlington free clinic.
31	• More clinics where clients can go for services. At times, there are long waits, [a] certain amount of clients can only be seen in a day, and/or there is a lottery system.
32	• More free/affordable mental health and dental health services • More free/affordable substance use treatment programs
33	• More home visiting doctor programs that aren't a concierge model. • More urgent care options that are accessible rather than 911 ambulance.
34	• More mental health services including more services to help everyone better integrate the mentally ill into our communities. • More attention to public health issues such as the dangers of pollution, pesticides, etc. • More screenings and services for those without consistent health insurance
35	• More programs for the uninsured; Arlington Free Clinic requires a lottery, difficult to get "foot in the door"
36	• More psych beds for adults. • Psych services for kids and adolescents.

Exhibit D4. Health Assets Needed in the Community	
Are there any health assets that the community needs, but may be lacking?	
37	• Need more inpatient behavioral health beds for all ages and medical detox.
38	• Need to build a stronger continuity of care and break down silos to care. Perhaps an integrated team model to treat individuals with mental illness, substance abuse, and medical issues holistically and completely. VOAC would love to work with the hospital more effectively in securing social services for vulnerable individuals who are frequent users of the ER.
39	• Oncology surgical specialists.
40	• Outpatient mental health care

41	• Plenty! [including]:
	  ○ Affordable dental care for children, seniors and those with disabilities and mental health issues
	  ○ Access to affordable, quality food. There are food deserts in the county. They just closed an affordable grocery store in 22204. The plan is to build a more expensive grocery store which will limit access for those on low incomes.

42	• Prevention programs • Access to primary care • Community outreach programs
43	• Promotion of more active life-style (e.g. more bike-friendly culture/bike lanes, workplace showers/locker rooms, employers support/incentivize • Fewer boutique gyms and more inexpensive/free places to exercise) • More options for aging population and those who assist them • Education/treatment for mental illness and addiction • Affordable/available/accessible childcare (for those with illness in family, working parents, working healthcare professionals) • Places for prescription drug take back.
44	• Shelter for persons who are chronically homeless/ incarcerated for more than 90 days. Shelter and services for persons who are frequently hospitalized for long periods of time and too disorganized to prove "residency."
45	• Social workers • Immigrant services
46	• We need to work on our public transportation for everyone.
47	• Yes-Sufficient mental health and substance abuse inpatient beds are lacking for adults and children.

Exhibit D5. Additional Ideas and Suggestions	
Optional: Please use the space below to share any additional ideas or suggestions for improving community health.	
1	• A more regional approach to addressing health care issues. While I understand the logic and rationale which each jurisdiction must consider when committing tax payer dollars to support programs that benefit residents, I feel that when the health of individuals are at stake. City and County lines should not be a barrier. A more regional approach with joint support would be much more effective and provide greater benefits to the masses.
2	• Access to pediatric care for low income • Access to affordable primary care for low income • Access o mental health for low income
3	• Access to specialty care and oral health care services for low-income people remain community issues.
4	• Accessible and affordable health care advise for people who cannot afford to purchase insurance.
5	• Aligned strategic plans across hospitals and public health.
6	• Arlington needs the full range of mental health services for all populations (undocumented, low-income and middle-income children, adolescents and adults). This means hospital beds, step-down beds, respite, and case management services available to keep school-age children on track in school and away from court involvement. • There is a significant gap in services for those young adults who have graduated from high school but have no post-high school plans.
7	• Cancer care is personalized medicine. • Genomic therapy and NCI designated trials.
8	• Collaborations of mirual services
9	• Communicate with caregivers and recognize the important part they play in caring for adults with SMI. Collaborate with them as you would Alzheimer's patients' family members.
10	• Continued proactive efforts to make sure services are accessed by disadvantaged members of the community. • Continued efforts to close all public transportation gaps in that impede mobility.
11	• I think we need to continue to explore telehealth and the ability to provide services to seniors in their homes.
12	• Improved communication and coordination between community resources.
13	• Increase programs and staffing at the County level. • Provide education about services and resources available. • Implement voluntary services at the County Fair to do some health assessments and screenings, even provide immunizations. • We may need more free clinics and dental clinics so that people can be seen before they need to use the emergency room for care.
14	• Many uninsured patients don't care until it's too late. I would love to see people have access to care. Perhaps a low-cost walk in option at an urgent care center. I know many physicians would be happy to give free care, but don't know how to go about doing it. Maybe have one Saturday a month be free care day, where patients have access to some physicians and hospitals services for one day; vulnerable patients can get seen by physician, get an x-ray if needed, get an EKG, and get prescribed the right medicine.

Exhibit D5. Additional Ideas and Suggestions	
Optional: Please use the space below to share any additional ideas or suggestions for improving community health.	
15	• Mobile vans to reach out to the chronically ill and for patients who are unable to keep prenatal appointments because lack of access to public transportation (cost and language being barriers).
16	• More awareness of peer and professional led support groups. • More mental health services and more testing of different models of approach. • More literature for wellness available in local libraries (AKA a bigger info/resource wall with brochures fliers etc.)
17	• More free or reduced dental services in more areas around NoVA (ditto for Arlington Free Clinic) • More sites and accessibility throughout the area
18	• Overall, we enjoy a strong working relationship with the hospital and appreciate working closely with [VHC staff]. Our last few meetings with [VHC staff], regarding VHC expansion/psych beds, have been very helpful as well. • One last thing, given that we are a small county and somewhat self-contained in regards to services and finances, this would be the ideal location to set up a population health consortium. Population health, combined with analytics, is the only model that seems to bring down costs while also improving outcomes, so it would be worth looking into. • I'd also add, that moving in that direction would provide a natural basis for the needed shift to wellness and prevention in healthcare services, which will bring about the biggest changes in overall well-being for our clients. (Feel free to reach out to me, I'd be happy to discuss this proposal... and recent discussions I had with [local physician] lead me to believe it would get state attention as well.)
19	• Partnerships between non-profit and for-profit communities to reach residents where they are but that involve them in structuring a community for healthy living.
20	• Please share your findings with other local public health systems in Arlington; particularly Dept. of Human Services Public Health Division.
21	• Primarily education and access would be the two most important attributes necessary for a strong community health program. The County does a pretty good job in outreach, but there are always opportunities for greater information and distribution of this information to those most in need. • And as I stated earlier in the survey, a much stronger coordinated response to the opiate crisis and substance abuse in general could be beneficial. It is important to note that substance abuse is not limited to any class of individual but is striking across all economic and social boundaries in the County and is something we need to take care of to the best of our abilities as soon as possible.
22	• Psychiatric Services: Over 200 referrals for psychiatric care were turned away at Virginia Hospital Center last year. We encourage a commitment from Virginia Hospital Center to address this critical need by implementing the recommendations of the Arlington Community Services Board. • Health Services: Provide expanded medical and financial support to Arlington providers that are reducing the cost of uninsured care, e.g. at the Medical Respite Program at the Homeless Services Center, so that fewer low-income households are turned away. • Ending Homelessness: Increase support for the 10-year Plan to End Homelessness to providers who provide wrap around support, financial support, and food for those who are homeless or at risk of homelessness, including A-SPAN, Doorways, B2i, and the Arlington nonprofit housing providers. • Affordable Housing: Arlington County has strong goals to expand affordable housing and diversify its location across the County—including a target in the Affordable Housing Master Plan for the Lee Highway corridor. We encourage Arlington County to utilize the swap to enable the purchase and development or co-location of new affordable housing on Lee Highway.
23	• Should have mentioned hygiene services for homeless...access to showers, laundry. Aspan does a good job.

Exhibit D5. Additional Ideas and Suggestions	
Optional: Please use the space below to share any additional ideas or suggestions for improving community health.	
24	• Stronger schools in certain areas
25	• Thank you for the opportunity to contribute. We value the VHC's contributions to the community (Outpatient Clinic and others) and seek to strengthen that relationship so that we can truly make a difference in people's lives.
26	• There needs to be better mental health services and access, not only in crisis situations, but for crisis prevention.
27	• Up the mental health game; [it is] way too difficult to navigate unless you have a strong advocate.
28	• VHC (and Arlington overall) will benefit from the hospital's CHNA/IP alignment with Arlington's broader community-wide health improvement process to leverage the resources it brings from planning efforts in place, the partners engaged, and better investments into the community that align and build upon the Arlington community's health and well-being needs.
29	• VHC is not meeting the needs of vulnerable populations.
30	• Widespread dissemination of information about available services at libraries, community centers, schools, drug stores, county offices etc.

Appendix E: Data Sources

Section	Source
Part I. Community Survey Results	
1) Community Survey as shown in Part 1 and in Appendix C 2) Suggestions for Improving Community Health	Community Health Solutions analysis of *Community Insight* survey responses submitted by community stakeholders.
Part II. Community Indicator Profile	
1) Health Demographic Snapshot (also Appendix A. Maps 1-11)	Community Health Solutions analysis of data from the US Census Bureau, American Community Survey (2011-2015)
2) Mortality Profile (also Appendix A. Maps 12-15)	Community Health Solutions analysis of Virginia Department of Health death record data (2013). The combined study region counts and rates, plus zip code-level counts were produced by Community Health Solutions.
3) Maternal and Infant Health Profile (also Appendix A. Maps 16-19)	Community Health Solutions analysis of Virginia Department of Health death record data (2013). The combined study region counts and rates, plus zip code-level counts were produced by Community Health Solutions.
4) Preventable Hospitalization Profile (also Appendix A. Map 20) 5) Behavioral Health Hospitalization Profile (also Appendix A. Map 21)	Community Health Solutions analysis of hospital discharge data from the Virginia Health Information (VHI) FY2015 (July 1, 2014-June 30, 2015) dataset and demographic estimates from • US Census Bureau, American Community Survey (2011-2015). 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. **Preventable Hospitalizations**. The prevention quality indicator (PQI) definitions are based on definitions published by the Agency for Healthcare Research and Quality (AHRQ). The 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 this report, low birth weight is included in the Maternal and Infant Health Profile. Also, there are four diabetes-related PQI indicators which have been combined into one for the report. Within the Exhibits, the *All PQI Discharges* figures are based on an AHRQ methodology that counts a hospital discharge with multiple PQI diagnoses as one discharge. By comparison, the figures for individual discharges do include a small number of cases in which a single hospital discharge with more than one PQI diagnosis would be counted more than once. Also, AHRQ refined their method to exclude the perforated appendix PQI from its list, but this diagnosis is included in the data used for this study. As a result of these methodological factors, the sum of the individual PQI discharges may be slightly different than the total for All PQI Discharges. These differences or on the order of less than one percent. For more information on the AHRQ methodology, visit the AHRQ website at www.qualityindicators.ahrq.gov/pqi_overview.htm *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.*

Section	Source
6) 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 • US Census Bureau, American Community Survey (2011-2015) Estimates are used when there are no primary sources of data available at the local level. The statistical model to produce the estimates was developed by Community Health Solutions. The estimates are for planning purposes only and are not guaranteed for accuracy. The table does not include a comparison to Virginia statewide rates because the local estimates were derived from state-level data. Differences between local rates and state rates may reflect estimation error rather than valid differences.
7) Youth Health Risk Factor Profile (also Appendix A. Maps 26-27)	Estimates of risk behaviors for children age 10-19 were produced by Community Health Solutions using: • Data from the Virginia Youth Risk Behavioral Surveillance System from the Centers for Disease Control (2011). For more information on YRBSS visit: http://www.cdc.gov/HealthyYouth/yrbs/index.htm • US Census Bureau, American Community Survey (2011-2015) Estimates are used when there are no primary sources of data available at the local level. The statistical model to produce the estimates was developed by Community Health Solutions. The estimates are for planning purposes only and are not guaranteed for accuracy. The table does not include a comparison to Virginia statewide rates because the local estimates were derived from state-level data. Differences between local rates and state rates may reflect estimation error rather than valid differences.
8) Uninsured Profile (also Appendix A. Maps 28-29)	Estimates of uninsured nonelderly age 0-64 were produced by Community Health Solutions using: • U.S. Census Bureau Small Area Health Insurance Estimates (2015) For more information visit: http://www.census.gov/did/www/sahie/data/index.html • US Census Bureau, American Community Survey (2011-2015) Estimates are used when there are no primary sources of data available at the local level. The statistical model to produce the estimates was developed by Community Health Solutions. The estimates are for planning purposes only and are not guaranteed for accuracy. The table does not include a comparison to Virginia statewide rates differences between local rates and state rates may reflect estimation error rather than valid differences.
9) Medically Underserved Profile	Community Health Solutions analysis of U.S. Health Resources and Services Administration data. For more information visit: at http://www.hrsa.gov/shortage/mua/index.htm.
10) Appendix B. Health Opportunity Index	Virginia Department of Health (2015). The Health Opportunity Index was developed using 2010 data. For more information visit: https://www.vdh.virginia.gov/omhhe/hoi/what-is-the-hoi/methodology