

A Community Health Needs Assessment
Prepared for the Virginia Hospital Center
By Community Health Solutions

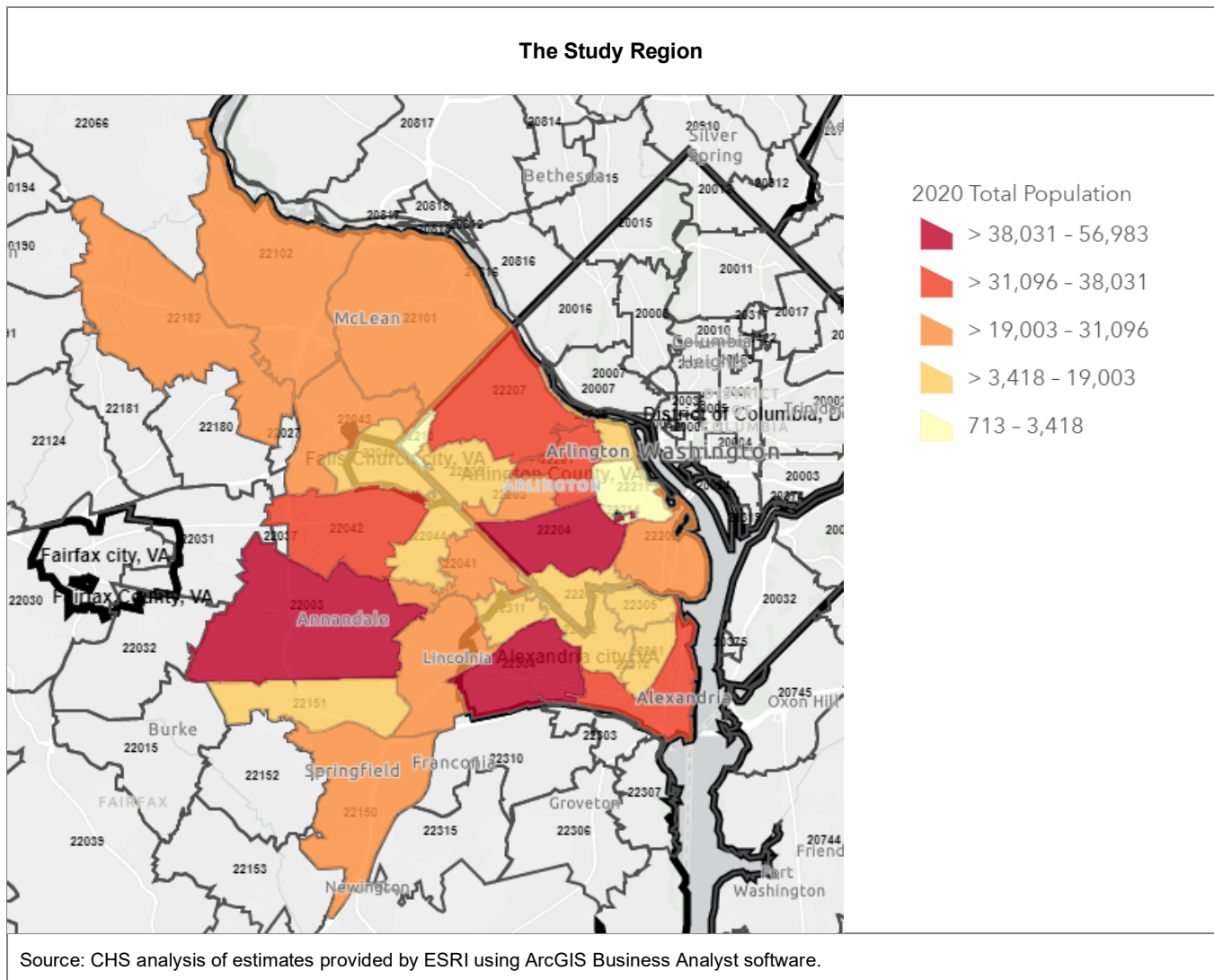
December 2020

Table of Contents		Page
Executive Summary		1
Section 1. Insights from Community Professionals		7
A	Survey Methods	7
B	Organizational Affiliation and Geographic Perspective	7
C	Community Needs Related to COVID-19	8
D	Community Health Concerns	9
E	Services and Supports that Need Strengthening	10
F	In their Own Words – Insights from Community Professionals	11
Section 2. Community Indicator Profiles		12
A	Health Factors: Community Demographics-Trend	13
B	Health Factors: Community Demographics-Snapshot	14
C	Health Factors: Social Determinants of Health	15
D	Health Factors: Risk Behaviors for Adults	16
E	Health Factors: Risk Behaviors for Youth	17
F	Health Factors: Access to Health Care	18
G	Health Outcomes: Leading Causes of Death	19
H	Health Outcomes: Maternal and Infant Health	20
I	Health Outcomes: Potentially Avoidable Hospitalizations	21
J	Health Outcomes: Mental Health and Substance Use Hospitalizations	22
Section 3. Social Determinants of Health		23
A	Insights from Surveys of Community Professionals	23
B	Community Mapping of Indicators	24
C	Health Disparities and Health Equity	29
Appendix A: Data Sources		32
Appendix B: Community Professional Survey Instrument		34

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 A*.

As shown in the map below, this region is home to more than 728,259 community members. The CHNA study was designed to provide insight about community health needs and opportunities for community health improvement. Research activities for the study included a survey of community professionals, and analysis of a variety of community health indicators.

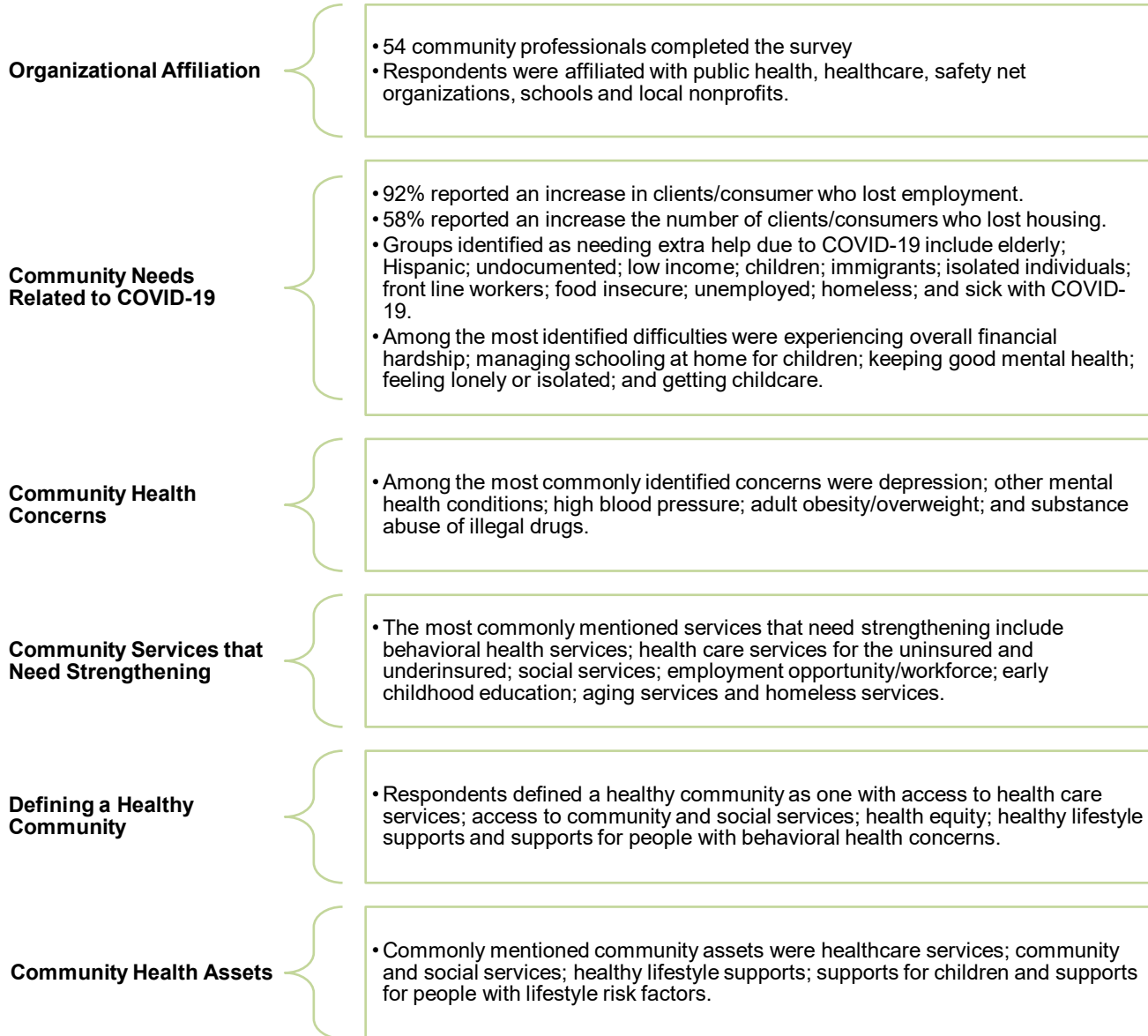


This Executive Summary provides an overview of the study results. More detailed analysis is provided in the four sections that follow, including:

- Section 1. Insights from Community Professionals
- Section 2. Community Indicator Profiles
- Section 3. Social Determinants of Health

Summary Insights from Community Professionals (Section 1)

Section 1 of the report presents results from the survey of community professionals. The survey was sent to 155 community professionals based on lists from Virginia Hospital Center staff. A total of 54 (35%) individuals submitted a response (although not every respondent answered every question). Community professionals provided rich insights about community health needs and opportunities in the study region. The summary results are outlined below and presented in more detail in Section 1 of the report.



Vulnerable or At-Risk Populations

• Most commonly mentioned groups included the minority population; low income population; people with behavioral health concerns; elderly population and the child population.

Groups Experiencing Health Inequities

• Most commonly mentioned groups included people with limited/no access to healthcare; low income population; food/housing insecure population; immigrant population; minority population; and child population.

New Health Issues

• Among the most commonly identified new issues were access to healthcare; behavioral health; COVID-19; health equity and child health.

Working Together for Community Health Improvement

• Collaboration ideas included improve access to healthcare services; more community collaboration; support vulnerable populations; improve access to community and social services; and address health equity.

Summary Insights from Community Indicator Profiles (Section 2)

Section 2 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 summary results are outlined below and presented in more detail in Section 2 of the report.

Community Demographics

- The total population of the study region is estimated at 728,259 people. This figure is projected to increase to 757,828 by 2025.
- In 2025:
 - The population growth includes a 16% increase in seniors age 65+ and an 11% increase in the Asian population.
- In 2020:
 - Children age 0-17 represent 19% of the population.
 - Seniors age 65+ represent 14% of the population.
 - 39% percent of the population is Non White.
 - 19% of the population is Hispanic.

Social Determinants of Health

- 8% of individual residents have incomes below poverty.
- 7% of households have incomes below poverty.
- 8% of the population age 25+ is without a high school diploma.

Health Risk Behaviors for Adults

- An estimated 586,459 adults age 18+ reside in the study region.
- Applying health district level survey data to the local population, an estimated:
 - 54% are overweight or obese.
 - 16% do not meet recommendations for physical activity.
 - 77% consume less than five servings of fruits and vegetables per day.
 - 8% are smokers.
 - 18% are at risk for binge drinking.

Health Risk Behaviors for High School Youth

- An estimated 43,653 youth age 14-19 reside in the study region.
- Applying health district level survey data to the local population, an estimated:
 - 23% are overweight or obese.
 - 18% have used tobacco or vapor products.
 - 58% do not meet recommendations for physical activity.

Access to Health Care

- An estimated 624,312 individuals age 0-64 lived in the study region in 2018.
- According to health insurance estimates from the US Census Bureau, an estimated 11% of individuals age 0-64 were uninsured at any point in 2018.
- As of 2020, three of the four localities within the study region are partly designated as medically underserved areas by the U.S. Health Resources and Services Administration.

Leading Causes of Death

- In 2019, there were 7,029 deaths in the study region.
- The five leading causes of death in the study region were cancer (1,692); heart disease (1,416); stroke (405); unintentional injury (355); and chronic lower respiratory (229).
- Except for Parkinson’s Disease, the age adjusted rates for the study region were generally lower than the Virginia rates for most localities. However, death rates for Falls Church were often higher than the statewide rate.

Maternal and Infant Health

- In 2019, there were 498 teen pregnancies, 337 infant deaths and 18,687 total live births.
- Of the total live births, there 1,355 low weight births, 4,005 non-marital births, and 409 births to teens.
- The study region rates were generally lower than statewide rate for all indicators except the live birth rate.

Potentially Avoidable Hospitalizations

- Some specifically-defined hospitalizations are potentially avoidable with adequate access to outpatient care and other health supports.
- In 2019 study region residents had 3,017 potentially avoidable hospitalizations.
- The leading diagnoses for these hospitalizations were congestive heart failure (1,010), diabetes (537), urinary tract infection (507); COPD or asthma in older adults (404), community acquired pneumonia (361), and hypertension (169).
- Most of these hospitalizations were for residents age 65+.
- The crude rates for most hospitalizations were lower in the study region than for Virginia as a whole for all age groups.

Hospitalizations for Mental Health and Substance Use Diagnoses

- In 2019 study region residents had 3,272 hospitalizations for behavioral health conditions in Virginia community hospitals.
- The leading causes of hospitalization were alcohol related disorders (785), major depressive disorder - recurrent (648), bipolar disorder (478), schizophrenia (270), and schizoaffective disorders (240).
- The crude rates for most hospitalizations were lower in the study region than for Virginia as a whole.

Summary Insights on Social Determinants of Health (Section 3)

Section 3 presents community insights and data for exploring social determinants of health in the region. Social determinants of health (SDoH) have been defined as the conditions under which people are born, grow, live, work, and age, and include factors such as socioeconomic status, education, employment, social support networks, and neighborhood characteristics.¹ A growing body of research indicates that SDoH can be linked to a lack of opportunity and resources to protect, improve, and maintain health. The impacts of SDoH can be seen in disparities in health status and access to healthcare for individuals and populations.

Section 3 explores the results of the CHNA study from a SDoH perspective.

- Part A provides summary insights about SDoH from the survey of community professionals.
- Part B presents a demographic profile of the region that may be helpful for understanding where populations with SDoH risk reside.
- Part C presents a summary of health equity and disparities within select community indicators at the zip code level.

This type of information can be helpful for planning efforts to reduce health disparities and increase health equity.

¹ American Academy of Family Physicians

Section 1. Insights from Community Professionals

A *Community Insight Survey* was conducted with a group of community professionals identified by Virginia Hospital Center (VHC) staff. This section describes the methods, summary results, and detailed results for each section of the survey.

A. Survey Methods

The survey was conducted online with a pool of potential respondents identified by VHC from their existing list of community contacts. The survey link was sent to a total of 155 community professionals. A total of 54 (35%) individuals submitted a response (although not every respondent answered every question).

One section of the survey included questions about community needs related to COVID-19. The other sections asked respondents for their insights about community health issues beyond COVID-19. It is important to note that while the survey was designed with multiple prompts to separate COVID-19 related concerns from general survey items, it is possible COVID-19 related concerns may have influenced some responses in both sections. A copy of the survey instrument can be found in [Appendix B](#).

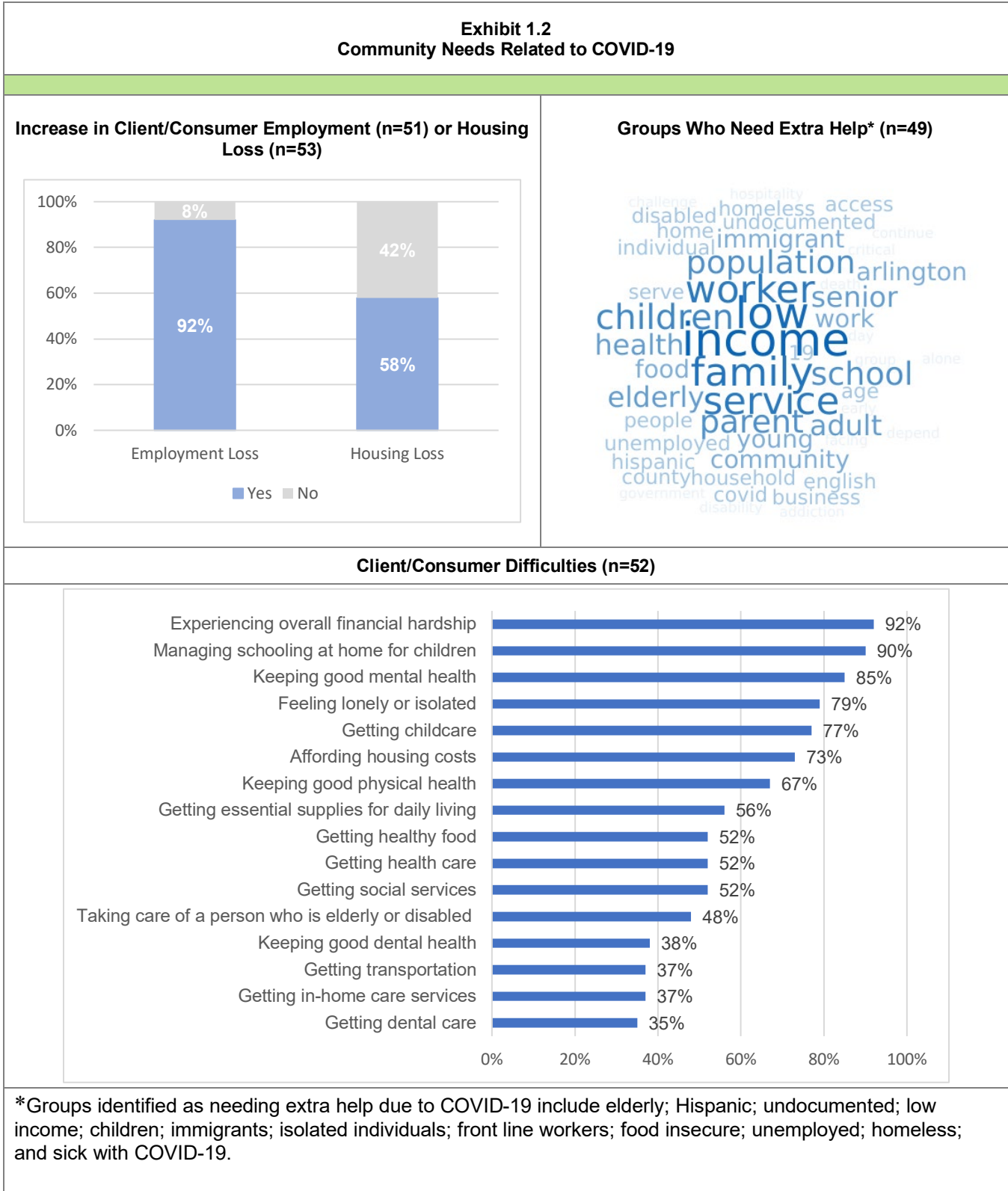
B. Organizational Affiliation and Geographic Perspective

Survey Responses were received from 54 community professionals from the organizations listed in **Exhibit 1.1**. Each respondent was asked to describe their geographic perspective in terms of the counties for which they would share insights on the survey. Most respondents identified multiple counties.

Exhibit 1.1											
Organizational Affiliation and Geographic Perspective (n=54)											
By Organization	By Geographic Perspective (Can select multiple)										
<i>(A count denotes multiple respondents from the same organization.)</i>											
<ul style="list-style-type: none"> <input type="checkbox"/> Alexandria Health Department <input type="checkbox"/> Alteon Health <input type="checkbox"/> Arlington Chamber of Commerce <input type="checkbox"/> Arlington Civic Federation <input type="checkbox"/> Arlington County - DHS <input type="checkbox"/> Arlington County (3) <input type="checkbox"/> Arlington County Medical Society <input type="checkbox"/> Arlington Economic Development <input type="checkbox"/> Arlington Food Assistance Center <input type="checkbox"/> Arlington Free Clinic <input type="checkbox"/> Arlington Partnership for Affordable Housing <input type="checkbox"/> Arlington Public Schools (9) <input type="checkbox"/> A-SPAN <input type="checkbox"/> Barcroft School & Civic League <input type="checkbox"/> Center for Youth and Family Advocacy <input type="checkbox"/> Dar Al-Hijrah Islamic Center <input type="checkbox"/> Dominion Anesthesia <input type="checkbox"/> Doorways <input type="checkbox"/> Edu-Futuro (2) <input type="checkbox"/> Just Neighbors <input type="checkbox"/> Lee Highway Alliance <input type="checkbox"/> Mt. Olivet United Methodist Church <input type="checkbox"/> National Capital Treatment and Recovery (formerly Phoenix House) <input type="checkbox"/> Neighborhood Health <input type="checkbox"/> Northern Virginia Health Foundation <input type="checkbox"/> Saint Ann Catholic Church <input type="checkbox"/> St John's Baptist Church <input type="checkbox"/> VA Delegates <input type="checkbox"/> Virginia Cancer Specialists <input type="checkbox"/> Virginia Hospital Center (13) 	<table border="1"> <tbody> <tr> <td>Alexandria City</td> <td style="text-align: right;">43%</td> </tr> <tr> <td>Arlington County</td> <td style="text-align: right;">96%</td> </tr> <tr> <td>Fairfax City</td> <td style="text-align: right;">33%</td> </tr> <tr> <td>Fairfax County</td> <td style="text-align: right;">44%</td> </tr> <tr> <td>Falls Church City</td> <td style="text-align: right;">39%</td> </tr> </tbody> </table>	Alexandria City	43%	Arlington County	96%	Fairfax City	33%	Fairfax County	44%	Falls Church City	39%
Alexandria City	43%										
Arlington County	96%										
Fairfax City	33%										
Fairfax County	44%										
Falls Church City	39%										

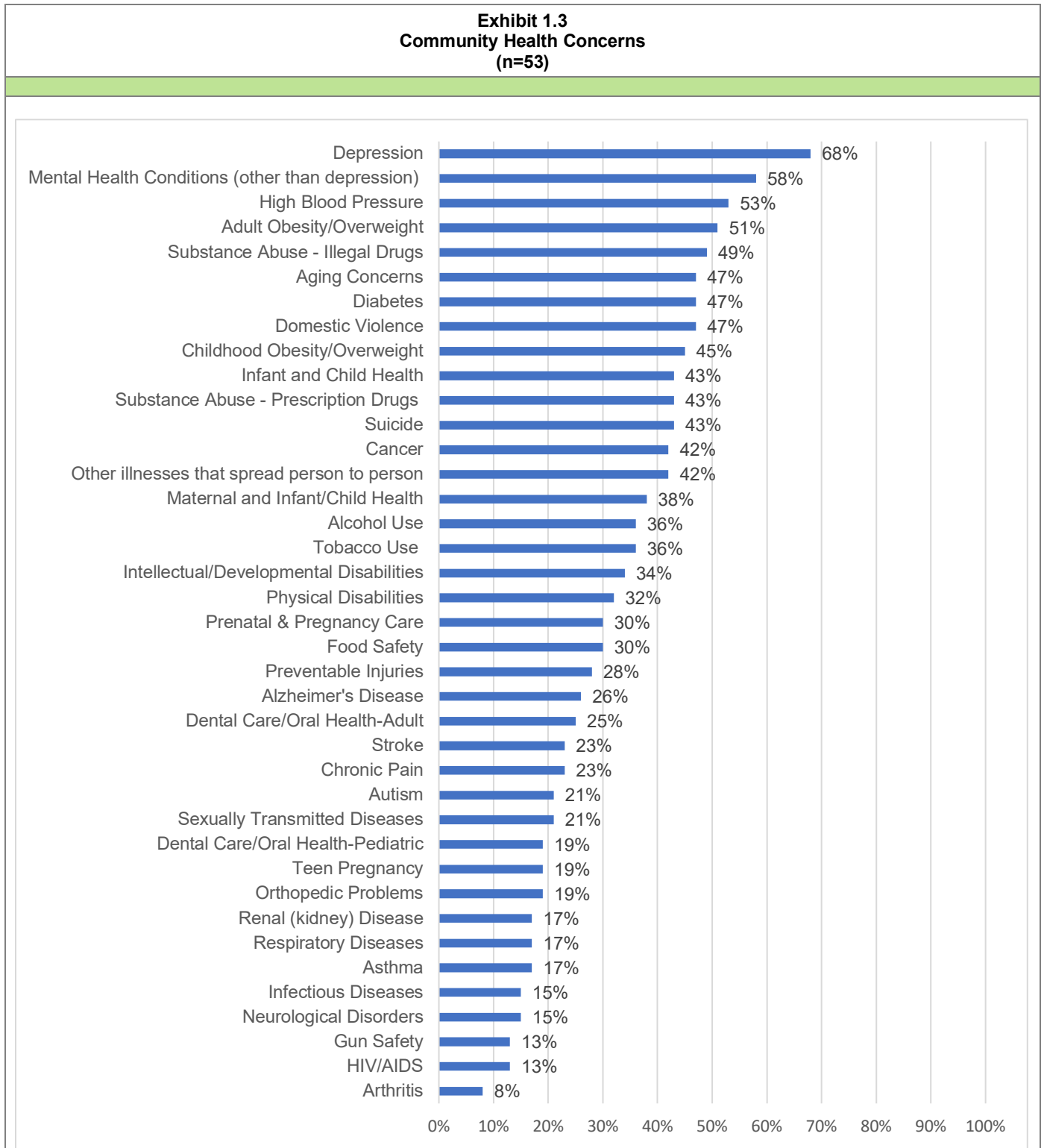
C. Community Needs Related to COVID-19

Community professionals were asked to share their insights on community needs specifically related to COVID-19. As shown in **Exhibit 1.2**, 92% said they have seen an increase in employment loss due to COVID-19, and 58% said they have seen an increase in housing loss. Survey respondents also identified multiple groups that need extra help due to COVID-19, and shared their perceptions of client/consumer difficulty as shown in the bottom panel.



D. Community Health Concerns

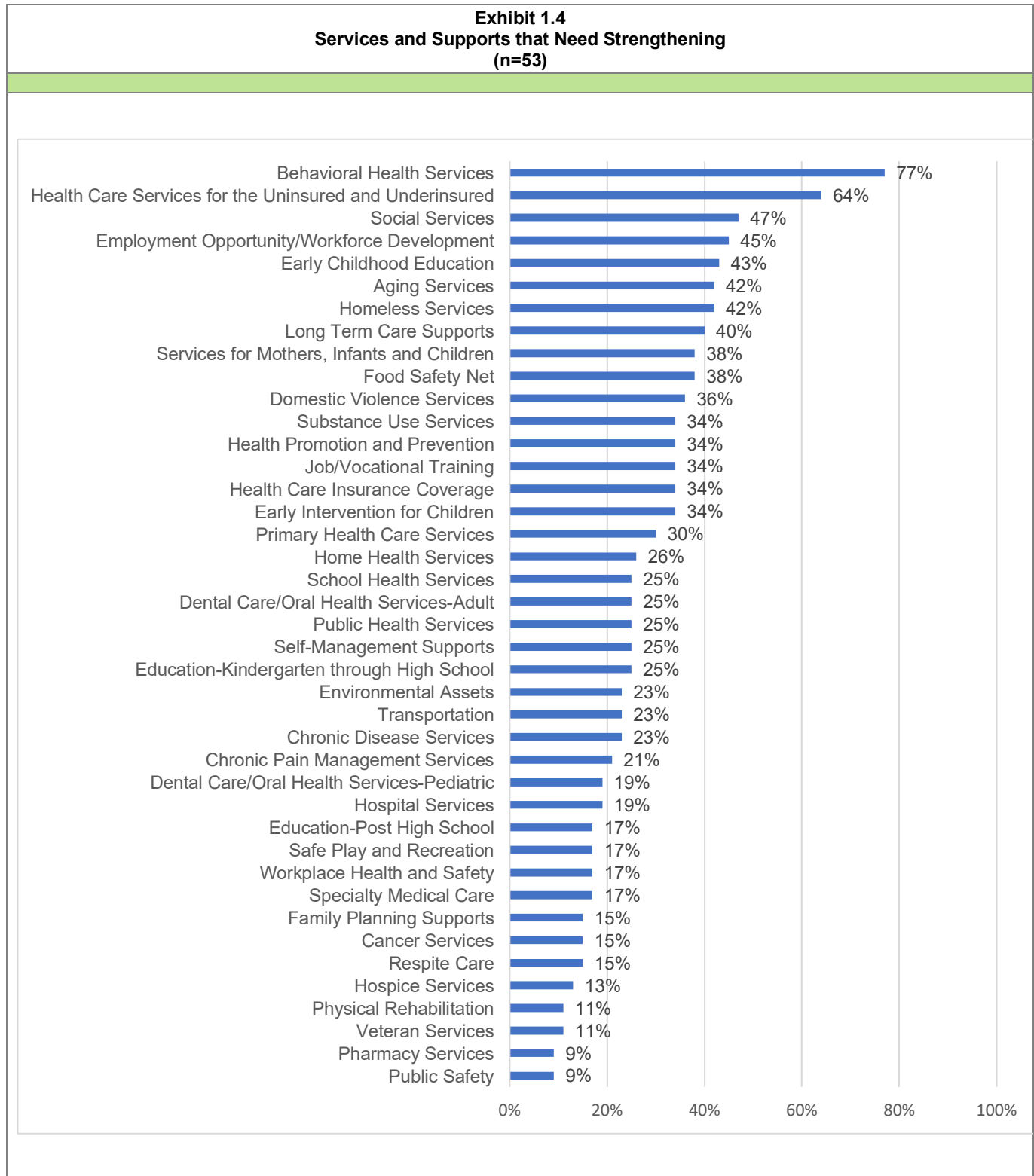
Community professionals were asked to review a list of common community health needs and identify which of these needs are present in their community. The results are shown in **Exhibit 1.3**.²



² It is important to note that while the survey was designed with multiple prompts to separate COVID-19 related concerns from general survey items, it is possible COVID-19 related concerns may have influenced some responses in both sections. A copy of the survey instrument can be found in Appendix B.

E. Services and Supports that Need Strengthening

Community professionals were asked to review a list of common community services and supports, and identify which of those services need strengthening in their community. The results are shown in **Exhibit 1.4**.³



³ It is important to note that while the survey was designed with multiple prompts to separate COVID-19 related concerns from general survey items, it is possible COVID-19 related concerns may have influenced some responses in both sections. A copy of the survey instrument can be found in Appendix B.

F. In Their Own Words – Insights from Community Professionals

Community professionals were asked to share in their own words their insights on the health and well-being of their community. **Exhibit 1.5** provides a summary of the **most common themes** and the associated number of responses. The most common themes are provided as a summary illustration, but they do not represent all the responses provided. The detailed responses are provided under separate cover. ⁴

Exhibit 1.5				
In their Own Words – Insights from Community Professionals				
1. In your own words, how would you define the idea of a “healthy community”?				
(n=46)				
31 Access to Health Care Services	20 Access to Community and Social Services	13 Health Equity	12 Access to Healthy Lifestyle Supports	9 Support for People with Behavioral Health Concerns
2. In your view, what are the most important health assets within the community?				
(n=47)				
28 Health Care Services	23 Community and Social Services	21 Healthy Lifestyle Supports	9 Supports for Children	9 Supports for People with Lifestyle Risk Facto
3. Are there particular groups within the community who are at greater risk for poorer health outcomes or difficulties obtaining optimal health or well-being?				
(n=49)				
20 Minority Population	13 Low Income Population	8 People with Behavioral Health Concerns	7 Elderly Population	4 Child Population
5. Are there particular groups in your community who may be experiencing health inequities? (n=45)				
16 People with Limited/No Access to Healthcare	15 Low Income Population	13 Food/Housing Insecure Population Immigrant Population	9 Minority Population	4 Child Population
6. Are there any new health issues within the community that may not be widely known yet, but could cause serious harm today or in the future?				
(n=37)				
12 Access to Healthcare	12 Behavioral Health Issues	10 COVID-19 Issues	6 Health Equity	4 Child Health Issues
7. Community health improvement works best when people work together. Please share your ideas about how people could work together to promote optimal health in the community.				
(n=37)				
16 Improve Access to Healthcare Services	15 More Community Collaboration	12 Support Vulnerable Populations	10 Improve Access to Community and Social Services	9 Address Health Equity

⁴ It is important to note that while the survey was designed with multiple prompts to separate COVID-19 related concerns from general survey items, it is possible COVID-19 related concerns may have influenced some responses in both sections. A copy of the survey instrument can be found in Appendix B.

Section 2. Community Indicator Profiles

This section of the report provides a quantitative profile of the study region based on a wide array of community health indicators. To produce the profile, Community Health Solutions analyzed data from multiple sources. By design, the analysis does not include every possible indicator of community health. The analysis is focused on a set of indicators that provide broad insight into community health and for which there were readily available data sources.

The results of this profile can be used to evaluate community health status compared to the Commonwealth of Virginia overall. The results can also be helpful for determining the number of people affected by specific health concerns. In addition, the results can be used alongside the survey results to help inform action plans for community health improvement.

The community data profiles are organized into two sections as outlined below. Health factors include demographics and other factors that can influence health status and access to health care for community populations. Health outcomes are indicators of the health status of community members.

Health Factor Profiles	Health Outcome Profiles
<ul style="list-style-type: none"> A. Community Demographics-Trend B. Community Demographics-Snapshot C. Social Determinants of Health D. Health Risk Behaviors for Adults E. Health Risk Behaviors for Youth 	<ul style="list-style-type: none"> F. Access to Health Care G. Leading Causes of Death H. Maternal and Infant Health I. Potentially Avoidable Hospitalization J. Mental Health and Substance Use Hospitalizations

A. Health Factors: Community Demographics-Trend

Exhibit 2.1 provides key population projections for the study region. Trends in health-related demographics are instructive for anticipating changes in community health status. Changes in the size, age and racial/ethnic mix of the population can have a significant impact on overall health status, health needs and demand for local services.

As shown below, as of 2020, the study region included an estimated 728,259 people. The population is expected to increase to 757,828 by 2025. It is projected that the population will remain stable or grow in most age groups, including a 16% increase in seniors age 65+. Focusing on racial background, growth is projected for most populations, including an 11% increase in the Asian population. The Hispanic ethnicity population is also expected to grow by 7%.

Exhibit 2.1 Community Demographics-Trend (2010-2025)				
Indicator	2010 Census	2020 Estimate	2025 Projection	% Change 2020-2025
Total Population	665,927	728,259	757,828	4%
Population Density (per Sq. Mile)	5,183.3	5,668.7	5,898.9	4%
Total Households	282,408	722,012	751,582	4%
Population by Age				
Children Age 0-17	130,007	141,800	140,828	-1%
Adults Age 18-29	128,448	118,094	125,152	6%
Adults Age 30-44	168,621	181,777	187,403	3%
Adults Age 45-64	168,613	181,110	181,839	0%
Seniors Age 65+	70,236	105,478	122,606	16%
Population by Race/Ethnicity				
Asian	87,107	109,416	121,863	11%
Black/African American	70,675	82,575	87,679	6%
White	429,303	441,748	446,971	1%
Other or Multi-Race	78,846	94,520	101,315	7%
Hispanic Ethnicity ⁵	119,482	139,094	148,605	7%
Source: Community Health Solutions analysis of data from US Census Bureau and ESRI. See Appendix A: Data Sources for details				

⁵ Classification of ethnicity; therefore, Hispanic individuals are also included in the race categories.

B. Health Factors: Community Demographics-Snapshot

Exhibit 2.2 provides a demographic profile of the study region. Focusing on rates in the bottom panel, compared to Virginia as a whole, the study region is more urban, has a higher percentage of adults age 30-44, and is more racially and ethnically diverse.

Exhibit 2.2 Community Demographics-Snapshot (2020)			
Indicator		Study Region	Virginia
Estimated Counts			
Total Population	Population	728,259	8,684,166
Age	Children Age 0-17	141,800	1,857,391
	Adults Age 18-29	118,094	1,425,254
	Adults Age 30-44	181,777	1,728,750
	Adults Age 45-64	181,110	2,272,656
	Seniors Age 65+	105,478	1,400,115
Sex	Female	367,530	4,411,676
	Male	360,729	4,272,490
Race	Asian	109,416	609,644
	Black/African American	82,575	1,687,062
	White	441,748	5,667,763
	Other or Multi-Race	94,520	719,697
Ethnicity	Hispanic Ethnicity	139,094	880,213
Estimated Rates			
Total Population	Population Density (pop. per sq. mile)	5,668.7	219.9
Age	Children Age 0-17 pct. of Total Pop.	19%	21%
	Adults Age 18-29 pct. of Total Pop.	16%	16%
	Adults Age 30-44 pct. of Total Pop.	25%	20%
	Adults Age 45-64 pct. of Total Pop.	25%	26%
	Seniors Age 65+ pct. of Total Pop.	14%	16%
Sex	Female pct. of Total Pop.	50%	51%
	Male pct. of Total Pop.	50%	49%
Race	Asian pct. of Total Pop.	15%	7%
	Black/African American pct. of Total Pop.	11%	19%
	White pct. of Total Pop.	61%	65%
	Other or Multi-Race pct. of Total Pop.	13%	8%
Ethnicity	Hispanic Ethnicity pct. of Total Pop.	19%	10%
Source: Community Health Solutions analysis of data from ESRI. See Appendix A: Data Sources for details			

C. Health Factors: Social Determinants of Health

Exhibit 2.3 shows selected social determinants of health for residents in the study region. Social determinants of health are social and economic factors that can influence health and access to health care for individuals and populations. The results show that while the study region compares favorably to Virginia as a whole, there are substantial numbers of community residents with low income, and without a high school diploma. These factors can impact an individual's health status and access to health services and supports.

Exhibit 2.3			
Social Determinants of Health (Various Years)			
Indicator		Study Region	Virginia
Estimated Counts			
Income ⁶	Total Population (Individual) in at 100% Federal Poverty Level (2018)	58,337	893,580
	Total Population (Individual) in at 200% Federal Poverty Level (2018)	131, 229	2,079,830
	Total Households at 100% Federal Poverty Level (2018)	20,896	330,813
Education	Population Age 25+ Without a High School Diploma (2020)	40,158	593,336
Estimated Rates			
Income	Total Population (Individual) at 100% Federal Poverty Level pct. of Total Population for Whom Poverty Status is Determined (2018)	8%	11%
	Total Population (Individual) at 200% Federal Poverty Level pct. of Total Population for Whom Poverty Status is Determined (2018)	18%	25%
	Total Households at 100% FPL pct. of Total Households for Whom Poverty Status is Determined (2018)	7%	11%
	Median Household Income (2020)	\$113,853	\$73,543
	Per Capita Income (2020)	\$68,684	\$40,095
Education	Population Age 25+ Without a High School Diploma pct. of Total Pop. Age 25+ (2020)	8%	10%
Source: Community Health Solutions analysis of data from ESRI, The U.S. Department of Housing and Urban Development, and Feeding America. See Appendix A: Data Sources for details			

⁶ For more information on 2018 federal poverty guidelines, visit <https://www.federalregister.gov/documents/2018/01/18/2018-00814/annual-update-of-the-hhs-poverty-guidelines>.

D. Health Factors: Risk Behaviors for Adults

Exhibit 2.4 shows selected health risk behaviors for adults in the study region. Health risk behaviors include lifestyle factors that can influence health including development of chronic disease. Please note that these figures are estimates derived by applying 2017/2018 health district estimates to 2020 local demographics for the study region. They are subject to error and presented for planning purposes only. The results show there are substantial numbers of community residents who could reduce their health risks by improving their diet, reducing their body weight, engaging in physical activity, reducing alcohol consumption, and ceasing smoking.

Exhibit 2.4 Adult Health Risk Behaviors (2020 Estimates)			
Indicator		Study Region	Virginia
Estimated Counts			
Total Estimated Adults age 18+		586,459	6,826,775
Lifestyle Risk Factors	Less than Five Servings of Fruits and Vegetables Per Day	452,034	5,597,956
	Overweight or Obese	318,991	4,505,672
	Not Meeting Recommendations for Physical Activity in the Past 30 Days	91,417	1,501,891
	At-risk for Binge Drinking ⁷	106,247	1,092,284
	Smoker	46,917	1,024,016
Chronic Conditions ⁸	High Cholesterol	183,184	2,389,371
	High Blood Pressure	146,358	2,184,568
	Arthritis	102,572	1,774,962
	Diabetes	41,052	750,945
General Health Status	Fair or Poor Health Status	123,837	1,570,158
Estimated Rates			
Lifestyle Risk Factors	Less than Five Servings of Fruits and Vegetables Per Day	77%	82%
	Overweight or Obese	54%	66%
	Not Meeting Recommendations for Physical Activity in the Past 30 Days	16%	22%
	At-risk for Binge Drinking	18%	16%
	Smoker	8%	15%
Chronic Conditions	High Cholesterol	31%	35%
	High Blood Pressure	25%	32%
	Arthritis	17%	26%
	Diabetes	7%	11%
General Health Status	Fair or Poor Health Status	21%	23%
Source: Community Health Solutions analysis of data from Virginia Department of Health Behavioral Risk Factor Surveillance System and demographic estimates from ESRI. See Appendix A: Data Sources for details			

⁷ Males having five or more drinks on one occasion, females having four or more drinks on one occasion.

⁸ As told by a doctor or other health professional.

E. Health Factors: Risk Behaviors for Youth

Exhibit 2.5 shows selected health risk behaviors for youth in the study region. Please note that all indicators in this profile are based on 2019 health district estimates applied to 2020 local demographics for the study region. They are subject to error and presented for planning purposes only. The results show there are substantial numbers of community youth who could reduce their health risks by avoiding tobacco and vapor products, engaging in more physical activity, and sustaining healthier body weight.

Exhibit 2.5			
High School Youth Health Risk Behaviors (2020 Estimates)			
Indicator		Study Region	Virginia
Estimated Counts			
Total Estimated High School Youth Age 14-19		43,653	652,253
Lifestyle Risk Factors	Used tobacco or vapor products in the past month	7,858	150,018
	Not Meeting Recommendations for Physical Activity in the Past Week	25,319	384,829
Chronic Conditions	Asthma	7,858	136,973
	Overweight or Obese	10,040	202,198
Estimated Rates			
Lifestyle Risk Factors	Used tobacco or vapor products in the past month	18%	23%
	Not Meeting Recommendations for Physical Activity in the Past Week	58%	59%
Chronic Conditions	Asthma	18%	21%
	Overweight or Obese	23%	31%
Source: Community Health Solutions analysis of data from Virginia Department of Health Youth Risk Behavior Surveillance System and demographic estimates from ESRI. See Appendix A: Data Sources for details			

F. Health Factors: Access to Health Care

Access to health care is essential for individual and population health. **Exhibit 2.6** below provides indicators of access to health insurance for community residents. As shown, an estimated 69,538 community members may lack health coverage.

Looking beyond health coverage, **Exhibit 2.7** on the following page shows that three of the four localities in the region have been designated as partially medically underserved areas by the U.S. Health Resources and Services Administration. The designations are based on several factors including primary care provider supply, infant mortality, prevalence of poverty and the prevalence of seniors age 65+.

Exhibit 2.6 Access to Health Coverage-Uninsured Population (2018 Estimates)		
Indicator	Study Region	Virginia
Estimated Counts - Population		
Total Population Age 0-64	624,312	6,994,021
Total Population Age 0-18	152,542	1,982,166
Total Population Age 19-64	471,770	5,011,855
Estimated Counts - Uninsured		
Uninsured Population Age 0-64	69,538	743,792
Uninsured Population Age 0-18	8,901	103,440
Uninsured Population Age 19-64	60,637	640,352
Estimated Rates - Uninsured		
Uninsured Population Age 0-64	11%	11%
Uninsured Population Age 0-18	6%	5%
Uninsured Population Age 19-64	13%	13%
Notes: These data may reflect conservative estimates of health coverage for 2018. Readers are encouraged to review current data on Medicaid Expansion enrollment that which updated on a regular basis. Click here view the Department of Medical Assistance Services Medicaid Expansion Access Dashboard.		
Source: Community Health Solutions analysis of data from ESRI. See Appendix A: Data Sources for details		

Exhibit 2.7 Access to Health Care-Medically Underserved Areas/Populations			
Locality	Index of Medical Underservice Score (0= Highest Need 100 =Lowest Need)	Service Area Name (s)	Status
Alexandria City	0.0	Low Income - Arlandria	MUP Other Population Governor's Exception
Arlington County	0.0		
Falls Church City	N/A	N/A	Not Designated
Fairfax County	68.0	Low Income-Fairfax Lee / Mt Vernon	MUP Low Income Governor's Exception
Source: Community Health Solutions analysis of data from Health Resources and Services Administration. See Appendix A: Data Sources for details			

G. Health Outcomes: Leading Causes of Death

Exhibit 2.8 shows the leading causes of death in the four localities that overlap with study region. In 2019, the five leading causes of death in the study region were cancer (1,692); heart disease (1,416); stroke (405); unintentional injury (355); and chronic lower respiratory (229). Except for Parkinson's Disease, the age adjusted rates for the study region were generally lower than the Virginia rates for most localities. However, death rates for Falls Church were often higher than the statewide rate.

Exhibit 2.8 Mortality (2019)						
Indicator	Alexandria City	Arlington County	Falls Church City	Fairfax County	Study Region	Virginia
Counts-Total Deaths						
Total Deaths by All Causes	797	885	139	5,208	7,029	70,359
Counts-Total Deaths by Leading 14 Causes						
Malignant Neoplasms (Cancer)	175	207	27	1,283	1,692	15,049
Heart Disease	172	185	25	1,034	1,416	15,061
Cerebrovascular Disease (Stroke)	36	50	12	307	405	3,823
Unintentional Injury	47	41	4	263	355	3,997
Chronic Lower Respiratory	28	28	7	166	229	3,666
Alzheimer's Disease	26	25	5	163	219	2,632
Diabetes	23	28	5	120	176	2,352
Nephritis and Nephrosis	25	14	3	106	148	1,662
Parkinson's Disease	10	17	3	106	136	894
Influenza and Pneumonia	8	21	2	91	122	1,103
Suicide	14	13	1	92	120	1,137
Septicemia	9	17	1	85	112	1,086
Primary Hypertension	16	14	1	58	89	817
Chronic Liver Disease	4	4	2	59	69	1,038
Rates-Age Adjusted per 100,000						
Total Deaths by All Causes	533.4	429.6	945.3	430.6	N/A	703.5
Malignant Neoplasms	117.0	99.1	173.0	102.3	N/A	144.9
Heart Disease	115.7	89.7	166.9	85.2	N/A	149.0
Cerebrovascular Disease	24.7	24.6	85.9	25.6	N/A	38.3
Unintentional Injury	30.7	18.4	25.3	22.6	N/A	43.8
Chronic Lower Respiratory	20.4	14.0	45.1	13.9	N/A	35.9
Alzheimer's Disease	18.6	13.6	35.8	14.1	N/A	26.9
Diabetes	14.8	11.8	35.5	9.7	N/A	22.8
Nephritis and Nephrosis	17.4	7.3	23.6	8.9	N/A	16.3
Parkinson's Disease	6.6	9.2	21.8	9.3	N/A	9.0
Influenza and Pneumonia	5.3	10.8	11.7	7.6	N/A	11.1
Suicide	8.2	5.8	7.4	7.8	N/A	12.8
Septicemia	5.7	7.8	6.9	7.1	N/A	10.5
Primary Hypertension	10.5	6.5	4.8	4.6	N/A	8.0
Chronic Liver Disease	2.4	1.5	14.6	4.7	N/A	10.0
<p>Shading denotes a rate higher than the Virginia rate. Source: Community Health Solutions analysis of data from the Virginia Department of Health. See Appendix A: Data Sources for details</p>						

H. Health Outcomes: Maternal and Infant Health

Exhibit 2.9 shows indicators of maternal and infant health in the study region. In 2019, there were 498 teen pregnancies, 337 infant deaths and 18,687 total live births.

Of the total live births, there 1,355 low weight births, 4,005 non-marital births, and 409 births to teens. The study region rates were generally lower than statewide rate for all indicators except the live birth rate.

Exhibit 2.9 Maternal and Infant Health (2019)						
Indicator	Alexandria City	Arlington County	Falls Church City	Fairfax County	Study Region	Virginia
Counts						
Teenage Pregnancies Age 10-19	74	52	369	3	498	4,825
Five-Year Average Infant Mortality (2015-2019)	40	39	256	2	337	2,807
Total Live Births	2,496	2,652	186	13,353	18,687	97,434
Low Weight Births	163	185	12	995	1,355	8,162
Non-Marital Births	586	436	22	2,961	4,005	34,196
Teenage Births (Age 10-19)	48	43	3	315	409	3,651
Births to Teens Age 18-19	36	33	2	226	297	2,798
Births to Teens Age 15-17	12	10	1	85	108	824
Births to Teens Age <15	0	0	0	4	4	29
Rates						
Total Pregnancies per 1,000 Female Population Age 10-19	12.4	5.1	5.1	3.0	5.6	9.2
Five-Year Average Infant Mortality Rate per 1,000 Live Births (2015-2019)	3.2	2.8	3.7	3.2	3.5	5.8
Live Birth Rate per 1,000 Population	15.7	11.2	12.7	11.6	12.0	11.4
Low Weight Births as a pct. of Total Births	7%	7%	6%	7%	7%	8%
Non-Marital Births as a pct. of Total Births	23%	16%	12%	22%	21%	35%
Teenage Births (Age 10-19) Rate per 1,000 Females age 10-19	8.1	4.2	3.0	4.4	4.6	7.0
<p>Shading denotes a rate higher than the Virginia rate.</p> <p>Source: Community Health Solutions analysis of data from the Virginia Department of Health. See Appendix A: Data Sources for details</p>						

I. Health Outcomes: Potentially Avoidable Hospitalizations

Exhibit 2.10 shows Prevention Quality Indicators (PQIs) of potentially avoidable hospitalizations in the study region. These hospitalizations are potentially avoidable with adequate access to outpatient care and other health supports. Cases are defined using specific diagnosis and procedure codes as noted in **Appendix A**.

In 2019, study region residents had 3,017 potentially avoidable hospitalizations, with most being for residents age 65+. The leading diagnoses for these hospitalizations were congestive heart failure (1,010), diabetes (537), COPD or asthma in older adults (404), community acquired pneumonia (361), and hypertension (169). Most of these hospitalizations were for residents age 65+. The crude rates⁹ for these hospitalizations were lower in the study region than for Virginia as a whole for all age groups.

Exhibit 2.10 Potentially Avoidable Hospitalizations (2019)		
Indicator	Study Region	Virginia
Counts- Total Discharges		
Total PQI Discharges by All Diagnoses	3,017	72,248
Counts- Discharges by Diagnosis		
Congestive Heart Failure	1,010	26,675
Diabetes	537	13,561
Urinary Tract Infection	507	7,481
COPD or Asthma in Older Adults	404	12,198
Community Acquired Pneumonia	361	8,514
Hypertension	169	3,292
Asthma in Younger Adults	30	538
Counts-Total Discharges by Age Group		
Total Discharges Age 18-29	104	2,522
Total Discharges Age 30-44	162	5,020
Total Discharges Age 45-64	781	21,010
Total Discharges Age 65+	1,970	43,696
Rates-Age Group Crude Rates Per 100,000 Population		
Total Discharges per 100,000 pop. All Ages	418.5	839.3
Total Discharges per 100,000 pop. Age 18-29	89.2	190.9
Total Discharges per 100,000 pop. Age 30-44	92.8	280.9
Total Discharges per 100,000 pop. Age 45-64	461.0	993.9
Total Discharges per 100,000 pop. Age 65+	1,723.5	2,768.9
-- Rates are not calculated where the number of discharges is less than 30.		
Source: Community Health Solutions analysis of data from Virginia Health Information, Inc. and demographic estimates from Virginia Department of Health. See Appendix A: Data Sources for details		

⁹ 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 PQI rates at the zip code level. Age group PQI rates are used as an alternative.

J. Health Outcomes: Mental Health and Substance Use Hospitalizations

Exhibit 2.11 shows that study region residents had 3,272 discharges from Virginia community hospitals for behavioral health conditions in 2019. The leading causes of hospitalization were alcohol related disorders (785), major depressive disorder - recurrent (648), bipolar disorder (478), schizophrenia (270), and schizoaffective disorders (240). The crude rates for most hospitalizations were lower in the study region than for Virginia as a whole.

Exhibit 2.11 Hospitalizations for Mental Health and Substance Use Diagnoses (2019)		
Indicator	Study Region	Virginia
Counts-Total Discharges by Diagnosis		
Total Discharges by All Diagnoses	3,272	68,583
Counts-Total Discharges by Leading 11 Diagnoses		
Alcohol related disorders	785	9,436
Major depressive disorder, recurrent	648	17,148
Bipolar disorder	478	10,137
Schizophrenia	270	3,229
Schizoaffective disorders	240	6,521
Major depressive disorder, single episode	231	6,790
Unspecified mood [affective] disorder	94	1,485
Persistent mood [affective] disorders	63	1,931
Unspecified psychosis not due to a substance or known physiological condition	57	1,004
Opioid related disorders	49	2,011
Reaction to severe stress, and adjustment disorders	45	2,287
Rates- Crude Rate Per 100,000 Population		
Total Discharges	463.4	796.8
Alcohol related disorders	107.8	108.7
Major depressive disorder, recurrent	89.0	197.5
Bipolar disorder	65.6	116.7
Schizophrenia	37.1	37.2
Schizoaffective disorders	33.0	75.1
Major depressive disorder, single episode	31.7	78.2
Unspecified mood [affective] disorder	12.9	17.1
Persistent mood [affective] disorders	8.7	22.2
Unspecified psychosis not due to a substance or known physiological condition	7.8	11.6
Opioid related disorders	6.7	23.2
Reaction to severe stress, and adjustment disorders	6.2	26.3
-- Rates are not calculated where the number of discharges is less than 30.		
Source: Community Health Solutions analysis of data from Virginia Health Information, Inc. and demographic estimates from ESRI. See Appendix A: Data Sources for details		

Section 3. Social Determinants of Health

Social determinants of health (SDoH) have been defined as the conditions under which people are born, grow, live, work, and age, and include factors such as socioeconomic status, education, employment, social support networks, and neighborhood characteristics.¹⁰ A growing body of research indicates that SDoH can be linked to a lack of opportunity and resources to protect, improve, and maintain health. The impacts of SDoH can be seen in disparities in health status and access to healthcare for individuals and populations.

This section explores the results of the CHNA study from an SDoH perspective:

- Part A provides summary insights about SDoH from the survey of community professionals.
- Part B presents a demographic profile of the region that may be helpful for understanding where populations with SDoH risk reside.
- Part C presents a summary of health equity and disparities within select community indicators at the zip code level.

This type of information can be helpful for planning efforts to reduce health disparities and increase health equity.

A. Insights from Survey of Community Professionals

Respondents were asked if there are particular groups of people within their neighborhood or community who need help obtaining better health. As shown in **Exhibit 3.1**, the most frequently identified populations are shown in the exhibit below, along with a list of specific mentions. Members of these populations have one or more social determinants of health that could influence their health status and access to health services and supports. The list is consistent with research on populations at higher risk for health challenges because of one or more social determinants of health.

Exhibit 3.1 Insights about Vulnerable Populations from Community Professionals N=49				
20 <i>Minority Population</i>	13 <i>Low Income Population</i>	8 <i>People with Behavioral Health Concerns</i>	7 <i>Elderly Population</i>	4 <i>Child Population</i>
Specific Populations Identified in the Survey				
<input type="checkbox"/> Black/African American <input type="checkbox"/> Children <input type="checkbox"/> Elderly <input type="checkbox"/> English as Second Language <input type="checkbox"/> Food Insecure <input type="checkbox"/> Hispanic/Latino <input type="checkbox"/> Homeless <input type="checkbox"/> Immigrants (including undocumented) <input type="checkbox"/> LGBTQ		<input type="checkbox"/> Low-income <input type="checkbox"/> People of color <input type="checkbox"/> People with disabilities <input type="checkbox"/> People with mental health conditions <input type="checkbox"/> People with substance use problems <input type="checkbox"/> Unemployed <input type="checkbox"/> Uninsured/Underinsured		

¹⁰ American Academy of Family Physicians

B. Community Mapping of SDoH Indicators

For purposes of assessment and planning it is helpful to understand where populations with SDoH risk factors reside in the community. The following exhibits provide maps and data for four SDoH indicators including low income, minority status, disability, and aging. There are many additional SDoH not shown here. The indicators shown are intended as a starting point for further analysis of SDoH factors in local communities.

Exhibit 3.1 shows the estimated median household income at the zip code level as of 2020. The range expands from a low of \$66,353 to a high of \$200,001.

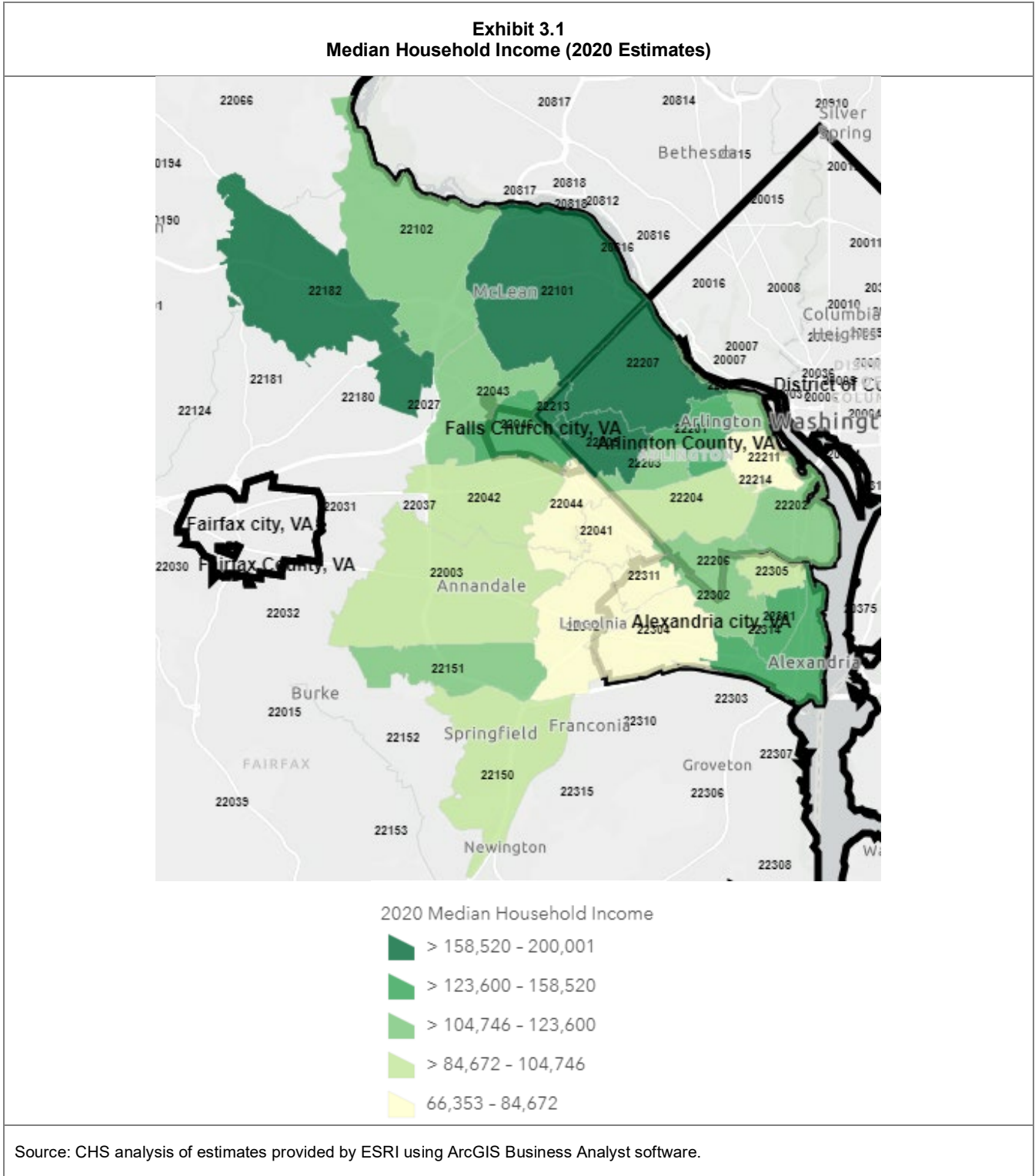
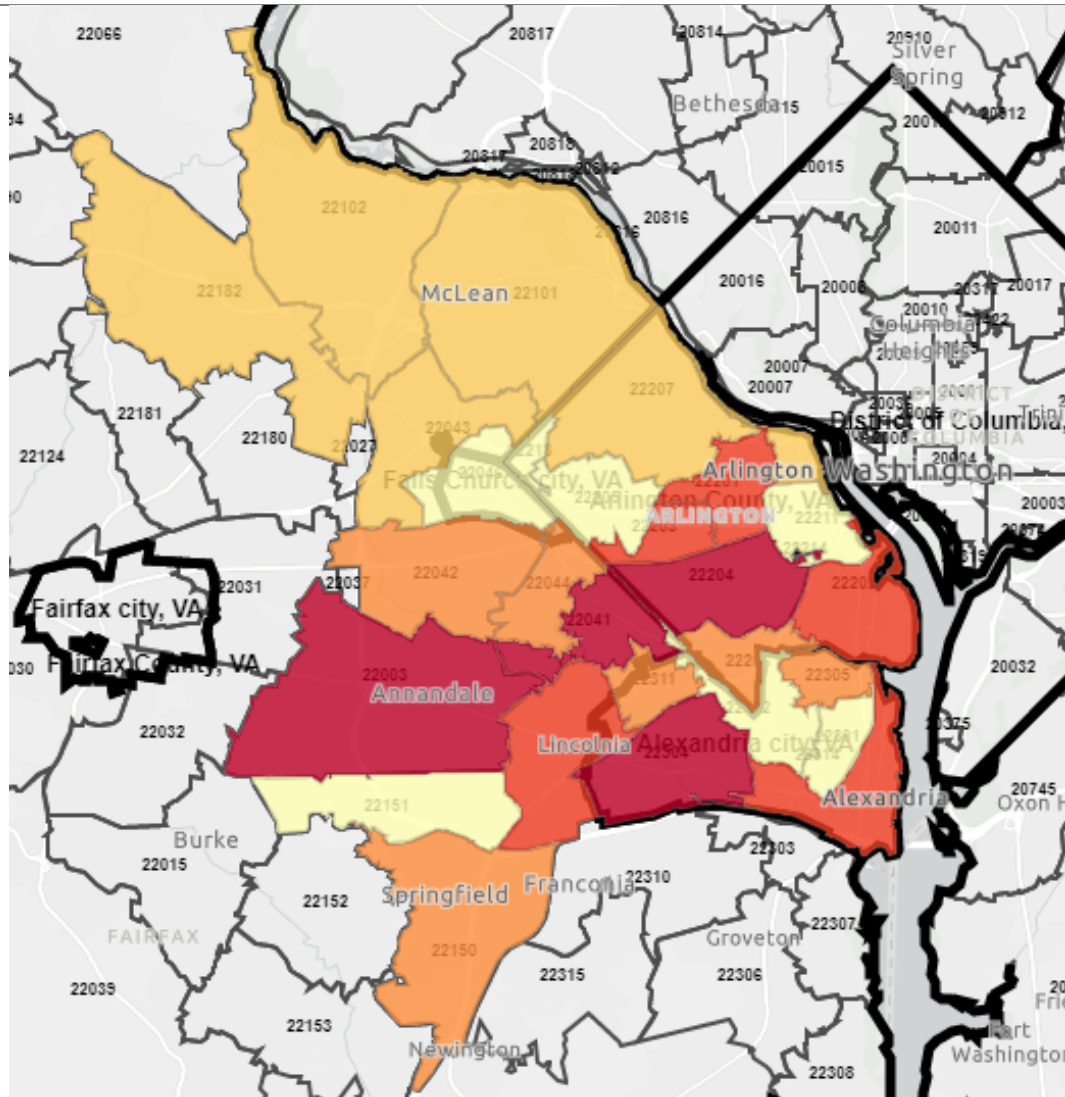


Exhibit 3.2 shows the estimated number of households with income below poverty as of 2018. There were an estimated 20,896 households in the study with income below poverty in 2018.

Exhibit 3.2
Number of Households with Income Below Poverty (2018 Estimates)



2018 HHs: Inc Below Poverty Level (ACS 5-Yr)



Source: CHS analysis of estimates provided by ESRI using ArcGIS Business Analyst software.

Exhibit 3.3 shows the estimated number of minority residents as of 2020. In this analysis, minority residents include people of races other than White, plus people of Hispanic ethnicity. There were an estimated 459,462 minority residents in the study region.

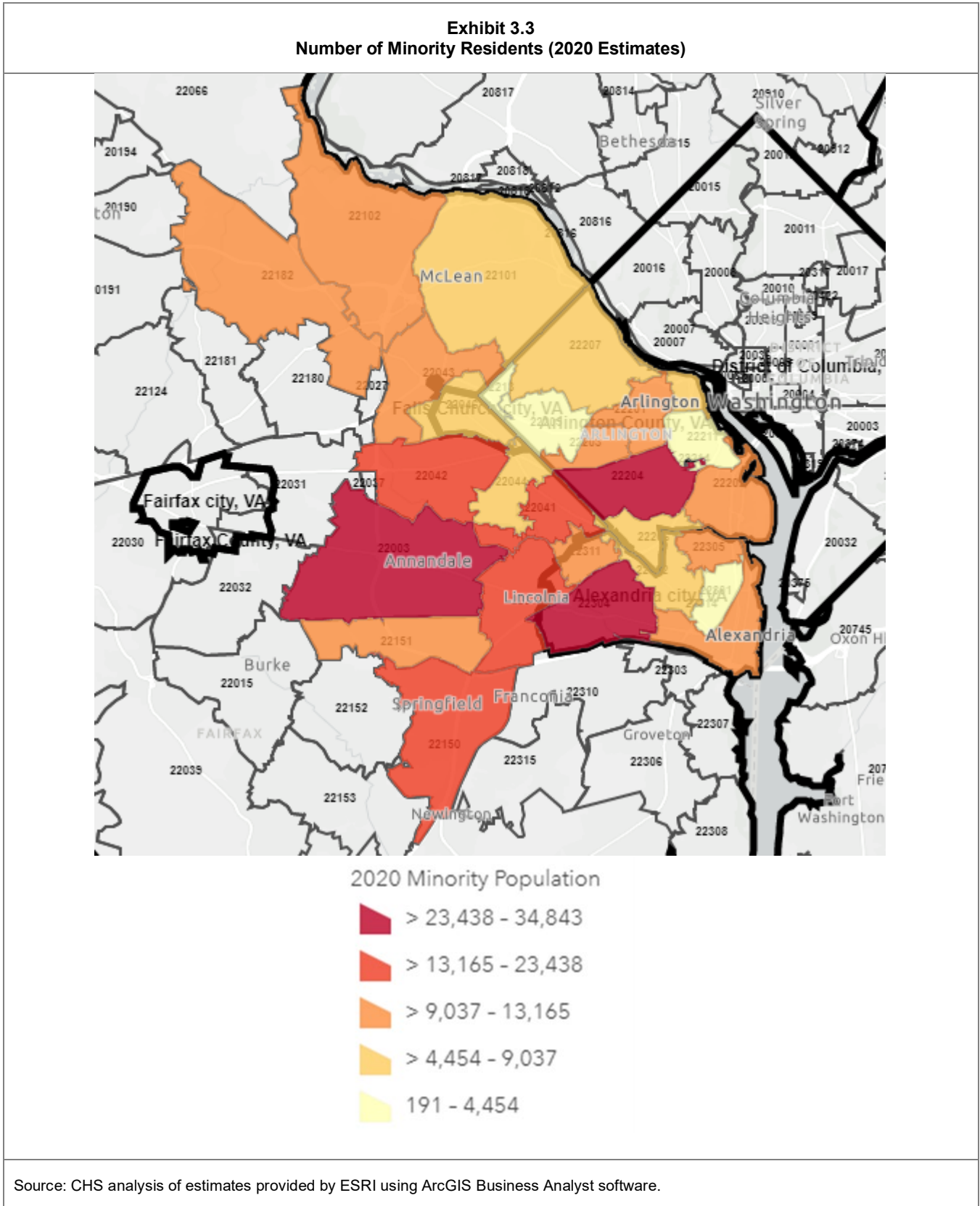
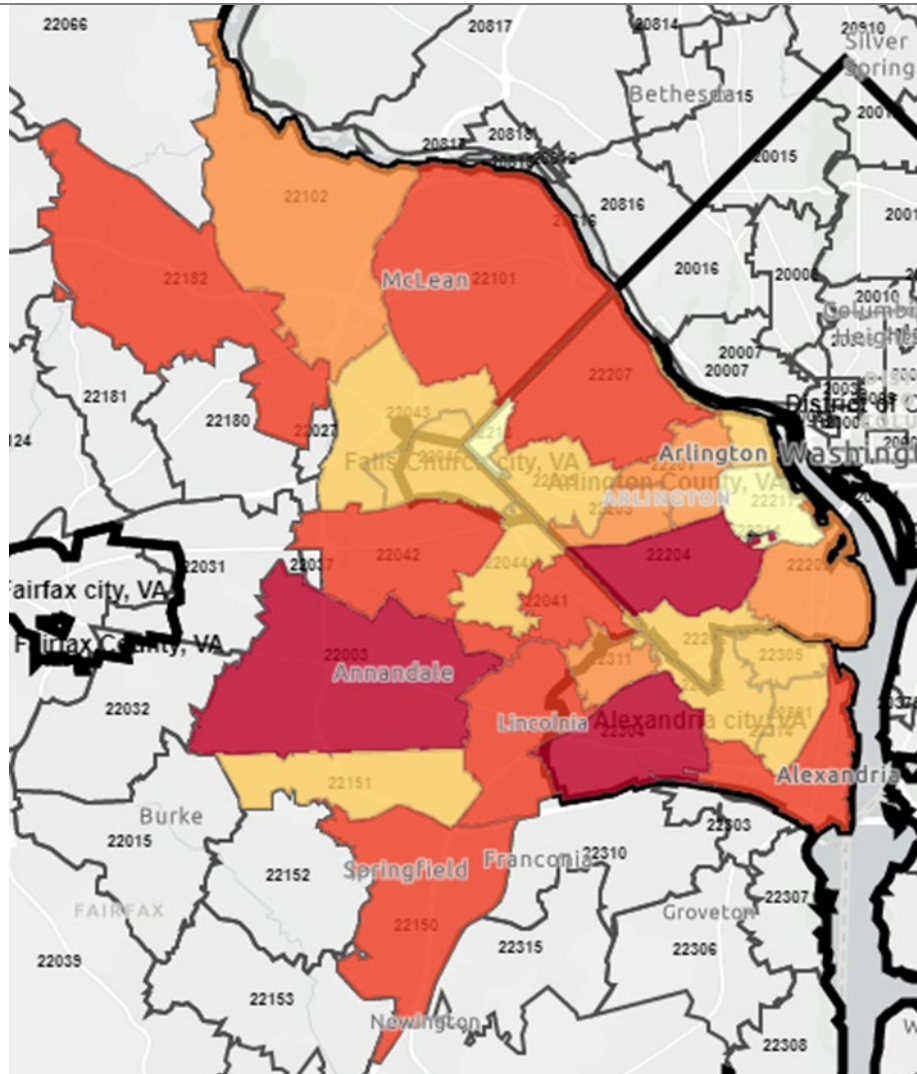


Exhibit 3.4 shows the estimated number of households having one or more members with a disability as of 2018. There were an estimated 37,817 households meeting this definition.

Exhibit 3.4
Households with 1+ Persons with Disability (2018 Estimates)

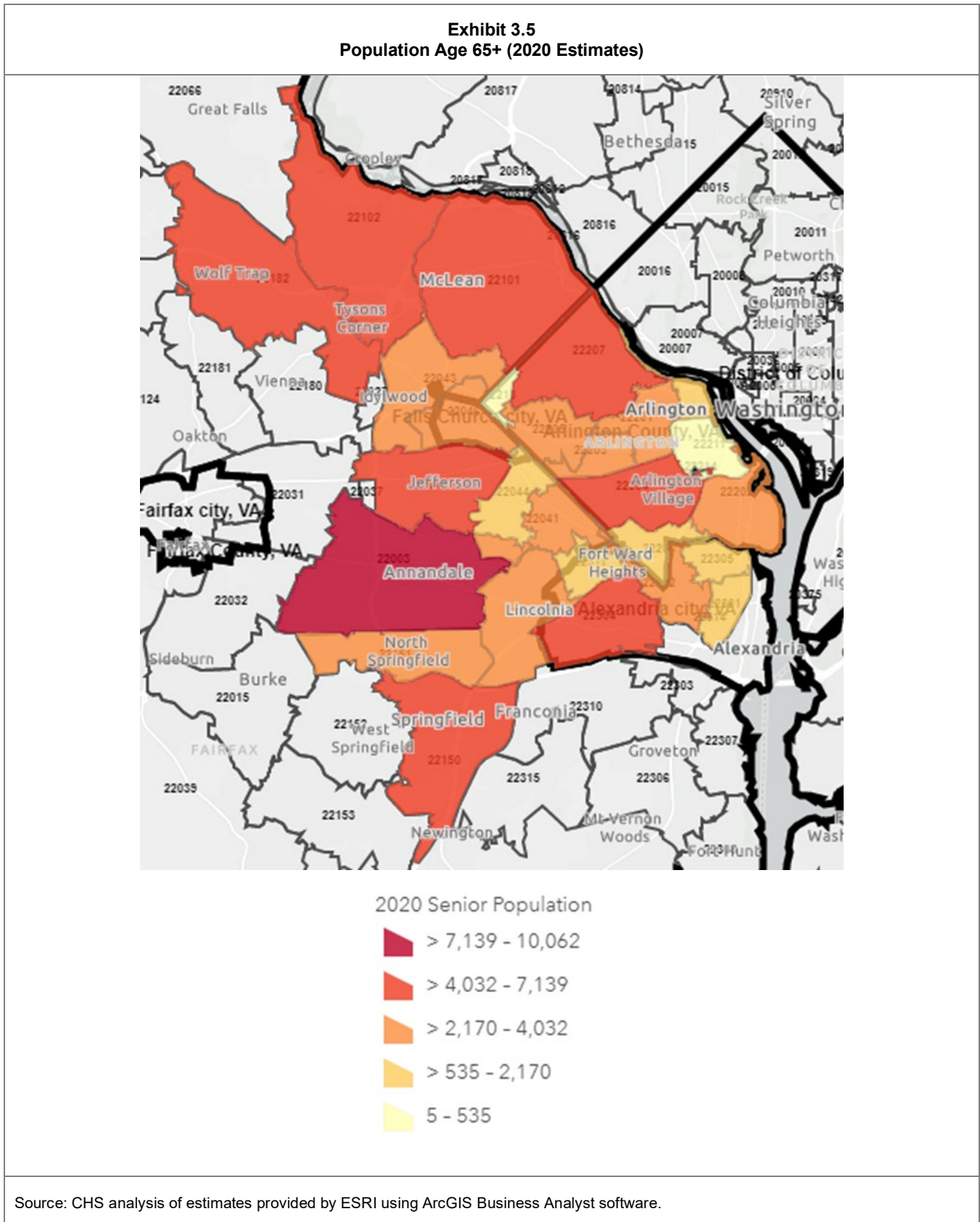


2018 HHs w/1+ Persons w/Disability (ACS 5-Yr)



Source: CHS analysis of estimates provided by ESRI using ArcGIS Business Analyst software.

Exhibit 3.5 shows the estimated population age 65+ as of 2020. There were an estimated 105,478 residents age 65+ in the study region.



C. Health Disparities and Health Equity

Community indicators in this report were analyzed at the study region level; all 28 zip codes that comprise the study region combined. As shown in [Section 2. Community Indicator Profiles](#), the study region compares favorably to Virginia as a whole for most indicators. However, in a region as large and diverse as Northern Virginia, even a zip code level analysis can often mask important variations in health equity within the region. Health equity is an important factor in creating healthy communities. Health equity exists when everyone has access to the conditions needed for optimal health and well-being.¹¹ Health inequities arise when people encounter structures and practices that prevent them from obtaining services and supports that are essential for optimal health.

Along with the SDoH maps, a zip code level analysis of key indicator can identify small geographic areas in which the population is likely to be more at risk for health problems and has poorer health outcomes. This information can be helpful for focusing community health initiatives in communities where they are most needed.

Exhibits 3.5 and 3.6 on the following pages provide rate comparisons for six indicators of demographics and health factors/outcomes. The demographic section includes a rate comparison of seniors age 65+; race/ethnicity; income; and education indicators. Health factor and outcome comparisons include potentially avoidable hospitalization; behavioral health hospitalization and access to health coverage (uninsured population).

Please note: Counts, indicator definitions and technical notes can be viewed in [Section 2. Community Indicator Profiles](#).

Age. The study region population has a lower rate of seniors age 65+ than Virginia as a whole. However, eight zip codes have a higher rate of seniors than the state, and 12 have a higher rate than the study region.

Race/Ethnicity. The study region is more racially and ethnically diverse than Virginia as a whole. Most zip codes in the region have a higher rate of Asian and Hispanic resident than the state. There are 11 zip codes with larger Asian and Hispanic populations than the study region. While the study region has a smaller proportion of Black/African American residents than the state, there are nine zip codes in the region with sizeable Black/African American populations.

Income. The study region has higher incomes than Virginia as a whole. However, there is one zip code with lower per capita income (22211 Fort Myer), and one zip code with a lower median household income (22311 Alexandria) than the state. Additionally, there are five zip codes with poverty rates above the state rate. Within the study region, there are several zip codes with income levels below the study region rates (13 zip codes and 15 zip codes; per capita and median income, respectively). There are also 10 zip codes with higher poverty rates than the study region rate.

Education. The study region has a lower rate of residents without a high school education than Virginia as a whole. However, there are 10 zip codes with a lower rate of high school graduates than the state and the study region.

Potentially Avoidable Hospitalization. Prevention Quality Indicators (PQIs) are used to analyze potentially avoidable hospitalizations. These hospitalizations are potentially avoidable with adequate access to outpatient care and other health supports. The study region had a lower rate of PQI discharges than Virginia as a whole. However, there were four zip codes with a higher rate of PQI discharges than the study region.

Behavioral Health Hospitalization. The study region had a lower rate of behavioral health (BH) related discharges than Virginia as a whole. However, there were 13 zip codes with a higher rate of BH discharges than the study region.

Uninsured Estimates. The study region had uninsured rates comparable to Virginia as a whole for adults and children. However, there were 10 zip codes with higher rates of uninsured adults and/or children than the state and/or the study region.

11

Arlington's Plan for Achieving Health Equity by 2027. <https://arlingtonva.s3.amazonaws.com/wp-content/uploads/sites/25/2019/04/A-Decade-of-Difference-D2027-Report.pdf>

Exhibit 3.5
Zip Code Level Comparison of Selected Community Indicators-Demographics

	Age 65+ %	Asian %	Black/African American %	Other or Multi-Race %	Hispanic Ethnicity %	Per Capita Income	Median Household Income	Poverty %	Age 25+ No HS Diploma %
Virginia	16%	7%	19%	8%	10%	\$40,095	\$73,543	11%	10%
Study Region	14%	15%	11%	13%	19%	\$68,684	\$113,853	8%	8%
22003 Annandale	18%	25%	8%	15%	25%	\$48,113	\$102,033	9%	12%
22041 Falls Church	14%	13%	15%	23%	38%	\$41,176	\$76,138	19%	19%
22042 Falls Church	13%	22%	6%	22%	34%	\$47,788	\$104,746	7%	14%
22043 Falls Church	14%	22%	4%	12%	17%	\$62,716	\$122,417	6%	7%
22044 Falls Church	15%	18%	6%	21%	34%	\$52,952	\$84,565	13%	16%
22046 Falls Church	16%	12%	4%	9%	14%	\$72,091	\$132,402	3%	3%
22101 Mc Lean	23%	17%	2%	5%	6%	\$98,595	\$200,001	3%	2%
22102 Mc Lean	17%	29%	5%	7%	8%	\$83,317	\$123,600	5%	2%
22150 Springfield	19%	26%	10%	20%	28%	\$40,427	\$98,715	8%	14%
22151 Springfield	16%	25%	7%	14%	22%	\$44,462	\$113,530	3%	13%
22182 Vienna	19%	22%	3%	6%	6%	\$90,400	\$200,001	3%	3%
22201 Arlington	8%	12%	5%	7%	10%	\$95,315	\$129,309	6%	3%
22202 Arlington	13%	14%	9%	6%	9%	\$91,817	\$117,658	9%	2%
22203 Arlington	13%	12%	7%	14%	20%	\$74,694	\$111,485	8%	7%
22204 Arlington	11%	13%	18%	21%	32%	\$50,539	\$90,867	10%	12%
22205 Arlington	14%	8%	3%	8%	10%	\$86,003	\$173,334	4%	4%
22206 Arlington	10%	8%	15%	12%	17%	\$76,757	\$113,303	8%	6%
22207 Arlington	18%	7%	5%	6%	9%	\$96,294	\$200,001	4%	2%
22209 Arlington	9%	18%	5%	8%	12%	\$87,290	\$112,116	7%	1%
22211 Fort Myer	1%	3%	10%	7%	10%	\$22,387	\$75,000	1%	2%
22213 Arlington	16%	9%	3%	7%	7%	\$99,661	\$181,293	2%	0%
22301 Alexandria	13%	3%	8%	8%	11%	\$94,020	\$158,520	2%	2%
22302 Alexandria	15%	7%	12%	9%	13%	\$78,353	\$114,541	4%	4%
22304 Alexandria	13%	9%	30%	12%	17%	\$58,349	\$84,566	12%	7%
22305 Alexandria	9%	4%	16%	26%	38%	\$59,076	\$101,162	18%	16%
22311 Alexandria	12%	10%	30%	18%	25%	\$41,950	\$66,353	14%	11%
22312 Alexandria	13%	16%	25%	18%	27%	\$43,125	\$84,672	11%	12%
22314 Alexandria	17%	4%	19%	6%	8%	\$99,666	\$135,330	7%	3%

Please note: Counts, indicator definitions and technical notes can be viewed in [Section 2. Community Indicator Profiles](#).
Source: CHS analysis of estimates provided by ESRI using ArcGIS Business Analyst software.

Exhibit 3.6
Zip Code Level Comparison of Selected Community Indicators-Health Factors and Outcomes

	Potentially Avoidable Discharges (rate per 100,000)	Behavioral Health Discharges (rate per 100,000)	Uninsured Age 19-64 %	Uninsured Age 0-18 %
Virginia	839.3	796.8	13%	5%
Study Region	543.3	463.4	13%	6%
22003 Annandale	452.6	428.4	21%	8%
22041 Falls Church	534.6	433.7	29%	13%
22042 Falls Church	391.1	677.5	19%	4%
22043 Falls Church	370.9	281.8	11%	2%
22044 Falls Church	443.8	605.2	20%	4%
22046 Falls Church	388	438.6	6%	3%
22101 Mc Lean	267.9	276.3	2%	2%
22102 Mc Lean	256.9	335.6	5%	2%
22150 Springfield	814.9	431.5	19%	12%
22151 Springfield	457.1	548.8	12%	4%
22182 Vienna	399.8	380.7	5%	3%
22201 Arlington	177.6	303.5	6%	2%
22202 Arlington	240.6	257.6	6%	6%
22203 Arlington	576.2	589.6	6%	6%
22204 Arlington	430.5	574.3	15%	5%
22205 Arlington	296.6	782.3	4%	1%
22206 Arlington	321.3	472.6	10%	5%
22207 Arlington	317.9	373.8	4%	2%
22209 Arlington	190.3	--	5%	6%
22211 Fort Myer	--	--	2%	0%
22213 Arlington	--	--	2%	2%
22301 Alexandria	350.1	671.6	4%	0%
22302 Alexandria	283.9	484.1	7%	2%
22304 Alexandria	626.0	626.5	17%	12%
22305 Alexandria	524.2	471.7	24%	11%
22311 Alexandria	630.4	538.8	21%	11%
22312 Alexandria	423.8	399.7	26%	11%
22314 Alexandria	532.7	523.3	6%	2%

-- Rates are not calculated where the number of discharges is less than 30.

Please note: Counts, indicator definitions and technical notes can be viewed in [Section 2. Community Indicator Profiles](#).
Source: Community Health Solutions analysis of data from Virginia Health Information, Inc., and demographic estimates from ESRI.
See Appendix A: Data Sources for details.

Appendix A: Data Sources

Profile	Source
Section 1. Insights from Community Professionals	Community Health Solutions analysis of Community Insight survey responses submitted by community professionals conducted in October-November 2020.
Section 2. Community Indicator Profiles	
A. Community Demographics-Trend	Community Health Solutions analysis of demographic estimates from US Census Bureau (2010) ESRI (2020).
B. Community Demographics-Snapshot	Community Health Solutions analysis of demographic estimates from ESRI (2020).
C. Social Determinants of Health	Community Health Solutions analysis of data from ESRI (2018 and 2020)
D. Health Risk Behaviors for Adults	<p>Estimates of chronic disease and risk behaviors for adults 18+ were produced by Community Health Solutions using:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Data from the Virginia Behavioral Risk Factor Surveillance System (2017 and 2018) <input type="checkbox"/> Local demographic estimates from ESRI (2020). <p>Estimates are used when there are no primary sources of data available at the local level. The estimates are for planning purposes only and are not guaranteed for accuracy. The statistical model to produce the local estimates was developed by Community Health Solutions. Local health district rates were used to render estimates at the zip code level. Therefore, direct comparisons of local estimates with state estimates are not recommended. Because of data limitations, it is not possible to assign specific margins of error or levels of significance to these statistical estimates.</p>
E. Health Risk Behaviors for Youth	<p>Estimates of chronic disease and risk behaviors for high school youth age 14-19 were produced by Community Health Solutions using:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Data from the Virginia Youth Risk Behavioral Surveillance System from the Centers for Disease Control (2019). https://www.vdh.virginia.gov/content/uploads/sites/69/2020/06/2019VAH-Summary-Tables.pdf <input type="checkbox"/> Local demographic estimates from ESRI (2020). <p>Estimates are used when there are no primary sources of data available at the local level. The estimates are for planning purposes only and are not guaranteed for accuracy. The statistical model to produce the local estimates was developed by Community Health Solutions. Local health district rates were used to render estimates at the zip code level. Therefore, direct comparisons of local estimates with state estimates are not recommended. Because of data limitations, it is not possible to assign specific margins of error or levels of significance to these statistical estimates.</p>
F. Access to Health Care-Uninsured Population	Community Health Solutions analysis of demographic estimates from ESRI (2018). Differences between local rates and state rates may reflect estimation error rather than valid differences. Therefore, direct comparisons of local estimates with state estimates are not recommended. These data may reflect conservative estimates of health coverage for 2018. Readers are encouraged to review current data on Medicaid Expansion enrollment that which updated on a regular basis. Click here view the Department of Medical Assistance Services Medicaid Expansion Access Dashboard.

Profile	Source
Access to Health Care-Medically Underserved Areas/Populations	Community Health Solutions analysis of U.S. Health Resources and Services Administration data. For more information, visit: http://muafind.hrsa.gov/
G. Leading Causes of Death	Data were obtained from the Virginia Department of Health (2019)
H. Maternal and Infant Health	Data were obtained from the Virginia Department of Health (2019)
I. Potentially Avoidable Hospitalization	<p>Community Health Solutions analysis of hospital discharge data from the Virginia Health Information (VHI) 2019 datasets and demographic estimates from ESRI (2019). 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.</p> <p>Potentially Avoidable Hospitalizations-The Prevention Quality Indicator (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 http://www.qualityindicators.ahrq.gov/modules/pqi_overview.aspx</p> <p>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.</p>
J. Mental Health and Substance Use: Hospitalizations	<p>Community Health Solutions analysis of hospital discharge data from the Virginia Health Information (VHI) 2019 datasets and demographic estimates from Virginia Department of Health (2019). 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.</p> <p>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.</p>
Section 3. Social Determinants of Health	<ul style="list-style-type: none"> □ Community Health Solutions analysis of Community Insight survey responses submitted by community professionals conducted in October-November 2020. □ Community Health Solutions analysis of demographic estimates from ESRI. (2020).

Appendix B: Community Professional Survey Instrument

Dear Community Stakeholder:

Virginia Hospital Center is conducting an assessment of the health needs in the communities we serve, which includes the counties of Arlington and Fairfax; and the cities of Alexandria, Fairfax, and Falls Church. We would very much appreciate your participation in this assessment through the completion of this survey. This survey will assist us in identifying the most pressing health concerns in our area, and the community health services and supports that need strengthening. In addition, it is an opportunity for you to share your ideas and suggestions to help us focus our efforts to improve the health of the community we share.

The survey is confidential, so you will not be identified in the survey results. The survey information provided by you and others will be analyzed with other data for a comprehensive community health needs assessment of our area.

This survey is being administered on behalf of Virginia Hospital Center by Community Health Solutions, Inc. When complete, Virginia Hospital Center will make the summary results available through our website. The survey is organized into the following parts:

- A. **Background Information.** In this section we ask a few questions about you so we can understand your organizational perspective.
- B. **Community Needs Related to COVID-19.** The questions in this section are focused on community needs specifically related to COVID-19.
- C. **General Community Needs.** The questions in this section are focused on general community needs, not just those specifically related to COVID-19.
- D. **General Community Services and Supports.** The questions in this section invite you to share your insights on general community services and supports that need strengthening, not just those specifically related to COVID-19.
- E. **Vulnerable/At Risk Populations and Health Equity.** The questions in this section invite you to identify groups who are vulnerable/at-risk due to social determinants of health, and to share your insights on health equity in the community.
- F. **Additional Insights.** The questions in this section invite you to share your insights on health and well-being in your neighborhood.

On behalf of Virginia Hospital Center, thank you for your contribution to this important effort.

Sincerely,

Jim Cole
President and CEO
Virginia Hospital Center



SCAN
TO COMPLETE THE SURVEY ONLINE

Note: This survey is being administered by Community Health Solutions, Inc. If you have any technical questions or problems, please contact Community Health Solutions at 804.673.0166 or chs@chsresults.com.

A. Background Information

The questions in this section gather background information so we can confirm your response and understand your geographical perspective. **Please note your responses will remain confidential.**

1. Contact Information

Please provide your contact information so we can confirm your response.

- Your name: _____
- Your organization: _____
- Your position title: _____
- Your email address: _____

2. Geographical Perspective

What parts of the local region does your organization serve? **Select all that apply**, even if your organization only serves part of the locality.

- Arlington County
- Alexandria City
- Fairfax City
- Fairfax County
- Falls Church City

B. Community Needs Related to COVID-19

The questions in this section are focused on the needs of the people your organization serves, specifically related to COVID-19.

3. Employment

Thinking about the people your organization serves, have you noticed an increase in people losing job since COVID-19 started?

- Yes
- No

4. Housing

Thinking about the people your organization serves, have you noticed an increase in people losing housing since COVID-19 started?

- Yes
- No

5. Current Concerns Related to COVID-19

Thinking about the people your organization serves, have you noticed people having difficulty with any of the following since COVID-19 started? (**Select all that apply**)

- Keeping good physical health
- Keeping good mental health
- Keeping good dental health
- Getting health care
- Getting dental care
- Getting in-home care services
- Getting social services
- Getting childcare
- Getting healthy food
- Affording housing costs
- Getting essential supplies for daily living
- Managing schooling at home for children
- Taking care of a person who is elderly or disabled and lives alone
- Getting transportation
- Experiencing overall financial hardship
- Feeling lonely or isolated

Other difficulties (please describe):

6. People Who Need Extra Help During COVID-19

Thinking about the people your organization serves, are there particular groups of people who need extra help during COVID-19?

C. General Community Health Concerns

This question is focused on general community needs, not just those specifically related to COVID-19. As you consider each question, think about community needs that existed before COVID-19 and continue to be concerns right now.

7. What are the important health concerns in your community?

Below is an alphabetical list of community health concerns which may or may not be important concerns in your community.

Based on your experience, please select each item which you think is an IMPORTANT HEALTH CONCERN in the communities your organization serves. If you are not sure about a particular item, just skip it and move on to the next one. Also use the space at the end to provide additional information on the items you selected, and to tell us about any additional health concerns not on the list.

- | | |
|---|---|
| <input type="checkbox"/> Adult Obesity/Overweight | <input type="checkbox"/> Intellectual/Developmental Disabilities |
| <input type="checkbox"/> Aging Concerns | <input type="checkbox"/> Maternal and Infant/Child Health |
| <input type="checkbox"/> Alcohol Use | <input type="checkbox"/> Mental Health Conditions (other than depression) |
| <input type="checkbox"/> Alzheimer's Disease | <input type="checkbox"/> Neurological Disorders (seizures, multiple sclerosis) |
| <input type="checkbox"/> Arthritis | <input type="checkbox"/> Respiratory Diseases (other than asthma) |
| <input type="checkbox"/> Asthma | <input type="checkbox"/> Sexually Transmitted Diseases |
| <input type="checkbox"/> Autism | <input type="checkbox"/> Stroke |
| <input type="checkbox"/> Cancer | <input type="checkbox"/> Substance Abuse - Illegal Drugs |
| <input type="checkbox"/> Childhood Obesity/Overweight | <input type="checkbox"/> Substance Abuse - Prescription Drugs |
| <input type="checkbox"/> Chronic Pain | <input type="checkbox"/> Suicide |
| <input type="checkbox"/> Dental Care/Oral Health-Adult | <input type="checkbox"/> Teen Pregnancy |
| <input type="checkbox"/> Dental Care/Oral Health-Pediatric | <input type="checkbox"/> Tobacco Use (cigarettes, vaping, snuff, chewing tobacco) |
| <input type="checkbox"/> Depression | <input type="checkbox"/> Orthopedic Problems |
| <input type="checkbox"/> Diabetes | <input type="checkbox"/> Other illnesses that spread person to person (TB, flu, newly emerging viruses) |
| <input type="checkbox"/> Domestic Violence | <input type="checkbox"/> Physical Disabilities |
| <input type="checkbox"/> Food Safety | <input type="checkbox"/> Prenatal & Pregnancy Care |
| <input type="checkbox"/> Gun Safety | <input type="checkbox"/> Preventable Injuries (car or bike crashes, falls) |
| <input type="checkbox"/> High Blood Pressure | <input type="checkbox"/> Renal (kidney) Disease |
| <input type="checkbox"/> HIV/AIDS | |
| <input type="checkbox"/> Infant and Child Health | |
| <input type="checkbox"/> Infectious Diseases (Lyme Disease, rabies) | |

Please use this space to add any additional health concerns you did not see on the list. Also, please use this space to provide information on the items you selected above.

D. General Community Services and Supports

These questions are focused on general service and support needs, not just those specifically related to COVID-19. As you consider each question, think about community services and supports that existed before COVID-19 and continue to need strengthening right now.

8. Which community services and supports need strengthening?

The following is an alphabetical list of community services and supports that can help community members obtain better health and well-being.

Please select each item you think needs strengthening in the communities your organization serves. If you are not sure about an item, just skip it and move on to the next one. Also use the space at the end to provide additional information on the items you selected, and to tell us about any additional services and supports in need of strengthening.

- | | |
|---|---|
| <input type="checkbox"/> Aging Services | <input type="checkbox"/> Home Health Services |
| <input type="checkbox"/> Behavioral Health Services (including mental health and intellectual disability) | <input type="checkbox"/> Homeless Services Hospice Services |
| <input type="checkbox"/> Cancer Services (screening, diagnosis, treatment) | <input type="checkbox"/> Hospital Services (including emergency, inpatient and outpatient) |
| <input type="checkbox"/> Chronic Disease Services (including screening and early detection) | <input type="checkbox"/> Job/Vocational Training Long Term Care Supports |
| <input type="checkbox"/> Chronic Pain Management Services | <input type="checkbox"/> Pharmacy Services |
| <input type="checkbox"/> Dental Care/Oral Health Services-Adult | <input type="checkbox"/> Physical Rehabilitation |
| <input type="checkbox"/> Dental Care/Oral Health Services-Pediatric | <input type="checkbox"/> Primary Health Care Services |
| <input type="checkbox"/> Domestic Violence Services | <input type="checkbox"/> Public Health Services |
| <input type="checkbox"/> Early Childhood Education | <input type="checkbox"/> Public Safety (police, fire, EMS) |
| <input type="checkbox"/> Early Intervention for Children | <input type="checkbox"/> Respite Care |
| <input type="checkbox"/> Education-Kindergarten through High School | <input type="checkbox"/> Safe Play and Recreation (community centers, parks) |
| <input type="checkbox"/> Education-Post High School | <input type="checkbox"/> Self-Management Supports (including nutrition, exercise, taking medications) |
| <input type="checkbox"/> Employment Opportunity/Workforce Development | <input type="checkbox"/> Services for Mothers, Infants and Children |
| <input type="checkbox"/> Environmental Assets (water quality, green spaces) | <input type="checkbox"/> School Health Services |
| <input type="checkbox"/> Family Planning Supports | <input type="checkbox"/> Social Services |
| <input type="checkbox"/> Food Safety Net (food bank, farmers markets, community gardens) | <input type="checkbox"/> Substance Use Services |
| <input type="checkbox"/> Health Care Insurance Coverage (private and government) | <input type="checkbox"/> Specialty Medical Care (e.g. cardiologists, oncologists, etc.) |
| <input type="checkbox"/> Health Care Services for the Uninsured and Underinsured | <input type="checkbox"/> Transportation |
| <input type="checkbox"/> Health Promotion and Prevention | <input type="checkbox"/> Veteran Services |
| | <input type="checkbox"/> Workplace Health and Safety |

Please use this space to add any additional services and supports you did not see on the list. Also, please use this space to provide information on the items you selected above.

E. Vulnerable Populations and Health Equity

9. Vulnerable Populations

Are there particular groups in your community who are at greater risk for poorer health outcomes or difficulties obtaining optimal health and well-being? Please describe:

10. Health Equity Concerns

Health equity is an important factor in creating healthy communities. *Health equity* exists when everyone has access to the conditions needed for optimal health and well-being.¹² *Health inequities* arise when people encounter structures and practices that prevent them from obtaining services and supports that are essential for optimal health. With this in mind, are there particular groups in your community who may be experiencing health inequities? Please describe:

¹²

Arlington's Plan for Achieving Health Equity by 2027. <https://arlingtonva.s3.amazonaws.com/wp-content/uploads/sites/25/2019/04/A-Decade-of-Difference-D2027-Report.pdf>

F. Additional Insights

In the next set of questions, we invite you to share your insights on health and well-being in the community. As you consider each question, think about community needs that existed before COVID-19 and continue to be concerns right now.

11. New Health Issues

Are there any new health issues within the community that may not be widely known yet, but could cause serious harm today or in the future? Please describe.

12. Healthy Community

In your own words, how would you define the idea of a “healthy community”?

13. Health Assets

Think of health assets as people, institutions, programs, services, supports, built resources (e.g. parks), or natural resources that promote a culture of health. In your view, what are the most important health assets within the community?

14. Working Together

Community health improvement works best when people work together. Please share your ideas about how people could work together to promote optimal health in the community.

15. Additional Ideas or Suggestions

At your option, please use the space below to share any additional ideas or suggestions.
