

# **A Community Health Needs Assessment**

**Prepared for VCU Medical Center**

**By Community Health Solutions**

**October 29, 2021**

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# A Thematic Summary of the CHNA Study Results for VCU Medical Center

## Introduction

The mission of VCU Health is to "Preserve and restore health for all people of Virginia and beyond through innovation in service, research, and education." With this mission in mind, VCU Medical Center commissioned Community Health Solutions (CHS) to conduct this community health needs assessment (CHNA) study in 2021.

Virginia Commonwealth University Health System Authority a/k/a VCU Medical Center is a public body corporate, public instrumentality, and political subdivision of the Commonwealth of Virginia. Given that multiple entities within VCU Health System Authority have the same service area, this is a joint CHNA with one defined community, and is inclusive of both VCU Medical Center ("VCUMC") as a 837 bed acute medical center and VCU Health Ambulatory Surgery Center, LLC ("ASC") as a 6-OR 501(c)(3) outpatient surgical hospital.

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 residents, a survey of community stakeholders, and analysis of selected community health indicators.

The study results reveal a wide range of community needs, along with insights about community assets and ideas for improving community health. In this summary CHS offers an outline of selected themes emerging from the study.

Please note that the data and measures generated for the study are substantial and informative, but for various technical reasons, no CHNA study can fully capture all of the needs a given community. In this context, we offer the themes outlined below as a starting point for discussion by the VCU Medical Center team. We encourage leaders to view this thematic analysis as a starting point, and adjust the focus as needed to reflect your vision.

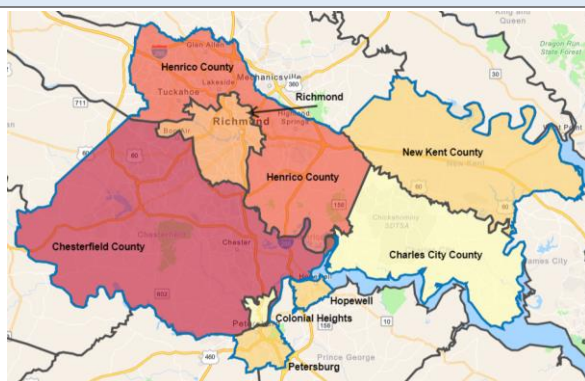
## 1. Population Diversity

The geographic region for the study includes eight localities: the cities of Colonial Heights, Hopewell, Petersburg, and Richmond; and the counties of Charles City, Chesterfield, Henrico, and New Kent. The community population is diverse in terms of race, ethnicity, economic status, and rural, suburban, and urban settings. Selected indicators of population diversity are provided below, and more detail is provided in Section 3 of the report.

### Themes to Consider

1. Population Diversity
2. Social Determinants of Health
3. Community Needs Related to COVID-19
4. Access to Community Healthcare
5. Access to Community Support Services
6. Maternal and Infant Health
7. Health Risk Behaviors and the Community Environment
8. Chronic Disease, Hospitalization, and Mortality
9. Ideas for Improving Community Health

### Community Indicators



#### 2021 Population Estimates

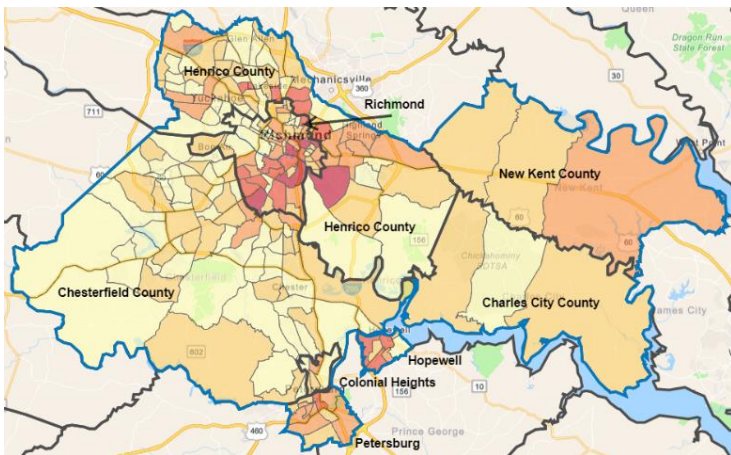
7,380	Charles City County
363,893	Chesterfield County
17,238	Colonial Heights
330,727	Henrico County
22,790	Hopewell
24,823	New Kent County
32,310	Petersburg
230,833	Richmond
1,029,994	Total

<p>Selected indicators of population diversity (estimates):</p> <ul style="list-style-type: none"> <li>❑ Estimated 1,029,994 community residents in the study region (2021)</li> <li>❑ 22% children age 0-17 in 2021, with projected growth of 3% from 2021 to 2026</li> <li>❑ 16% older adults age 65+ in 2021, with projected growth of 4% from 2021 to 2026</li> <li>❑ 5% Asian in 2021, with projected growth of 19% from 2021 to 2026</li> </ul>	<ul style="list-style-type: none"> <li>❑ 33% Black/African American in 2021, with projected growth of 4% from 2021 to 2026</li> <li>❑ 8% Other or Multi-Race in 2021, with projected growth of 19% from 2021 to 2026</li> <li>❑ 8% Hispanic ethnicity in 2021, with projected growth of 22% from 2021 to 2026</li> <li>❑ 12% with income below 100% of poverty (2019)</li> <li>❑ 28% with income below 200% of poverty (2019)</li> <li>❑ * See report <b>Exhibits 3.1, 3.2, and 3.3</b> for details.</li> </ul>
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## 2. Social Determinants of Health

The Centers for Disease Control (CDC) defines **social determinants of health (SDoH)** as conditions in the places where people live, learn, work, and play that affect a wide range of health risks and outcomes. A growing body of research indicates that SDoH can be linked to a lack of opportunity and resources to protect, improve, and maintain health.

As outlined under community insights below, respondents to the surveys of community residents and community stakeholders identified a range of vulnerable populations who may be at risk for SDoH-related challenges. The community indicators provide insight into the numbers of community residents who may be at risk. Report Section 4 provides additional community maps showing the community distribution of selected populations.

Community Insights	
<p>Vulnerable populations identified in one or both surveys of community residents and community stakeholders:</p> <ul style="list-style-type: none"> <li>❑ Elderly</li> <li>❑ Hispanic/Latino</li> <li>❑ Homeless</li> <li>❑ Immigrants</li> <li>❑ Low-income</li> <li>❑ LGBTQ</li> <li>❑ Parents of school aged children</li> <li>❑ Single parents</li> <li>❑ People of color</li> <li>❑ People with disabilities</li> <li>❑ People with limited English proficiency</li> <li>❑ People with mental health conditions</li> <li>❑ People with substance use problems</li> <li>❑ People with transportation access needs</li> <li>❑ Unemployed</li> <li>❑ Underinsured/Uninsured</li> <li>❑ Working poor</li> </ul> <p>*See report <b>Exhibits 1.10, 2.5, and 4.1</b> for details.</p>	
Community Indicators	
<p>Selected indicators of populations potentially at risk for SDoH-related challenges (estimates):</p> <ul style="list-style-type: none"> <li>❑ 11% of households with income below 100% of poverty (2019)</li> <li>❑ 12% of population with income below 100% of poverty (2019)</li> <li>❑ 28% of population with income below 200% of poverty (2019)</li> <li>❑ 45% racial minority (33% Black African American, 8% Other/Multi Race, 5% Asian)</li> <li>❑ 8% Hispanic ethnicity</li> <li>❑ 9% age 25+ with less than high school education (2021)</li> <li>❑ 13% of households without internet access (2019)</li> <li>❑ Community maps indicate presence of vulnerable populations within census tracts across all eight localities</li> <li>❑ * See report <b>Exhibits 3.1, 3.2, and 4.2</b> for details.</li> </ul>	 <p><b>Map View.</b> Estimated community distribution of households with income below 100% of poverty. Darker shading indicates higher prevalence. See Section 4 for details on this and other community maps. .</p>

### 3. Community Needs Related to COVID 19

Respondents to the surveys of community residents and community stakeholders provided important insights about community needs in the specific context of COVID-19. In particular, both groups shared their insights on employment loss, housing loss, groups needing extra help, and personal difficulties experienced by community members. The survey results for each group are summarized below. Worth noting is the substantial overlap across the two survey groups in their perspectives on groups needing extra help, and personal difficulties experienced by community members.

Impact	Community Resident Insights	Community Stakeholder Insights
Employment Loss	110 out of 463 respondents reported they or an immediate family member lost employment due to COVID-19.	18 of 20 respondents reported an increase in clients/consumers who lost employment due to COVID-19.
Housing Loss	24 out of 463 respondents reported they or an immediate family member lost housing due to COVID-19.	13 of 20 respondents reported an increase in clients/consumers who lost housing due to COVID-19.
Groups Needing Extra Help	Groups identified as needing extra help due to COVID-19 include elderly; homeless; families with school-age children; low income families; people with disabilities; and more.	Groups identified as needing extra help due to COVID-19 include elderly; families with school-age children; homeless; people of color; people with mental illness; and people with chronic conditions.
Personal Difficulties Experienced	<p>The most commonly identified personal difficulties during COVID-19 were:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Keeping good mental health</li> <li><input type="checkbox"/> Keeping good physical health</li> <li><input type="checkbox"/> Feeling lonely or isolated</li> <li><input type="checkbox"/> Having money worries</li> <li><input type="checkbox"/> Managing schooling at home for children</li> <li><input type="checkbox"/> Getting essential supplies</li> <li><input type="checkbox"/> Getting trusted information on COVID-19</li> <li><input type="checkbox"/> Keeping good dental health care</li> <li><input type="checkbox"/> Getting health care.</li> </ul>	<p>The most commonly identified client/consumer difficulties during COVID-19 were:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Accessing mental health services</li> <li><input type="checkbox"/> Childcare</li> <li><input type="checkbox"/> Managing schooling at home for children</li> <li><input type="checkbox"/> Accessing transportation</li> <li><input type="checkbox"/> Feeling lonely or isolated</li> <li><input type="checkbox"/> Accessing healthy food</li> <li><input type="checkbox"/> Accessing healthcare services</li> <li><input type="checkbox"/> Housing</li> <li><input type="checkbox"/> Financial resources.</li> </ul>

\*See report **Exhibits 1.3** and **2.2** for details.

### 4. Access to Community Healthcare

Access to community healthcare is a concern for community residents who face obstacles due to lack of health coverage or other factors. As outlined under community resident insights, respondents to the survey of community residents identified personal barriers to healthcare, health care service needs, and services they would like to see more of from VCU Medical Center.

Community Resident Insights
<ul style="list-style-type: none"> <li><input type="checkbox"/> The most commonly identified <b>personal barriers to healthcare</b> include inability to get appointments; high cost/out of pocket expenses; not able to take time off work; lack of provider follow-through; inability to get mental health services; limited or no insurance coverage; and lack of knowledge about what services are available.</li> <li><input type="checkbox"/> The most commonly identified <b>health care service needs</b> include affordable health insurance; mental health services; dental services; services for weight control; health education and prevention services; and primary care services.</li> <li><input type="checkbox"/> When asked to identify <b>services they would like to see more of from VCU Medical Center</b>, the most common responses were affordable health insurance; mental health services; dental services; services for weight control; and substance use and addiction services.</li> <li><input type="checkbox"/> *See report <b>Exhibits 1.4, 1.6, and 1.7</b> for details</li> </ul>

The community indicators listed below provide estimates of uninsured community members as of 2019, with an estimated total of 76,626 people uninsured within the study region. As context it is important to note that Virginia implemented Medicaid expansion for adults beginning on January 1, 2019. By October of 2021, an estimated 86,507 adults had enrolled in Medicaid expansion. At this point in time there are no data available to provide an indication of how many uninsured adults remain.

We do know that the relationship between enrollees in Medicaid expansion and the number of uninsured is not static. For example, since 2019 the pandemic has caused major disruptions in the economy, which may have resulted in more uninsured who were not eligible for Medicaid. Likewise, there is some level of turnover in local Medicaid enrollment as adults enter or leave the area, or disenroll due to changes in eligibility. For these reasons, an updated study of uninsured rates and Medicaid enrollment would be required to produce a more precise estimate of local uninsured rates and counts for 2021.

#### Community Indicators

Selected indicators of access to community healthcare:

- ☐ 76,626 (9%) uninsured among population age 0-64 (2019 estimate)
- ☐ 9,159 (4%) uninsured among children 0-18 (2019 estimate)
- ☐ 67,622 (11%) uninsured among adults 18-64 (2019 estimate)
- ☐ 86,507 adults enrolled in Medicaid expansion between 2019 and 2021 (estimate)
- ☐ Charles City County, Hopewell, New Kent County, and Petersburg designated as medically underserved areas.
- ☐ Selected census tracts in Chesterfield County, Henrico County, and Richmond designated as medically underserved.
- ☐ \*See report **Exhibits 3.6, 3.7, and 3.8** for details

## 5. Access to Community Support Services

Widening the lens beyond community healthcare, respondents to the surveys of community residents and community stakeholders were asked to share their insights about access to community support services. Both survey groups were asked to identify community services that need strengthening, with the results summarized below. The two survey groups show both commonalities and differences in their responses. Together they provide a wide lens on the importance of community support services for community health improvement.

Community Resident Insights	Community Stakeholder Insights
<p>The most commonly identified <b>community services that need strengthening</b> include:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> After school programs</li> <li><input type="checkbox"/> Childcare services</li> <li><input type="checkbox"/> Services for children with special needs</li> <li><input type="checkbox"/> Services for adults with disabilities</li> <li><input type="checkbox"/> Housing assistance</li> <li><input type="checkbox"/> Public transportation</li> <li><input type="checkbox"/> Services for older adults</li> <li><input type="checkbox"/> Utility assistance</li> <li><input type="checkbox"/> Food assistance</li> <li><input type="checkbox"/> Long term care services</li> <li><input type="checkbox"/> Transportation to grocery stores</li> <li><input type="checkbox"/> *See report <b>Exhibit 1.8</b> for details</li> </ul>	<p>The most commonly identified <b>community services that need strengthening</b> include:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Homeless services</li> <li><input type="checkbox"/> Behavioral health services</li> <li><input type="checkbox"/> Dental care / oral health</li> <li><input type="checkbox"/> Employment opportunity / workforce development</li> <li><input type="checkbox"/> Transportation</li> <li><input type="checkbox"/> Bi-lingual and multi-lingual services</li> <li><input type="checkbox"/> Health promotion and prevention</li> <li><input type="checkbox"/> Long-term care supports</li> <li><input type="checkbox"/> Job/vocational training</li> <li><input type="checkbox"/> Health care services for uninsured</li> <li><input type="checkbox"/> *See report <b>Exhibit 2.4</b> for details</li> </ul>



## 6. Maternal and Infant Health

As shown in the listed of selected indicators below, in 2019 there were 12,260 total live births in the study region, with 1,088 low weight births, 1,622 births without early prenatal care, 5,436 non-marital births, and 495 births to teens. There were also an average 104 infant deaths per year across the study region from 2015-2019. Focusing on rates, the study region had a lower rate of births without early prenatal care, and higher rates of non-marital births and infant mortality compared to statewide rates. .

Community Indicators
Maternal and infant health (selected indicators):
<input type="checkbox"/> 12,260 total live births (2019) <input type="checkbox"/> 1,088 low weight births (8% of total live births) (2019) <input type="checkbox"/> 1,622 births without early prenatal care (13% of total live births) (2019) <input type="checkbox"/> 5,436 nonmarital births (44% of total live births) (2019) <input type="checkbox"/> 495 births to teens (4% of total live births) (2019) <input type="checkbox"/> 98 average infant deaths annually (8.0 per 1,000 live births) (2015-2019) <input type="checkbox"/> Higher rates of non-marital births and infant mortality compared to statewide rates <input type="checkbox"/> *See report <b>Exhibit 3.10</b> for details

## 7. Health Risk Behaviors and the Community Environment

Health risk behaviors include lifestyle factors that can influence individual and population health, including development of chronic disease. The community indicators listed below show there is room for improvement in reducing personal health risks through weight control, healthy eating, physical activity, smoking reduction, and binge drinking reduction.

Community Indicators (adult estimates)	Community Indicators (high school youth estimates)
Adult health risk behaviors (selected indicators):	High school youth health risk behaviors (selected indicators):
<input type="checkbox"/> 34% overweight (BMI > 30) (2021) <input type="checkbox"/> 85% consume less than five servings of fruits & vegetables per day (2021) <input type="checkbox"/> 22% no physical activity in past 30 days (2021) <input type="checkbox"/> 13% smoke (2021) <input type="checkbox"/> 19% at risk for binge drinking (2021) <input type="checkbox"/> *See report <b>Exhibit 3.4</b> for details	<input type="checkbox"/> 32% self-describe as slightly or very overweight (2021) <input type="checkbox"/> 60% not meeting recommendations for physical activity in past week (2021) <input type="checkbox"/> 22% used tobacco or vapor products in the past month (2021) <input type="checkbox"/> *See report <b>Exhibit 3.5</b> for details

Health risks are also reflected in responses to the surveys of community residents and community stakeholders. As outlined below, both groups identified healthy lifestyle needs and concerns in their respective survey responses.

Community Resident Insights	Community Stakeholder Insights
The most commonly identified <b>neighborhood and community needs</b> include:	The most commonly identified <b>community health concerns</b> include:
<input type="checkbox"/> Access to healthy foods <input type="checkbox"/> Opportunities to participate in community events <input type="checkbox"/> Spaces for walking <input type="checkbox"/> Access to public transportation <input type="checkbox"/> Violence reduction <input type="checkbox"/> Traffic safety <input type="checkbox"/> Access to public parks or playgrounds <input type="checkbox"/> School safety <input type="checkbox"/> Air quality <input type="checkbox"/> Housing access <input type="checkbox"/> *See report <b>Exhibit 1.5</b> for details	<input type="checkbox"/> Mental health <input type="checkbox"/> Addiction / substance use <input type="checkbox"/> Domestic and community violence <input type="checkbox"/> Adult overweight / obesity <input type="checkbox"/> Diabetes <input type="checkbox"/> Dental care / oral health <input type="checkbox"/> Language access to health care <input type="checkbox"/> High blood pressure <input type="checkbox"/> Legal services <input type="checkbox"/> Literacy <input type="checkbox"/> *See report <b>Exhibit 2.3</b> for details

## 8. Chronic Disease, Hospitalization, and Mortality

Health risk factors and the community environment can have a direct impact on chronic disease, hospitalization, and mortality across the community.

- *1. Chronic disease prevalence.* Substantial numbers of adults have been told by a health care provider they have arthritis, diabetes, high blood pressure, or high cholesterol, and an estimated 16% self-report they have fair or poor health status.
- *2. Potentially avoidable hospitalizations.* The impact of chronic disease is further reflected in the number of potentially avoidable hospitalizations for congestive heart failure, diabetes, chronic respiratory disease, and hypertension.
- *3. Behavioral health hospitalization.* Chronic mental illness and substance use disorders are also key considerations for chronic care improvement, as reflected in the substantial numbers of hospitalizations for these conditions at area hospitals (not including state facilities).
- *4. Leading causes of death.* The leading causes of death in the study region are also driven primarily (though not exclusively) by chronic illness. This has always been the case, but from a community health improvement standpoint, it can be helpful to explore how many of these deaths occur prematurely and might be prevented or delayed through effective health care and community supports.

1. Chronic Disease Prevalence	2. Leading Causes of Potentially Avoidable Hospitalization
<p>Selected indicators of chronic disease among adults (estimates):</p> <ul style="list-style-type: none"> <li>□ 211,016 arthritis (26% of adult population) (2021)</li> <li>□ 99,505 diabetes (12% of adult population) (2021)</li> <li>□ 289,665 high blood pressure (36% of adult population) (2021)</li> <li>□ 245,604 high cholesterol (30% of adult population) (2021)</li> <li>□ 131,941 self-reported fair or poor health status (16% of adult population) (2021)</li> <li>□ *See report <b>Exhibit 3.4</b> for details</li> </ul>	<p>Selected indicators of potentially avoidable hospitalization (inpatient discharges) among adults:</p> <ul style="list-style-type: none"> <li>□ 10,508 total potentially avoidable hospitalizations (2019)</li> <li>□ 4,043 congestive heart failure (2019)</li> <li>□ 2,386 diabetes (2019)</li> <li>□ 1,533 COPD or asthma in older adults (2019)</li> <li>□ 925 urinary tract infection (2019)</li> <li>□ 919 community acquired pneumonia (2019)</li> <li>□ 548 hypertension (2019)</li> <li>□ 156 asthma in younger adults (2019)</li> <li>□ Higher crude rates of hospitalization per 100,000 population for above causes compared to statewide rates, except for community-acquired pneumonia</li> <li>□ *See report <b>Exhibit 3.11</b> for details</li> </ul>
3. Leading Causes of Behavioral Health Hospitalization	4. Leading Causes of Death



<p>Selected indicators of behavioral health hospitalization (inpatient discharges):</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> 13,197 total behavioral health hospitalizations</li> <li><input type="checkbox"/> 3,871 major depressive disorder, recurrent (2019)</li> <li><input type="checkbox"/> 1,541 schizoaffective disorders (2019)</li> <li><input type="checkbox"/> 1,487 bipolar disorder (2019)</li> <li><input type="checkbox"/> 1,444 alcohol-related disorders (2019)</li> <li><input type="checkbox"/> 1,190 major depressive disorder, single episode (2019)</li> <li><input type="checkbox"/> 753 schizophrenia (2019)</li> <li><input type="checkbox"/> 451 opioid related disorders (2019)</li> <li><input type="checkbox"/> 401 unspecified mood (affective) disorders (2019)</li> <li><input type="checkbox"/> 337 reaction to severe stress, and adjustment disorders</li> <li><input type="checkbox"/> Higher crude rates of hospitalization per 100,000 population for above causes compared to statewide rates</li> <li><input type="checkbox"/> *See report <b>Exhibit 3.12</b> for details</li> </ul>	<p>Leading causes of death (selected indicators)</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> 8,692 total deaths, all causes (2019)</li> <li><input type="checkbox"/> 1,868 heart disease (2019)</li> <li><input type="checkbox"/> 1,815 malignant neoplasms (cancer) (2019)</li> <li><input type="checkbox"/> 575 unintentional injury (2019)</li> <li><input type="checkbox"/> 498 cerebrovascular disease (stroke) (2019)</li> <li><input type="checkbox"/> 449 chronic lower respiratory disease (2019)</li> <li><input type="checkbox"/> 293 Alzheimer's disease (2019)</li> <li><input type="checkbox"/> 268 diabetes (2019)</li> <li><input type="checkbox"/> 250 Nephritis and nephrosis (2019)</li> <li><input type="checkbox"/> 158 septicemia (2019)</li> <li><input type="checkbox"/> 138 suicide (2019)</li> <li><input type="checkbox"/> Higher crude rates of death per 100,000 population for above causes compared to statewide rates except for suicide, Alzheimer's disease, and diabetes.</li> <li><input type="checkbox"/> *See report <b>Exhibit 3.9</b> for details</li> </ul>
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## 9. Ideas and Suggestions for Improving Community Health

Looking forward, community residents and community stakeholders were invited to share ideas for improving community health. The responses outlined below represent general themes emerging from the survey responses. Richer descriptions are available in the individual survey responses which have been provided to VCU Medical Center under separate cover.

Community Resident Insights	Community Stakeholder Insights
<p>Ideas about how VCU Medical Center and its partners can help community members achieve better health:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Provide healthcare services</li> <li><input type="checkbox"/> Provide community and social services</li> <li><input type="checkbox"/> Facilitate community engagement</li> <li><input type="checkbox"/> Help address health equity</li> <li><input type="checkbox"/> Provide services and supports for children</li> <li><input type="checkbox"/> Provide services and supports for people with mental health and substance use concerns</li> <li><input type="checkbox"/> *See report <b>Exhibit 1.10</b> for details</li> </ul>	<p>Ideas about how people could work together to promote optimal health in the community:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Engage the community</li> <li><input type="checkbox"/> Improve community and social services</li> <li><input type="checkbox"/> Improve health care services</li> <li><input type="checkbox"/> Address health equity</li> <li><input type="checkbox"/> Improve healthy lifestyle supports</li> <li><input type="checkbox"/> Improve services for mental health and substance use</li> <li><input type="checkbox"/> *See report <b>Exhibit 2.5</b> for details</li> </ul>

## Section 1. Insights from Community Residents

To generate community input for the community health needs assessment, a *Community Insight Survey* was conducted with community residents. Insights were collected via surveys administered online. Four hundred and seventy (470) community residents submitted a response (although not every respondent answered every question). The respondents provided rich insights about community health in the study region. This section describes the methods and results of the survey.

### A. Survey Methods

VCU Medical Center began with a goal to conduct an inclusive survey with insights from all demographic groups, including low-income and minority populations. With this in mind the survey was distributed electronically and on paper through multiple community partners. Electronic distribution was facilitated primarily through messaging to a sample of VCU Health patients selected from across the region. Paper versions of the survey were distributed by multiple community partner organizations who offered the survey to community residents they serve.

It should also be noted that the surveys were conducted using convenience sampling methods. Convenience sampling is a practical approach for obtaining insights from as many people as possible. It differs from probability sampling, which involves random selection of a smaller group of respondents that should be representative of the broader population. The results of a convenience sample are instructive for understanding the scope of issues and opportunities in a community; however, they are not necessarily representative of the entire community.

Section Outline	
A.	Survey Methods
B.	Demographic Profile
C.	Community Needs Related to COVID-19
D.	Personal Barriers to Health Prior to COVID-19
E.	Neighborhood and Community Environment
F.	Community Health Care Services
G.	VCU Medical Center Services
H.	Community Support Services
I.	Sources of Health Information
J.	In their Own Words

## B. Demographic Profile of Survey Respondents

Survey respondents were asked to describe their demographic background. The resulting demographic profile of survey respondents is shown in **Exhibit 1.1**. Although some respondents did not answer all of the demographic questions, the results indicate substantial participation by community members across age groups, race and ethnicity, household income, education status, household size, and households with and without children. Responses by gender leaned heavily toward respondents who self-identified as female, which is common in these types of community surveys.

**Exhibit 1.1**  
**Demographic Profile of Community Resident Survey Respondents**  
**(n=470)**

Age	Count	Percent
18-24	27	6%
25-34	79	17%
35-44	137	29%
45-54	75	16%
55-64	62	13%
65-74	64	14%
75-84	17	4%
85+	3	1%
Unknown	6	1%

Race	Count	Percent
Asian	11	2%
American Indian or Alaska Native	6	1%
Black or African American	154	33%
Multiple Race	19	4%
Pacific Islander	1	0%
White	261	56%
Unknown	18	4%

Ethnicity	Count	Percent
Hispanic, Latino, or Spanish origin	24	5%
Non-Hispanic, Latino, or Spanish origin	437	93%
Unknown	9	2%

Gender	Count	Percent
Female	347	74%
Male	94	20%
Unknown	29	6%

Education	Count	Percent
Less than High School	29	6%
High School or GED	89	19%
Some College	92	20%
Associate degree	45	10%
Bachelor's Degree	106	23%
Master's Degree	74	16%
Professional Degree	17	4%
Doctorate	16	3%
Unknown	2	0%

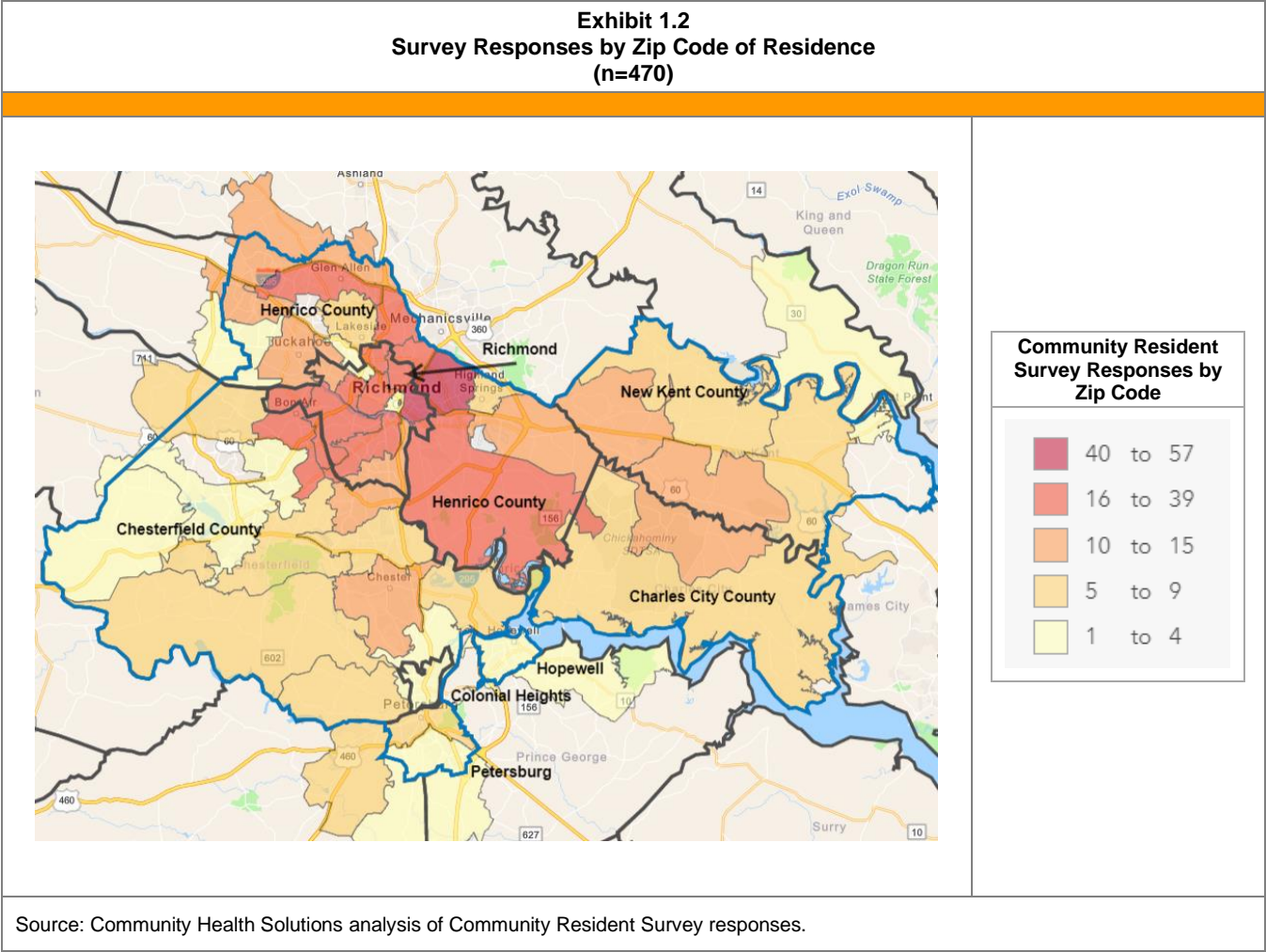
Household Size	Count	Percent
1	64	14%
2	120	26%
3	116	25%
4	93	20%
5	41	9%
6+	35	7%
Unknown	1	0%

School Aged Children in the Household (n=470)	Count	Percent
Yes	213	45%
No	257	55%

Household Income	Count	Percent
Less than \$25,000	112	24%
\$25,000-\$34,999	35	7%
\$35,000-\$49,999	53	11%
\$50,000-\$74,999	60	13%
\$75,000+	161	34%
Don't Know/Not Sure	44	9%
Unknown	5	1%

Source: Community Health Solutions analysis of Community Resident Survey responses.

Community residents were also asked to indicate the zip code where they live in the study region. The map and table in **Exhibit 1.2** show the number of survey responses received from residents of each of more than 40 zip codes. (Please note some zip codes overlap county boundaries.)



## C. Community Needs Related to COVID-19

Community residents were asked to share their insights on community needs specifically related to COVID-19. The results are shown in **Exhibit 1.3**. One hundred and ten (110) respondents (24%) said they or an immediate family member lost employment due to COVID-19, and 24 respondents (5%) reported they or a family member lost housing. Survey respondents also identified multiple groups that need extra help due to COVID-19, including the elderly, homeless persons, families with children, low-income families, people with disabilities, and more. They also shared their experiences of personal difficulty during COVID-19 as shown in the bottom panel.

**Exhibit 1.3**  
**Community Needs Related to COVID-19**

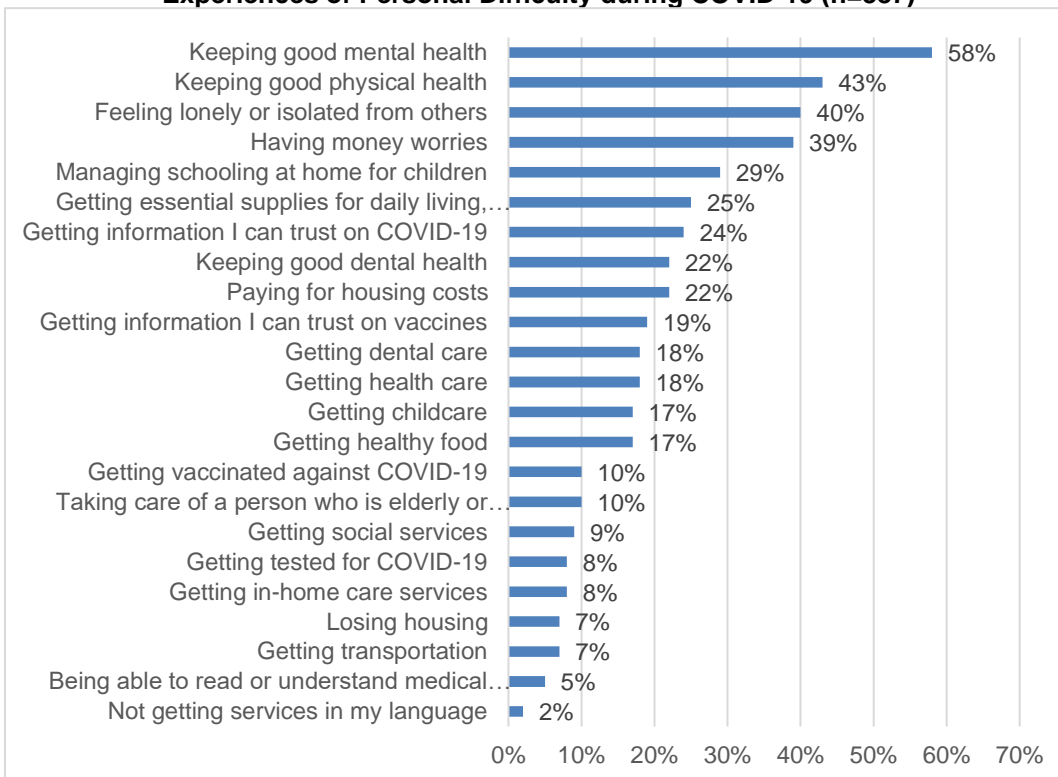
### Loss of Employment or Housing Due to COVID-19

	Count	Percent
Self or family member lost employment due to COVID-19	110 (of 463)	24%
Self or family member lost housing due to COVID-19	24 (of 460)	5%

### Community Population Groups Who Need Extra Help During COVID-19 (n=260)



### Experiences of Personal Difficulty during COVID-19 (n=387)

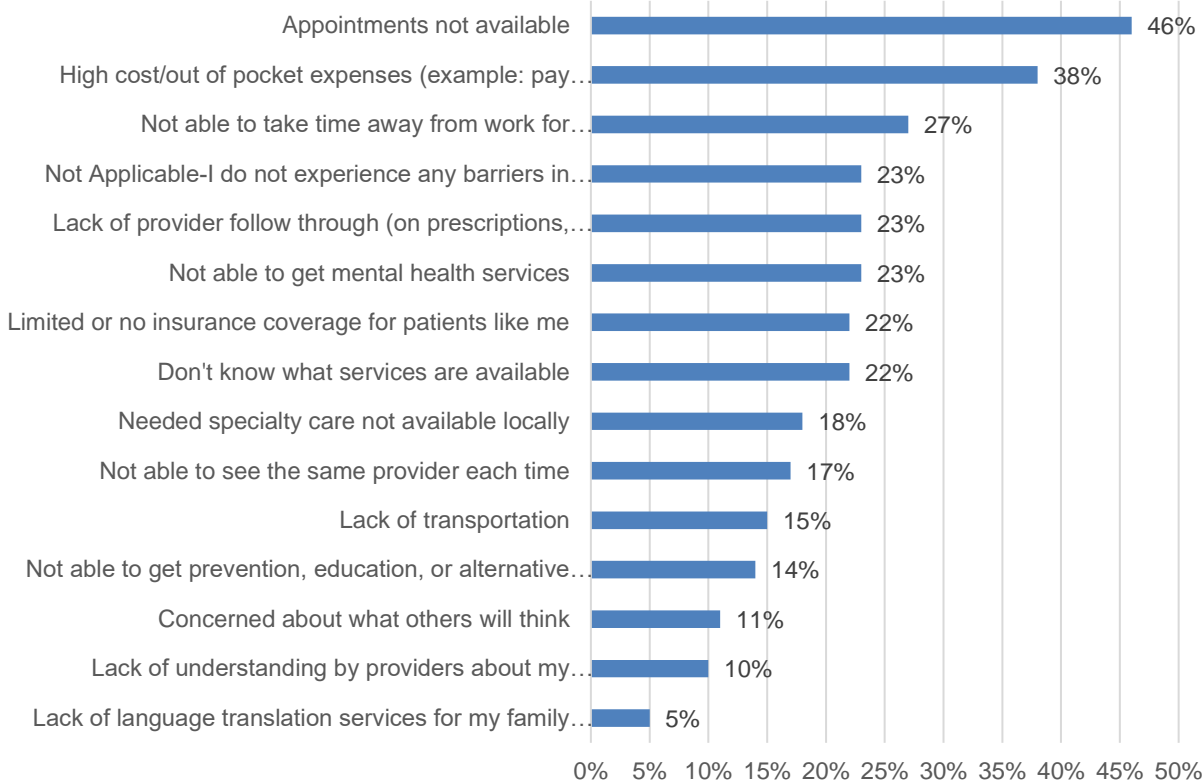


Source: Community Health Solutions analysis of Community Resident Survey responses.

## D. Personal Barriers to Health Care Prior to COVID-19

As shown in **Exhibit 1.4**, respondents identified barriers to obtaining the health care services they and their immediate family have experienced prior to COVID-19. Among responses from 373 individuals, the most commonly identified barriers include the inability to get appointments (46%); high cost/out of pocket expenses (38%); not able to take time off work (27%); lack of provider follow through (23%); inability to get mental health services (23%); limited or no insurance coverage (22%); and don't know what services are available (22%).

**Exhibit 1.4**  
**Barriers to Health Care Services (n=373)**



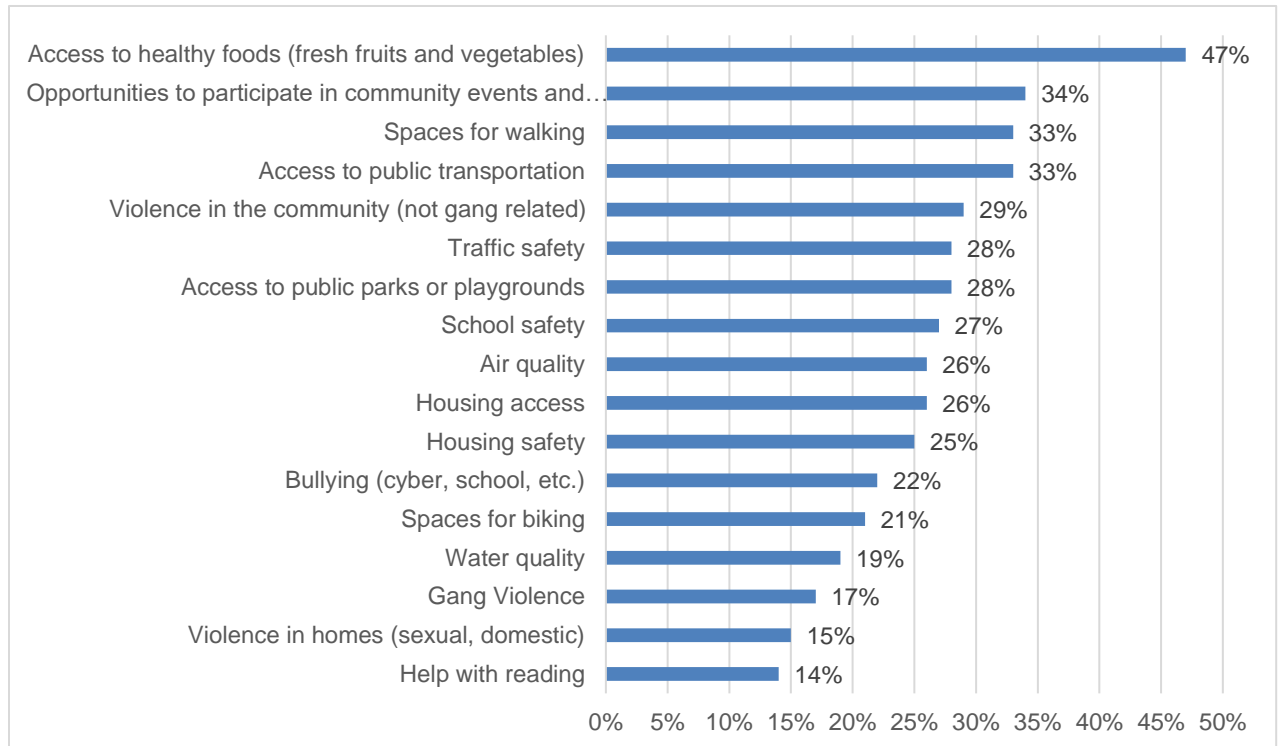
Source: Community Health Solutions analysis of Community Resident Survey responses.



## E. Neighborhood and Community Environment

Community residents were asked to review a list of common community health needs and concerns and identify which of these areas need improvement in their community. As shown in **Exhibit 1.5**, among responses from 323 individuals, the most commonly identified neighborhood and community needs include access to healthy foods (47%); opportunities to participate in community events/activities (34%); spaces for walking (33%); access to public transportation (33%); violence in the community (29%); traffic safety (28%); and access to public parks or playgrounds (28%).

**Exhibit 1.5**  
**Neighborhood and Community Needs (n=323)**

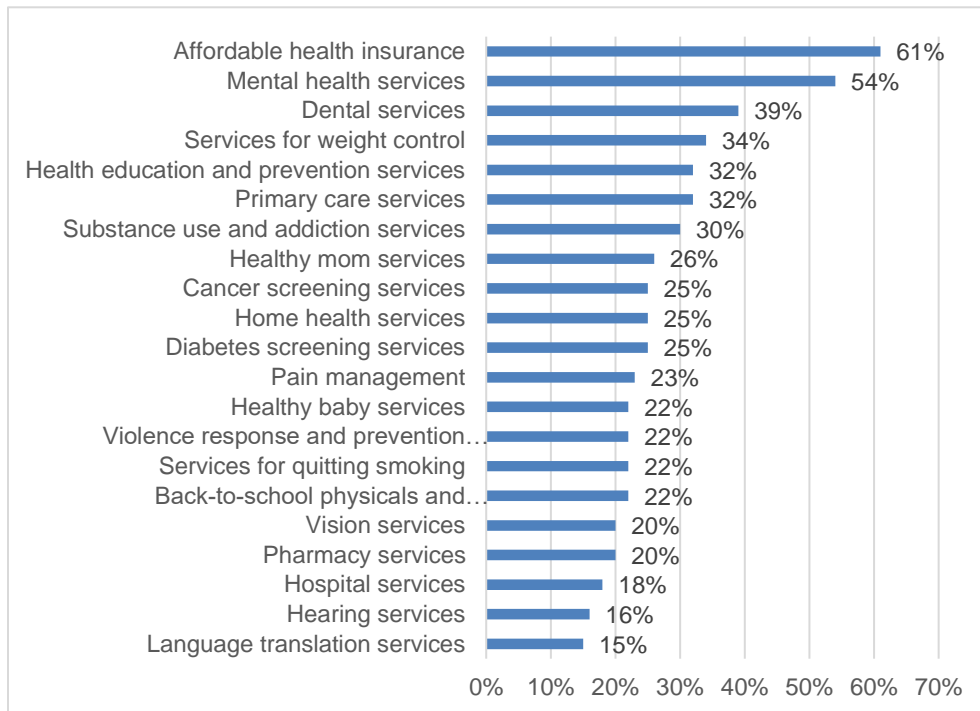


Source: Community Health Solutions analysis of Community Resident Survey responses.

## F. Community Health Care Services

Community residents were asked to review a list of common health services, and identify which services need strengthening in their community. As shown in **Exhibit 1.6**, among responses from 319 individuals, the most commonly identified health care service needs include affordable health insurance (61%); mental health services (54%); dental services (39%); services for weight control (34%); health education and prevention services (32%); primary care services (32%); substance use and addiction services (30%); healthy mom services (26%); cancer screening services (25%); home health services (25%); diabetes screening services (25%); pain management (23%); healthy baby services (22%); violence response and prevention (22%); services for quitting smoking (22%); back-to-school physicals and (22%); vision services (20%); pharmacy services (20%); hospital services (18%); hearing services (16%); and language translation services (15%).

**Exhibit 1.6**  
**Health Care Service Needs (n=319)**

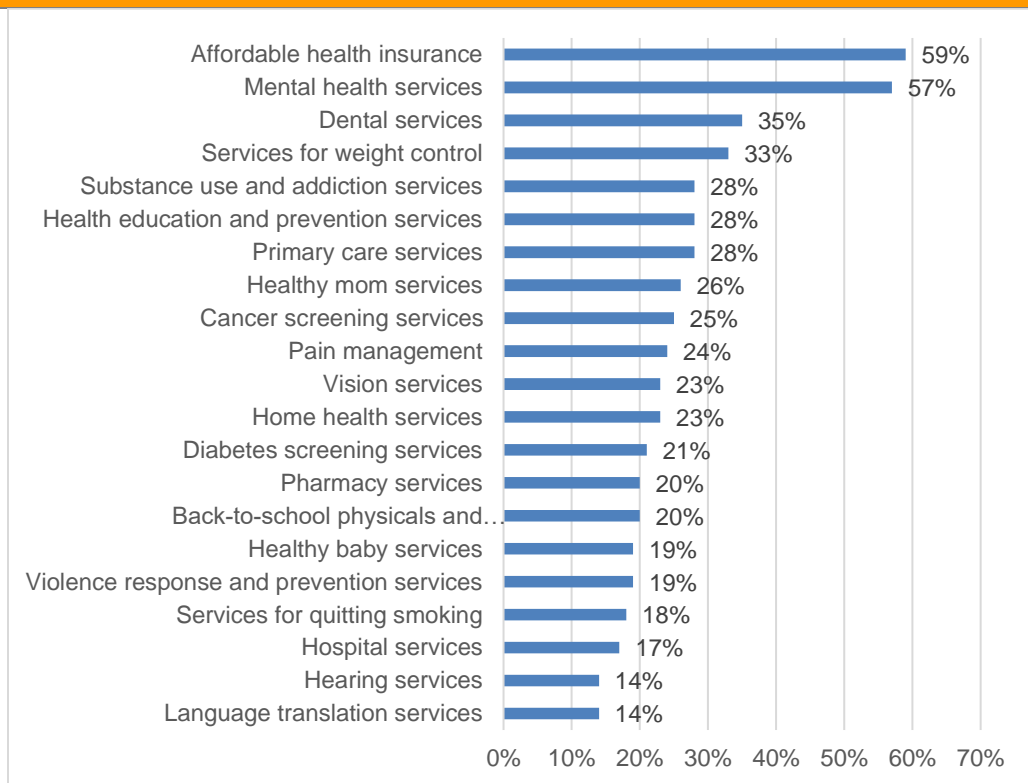


Source: Community Health Solutions analysis of Community Resident Survey responses.

## G. VCU Medical Center Services

Survey respondents were asked which medical services offered by VCU Medical Center they would like to see more of. As shown in **Exhibit 1.7**, among 347 individuals responding, the majority reported they would like to see more of affordable health insurance (59%) and mental health services (57%). More than thirty percent said they would like to see more dental services and services for weight control, and between 14% and 28% said they would like to see more of the additional services on the list.

**Exhibit 1.7**  
**Would Like to See More of these VCU Medical Center Services**  
**(n=347)**

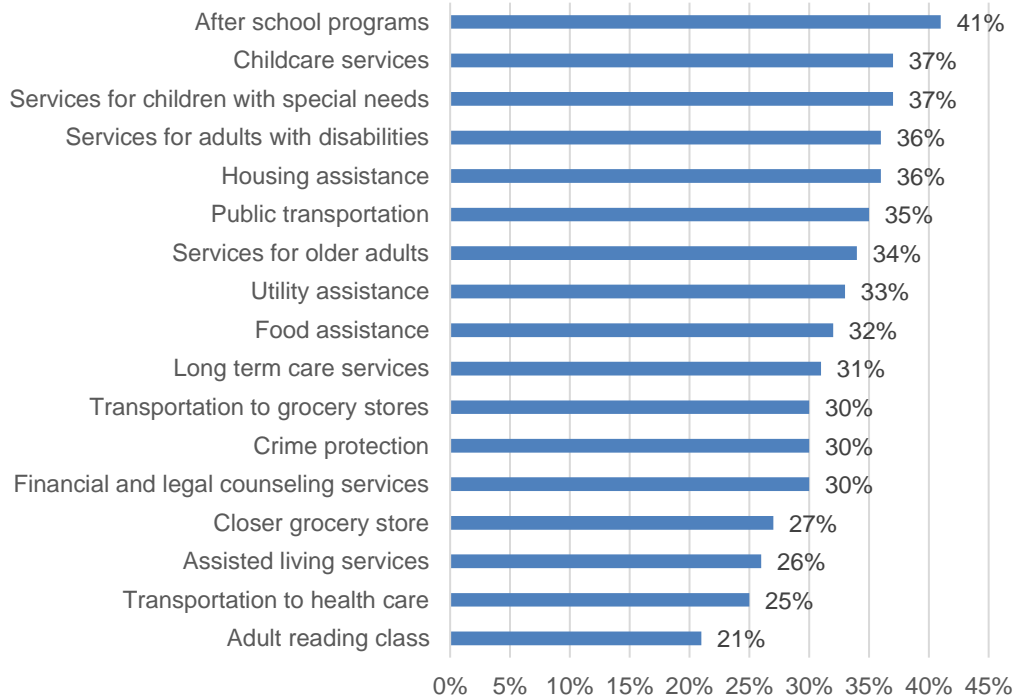


Source: Community Health Solutions analysis of Community Resident Survey responses.

## H. Community Support Services

Community residents were asked to review a list of common community support services and identify which of those services need strengthening in their community. As shown in **Exhibit 1.8**, among 314 individuals responding, the most commonly identified community services include after school programs (41%), childcare services (37%), services for children with special needs (37%), services for adults with disabilities (36%), and housing assistance (36%). Substantial numbers of respondents (21%-35%) identified additional services on the list.

**Exhibit 1.8**  
**Community Services that Need Strengthening**  
**(n=314)**



Source: Community Health Solutions analysis of Community Resident Survey responses.

## I. Sources of Health Information

Community residents were asked to identify sources they turn to for health information. As shown in **Exhibit 1.9**, among 467 individual respondents, 82% use their health care provider, 46% use online resources, 26% use family; 19% use friends, and 17-18%% use the hospital emergency department or an urgent care center. Other identified sources include the local health department (16%), a free clinic (10%), social media resources (8%), and places of worship (6%).


<b>Exhibit 1.9</b> <b>Sources of Health Information</b> <b>(n=467)</b>		
Health Care Provider (Example: Physician, Nurse Practitioner)	384	82%
Online Resources (Example: WebMD)	214	46%
Family Member	123	26%
Friends	91	19%
Hospital Emergency Department	84	18%
Urgent Care	81	17%
Local Health Department	73	16%
Free Clinic	48	10%
Social Media Resources (Example: Facebook)	36	8%
Place of worship	27	6%
Source: Community Health Solutions analysis of Community Resident Survey responses.		

## J. In Their Own Words – Insights from Community Residents


Community residents were asked to share in their own words their insights on the health and well-being of their community. **Exhibit 1.10** presents 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.

**Exhibit 1.10**  
**In their Own Words – Insights from Community Resident Survey Respondents**

*Note: Thematic categories are not mutually exclusive. Individual responses may be coded into multiple categories.*

 <b>Are there particular groups of people within your neighborhood or community who need help obtaining better health? (n=284)</b>				
Populations with potential health equity concerns	Elderly population	Those with limited access to health care services	Low income population	Those with limited access to community and social services
61	60	60	54	29

 <b>Do you have any ideas on how VCU Medical Center and its partners can help you and others in your neighborhood achieve better health? (n=211)</b>				
Provide health care services	Provide community and social services	Facilitate community engagement	Help address health equity	Supports for children
				Supports for people with mental health or substance use concerns
90	29	29	19	17 (each)

Source: Community Health Solutions analysis of Community Resident Survey responses.



## Section 2. Insights from Community Stakeholders

In addition to the survey of community residents described in **Section 1**, a second *Community Insight Survey* was conducted with a group of community stakeholders identified by VCU Medical Center 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 VCU Medical Center from their existing lists of community contacts. 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. A total of 20 individuals from 15 organizations submitted a response (although not every respondent answered every question).

Section Outline	
A.	Survey Methods
B.	Organizational Affiliation and Geographic Perspective
C.	Community Needs Related to COVID-19
D.	Community Health Concerns
E.	Services and Supports that Need Strengthening
F.	In their Own Words – Insights from Community Stakeholders

### B. Organizational Affiliation and Geographic Perspective

Survey responses were received from 20 community stakeholders from the organizations listed in **Exhibit 2.1**. 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 2.1**  
**Organizational Affiliation and Geographic Perspective of Survey Respondents**  
(n=20)

By Organization	
<i>Note: A count denotes multiple respondents from the same organization.</i>	
<input type="checkbox"/> Capital Area Health Network (2) <input type="checkbox"/> Central Virginia Health Services <input type="checkbox"/> Chesterfield Community Services Board (CSB) <input type="checkbox"/> Chesterfield Health District <input type="checkbox"/> CrossOver Healthcare Ministry <input type="checkbox"/> Feed More <input type="checkbox"/> Health Brigade <input type="checkbox"/> Henrico Area Mental Health & Developmental Services (2) <input type="checkbox"/> Henrico County Public Schools <input type="checkbox"/> Homeward <input type="checkbox"/> Jewish Family Services Richmond <input type="checkbox"/> Richmond Behavioral Health Authority <input type="checkbox"/> Richmond City Health District (4) <input type="checkbox"/> Sacred Heart Center <input type="checkbox"/> Virginia Department of Health	
By Geographic Perspective (Can select multiple)	
Charles City County	25%
Chesterfield County	60%
Henrico County	65%
Hopewell	10%
New Kent County	20%
Petersburg	30%
Richmond City	70%

Source: Community Health Solutions analysis of Community Stakeholder Survey responses.

### 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 2.2**, eighteen of twenty respondents (90%) said they have seen an increase in employment loss due to COVID-19, and 13 of 19 respondents (68%) said they have seen an increase in housing loss due to COVID-19. Survey respondents also identified multiple groups that need extra help due to COVID-19, including the elderly; parents of school-age children; homeless persons; people of color; people with mental health conditions; people with chronic conditions; and other vulnerable populations. They also shared their observations about particular difficulties experienced by the community members they serve as shown in the bottom panel.

**Exhibit 2.2**  
**Community Needs Related to COVID-19**

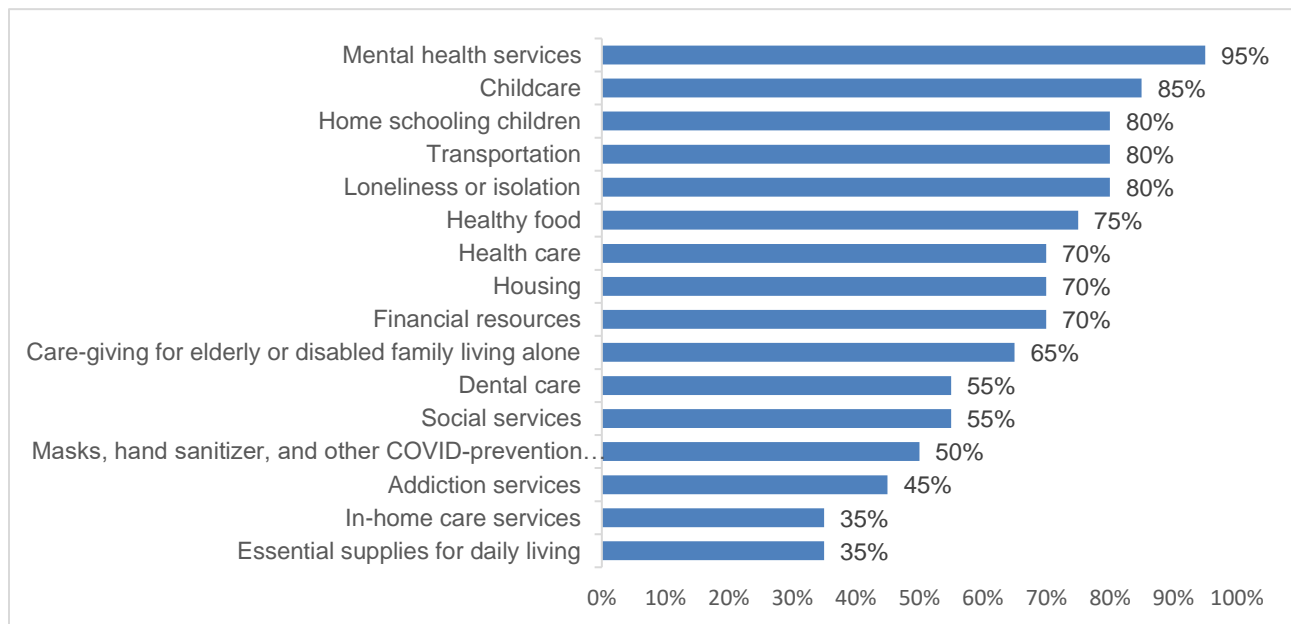
#### Observations about Loss of Employment or Housing Due to COVID-19

	Count	Percent
Seen an increase in employment loss due to COVID-19	18 (of 20)	90%
Seen an increase in housing loss due to COVID-19	13 (of 19)	68%
Note: n=463 for employment question, n=460 for housing question.		

#### Community Population Groups Who Need Extra Help During COVID-19 (n=17)



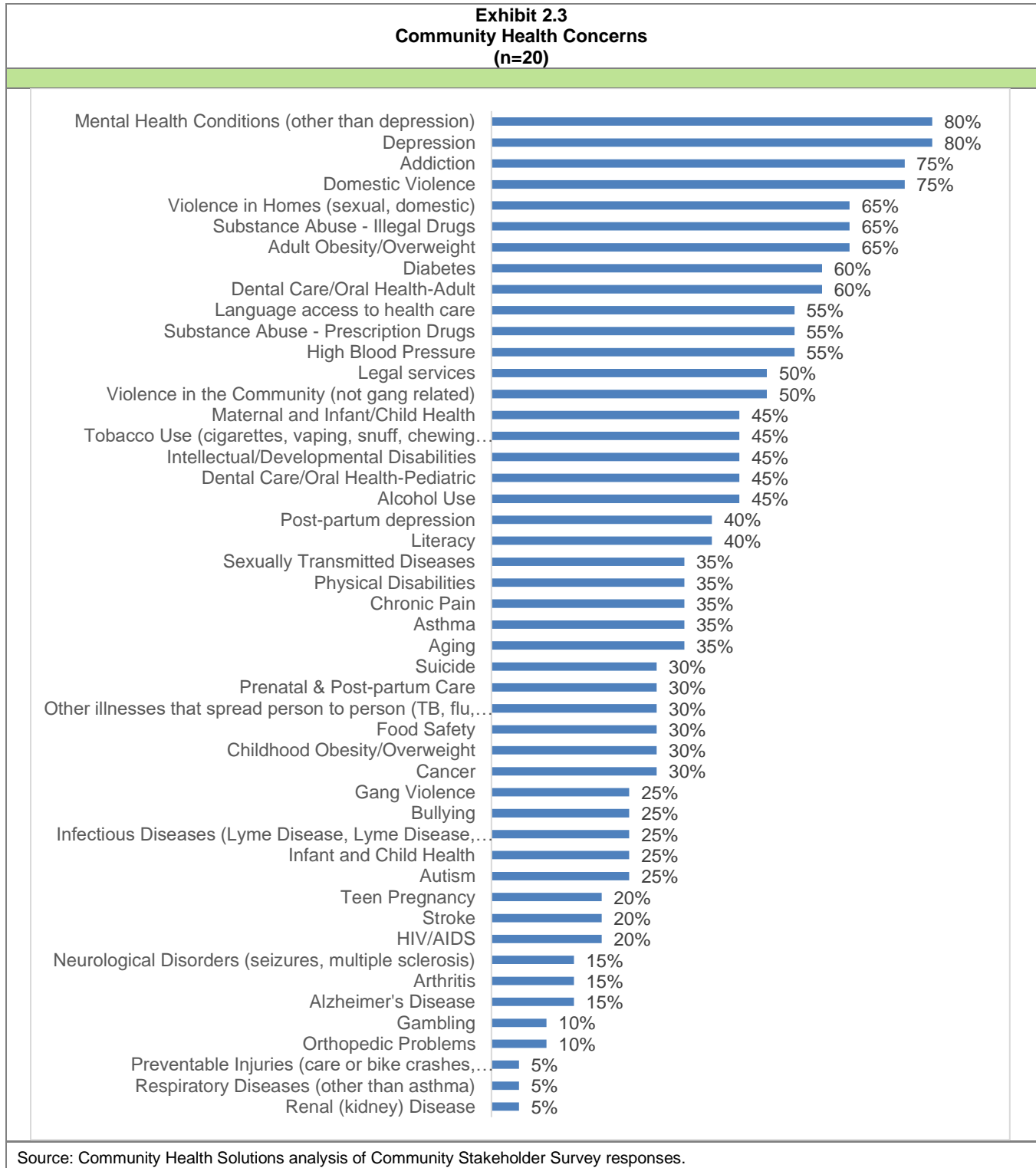
#### Client/Consumer Difficulties (n=20)



Source: Community Health Solutions analysis of Community Stakeholder Survey responses.

## D. Community Health Concerns (beyond COVID 19)

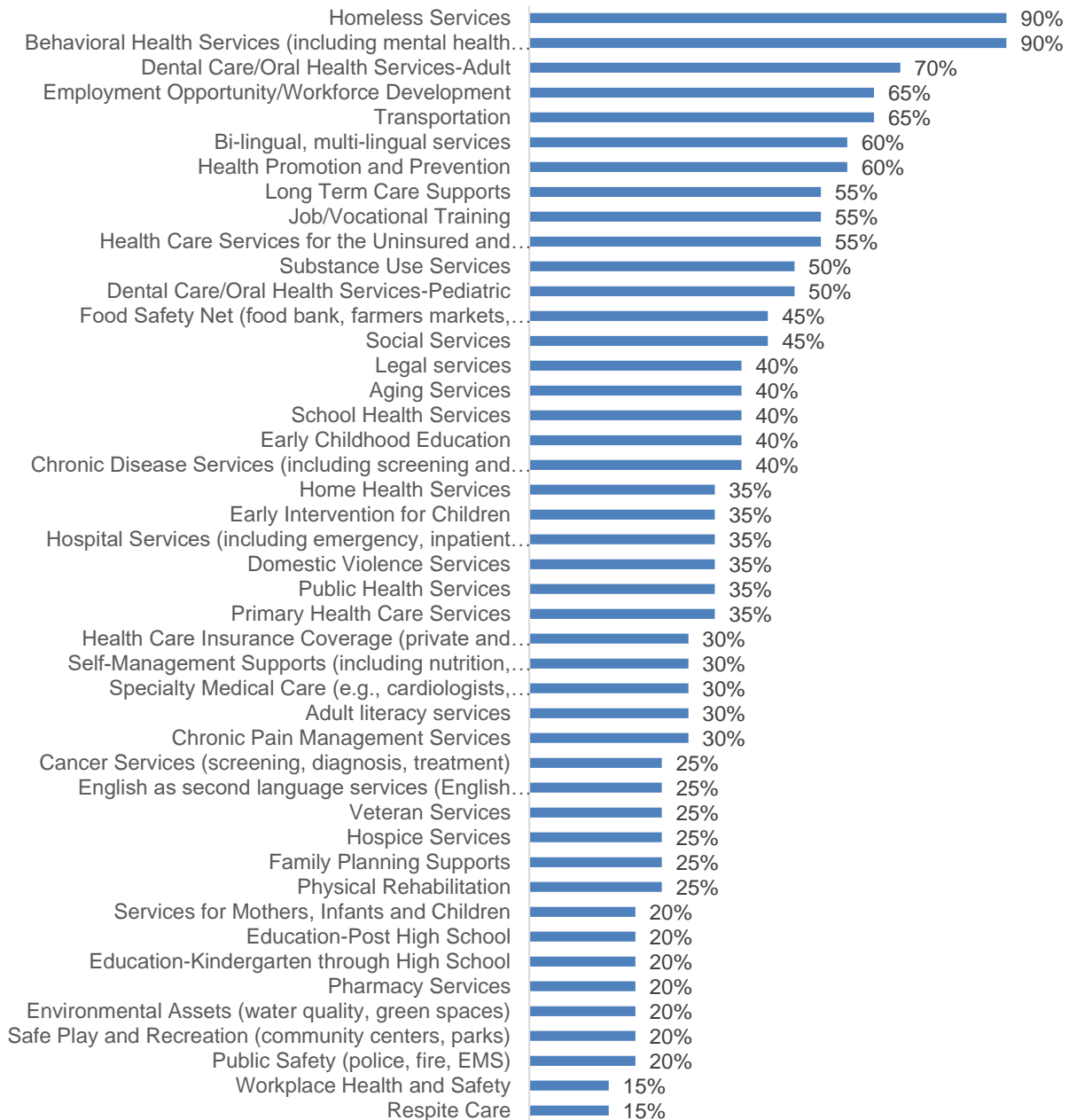
Community professionals were asked to review a list of common community health concerns, and identify which of these are important concerns in the community. As shown in **Exhibit 2.3**, the most commonly identified concerns were mental health conditions; depression; addiction; domestic violence; violence in homes; substance abuse - illegal drugs; adult overweight/obesity.



## E. Community Services and Supports

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. As shown in **Exhibit 2.4**, the most commonly mentioned services that need strengthening include homeless services; behavioral health services; dental care/oral health services for adults; employment opportunity/workforce development; and transportation.

**Exhibit 2.4**  
**Services and Supports that Need Strengthening**  
(n=20)




Source: Community Health Solutions analysis of Community Stakeholder Survey responses.


## F. In Their Own Words – Insights from Community Stakeholders


Community professionals were asked to share in their own words their insights on the health and well-being of their community. **Exhibit 2.5** 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.


**Exhibit 2.5**  
**In their Own Words – Insights from Community Stakeholders**

*Note: Thematic categories are not mutually exclusive. Individual responses may be coded into multiple categories.*

 <b>In your own words, how would you define the idea of a “healthy community”? (n=16)</b>				
Access to health care services	Access to community and social services	Health equity	Healthy lifestyle supports	Supports for people with mental health or substance use concerns
9	8	4	3	2

 <b>In your view, what are the most important health assets within the community? (n=16)</b>				
Health care services	Community and social services	Healthy lifestyle supports	Community engagement	Supports for children
6	6	6	4	2

 <b>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. (n=10)</b>				
COVID-19	People with mental health or substance use concerns	Community and social services	Health care services	Elderly
4	4	3	3	2

 <b>Please share your ideas about how people could work together to promote optimal health in the community (n=15)</b>			
Community engagement	Community and social services	Health care services	Health equity
			Healthy lifestyle supports
			Mental health or substance use supports
11	6	5	2 (each)

Source: Community Health Solutions analysis of Community Stakeholder Survey responses.

## Section 3. 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 in the box. 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.

Section Outline	
A.	Health Factors: Community Demographics
B.	Health Factors: Risk Behaviors for Adults
C.	Health Factors: Risk Behaviors for Youth
D.	Health Factors: Access to Health Care
E.	Health Outcomes: Leading Causes of Death
F.	Health Outcomes: Maternal and Infant Health
G.	Health Outcomes: Potentially Avoidable Hospitalizations
H.	Health Outcomes: Mental Health and Substance Use Hospitalizations



## A. Health Factors: Community Demographics

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

As shown in **Exhibit 3.1**, as of 2021, the study region included an estimated 1,029,994 people. The population is expected to increase to 1,076,896 people by 2026. Focusing on trends from 2021 to 2026, projections indicate the population largest population growth (8%) will occur in the 30-44 age range. Focusing on race and ethnicity, all of the listed population segments are projected to grow, with the highest growth rates in the Asian population, the other or multi-race population, and the Hispanic population.

<b>Exhibit 3.1</b> <b>Community Demographic Trend (2010-2026 Estimates)</b>					
Indicator		2010 Census	2021 Estimate	2026 Projection	% Change 2021-2026
Total Population	Population	925,492	1,029,994	1,076,896	5%
	Households	367,238	407,955	426,363	5%
Age	Children Age 0-17	216,566	218,562	227,481	3%
	Adults Age 18-29	163,516	172,936	171,073	-1%
	Adults Age 30-44	186,835	205,193	221,670	8%
	Adults Age 45-64	248,305	261,139	258,532	-1%
	Seniors Age 65+	108,492	169,025	198,140	4%
Race	Asian	36,309	52,794	62,924	19%
	Black/African American	305,216	337,343	350,449	4%
	White	531,046	562,204	570,971	2%
	Other or Multi-Race	52,921	77,653	92,552	19%
Ethnicity	Hispanic Ethnicity	54,516	82,815	100,859	22%
Source: Community Health Solutions analysis of data from US Census Bureau and ESRI. See Appendix A: Data Sources for details					

**Exhibit 3.2** provides a snapshot demographic profile of key health-related demographics of the study region. As of 2021, the study region included an estimated 1,029,944 people, with a population density of 895.6 persons per square mile. As illustrated by the population rates shown in the lower part of the Exhibit, the demographic profile of the study is fairly comparable to Virginia as a whole, with the exception of a proportionally larger Black/African American population.

<b>Exhibit 3.2</b> <b>Community Demographic Snapshot (2021 Estimates)</b>			
Indicator		Study Region Total	Virginia
<b>Estimated Counts</b>			
Total Population	Population	1,029,994	8,695,186
	Population Density (pop. per sq. mile)	895.6	220.2
Age	Children Age 0-17	221,701	1,866,288
	Adults Age 18-29	172,936	1,377,076
	Adults Age 30-44	205,193	1,754,440
	Adults Age 45-64	261,139	2,238,931
	Seniors Age 65+	169,025	1,458,451
Sex	Female	537,079	4,416,924
	Male	492,915	4,278,262
Race	Asian	52,794	608,471
	Black/African American	337,343	1,691,100
	White	562,204	5,663,178
	Other or Multi-Race	77,653	732,437
Ethnicity	Hispanic Ethnicity	82,815	893,165
<b>Estimated Rates</b>			
Age	Children Age 0-17 pct. of Total Pop.	22%	21%
	Adults Age 18-29 pct. of Total Pop.	17%	16%
	Adults Age 30-44 pct. of Total Pop.	20%	20%
	Adults Age 45-64 pct. of Total Pop.	25%	26%
	Seniors Age 65+ pct. of Total Pop.	16%	17%
Sex	Female pct. of Total Pop.	52%	51%
	Male pct. of Total Pop.	48%	49%
Race	Asian pct. of Total Pop.	5%	7%
	Black/African American pct. of Total Pop.	33%	19%
	White pct. of Total Pop.	55%	65%
	Other or Multi-Race pct. of Total Pop.	8%	8%
Ethnicity	Hispanic Ethnicity pct. of Total Pop.	8%	10%
Source: Community Health Solutions analysis of data from ESRI. See Appendix A: Data Sources for details			

**Exhibit 3.3** shows selected measures of education and income for residents of the study region versus Virginia as a whole. Income and education are two social determinants of health that can impact an individual and community health status and access to health services and supports. The results indicate substantial numbers of adults age 25+ without a high school diploma (67,203) and with low levels of income (269,507 with income below 200% of poverty).

<b>Exhibit 3.3</b> <b>Education and Income Snapshot (Various Years)</b>			
<b>Indicator</b>		<b>Study Region Total</b>	<b>Virginia</b>
<b>Estimated Counts</b>			
Education	Population Age 25+ Without a High School Diploma (2021)	67,203	591,064
Income	Population with Income Below 100% of Poverty (2019)	120,051	865,691
	Population with Income 100-199% of Poverty (2019)	149,456	1,164,896
	Population with Income Below 200% of Poverty (2019)	269,507	2,030,587
	Households with Incomes Below the Poverty Level (2019)	43,989	323,273
<b>Estimated Rates</b>			
Education	Population Age 25+ Without a High School Diploma pct. of Total Pop. Age 25+ (2021)	9%	10%
Income	Median Household Income (2021)	\$65,370	\$76,448
	Per Capita Income (2021)	\$37,356	\$41,359
	Population with Income Below 100% of Poverty (2019)	12%	11%
	Population with Income 100-199% of Poverty (2019)	15%	14%
	Population with Income Below 200% of Poverty (2019)	28%	25%
	Households with Incomes Below the Poverty Level (2019) pct. of Total Household for Which Poverty Status is Determined (2019)	11%	10%
Source: Community Health Solutions analysis of data from US Census Bureau and ESRI. See Appendix A: Data Sources for details.			

## B. Health Factors: Risk Behaviors for Adults

**Exhibit 3.4** shows selected health risk behaviors for adults for residents of the study region versus Virginia as a whole. 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 2019 health district estimates to 2021 local demographics for the study region. The estimates are subject to error and presented for planning purposes only. The results indicate 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.

<b>Exhibit 3.4</b> <b>Adult Health Risk Behaviors (2021 Estimates)</b>			
Indicator		Study Region Total	Virginia
Estimated Counts			
Total Estimated Adults age 18+		811,432	6,851,826
Lifestyle Risk Factors	Less than Five Servings of Fruits and Vegetables Per Day	693,012	5,755,534
	Overweight (BMI > 25.0)	558,218	4,522,205
	Overweight (BMI >30.0)	278,639	2,185,732
	No Physical Activity in the Past 30 Days	178,049	1,712,957
	At-risk for Binge Drinking <sup>1</sup>	150,483	1,027,774
	Smoker	108,052	959,256
Chronic Conditions <sup>2</sup>	Arthritis	211,016	1,781,475
	Diabetes	99,505	753,701
	High Blood Pressure	289,665	2,329,621
	High Cholesterol	245,604	2,261,103
General Health Status	Fair or Poor Health Status	131,941	1,164,810
Estimated Rates			
Lifestyle Risk Factors	Less than Five Servings of Fruits and Vegetables Per Day	85%	84%
	Overweight (BMI > 25.0)	69%	66%
	Overweight (BMI >30.0)	34%	32%
	No Physical Activity in the Past 30 Days	22%	25%
	At-risk for Binge Drinking	19%	15%
	Smoker	13%	14%
Chronic Conditions	Arthritis	26%	26%
	Diabetes	12%	11%
	High Blood Pressure	36%	34%
	High Cholesterol	30%	33%
General Health Status	Fair or Poor Health Status	16%	17%
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			

<sup>1</sup> Males having five or more drinks on one occasion, females having four or more drinks on one occasion.

<sup>2</sup> As told by a doctor or other health professional

## C. Health Factors: Risk Behaviors for Youth

**Exhibit 3.5** shows selected health risk behaviors for youth residents of the study region versus Virginia as a whole. Please note that all indicators in this profile are based on 2019 health district or statewide estimates applied to 2021 regional demographics for the study region. The estimates are subject to error and presented for planning purposes only. The results indicate 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.

<b>Exhibit 3.5</b> <b>High School Youth Health Risk Behaviors (2021 Estimates)</b>			
Indicator		Study Region Total	Virginia
<b>Counts</b>			
Total Estimated High School Youth Age 14-19		78,469	651,505
Lifestyle Risk Factors	Used tobacco or vapor products in the past month	17,263	149,846
	Not Meeting Recommendations for Physical Activity in the Past Week	47,081	384,388
Chronic Conditions	Told they Have Asthma	18,833	136,816
	Described Themselves as Slightly or Very Overweight	25,110	201,966
<b>Rates</b>			
Lifestyle Risk Factors	Used tobacco or vapor products	22%	23%
	Not Meeting Recommendations for Physical Activity in the Past Week	60%	59%
Chronic Conditions	Told they Have Asthma	24%	21%
	Described Themselves as Slightly or Very Overweight	32%	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			

## D. Health Factors: Access to Health Care

Access to health care is essential for individual and population health. **Exhibit 3.6** shows indicators of access to health insurance for community residents. Please note the estimates are based on 2019 uninsured estimates applied to 2021 regional demographics for the study region. The estimates are subject to error and presented for planning purposes only. As shown, an estimated 76,626 community members age 0-64 lacked health coverage, including 9,159 children age 0-18, and 67,622 adults age 19-64. The uninsured rates in the study region are comparable to those for the state as a whole.

Exhibit 3.6 Uninsured Population (2019 Estimates)		
Indicator	Study Region Total	Virginia
<b>Total Population Estimates by Age Group</b>		
Total Population Age 0-64	850,969	7,236,735
Total Population Age 0-18	234,838	1,974,915
Total Population Age 19-64	626,131	5,261,820
<b>Uninsured Estimates by Age Group (counts)</b>		
Uninsured Population Age 0-64	76,626	673,016
Uninsured Population Age 0-18	9,159	88,871
Uninsured Population Age 19-64	67,622	589,324
<b>Uninsured Estimates by Age Group (rates)</b>		
Uninsured Population Age 0-64	9%	9%
Uninsured Population Age 0-18	4%	5%
Uninsured Population Age 19-64	11%	11%
Source: Community Health Solutions analysis of 2019 uninsured estimates applied to 2021 demographics. Uninsured estimates are from the Urban Institute as published by the Virginia Health Care Foundation. <a href="#">See Appendix A: Data Sources for details</a>		

As additional context it is important to note that **Virginia implemented Medicaid expansion** for adults beginning on January 1, 2019. As shown in **Exhibit 3.7**, by October of 2021, an estimated **86,507** adults from the study region had enrolled in Medicaid expansion.

At this point in time there are no data available to provide an indication of how many uninsured adults remain within the study region. We do know that the relationship between enrollees in Medicaid expansion and the number of uninsured is not static. For example, since 2019 the pandemic has caused major disruptions in the economy, which may have resulted in more uninsured who were not eligible for Medicaid. Likewise, there is some level of turnover in local Medicaid enrollment as adults enter or leave the area, or disenroll due to changes in eligibility. For these reasons, an updated study of uninsured rates and Medicaid enrollment would be required to produce a more precise estimate of local uninsured rates and counts for 2021.

Exhibit 3.7 Medicaid Expansion Enrollment		
Timeframe	Study Region Total	Virginia
Members enrolled as of January 1, 2020	54,920	378,623
Members enrolled as of October 15, 2021	86,507	593,496
Source: Community Health Solutions analysis of Medicaid enrollment data obtained from Virginia DMAS at <a href="https://www.dmas.virginia.gov/data/medicaid-expansion-enrollment/">https://www.dmas.virginia.gov/data/medicaid-expansion-enrollment/</a>		



Looking beyond health coverage, **Exhibit 3.8** shows each of the localities within the study region are designed as 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+. Charles City County, Hopewell, New Kent County, and Petersburg are designated as medically underserved cities and counties. Chesterfield County, Henrico County, and the City of Richmond have specific census tracts designated as medically underserved.

<b>Exhibit 3.8</b> <b>Medically Underserved Areas/Populations</b>		
<b>Locality</b>	<b>Index of Medical Underservice Score (0= Highest Need 100 =Lowest Need)</b>	<b>Rural Status (Federal Designation)</b>
Charles City County	61.3	Non-Rural
Chesterfield County (Census Tracts 1010.04, 1010.07)	58.8	Non-Rural
Henrico County (Census Tracts 2008.04, 2008.05)	55.0	Non-Rural
Hopewell	61.6	Non-Rural
New Kent County	53.2	Non-Rural
Petersburg	61.6	Non-Rural
Richmond (14 census tracts)	57.1	Non-Rural
Source: Community Health Solutions analysis of data from Health Resources and Services Administration. Data not available for Colonial Heights as a separate jurisdiction. See Appendix A: Data Sources for details		

## E. Health Outcomes: Leading Causes of Death

**Exhibit 3.9** shows the leading causes of death for residents of the study region versus Virginia as a whole. In 2019 the five leading causes of death in the study region were heart disease (1,868); malignant neoplasms (cancer) (1,815); unintentional injury (575); cerebrovascular disease (stroke) (498); and chronic lower respiratory disease (449). Crude mortality rates for the study region were higher than the Virginia rate for all deaths and for the top five causes of death. Variations in age distribution in the region as compared to the state may account for these differences.

<b>Exhibit 3.9 Mortality Indicators (2019)</b>		
<b>Indicator</b>	<b>Study Region</b>	<b>Virginia</b>
<b>Counts</b>		
Total Deaths by All Causes	8,692	70,359
Heart Disease	1,868	15,061
Malignant Neoplasms (Cancer)	1,815	15,049
Unintentional Injury	575	3,997
Cerebrovascular Disease (Stroke)	498	3,823
Chronic Lower Respiratory	449	3,666
Alzheimer's Disease	293	2,632
Diabetes	268	2,352
Nephritis and Nephrosis	250	1,662
Septicemia	158	1,086
Suicide	138	1,137
Chronic Liver Disease	123	1,038
Influenza and Pneumonia	119	1,103
Parkinson's Disease	110	894
Primary Hypertension	83	817
<b>Rates (Crude Rate Per 100,000 Population)</b>		
Total Deaths by All Causes	882.6	824.3
Heart Disease	184.0	176.5
Malignant Neoplasms (Cancer)	178.8	176.3
Cerebrovascular Disease (Stroke)	49.0	44.8
Unintentional Injury	56.6	46.8
Chronic Lower Respiratory	44.2	42.9
Alzheimer's Disease	28.9	30.8
Diabetes	26.4	27.6
Nephritis and Nephrosis	24.6	19.5
Septicemia	15.6	12.7
Suicide	13.6	13.3
Chronic Liver Disease	12.1	12.2
Influenza and Pneumonia	11.7	12.9
Parkinson's Disease	10.8	10.5
Primary Hypertension	8.2	9.6
Source: Community Health Solutions analysis of data from the Virginia Department of Health. Crude rates are used by available demographic data are not adequate to support age-adjusted rates. See Appendix A: Data Sources for details		

## F. Health Outcomes: Maternal and Infant Health

**Exhibit 3.10** show indicators of maternal and infant health for residents of the study region compared to Virginia as a whole. As shown, in 2019 there were 12,260 total live births in the study region, with 1,088 low weight births, 1,622 births without early prenatal care, 5,436 non-marital births, and 495 births to teens. There were also an average 98 infant deaths per year across the study region from 2015-2019. Focusing on rates, the study region had a lower rate of births without early prenatal care, and higher rates of non-marital births and infant mortality than Virginia as a whole.

<b>Exhibit 3.10</b> <b>Maternal and Infant Health Indicators (2019)</b>		
<b>Indicator</b>	<b>Study Region</b>	<b>Virginia</b>
<b>Counts</b>		
Total Live Births	12,260	97,434
Low Weight Births	1,088	8,162
Births Without Early Prenatal Care (No Care in the First 13 Weeks)	1,622	16,122
Non-Marital Births	5,436	34,196
Teenage Births (Age 10-19)	495	3,651
Teenage Births (Age 18-19)	377	2,748
Teenage Births (Age 15-17)	114	824
Teenage Births (Age <15)	4	29
Infant Mortality (5-year average 2015-2019)	98	570
<b>Rates</b>		
Live Birth Rate per 1,000 Population	12.1	11.4
Low Weight Births as a Percent of Total Births	8%	8%
Births Without Early Prenatal Care as a Percent of Total Births	13%	17%
Non-Marital Births as a Percent of Total Births	44%	35%
Teenage Births (Age 10-19) as a Percent of Total Births	4%	4%
Infant Mortality per 1,000 Live Births (5-year average 2015-2019)	8.0	5.7
Source: Community Health Solutions analysis of data from Virginia Department of Health. See Appendix A: Data Sources for details		

## G. Health Outcomes: Potentially Avoidable Hospitalizations

**Exhibit 3.11** shows indicators of potentially avoidable hospitalizations for residents of the study region versus Virginia as a whole. 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**. Cases are referred to as Prevention Quality Indicator (PQI) hospitalizations.

In 2019 study region residents had 10,508 potentially avoidable hospitalizations, with the majority for patients age 65+. The leading diagnoses for these hospitalizations were congestive heart failure (4,043), diabetes (2,386), COPD or asthma in older adults (1,533), urinary tract infection (925), and community acquired pneumonia (919). The crude rates for these hospitalizations were higher in study region than for Virginia as a whole for all diagnoses listed except community acquired pneumonia.

<b>Exhibit 3.11 Potentially Avoidable Hospitalizations (2019)</b>		
<b>Indicator</b>	<b>Study Region</b>	<b>Virginia</b>
<b>Counts- Total Discharges by Diagnosis</b>		
Total PQI Discharges by All Diagnoses	10,508	72,248
<b>Counts- Total Discharges by Leading Diagnosis</b>		
Congestive Heart Failure	4,043	26,675
Diabetes	2,386	13,561
COPD or Asthma in Older Adults	1,533	12,198
Urinary Tract Infection	925	7,481
Community Acquired Pneumonia	919	8,514
Hypertension	548	3,292
Asthma in Younger Adults	156	538
<b>Rates-Crude Rate Per 100,000 Population</b>		
Total Prevention Quality Indicator (PQI) Discharges	1,034.9	846.4
Congestive Heart Failure	398.2	312.5
Diabetes	251.4	158.9
COPD or Asthma in Older Adults	151.0	142.9
Urinary Tract Infection	91.1	87.6
Community Acquired Pneumonia	90.5	99.7
Hypertension	54.0	38.6
Asthma in Younger Adults	15.4	6.3
Source: Community Health Solutions analysis of data from Virginia Health Information, Inc. and demographic estimates from ESRI. Crude rates are used by available demographic data are not adequate to support age-adjusted rates. See Appendix A: Data Sources for details		

## H. Health Outcomes: Mental Health and Substance Use Hospitalizations

**Exhibit 3.12** shows residents of the study region had 13,197 discharges from Virginia community hospitals for behavioral health conditions in 2019. The leading causes of hospitalization were major depressive disorder - recurrent (3,871), schizoaffective disorders (1,541), bipolar disorder (1,487), alcohol-related disorders (1,444), and major depressive disorder, single episode (1,190). The crude rates for behavioral health hospitals were higher in the study region compared to the state for all diagnoses listed.

<b>Exhibit 3.12</b> <b>Hospitalizations for Mental Health and Substance Use Diagnoses (2019)</b>		
Indicator	Study Region	Virginia
<b>Counts-Total Discharges by Diagnosis</b>		
Total Discharges by All Diagnoses	13,197	68,583
<b>Counts-Total Discharges by Leading 11 Diagnoses</b>		
Major depressive disorder, recurrent	3,871	17,148
Schizoaffective disorders	1,541	6,521
Bipolar disorder	1,487	10,137
Alcohol related disorders	1,444	9,436
Major depressive disorder, single episode	1,190	6,790
Schizophrenia	753	3,229
Opioid related disorders	451	2,011
Unspecified mood [affective] disorder	401	1,485
Reaction to severe stress, and adjustment disorders	337	2,287
Persistent mood [affective] disorders	267	1,931
Unspecified psychosis not due to a substance or known physiological condition	217	1,004
<b>Rates-Crude Rate Per 100,000 Population</b>		
Total Discharges	1299.7	796.8
Major depressive disorder, recurrent	381.3	197.5
Schizoaffective disorders	151.8	75.1
Bipolar disorder	146.5	116.7
Alcohol related disorders	142.2	108.7
Major depressive disorder, single episode	117.2	78.2
Schizophrenia	74.16	37.2
Opioid related disorders	44.42	23.2
Unspecified mood [affective] disorder	39.49	17.1
Reaction to severe stress, and adjustment disorders	33.19	26.3
Persistent mood [affective] disorders	26.30	22.2
Unspecified psychosis not due to a substance or known physiological condition	21.37	11.6
Source: Community Health Solutions analysis of data from Virginia Health Information, Inc. and demographic estimates from ESRI. Crude rates are used by available demographic data are not adequate to support age-adjusted rates. See Appendix A: Data Sources for details		

## Section 4. Exploring Social Determinants of Health

This section explores the results of the CHNA study from the perspective of social determinants of health. Part A provides a definition of social determinants of health in relation to two other key dynamics, health disparities and health equity. Part B outlines insights about vulnerable community populations based on responses to the community resident survey and the community stakeholder survey. Part C and Part D illustrate local variation in social determinants of health at the county and census-tract level.

Section Outline	
A.	Defining Social Determinants of Health
B.	Insights from Community Survey Respondents
C.	Selected Indicators of Social Determinants of Health
D.	Small-Area Variation in Social Determinants of Health

### A. Defining Social Determinants of Health

The Centers for Disease Control (CDC) defines **social determinants of health** (SDoH) as conditions in the places where people live, learn, work, and play that affect a wide range of health risks and outcomes. Healthy People 2030 uses a place-based framework that outlines five key areas of SDoH, including:

- ☐ Health care access and quality
- ☐ Education access and quality
- ☐ Social and community context
- ☐ Economic stability
- ☐ Neighborhood and built environment.

Social determinants of health can contribute to **health disparities**, which the CDC defines as preventable differences in the burden of disease, injury, violence, or in opportunities to achieve optimal health experienced by socially disadvantaged racial, ethnic, and other population groups, and communities. Research shows that health disparities exist in all age groups as evidenced in disparities in health status, access to health care, utilization of health care, the patient experience of health care, and health care outcomes.

Social determinants of health and health disparities are essential considerations for promoting health equity. According to the CDC, **health equity** is achieved when every person has the opportunity to “attain his or her full health potential” and no one is “disadvantaged from achieving this potential because of social position or other socially determined circumstances.” Health inequities may be reflected in differences in length of life; quality of life; rates of disease, disability, and death; severity of disease; and access to treatment.

An important first step toward achieving and sustaining health equity is to understand the extent to which social determinants of health may be influencing health disparities at the community level. The following sections provide an introductory analysis of social determinants of health within the eight-locality region included in the CHNA study region.

## B. Insights from Community Survey Respondents

Community residents were asked to share their insights about particular groups of people within their neighborhood or community who need help obtaining better health, both within and beyond the context of COVID-19. Community stakeholders were also invited to share their insights about community populations in need.

As shown in **Exhibit 4.1**, survey respondents identified multiple community populations as being vulnerable for health challenges. The list is consistent with research on populations at higher risk for health challenges because of one or more social determinants of health. Within each population segment, children, older adults, and individuals with complex health conditions may be at particular risk for health challenges related to SDoH.

<b>Exhibit 4.1</b> <b>Vulnerable Populations Identified in the Surveys of Community Residents and Community Stakeholders</b>				
Elderly	Hispanic/Latino	Homeless	Immigrants	Low-income
LGBTQ	Parents of school aged children	Single parents	People of color	People with disabilities
People with limited English proficiency	People with mental health conditions	People with substance use problems	People with transportation access needs	Unemployed
	Underinsured/ Uninsured	Working poor		

Source: Community Health Solutions analysis of responses to the Community Resident Survey and Community Stakeholder Survey.

### C. Selected Indicators of Social Determinants of Health

**Exhibit 4.2** shows selected indicators of social determinants of health at the city and county level. The indicators are based on community demographic estimates provided by ESRI. They are subject to estimation error, and presented for exploration and planning purposes only.

The exhibit includes selected indicators of educational attainment, household income, individual income, race and ethnicity, language spoken at home, and digital access. All of these factors can be defined as social determinants of health, and each has the potential to influence health disparity and health equity for individual community members.

A scan of the exhibit indicates substantial variation across the eight localities included in the study region. As indicated by the shaded cells, within the region there is a pattern in which Charles City County, Hopewell, Petersburg, and Richmond have lower levels of adult educational attainment, on-time high school graduation, income, and access to internet services compared to other localities in the region. There is even more variation within the city and county boundaries across the region, as explored in Section D.

<b>Exhibit 4.2</b> <b>Selected Indicators of Social Determinants of Health by City and County</b> <b>(continued on the following page)</b>									
Indicator	CHNA Study Region	Charles City County, VA	Chesterfield County, VA	Colonial Heights city, VA	Henrico County, VA	Hopewell city, VA	New Kent County, VA	Petersburg city, VA	Richmond city, VA
<b>Educational Attainment Estimates</b>									
2021 Age 25+ Less than High School	67,203	1,163	18,009	1,015	18,051	2,804	1,302	3,859	21,000
2021 Age 25+ Less than High School (%)	9%	20%	7%	8%	8%	18%	7%	16%	14%
2021 On-Time H.S. Graduation Rate (%)	na	88%	92%	92%	90%	77%	95%	87%	79%
<b>Household Income Estimates</b>									
2021 Median Household Income	\$65,370	\$61,023	\$81,597	\$55,329	\$67,935	\$40,595	\$90,641	\$37,891	\$51,249
2019 Households Below the Poverty Level	43,989	413	7,375	874	11,321	2,267	548	3,049	18,142
2019 Households Below the Poverty Level (%)	11%	14%	6%	12%	8%	25%	7%	23%	20%
2021 Household Income less than \$35,000 %	17%	22%	10%	19%	15%	31%	9%	34%	27%
<b>Per Capita Income and Poverty Estimates</b>									
2021 Per Capita Income	\$37,356	\$31,475	\$38,347	\$31,276	\$41,173	\$23,549	\$41,205	\$22,120	\$34,048
2019 Pop with Income Below 100% of Poverty	120,051	919	23,060	2,083	29,673	5,253	1,457	7,406	50,200
2019 Pop with Income Below 200% of Poverty	269,507	2,144	65,548	5,663	71,836	11,011	3,211	15,585	94,509
2019 Pop with Income Below 100% of Poverty (%)	12%	13%	7%	12%	9%	24%	7%	24%	23%
2019 Pop with Income Below 200% of Poverty (%)	28%	31%	19%	33%	22%	50%	15%	51%	44%
<b>Digital Access Estimates</b>									
2019 Pop <18 in HHs: have no Computer (%)	2%	8%	1%	0%	1%	1%	1%	8%	5%
2019 Pop 18-64 in HHs: have no Computer (%)	4%	11%	2%	3%	3%	7%	2%	11%	7%
2019 HHS with no internet Access %	13%	29%	7%	17%	11%	21%	14%	25%	18%
<b>Minority Populations</b>									
2021 Racial Minority Population %	45%	55%	37%	28%	46%	54%	24%	84%	55%
2021 Hispanic Population %	8%	2%	10%	7%	6%	9%	5%	5%	8%
Source: CHS analysis of community demographic data from ESRI.									

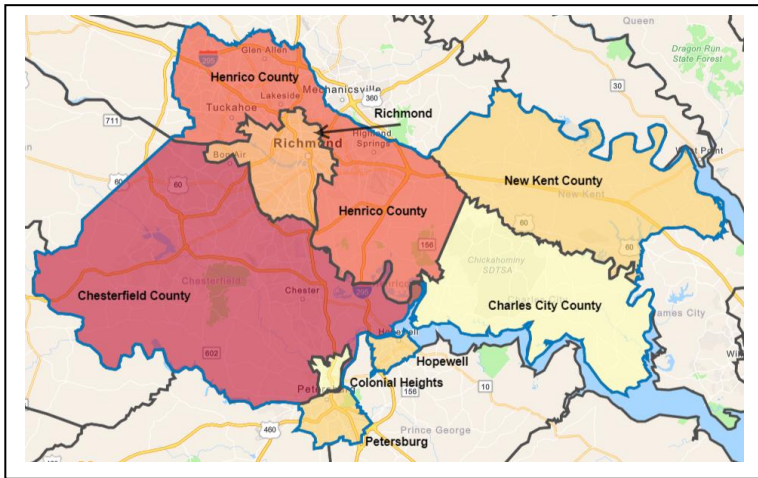
### D. Community Mapping of Social Determinants of Health Indicators



**Maps 1-6** illustrate examples of small-area variation in selected SDoH indicators. As with Exhibit 4.2, the indicators are based on community demographic estimates provided by ESRI. They are subject to estimation error, and presented for exploration and planning purposes only.

The maps are constructed at the census-tract level to illustrate how neighborhoods can vary on local indicators of SDoH. Understanding this neighborhood-level variation can be helpful for planning community outreach and engagement to address factors related to SDoH, health disparities, and health equity.

The county-level map in the box below is provided as a reference for the census tract level maps that follow. Note that Henrico County is labeled twice to indicate the east side and west side of the county relative to the City of Richmond.

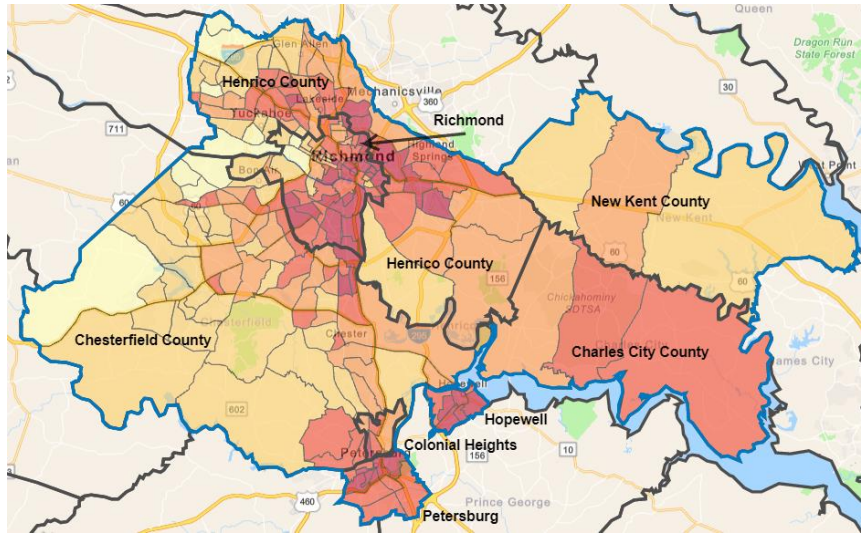


#### A Note on Counts vs. Percentages

- ☐ The following maps show the study region population distributions in terms of counts (number of residents in each census tract) vs. rates (percent of residents in each census tract).
- ☐ This approach is chosen because it can be helpful to envision the number of individuals who might be at risk for SDOH-related health challenges when planning for community outreach and community services.

**Maps 1 and 2** show how neighborhood-level income varies across the region. In **Map 1** the lighter shading indicates census tracts with higher income levels, which tend to lie in the western part of Richmond and Henrico, and outlying sections of Chesterfield and New Kent. In **Map 2** the darker shading indicates census tracts with a higher number of households with income below poverty level. These tend to lie in the cities of Richmond, Colonial Heights, Hopewell, and Petersburg, as well as parts of Chesterfield, Charles City County, and New Kent County.

**Map 1. Median Household Income by Census Tract (2021 Estimates)**

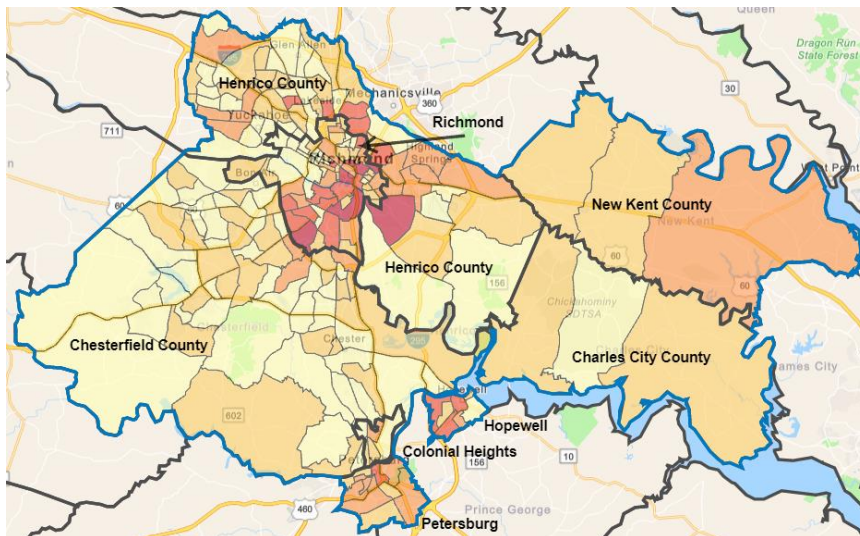


2021 Median Household Income by Census Tract

	\$134,763 to \$200,001
	\$88,986 to \$134,762
	\$61,625 to \$88,985
	\$41,122 to \$61,624
	\$0 to \$41,121

Source: CHS analysis of demographic estimates provided by ESRI. See Appendix A for details.

**Map 2. Number of Households with Income Below Poverty (2019 Estimates)**



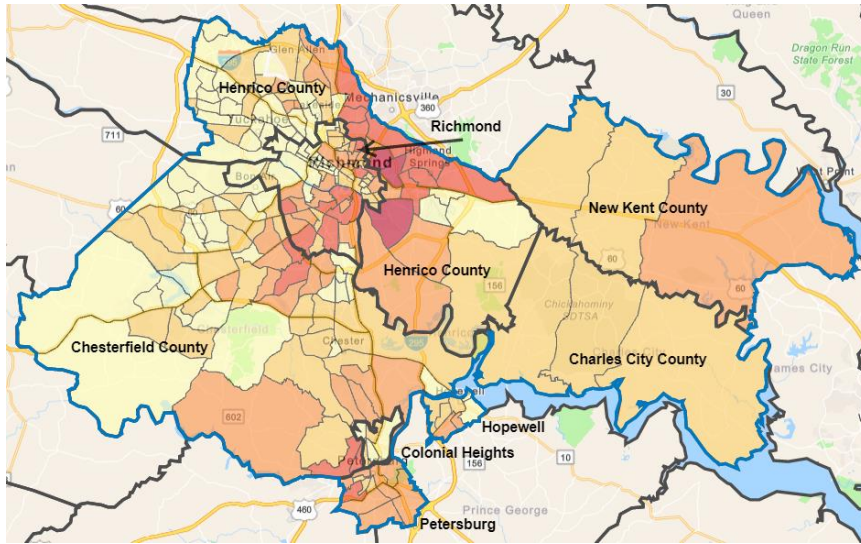
2019 Number of Households with Income Below Poverty

	650 to 882
	408 to 649
	232 to 407
	110 to 231
	0 to 109

Source: CHS analysis of demographic estimates provided by ESRI. See Appendix A for details.

**Maps 3 and 4** illustrate the distribution of selected minority populations across the region. **Map 3** shows the distribution of the Black/African American population, with a higher numbers in Richmond, Petersburg, and parts of Chesterfield, Henrico, and New Kent County. **Map 4** shows the distribution of the Hispanic population, with higher numbers in parts of South Richmond, western Henrico, and parts of Chesterfield, Petersburg, and Hopewell.

**Map 3. Number of Black / African American Residents by Census Tract (2021 Estimates)**

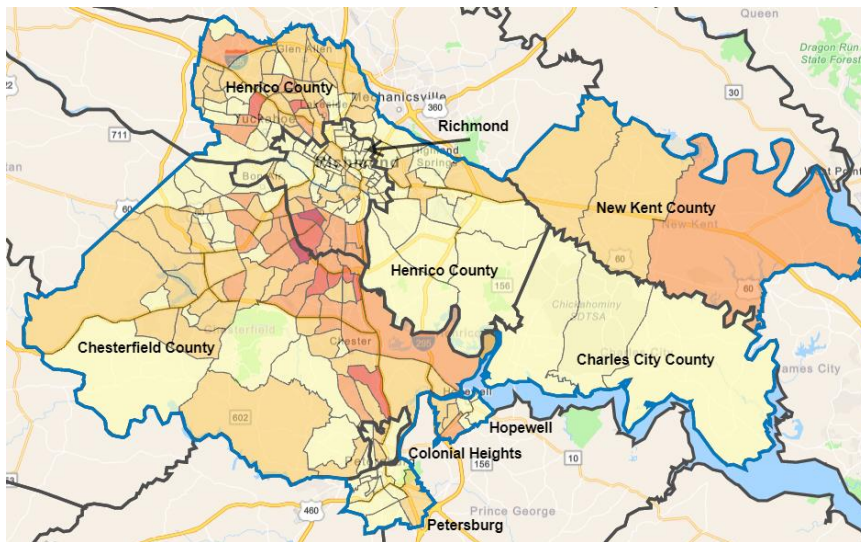


2021 Black / African American Residents by Census Tract

5,494 to 8,427
3,152 to 5,493
1,779 to 3,151
817 to 1,778
0 to 816

Source: CHS analysis of demographic estimates provided by ESRI. See Appendix A for details.

**Map 4. Number of Hispanic Residents by Census Tract (2021 Estimates)**



2021 Hispanic Residents by Census Tract

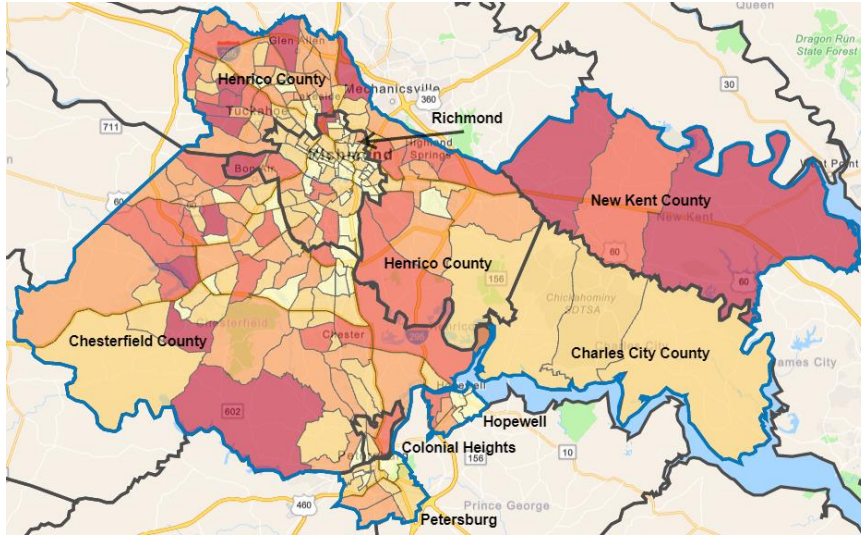
2,155 to 3,491
1,091 to 2,154
557 to 1,090
245 to 556
0 to 244

Source: CHS analysis of demographic estimates provided by ESRI. See Appendix A for details.

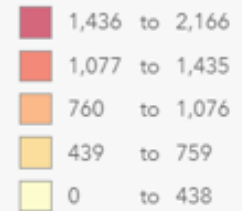


**Maps 5 and 6** show the distribution of older adults and residents with disabilities across the region. **Map 5** shows the distribution of the older adult population, which is widely spread across the region. A similar widespread distribution is shown in **Map 6** for households with one or more residents having a disability.

**Map 5. Number of Residents Age 65+ by Census Tract (2021 Estimates)**

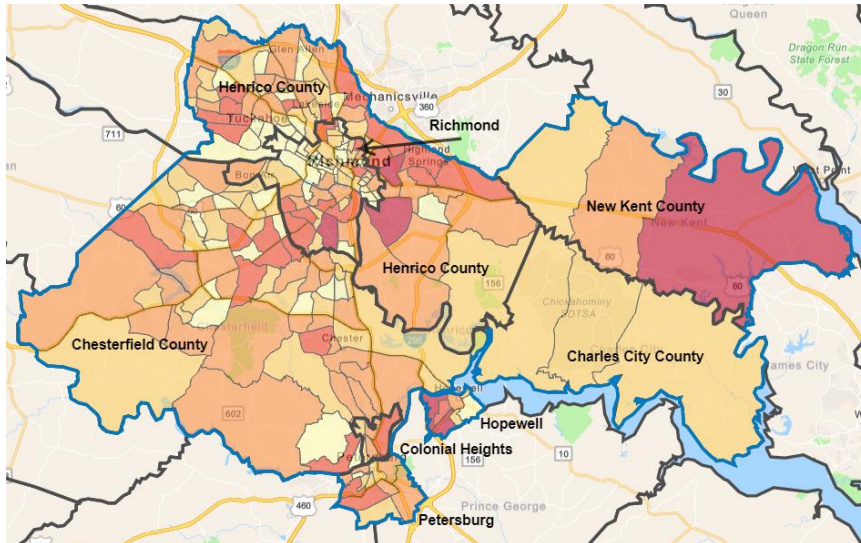


2021 Residents Age 65+ by Census Tract

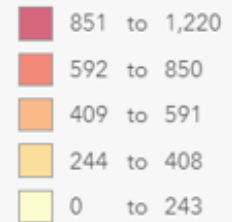


Source: CHS analysis of demographic estimates provided by ESRI. See Appendix A for details.

**Map 6. Number of Households with One or More Residents Having a Disability (2019 Estimates)**



2021 Households with One or More Residents Having a Disability



Source: CHS analysis of demographic estimates provided by ESRI. See Appendix A for details.

## Appendix A: Data Sources

Profile	Source
Section 1. Insights from Community Residents	Community Health Solutions analysis of Community Resident Survey responses submitted by community residents conducted in July - September 2021.
Section 2. Insights from Community Stakeholders	Community Health Solutions analysis of Community Resident Survey responses submitted by community stakeholders conducted in July – August 2021.
Section 3. Community Indicator Profiles	
A. Community Demographics	Community Health Solutions analysis of demographic estimates from ESRI. (2021 and 2026).
B. Health Risk Behaviors for Adults	<p>Community Health Solutions analysis of:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> 2019 data from the Virginia Behavioral Risk Factor Surveillance System, supplied by the Virginia Department of Health</li> <li><input type="checkbox"/> 2021 demographic estimates from ESRI.</li> </ul> <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.</p>
C. Health Risk Behaviors for Youth	<p>Community Health Solutions analysis of:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> 2019 data from the Virginia Youth Risk Behavioral Surveillance System, supplied by the Virginia Department of Health.</li> <li><input type="checkbox"/> 2021 demographic estimates from ESRI.</li> </ul> <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. .</p>
D. Access to Health Care	<p>Community Health Solutions analysis of:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> 2019 uninsured estimates from Urban Institute as published by Virginia Health Care.</li> <li><input type="checkbox"/> 2019 demographic estimates from US Census Bureau.</li> <li><input type="checkbox"/> Medically Underserved Area (MUA) designations from the U.S. Health Resources and Services Administration.</li> </ul>
E. Leading Causes of Death	<p>Community Health Solutions analysis of:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> 2019 mortality record data supplied by the Virginia Department of Health.</li> <li><input type="checkbox"/> 2019 demographic estimates from the US Census Bureau.</li> </ul>
F. Maternal and Infant Health	<p>Community Health Solutions analysis of:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> 2019 birth record data supplied by the Virginia Department of Health.</li> <li><input type="checkbox"/> 2019 demographic estimates from the US Census Bureau.</li> </ul>

<p>G. Potentially Avoidable Hospitalizations</p>	<p>Community Health Solutions analysis of:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> 2019 Virginia hospital discharge data from the Virginia Health Information (VHI).</li> <li><input type="checkbox"/> 2019 demographic estimates from US Census Bureau.</li> </ul> <p>Notes:</p> <p>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 Indicators (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 <a href="http://www.qualityindicators.ahrq.gov/modules/pqi_overview.aspx">http://www.qualityindicators.ahrq.gov/modules/pqi_overview.aspx</a></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>
<p>H. Mental Health and Substance Use: Hospitalizations</p>	<p>Community Health Solutions analysis of:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> 2019 Virginia hospital discharge data from the Virginia Health Information (VHI).</li> <li><input type="checkbox"/> 2019 demographic estimates from US Census Bureau.</li> </ul> <p>Notes:</p> <p>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>
<p>Section 4. Social Determinants of Health</p>	<p>Community Health Solutions analysis of:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Community Resident Survey responses.</li> <li><input type="checkbox"/> Community Stakeholder Survey responses.</li> <li><input type="checkbox"/> 2021 and 2019 demographic estimates from ESRI.</li> </ul>