Mass General Brigham

# Partners Ambulatory Care – Woburn Service Area Community Health Needs Assessment

October 3, 2020

Mass General Brigham

Health Resources in Action
*Advancing Public Health and Medical Research*

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# EXECUTIVE SUMMARY

**Introduction**
Mass General Brigham (formerly Partners HealthCare, 'the System') is a not-for-profit, integrated health care system that was formed in 1994 by an affiliation between The Brigham Medical Center, Inc. (now known as Brigham Health) and The Massachusetts General Hospital ("MGH"). Mass General Brigham currently operates two tertiary hospitals, six community acute care hospitals, and one acute care specialty hospital in Massachusetts; one community acute care hospital in Southern New Hampshire; one facility providing inpatient and outpatient mental health services; and three facilities providing inpatient and outpatient services in rehabilitation medicine and long-term care.

To fulfill Mass General Brigham's four-part mission of patient care, research, education and community, the organization has affirmed a system-wide strategy that is grounded in the excellence of Mass General Brigham's two academic medical centers, focused on improved patient outcomes and experience, and supported by its historical and ongoing commitment to digital health and data analytics, population health, ambulatory care and insurance risk management. Developing community-based care centers that offer primary and behavioral health care, as well as specialty and surgical services also are a component of Mass General Brigham's mission.

Accordingly, the System is seeking ways to expand care options in more suburban settings, including in the Woburn service area. This potential expansion will require Mass General Brigham to fully understand the range of needs (related to health and the social determinants of health) within the Woburn service area, includes the communities of: Andover, Arlington, Bedford, Billerica, Burlington, Lexington, Lynnfield, Medford, Melrose, North Reading, Reading, Stoneham, Tewksbury, Wakefield, Wilmington, Winchester, and Woburn.

This community health needs assessment (CHNA or Assessment) aims to gain a greater understanding of the issues that residents within the Woburn service area face, how those issues are currently being addressed, and where there are gaps and opportunities to address these issues in the future. This CHNA report provides the results from a mixed methods study aimed at identifying the most pressing social, economic, and health issues in the service area. The specific goals of this CHNA are to:

- Systematically identify the health-related needs, strengths, and resources of the service area to inform future planning,
- Understand the current health status of residents within the service area, as well as sub-populations within their social context, and
- Engage the community to help determine community needs and social determinant of health needs.

**Context**
This CHNA was conducted during an unprecedented time period, due to the COVID-19 novel coronavirus (COVID-19) pandemic and the national movement for racial justice. The COVID-19 pandemic coincided with the activities of this assessment and impacted both the CHNA data collection process, as well as topics and concerns that residents raised in focus groups and key informant interviews. A wave of national protests for racial equity also coincided with the timeline of the CHNA and impacted the content of this report, as well as data collection processes, including the design of data collection instruments and the input that was shared during interviews and focus groups, key informant interviews, and through Woburn Community Priorities Survey responses.

**Methods**
The 2020 Woburn service area CHNA aims to identify the community needs and strengths through a social determinants of health framework, which defines health in the broadest sense and recognizes numerous

factors at multiple levels— from lifestyle behaviors (e.g., healthy eating and active living) to clinical care (e.g., access to medical services) to social and economic factors (e.g., poverty) to the physical environment (e.g., air quality)—which have an impact on the community's health.

To identify the health and social determinant of health needs of the service area, challenges to addressing these needs, current strengths and assets, and opportunities for action, the assessment process included: synthesizing existing data on social, economic, and health indicators in the Woburn service area; conducting a community survey with 552 residents of towns in the Woburn service area; conducting 8 virtual focus groups with 19 participants and 9 key informant interviews with 11 individuals representing a variety of organizations, including mental health, senior, and immigrant-focused social services; law enforcement; and the faith community.

Due to COVID-19, it should be noted that while efforts were made to engage residents through virtual qualitative and survey data collection, given the context of the pandemic the capacity of community organizations to assist with outreach and the capacity of community members to participate was limited. This report should be considered a snapshot of an unprecedented time, and the findings in this report can be built upon through future data collection efforts.

**Findings**

The following provides a brief overview of key findings that emerged from this assessment.

*Population Characteristics*

- **Demographics:** The service area for this CHNA comprises a total population of 504,680 residents. The Woburn service area includes a mix of towns with residents who work blue-collar jobs and identify as largely non-Hispanic White; affluent and very-well educated communities with large immigrant populations; and lower income towns with more racial/ethnic diversity. Notable demographic differences exist by race/ethnicity, foreign-born residents, and language in the Woburn service area. For example, Lexington had the highest proportion of non-Hispanic Asian residents (29.2%), while Medford had the largest proportion of non-Hispanic Black (9.3%) and Hispanic/Latino (5.3%) residents.[1]

*Community Social and Economic Environment*

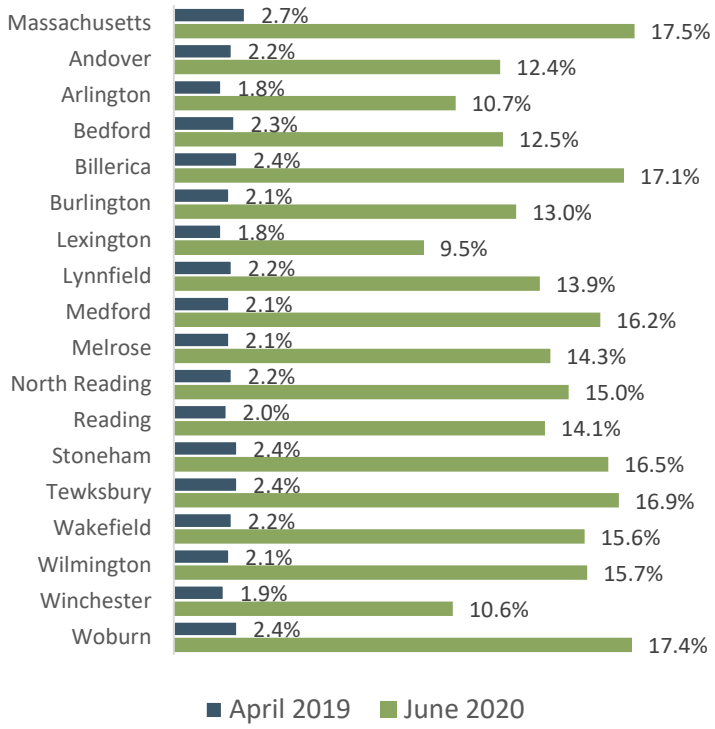
- **Community Perceptions of Need:** The most common issues that Woburn Community Priorities Survey respondents reported being affected by (either currently, 6 months ago, or at both timepoints) were mental health issues (50.6%), financial insecurity (40.8%), and overweight/obesity (38.9%). Interview and focus group participants also highlighted the particular challenges faced by seniors, parents and their young children, and low-income immigrants as a result of the Coronavirus pandemic shutdowns.

- **Community Assets:** Respondents to the Woburn Community Priorities Survey most commonly reported good schools (75.7%), safe/walkable sidewalks (72.8%), and parks/green space (72.3%) as strengths of their communities. Interview and focus group participants also noted feelings of belonging, support for vulnerable groups, youth programming, and community participation as major assets.

[1] U.S. Census Bureau, American Community Survey 5-Year Estimates, 2014-2018.

- **Income and Financial Security:** The area around Woburn is largely affluent, with median annual household income in 2014-2018 ranging from almost $89,000 in Woburn to almost $173,000 in Lexington. Medford (20.3%) and Woburn (15.3%) had the largest number of residents who were low income, at <200% Federal Poverty Level, in 2014-2018. [2] Among Woburn Community Priorities Survey respondents, almost 30% reported that their financial situation had gotten worse since the coronavirus pandemic, 6.5% reported it had improved, and 63.9% reported it had stayed the same.

**Percent Population Unemployed, 16 Years and Older, in Massachusetts and by Town, 2019-2020**




DATA SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Local Area Unemployment Statistics, 2019-2020.

- **Employment and Workforce:** In April 2019, all towns in the Woburn area had unemployment rates under 3%. During the pandemic, rates increased from between 7.2% in Lexington to 16.7% in Billerica.[3] Interview and focus group participants expressed concerns about the effect of the pandemic on working parents and on low-income residents who lost their jobs or had to work in risky situations in order to put food on the table for their families.

- **Education:** The area around Woburn is very well educated, on average. Among residents over 25 years of age in the Woburn region, about half of Winchester and Lexington residents had a graduate or professional degree. In contrast, Billerica and Tewksbury had the largest populations with a High School diploma or less. In 2019, high school graduation rates were 90% or higher in all towns.[4] Good schools were a top strength listed by Woburn Community Priorities Survey respondents.

- **Housing:** Housing affordability was consistently noted as a top concern among interview and focus group participants. Concerns were expressed for the ability of seniors to age in place in their communities due to a lack of affordable housing, for young families looking to buy homes in the area, and for refugee populations living in over-crowded housing and facing evictions during the pandemic. Median monthly housing costs for owner-occupied households with a mortgage ranged from $2,214 in Woburn to $3,940 in Lexington.[5]

> *"My rent is half of my paycheck. Every financial advisor will tell you that's crazy, but this is the cheapest apartment I could find".* – Focus group participant

[2] U.S. Census Bureau, American Community Survey 5-Year Estimates, 2014-2018.
[3] U.S. Department of Labor, Bureau of Labor Statistics, Local Area Unemployment Statistics, 2019-2020.
[4] Massachusetts Department of Elementary and Secondary Education, School and District Profiles, Cohort 2019 Graduation Rates, 2019.
[5] U.S. Census Bureau, American Community Survey 5-Year Estimates, 2014-2018.

- **Transportation:** In the large area around Woburn, perceptions about transportation varied. In many towns, focus group participants agreed that transportation was almost entirely limited to use of personal vehicles. This was only seen as a concern for select populations, such as seniors who no longer drive and public housing residents. Other towns, including Arlington, Medford, and Melrose, had better access to mass transit, such as MBTA bus service, commuter rail, and the T.

- **Built Environment:** Communities around Woburn were described as having parks and playgrounds, libraries, and trails, all of which residents appreciated. Increased use of bicycles in the community due to COVID-19 has highlighted the need for more bike lanes in communities, according to participants.

- **Crime and Violence:** In 2018, rates of violent crime (i.e. murder, rape, robbery, aggravated assault) varied notably across the towns around Woburn, although no towns had higher rates than the state average of 338.1 incidents per 100,000 residents. The highest violent crime rates were in Tewksbury, Wakefield, Stoneham, and Burlington.[6] Overall, focus group members and interviewees described their communities as very safe.

- **Discrimination and Racism:** Among Woburn Community Priorities Survey respondents, the second most common issue for future action was addressing systemic racism/racial injustice (38.4%). Overall, 11.2% of respondents reported experiencing discrimination in the past six months, and among these, 50.0% reported this was due to their race; 37.9% said it was due to their gender; 34.5% said it was due to their ethnicity or national origin. Participants reported that conversations about racial justice have been occurring recently in Woburn service area communities. Perceptions about the extent of discrimination and racism in the community varied. Some participants mentioned incidences in schools of anti-Semitic and racist graffiti and incidences in the larger community of racism and anti-immigrant actions. Local leaders and community-based organizations, including faith institutions, have been working to engage the community in conversations about this issue, participants reported.

*Community Health Issues*

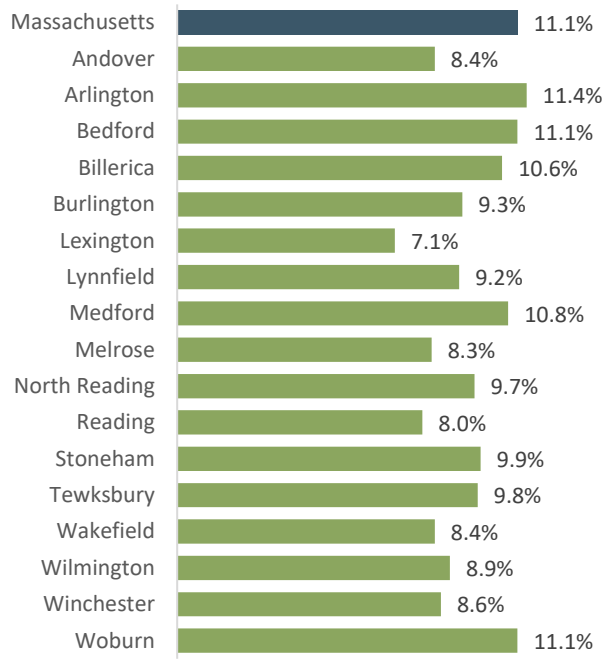
- **Overall Mortality:** Age-adjusted mortality rates per 100,000 population varied across the Woburn area in 2017, from a low of 447.0 in Lexington to a high of 743.0 in Billerica.[7]
- **Chronic Diseases and Related Risk Factors:** In general, rates of chronic disease in the Woburn service area are similar to the state overall. Interview and focus group participants did not cite specific chronic diseases as pressing concerns in their communities, and 13.2% and 11.1% of Woburn Community Priorities Survey respondents cited chronic disease and overweight/obesity as top issues for action, respectively. However, these issues were also ranked among the top five issues that have personally affected respondents in the past six months.

[6] Federal Bureau of Investigation, Uniform Crime Reports, Offenses Known to Law Enforcement, 2018.

[7] Massachusetts Department of Public Health, Registry of Vital Records and Statistics, 2017.

- **Mental Health:** Mental health issues were the top concern that had personally affected Woburn Community Priorities Survey respondents in the past six months (50.6%) and were the fourth most commonly cited issue for future community action (35.0%). Focus group participants and interviewees stated that COVID-19 exacerbated mental health issues in the community, particularly among seniors, who already tend to be socially isolated; and among immigrants and refugees, who already face anxiety related to the current political context. Participants with school-age children shared the challenges of remote learning and the stress that comes with the uncertainty of the coming school year. Many worried about the long-term impact of the pandemic and lack of socialization on the community's children and youth. According to focus group members and interviewees, lack of mental health providers was the primary challenge in addressing mental health in the community. It was reported that the number of providers in the community is insufficient to meet the demand for services, leading to long waits for mental health services.

**Percent of Adults Reporting 15 or More Days of Poor Mental Health in the Last Month, in Massachusetts and by Town, 2012-2014**




DATA SOURCE: Massachusetts Department of Public Health, Behavioral Risk Factor Surveillance System (BRFSS) Small Area Estimates, 2012-2014.

- **Substance Use:** Alcohol and drug use was not a top issue that had personally affected most Woburn Community Priorities Survey respondents in the past six months (13.0%). However, it was the sixth most common issue listed for future action (22.3%) and was more common among residents with less than a high school education. Opioid-related overdose deaths were relatively rare in the town around Woburn in the past five years and issues with substance use came up only rarely among interview and focus group participants.

- **Environmental Health:** Emergency department visits for asthma were below the Massachusetts state rate for all towns in the Woburn service area, and concerns about environmental-related health concerns were not mentioned by interview and focus group participants.

- **Infectious and Communicable Disease:** Many participants shared concerns about the ongoing spread and impact of COVID-19 and about access to accurate testing. COVID-19 concerns were ranked first by Woburn Community Priorities Survey respondents among the most important issues for future action (47.8%). Through August of 2020, the COVID-19 case rate in Massachusetts was 1,642 cases per 100,000 population. The case rate varied across the Woburn area, with the highest case rate occurring in Tewksbury (1,969 per 100,000 population) and the lowest case rate occurring in Winchester (544 per 100,000 population).[8] Sexually transmitted and other communicable diseases were not prevalent or a major concern in the area around Woburn.

- **Injury:** Interview and focus group participants did not raise injury as a concern fort their communities. Rates of emergency department visits, motor vehicle accidents, and fall hospitalization are in general fairly similar or lower among these communities when compared to the state.

[8] Massachusetts Department of Public Health, Bureau of Infectious Disease and Laboratory Sciences, 2020.

- **Maternal and Infant Health:** Interview and focus group participants did not raise maternal and infant health as a concern for their communities. In 2015, the percent of preterm births in Massachusetts was 6.5%. By town, preterm births ranged from 2.7% in Reading to 8.4% in Lexington.[9]

*Access to Services*

- **General Access:** Overall**,** 48.5% of Woburn Community Priorities Survey respondents reported at least one barrier to accessing medical, mental health, or social services in the past six months. Among respondents reporting at least one barrier, the most common barriers were long wait times for appointments (55.4%), cost of services (34.5%), lack of information about available services (28.7%), and lack of evening or weekend services (28.7%).

- **Healthcare Services:** Several interviewees and focus group members mentioned access to healthcare as a community health concern, including the high cost of healthcare, difficulty accessing MassHealth, and lack of dental services. Participants noted that strict income requirements to qualify for MassHealth means that some lower income residents may not qualify, and that immigrants are often not enrolled in the best coverage they have a right to. Participants also mentioned that lack of continuity of healthcare and transition to community services after a hospital stay creates challenges for seniors and others.

> *"Health care, social services, human services are each in a separate corner, and not working together in a unified manner. We've been talking about this for 20 years and there's no change."*– Key informant interviewee

- **Social and Essential Services:** Participants mentioned that lack of continuity of healthcare and transition to community services after a hospital stay creates challenges for seniors and others. The siloing of health care, social services, and human services was noted as a barrier for establishing comprehensive and continuous care. Participants suggested building coalitions of services and co-locating services, especially for underserved populations.

*Community Perceptions of Issues for Action*

Woburn Community Priorities Survey respondents were asked to select the top five issues for future action on the survey and most frequently reported (1) coronavirus/COVID-19 testing and/or the possibility of a new outbreak, (2) addressing systemic racism/racial injustice, (3) housing, (4) mental health issues, and (5) financial insecurity/unemployment/lack of job opportunities. Notably, although COVID-19 was the most commonly noted issue to take action on, less than half of respondents endorsed it as an issue. These survey results were largely in line with the concerns most mentioned in interviews and focus groups, as described above.

*Key Themes and Conclusions*

Through a review of the secondary social, economic, and epidemiological data, a community survey, and discussions with community residents and stakeholders, this assessment report examined the current health status of the Woburn service area during an unprecedented time given the COVID-19 pandemic and the national movement for racial justice. Several overarching themes emerged from this synthesis:

- There are **many assets** in the Woburn service area, including high-quality schools, access to parks and green space, access to medical services, and overall **social cohesion and community engagement**.

[9] Massachusetts Department of Public Health, Registry of Vital Records and Statistics, 2015.

- **COVID-19** remains a major concern, along with its impact on local economies, financial security, child development, social isolation of seniors, and overall mental health of community members.

- While the Woburn service area overall is affluent, some communities within the area face **unemployment and financial insecurity**, especially in the context of the economic impact of the COVID-19 pandemic.

> *"There have been quick band-aids put in place. These have alleviated the immediate problem, but we're going to see worse impacts that haven't hit yet. The effect on folks living too close to the edge will be great."*
> – Key informant interviewee

- The COVID-19 pandemic has exacerbated **pre-existing inequities in income and wealth** in the area. Increased use of food pantries, social services to support housing costs, and financial support, were expected to increase further, and there is great concern for residents already living on the edge.

- **Housing affordability** was identified as a pressing concern, particularly for seniors, racial/ethnic minorities, low-income immigrants, and young families.

- **Transportation** was a concern for some communities, particularly for certain populations including seniors and public housing residents.

- Some community members have experienced or recognized discrimination in their communities and prioritized **addressing racial injustice**.

- **Mental health** was a top concern among many community residents, especially in the context of COVID-19.

- **Alcohol and substance use** were concerns, particularly for residents with less than a high school education.

- Social isolation, difficulty in accessing services, and mental health were pressing concerns for **older adults**, particularly in the context of COVID-19.

- While **access to medical care** was seen as a strength of the area overall, there were concerns related to continuity of health care with other social services, the high cost of health care, and lack of culturally and linguistically competent mental health services.

**Priority Needs of the Community**

*Community Prioritization Meeting*

Data and themes from the CHNA report were presented to service area residents and stakeholders at a virtual community prioritization meeting in September 2020. Prioritization allows organizations to target and align resources, leverage efforts, and focus on achievable strategies and goals for addressing priority needs. Through a systematic, engaged approach that is informed by data, priorities are identified through an iterative process to focus planning efforts. The following four criteria were used to guide prioritization discussions and voting processes:

- Concern
- Equity
- Effectiveness
- Feasibility

Meeting participants voted for up to three of the nine priorities identified from the data and based on the specific prioritization criteria. Voting identified Mental Health as the most commonly endorsed community priority (69%), followed by Coronavirus/COVID-19 (38%), Financial Insecurity/Unemployment (38%), and Issues Related to Older Adults (38%).

*Community Advisory Board Meeting*

The goal of this meeting was for CAB members to review the CHNA findings for the service area and amalgamate that information with the input provided from the community prioritization meeting, to refine and narrow the list of priorities in alignment with the social determinants of health. To determine priorities for the CHNA, CAB members were asked to consider the same prioritization criteria (Concern, Equity, Effectiveness, Feasibility) that were used by the community members during the remote prioritization meeting and come to a consensus about priorities for future action. Ultimately, the CAB agreed on the following priorities to consider for future action:

- Coronavirus/ COVID-19 *(specifically related to testing, transmission, disease mitigation, etc.)*
- Systemic Racism and Racial Injustice
- Behavioral Health *(inclusive of mental health and substance use)*
- Issues related to Older Adults

# Mass General Brigham
# Partners Ambulatory Care - Woburn Service Area Community Health Needs Assessment

## INTRODUCTION

Mass General Brigham (formerly Partners HealthCare, 'the System') is a not-for-profit, integrated health care system that was formed in 1994 by an affiliation between The Brigham Medical Center, Inc. (now known as Brigham Health) and The Massachusetts General Hospital MGH). Mass General Brigham currently operates two tertiary hospitals, six community acute care hospitals, and one acute care specialty hospital in Massachusetts; one community acute care hospital in Southern New Hampshire; one facility providing inpatient and outpatient mental health services; and three facilities providing inpatient and outpatient services in rehabilitation medicine and long-term care. Mass General Brigham also operates physician organizations and practices, a home health agency, nursing homes and a graduate level program for health professionals. Mass General Brigham is a non-university-based nonprofit private medical research enterprise and its academic medical centers are principal teaching affiliates of the medical and dental schools of Harvard University. Mass General Brigham provides its services to patients primarily from the Greater Boston area and eastern Massachusetts, as well as New England and beyond. Additionally, Mass General Brigham operates a licensed, not-for-profit managed care organization that provides health insurance products to the MassHealth Program (Medicaid), ConnectorCare (a series of health insurance plans for adults who meet income and other eligibility requirements) and commercial populations.

To fulfill Mass General Brigham's four-part mission of patient care; research education; and community, the organization has affirmed a system-wide strategy that is grounded in the excellence of Mass General Brigham's two academic medical centers, focused on improved patient outcomes and experience, and supported by its historical and ongoing commitment to digital health and data analytics; population health; ambulatory care; and insurance risk management. Implementation of this strategy relies on a series of synergistic priorities that include:

i. improving health outcomes across the full continuum of care with an emphasis on the development by Mass General Brigham's academic medical centers of multidisciplinary centers of excellence for tertiary and quaternary care;

ii. enhancing the patient experience, particularly for primary care and behavioral health care, by developing community-based health care settings that improve access and ease of navigation for patients;

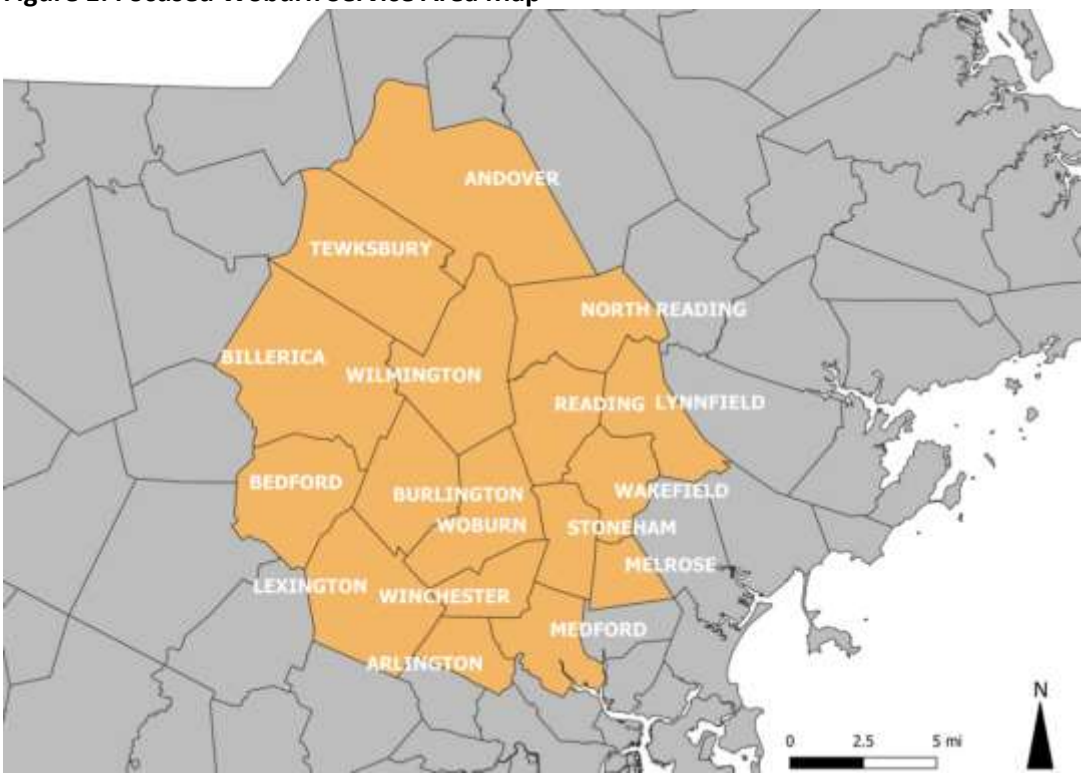
iii. reducing the total cost of health care by developing delivery models that focus on value while simultaneously improving outcomes; and

iv. investing in research and innovations that meaningfully improve the diagnosis and treatment of all forms of human illness.

Developing community-based care centers that offer primary and behavioral health care, as well as specialty and surgical services meet the second component of Mass General Brigham's mission.

Accordingly, the System is seeking ways to expand care options in more suburban settings, including in the Woburn area. This potential expansion will require Mass General Brigham to fully understand the range of needs (related to health and the social determinants of health) within the Woburn service area (including Andover, Arlington, Bedford, Billerica, Burlington, Lexington, Lynnfield, Medford, Melrose, North Reading, Reading, Stoneham, Tewksbury, Wakefield, Wilmington, Winchester, and Woburn). The Woburn service area is shown in Figure 1.

**Figure 1. Focused Woburn Service Area Map**




**Purpose and Scope of the Community Health Needs Assessment**

This community health needs assessment (CHNA or Assessment) aims to gain a greater understanding of the issues that community residents face, how those issues are currently being addressed, and where there are gaps and opportunities to address these issues in the future. This report presents findings from the 2020 Woburn service area needs assessment processes, which were conducted between March-August 2020, and informed discussions about key community issues and concerns in the service area.

The specific goals of this CHNA are to:

- Systematically identify the health-related needs, strengths, and resources of the community to inform future planning;
- Understand the current health status of the service area overall and its sub-populations within their social context; and
- Engage the community to help determine community needs and social determinant of health needs.

Priority social determinants of health areas include the social environment, built environment, employment, education, housing, and violence and trauma.

## CONTEXT FOR THE COMMUNITY HEALTH NEEDS ASSESSMENT

This CHNA was conducted during an unprecedented time, given the COVID-19 pandemic and the national movement for racial justice. This context had a significant impact on the assessment approach and content.

**COVID-19 Pandemic**

The novel coronavirus (COVID-19) pandemic coincided with the activities of this assessment and impacted both the CHNA data collection process and topics, as well as concerns that participants put forth during discussions in focus groups and interviews. On February 1, 2020, the first confirmed case of COVID-19 in Massachusetts was announced, and on March 15, 2020, the Governor of Massachusetts issued an emergency order announcing emergency actions to address COVID-19 including school closures, business closures, and limitations on gatherings. Data collection planning (e.g., finalizing methodology, developing data collection instruments) occurred at the beginning of this state-wide shutdown. Logistically, the pandemic impacted the feasibility of convening in-person groups for the CHNA (advisory bodies, focus groups, etc.) and the availability of key stakeholders and community members to participate in CHNA activities, given their focus on addressing immediate needs. Consequently, all data collection was shifted to a virtual setting (e.g., telephone or video focus groups and an online survey), and engagement of residents and stakeholders was challenging. (A more detailed description of this engagement process may be found in the Methods section, and COVID-19 data specific to this service area is provided in the Infectious and Communicable Disease section of this report.)

Substantively, during the CHNA process, COVID-19 was and remains a primary health concern for communities and also has exacerbated underlying inequities and social needs. The pandemic brought to light both the capabilities and gaps in the healthcare system, the public health infrastructure, and social service networks. In this context, an assessment of the community's strengths and needs, and in particular the social determinants of health, is both critically important and logistically challenging. Where possible, CHNA participants were asked to reflect on health and social issues beyond those directly related to COVID-19, yet the pandemic's short-term and long-term impacts remained at the forefront of many conversations. This CHNA should be considered a snapshot in time; consistent with public health best practices, the community can continue to be engaged to understand how identified issues may evolve and what new issues or concerns may emerge over time.

**National Movement for Racial Justice**

A wave of national protests for racial equity – sparked by the killing of George Floyd, Ahmaud Arbery, Breonna Taylor, Tony McDade, and many others – also coincided with the timeline of the CHNA. As part of a movement for racial justice, national attention was focused on how racism is embedded in every system and structure of our country, including housing, education, employment, and healthcare. This context impacted the content of the CHNA, including the design of data collection instruments and the input that was shared during interviews and focus groups and through community survey responses. While racism and oppression have persisted in this country for over 400 years, it is important to acknowledge the recent focus on these issues in late spring 2020 in the form of protests and dialogues, locally and nationally, as context for this assessment.

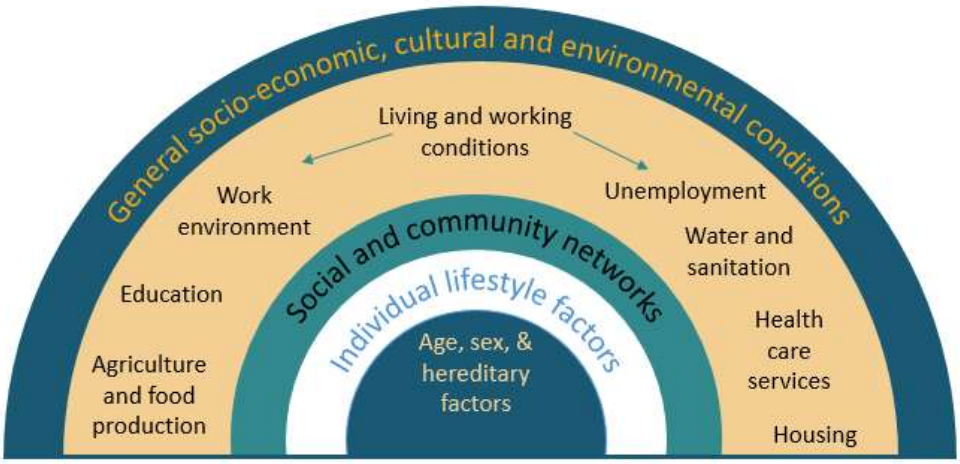
## METHODS

The following section details how data for the CHNA were compiled and analyzed, as well as the broader lens used to guide this process.

**Social Determinants of Health Framework**
While this CHNA aimed to be comprehensive, its data collection approach focused on the social and economic upstream issues that affect a community's health.

*Upstream Approaches to Health*
Having a healthy population is about more than delivering quality health care to residents. Where a person lives, learns, works, and plays all have an enormous impact on health. Health is not only affected by people's genes and lifestyle behaviors, but by upstream factors such as employment status, quality of housing stock, and economic policies. Figure 2 provides a visual representation of these relationships, demonstrating how individual lifestyle factors, which are closest to health outcomes, are influenced by more upstream factors, such as employment status and educational opportunities.

**Figure 2. Social Determinants of Health Framework**




SOURCE: World Health Organization, Commission on the Social Determinants of Health, Towards a Conceptual Framework for Analysis and Action on the Social Determinants of Health, 2005.

The data to which we have access is often a snapshot in time, but the people represented by that data have lived their lives in ways that are constrained and enabled by economic circumstances, social context, and government policies. To this end, much of this report is dedicated to discussing the social, economic, and community context in which residents live. We hope to understand the current health status of residents and the multitude of factors that influence health to enable the identification of priorities for community health planning, existing strengths and assets upon which to build, and areas for further collaboration and coordination.

*Health Equity Lens*
The influences of race, ethnicity, income, and geography on health patterns are often intertwined. In the United States, social, economic, and political processes ascribe social status based on race and ethnicity, which may influence opportunities for educational and occupational advancement and housing options, two factors that profoundly affect health. Institutional racism, economic inequality, discriminatory

policies, and historical oppression of specific groups are a few of the factors that drive health inequities in the U.S.

In the present report, health patterns for the Woburn CHNA service area are described overall, as well as areas of need for particular population groups. Understanding factors that contribute to health patterns for these populations can facilitate the identification of data-informed and evidence-based strategies to provide all residents with the opportunity to live a healthy life.

**Approach and Community Engagement Process**

The CHNA aimed to engage agencies, organizations, and community residents through different avenues. The CHNA process was guided by a regional Community Advisory Board (CAB). Mass General Brigham hired Health Resources in Action (HRiA), a non-profit public health organization, as a consultant partner to facilitate the CHNA process, collect and analyze data, and develop the CHNA report.

*Community Engagement*

Community engagement is described further below under the primary data collection methods. It should be noted that, due to the COVID-19 pandemic, the community engagement for this CHNA occurred virtually. Additionally, while the CHNA aimed to engage a cross-section of individuals and to be inclusive of traditionally under-represented communities, due to the pandemic and competing priorities, community-based organizations had limited time to assist with outreach and community members had constraints on their own time for participation. Nevertheless, by engaging the community through multiple methods and in multiple languages, this CHNA aims to describe community strengths and needs during this unique time.

*Community Advisory Board Engagement*

As noted, a CAB provided oversight, input, and support throughout the CHNA process. The CAB was regional in focus and oversaw the work for this CHNA, as well as two other co-occurring CHNAs (taking place in the greater Westborough area and greater Westwood area). CAB members included representation from both regional groups and residents of the primary service area. The fifteen CAB members represent municipalities; the education, housing, social service, planning and transportation sectors; the private sector; community health centers; and community-based organizations. See APPENDIX A: COMMUNITY ADVISORY BOARD MEMBERS for a full list of CAB members.

The CAB was engaged throughout the CHNA process. This engagement included meeting three times (in March to provide input on the CHNA methods and timeline; in June to hear updates on the CHNA process and to discuss virtual engagement, survey dissemination, and community outreach; and in September to discuss identified priorities) and providing regular input through email correspondence and telephonic discussions. CAB input included advising on key informant interviewees and focus group segments, identifying local data sources and communication outlets for the CHNA community health survey, and providing connections to community organizations to support data collection and outreach efforts. Additionally, the members of the CAB participated in the community prioritization meetings (see below for more information).

**Secondary Data: Review of Existing Secondary Data**
Secondary data are data that have already been collected for another purpose. Examining secondary data helps us to understand trends, provide a baseline, and identify differences by sub-groups. It also helps in guiding where primary data collection can dive deeper or fill in gaps.

Secondary data, including information and statistics, for this CHNA were drawn from a variety of sources, including the U.S. Census American Community Survey (ACS), the U.S. Department of Labor Bureau of Labor Statistics, the Federal Bureau of Investigation Uniform Crime Reports, the MA Department of Elementary and Secondary Education, the MA Center for Health Information and Analysis (CHIA) database, and a number of other agencies and organizations. Secondary data were analyzed by the agencies that collected or received the data. Data are typically presented as frequencies (%) or rates per 100,000 population. It should be noted that when the narrative makes comparisons between towns or with MA overall, these are lay comparisons and *not* statistically significant differences.

It should also be noted that for most social and economic indicators, the U.S. Census American Community Survey (ACS) 5-year (2014-2018) aggregate datasets were used over the one-year datasets, since many of the towns in the service area are smaller in population size. Since the ACS uses a probability sampling technique, using the five-year aggregate dataset over the one-year data provides a larger sample size and more precision in its estimates.

**Primary Data Collection**
Primary data are new data collected specifically for the purpose of the CHNA. Goals of the CHNA primary data were: 1) to determine perceptions of the strengths and needs within the service area, and identify sub-populations most affected; 2) to explore how these issues can be addressed in the future; and 3) to identify the gaps, challenges, and opportunities for addressing community needs more effectively. Primary data were collected using three different methods for this CHNA: key informant interviews, focus groups, and a community survey.

*Qualitative Discussion: Key Informant Interviews and Focus Groups*

*Key Informant Interviews*
A total of 9 key informant interviews were completed with 10 individuals by phone. Interviews were 45-60-minute semi-structured discussions that engaged institutional, organizational, and community leaders as well as front-line staff across sectors. Discussions explored interviewees' experiences of addressing community needs and priorities for future alignment, coordination, and expansion of services, initiatives, and policies. Interviewees were asked to share their perceptions of needs both prior to and following the start of the COVID-19 pandemic. Sectors represented in these interviews included: housing services, immigrant and refugee services, senior services, law enforcement, the faith community, and mental health. See Appendix B for the list of key informant interviewees and Appendix C for the key informant interview guide.

*Focus Groups*
The proposed focus group methodology for this CHNA changed during the pandemic. Rather than conducting traditional in-person focus groups of approximately eight participants each, more focus groups were conducted than originally planned, but with fewer participants in each discussion and virtually. Due to the COVID-19 pandemic, focus groups were conducted via a video conference platform or by telephone, to accommodate participants who did not have reliable internet access and/or were not familiar with video conferencing technology. Focus groups were intentionally limited in regard to the

number of participants to facilitate conversation and full participation in a virtual environment, especially since the moderator could not pick up on non-verbal cues as easily.

A total of 19 community residents participated in 8 virtual focus groups (telephone or video) conducted with specific populations of interest: seniors (ages 65+), parents of school-age children, residents living in public housing, and community college students. Focus groups were up to 60-minute semi-structured conversations and aimed to delve deeply into the community's needs, strengths, and opportunities for the future and to gather feedback on priorities for action. Focus group participants were asked to share their perceptions of needs both prior to and following the start of the COVID-19 pandemic. Please see APPENDIX D: FOCUS GROUP GUIDE for the focus group facilitator's guide.

Throughout this report, service area residents and key stakeholders who participated in key informant interviews and focus groups are referred to as study 'participants.'

*Analyses*

The collected qualitative information was coded and then analyzed thematically by data analysts for main categories and sub-themes. Analysts identified key themes that emerged across all groups and interviews as well as the unique issues that were noted for specific populations. Throughout the qualitative findings included in this report, the term "participants" is used to refer to key informant interview and focus group participants. Unique issues that emerged among a group of participants are specified as such. Frequency and intensity of discussions on a specific topic were key indicators used for extracting main themes. While differences between towns and neighborhoods are noted where appropriate, analyses emphasized findings common across the Woburn service area. Selected paraphrased quotes—without personal identifying information—are presented in the narrative of this report to further illustrate points within topic areas.

*Community Priorities Survey*

A community priorities survey was developed and administered over six weeks from early July through mid-August 2020. The survey focused on identifying issues that had a direct impact on survey respondents, perceptions of community strengths, and important issues for community action. Given the unprecedented time, survey respondents were asked to identify current issues and concerns, as well as issues and concerns that were present around the holiday season (approximately six months ago prior to the start of the COVID-19 pandemic in the United States). The survey was administered online in four languages (English, Spanish, Portuguese, and Chinese). Please see APPENDIX E: SURVEY INSTRUMENT for the English-language version of the survey.

Extensive outreach was conducted with assistance from CAB members and organizations and through social media outreach to obtain survey responses. The survey was disseminated via email to known distribution lists of residents, as well as to individuals who attended earlier community engagement sessions for this process. Several paid Facebook ads were displayed in targeted geographic locations within the service area in all four languages to promote the survey. Additionally, several postings were run via Twitter, LinkedIn, and Facebook. Email dissemination outreach was also sent to over 50 different community-based organizations, which included local food pantries, immigrant service agencies, community centers, libraries, local news outlets, and other groups.

The final sample of the community priorities survey comprised 552 respondents who were residents of the Woburn service area. APPENDIX F: ADDITIONAL SURVEY DATA provides a table with the demographic composition of survey respondents. Respondents to the Partners Ambulatory Care (PAC)

Woburn Area CHNA survey were predominantly non-Hispanic White, female, heterosexual, and with high socioeconomic status. Almost 5% reported primarily speaking a language other than English at home. About 48% were employed full-time. Throughout this report, service area residents who participated in Community Priorities Survey are referred to as survey 'respondents.'

*Analyses*

Frequencies were calculated for each survey question. Not all respondents answered every question; therefore, denominators in analyses reflect the number of total responses for each question, which varied by question. Additionally, denominators excluded respondents who selected "prefer not to answer/don't know." For questions that allowed for multiple responses (i.e., questions that asked respondents to check all that apply), the denominator was out of the total number of respondents who selected at least one response option for the question. Stratified analyses were conducted for select questions by specific sub-groups that had large enough sample sizes (at least 30 respondents).

*Data Limitations*

As with all data collection efforts, there are several limitations that should be acknowledged. Numerous secondary data sources were drawn upon in creating this report and each source has its own set of limitations. Overall, it should be noted that different data sources use different ways of measuring similar variables (e.g., different questions to identify race/ethnicity). There may be a time lag for many data sources from the time of data collection to data availability. Some data are not available by specific population groups (e.g., race/ethnicity) or at a more granular geographic level (e.g., town or municipality) due to small sub-sample sizes. In some cases, data from multiple years may have been aggregated to allow for data estimates at a more granular level or among specific groups.

With many organizations and residents focused on the pandemic and its effects, community engagement and timely response to data collection requests were challenging. While extensive outreach was conducted, the overall response was not as large as expected based on previous assessment studies. Additionally, with its online administration method, the community survey used a convenience sample. Since a convenience sample is a type of non-probability sampling, there is potential selection bias in who participated or was asked to participate in the survey. Due to this potential bias, results cannot necessarily be generalized to the larger population. Similarly, while interviews and focus groups provide valuable insights and important in-depth context, due to their non-random sampling methods and small sample sizes, results are not necessarily generalizable. Due to COVID-19, focus groups and interviews were also conducted virtually, and therefore, while both video conference and telephonic options were offered, some residents who lack reliable access to the internet and/or cell phones may have experienced difficulty participating. Lastly, for the primary data collection, it should be noted that while efforts were made to engage residents through qualitative and survey data collection, given the context of the pandemic, the capacity of community organizations to assist with outreach and community members to participate was limited. This report should be considered a snapshot of an unprecedented time, and the findings in this report can be built upon through future data collection efforts.

## POPULATION CHARACTERISTICS

**Population Overview**

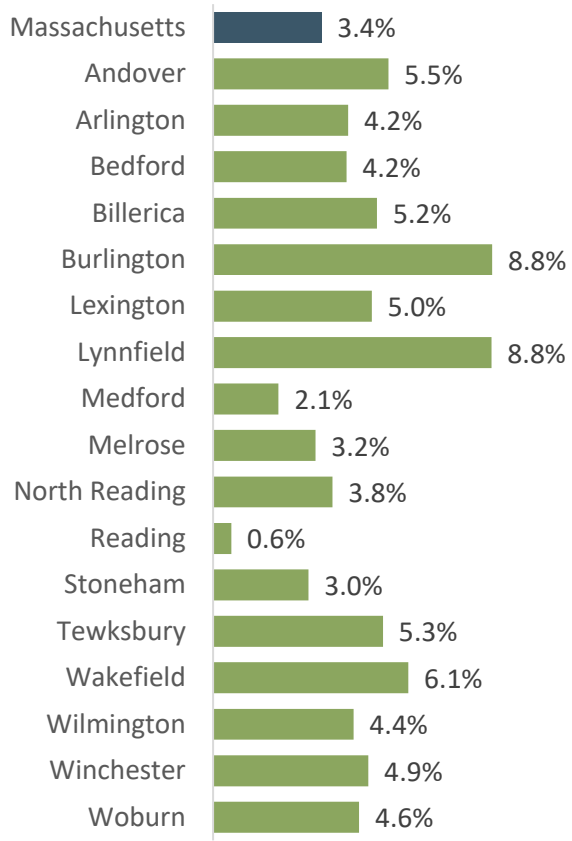
The service area for this CHNA comprises a total population of 504,680 residents. The area around Woburn is divided into towns with populations ranging from almost 12,000 residents in Lynnfield to over 56,000 in Medford (Table 1). By population size, the largest towns are Medford, Arlington, Billerica, and Woburn. Similar to the Commonwealth overall, all towns in this region experienced population growth between 2009-2013 and 2014-2018. The largest population growth occurred in Burlington and Lynnfield, both with 8.8% (Figure 3).

**Table 1. Total Population, in Massachusetts and by Town, 2009-2013 and 2014-2018**

| | 2007-2013 | 2014-2018 |
|---|---|---|
| Massachusetts | 6,605,058 | 6,830,193 |
| Andover | 33,746 | 35,609 |
| Arlington | 43,308 | 45,147 |
| Bedford | 13,557 | 14,126 |
| Billerica | 40,932 | 43,044 |
| Burlington | 24,875 | 27,059 |
| Lexington | 31,886 | 33,480 |
| Lynnfield | 11,812 | 12,847 |
| Medford | 56,607 | 57,771 |
| Melrose | 27,239 | 28,116 |
| North Reading | 15,076 | 15,642 |
| Reading | 24,957 | 25,100 |
| Stoneham | 21,498 | 22,144 |
| Tewksbury | 29,429 | 31,002 |
| Wakefield | 25,400 | 26,960 |
| Wilmington | 22,656 | 23,658 |
| Winchester | 21,621 | 22,677 |
| Woburn | 38,528 | 40,298 |

DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2009-2013 and 2014-2018.

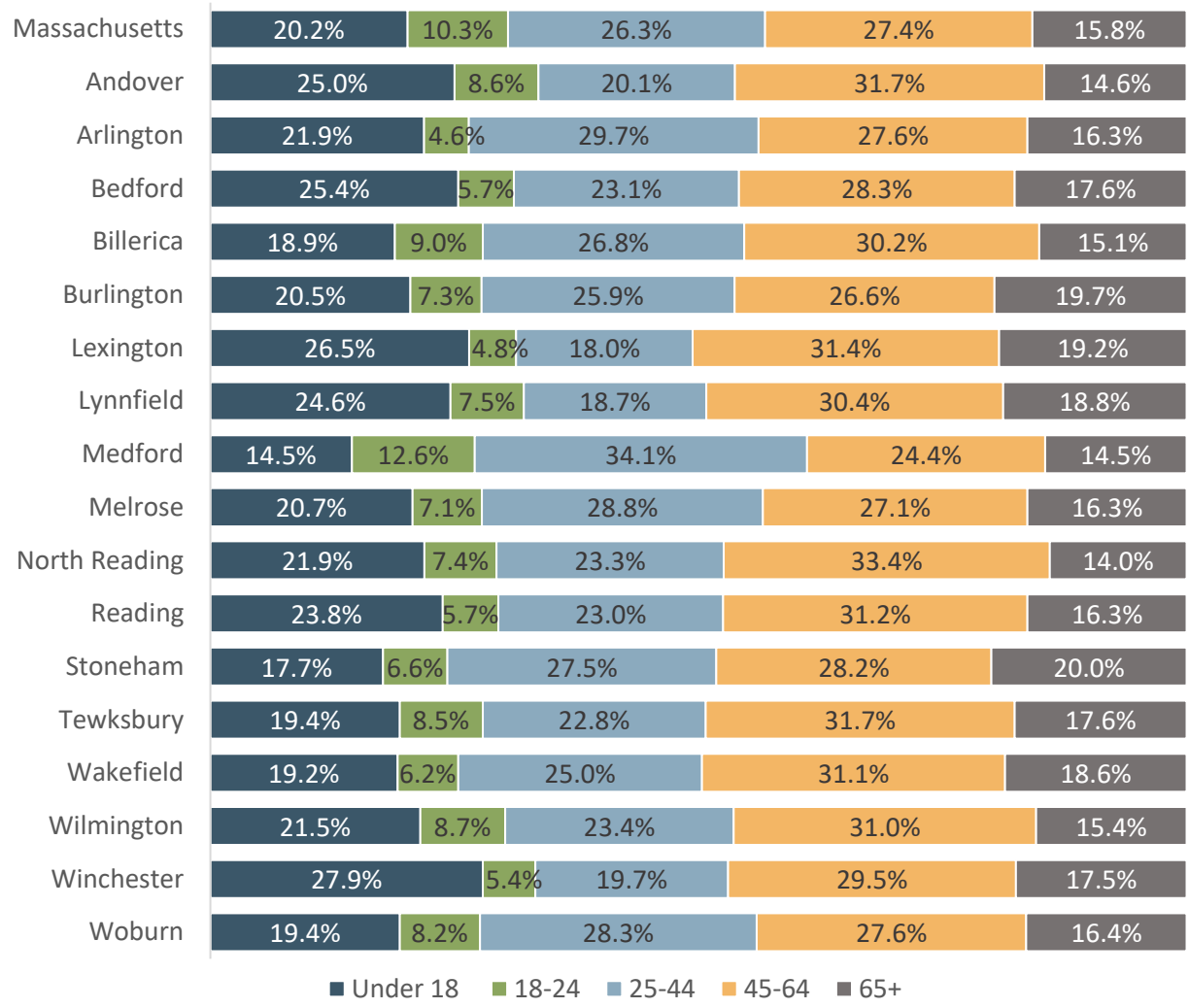
**Figure 3. Percent Change in Population, in Massachusetts and by Town, 2009-2013 and 2014-2018**




DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2009-2013 and 2014-2018.

Overall, most towns in the service area had a greater proportion of both younger and older residents than Massachusetts (residents under 18 years old and 65+ years old). In 2014-2018, about one-quarter of the population of Andover, Bedford, Lexington, and Winchester was under the age of 18 (Figure 4). The largest populations over age 65 were in Stoneham (20.0%), Burlington (19.7%), and Lexington (19.2%).

**Figure 4. Age Distribution, in Massachusetts and by Town, 2014-2018**




DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2014-2018.

**Racial, Ethnic, and Language Diversity**

Understanding the racial, ethnic, cultural and language profiles of residents within the Woburn service area assists in providing context to data about health status and the structural, discriminatory, and social factors that contribute to health inequities. Focus group members and interviewees described the Woburn service area as racially and ethnically diverse, which they saw as a positive attribute. Census data reveal that the racial and ethnic population distributions within the Woburn service area varied by town. While all towns have a majority White population, some areas have greater proportions of Asian, Black, and Latino residents. For example, Lexington (29.2%), Burlington (16.3%), and Bedford (14.7%) had the largest non-Hispanic Asian populations; while Medford (9.3%) and Woburn (6.5%) had the

largest non-Hispanic Black populations (Table 2). Moreover, similar to what is occurring nationally, numerous participants shared that conversations about racial equity were occurring in their communities, which they reported both united residents and highlighted differences.

**Table 2. Racial and Ethnic Distribution, in Massachusetts and by Town, 2014-2018**

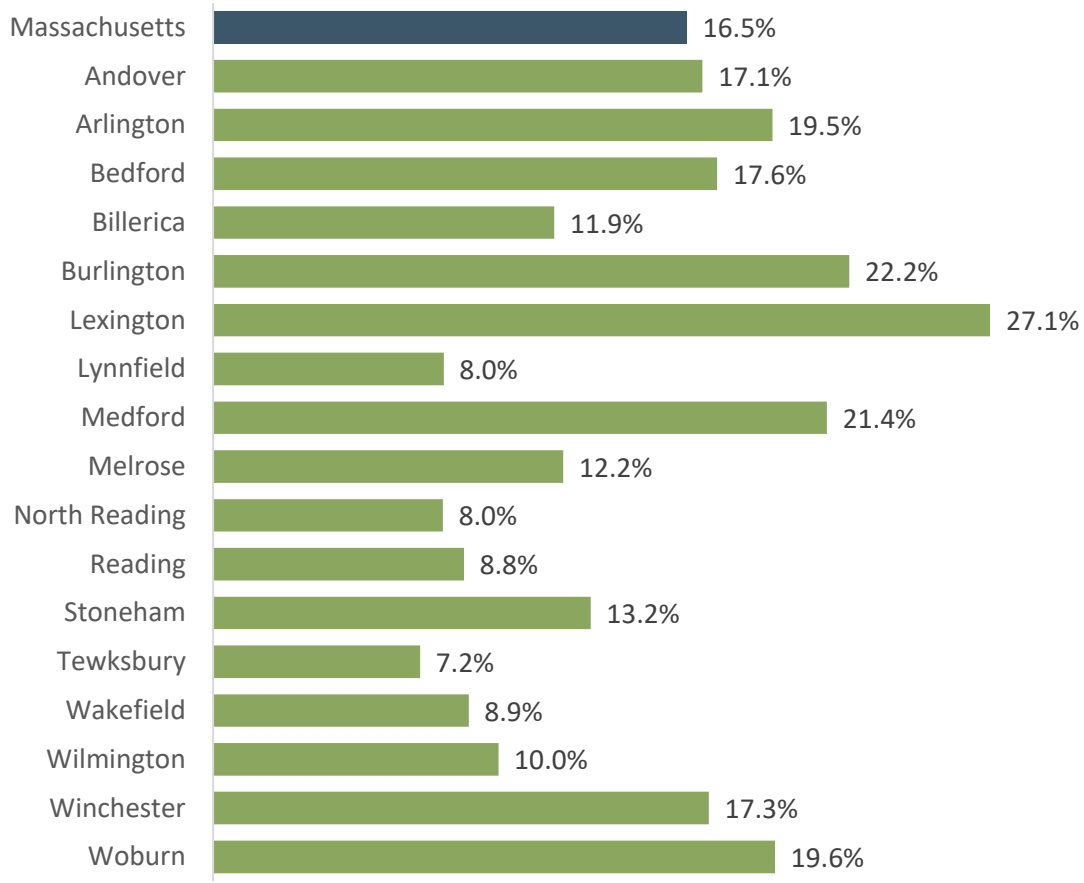
| | Asian, Non-Hispanic | Black, Non-Hispanic | Hispanic/ Latino | White, Non-Hispanic | Other, Non-Hispanic |
|---|---|---|---|---|---|
| Massachusetts | 6.4% | 6.8% | 11.6% | 72.2% | 3.0% |
| Andover | 13.9% | 2.7% | 4.4% | 77.2% | 1.8% |
| Arlington | 11.8% | 2.6% | 5.1% | 76.5% | 4.0% |
| Bedford | 14.7% | 3.6% | 3.6% | 76.1% | 2.1% |
| Billerica | 7.0% | 3.3% | 4.0% | 83.9% | 1.8% |
| Burlington | 16.3% | 4.9% | 2.2% | 73.6% | 2.9% |
| Lexington | 29.2% | 0.9% | 2.0% | 64.2% | 3.7% |
| Lynnfield | 4.9% | 1.2% | 2.3% | 89.5% | 2.1% |
| Medford | 10.6% | 9.3% | 5.3% | 71.5% | 3.4% |
| Melrose | 5.9% | 2.6% | 3.7% | 85.9% | 1.8% |
| North Reading | 4.5% | 1.3% | 1.4% | 89.8% | 2.9% |
| Reading | 4.7% | 0.4% | 2.8% | 91.0% | 1.1% |
| Stoneham | 3.3% | 2.6% | 3.7% | 89.0% | 1.4% |
| Tewksbury | 3.4% | 1.5% | 1.6% | 91.0% | 2.4% |
| Wakefield | 2.2% | 1.3% | 4.7% | 90.4% | 1.4% |
| Wilmington | 4.9% | 3.3% | 1.6% | 88.8% | 1.3% |
| Winchester | 12.7% | 0.3% | 2.1% | 81.7% | 3.2% |
| Woburn | 7.9% | 6.5% | 4.9% | 77.4% | 3.3% |

DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2014-2018.
NOTE: Hispanic/Latino includes residents who identify as Hispanic/Latino regardless of race and racial categories. Other includes non-Hispanic/Latino residents who identify as American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, Some other race, and Two or more races.

*Country of Origin*

In 2014-2018 within Massachusetts, 16.5% of the population was born outside of the United States (Figure 5). Within the Woburn service area, the proportion of residents that were born outside of the United States ranged from 7.2% in Tewksbury to 27.1% in Lexington. Towns with the highest proportion of foreign-born residents within the Woburn service area include Lexington (27.1%), Burlington (22.2%), Medford (21.4%), Woburn (19.6%), and Arlington (19.5%). In Lexington and Arlington, the highest proportion of individuals born outside the United States were born in China (inclusive of Hong Kong and Taiwan) (30.9% and 13.3%, respectively). In Burlington and Woburn, the highest proportion of the foreign-born population was born in India (37.3% and 18.1%, respectively). In Medford, the highest proportion of foreign-born residents were from Haiti (15.8%).

**Figure 5. Percent Foreign Born Population, in Massachusetts and by Town, 2014-2018**



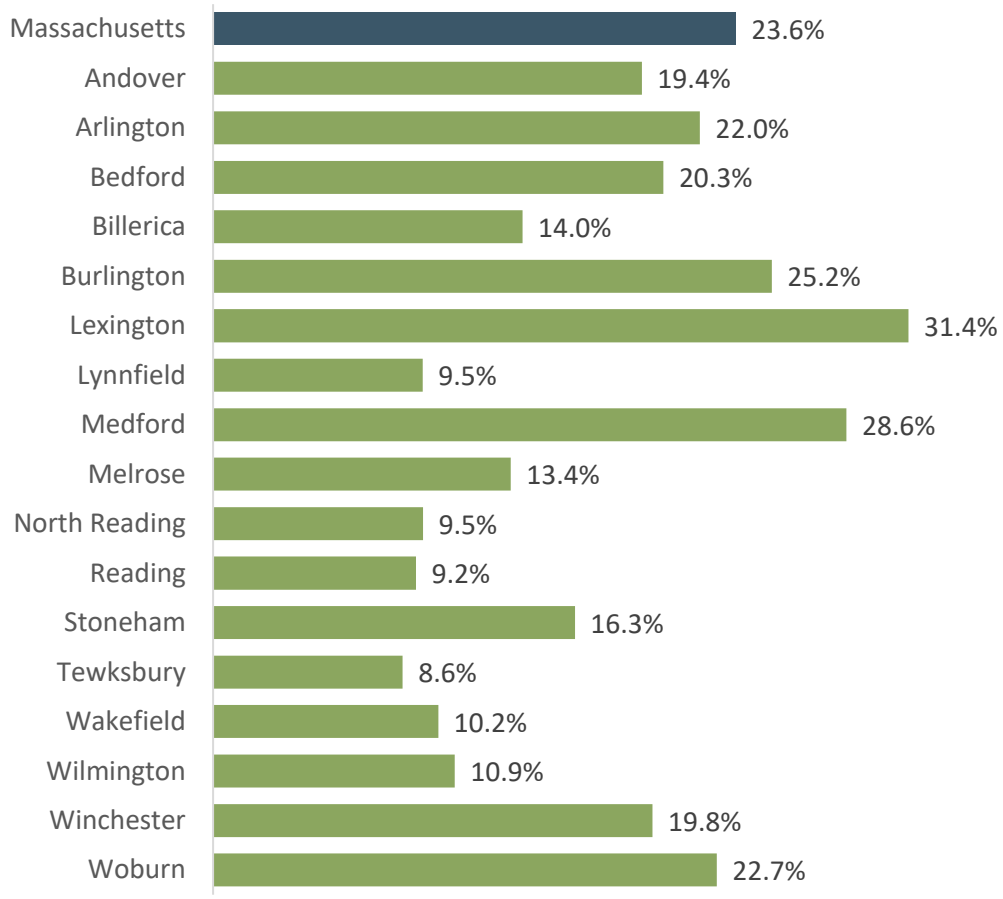

DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2014-2018.

*Language*

Languages spoken by community residents represent the Woburn service area's cultural diversity. However, having a primary language other than English may also serve as a potential barrier to receiving adequate health and social services. Among Massachusetts residents over age five, 23.6% reported speaking a language other than English at home in 2014-2018 (Figure 6). Of towns in the Woburn service area, Burlington, Medford, and Lexington all exceeded the overall state prevalence with over one-quarter of residents speaking a language other than English at home. The most commonly spoken languages among these residents were Spanish; the Census category of "Other Indo-European

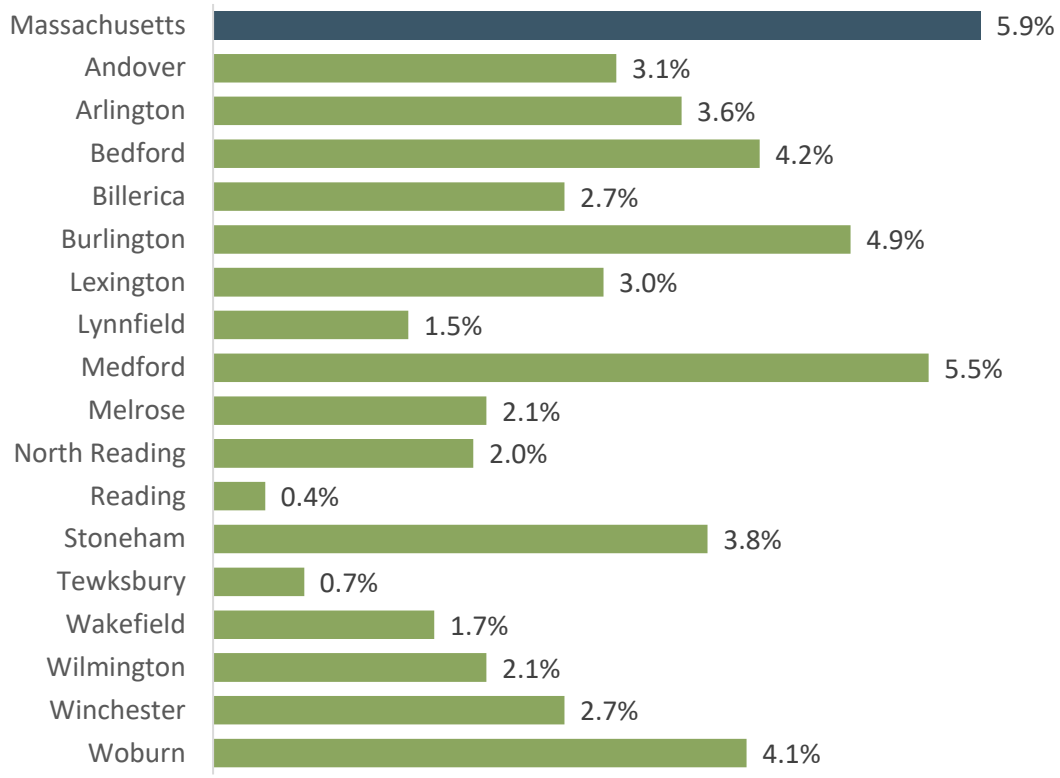
languages" (likely Portuguese); and Chinese. In contrast, towns in the Woburn service area had relatively low prevalence of limited English-speaking at home, with a range of 0.4% in Reading to 5.5% in Medford (Figure 7).

**Figure 6. Percent Population 5 Years and Over Who Speak a Language Other Than English, in Massachusetts and by Town, 2014-2018**




DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2014-2018.

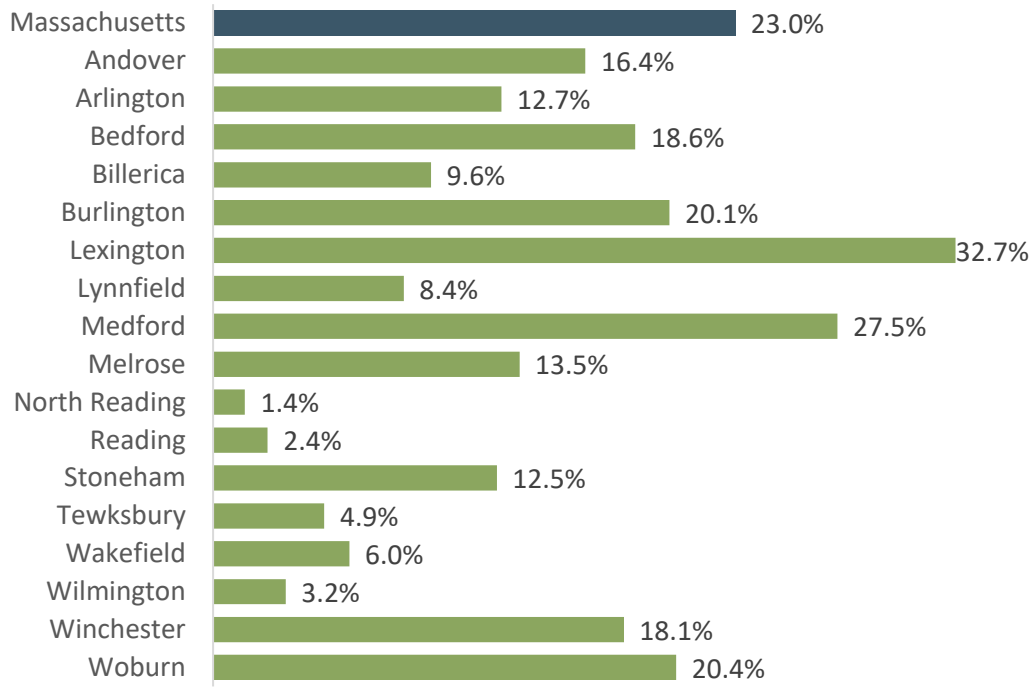
**Figure 7. Percent Households Limited English-Speaking, in Massachusetts and by Town, 2014-2018**




DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2014-2018.
NOTE: A limited English-speaking household is defined as one in which no member 14 years and over speaks only English or speaks English "very well."

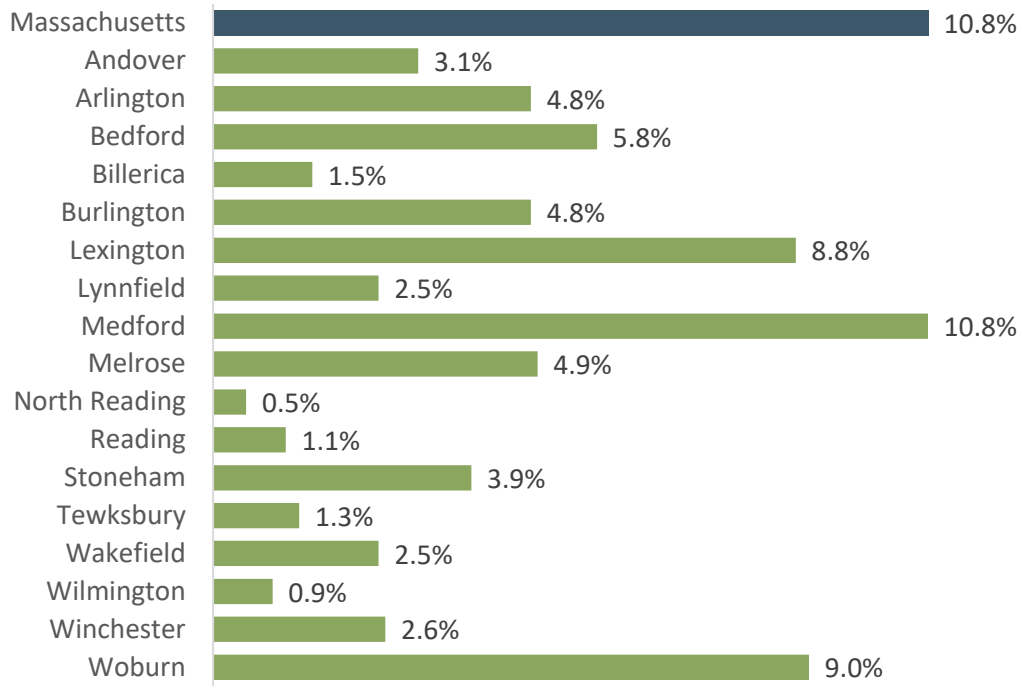
In 2020, almost one-third of public school students in Lexington and over one-quarter in Medford did not speak English as their first language (Figure 8). In Medford, 10.8% of public school students were enrolled in English language learning programs, with 9.0% in Woburn, and 8.8% in Lexington (Figure 9).

**Figure 8. Percent Public School Students whose First Language is Not English, in Massachusetts and by School District, 2020**




DATA SOURCE: Massachusetts Department of Elementary and Secondary Education, School and District Profiles, Selected Populations, 2020.
NOTE: Years represent school years (e.g., 2020 represents school year 2019-2020); First Language not English indicates the percent of enrollment whose first language is a language other than English.

**Figure 9. Percent Public School Students Enrolled English Language Learner, in Massachusetts and by School District, 2020**




DATA SOURCE: Massachusetts Department of Elementary and Secondary Education, School and District Profiles, Selected Populations, 2020.
NOTE: Years represent school years (e.g., 2020 represents school year 2019-2020); English Learners indicates the percent of enrolled students who are English learners, defined as a student whose first language is a language other than English who is unable to perform ordinary classroom work in English.

Interviewees working in social service organizations expressed concern for their clients who speak limited English, in particular immigrants and those seeking asylum. These residents, who already faced difficulties in the current political environment, have experienced additional challenges with COVID-19. Interviewees described anxiety and fear in these communities, as well as a reluctance to enroll in services that can help them meet basic needs. Limited English proficiency also is a barrier to employment, and interviewees noted a lack of employment opportunities for immigrants will likely exacerbate social determinant of health challenges within this population.

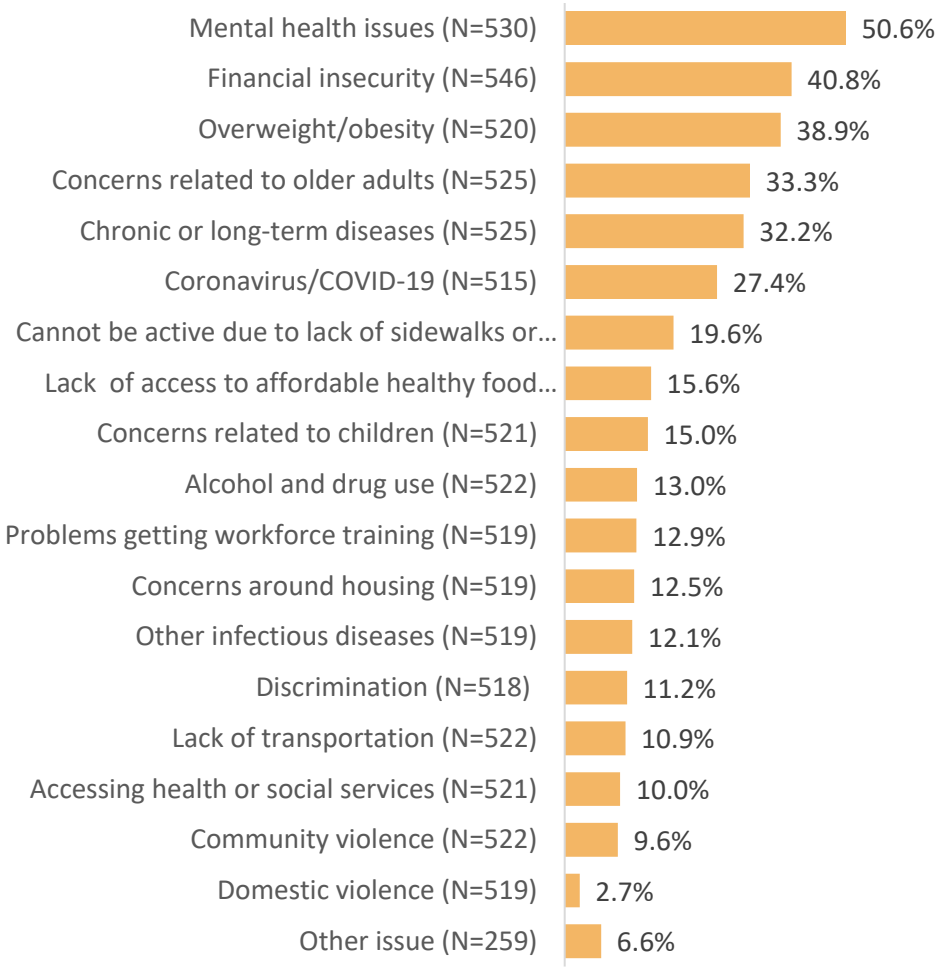
## COMMUNITY SOCIAL AND ECONOMIC ENVIRONMENT

**Community Perceptions of Need**

Woburn Community Priorities Survey respondents were asked about a series of issues or problems that affected them or their families currently and/or prior to the start of the coronavirus pandemic. The most common issues reported were mental health (50.6%), financial insecurity (40.8%), and overweight/obesity (38.9%) (Figure 10). Over one quarter of respondents reported their family was personally affected by COVID-19 and 11.2% reported being affected by some form of discrimination. When reviewing the two time periods (current and pre-pandemic), participants were more likely to indicate that issues such as financial insecurity, mental health, chronic conditions, and overweight/obesity affected them now but not six months ago (see APPENDIX F: ADDITIONAL SURVEY

DATA for a data table that provides data on the detailed responses from Woburn Community Priorities Survey respondents on whether they were impacted by the noted issues now, six months ago, or at both times.).

**Figure 10. Percent of CHNA Community Priorities Survey Respondents Reporting Being Affected Currently and/or 6 months ago by Issues, by Type of Issue, 2020**




NOTE: Question in the survey allowed for multiple responses; therefore, percentages may not add up to 100%.
DATA SOURCE: PAC CHNA Community Priorities Survey, 2020.

There was some variation by race/ethnicity in the top five issues that respondents reported affected them or their families over the past six months. Non-Hispanic Whites did not list discrimination as one of their top five concerns, while People of Color ranked it third (Figure 11). Overweight/obesity was more commonly endorsed by People of Color than Non-Hispanic Whites. It should be noted that racial/ethnic groups were categorized into these two groups due to small sample sizes among specific racial/ethnic groups (e.g. Latino, Black, and Asian respondents).

**Figure 11. Percent of CHNA Community Priorities Survey Respondents Reporting Being Affected Currently and/or 6 months ago by Issues, by Selected Demographics, 2020**

| | White, Non-Hispanic (N=415) | People of Color (POC) (N=49) |
|---|---|---|
| 1 | Mental health issues (51.0%) | Financial insecurity (59.2%) |
| 2 | Financial insecurity (39.5%) | Overweight/obesity (54.2%) |
| 3 | Overweight/obesity (36.3%) | Discrimination (51.1%) |
| 4 | Concerns related to older adults (34.0%) | Mental health issues (51.0%) |
| 5 | Chronic or long-term diseases (32.2%) | Chronic or long-term diseases (35.4%) (tied) |
| Tie | | Concerns related to older adults (35.4%) (tied) |

NOTE: Question in the survey allowed for multiple responses; therefore, percentages may not add up to 100%.
DATA SOURCE: PAC CHNA Community Priorities Survey, 2020.

Interviews and focus group discussions reflected overall agreement with these Woburn Community Priorities Survey results. Mental health issues, concerns related to older adults, and financial insecurity were all common themes. Chronic health conditions, including overweight/obesity were not commonly referenced in the qualitative data.

**Community Assets**

> *"I think in Medford there definitely is a sense of community. There's a sense of belonging to this place*." – Focus group participant

An understanding of community assets, including resources and services, can help identify strengths that may be leveraged or built upon to address community needs. Focus group members and interviewees reported that they enjoyed living in their communities, which they described as a mix of families, seniors, and young professionals. These participants valued the proximity of the Woburn service area to Boston but saw their communities as quiet and peaceful, which they appreciated. One parent focus group member described Medford as follows: *"I would say it's close to Boston, but still far enough outside that we have our own community and resources."* Participants frequently mentioned that their communities were family-oriented and *"a great place to raise kids."* They appreciated the many amenities available in their communities including shopping as well as public services such as libraries, parks, good schools, programs for children and youth, and active senior centers.

Focus group members and interviewees consistently mentioned strong social ties as a key community asset. They described their neighbors as friendly and helpful. As one interviewee from Woburn stated, *"There is an incredible sense of community here. It's an incredibly close-knit city."* Participants shared several examples of this community cohesiveness including active Facebook groups that provide support to parents of young children, neighbors who check in on older residents, a community "Wine a Neighbor" gifting event, and high levels of volunteering.

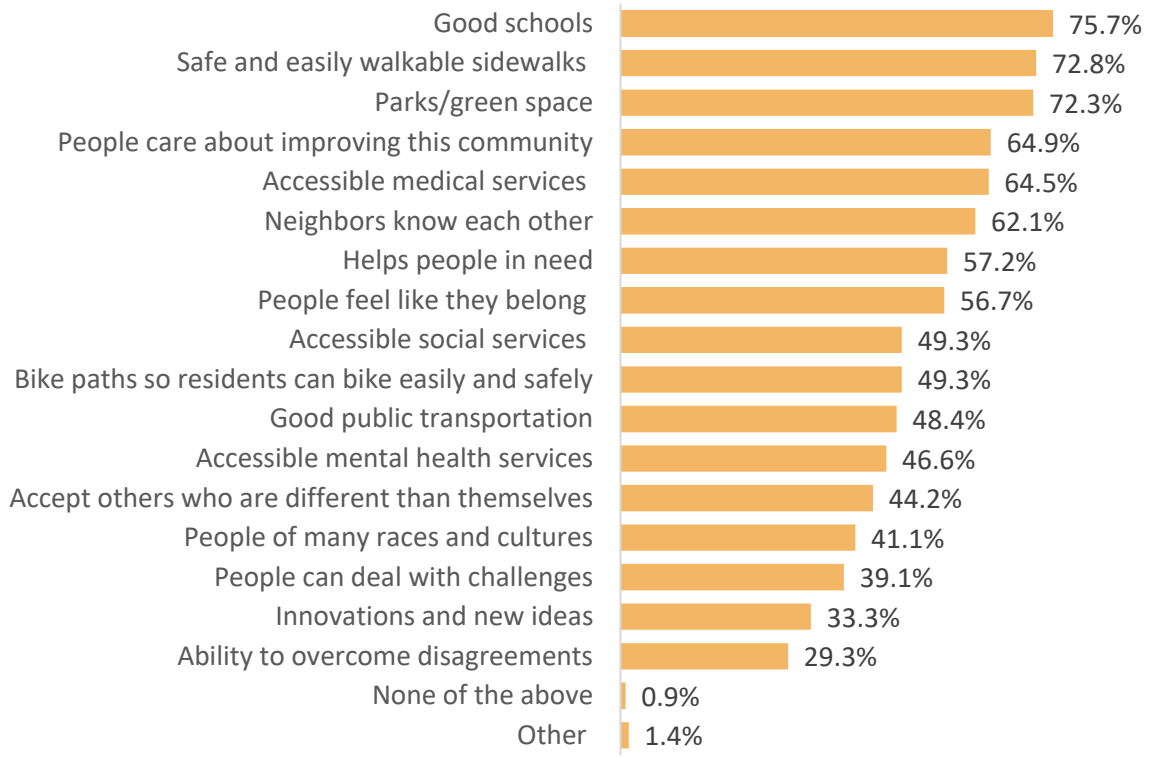
According to interviewees, this spirit of cooperation extends to community organizations as well with strong collaboration amongst government agencies, social service organizations, schools, and faith institutions. One interviewee shared an example of a collaboration between the Billerica Council on Aging and the Billerica police department – these groups are working to address elder abuse. Another interviewee mentioned a social service provider network in Arlington that meets to discuss how social service providers can work together to create a full network of services for specific clients.

> *"The Medford community has stepped up to help the residents of Medford. They've tried to make so many things accessible during this time – like a food pantry. Coronavirus in a way kind of sprang the Medford community instead of bringing it down."* — Focus group participant

Participants shared that the sense of community and willingness to help others has been magnified as a result of COVID-19. Small and large examples of neighborliness during the pandemic, included: the opening of community food pantries; ongoing checks on neighbors and students living in the area; support to neighbors who cannot leave their homes; families putting pictures of hope and encouragement in their windows; and parents organizing video playgroups.

In addition to the strengths listed by interview and focus group participants, respondents to the Woburn Community Priorities Survey were also asked about their perceptions on the strengths of the Woburn service area. The most common responses were good schools (75.7%), safe/walkable sidewalks (72.8%), and parks/green space (72.3%) (Figure 12). Only 0.9% of respondents reported none of the above, and 1.4% other.

**Figure 12. Percent of CHNA Community Priorities Survey Respondents Reporting Strengths of Their Community, 2020 (N=552)**




NOTE: Question in the survey allowed for multiple responses; therefore, percentages may not add up to 100%.
DATA SOURCE: PAC CHNA Community Priorities Survey, 2020.

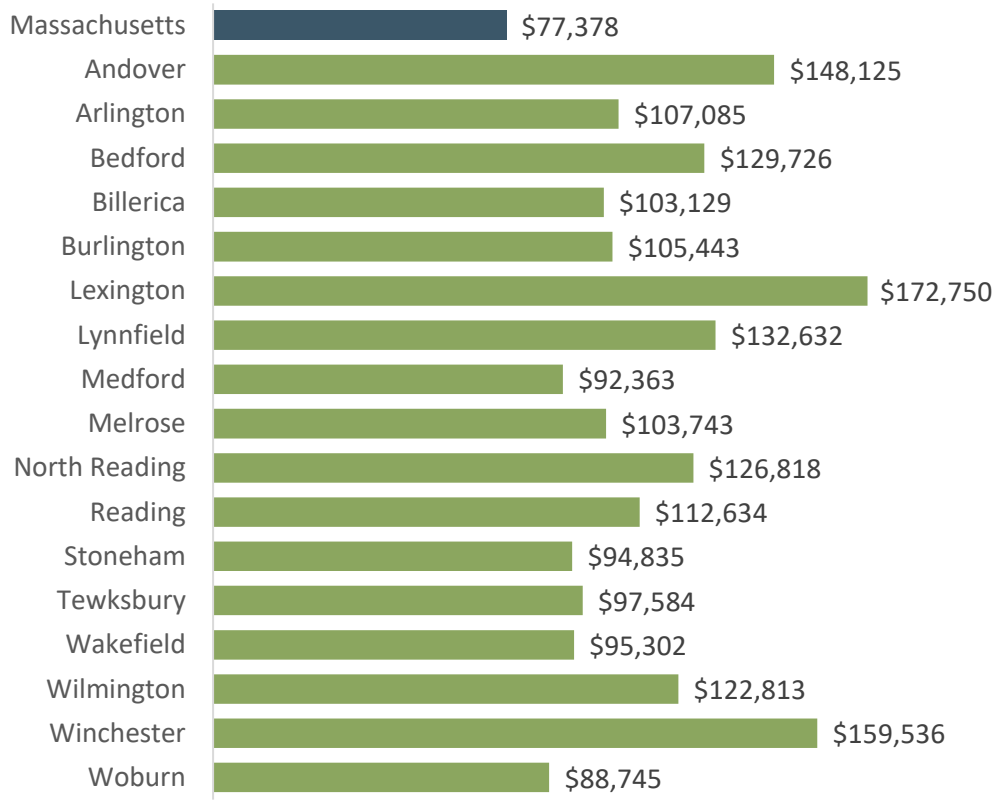
**Income and Financial Security**

> *"I would say that [Arlington] could be perceived as an affluent community, but there are some major economic inequities."* – Key informant interviewee

The communities within the Woburn service area were described as economically diverse by interview and focus group participants. While Arlington was seen as more affluent, Woburn was described as more working-class. A consistent theme across participants was the high cost of living in the area, attributed to expensive housing, and for those with young children, high childcare costs. As one parent focus group member explained, *"I was paying half of my income in rent and then two-thirds of the other half to daycare."*

In the Woburn service area, socioeconomic factors vary across towns. For example, the median annual household income in 2014-2018 ranged from almost $89,000 in Woburn to almost $173,000 in Lexington (Figure 13). All towns in this region had median incomes well above the state average.

**Figure 13. Median Household Income, in Massachusetts and by Town, 2014-2018**

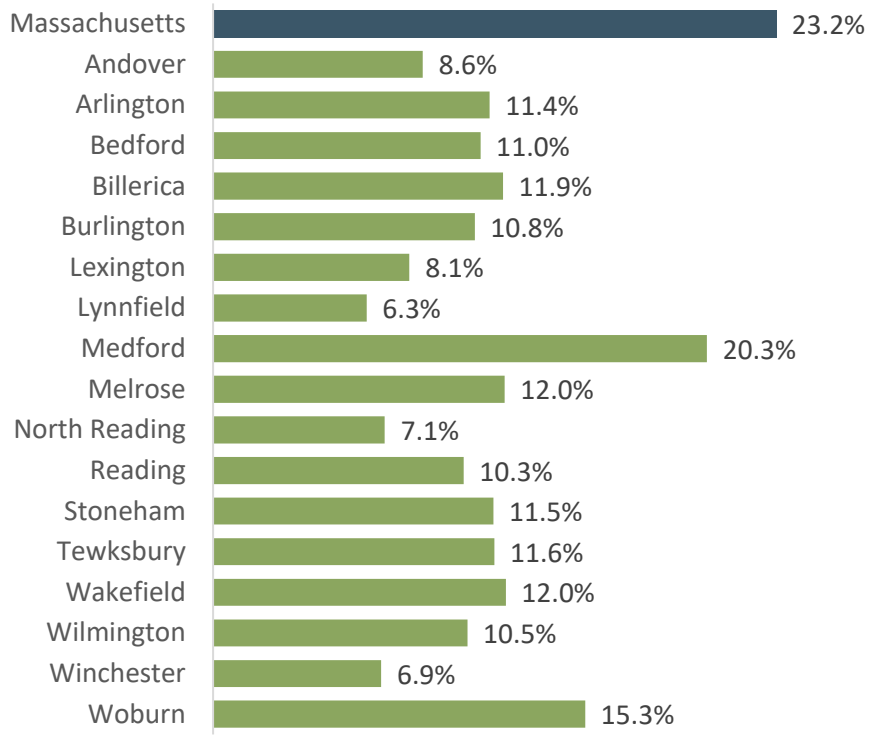



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2014-2018.

Given the high cost of living in the Greater Boston Area and the low federal poverty line, individuals with household incomes at even 200% of the Federal Poverty Level (FPL) are at the extreme end of financial insecurity. The federal poverty line changes by household size, so in 2020, 200% FPL was the equivalent of an annual household income of $25,520 for an individual and $52,400 for a family of four.

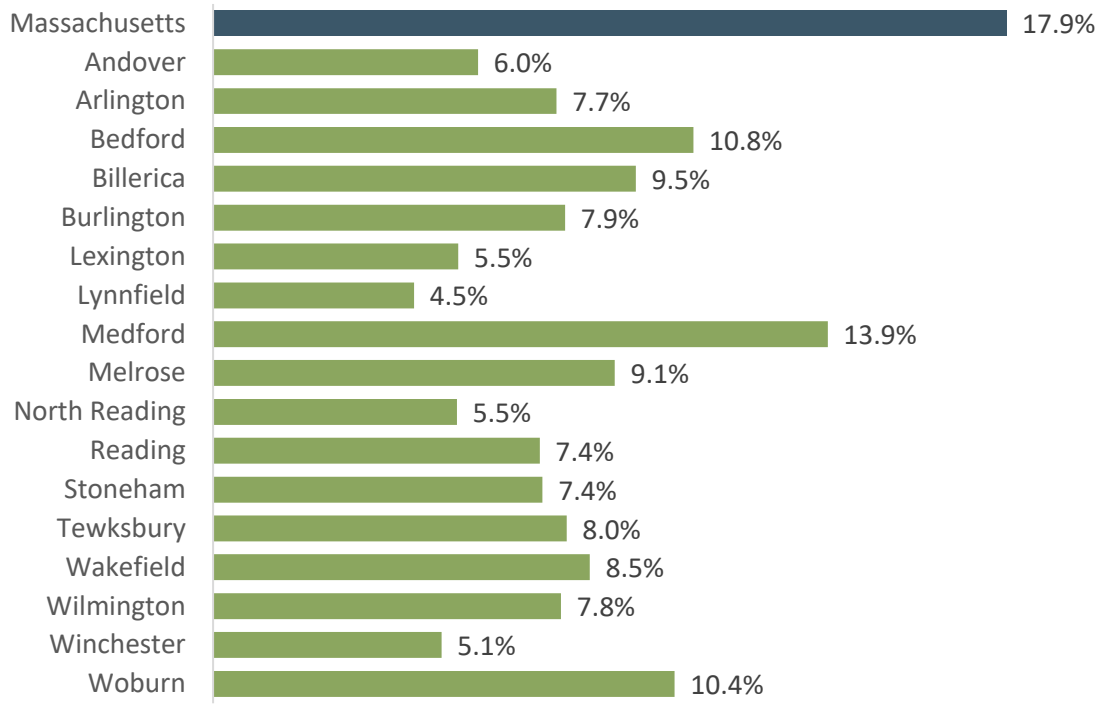
Even though the towns in the Woburn area are generally affluent, many of the towns in this area still have residents experiencing poverty, with incomes at or below 200% FPL – and it is these populations that are dealing with multiple challenges related to COVID-19, according to focus group and interview participants. Medford (20.3%) and Woburn (15.3%) had the largest number of residents in poverty, with a number of other towns within the Woburn service area having about one in ten individuals living in poverty in 2014-2018 (Figure 14). Similar patterns existed for *families* living below 200% of the FPL (Figure 15).

**Figure 14. Percent Individuals Living Below 200% of Poverty Level, in Massachusetts and by Town, 2014-2018**




DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2014-2018.

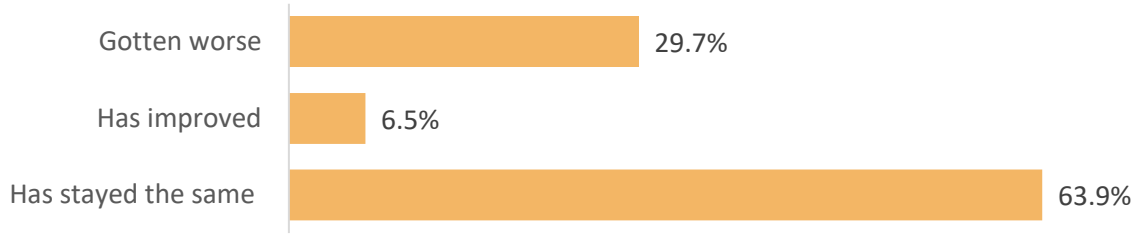
**Figure 15. Percent Families Living Below 200% of Poverty Level, in Massachusetts and by Town, 2014-2018**




DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2014-2018.

A few interviewees expressed concerns about income disparity. Inequities have been exacerbated by the pandemic, including unemployment, increased use of food pantries, and increased demand on social services for support with food, rent, and heat. As shown in Figure 16, nearly three in ten (29.7%) Woburn Community Priorities Survey respondents indicated that their financial situation has gotten worse since the COVID-19 pandemic.

**Figure 16. Percent CHNA Survey Respondents Indicating Whether Their Financial Situation Has Gotten Worse, Has Improved, or Stayed the Same Due to COVID-19 (N=462)**




DATA SOURCE: PAC CHNA Community Priorities Survey, 2020.

Interview and focus group participants noted that immigrants have been severely impacted by the current economic situation. A large number of immigrants were employed in the construction, restaurant, and retail sectors, all of which have been harshly affected by the pandemic. Moreover, concerns about documentation and language barriers also create additional challenges to meeting this population's basic needs. Many participants expressed concern about the long-term effects of the

pandemic. As one interviewee predicted, *"There have been quick band-aids put in place. These have alleviated the immediate problem, but we're going to see worse impacts that haven't hit yet. The effect on folks living too close to the edge will be great."*

For community members living at 100% of FPL – equivalent to an annual household income of $12,760 for an individual and $26,200 for a family of four – patterns vary substantially by race/ethnicity. For example, over 18% of Hispanics/Latinos living in Burlington and Reading were living below 100% FPL in 2014-2018, relative to around 3% of the non-Hispanic White residents of these same towns (Table 3). Variation also exists within racial groups, for example 0.5% of non-Hispanic Blacks living in Andover were living in poverty compared to 44.3% of non-Hispanic Blacks in Tewksbury. Any apparent differences should be interpreted cautiously, due to small populations of residents of color and residents in poverty in some towns.

**Table 3. Percent Population Living Below Poverty Level (100% FPL), by Race/Ethnicity, in Massachusetts and by Town, 2014-2018**

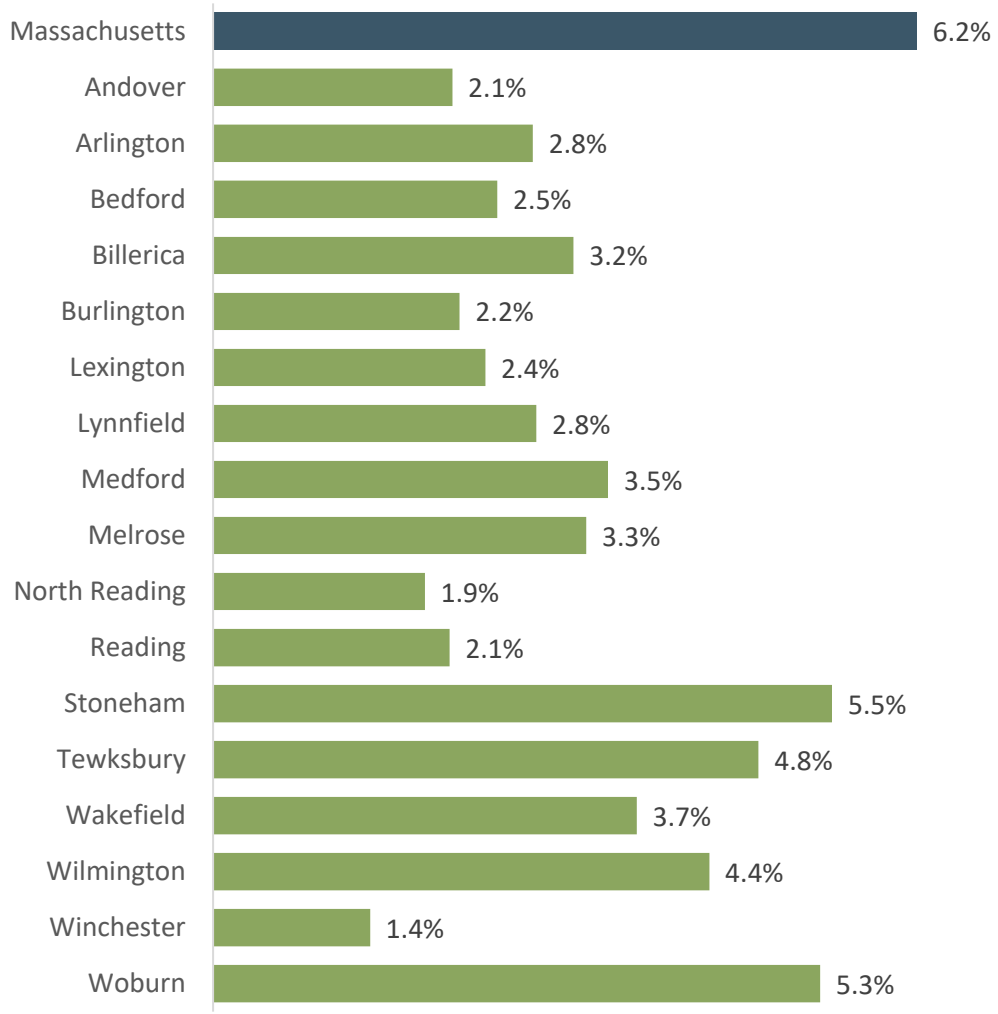
| | Asian | Black | Other | White, Non-Hispanic | Hispanic/ Latino |
|---|---|---|---|---|---|
| Massachusetts | 13.8% | 19.7% | 22.8% | 7.1% | 26.6% |
| Andover | 6.3% | 0.5% | 12.2% | 3.5% | 9.8% |
| Arlington | 11.5% | 2.5% | 8.4% | 4.3% | 5.9% |
| Bedford | 7.4% | 0.6% | 6.9% | 2.7% | 0.0% |
| Billerica | 2.7% | 7.4% | 5.8% | 3.7% | 4.3% |
| Burlington | 4.3% | 8.5% | 0.2% | 3.2% | 18.8% |
| Lexington | 5.0% | 2.4% | 2.5% | 3.1% | 2.3% |
| Lynnfield | 0.0% | 3.7% | 0.4% | 2.0% | 0.3% |
| Medford | 16.5% | 8.0% | 9.9% | 7.8% | 17.4% |
| Melrose | 5.5% | 12.4% | 0.0% | 3.9% | 1.8% |
| North Reading | 0.0% | 7.4% | 1.2% | 2.9% | 14.0% |
| Reading | 0.0% | 1.1% | 15.8% | 2.9% | 18.1% |
| Stoneham | 13.3% | 1.4% | 9.8% | 5.1% | 8.4% |
| Tewksbury | 4.2% | 44.3% | 6.3% | 5.2% | 0.6% |
| Wakefield | 0.0% | 1.6% | 10.8% | 4.0% | 5.9% |
| Wilmington | 1.9% | 2.9% | 0.2% | 2.4% | 8.7% |
| Winchester | 5.5% | 10.4% | 5.5% | 1.9% | 0.8% |
| Woburn | 1.2% | 18.0% | 18.1% | 4.3% | 17.4% |

DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2014-2018.
NOTE: Asian, Black and Other racial categories include residents who identify as Hispanic/Latino; Other includes American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, Some other race, and Two or more races; White, Non-Hispanic category includes residents who do not identify as Hispanic/Latino; Hispanic/Latino includes residents who identify as Hispanic/Latino regardless of race.

Supplemental Security Income (SSI) is provided to adults and children with disabilities and limited income and resources, as well as to people over 65 years-old with limited wealth and resources. In 2014-2018, the proportion of households receiving SSI ranged from 1.4% in Winchester to 5.5% in

Stoneham (Figure 17). This reflects both the differing age and wealth distributions of the residents of the Woburn service area.

**Figure 17. Percent Households Receiving Supplemental Social Security Income in Past 12 months, in Massachusetts and by Town, 2014-2018**

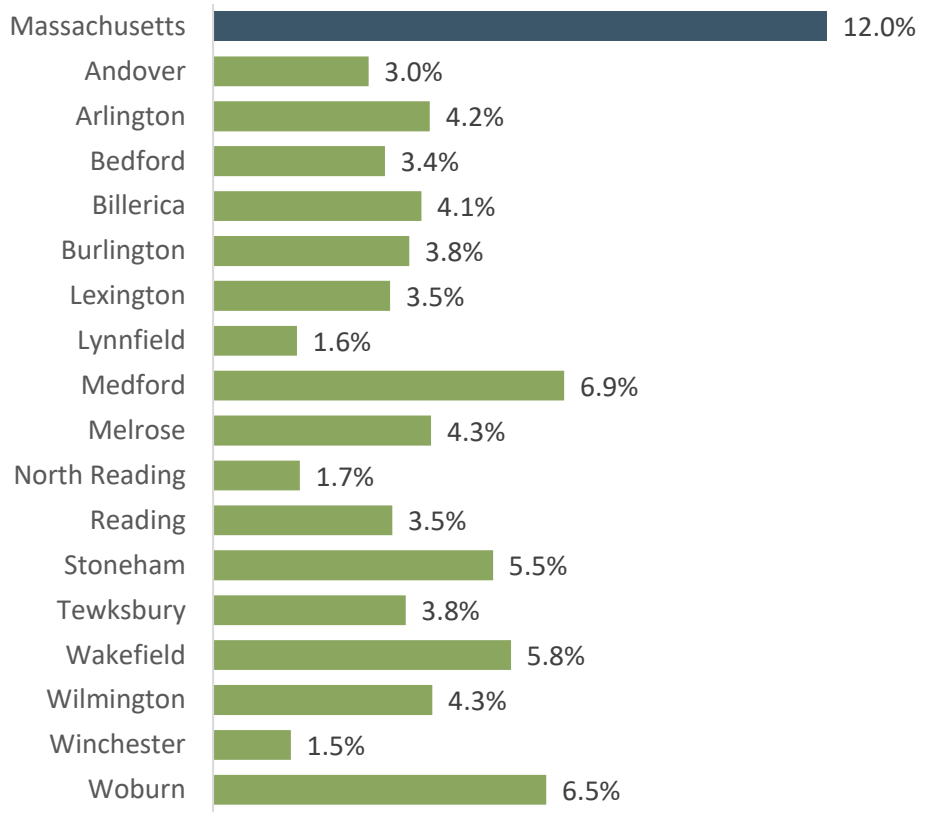



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2014-2018.

Both interviewees and focus group participants frequently mentioned food insecurity as a community challenge and an issue that existed prior to COVID-19 but has been exacerbated by the pandemic. Low-income residents and seniors were identified as those most food insecure prior to the pandemic. Since the onset of COVID-19, participants reported, food needs across groups multiplied as residents faced unemployment and other economic challenges or were unable to obtain groceries due to a lack of transportation or safety concerns. The number of families using food pantries and seniors accessing Meals on Wheels grew substantially according to interviewees whose organizations provide these services. Participants also mentioned that school lunch programs were expanded to meet the demand for food.

In Massachusetts overall, 12.0% of households received food stamps or Supplemental Nutrition Assistance Program (SNAP) benefits in 2014-2018 (Figure 18). In the Woburn service area, households receiving the noted benefits ranged from 1.5% in Winchester and 1.6% in Lynnfield to 6.5% in Woburn and 6.9% in Medford.

**Figure 18. Percent Households Receiving Food Stamps/SNAP Benefits, in Massachusetts and by Town, 2014-2018**




DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2014-2018.

Within the Woburn service area, the proportion of households receiving SNAP benefits also varied by race/ethnicity. In Massachusetts, 36.3% of Hispanic/Latino households receive food stamps, compared to only 7.9% of non-Hispanic White households, with Asian, Black, and Other race households falling in between (Table 3). In Medford, 4.7% of non-Hispanic Asians, 17.5% of non-Hispanic Blacks, 7.2% of residents identifying as "Other," 5.8% of non-Hispanic Whites, and 13.2% of Hispanics/Latinos received SNAP benefits in 2014-2018. In Woburn, prevalence was 5.0%, 9.2%, 10.2%, 5.7%, and 16.4%, respectively.

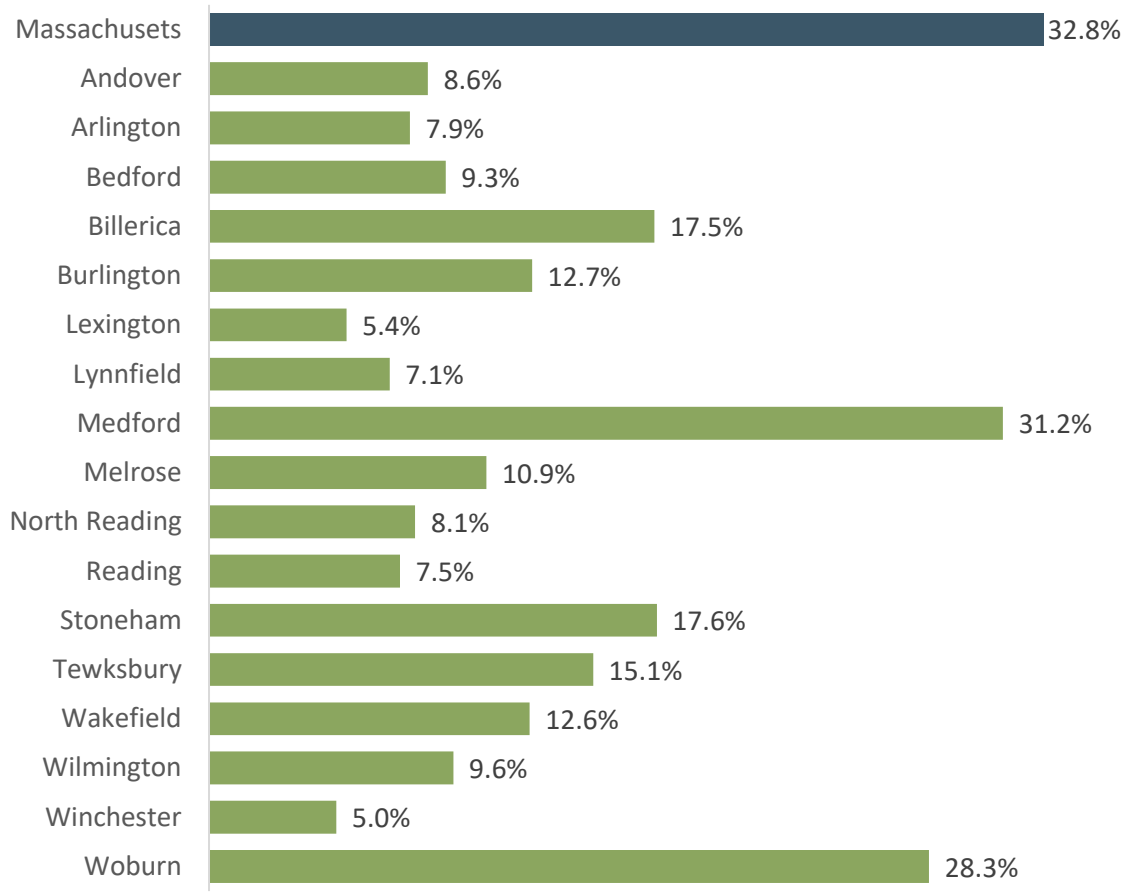
**Table 4. Percent Households Receiving Food Stamps/SNAP Benefits, by Race/Ethnicity, in Massachusetts and by Town, 2014-2018**

| | Asian | Black | Other | White, Non-Hispanic | Hispanic/ Latino |
|---|---|---|---|---|---|
| Massachusetts | 11.5% | 27.3% | 32.2% | 7.9% | 36.3% |
| Andover | 3.7% | 22.4% | 6.1% | 2.1% | 15.5% |
| Arlington | 8.2% | 26.0% | 6.4% | 3.5% | 1.5% |
| Bedford | 0.0% | 36.6% | 0.0% | 1.9% | 32.1% |
| Billerica | 8.5% | 0.0% | 7.2% | 3.9% | 4.2% |
| Burlington | 4.1% | 14.3% | 3.7% | 2.4% | 34.3% |
| Lexington | 4.3% | 4.6% | 4.3% | 3.2% | 0.0% |
| Lynnfield | 0.0% | 0.0% | 0.0% | 1.8% | 0.0% |
| Medford | 4.7% | 17.5% | 7.2% | 5.8% | 13.2% |
| Melrose | 5.7% | 8.3% | 4.3% | 4.2% | 0.0% |
| North Reading | 0.0% | 40.0% | 0.0% | 1.5% | 0.0% |
| Reading | 0.0% | 0.0% | 0.0% | 3.6% | 7.5% |
| Stoneham | 10.3% | 0.0% | 5.7% | 5.7% | 2.4% |
| Tewksbury | 0.0% | 0.0% | 4.3% | 3.8% | 0.0% |
| Wakefield | 9.7% | 6.7% | 6.1% | 5.9% | 2.5% |
| Wilmington | 4.9% | 25.2% | 6.5% | 3.7% | 0.0% |
| Winchester | 4.8% | 0.0% | 4.1% | 1.0% | 14.6% |
| Woburn | 5.0% | 9.2% | 10.2% | 5.7% | 16.4% |

DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2014-2018.
NOTE: Asian, Black and Other racial categories include residents who identify as Hispanic/Latino; Other includes American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, Some other race, and Two or more races; White, Non-Hispanic category includes residents who do not identify as Hispanic/Latino; Hispanic/Latino includes residents who identify as Hispanic/Latino regardless of race.

According to the Massachusetts Department of Elementary and Secondary Education, 32.8% of Public School students in Massachusetts were economically disadvantaged during the 2019-2020 school year (Figure 19; see footer for definition). In the Woburn service area, proportions varied by town, ranging from 5.0% in Winchester and 5.4% in Lexington to 28.3% in Woburn and 31.2% in Medford.

**Figure 19. Percent Public School Students Economically Disadvantaged, in Massachusetts and by School District, 2020**



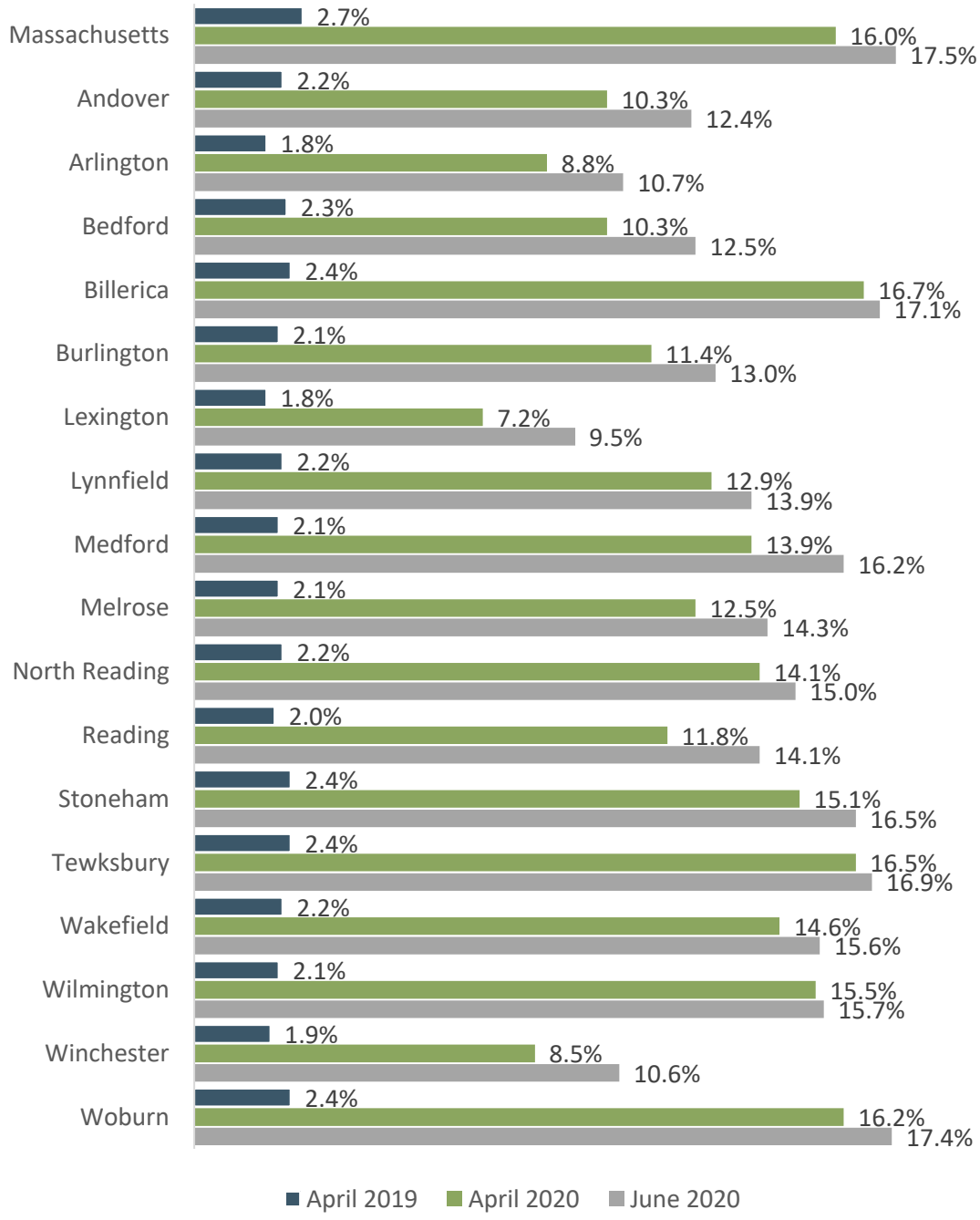

DATA SOURCE: Massachusetts Department of Elementary and Secondary Education, School and District Profiles, Selected Populations, 2020.
NOTE: Years represent school years (e.g., 2020 represents school year 2019-2020); Economically disadvantaged is determined based on a student's participation in one or more of the following state-administered programs: the Supplemental Nutrition Assistance Program (SNAP), the Transitional Assistance for Families with Dependent Children (TAFDC), the Department of Children and Families' (DCF) foster care program, and MassHealth (Medicaid).

**Employment and Workforce**

In the Woburn service area, the top three industries for employment are (1) Educational services, and health care and social assistance; (2) Professional, scientific, management, and administrative and waste management services; and (3) Manufacturing. The impact of the pandemic and resulting economic shutdown in many sectors are reflected in unemployment data from towns in the Woburn service area, between April 2019 and June 2020 (Figure 20). Unemployment rates continued to increase from April 2020 to June 2020 in all towns. In April 2019, Massachusetts, and each city or town in the area, had

unemployment rates under 3%, with Arlington, Lexington, and Winchester under 2%. However, during the pandemic, unemployment rates increased to 16.0% statewide in April, with similar (e.g. Billerica, 16.7%; Tewksbury, 16.5%) or lower (e.g. Lexington, 7.2%) rates in the Woburn service area.

**Figure 20. Percent Population 16 Years and Over Unemployed, in Massachusetts and by Town, 2019-2020**




DATA SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Local Area Unemployment Statistics, 2019-2020.
NOTE: Data are not seasonally adjusted; June 2020 data are preliminary and subject to revision.

Focus group members and interviewees spoke primarily about employment in the context of COVID-19, with some sharing that family members and friends had lost their jobs during the pandemic. Participants expressed uncertainty about how long unemployment may last and the status of unemployment benefits. Those with school-age children worried about how school reopening strategies would affect their children's education and their ability to work.

**Education**

Educational attainment is another important measure of socioeconomic position that may reveal additional nuances about populations, in parallel to measures of income, wealth, and poverty. Massachusetts stands out as a state with an exceptionally high proportion of residents with college, graduate, and professional degrees (42.9% in 2014-2018; Table 5). Among residents over 25 years of age in the Woburn service area, 45.9% of Winchester residents and 54.2% of Lexington residents had a graduate or professional degree. In contrast, Billerica and Tewksbury had the largest populations with a High School diploma or less.

**Table 5. Educational Attainment for Population 25 Years and Over, in Massachusetts and by Town, 2014-2018**

| | Less than HS diploma | HS graduate | Some college/ Associate's degree | Bachelor's degree | Graduate or Professional Degree |
|---|---|---|---|---|---|
| Massachusetts | 9.6% | 24.2% | 23.3% | 23.8% | 19.1% |
| Andover | 2.6% | 8.6% | 14.9% | 34.4% | 39.4% |
| Arlington | 3.4% | 12.2% | 13.4% | 30.6% | 40.5% |
| Bedford | 3.2% | 9.0% | 16.9% | 31.2% | 39.7% |
| Billerica | 7.3% | 31.8% | 26.6% | 22.8% | 11.5% |
| Burlington | 4.1% | 20.6% | 20.5% | 30.8% | 24.0% |
| Lexington | 1.7% | 7.1% | 9.0% | 28.1% | 54.2% |
| Lynnfield | 2.3% | 17.4% | 22.7% | 31.8% | 25.8% |
| Medford | 7.4% | 21.0% | 18.7% | 26.3% | 26.5% |
| Melrose | 4.7% | 15.9% | 20.9% | 30.6% | 27.8% |
| North Reading | 3.6% | 23.8% | 22.3% | 29.4% | 20.9% |
| Reading | 3.1% | 15.7% | 19.3% | 32.7% | 29.3% |
| Stoneham | 5.8% | 24.8% | 24.8% | 26.3% | 18.3% |
| Tewksbury | 5.3% | 30.6% | 28.6% | 23.3% | 12.2% |
| Wakefield | 6.8% | 20.3% | 21.6% | 31.0% | 20.5% |
| Wilmington | 4.4% | 28.2% | 24.4% | 24.6% | 18.4% |
| Winchester | 1.7% | 11.3% | 11.3% | 29.9% | 45.9% |
| Woburn | 5.9% | 25.5% | 23.9% | 27.2% | 17.6% |

DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2014-2018.

Table 6 illustrates additional patterns in educational attainment across service area towns, by race/ethnicity. For some towns, data interpretation is limited given the small number of residents in certain education by race brackets. However, in other towns, findings reveal variations, for example, among Hispanics/Latinos over age 25, 33.5% in Wakefield, 16.4% in Woburn, 8.4% in Andover, and 7.6% in Medford have less than a High School diploma. Variation was also apparent by race/ethnicity *within*

towns. For example, 14.7% of non-Hispanic Asian residents of Grafton over age 25 did not have a high school diploma in 2014-2018, compared to 1.8% of non-Hispanic Other race residents and 3.7% of non-Hispanic White residents. In Medford in 2014-2018, the proportion of the population without a High School diploma ranged from 5.3% of non-Hispanic Other race residents to 13.3% of non-Hispanic Black residents.

**Table 6. Percent Population 25 Years and Over with Less than High School Diploma, in Massachusetts and by Town, 2014-2018**

| | Asian | Black | Other | White, Non-Hispanic | Hispanic/ Latino |
|---|---|---|---|---|---|
| Massachusetts | 14.9% | 14.8% | 27.4% | 6.2% | 30.0% |
| Andover | 2.7% | 1.0% | 14.2% | 2.3% | 8.4% |
| Arlington | 6.1% | 1.6% | 6.8% | 2.9% | 8.0% |
| Bedford | 5.6% | 8.1% | 18.5% | 2.3% | 7.3% |
| Billerica | 8.8% | 7.8% | 18.5% | 6.7% | 14.7% |
| Burlington | 4.1% | 8.0% | 0.0% | 3.8% | 9.6% |
| Lexington | 1.6% | 11.4% | 0.0% | 1.6% | 0.0% |
| Lynnfield | 0.0% | 0.0% | 2.3% | 2.3% | 23.7% |
| Medford | 11.4% | 13.3% | 5.3% | 6.4% | 7.6% |
| Melrose | 9.3% | 7.2% | 0.0% | 4.6% | 0.5% |
| North Reading | 2.9% | 0.0% | 1.5% | 3.8% | 2.2% |
| Reading | 4.1% | 1.0% | 10.2% | 2.6% | 23.4% |
| Stoneham | 4.2% | 3.8% | 0.0% | 6.0% | 7.1% |
| Tewksbury | 5.5% | 3.3% | 6.8% | 5.2% | 17.2% |
| Wakefield | 7.8% | 3.1% | 43.9% | 5.6% | 33.5% |
| Wilmington | 3.6% | 16.5% | 0.6% | 4.1% | 17.4% |
| Winchester | 5.2% | 12.8% | 0.0% | 1.2% | 0.0% |
| Woburn | 8.1% | 10.9% | 6.8% | 5.0% | 16.4% |

DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2014-2018.
NOTE: Asian, Black and Other racial categories include residents who identify as Hispanic/Latino; Other includes American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, Some other race, and Two or more races; White, Non-Hispanic category includes residents who do not identify as Hispanic/Latino; Hispanic/Latino includes residents who identify as Hispanic/Latino regardless of race.

In contrast, Table 7 shows the percent population over age 25 with a bachelor's degree or higher, by race/ethnicity in the towns around Woburn in 2014-2018. Variation exists, for example with 80.1% of non-Hispanic Whites in Lexington having a bachelor's degree or higher, compared to 31.7% in Billerica and 34.5% in Tewksbury. For Woburn residents over age 25, 72.6% of non-Hispanic Asians, 30.9% of non-Hispanic Blacks, 41.4% of non-Hispanic Other race residents, 43.6% of non-Hispanic Whites, and 33.3% of Hispanics/Latinos had a bachelor's degree or higher.

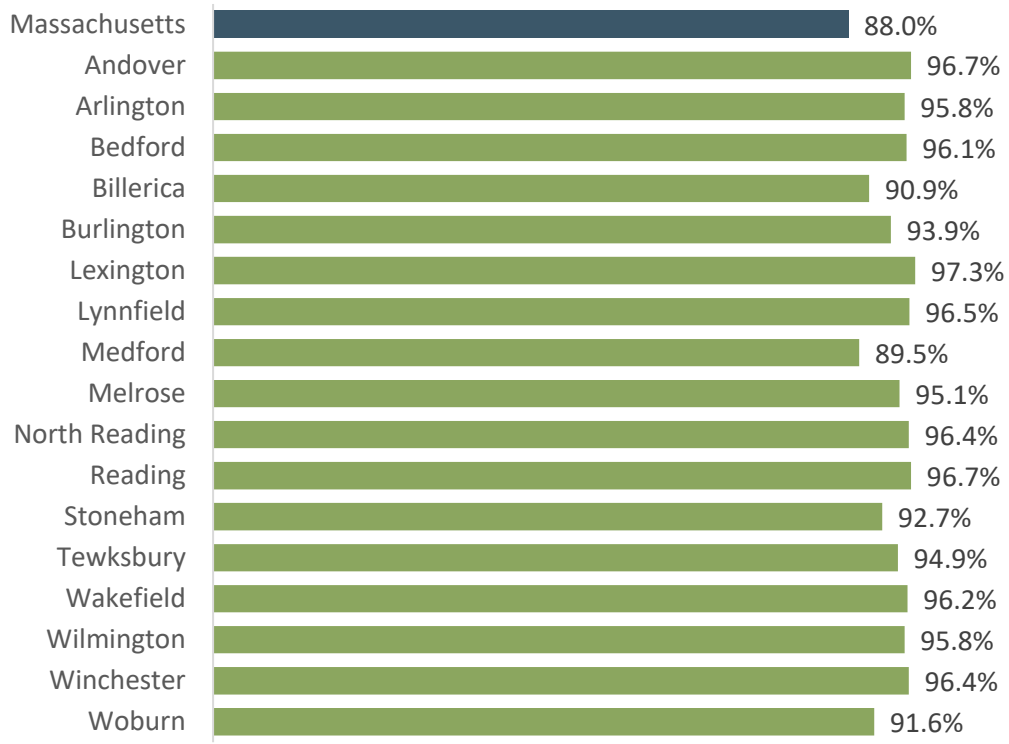
**Table 7. Percent Population 25 Years and Over with Bachelor's Degree or Higher, in Massachusetts and by Town, 2014-2018**

| | Asian | Black | Other | White, Non-Hispanic | Hispanic/ Latino |
|---|---|---|---|---|---|
| Massachusetts | 60.2% | 25.6% | 20.8% | 46.0% | 18.8% |
| Andover | 86.9% | 65.4% | 58.9% | 72.5% | 57.4% |
| Arlington | 76.8% | 46.6% | 61.3% | 71.4% | 55.6% |
| Bedford | 82.7% | 47.2% | 38.0% | 70.3% | 57.1% |
| Billerica | 73.6% | 30.5% | 13.4% | 31.7% | 19.8% |
| Burlington | 78.5% | 65.2% | 74.4% | 48.5% | 56.9% |
| Lexington | 88.2% | 68.2% | 84.8% | 80.1% | 84.0% |
| Lynnfield | 85.8% | 43.0% | 97.7% | 55.6% | 54.6% |
| Medford | 65.7% | 28.7% | 59.3% | 53.5% | 51.9% |
| Melrose | 64.2% | 39.6% | 56.5% | 58.4% | 66.1% |
| North Reading | 74.5% | 43.6% | 64.4% | 48.7% | 61.2% |
| Reading | 90.4% | 80.2% | 64.6% | 60.3% | 55.5% |
| Stoneham | 68.9% | 41.7% | 34.8% | 44.6% | 31.7% |
| Tewksbury | 65.8% | 35.3% | 17.9% | 34.5% | 48.2% |
| Wakefield | 74.1% | 36.7% | 40.9% | 51.3% | 41.1% |
| Wilmington | 77.4% | 37.7% | 21.0% | 41.4% | 16.1% |
| Winchester | 79.4% | 43.6% | 59.5% | 75.5% | 90.6% |
| Woburn | 72.6% | 30.9% | 41.4% | 43.6% | 33.3% |

DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2014-2018.
NOTE: Asian, Black and Other racial categories include residents who identify as Hispanic/Latino; Other includes American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, Some other race, and Two or more races; White, Non-Hispanic category includes residents who do not identify as Hispanic/Latino; Hispanic/Latino includes residents who identify as Hispanic/Latino regardless of race.

Among current high school students in 2019, graduation rates were high, ranging from 89.5% in Medford to 97.3% in Lexington (Figure 21). All towns in this region reported higher graduation rates than the state overall. Both interviewees and focus group members praised the school systems in the Woburn service area, which they reported were highly rated.

**Figure 21. Graduation Rate among Public High School Students, in Massachusetts and by School District, 2019**




DATA SOURCE: Massachusetts Department of Elementary and Secondary Education, School and District Profiles, Cohort 2019 Graduation Rates, 2019.

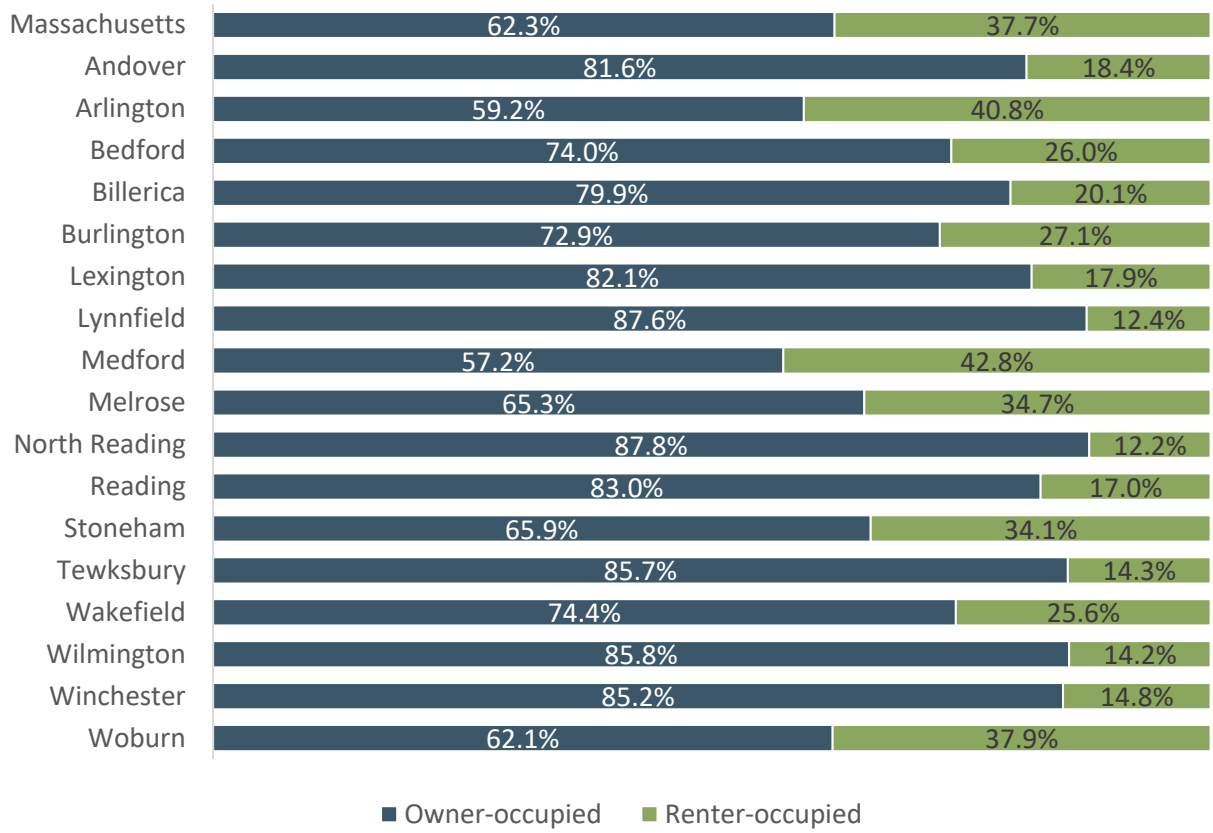
**Housing**

> *"My rent is half of my paycheck. Every financial advisor will tell you that's crazy, but this is the cheapest apartment I could find".* – Focus group participant
>
> *"If I were to buy a house, I would be looking outside the area*." – Focus group participant

A prominent theme in focus group discussions and interviews was the high cost of housing in the region. While Billerica and Woburn were described as more affordable than Medford or Arlington, participants consistently mentioned housing expense and high taxes as concerns that are putting housing out of reach for some and making it harder for seniors who want to stay in the area and downsize. Participants noted that high housing costs also contributed to overcrowding and rising homelessness in the larger towns within the Woburn service area. As one focus group member stated, "*I know Medford is expensive for housing. I know there are people who are trying to move to the area but can't afford it."*

In Massachusetts, 62.3% of housing units are owner-occupied versus 37.7% renter-occupied (Figure 22). In most of the towns around Woburn, owner-occupied units are more common than in the state overall, for example 87.8% in North Reading; 87.6% in Lynnfield; and 85.8% in Wilmington. The exceptions are Arlington (59.2%), Medford (57.2%), and Woburn (62.1%).

**Figure 22. Percent of Housing Units Owner- or Renter-Occupied, in Massachusetts and by Town, 2014-2018**

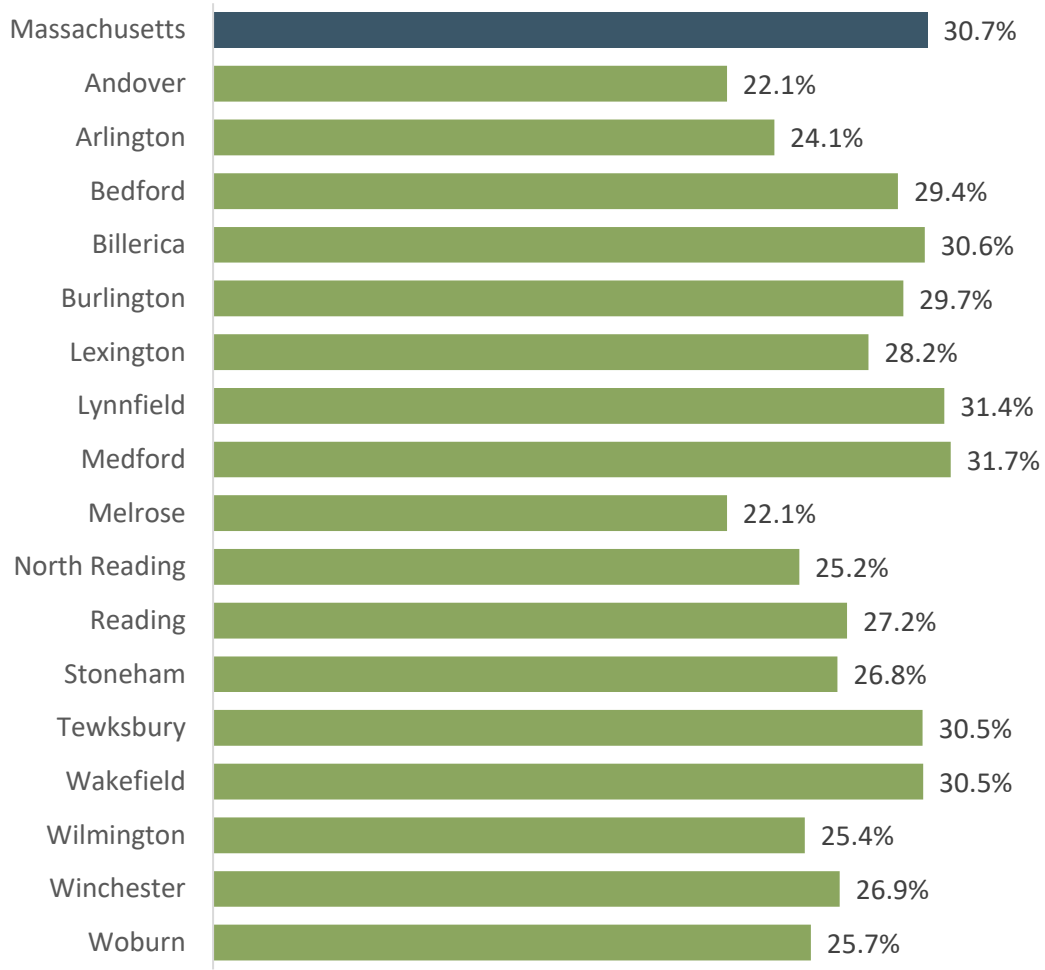



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2014-2018.

Most participants reported that the communities within the Woburn service area lacked affordable housing. Members of the parents focus group, for example, mentioned 5-10 year wait lists to obtain affordable public housing. Seniors expressed concern about finding housing within their incomes.

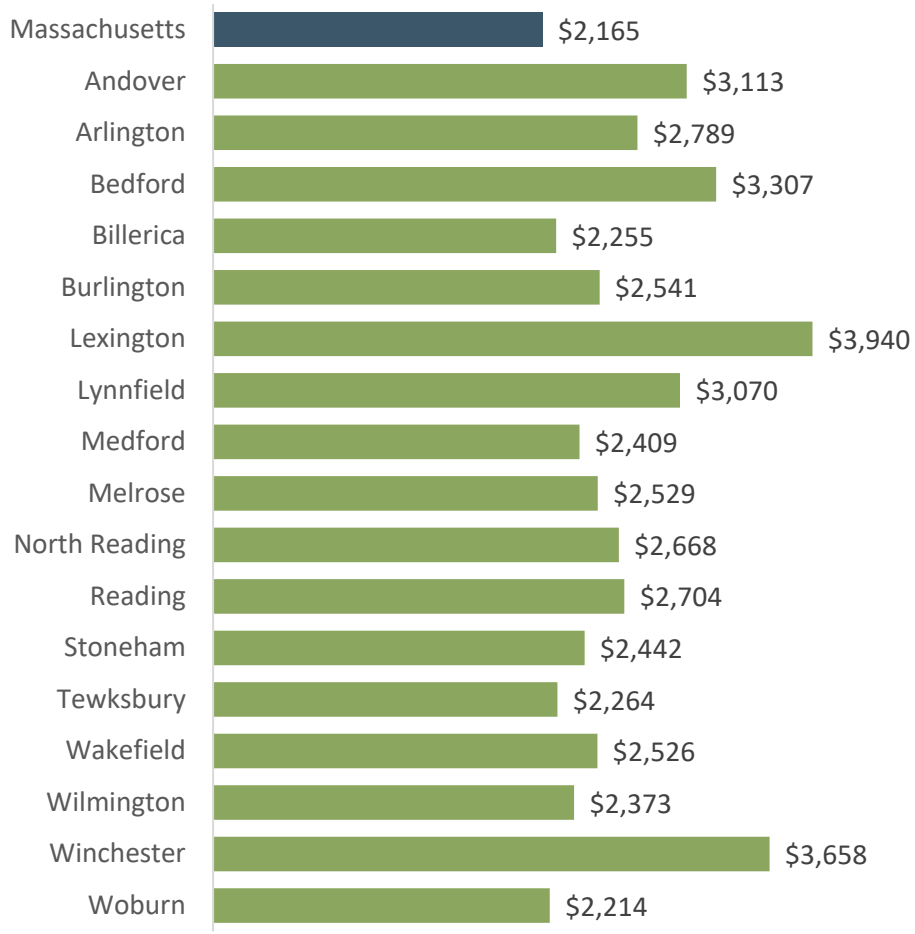
The average percent of income spent on housing costs is an important measure of an area's availability of affordable housing. It is recommended that households spend no more than 30% of their incomes on housing costs, in order to avoid cost burdens. In the Commonwealth overall, 30.7% of owner-occupied households with a mortgage spend more than 30% of their income on housing costs (Figure 23). Many of the towns in the Woburn service area are similar, with a range of 22.1% of residents in Andover and Melrose to over 31% in Lynnfield and Medford spending more than 30% of their income on housing. Median monthly housing costs for owner-occupied households with a mortgage ranged from $2,214 in Woburn to $3,940 in Lexington (Figure 24).

**Figure 23. Percent Housing Units Where 30% or More of Income Spent on Monthly Housing Costs, by Owner-Occupied Household with a Mortgage, in Massachusetts and by Town, 2014-2018**




DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2014-2018.

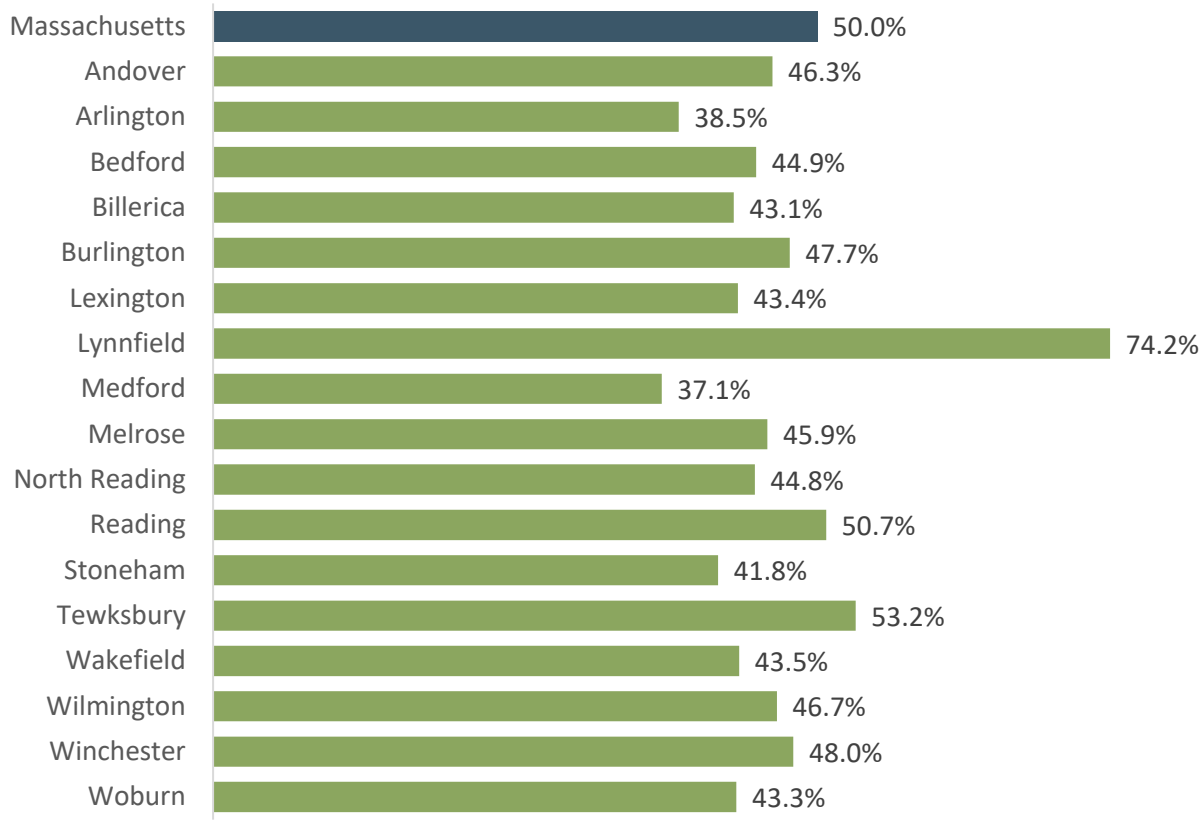
**Figure 24. Median Monthly Housing Costs for Owner-Occupied Households with a Mortgage, in Massachusetts and by Town, 2014-2018**




DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2014-2018.

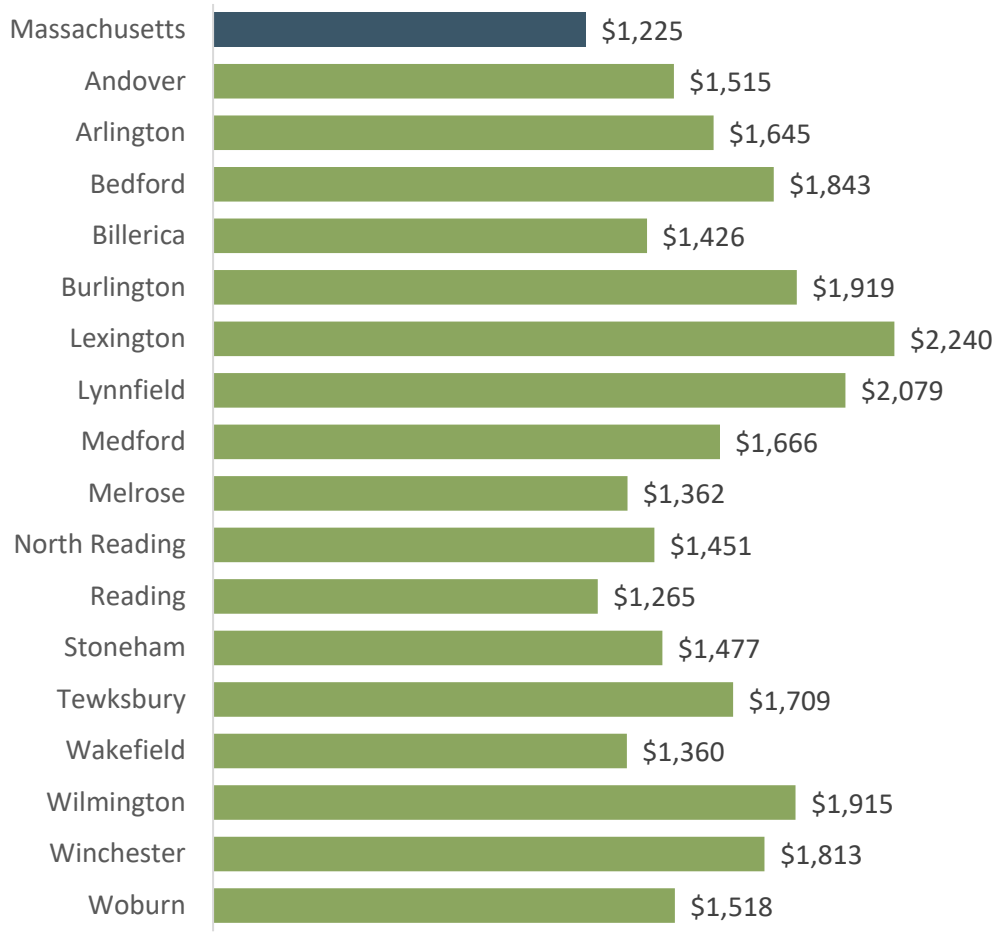
In comparison, there was a wider range in the proportion of housing units where renters spent more than 30% of income on housing costs in 2014-2018. For example, in the Woburn service area, during this timeframe, the proportion of renters spending more than 30% of their income on housing ranged from 37.1% in Medford and 38.5% in Arlington to 53.2% in Tewksbury and 74.2% in Lynnfield (Figure 25). Rates may be skewed in towns where a very small proportion of housing units are occupied by renters, such as in Lynnfield. Median monthly housing costs for renter-occupied households in 2014-2018 ranged from $1,265 in Reading to $2,240 in Lexington (Figure 26).

**Figure 25. Percent Housing Units Where 30% or More of Income Spent on Monthly Housing Costs, by Renter, in Massachusetts and by Town, 2014-2018**




DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2014-2018.

**Figure 26. Median Monthly Housing Costs for Renter-Occupied Households, in Massachusetts and by Town, 2014-2018**




DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2014-2018.

Participants shared that communities are working to address housing constraints. In Medford, participants reported, there were city-level conversations about the development of more affordable housing; these discussions were led by organizations like Medford Community Housing. Support of community residents is critical to expanded housing, many interviewees noted. In describing efforts to expand affordable housing in Arlington, for example, one interviewee shared, "*Arlington considers itself progressive. Yet when they try to build lots of new affordable housing, neighbors always don't want the new sites in their neighborhoods."* A few participants commented that some areas of Woburn and Billerica have been overdeveloped and more housing was not needed.

The longer-term impact of COVID-19 on housing also was of concern to residents. While at the time of this report, landlords could not evict their tenants for nonpayment, some focus group members reported that this was happening informally, especially among immigrant groups. Overall, focus group members and interviewees shared concerns about future potential foreclosures and the impact on local communities.

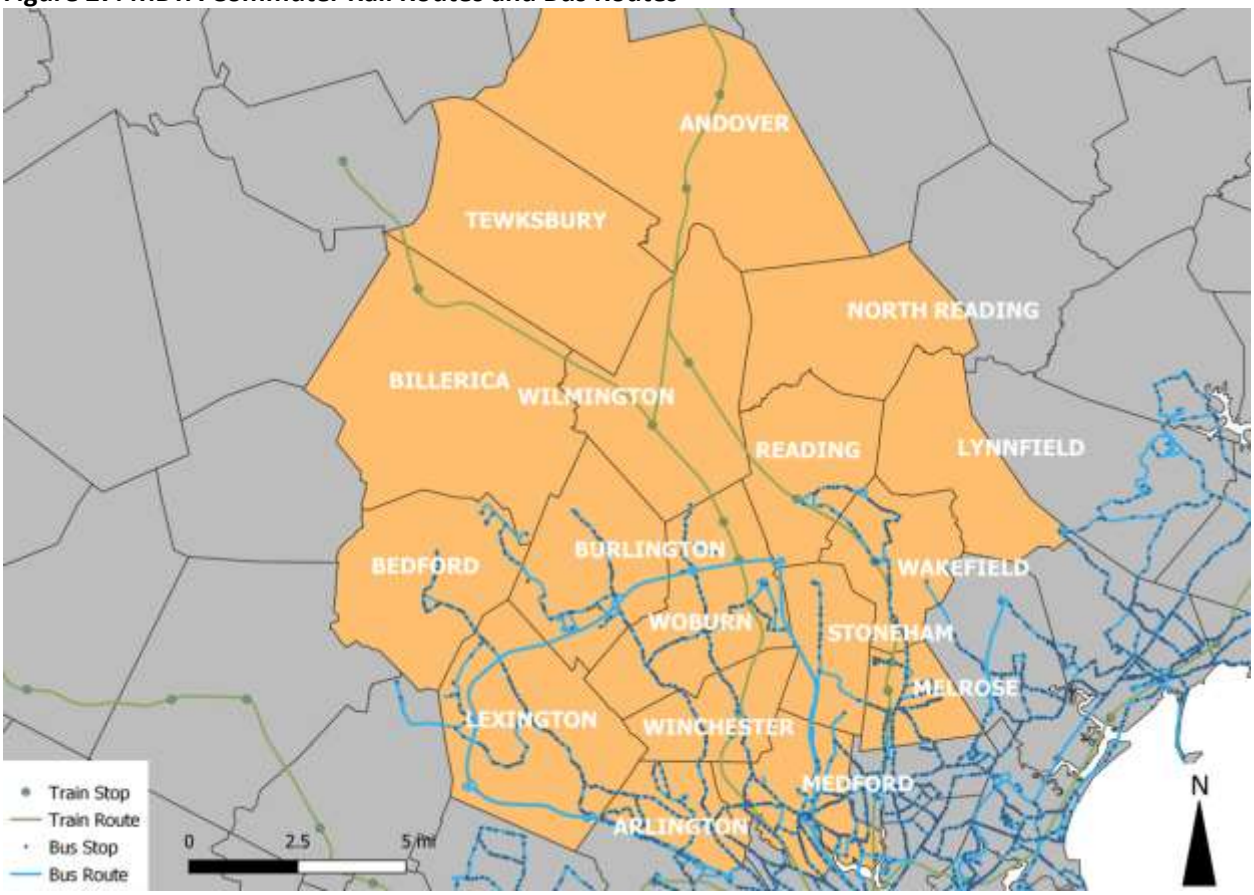
**Transportation**

> *"Transportation is good. The buses are right outside. They go everywhere unless you're handicapped."* – Focus group participant

When asked about transportation in the Woburn service area, focus group members and interviewees reported that most residents have access to the Massachusetts Bay Transportation Authority ('MBTA') and major bus lines, making it easy to get to Boston and other larger towns. However, not all residents have access. One interviewee reported, some public housing complexes are located far from public transit. Additionally, the timing of transit and the need to switch services can create barriers. As one parent stated, "*I'm right near a bus that goes to the T, but that adds a half hour* [of commuting time] *just waiting for the bus and then waiting for the T*."

MBTA Commuter Rail Routes and MBTA Rapid Transit are shown in Figure 29 below. In general, towns closer to Boston had both train and bus routes. Tewksbury, Billerica, North Reading, and Lynnfield appear to have limited MBTA options available.

**Figure 27. MBTA Commuter Rail Routes and Bus Routes**




DATA SOURCE: Massachusetts Bureau of Geographic Information (MassGIS), Central Transportation Planning Staff, 2020.

In 2014-2018, 70.2% of people in Massachusetts over age 16 commuted to work alone in a vehicle (Table 8). In the Woburn service area, this ranged from 59.1% in Medford to 87.2% in Billerica. Public transportation was most commonly used in Arlington, Medford, and Melrose.

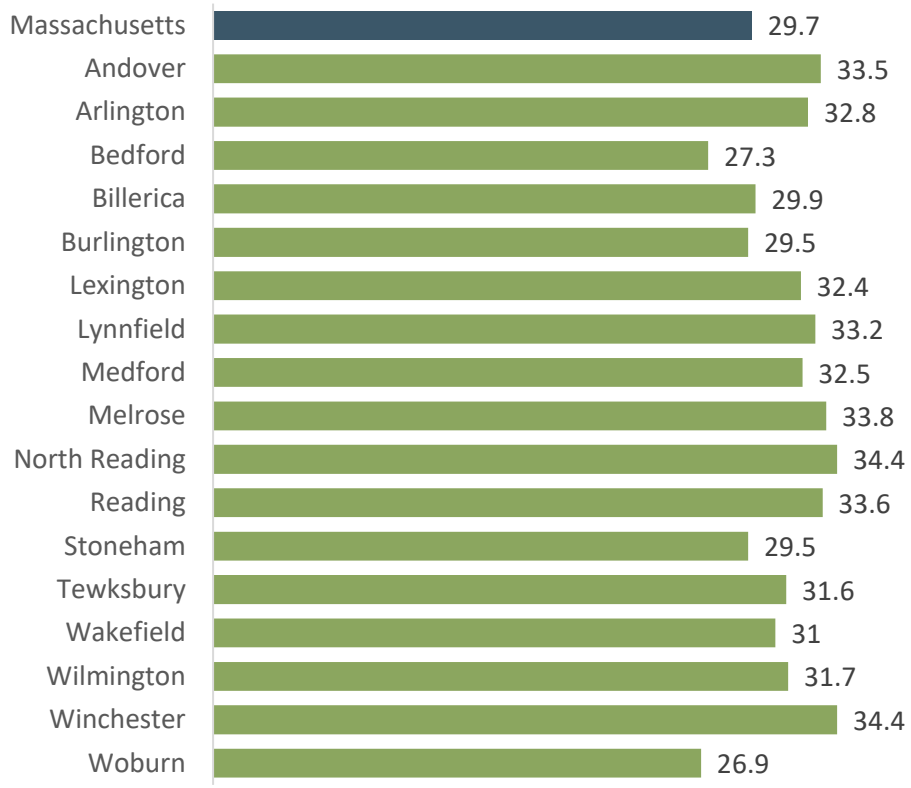
**Table 8. Means of Transportation to Work for Population 16 years and Over, in Massachusetts and by Town, 2014-2018**

| | Car, truck, or van - alone | Car, truck, or van - carpool | Public transportation | Other |
|---|---|---|---|---|
| Massachusetts | 70.2% | 7.5% | 10.2% | 12.0% |
| Andover | 74.8% | 6.4% | 5.1% | 13.8% |
| Arlington | 60.3% | 6.6% | 19.5% | 13.6% |
| Bedford | 80.0% | 7.3% | 2.3% | 10.4% |
| Billerica | 87.2% | 5.3% | 3.4% | 4.1% |
| Burlington | 82.6% | 7.5% | 3.7% | 6.3% |
| Lexington | 71.4% | 5.8% | 8.6% | 14.1% |
| Lynnfield | 80.9% | 8.6% | 2.4% | 8.1% |
| Medford | 59.1% | 9.3% | 20.7% | 10.9% |
| Melrose | 64.3% | 3.8% | 22.9% | 9.0% |
| North Reading | 84.2% | 3.4% | 3.6% | 8.8% |
| Reading | 75.2% | 6.0% | 10.0% | 8.8% |
| Stoneham | 82.0% | 5.6% | 7.3% | 5.2% |
| Tewksbury | 84.7% | 6.4% | 3.4% | 5.5% |
| Wakefield | 78.3% | 5.7% | 8.1% | 7.9% |
| Wilmington | 83.3% | 6.2% | 5.0% | 5.5% |
| Winchester | 71.4% | 7.4% | 11.1% | 10.1% |
| Woburn | 78.9% | 8.9% | 4.3% | 7.9% |

DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2014-2018.
NOTE: Other includes "worked at home" category, taxicabs, motorcycle, bicycle, walked and other means.

In 2014-2018, the average time spent commuting to work for residents within the Woburn area ranged from 26.9 minutes in Woburn to 34.4 minutes in both North Reading and Winchester (Figure 28).

**Figure 28. Mean Travel Time to Work (in Minutes), in Massachusetts and by Town, 2014-2018**

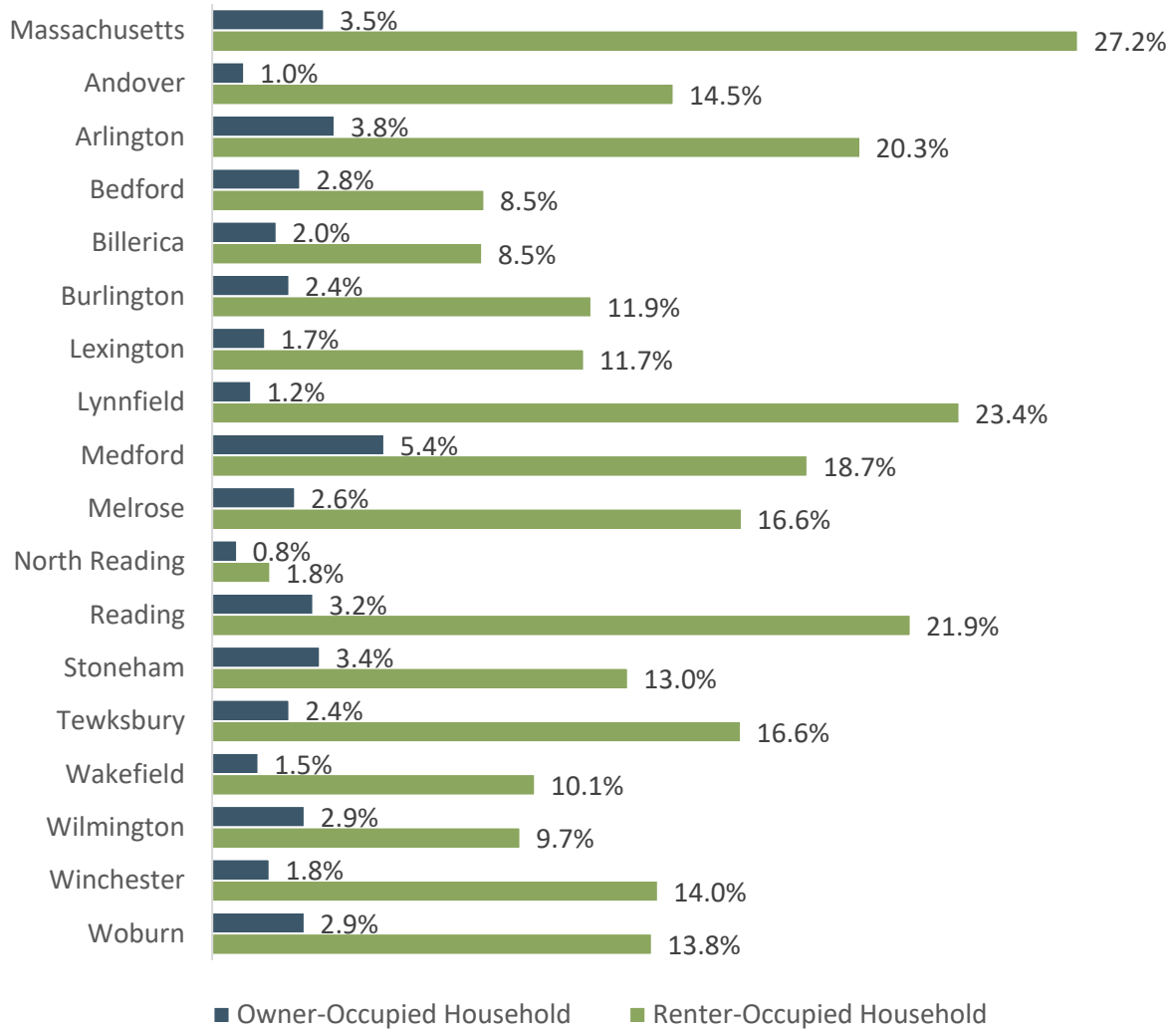



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2014-2018.

Adding to the service area's transportation challenges, few communities have their own transit systems, and thus, a car is needed to travel. Seniors in particular expressed concerns about challenges traveling locally; several senior focus group members reported that they no longer drive, and therefore, have to rely on friends or family members. As one senior shared, "*Transportation is an issue. I don't drive anymore, so I rely on my son and his son to take me to appointments."* While some senior ride services are available through vans sponsored by senior centers and The Ride offered by the MBTA, these services were reported to be expensive.

In 2014-2018, renter-occupied households were more likely to have no vehicle available to them, across towns in the Woburn service area. In Lynnfield 23.4% and in Reading 21.9% of households with renters did not have a vehicle (Figure 29). Across the service area, very few owner-occupied households did not have access to a vehicle, with the highest proportion in Medford (5.4%).

**Figure 29. Percent Households with No Vehicles Available, by Housing Tenure, in Massachusetts and by Town, 2014-2018**




DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2014-2018.

COVID-19 substantially affected transportation in the Woburn service area. Seniors, in particular, spoke about this issue in focus groups as ride services for them were temporarily ceased or reduced at the peak of the pandemic, substantially affecting their ability to go to medical appointments; grocery stores; and receive other services. While these services have slowly restarted, capacity restrictions limit how often and for what purpose seniors may use these services.

A positive transportation development related to COVID-19 within the Woburn service that a few participants observed, is an increase in bicycling. While this was seen as a welcome change, a few people expressed concerns about road safety. As one focus group member shared, "*I think at least once*

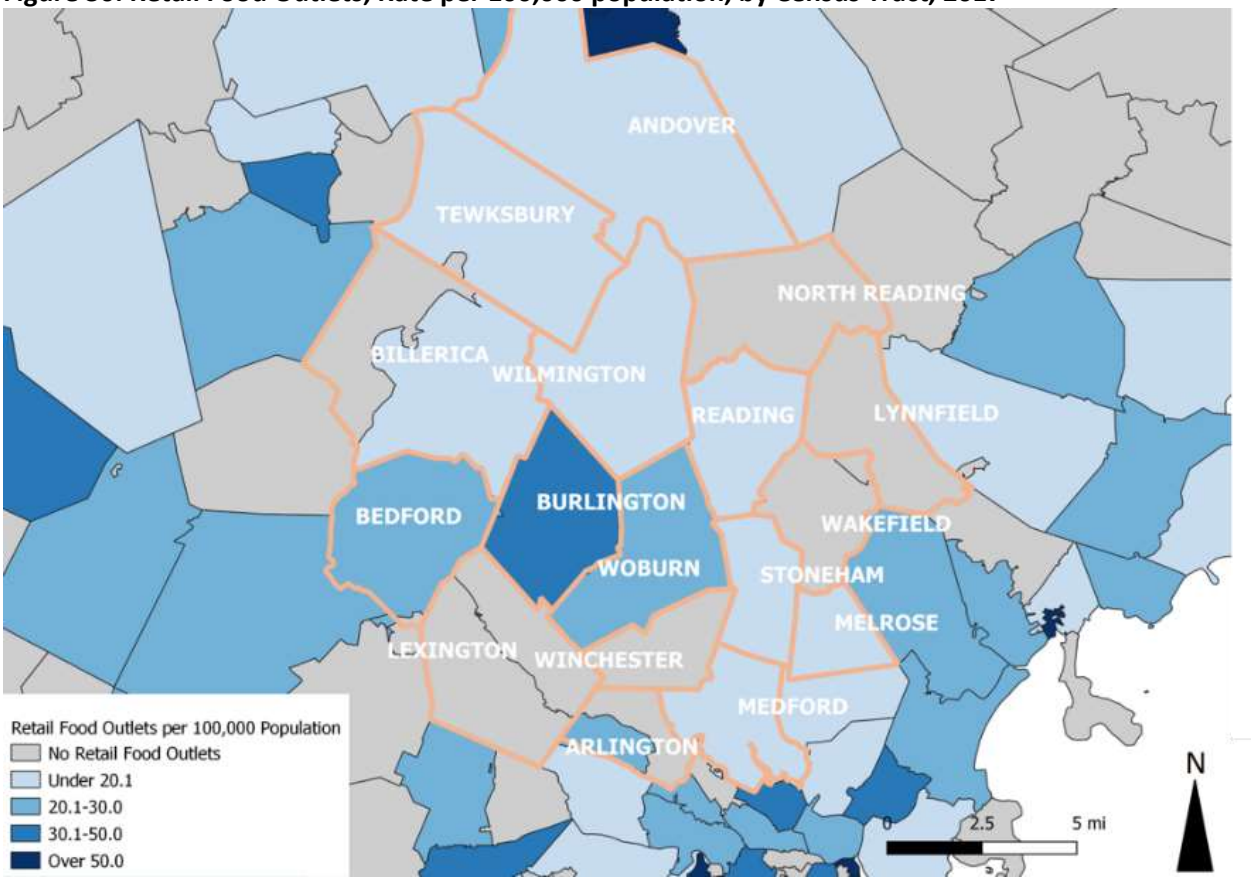
*a week people post [on Facebook] about almost being hit by a car in Medford."* Focus group members mentioned a need for more bike lanes in communities like Medford and Melrose.

**Built Environment**

Communities within the Woburn service area were described as having parks and playgrounds, libraries, and trails, which residents appreciated. Increased use of bicycles in the Woburn service area due to COVID-19 has highlighted the need for more bike lanes in communities, according to participants.

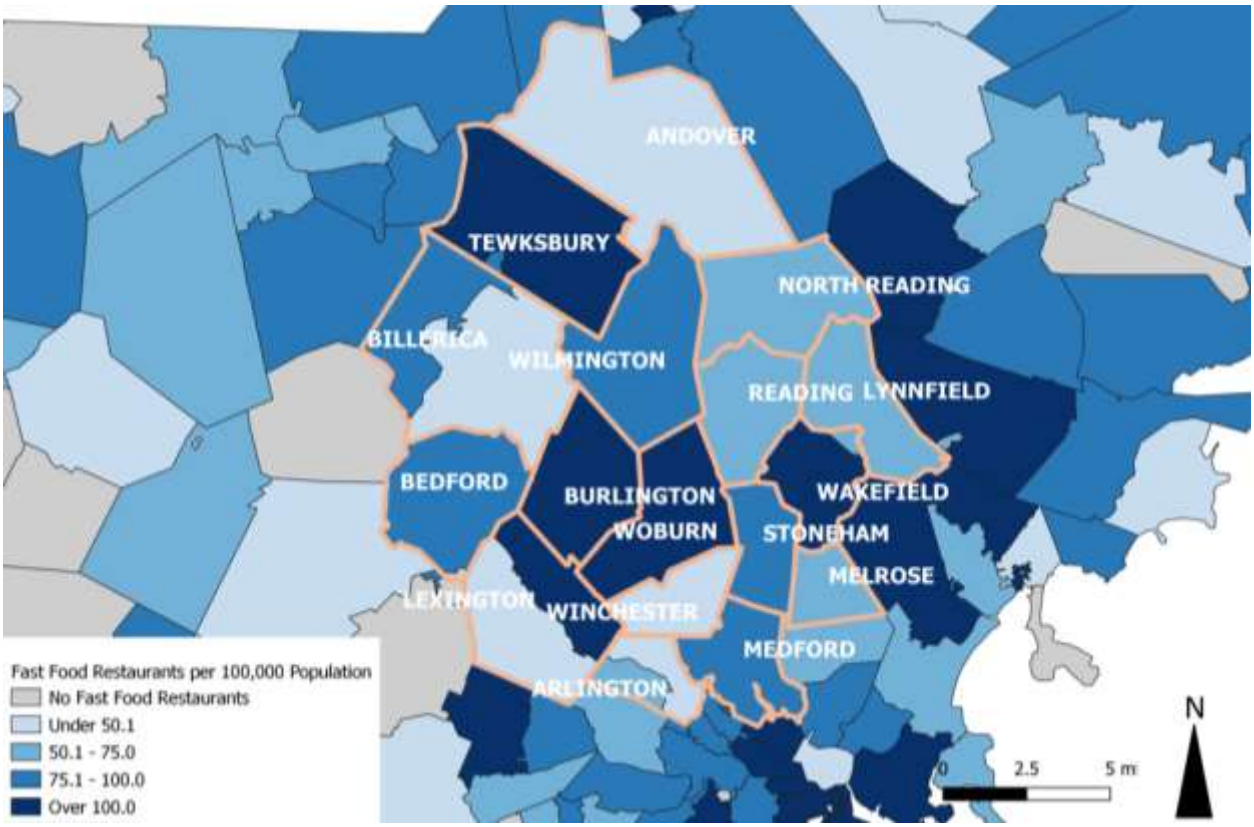
Figure 30 and Figure 31 are maps of the Woburn service area showing the density of retail food outlets and fast food restaurants in the area. Burlington has the highest density of retail food outlets, which are defined as supermarkets and smaller grocery stores primarily engaged in retailing a general line of food, such as canned and frozen foods; fresh fruits and vegetables; as well as fresh and prepared meats, fish, and poultry. Many of the towns in the Woburn service area have under 20 retail food outlets per 100,000 residents, and some have none at all. In contrast, many towns in the area have over 100 fast food restaurants per 100,000 residents.

**Figure 30. Retail Food Outlets, Rate per 100,000 population, by Census Tract, 2017**




DATA SOURCE: U.S Census Bureau, County Business Patterns, as cited by Community Commons, 2017.

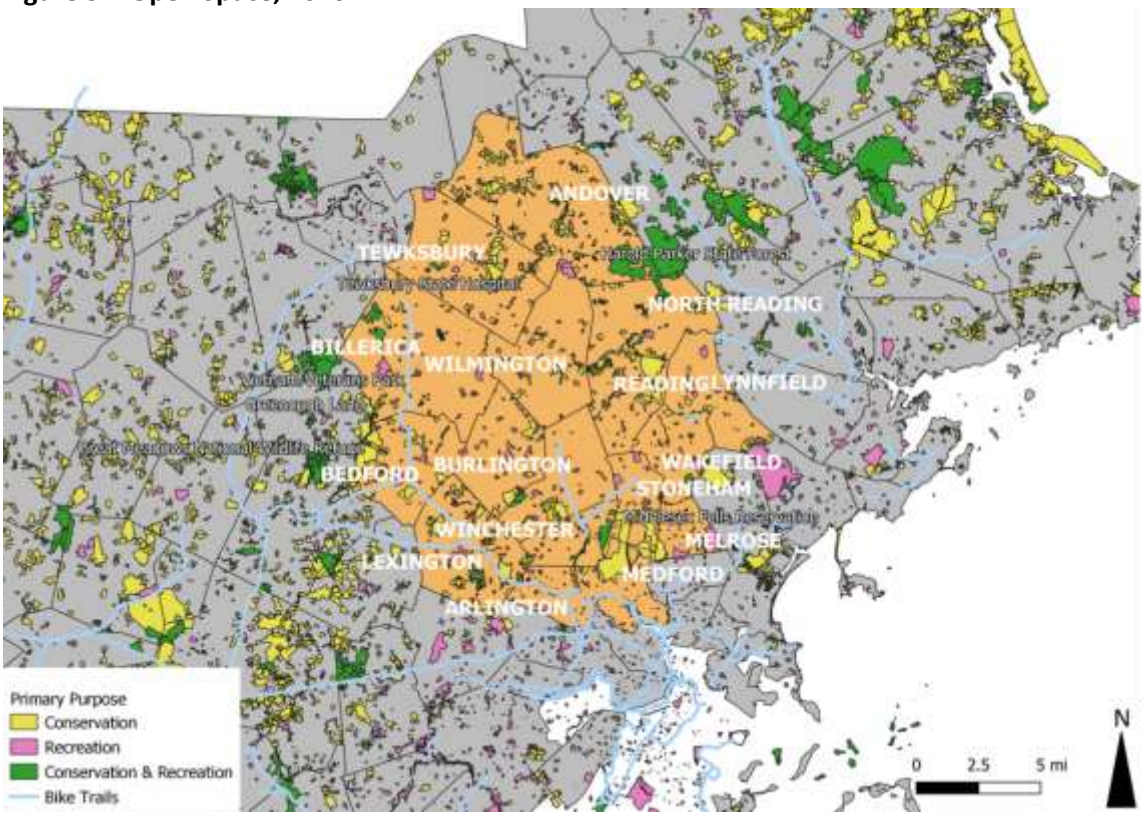
**Figure 31. Fast Food Restaurants, Rate per 10,000, by Census Tract 2017**




DATA SOURCE: U.S Census Bureau, County Business Patterns, as cited by Community Commons, 2017.

Figure 32 shows publicly accessible open space in the Woburn service area. Conservation land includes habitat protection with some recreation including walking trails. Recreation land includes outdoor facilities including parks, commons, playing fields, school fields, and scout camps. The bike trail lines show trails which permit bike travel or corridors with conversion potential.

**Figure 32. Open Space, 2020**



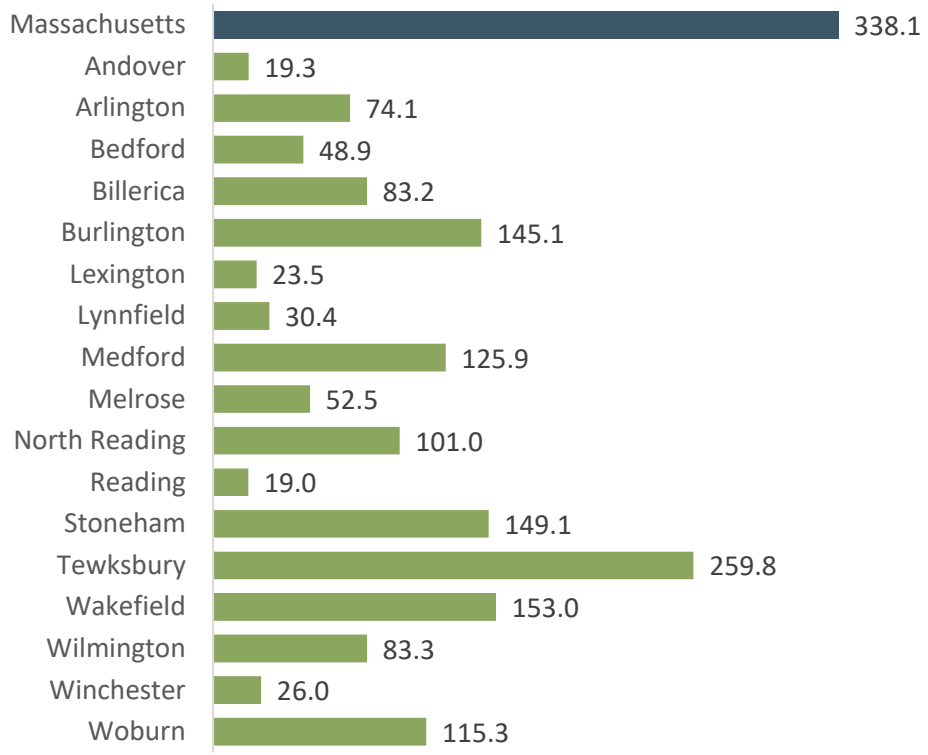

DATA SOURCE: Massachusetts Bureau of Geographic Information (MassGIS), Executive Office of Energy and Environmental Affairs, 2020.

**Crime and Violence**

Overall, focus group members and interviewees described their communities as very safe. A few interviewees reported that police in the community are responding to fewer calls since COVID-19. Interpersonal violence, however, was of concern to participants, and a couple of participants feared that this violence increased during COVID-19. As one interviewee shared, *"The pandemic has increased problems of domestic violence. People are spending too much time together. And liquor stores are open and the drug trade is still on. That exacerbates problem."*

In 2018, rates of violent crime (i.e. murder, rape, robbery, aggravated assault) varied notably across the towns in the Woburn service area, although no towns had higher rates of violent crime than the state average of 338.1 incidents per 100,000 residents (Figure 33). The highest violent crime rates were in Tewksbury (259.8 per 100,000 residents), Wakefield (153.0), Stoneham (149.1), and Burlington (145.1).

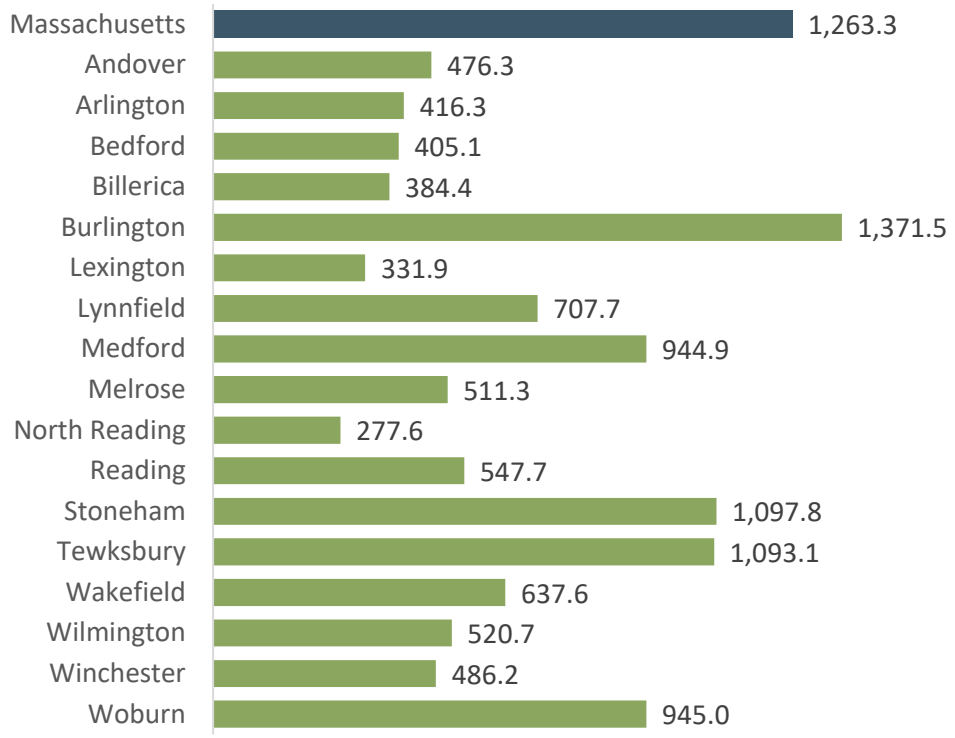
**Figure 33. Violent Crime, Rate per 100,000 Population, in Massachusetts and by Town, 2018**




DATA SOURCE: Federal Bureau of Investigation, Uniform Crime Reports, Offenses Known to Law Enforcement, 2018.
NOTE: Violent crime includes murder, rape, robbery, and aggravated assault.

Property crime (i.e. burglary, larceny, and auto theft) is generally much more common than violent crime in the service area. In 2018, within the Woburn service area, property crime was most common in Burlington (1,371.5 per 100,000 residents); Stoneham (1,097.8); and Tewksbury (1,093.1) (Figure 34).

**Figure 34. Property Crime, Rate per 100,000 Population, in Massachusetts, by Town and Boston Neighborhood, 2018**




DATA SOURCE: Federal Bureau of Investigation, Uniform Crime Reports, Offenses Known to Law Enforcement, 2018.
NOTE: Property crime includes commercial burglary, residential burglary, other burglary, larceny from motor vehicle, other larceny, and auto theft.

**Discrimination and Racism**

> *"It's eye-opening to see [racism] can happen here in this community. You always think of racism as something that happens somewhere else, in some other part of the country."* – Focus group participant

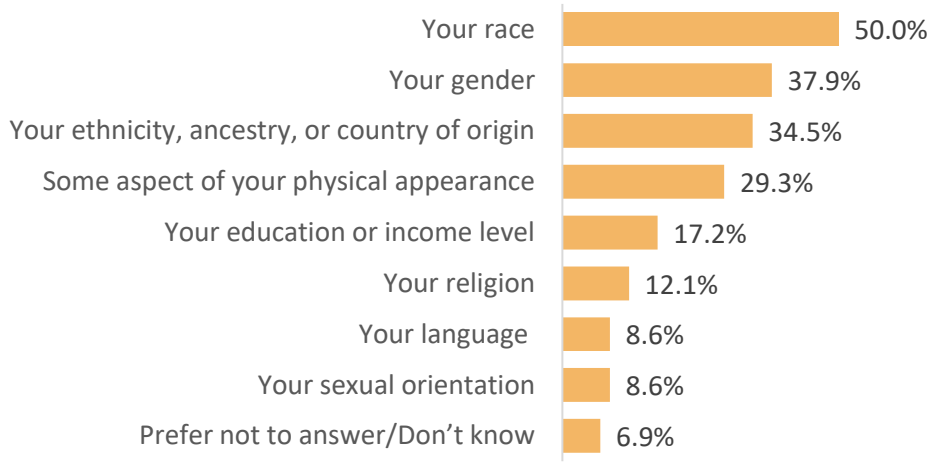
Participants reported that similar to the national dialogue—more emphasis on racial justice has been occurring in the Woburn service area. Perceptions about the extent of discrimination and racism in the community varied. Some participants mentioned incidences in schools of anti-Semitic and racist graffiti and community incidences of racism and anti-immigrant actions. As one focus group member stated, "*A lot of people were shocked to know that there's racism happening in Medford. I was shocked to know a lot of people were surprised by that – I wasn't surprised."* Other participants, however, reported that they did not see discrimination and racism as prominent community issues.

Consistently, however, participants shared that conversations about racial justice and policing have been taking place in their communities. A few residents pointed to tensions among those supporting the Black Lives Matter movement and those who disagreed with some of their stances, particularly related to the police. Local leaders and community-based organizations, including faith institutions, have been working to engage the community in conversations about this issue, participants reported. As one interviewee commented, "*People are angry, but talking."* Additionally, interviewees reported that conversations and work on addressing systemic racism has started in police departments and within schools in their communities.

While participants felt strongly about the cohesiveness of their communities, they also acknowledged that recent conversations and activism around racial justice have been difficult and some divisions have emerged. As one interviewee observed, *"It's hard to have conversations outside of groups you're familiar with talking to. In these times, cracks are opening up where people have never examined their beliefs."*

Assessment participants also noted their own experiences with discrimination. Among Woburn Community Priorities Survey respondents, 11.2% indicated that they or their family members have directly experienced discrimination in the past six months. Among that sub-sample, 50.0% reported this was due to their race; 37.9% said it was due to their gender; 34.5% said it was due to their ethnicity, ancestry, or country of origin; and 29.3% reported it was due to their physical appearance (Figure 35).

**Figure 35. Percent of CHNA Community Priorities Survey Respondents Reporting Main Reasons for Discrimination, among Respondents Reporting Discrimination as an Issue, 2020 (N=58)**




NOTE: Question in the survey allowed for multiple responses; therefore, percentages may not add up to 100%.
DATA SOURCE: PAC CHNA Community Priorities Survey, 2020.

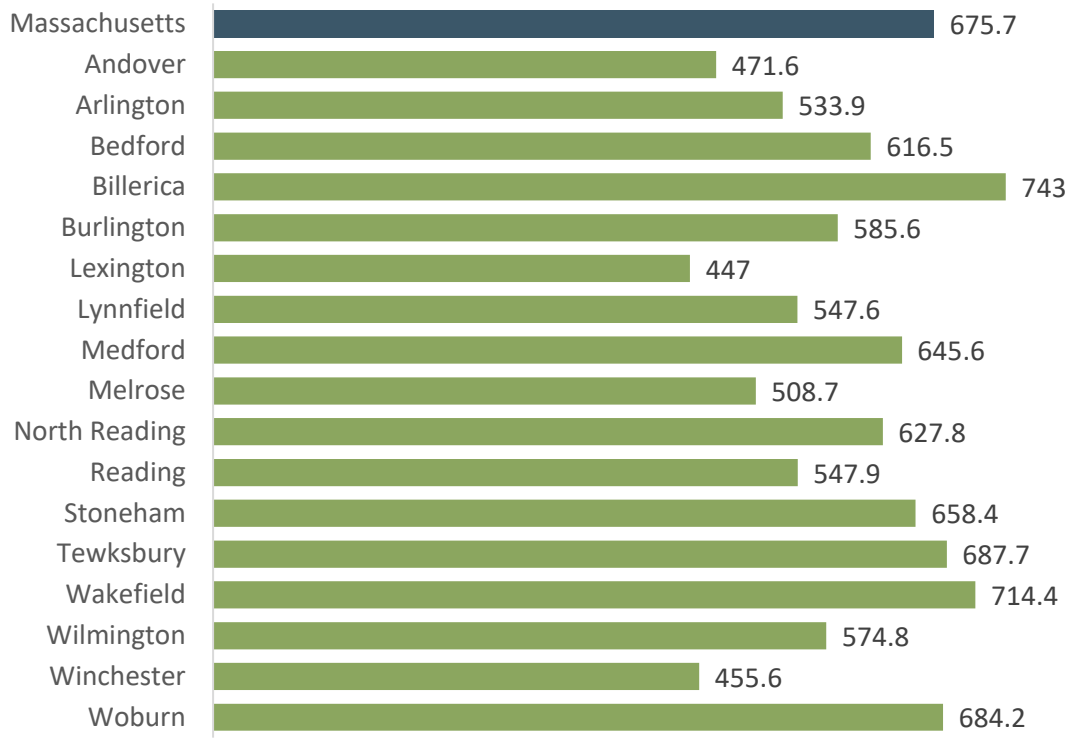
## COMMUNITY HEALTH ISSUES

**Overall Mortality**

Mortality rates help to measure the burden and impact of disease on a population, while premature mortality data (deaths before age 65 years old) provide a picture of preventable deaths and point to areas where additional health and public health interventions may be warranted. Age-adjusted mortality rates per 100,000 residents varied between towns in the Woburn service area in 2017, from

lows of 447.0 in Lexington, 455.6 in Winchester, and 471.6 in Andover; to highs of 743.0 in Billerica and 714.4 in Wakefield (Figure 36).

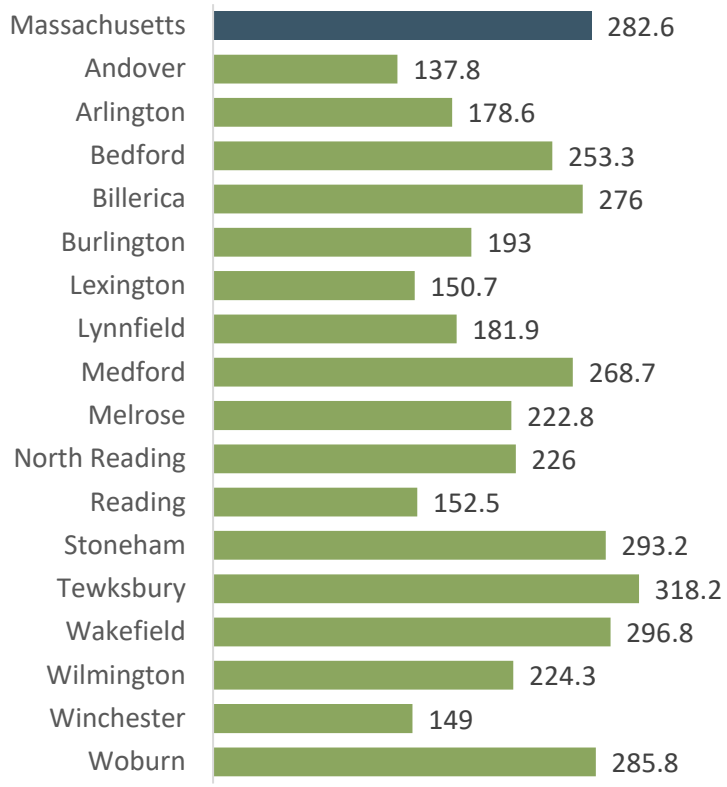
**Figure 36. Overall Mortality, Age-Adjusted Rate per 100,000 Population, in Massachusetts and by Town, 2017**




DATA SOURCE: Massachusetts Department of Public Health, Registry of Vital Records and Statistics, 2017.

For age-adjusted premature mortality in 2017, the lowest rates of deaths before age 65 were in Andover, Winchester, Lexington, and Reading; the highest rates were in Stoneham, Wakefield, and Tewksbury (Figure 37).

**Figure 37. Premature Mortality, Age-Adjusted Rate per 100,000 Population, in Massachusetts and by Town, 2017**




DATA SOURCE: Massachusetts Department of Public Health, Registry of Vital Records and Statistics, 2017.

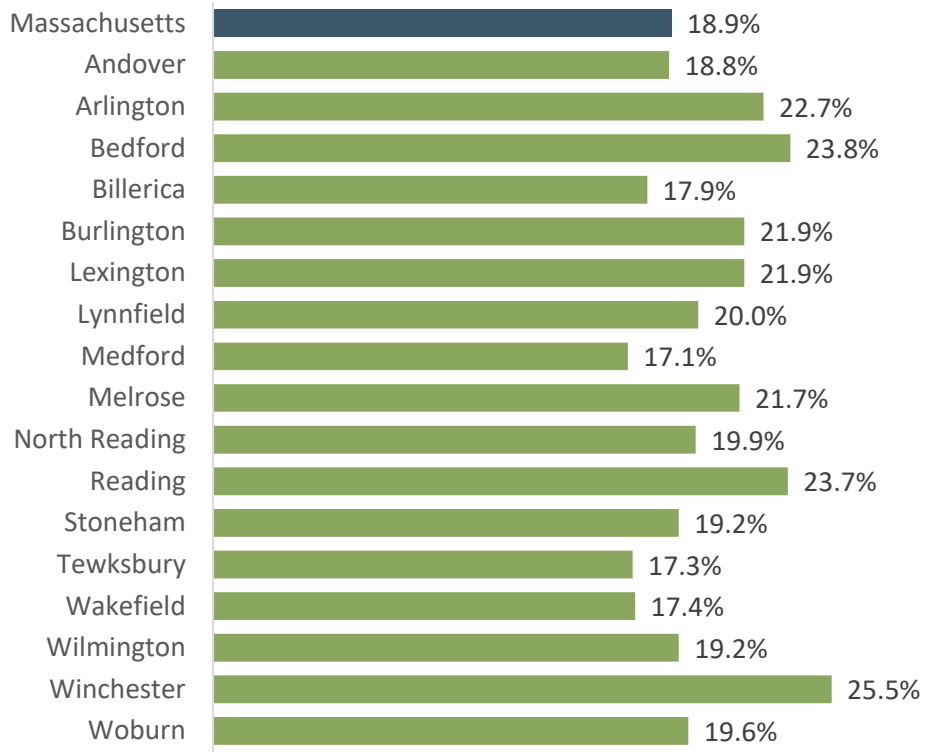
**Chronic Diseases and Related Risk Factors**

*Overweight and Obesity*

While nearly four in ten of Woburn Community Priorities Survey respondents (38.9%) indicated that overweight/obesity was an issue that affected them or their family personally in the past six months, it was not an issue brought up among focus group or interview participants. Healthy eating is a key component of maintaining a healthy weight, and overall adults in the Woburn service area reported previously that they were not likely to meet the recommended vegetable guidelines. In 2011-2015, the percent of adults consuming five or more fruits and vegetables daily in Massachusetts was 18.9%. By town, the percent of adults consuming 5 or more fruits and vegetables daily ranged from 17.1% in Medford to 25.5% in Winchester (Figure 38).

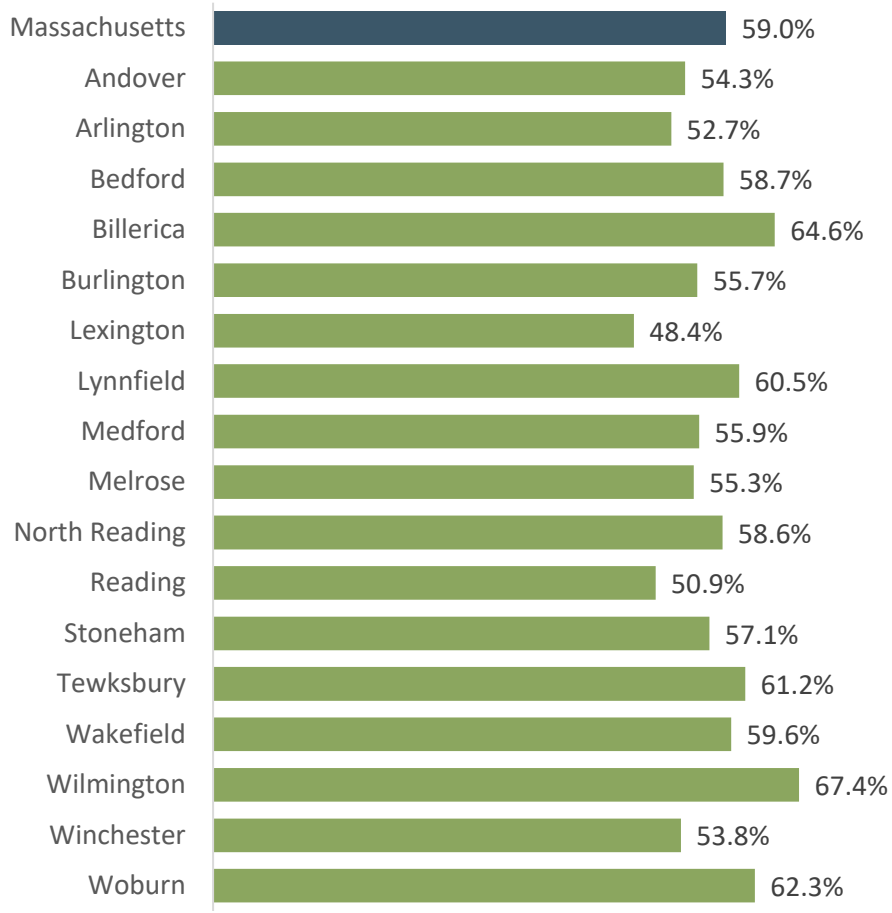
In 2012-2014, the percent of adults reporting obesity or overweight in Massachusetts was 59.0%. By town, the percent of adults reporting obesity or overweight ranged from 48.4% in Lexington to 67.4% in Wilmington (Figure 39).

**Figure 38. Percent Adults Consuming 5 or More Fruits and Vegetables Daily, in Massachusetts and by Town, 2011-2015**




DATA SOURCE: Massachusetts Department of Public Health, Behavioral Risk Factor Surveillance System (BRFSS) Small Area Estimates, 2011-2015.
NOTE: Data are aggregated based on multiple years including 2011, 2013, 2015.

**Figure 39. Percent Adults Reporting Obesity or Overweight, in Massachusetts and by Town, 2012-2014**

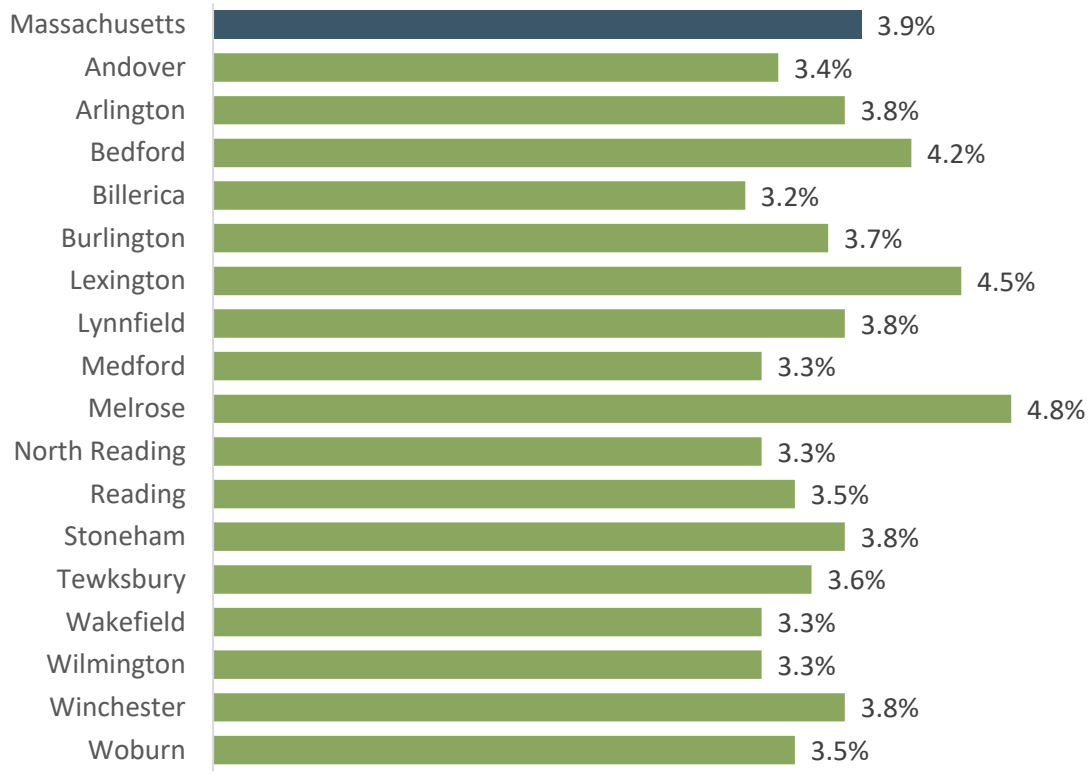



DATA SOURCE: Massachusetts Department of Public Health, Behavioral Risk Factor Surveillance System (BRFSS) Small Area Estimates, 2012-2014.
NOTE: Data are aggregated based on multiple years including 2012-2014.

*Heart Disease*

Even though heart disease is the second leading cause of death in Massachusetts, it was not an issue discussed in the focus groups or interviews. In 2012-2014, the percent of adults reporting angina or coronary heart disease (CHD) in Massachusetts was 3.9%. By town, the percent of adults reporting angina or CHD ranged from 3.2% in Billerica to 4.8% in Melrose (
Figure **40**).

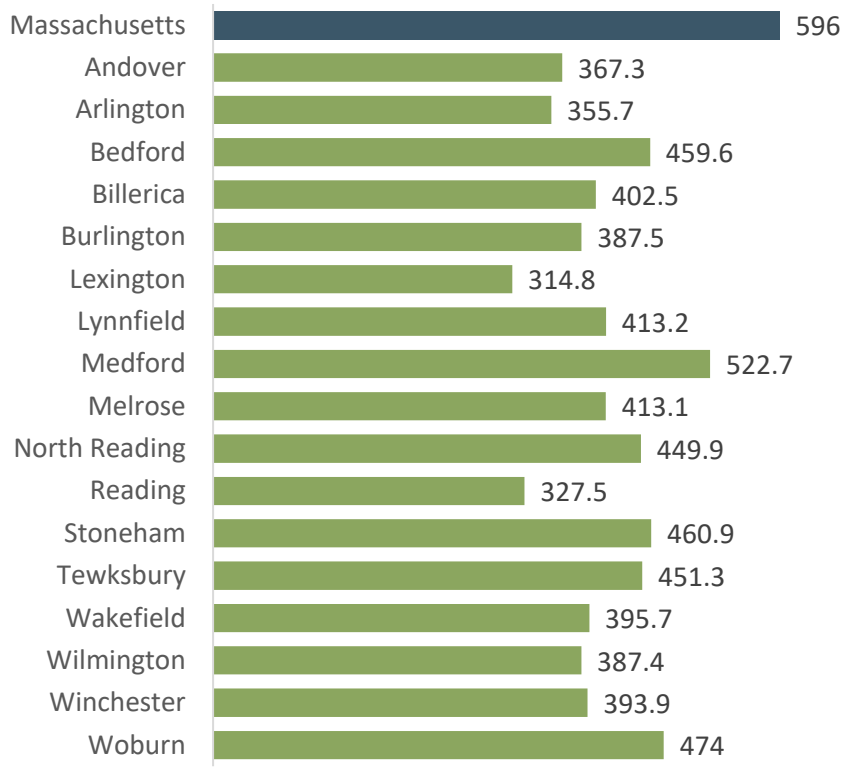
**Figure 40. Percent Adults Reporting Angina or Coronary Heart Disease (CHD), in Massachusetts and by Town, 2012-2014**




DATA SOURCE: Massachusetts Department of Public Health, Behavioral Risk Factor Surveillance System (BRFSS) Small Area Estimates, 2012-2014.
NOTE: Data are aggregated based on multiple years.

In 2014, the age-adjusted rate per 100,000 population of heart disease emergency department visits was 596 in Massachusetts. By town, the age-adjusted rate of heart disease emergency department visits ranged from 314.8 per 100,000 population in Lexington to 522.7 per 100,000 population in Medford (Figure 41).

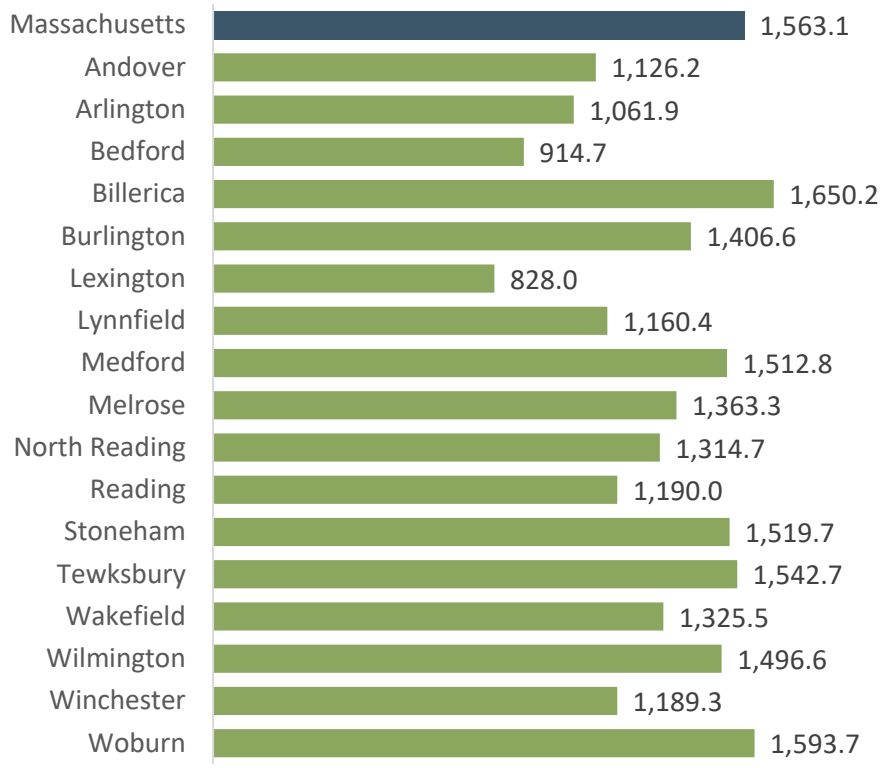
**Figure 41. Heart Disease Emergency Department Visits, Age-Adjusted Rate per 100,000 Residents, in Massachusetts and by Town, 2014**




DATA SOURCE: Massachusetts Department of Public Health, Center for Health Information and Analysis (CHIA), 2014.

In 2014, the age-adjusted rate per 100,000 population of heart disease hospitalizations was 1,563.1 in Massachusetts. By town, the age-adjusted rate of heart disease hospitalizations ranged from 828.0 per 100,000 population in Lexington to 1,650.2 per 100,000 population in Billerica (
Figure **42**).

**Figure 42. Heart Disease Hospitalizations, Age-Adjusted Rate per 100,000 Residents, in Massachusetts and by Town, 2014**

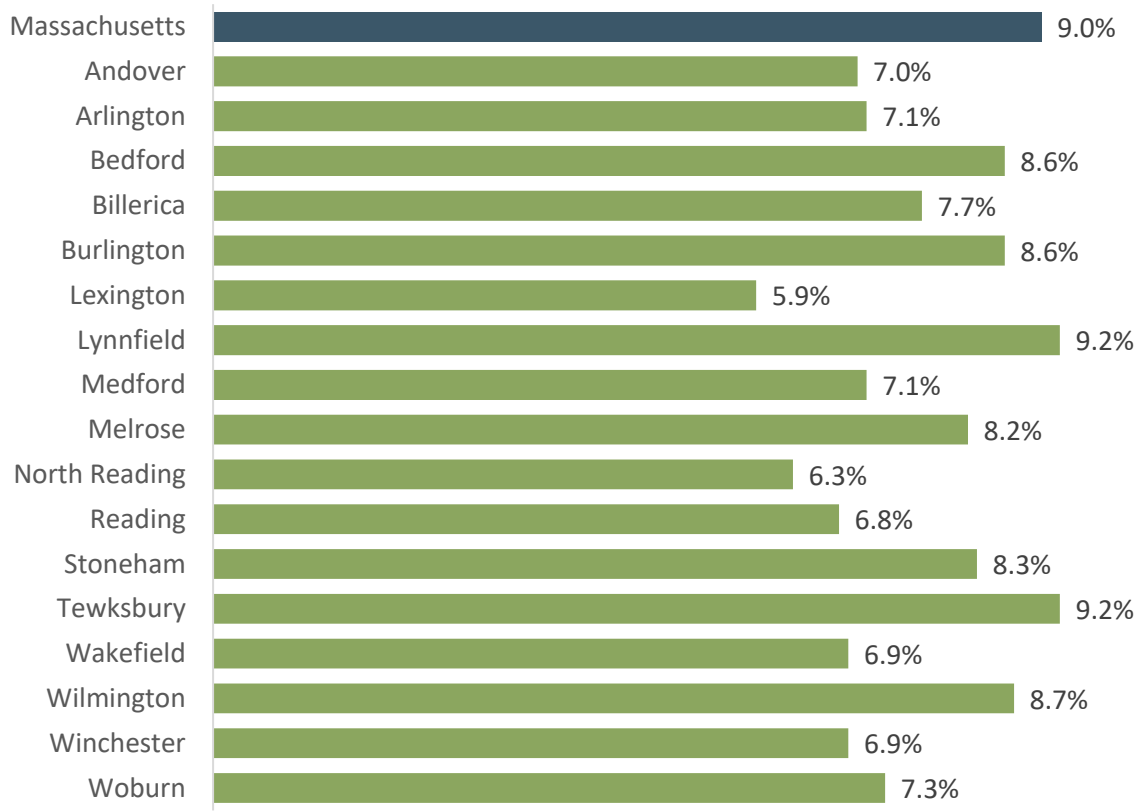



DATA SOURCE: Massachusetts Department of Public Health, Center for Health Information and Analysis (CHIA), 2014.

*Diabetes*

In 2012-2014, the percent of adults reporting diabetes in Massachusetts was 9.0%. By town, the percent of adults reporting diabetes ranged from 5.9% in Lexington to 9.2% in Lynnfield and Tewksbury (Figure 43).

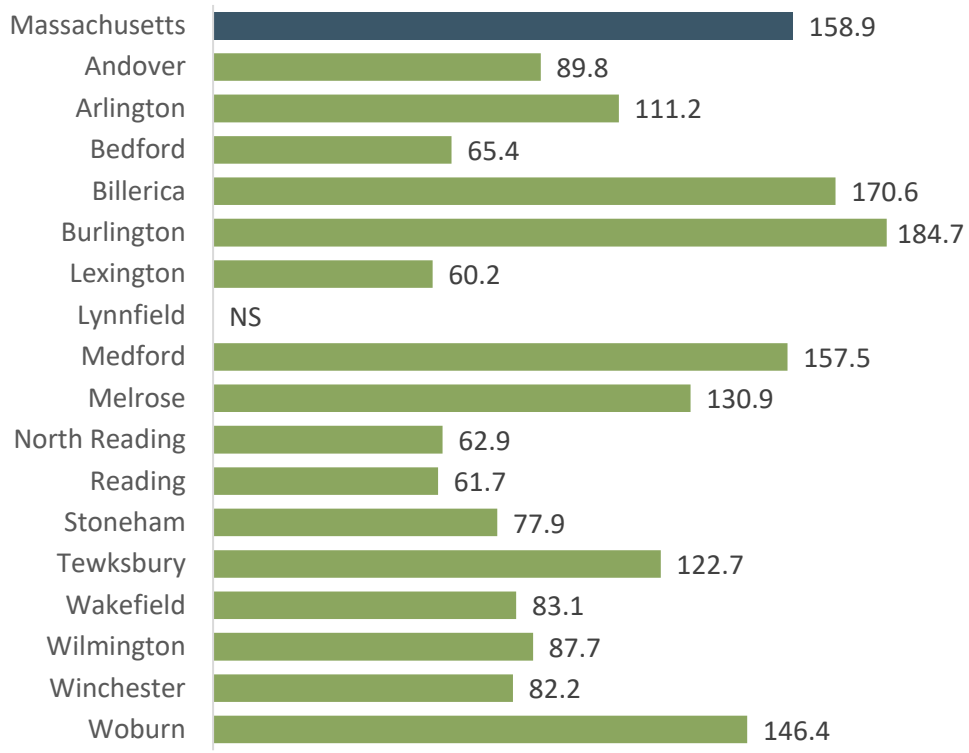
**Figure 43. Percent Adults Reporting Diabetes, in Massachusetts and by Town, 2012-2014**




DATA SOURCE: Massachusetts Department of Public Health, Behavioral Risk Factor Surveillance System (BRFSS) Small Area Estimates, 2012-2014.
NOTE: Data are aggregated based on multiple years including 2012-2014.

In 2014, the age-adjusted rate of diabetes hospitalizations per 100,000 population was 158.9 in Massachusetts. By town, the age-adjusted rate of diabetes hospitalizations ranged from 60.2 per 100,000 population in Lexington to 184.7 per 100,000 population in Burlington (Figure 44).

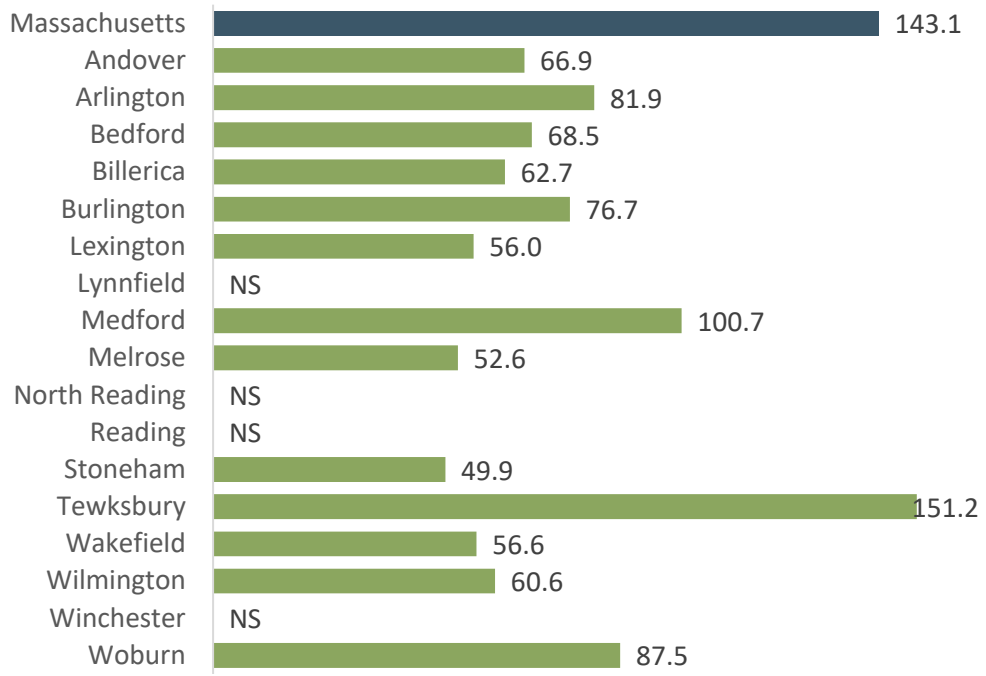
**Figure 44. Diabetes Hospitalizations, Age-Adjusted Rate per 100,000 population, in Massachusetts and by Town, 2014**




DATA SOURCE: Massachusetts Department of Public Health, Center for Health Information and Analysis (CHIA), 2014.
NOTE: NS = Data not shown due to insufficient sample size.

In 2014, the age-adjusted rate of diabetes emergency department visits per 100,000 population was 143.1 in Massachusetts. By town, the age-adjusted rate of diabetes emergency department visits ranged from 49.9 per 100,000 population in Stoneham to 151.2 per 100,000 population in Tewksbury. Data for several towns were not reported due to insufficient sample size (Figure 45).

**Figure 45. Diabetes Emergency Department Visits, Age-Adjusted Rate per 100,000 population, in Massachusetts and by Town, 2014**




DATA SOURCE: Massachusetts Department of Public Health, Center for Health Information and Analysis (CHIA), 2014.
NOTE: NS = Data not shown due to insufficient sample size.

*Cancer*

Cancer is the leading cause of death in Massachusetts. In 2009-2013, by town, standardized incidence ratios (SIR) for breast cancer in females ranged from 89 (Lynnfield) to 121 (Reading and Stoneham). This indicates that the incidence of breast cancer in females was 11% lower in Lynnfield and 21% higher in Reading and Stoneham than expected based on standardized rates for the state. The incidence of prostate cancer in males ranged from 37% lower than expected in Reading (SIR 63) to 3% higher than expected in Lexington and Tewksbury (SIR 103). The incidence of lung and bronchus cancer ranged from 46% lower than expected in Lexington (SIR 54) to 24% higher than expected in Billerica (SIR 124). The incidence of colorectal cancer ranged from 29% lower than expected in Lexington (SIR 71) to 18% higher than expected in Melrose (SIR 118) (Table 9).

**Table 9. Cancer Standardized Incidence Ratios for Leading Cancer Types, 2009-2013**

| | Breast Cancer (female) | Prostate (male) | Lung and Bronchus | Colorectal |
|---|---|---|---|---|
| Andover | 108 | 92 | 58 | 76 |
| Arlington | 103 | 99 | 85 | 80 |
| Bedford | 97 | 87 | 82 | 87 |
| Billerica | 95 | 96 | 124 | 103 |
| Burlington | 111 | 102 | 93 | 92 |
| Lexington | 101 | 103 | 54 | 71 |
| Lynnfield | 89 | 94 | 89 | 111 |
| Medford | 101 | 83 | 104 | 113 |
| Melrose | 96 | 92 | 83 | 118 |
| North Reading | 119 | 91 | 75 | 88 |
| Reading | 121 | 63 | 90 | 84 |
| Stoneham | 121 | 75 | 91 | 112 |
| Tewksbury | 98 | 103 | 118 | 92 |
| Wakefield | 109 | 82 | 95 | 109 |
| Wilmington | 116 | 77 | 118 | 102 |
| Winchester | 116 | 102 | 76 | 91 |
| Woburn | 120 | 92 | 109 | 115 |

DATA SOURCE: Massachusetts Department of Public Health, Massachusetts Cancer Registry, 2009-2013.

**Behavioral Health**

*Mental Health*

> *"Day to day we see a lot of anxiety. That continually comes up as an issue that many, if not most, families are dealing with. That's community wide."* – Key informant interviewee

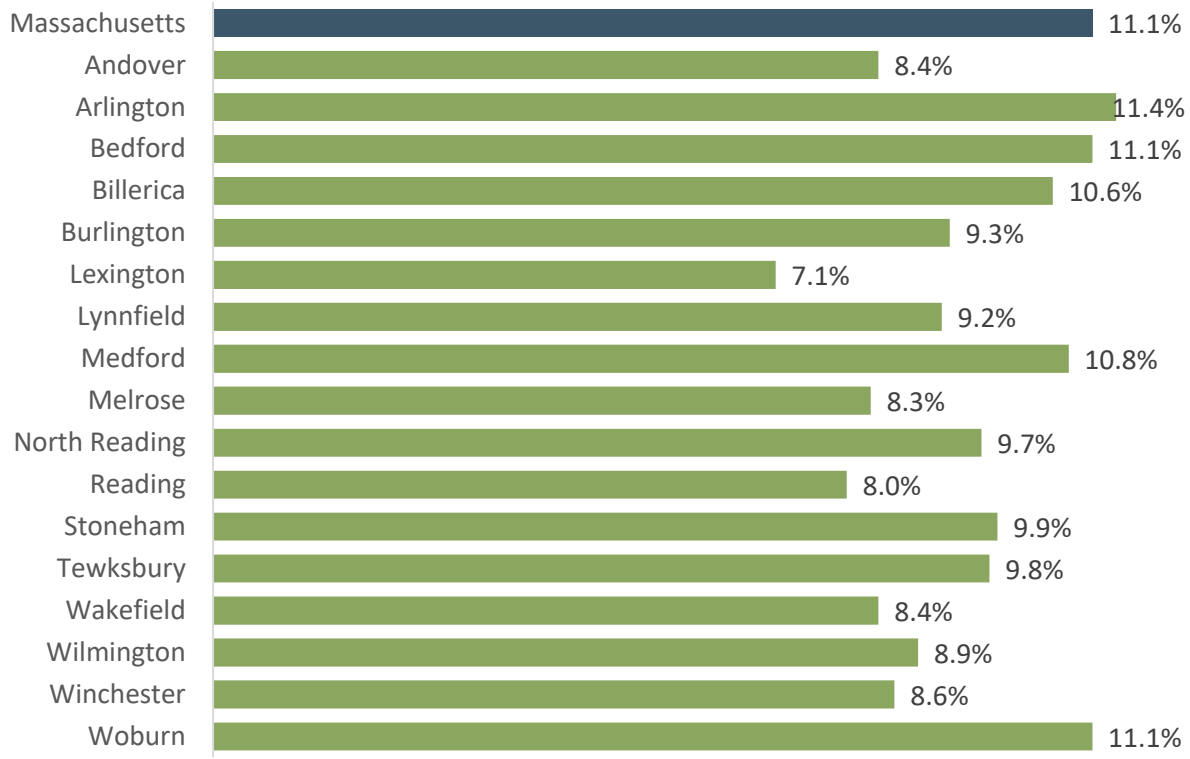
When asked to identify health issues of greatest concern to the community, focus group members and interviewees consistently mentioned mental health. Poor mental health was described as a challenge across all age groups and an issue that existed prior, but has been magnified by, the pandemic. Participants mentioned anxiety and trauma as prevalent among community members, with some suffering from more serious mental health concerns. The mental health of seniors, including depression

that comes from isolation and loneliness and the onset of dementia and Alzheimer's disease, was identified as a community concern by several participants.

Mental health concerns among immigrant and refugee populations were also highlighted. As one person described, *"For refugees and immigrants, there is a whole level of anxiety about everything in life. Almost everyone comes here with trauma. Mental health from trauma is such a huge thing. Plus, in the current context, they have anxiety every time they step out the door."* Focus group members and interviewees shared that lack of providers who speak other languages, especially for immigrants from African countries, means some groups cannot access needed services. As one interviewee stated, "*You need native speakers. You can't be 'kind of fluent' when providing mental health therapy."* One interviewee also noted that specific outreach and education should be targeted at specific groups to help overcome stigma about mental health that those communities may hold, *"In Asian cultures, it's considered shameful if you have mental health issues, so a lot of people don't go for treatment…We're doing education to reduce stigma and make people realize how important it is to address [mental health]."*

In 2012-2014, the percent of adults reporting 15 or more days of poor mental health in the last month was 11.1% in Massachusetts. By town, the percent of adults reporting 15 or more days of poor mental health in the last month ranged from 7.1% in Lexington to 11.4% in Arlington (Figure 46).

**Figure 46. Percent of Adults Reporting 15 or More Days of Poor Mental Health in the Last Month, in Massachusetts and by Town, 2012-2014**



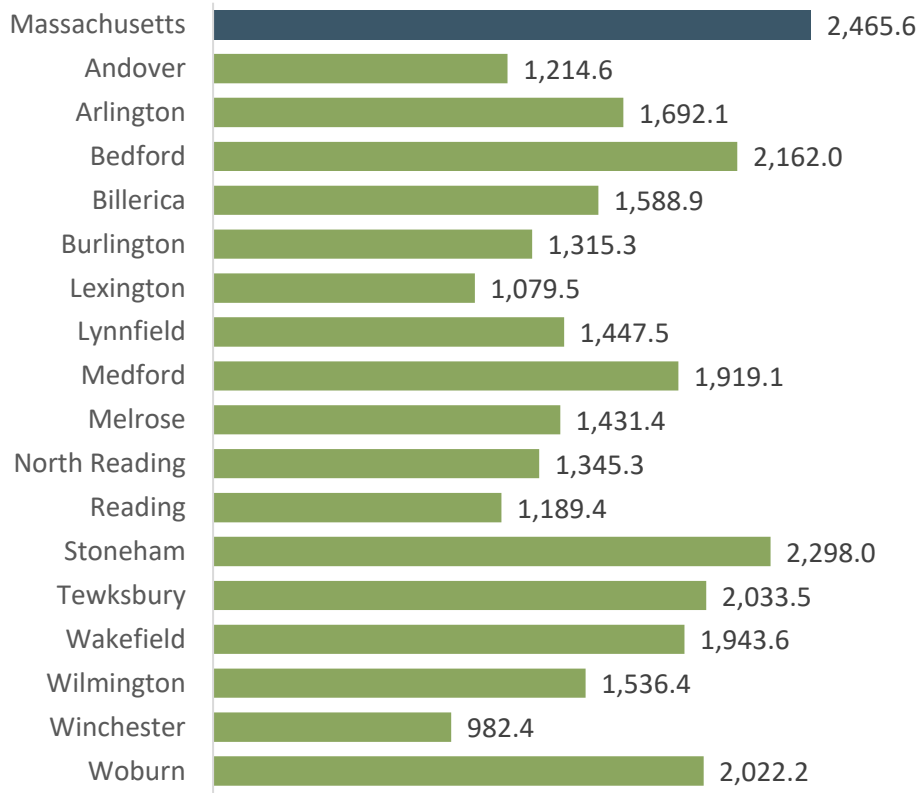

DATA SOURCE: Massachusetts Department of Public Health, Behavioral Risk Factor Surveillance System (BRFSS) Small Area Estimates, 2012-2014.
NOTE: Data are aggregated based on multiple years.

According to focus group members and interviewees, lack of mental health providers was the primary challenge in addressing mental health in the community. It was reported that the number of providers in the community is insufficient to meet the demand for services, leading to long waits for mental health services. As one interviewee explained, *"When I see people, they're in crisis, so to tell them there's a wait list to see someone is really hard and not very helpful."* A lack of providers for children and adolescents was described as an especially significant challenge.

Additional mental health workforce challenges included low reimbursement for mental health services, which can make it difficult for provider organizations to fill positions when they are available. Few providers accept MassHealth, participants reported, furthering curtailing access to mental health services for lower income residents.

In 2014, the age-adjusted rate of mental health emergency department visits per 100,000 population was 2,465.6 in Massachusetts. By town, the age-adjusted rate of mental health emergency department visits ranged from 982.4 per 100,000 population in Winchester to 2,298.0 per 100,000 population in Stoneham (Figure 47).

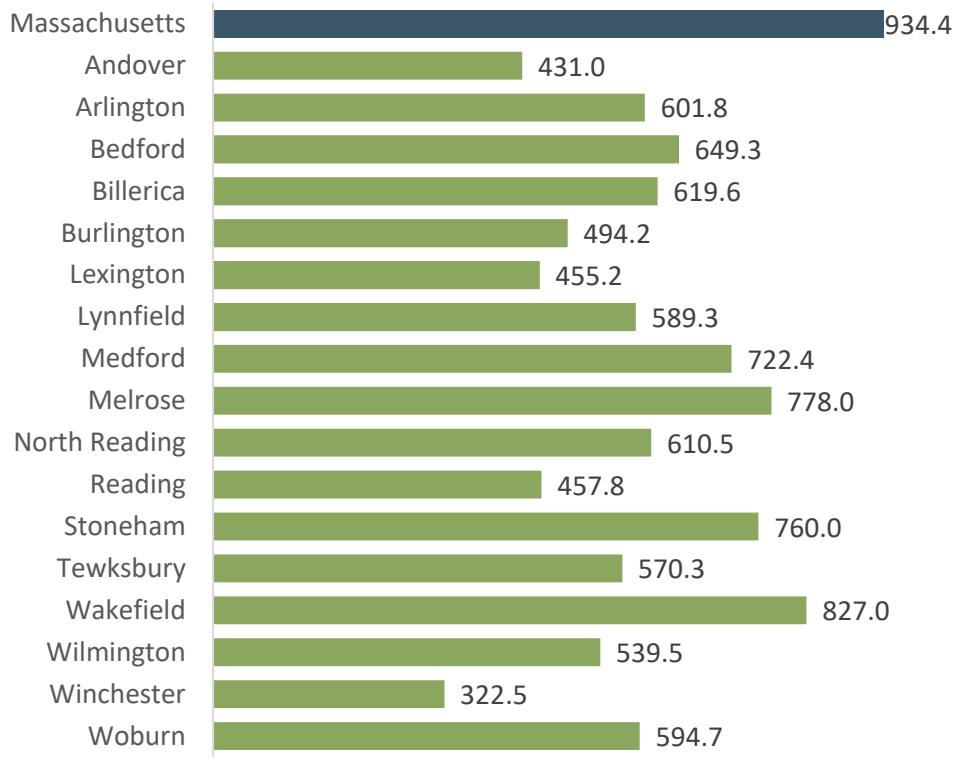
**Figure 47. Mental Health Emergency Department Visits, Age-Adjusted Rate per 100,000 population, in Massachusetts and by Town, 2014**




DATA SOURCE: Massachusetts Department of Public Health, Center for Health Information and Analysis (CHIA), 2014.

In 2014, the age-adjusted rate of mental health hospitalizations per 100,000 population was 934.4 in Massachusetts. By town, the age-adjusted rate of mental health emergency department visits ranged from 322.5 per 100,000 population in Winchester to 827.0 per 100,000 population in Wakefield (Figure 48).

**Figure 48. Mental Health Hospitalizations, Age-Adjusted Rate per 100,000 population, in Massachusetts and by Town, 2014**




DATA SOURCE: Massachusetts Department of Public Health, Center for Health Information and Analysis (CHIA), 2014.

Focus group participants and interviewees stated that COVID-19 exacerbated mental health issues in their communities. Depression, anxiety, stress, and trauma were most frequently mentioned. Seniors and public housing residents participating in focus groups spoke about the isolation and fear brought on by COVID-19. Those with school-age children shared the challenges of remote learning and the stress that comes with the uncertainty of the coming school year. Many worried about the long-term impact of the pandemic and lack of socialization on the community's children and youth. On a more positive note, interviewees who work in mental health services stated that the pandemic has led to greater use of telehealth to deliver mental health services, which offers the potential to address some service delivery issues in the future. However, they also noted that this model does not work for everyone, and thus, COVID-19 has interrupted mental health services to some who were receiving them.

*Mental Health among Seniors*

Isolation of senior residents—from services and others—was a frequently-cited concern among focus group members and interviewees. As one interviewee explained, *"People used to drop by all the time, to drop off a check or something, and then they would stay and chat. But now, we just don't hear from*

*them – it's very concerning. Some of our tenants are terrified, they don't want to leave their units. So, what are they eating? what are they feeding their pets? How are they getting by?"* Numerous participants spoke about not hearing from friends and neighbors with whom they regularly interacted prior to COVID-19.

Senior focus group members and interviewees who work with seniors noted that the isolation of seniors was a challenge prior to COVID-19, but worse now as seniors are afraid to leave their homes and transportation services have been curtailed, creating health and mental health challenges. As one senior shared, *"I do feel like a lot of people are down with the COVID– they want to get out of their house, they don't have a lot of people to talk to. They're very lonely."* Another participant noted a similar sentiment, "*It's a long time to not be able to talk to anyone. There are definitely people who don't have anyone to talk to or no family nearby."* Participants praised the communication and efforts of senior center staff through virtual means and socially distanced programs, although this has been difficult for seniors who do not have access to computers.

In 2018, the percent of adults 65 years or older with depression was 31.5% in Massachusetts. By town, the percent of adults 65 years or older with depression ranged from 26.9% in Andover to 32.8% in Arlington (Figure 49).

**Figure 49. Percent of Adults Aged 65 years or older with Depression, in Massachusetts and by Town, 2018**

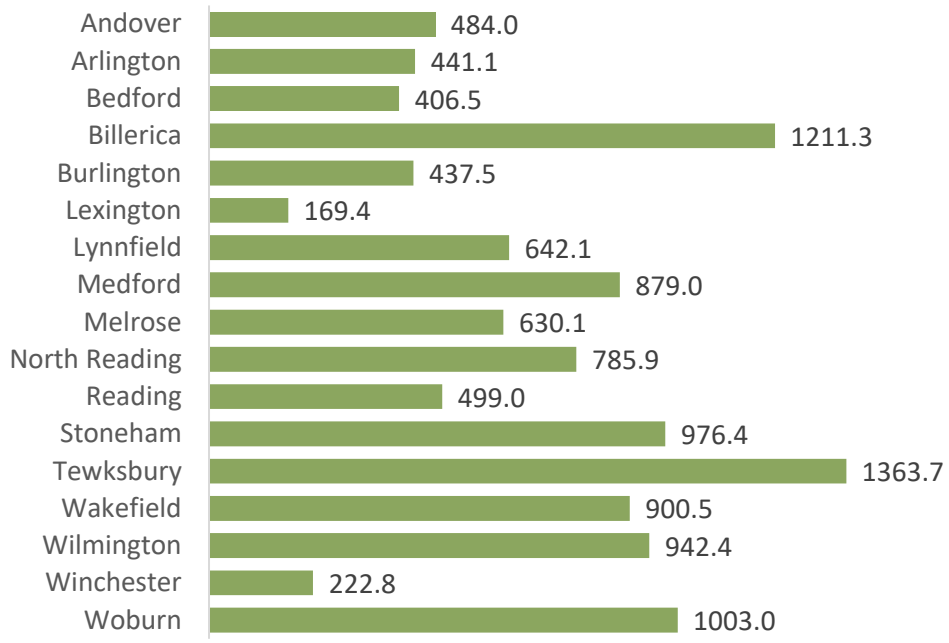

DATA SOURCE: Tufts Health Plan, Massachusetts Healthy Aging Data Report, 2018.

*Substance Use*

While substance use was not mentioned frequently by participants, a few interviewees stated that, as in other urban areas, opioid and prescription drug misuse were of concern in the Woburn service area. A few participants mentioned that they were concerned that COVID-19 has exacerbated substance misuse. As one interviewee reported, *"People are drowning themselves in drugs and booze."* One interviewee shared that marijuana use among young people is a growing issue in the community and one that is not receiving sufficient attention.

Participants reported that recovery programs exist in the community, although more services are needed, especially those providing residential treatment. In 2016-2017, the rate of Bureau of Substance Addiction Services Enrollments ranged from 169.4 per 100,000 population in Lexington to 1,363.7 per 100,000 population in Tewksbury (Figure 50).

**Figure 50. Bureau of Substance Addiction Services Enrollments, Rate per 100,000 population, by Town, 2016-2017**




DATA SOURCE: Massachusetts Department of Public Health, Bureau of Substance Addiction Services, 2016-2017.

From 2014-2019, Massachusetts had around 2,000 opioid-related overdose death each year, with the fewest deaths in 2014 (1,365) and the most deaths in 2016 (2,094). By town, Billerica, Medford, and Woburn all averaged more than 10 deaths per year over the 6-year period (Table 10).

**Table 10. Count of Opioid-Related Overdose Deaths, Massachusetts and by Town, 2014-2018**

| | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|---|---|---|---|---|---|
| Massachusetts | 1,365 | 1,747 | 2,094 | 1,977 | 2,005 | 1972 |
| Andover | 6 | 6 | 3 | 2 | 2 | 5 |
| Arlington | 5 | 6 | 6 | 3 | 3 | 4 |
| Bedford | 3 | 1 | 6 | 3 | 3 | 4 |
| Billerica | 12 | 14 | 16 | 14 | 13 | 11 |
| Burlington | 3 | 3 | 8 | 8 | 3 | 4 |
| Lexington | 2 | 3 | 2 | 0 | 3 | 1 |
| Lynnfield | 2 | 2 | 1 | 2 | 5 | 4 |
| Medford | 14 | 21 | 18 | 18 | 8 | 10 |
| Melrose | 4 | 2 | 10 | 11 | 8 | 3 |
| North Reading | 2 | 1 | 2 | 6 | 5 | 2 |
| Reading | 4 | 3 | 4 | 6 | 5 | 3 |
| Stoneham | 5 | 7 | 8 | 6 | 6 | 4 |
| Tewksbury | 7 | 9 | 13 | 11 | 7 | 6 |
| Wakefield | 5 | 8 | 10 | 8 | 10 | 3 |
| Wilmington | 4 | 8 | 5 | 6 | 6 | 5 |
| Winchester | 4 | 1 | 2 | 1 | 2 | 1 |
| Woburn | 5 | 7 | 17 | 16 | 14 | 13 |

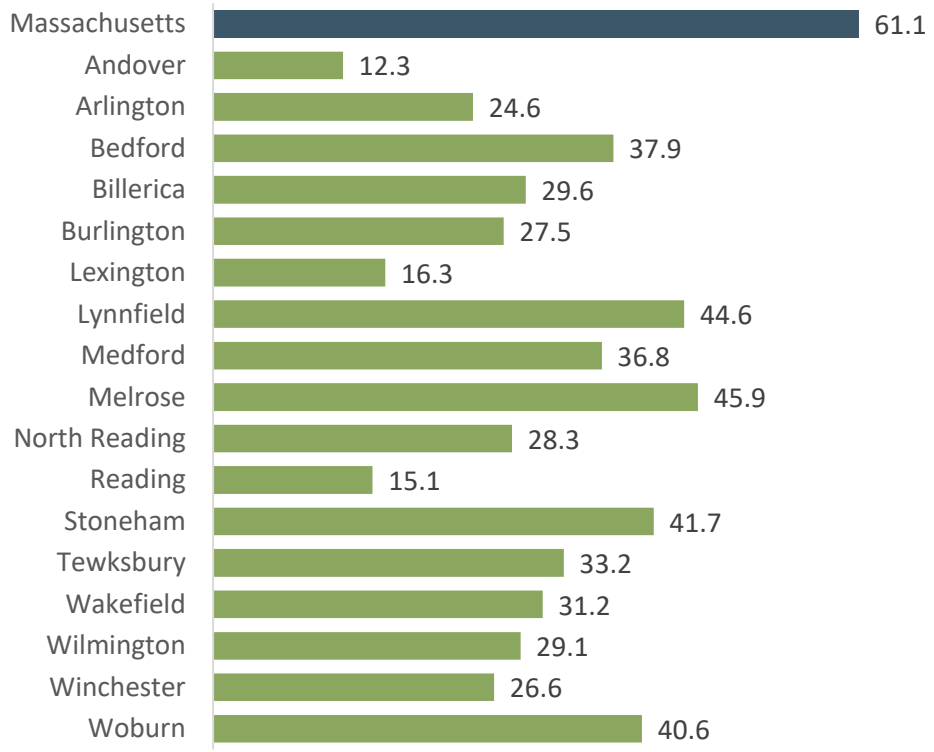
DATA SOURCE: Massachusetts Department of Public Health, Registry of Vital Records and Statistics, Number of Opioid-Related Overdose Deaths All Intents by City/Town, 2013-2019 (updated January 2020)
NOTE: Please note that 2017-2019 death data are preliminary and subject to updates. Case reviews of deaths are evaluated and updated on an ongoing basis. A large number of death certificates have yet to be assigned final cause of death codes. The information presented in this city/town table only includes confirmed cases.

**Environmental Health**

*Asthma*

Environmental health issues were not mentioned in focus group or interview discussions. However, in Massachusetts, approximately 10% of adults have asthma. In 2016, the age-adjusted rate of asthma emergency department visits per 100,000 population was 61.1 in Massachusetts. By town, the age-adjusted rate of asthma emergency department visits ranged from 12.3 per 100,000 population in Andover to 45.9 per 100,000 population in Melrose (Figure 51).

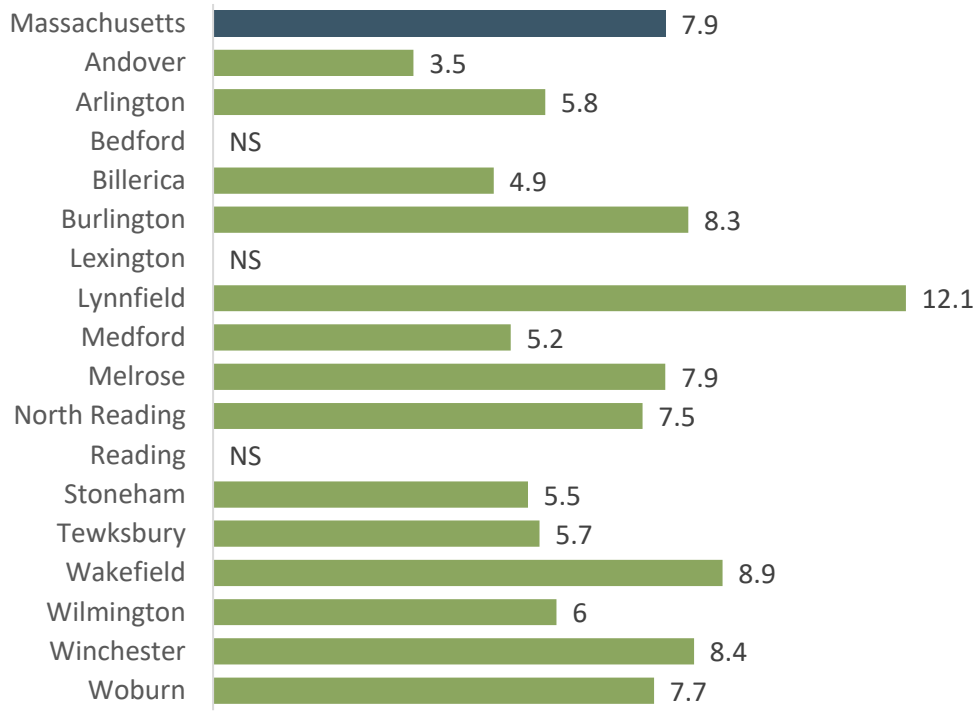
**Figure 51. Asthma Emergency Department Visits, Age-Adjusted Rate per 100,000 population, in Massachusetts and by Town, 2016**




DATA SOURCE: Massachusetts Department of Public Health, Center for Health Information and Analysis (CHIA), 2016.

In 2016, the age-adjusted rate of asthma hospitalizations per 100,000 population was 7.9 in Massachusetts. By town, the age-adjusted rate of asthma hospitalizations ranged from 3.5 per 100,000 population in Andover to 12.1 per 100,000 population in Lynnfield. Data for several towns were not reported due to insufficient sample size (Figure 52).

**Figure 52. Asthma Hospitalizations, Age-Adjusted Rate per 100,000 population, in Massachusetts and by Town, 2016**




DATA SOURCE: Massachusetts Department of Public Health, Center for Health Information and Analysis (CHIA), 2016.
NOTE: NS = Data not shown due to insufficient sample size.

*Air Quality*

Fine particulate matter (PM)2.5 is an air pollutant that is a concern for people's health when levels in air are high. PM2.5 are tiny particles in the air that reduce visibility and cause the air to appear hazy when levels are elevated. The long-term standard (annual average) for safety is 12 micrograms/cubic meter. All towns in the area were well under the threshold. In 2014, the annual average PM2.5 concentrations were around 7.7 for most towns, ranging from 7.6 micrograms/cubic meter in Andover; Arlington; and Lexington to 7.9 micrograms/cubic meter in Bedford (Figure 53).

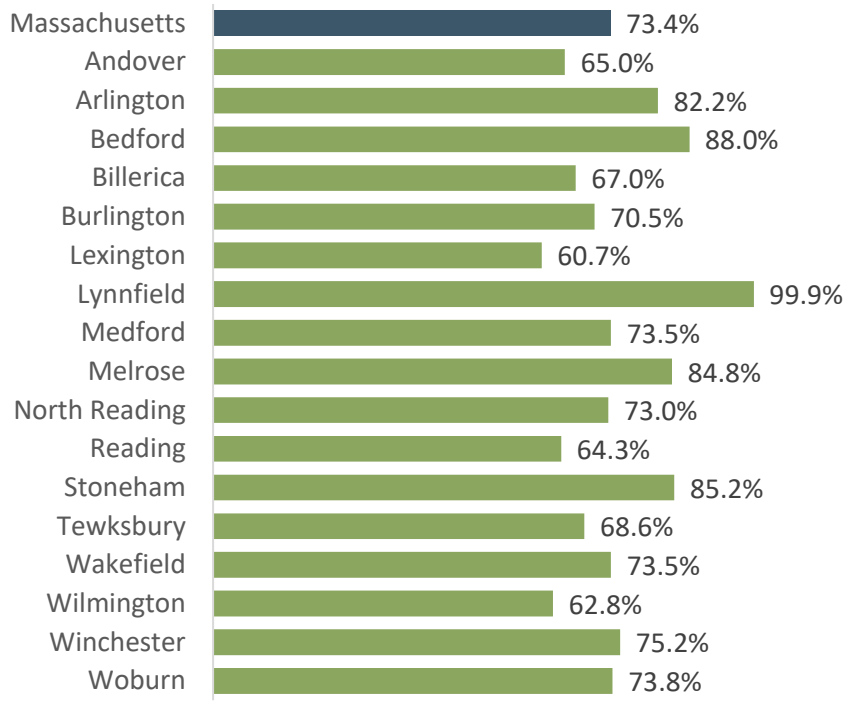
**Figure 53. Air Quality Modeled Data Annual Average PM2.5 Concentrations (micrograms/cubic meter), by Towns, 2014**


DATA SOURCE: Massachusetts Department of Public Health, Bureau of Environmental Health, 2014.
NOTE: Air Quality is a localized measure, therefore statewide estimates are not available.

*Lead Poisoning*

In 2013-2017, 73.4% of children aged 9-47 months were screened for lead poisoning in Massachusetts. By town, percentages of screened children ranged from 60.7% in Lexington to 99.9% in Lynnfield (Figure 54).

**Figure 54. Percent of Children 9-47 Months Screened for Lead Poisoning, in Massachusetts and by Town, 2013-2017**




DATA: Massachusetts Department of Public Health, Bureau of Environmental Health, Childhood Lead Poisoning Prevention Program, 2013-2017.

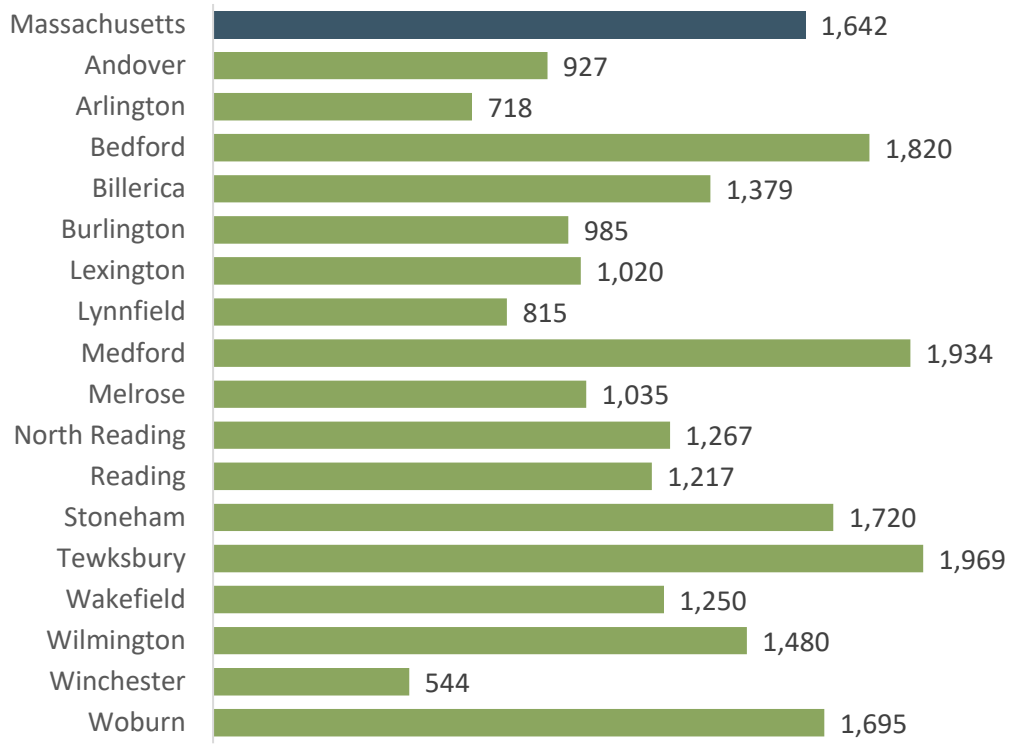
**Infectious and Communicable Disease**

*COVID-19*

Focus group members and interviewees had mixed responses about the impact of COVID-19 in their communities. Some reported it was prevalent while others stated that their communities were far less affected than others. A couple of participants reported that they were pleased with the level of COVID-19 testing in their communities. Many participants reported community compliance with mask and social distancing guidelines. As one focus group member stated, "*People in city hall and Medford have been following the guidelines, which shows [a] positive aspect of the community."* However, not all shared this view: another focus group member stated, "*I don't know if it's specific to Medford, but people are not wearing their darn masks!"*

On August 12, 2020, the COVID-19 case rate in Massachusetts was 1,642 cases per 100,000 population. The case rate varied across the Woburn service area, with the highest case rates occurring in Tewksbury (1,969 per 100,000 population) and Medford (1,934) and the lowest case rates occurring in Arlington (718) and Winchester (544) (Figure 55).

**Figure 55. COVID-19 Case Rate per 100,000 Population, in Massachusetts and by Town, as of August 12, 2020**



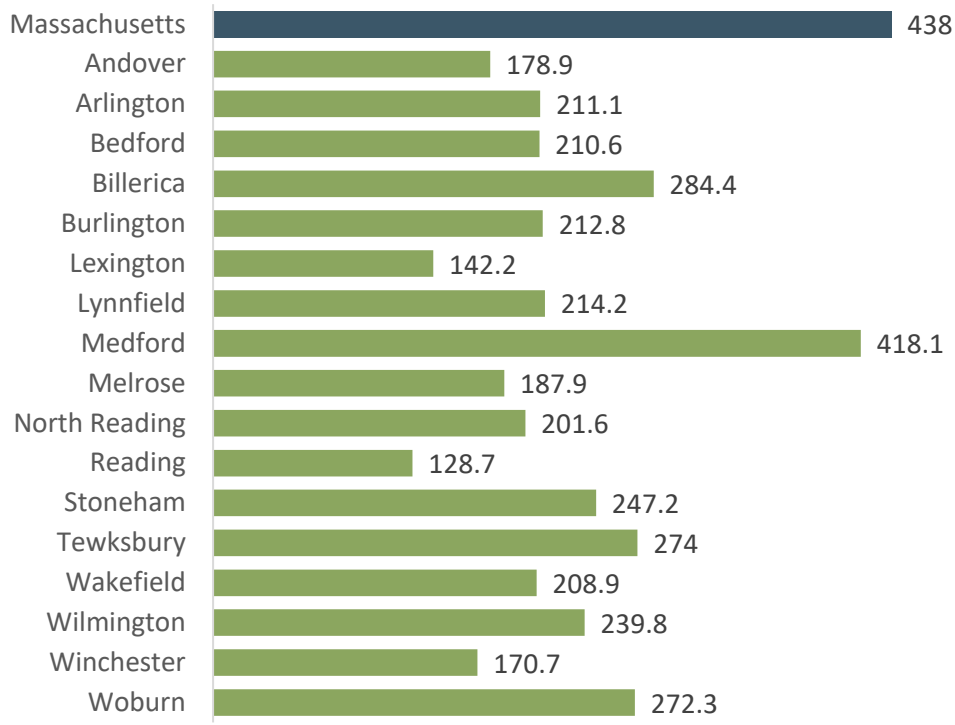

DATA SOURCE: Massachusetts Department of Public Health, Bureau of Infectious Disease and Laboratory Sciences, 2020.
NOTE: Data as of August 12, 2020.

Most often, participants shared the challenges of stay-at-home mandates and closures brought on by the pandemic. They described the impact of closed libraries and other services, reduced transportation options, and lack of socialization for their children. Participants also expressed concern about the lingering effects of COVID-19 on the economy, housing, and employment. Those with school-age children described the challenges of remote learning and the stress associated with uncertainty about the coming school year. However, a few participants also shared the "*silver linings*"—greater social cohesiveness and consideration toward neighbors, more time with family, and expansion of remote interaction, including telehealth.

*Sexually Transmitted Diseases*

Sexual health concerns were not raised by interview or focus group participants. In 2018, there were 438 cases of chlamydia per 100,000 population in Massachusetts. By town, the rates of chlamydia per 100,000 population ranged from 128.7 in Reading to 418.1 in Medford (Figure 56).

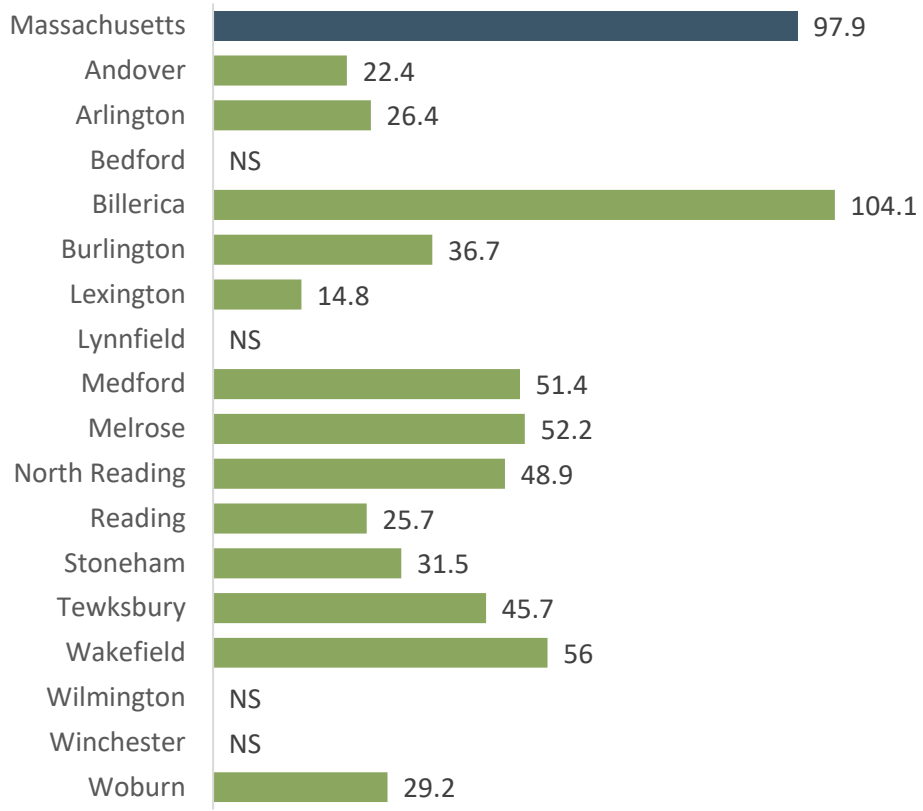
**Figure 56. Chlamydia Cases, Crude Rate per 100,000 population, in Massachusetts and by Town, 2018**




DATA SOURCE: Massachusetts Department of Public Health, Bureau of Infectious Disease and Laboratory Sciences, 2018.

In 2018, there were 97.9 cases of hepatitis C per 100,000 population in Massachusetts. By town, the rates of hepatitis C per 100,000 population ranged from 14.8 in Lexington to 104.1 in Billerica. Data from several towns are not presented due to insufficient sample (Figure 57).

**Figure 57. Hepatitis C Cases, Crude Rate per 100,000 population, in Massachusetts and by Town, 2018**

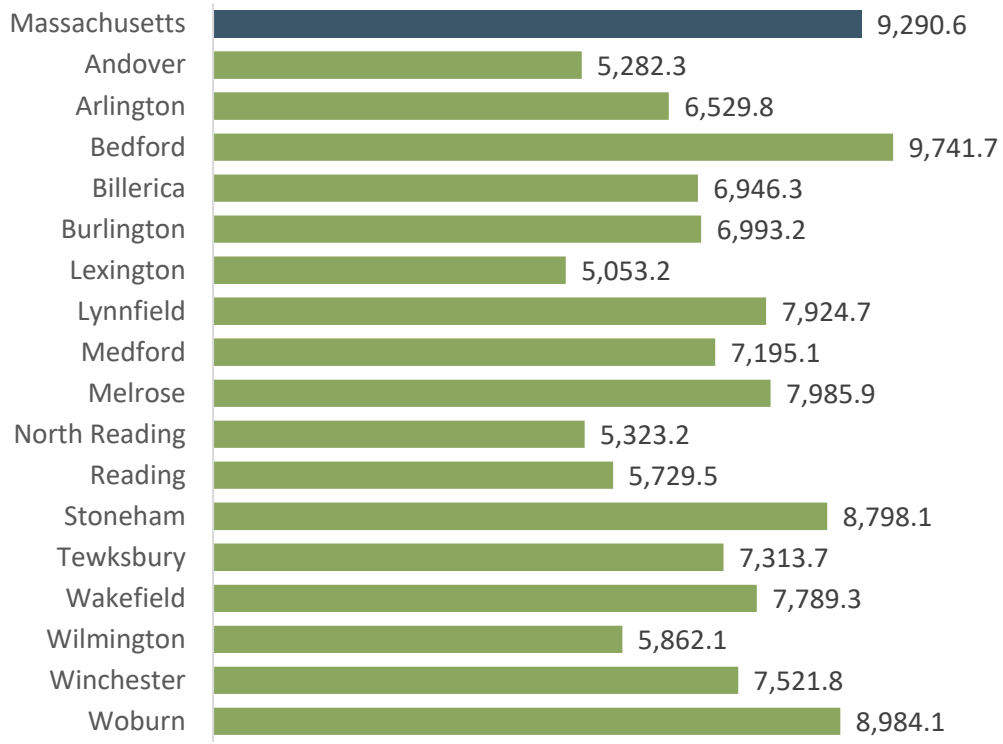



DATA SOURCE: Massachusetts Department of Public Health, Bureau of Infectious Disease and Laboratory Sciences, 2018.
NOTE: NS = Data not shown due to insufficient sample size.

**Injury**

Interview and focus group participants did not raise injury as a concern for their communities. In 2014, there were 9,290.6 unintentional injury emergency department visits per 100,000 in Massachusetts. By town, unintentional injury emergency department visits ranged from 5,053.2 (Lexington) to 9,741.7 (Bedford) per 100,000 population **(**Figure 58).

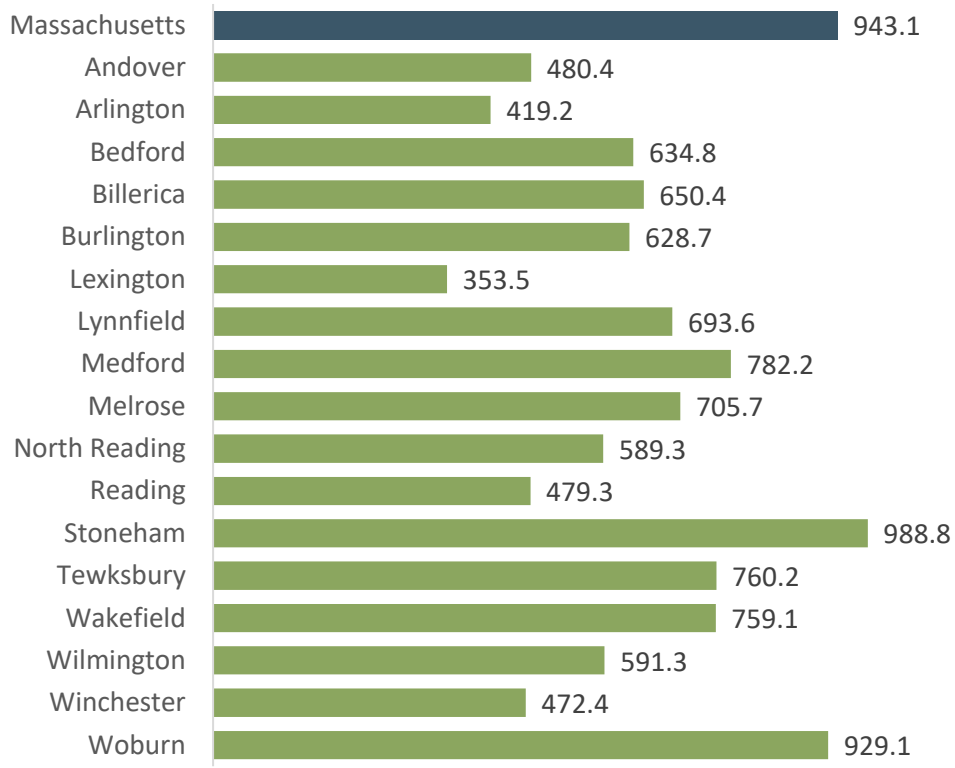
**Figure 58. Unintentional Injury Emergency Department Visits, Age-Adjusted Rate per 100,000 population, in Massachusetts and by Town, 2014**




DATA SOURCE: Massachusetts Department of Public Health, Center for Health Information and Analysis (CHIA), 2014.

In 2014, there were 943.1 motor vehicle accidents where occupants were injured per 100,000 population in Massachusetts. By town, accidents ranged from 353.5 per 100,000 population in Lexington to 988.8 per 100,000 population in Stoneham (Figure 59).

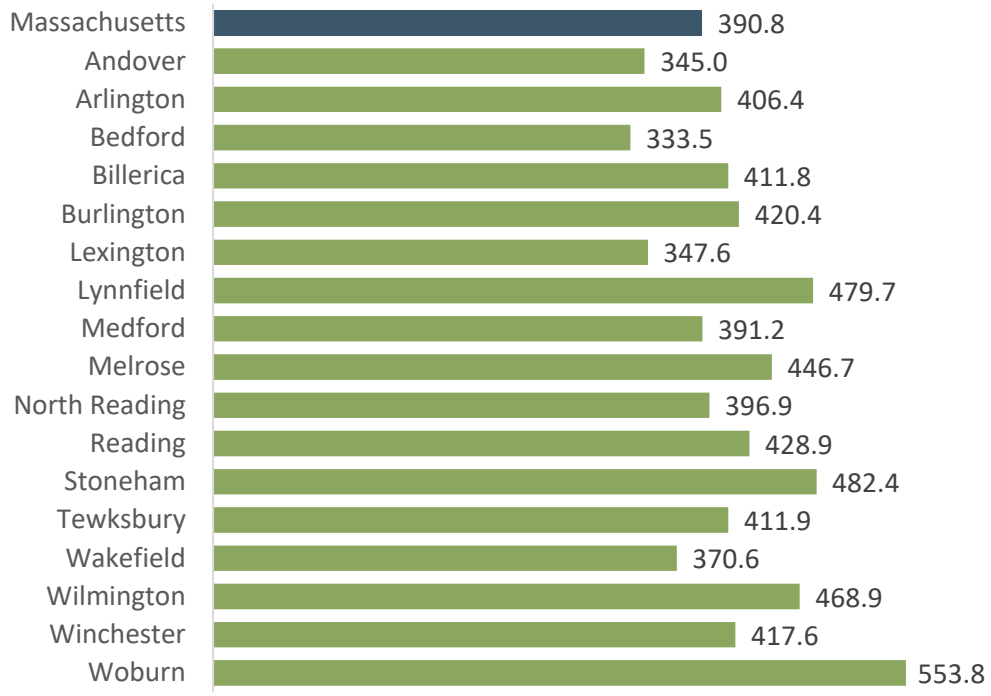
**Figure 59. Motor Vehicle Accidents where Occupants are Injured, Emergency Department Visits, Age-Adjusted Rate per 100,000 population, in Massachusetts and by Town, 2014**




DATA SOURCE: Massachusetts Department of Public Health, Center for Health Information and Analysis (CHIA), 2014.

Falls are a particular concern of injury among the senior population. In 2014, the age-adjusted rate per 100,000 population of hospitalizations due to a fall was 390.8 in Massachusetts. By town, the age-adjusted rate per 100,000 population of fall hospitalizations ranged from 333.5 in Bedford to 553.8 in Woburn (Figure 60).

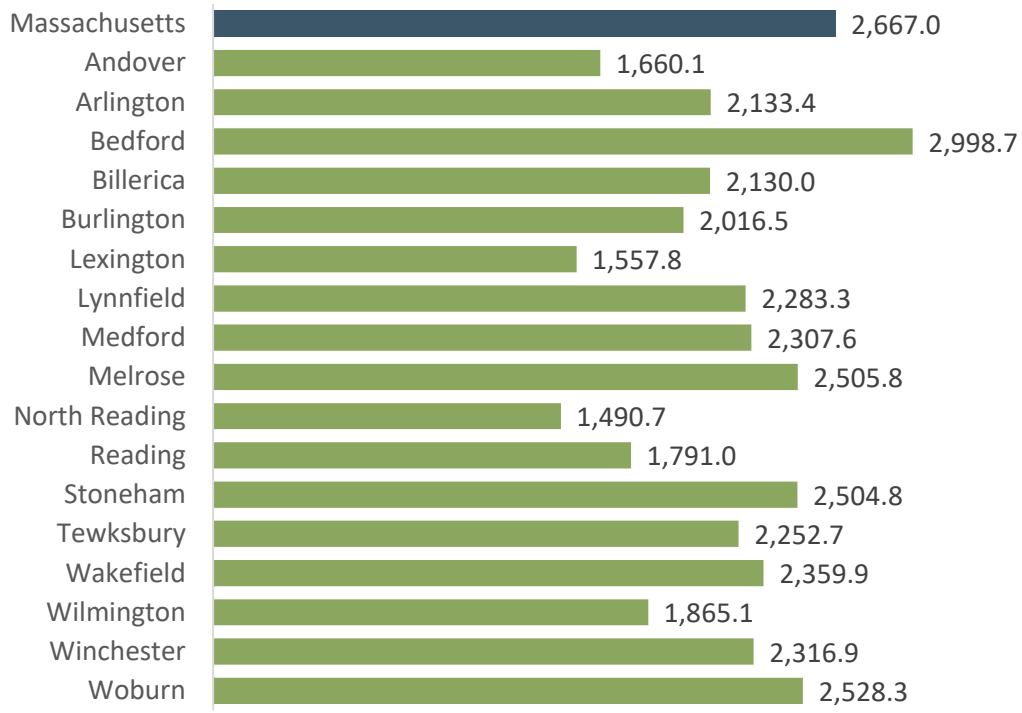
**Figure 60. Falls Hospitalizations, Age-Adjusted Rate per 100,000 population, in Massachusetts and by Town, 2014**




DATA SOURCE: Massachusetts Department of Public Health, Center for Health Information and Analysis (CHIA), 2014.

In 2014, the age-adjusted rate per 100,000 population of emergency department visits due to a fall was 2,667.0 in Massachusetts. By town, the age-adjusted rate per 100,000 population of fall emergency department visits ranged from 1,490.7 in North Reading to 2,998.7 in Bedford (Figure 61).

**Figure 61. Falls Emergency Department Visits, Age-Adjusted Rate per 100,000 population, in Massachusetts and by Town, 2014**

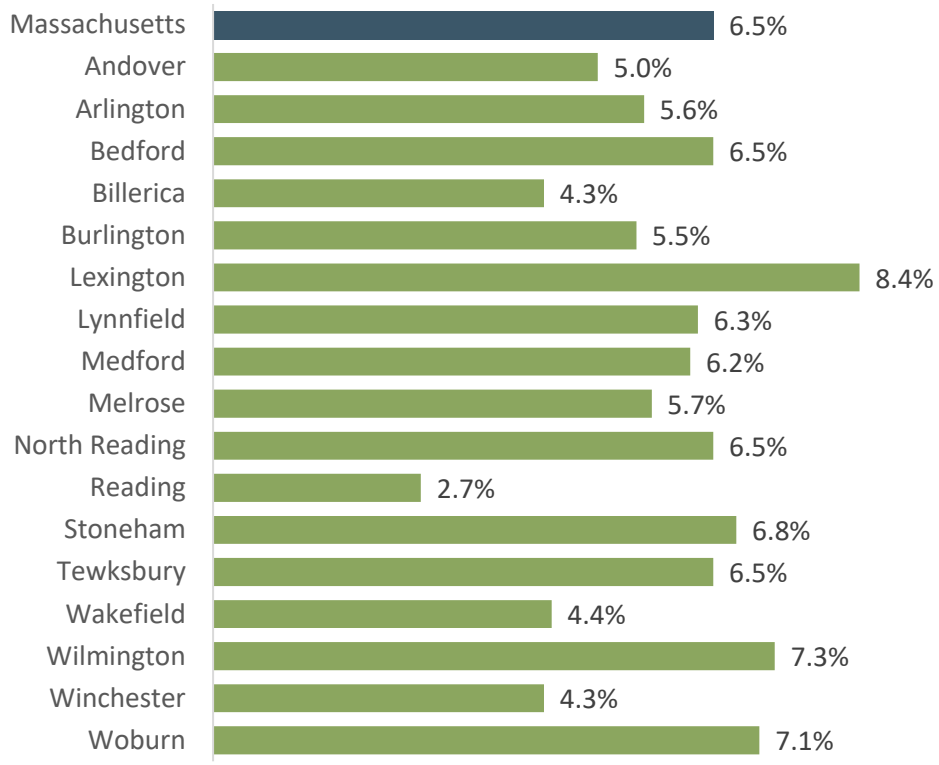



DATA SOURCE: Massachusetts Department of Public Health, Center for Health Information and Analysis (CHIA), 2014.

**Maternal and Infant Health**

While, as described above under "mental health," concerns about child development in the context of COVID-19 and social distancing were raised, in general participants did not discuss maternal and infant health in detail. In 2015, the percent of preterm births in Massachusetts was 6.5%. By town, preterm births ranged from 2.7% in Reading to 8.4% in Lexington (Figure 62).

**Figure 62. Percent Preterm Births, in Massachusetts and by Town, 2015**




DATA SOURCE: Massachusetts Department of Public Health, Registry of Vital Records and Statistics, 2015.
NOTE: Preterm birth is defined as being born before 37 weeks of gestation.

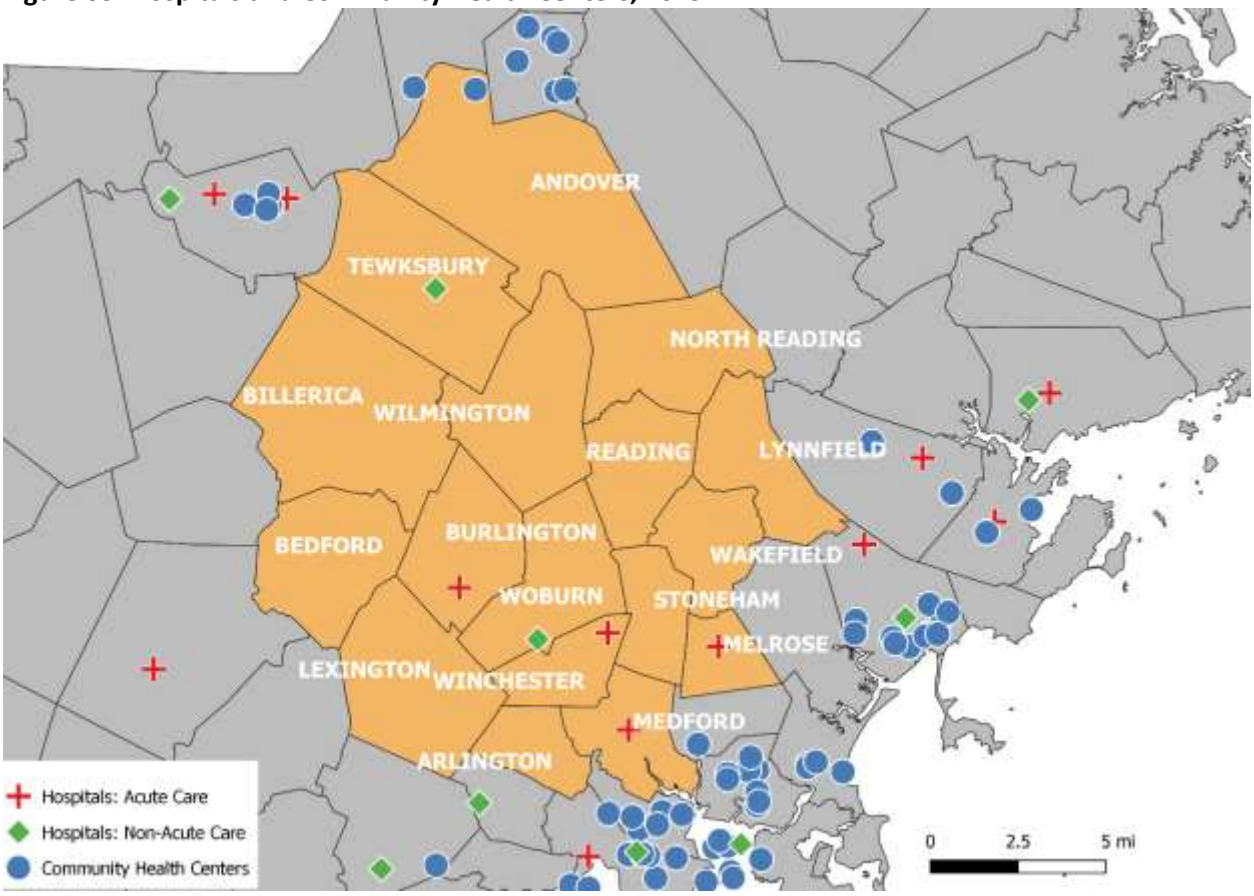
## ACCESS TO SERVICES

**Access to Healthcare Services**

As noted earlier, 64.5% of Woburn Community Priorities Survey respondents indicated that being close to medical services was a strength of their community. As shown in Figure 63, there are a few acute and non-acute hospitals in the Woburn service area and numerous healthcare services in close proximity to the towns closer to Boston. County-level data also indicate that there are more per capita providers in the Woburn service area than Massachusetts overall. Table 11 shows the ratio of population per provider (for this indicator, a lower population number indicates more providers per capita.) In 2017-2019, Massachusetts had 1 primary care provider per 970 people; Essex County had 1 for every 1,310 people; Middlesex County had 1 for every 800 people; and Suffolk County had 1 for every 670 people. Massachusetts had 1 dentist per 970 people, Essex County had 1 dentist for every 1130 people, Middlesex had 1 dentist for every 1020 people, and Suffolk County had 1 dentist for every 480 people. Massachusetts had 1 mental health provider per 160 people, Essex County had 1 mental health provider

for every 170 people, Middlesex County had 1 mental health provider for every 170 people, and Suffolk County had 1 mental health provider for every 120 people.

**Figure 63. Hospitals and Community Health Centers, 2019**




DATA SOURCE: Massachusetts Bureau of Geographic Information (MassGIS), Department of Mental Health (DMH) & Massachusetts Department of Public Health: Bureau of Environmental Health GIS Program League of Community Health Centers, Office of Medical Services, Center for Health Information and Analysis, 2019.

**Table 11. Ratio of Population per Health Care Provider, in Massachusetts and by County, 2017-2019**

| | Primary Care Physicians (2017) | Dentists (2018) | Mental Health Provider (2019) |
|---|---|---|---|
| Massachusetts | 970 | 970 | 160 |
| Essex County | 1310 | 1130 | 170 |
| Middlesex County | 800 | 1020 | 170 |
| Suffolk County | 670 | 480 | 120 |

DATA SOURCE: American Medical Association, Area Health Resource File, as reported by County Health Rankings, 2017-2018; Centers for Medicare & Medicaid Services, National Provider Information Registry, as reported by County Health Rankings, 2019.

However, when discussing issues related to healthcare access, several interviewees and focus group members mentioned a number of barriers. Specifically cited were the high cost of healthcare, difficulty accessing MassHealth, and lack of dental services. A few participants shared some specific infrastructure challenges: the lack of a hospital in Arlington and a recently closed emergency room in Medford.

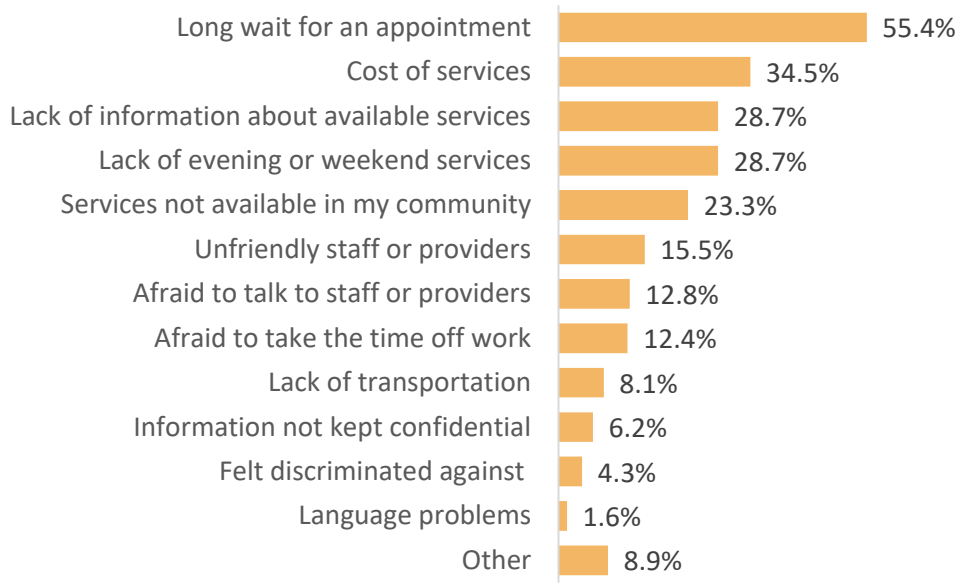
The high cost of healthcare, including health insurance and deductibles, was mentioned by a few participants. Interviewees shared that some community residents do not have a primary care physician or are from cultures in which preventative healthcare is not as common. These residents, interviewees reported, utilize the ER for healthcare, which is far more costly.

Accessing MassHealth was also described as a challenge. Focus group members from public housing, for example, noted that strict income requirements to qualify for MassHealth means that some lower income residents may not qualify. As one participant explained, "*I know people who have the situation where because of their income, they may have a couple dollars more than what would make them qualify to get MassHealth or free care. Because of that, I think a lot of people don't go to the doctor regularly.*" An interviewee shared examples of inaccurate communication and instructions about MassHealth enrollment and expressed concern that some residents who are immigrants do not receive higher levels of coverage because MassHealth enrollers do not accurately apply standards for individuals with Permanent Residence in the US Under Color of Law – PRUCOL.

Participants also shared healthcare concerns specific to seniors. Those who work and live in public housing mentioned that the isolation of seniors makes it challenging to identify health issues in a timely manner. Senior focus group members described the challenges that they faced traveling to other towns for specialty healthcare services. Participants also mentioned a lack of continuity in healthcare and transition to community services after a hospital stay, ultimately creating challenges for seniors. As one interviewee explained, *"Health care, social services, and human services are each in a separate corner, and not working together in a unified manner. We've been talking about this for 20 years and there's no change.*" Finally, participants also mentioned that a lack of dental care for seniors is a concern. As one senior focus group member shared, "*Dental health, a lot of seniors neglect it. A lot of people when they age, maybe they don't have dental insurance. I think that's an issue.*"

Woburn Community Priorities Survey respondents were asked about barriers to accessing services, including medical services, mental health, and social services. Nearly half (48.5%) of Woburn Community Priorities Survey respondents, reported experiencing at least one barrier to accessing medical, mental health, or social services in the past six months. Among respondents reporting at least one barrier, the most common barriers were long waits for appointments (55.4%); cost of services (34.5%); lack of information about available services (28.7%); and lack of evening or weekend services (28.7%) (Figure 64).

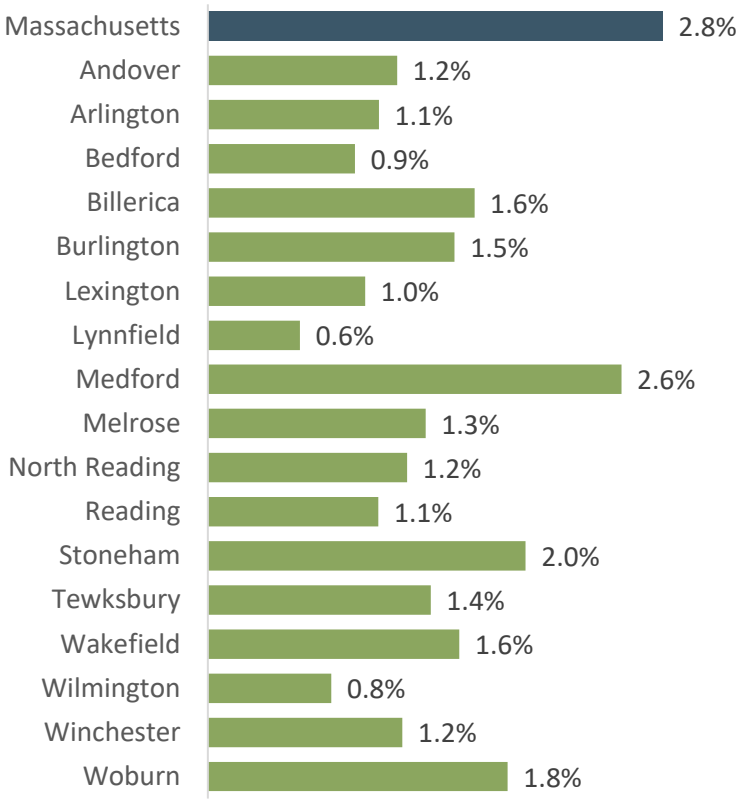
**Figure 64. Percent of CHNA Community Priorities Survey Respondents Reporting Barriers to Accessing Medical, Mental Health or Social Services in the Past Six Months, among Respondents Reporting at Least One Barrier, 2020 (N=258)**




NOTE: Question in the survey allowed for multiple responses; therefore, percentages may not add up to 100%.
DATA SOURCE: PAC CHNA Community Priorities Survey, 2020.

While having no health insurance was not mentioned in the Woburn Community Priorities Survey or focus group/interview discussions as a significant barrier to care among residents, secondary data indicate that uninsured rates are low overall but do vary by community. In 2014-2018, the percent of the population with no health insurance in Massachusetts was 2.8%. By town, the percent of the population with no health insurance ranged from 0.6% in Lynnfield to 2.6% in Medford (Figure 65).

**Figure 65. Percent Population with No Health Insurance, in Massachusetts and by Town, 2014-2018**




DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2014-2018.

**Access to Social Services or Other Essential Services**

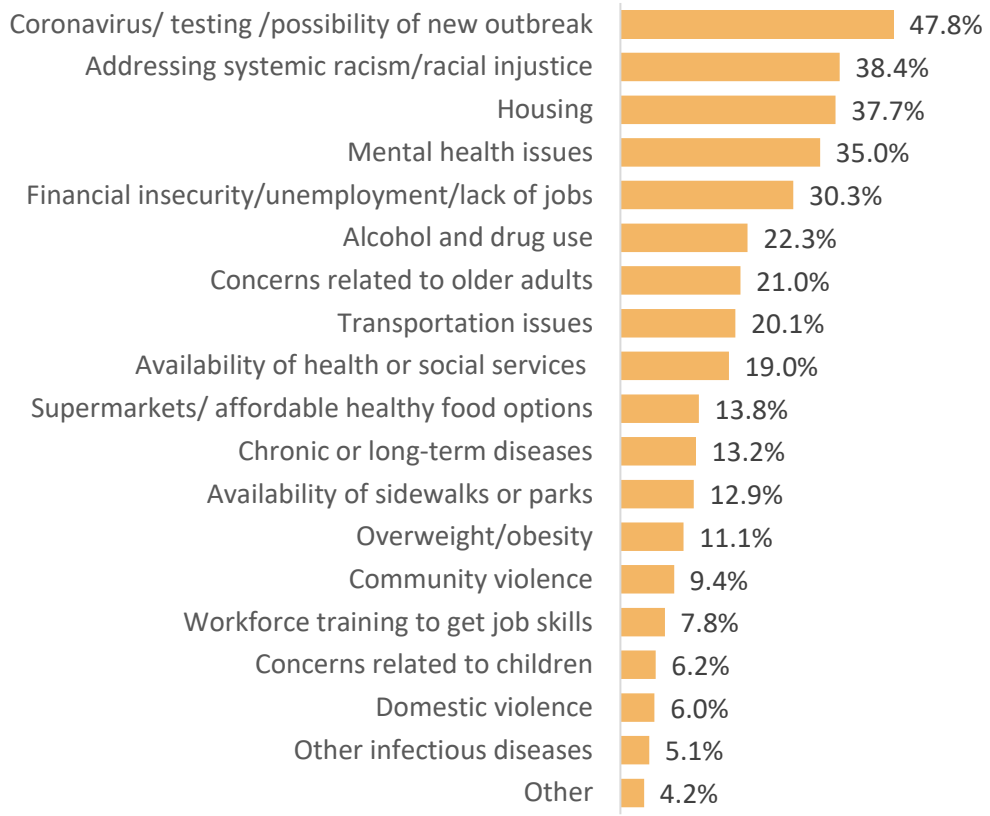
When asked about challenges to accessing social or other essential services, participants spoke in terms of challenges during the COVID-19 pandemic. Participants reported that some services were curtailed at the height of the pandemic. Accessing services during this period was primarily electronic which created difficulties, participants reported, for those without computers or internet access or who did not speak English. Service providers shared that they have worked to bring services online as much as possible and have been working hard to reach out to clients to ensure that their needs are being met. As services have slowly reopened, some residents faced challenges with transportation as options for services were limited. Some participants reported that they continue to fear spending too much time in public which has prevented them from accessing services.

## COMMUNITY PERCEPTIONS AND VISION FOR THE FUTURE

**Top Issues for Action**

Woburn Community Priorities Survey respondents were asked to consider the most important issues in their communities to take action on in the next few years. Respondents were asked to consider the importance of these issues in regard to Concern, Equity, Effectiveness, and Feasibility (see Appendix E for the survey instrument) and to select the five most important issues for action. Taken together, the top five issues of concern were (1) coronavirus/COVID-19 testing and/or the possibility of a new outbreak; (2) addressing systemic racism/racial injustice; (3) housing; (4) mental health issues; and (5) financial insecurity/unemployment/lack of job opportunities (Figure 66). These priorities were very similar issues that focus group and interview participants mentioned when discussing their biggest concerns in the community.

**Figure 66. Percent of CHNA Community Priorities Survey Respondents Reporting Most Important Issues for Action in the Next Few Years in Their Community, 2020 (N=552)**




NOTE: Question in the survey allowed for up to five responses; therefore, percentages may not add up to 100%.
DATA SOURCE: PAC CHNA Community Priorities Survey, 2020.

There was variation in the top five priorities of concern in sub-groups defined by educational attainment. Both respondents with less than a bachelor's degree and a bachelor's degree or higher most commonly ranked issues related to coronavirus/COVID-19 as the top priority (Figure 67). However, those without a bachelor's degree ranked alcohol and drug use as one of their five top priorities, while those with a bachelor's degree or higher ranked addressing systemic racism as a top priority.

**Figure 67. Percent of CHNA Community Priorities Survey Respondents Reporting Most Important Issues for Action in the Next Few Years in Their Community, by Selected Demographics, 2020**

| | Less than College (N=93) | College or More (N=369) |
|---|---|---|
| 1 | Coronavirus/ testing /possibility of new outbreak (53.8%) | Coronavirus/ testing /possibility of new outbreak (56.6%) |
| 2 | Financial insecurity/unemployment/lack of jobs (43.0%) | Addressing systemic racism/racial injustice (50.1%) |
| 3 | Housing (32.3%) | Housing (46.6%) |
| 4 | Mental health issues (31.2%) | Mental health issues (43.1%) |
| 5 | Alcohol and drug use (30.1%) | Financial insecurity/unemployment/lack of jobs (33.6%) |

NOTE: Question in the survey allowed for multiple responses; therefore, percentages may not add up to 100%.
DATA SOURCE: PAC CHNA Community Priorities Survey, 2020.

**Suggestions for Future Programs, Services, and Initiatives**

Interviewees and focus group members were asked about their vision for the next five years, including suggestions for future programs, services, and initiatives. Several suggestions emerged, including more affordable housing, expanded mental health services, stronger collaboration across organizations and agencies, greater efforts related to racial justice, and more services for seniors.

*Housing*

Housing was overwhelmingly identified by focus group members and interviewees as a top issue to address in the Woburn service area. As one focus group member stated, *"Housing will continue to be an issue – the rents will be even higher."* Participants expressed concern about the lingering effects of COVID-19 on foreclosures and housing; worried about rising rents and long wait lists for public housing. Overall, participants suggested increased attention to meeting the diverse housing needs of community members including the construction of more affordable housing. Those living in public housing mentioned a need to update current buildings and seniors expressed a desire for better quality senior housing. One interviewee suggested that more funding is needed, so people can stay in housing, including an expansion of the Section 8 program.

*Mental Health Services*

Increasing access to mental health services was another prominent theme among focus group members and interviewees. While participants shared that restrictions due to COVID-19 have enhanced the use of telehealth for the delivery of mental health services, this new way of providing services has not worked for everyone. Participants cited a need for more providers and services, particularly for children and

adolescents, including residential services, to reduce waitlists and ensure those in crisis have immediate access to services. One interviewee stated that a future goal is to "*Somehow eliminate our waitlist and ensure that families and children that need mental health services are able to connect immediately.*" Key to achieving this goal, according to one interviewee, is increasing reimbursement rates for mental health services and continuing to expand the use of telehealth where appropriate. Hiring providers who speak other languages also was described as critical. Participants also suggested greater integration of mental health services into schools and community programs for youth.

*Collaboration to Increase Services*

While participants praised current levels of collaboration among community organizations, they also suggested more could be done to maximize and enhance the availability and efficiency of services to community members. Interviewees working in social services described a need for more resources for organizations working to meet community members' basic needs, especially since these have increased as a result of COVID-19. These interviewees recommended more work across different entities including government, hospitals and healthcare providers, social services, and faith institutions to ensure that residents have seamless access to the services that they need. Local government leadership was seen as essential. One interviewee recommended *"Continuing to build connection across disciplines so problems can be solved."* Specific examples included collaboration between senior centers and libraries and recreation departments to offer programming for younger seniors, intergenerational programming, and continuing work between police, community organizations, and schools.

*Racial Justice*

Several participants expressed hope that the current momentum around racial justice will continue. These participants saw a need for more education and community conversation relative to systemic racism. As one student focus group member shared, "*We need to have more open conversations [about racism]. We used to look at it from the outside as happening somewhere else. But it's happening in Woburn, and we need to talk about it in a public forum.*" A few focus group members expressed hope that in the future, city government and police workforces would be more diverse. One interviewee shared this same vision for the community, *"Asian-Americans are an integral part of the town, but right now, city employees and teachers don't reflect that. Thirty percent of the town is Asian-American, but we're underrepresented within the town's employees."*

*More Senior Services*

Seniors who participated in the focus groups and interviewees who work with seniors envisioned a future with more programs and services for the older and aging residents. These participants stated that senior center buildings need to be expanded and that senior centers should do more to attract younger seniors to participate, through a greater variety of programming, more flexible hours, and opportunities for continuing mental stimulation. Participants also saw a need for a greater continuum of supports for aging residents, one that begins by engaging younger seniors and supports "aging in place," but also includes adult day programs; supports for those with dementia and Alzheimer's; and programs for caregivers. As one interviewee described, "*We need to integrate understanding among these different stages of support. You need to understand who your partners are, so you can start planning for next higher level of support. Eventually, people may need assisted living. But there are steps to get there, and you need to understand different parts of the continuum.*"

*Other Areas for Focus*

*Transportation:* Some participants in the parent and senior focus groups suggested greater access to public transportation, especially within towns. As one parent suggested, "*Better access to public transportation – that's a big one. Maybe just even more frequent and reliable buses."*

*Support for Parents:* Parent focus group members saw a need for more support for those with school-aged children. Suggestions included more parenting education, such as that offered by the Medford Family Network and expanded youth and family programming.

*More Community Events/Efforts that Promote Social Cohesion:* A couple of participants suggested a need for a community center with activities and programs. Suggestions also included events, such as movie nights and concerts. As one senior focus group member stated, "*It's important to get people together*."

*Connection to Health Insurance:* One interviewee reported that more should be done to ensure that people are appropriately connected to MassHealth and more outreach is conducted to ensure that people are knowledgeable and feel comfortable applying to MassHealth, including outreach to immigrant populations. Specific suggestions included pop-up enrollment centers or centers co-located with other services including schools, and a need for navigators who are embedded in vulnerable communities. As the interviewee described, *"The system is there. It's just about making easy access."*

*Youth Programming:* Focus group members with children saw a need for more programming for children and youth including sports and other activities. Seniors suggested intergenerational programming.

*Support for Small Business:* Participants recognized the economic impact of COVID-19 on small businesses that are so valuable in their communities. A few suggested that more funding should be made available to support these businesses. As one interviewee stated, ***"****Small businesses support a lot people in the community. I don't think we appreciate this. They are vital to communities."*

*Support for Young Families:* A parent focus group member stated, "*I would love to see early literacy programing in Medford change."* Another parent stated that more daycare options were needed to meet demand and reduce current waitlists.

## KEY THEMES AND CONCLUSIONS

This community health needs assessment for the Woburn service area provides a summary of community needs, strengths, and resources based on a review of existing data, a community survey, and discussions with community residents and key informants. This assessment was conducted during an unprecedented time, given the COVID-19 pandemic, and the national movement for racial justice; findings in this report can be used to inform future planning and can be built upon through future data collection efforts. The following overarching themes emerged from this synthesis and include many upstream factors:

- **There are many assets in the Woburn service area, including high-quality schools, access to parks and green space, access to medical services, and overall social cohesion and community engagement**. Many CHNA participants described the towns within the Woburn service area as a great place to live. Participants reported a strong sense of community and belonging, and a great

place to raise a family. These individuals noted that support and help for each other has particularly come to light during the pandemic. Other community strengths included schools, parks, access to medical services, and proximity to Boston.

- **COVID-19 remains a major concern, along with its impact on local economies, financial security, child development, social isolation of seniors, and overall mental health of community members.** During this unprecedented time, the pandemic and its social and economic impacts were unsurprisingly at the forefront of community members' concerns. While the virus itself had not strongly impacted most of these communities as of August 2020, residents expressed widespread feelings of anxiety about the future. Specifically, concerns were raised about the social and emotional development of children, social isolation among seniors, and the financial impact of the economic shut-down for local business and families.

- **While Woburn service area overall is affluent, some communities within the area face unemployment and financial insecurity, especially in the context of the economic impact of the COVID-19 pandemic.** Prior to the pandemic, median household incomes in the Woburn area were generally higher than the state average, and unemployment was less than 3% in all towns. Within the Woburn service area, Medford (20.3%) and Woburn (15.3%) had the largest number of residents in poverty (<200% FPL) in 2014-2018; and in some towns, almost 20% of Hispanics/Latinos were living in poverty (<100% FPL), relative to 3% of non-Hispanic Whites. CHNA participants expressed concerns about increased pandemic-related unemployment, which was especially apparent in data for Billerica and Woburn.

- **The COVID-19 pandemic exacerbated pre-existing inequities in income and wealth in the area. Increased use of food pantries, social services to support housing costs, and government financial support, were expected to increase further, and there was great concern for community members already living on the edge.** Almost 30% of Woburn Community Priorities Survey respondents reported that their financial situation had gotten worse since the onset of the pandemic, 6.5% reported it had improved, and 63.9% reported it had stayed the same. These data highlight the pre-existing socioeconomic disparities in the Woburn service area, with some residents losing work and others being able to transition to work from home. CHNA participants expressed concerns about already vulnerable community members, including low-income seniors, racial/ethnic minorities, and immigrants and refugees.

- **Housing affordability was identified as a pressing concern, particularly for seniors, racial/ethnic minorities, low-income immigrants, and young families.** In most towns within the Woburn service area, owner-occupied units were more common than rental units, compared to the state overall, with notable exceptions in Arlington; Medford; and Woburn. Lack of affordable housing was a common concern among participants and was ranked the third highest priority for action (37.7%) among Woburn Community Priorities Survey respondents.

- **Transportation is a concern for some communities, particularly for certain populations including seniors and public housing residents.** In 2014-2018, between 60-90% of residents in the Woburn service area commuted to work alone in a vehicle. Transportation issues ranked as the eighth most common priority among Woburn Community Priorities Survey respondents. However, these overall responses belie the lack of access to public transportation among certain residents, in particular seniors who do not drive and residents of public housing. Other towns, including Arlington,

Medford, and Melrose, had better access to mass transit, such as MBTA bus service; commuter rail; and the subway.

- **Some community members have experienced or recognized discrimination in their communities and prioritized addressing racial injustice.** Among Woburn Community Priorities Survey respondents, the second most common issue for future action was addressing systemic racism/racial injustice (38.4%). Overall, 11.2% of respondents reported experiencing discrimination in the past six months, and among these individuals, 50.0% reported this was due to their race; 37.9% said it was due to their gender; 34.5% said it was due to their ethnicity. Participants reported that conversations about racial justice were occurring in their communities, similar to national discussions. Perceptions about the extent of discrimination and racism in the community varied. Participants reported that local leaders and community-based organizations, including faith institutions, were working to engage the community in conversations about this issue.

- **Mental health is a top concern among many community residents, especially in the context of COVID-19.** Mental health issues were the top concern that had personally affected Woburn Community Priorities Survey respondents in the past six months (50.6%) and were the fourth most commonly cited issue for future action (35.0%). Focus group participants and interviewees stated that COVID-19 exacerbated mental health issues in the community, particularly among seniors, who already tend to be socially isolated; and among immigrants and refugees, who already face anxiety related to the current political context. Participants with school-age children shared the challenges of remote learning and the stress that comes with the uncertainty of the coming school year. Many worried about the long-term impact of the pandemic and lack of socialization on the community's children and youth. According to focus group members and interviewees, a lack of mental health providers was the primary challenge in addressing mental health in the community. It was reported that the number of providers in the community is insufficient to meet the demand for services, leading to long waits for mental health services.

- **Alcohol and substance use are a concern, particularly for residents with less than a high school education.** Alcohol and drug use were not top issues that had personally affected most Woburn Community Priorities Survey respondents in the past six months (13.0%). However, substance use was the sixth most common issue listed for future action (22.3%) and was more common among residents with less than a high school education. Opioid-related overdose deaths were relatively rare in the Woburn service area in the past five years and issues with substance use came up only rarely among interview and focus group participants.

- **Social isolation, difficulty in accessing services, and mental health are pressing concerns for older adults, particularly in the context of COVID-19.** Many participants expressed deep concern with how the pandemic affected older adults in myriad ways. Most concerning was social isolation, which was already an issue for elders in the service area prior to the pandemic. While local Councils on Aging provide excellent services to seniors, outreach and activities have been hindered by the pandemic, especially for vulnerable populations. Seniors are isolated at home, unable to attend medical and social service appointments, and often limited in their use of technology, making communication with friends, family and medical providers challenging.

- **While access to medical care was seen as a strength of the area overall, there are concerns related to continuity of health care with other social services, the high cost of health care, and lack of culturally and linguistically competent mental health services.** Among Woburn Community

Priorities Survey respondents, 64.5% listed accessible medical services as a community strength. However, participants also reported concerns with the high cost of healthcare, difficulty obtaining appropriate MassHealth coverage, a lack of dental and mental health services, and a lack of continuity of care and transition to community services.

## COMMUNITY PRIORITIES FOR ACTION

Prioritization allows organizations to target and align resources, leverage efforts, and focus on achievable strategies and goals for addressing priority needs. Through a systematic, engaged approach that is informed by data, priorities are identified through an iterative process to focus planning efforts. This section describes the process and outcomes of the Woburn-area CHNA prioritization process.

**Woburn Service Area – Prioritization Process**

Assessment Study – Primary and Secondary Data Collection

- Synthesized data on social, economic, and health issues
- CHNA participants identified areas of concern and priority, via key informant interviews, focus groups, and the Community Priorities Survey

Virtual Community Prioritization Meeting

- Presented study findings and voted on priorities using selected criteria

Community Advisory Board Meeting

- Regional community leaders discussed study findings and community prioritization meeting results; refined and approved priorities

**Criteria for Prioritization**
When embarking on a prioritization process, using set criteria assists in providing parameters for selection. The following four criteria were used to guide prioritization discussions and voting processes with community members from the Woburn service area, as well as the Community Advisory Board who provided oversight of the CHNA.

*Prioritization Criteria*

- **Concern:** How much does this issue affect our community? How urgent is this issue? How much does this issue impact people's lives?
- **Equity:** Will addressing this issue substantially benefit those most in need? Does this issue address the root causes of inequities?
- **Effectiveness:** Can we make a difference if we work on this issue? Can working on this issue achieve both short-term and long-term change?
- **Feasibility:** Can we do it? Is it possible to address this issue in our community given the infrastructure, capacity, and community commitment?

**Prioritization Process**
The prioritization process was multifaceted and aimed to be inclusive, participatory, and data-driven.

Step 1: Input from Community Members and Stakeholders via Primary Data Collection
During each step of the primary data collection phase of the CHNA, study participants were asked for input on the top priorities for action in their communities when considering the prioritization criteria. Key informant interviewees and focus group participants were asked about the most pressing concerns

in their communities, as well as the three highest priority issues for future action and investment (Appendices C and D). Community Priorities Survey respondents also were asked to select up to five of the most important issues for future action on in their communities (Appendix E).

Based on data gathered from key informant interviews, focus group participants, and Woburn Community Priorities Survey respondents, nine major priorities were identified for the Woburn service area:

- Coronavirus/ COVID-19 *(specifically related to testing, transmission, disease mitigation, etc.)*
- Financial Insecurity / Unemployment
- Housing
- Transportation
- Systemic Racism and Racial Injustice
- Mental Health
- Alcohol/Substance Use
- Issues related to Older Adults
- Access to Care

Step 2: Data-Informed Voting via a Community Prioritization Meeting

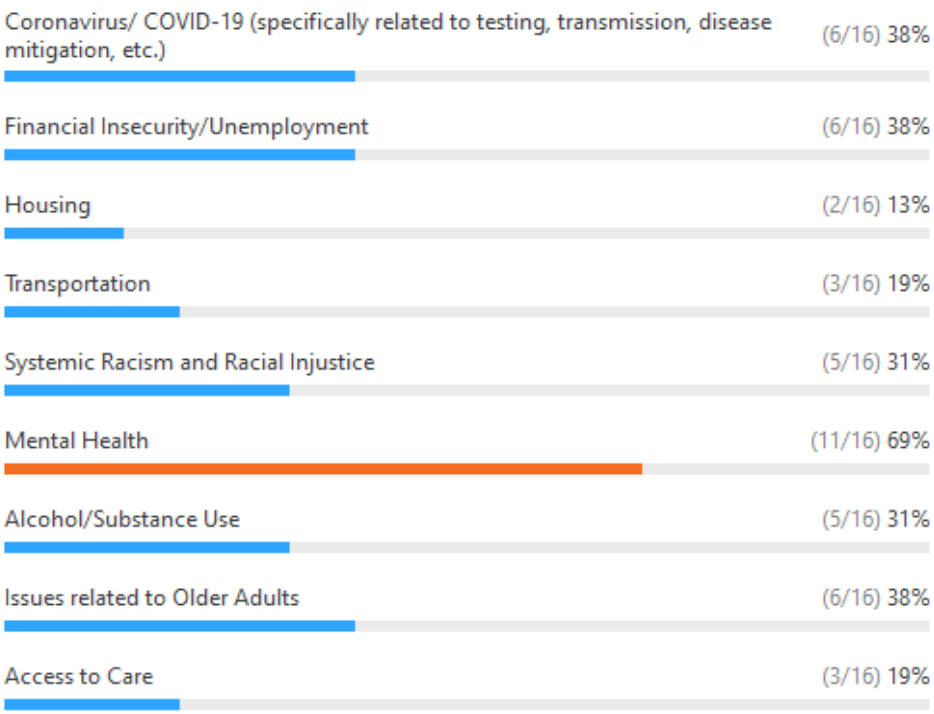
The next step of the prioritization process included presenting quantitative and qualitative data from the data collection phases to community members and stakeholders in a larger forum. On, September 1, 2020, a one-hour virtual community meeting was held for the Woburn service area, so residents and stakeholders could discuss and vote on community priorities. In order to obtain as much feedback as possible on the priorities, outreach was conducted with key informant interviewees, focus group participants, staff from organizations involved in focus group recruitment and survey administration and local Boards of Health directors. Various forms of outreach were employed to reach residents and stakeholders, including email and telephonic outreach, as well as social media posts.

During the remote prioritization meeting, attendees heard a brief data presentation on the key findings for the Woburn service area. Next, meeting participants were divided into small groups to discuss the data and offer their own perspectives and expertise on the various priorities. Meeting participants then shared information from their discussions with the full group.

At the end of the meeting, using the Zoom polling feature, meeting participants voted for up to three of the nine priorities identified from the data and based on the specific prioritization criteria (Concern, Equity, Effectiveness, Feasibility). Participants were asked to identify any additional priorities that they thought were missing from the data-derived list using the Chat feature of Zoom. A total of 16 community members voted during the Community Prioritization Meeting.

As seen in Figure 68, voting identified Mental Health as the most commonly endorsed community priority (69%), followed by Coronavirus/COVID-19 (38%), Financial Insecurity/Unemployment (38%), and Issues Related to Older Adults (38%).

**Figure 68: Woburn Prioritization Meeting, Zoom Poll Results, September 1, 2020**




NOTE: Poll allowed for up to three responses; therefore, percentages may not add up to 100%.
DATA SOURCE: PAC CHNA Community Prioritization Meeting, 2020.

Step 3: Prioritization Refinement via Community Advisory Board Meeting

On September 9, 2020, the Partners Ambulatory Care – Community Advisory Board, who is charged with providing oversight of the CHNA process, met virtually to discuss the CHNA findings and community prioritization meeting output for the Woburn service area. The goal of this meeting was for CAB members to review the CHNA findings for the Woburn service area and amalgamate that information with the input provided from the community prioritization meeting to refine and narrow the list of priorities in alignment with the social determinants of health.

In the meeting, CAB members were presented with information on community priorities that emerged from the CHNA, the community priorities survey, and the community prioritization meeting, together these prioritization steps revealed the following six priorities for the Woburn service area:

- Coronavirus/ COVID-19 *(specifically related to testing, transmission, disease mitigation, etc.)*
- Financial Insecurity / Unemployment
- Systemic Racism and Racial Injustice
- Mental Health
- Alcohol/Substance Use
- Issues related to Older Adults

To determine priorities for the CHNA, CAB members were asked to consider the same prioritization criteria (Concern, Equity, Effectiveness, Feasibility) that were used by the community members during the remote prioritization meeting and come to a consensus about priorities for future action. Much of the CAB's discussion focused on the inter-connectedness of the priorities and the difficulty in identifying a narrow area of focus given the need to address root causes of inequity in the social determinants of health. CAB members noted the importance of focusing on systemic racism and racial injustice given the demographics of the Woburn service area ( the majority of residents identify as White) CAB members also discussed that a focus on housing could assist in addressing some of the other concerns related to financial insecurity, behavioral health (mental health and substance use), older adults, and systemic racism. Ultimately, the CAB agreed on the following priorities to consider for future action:

- Coronavirus/ COVID-19 *(specifically related to testing, transmission, disease mitigation, etc.)*
- Systemic Racism and Racial Injustice
- Behavioral Health *(inclusive of mental health and substance use)*
- Issues related to Older Adults

Financial Insecurity and Unemployment were eliminated from the list of priorities for action as these social determinants of health were determined to be embedded within other priority areas. Given the highly mutable state of current affairs, and the ability to further refine these priorities for future action, consensus among the CAB was to keep the list of priorities broader and then refine these issues at a later stage.

## APPENDIX A: COMMUNITY ADVISORY BOARD MEMBERS

| Name | Organization | Position |
|---|---|---|
| Amy Schectman | 2Life Communities | President and CEO |
| Ann Houston | Opportunity Communities | CEO |
| Charles Desmond | Inversant | CEO |
| Charles Murphy | Montachusett Veterans Outreach Center | Executive Director |
| Cheryl Sbarra | Massachusetts Association of Health Boards | Senior Staff Attorney and Director of Policy and Law |
| Danna Mauch | Massachusetts Association for Mental Health | President and CEO |
| Dianne Kuzia Hills | My Brother's Table | Executive Director |
| Joseph D. Feaster, Jr. | Urban League of Eastern Massachusetts | Board Chairman |
| Laura Van Zandt | REACH (domestic violence prevention and services) | Executive Director |
| Mary Skelton Roberts | Barr Foundation | Co-Director of Climate |
| Milagros Abreu | The Latino Health Insurance Program, Inc. | Founder and Executive Director |
| Monica Tibbits-Nutt | 128 Business Council / Fiscal Management and Control Board overseeing the MBTA | Executive Director / Vice Chair |
| Peter Koutoujian | Middlesex Sheriff's Office | Middlesex Sheriff |

| | | |
|---|---|---|
| Rebecca Gallo | MetroWest Health Foundation | Senior Program Officer |
| Stephen J. Kerrigan | Edward M. Kennedy Community Health Center | President and CEO |

## APPENDIX B: KEY INFORMANT INTERVIEWEES

| Name | Position | Organization |
|---|---|---|
| Rev. Dr. Katherine Adams | Senior Pastor | First Congregational Church of Billerica |
| Jean Bushnell | Director | Billerica Council on Aging |
| Elizabeth Dray | Volunteer | ArCS Cluster |
| Pamela Hallett | Executive Director | Housing Corporation of Arlington |
| Colleen Leger | Executive Director | Arlington Youth Counseling Center |
| Melanie Lin | Vice President | Chinese American Association of Lexington |
| Robert Rufo | Chief of Police | Woburn Police Department |
| Lisa Tonello;<br>Barbara Fleming | ROSS Coordinator;<br>Director of Resident Services | Medford Housing Authority |
| Rebecca Wolfe | Clinical Responder | Jail Diversion Program/Arlington Police Department |

# APPENDIX C: KEY INFORMANT INTERVIEW GUIDE

Health Resources in Action
Partners Ambulatory Care (PAC) Mass General Brigham CHNAs
Westborough, Westwood, and Woburn Service Areas
Key Informant Interview Guide
*Guide – May 19, 2020*

Goals of the Key Informant Interview

- To determine perceptions of the strengths and needs of these communities, and identify sub-populations most affected
- To explore how these issues can be addressed in the future
- To identify the gaps, challenges, and opportunities for addressing community needs more effectively

**[NOTE: THE QUESTIONS IN THE INTERVIEW GUIDE ARE INTENDED TO SERVE AS A GUIDE, BUT NOT A SCRIPT.]**

**I. BACKGROUND (5 MINUTES)**

- Hello, my name is _____, and I work for Health Resources in Action, a non-profit public health organization in Boston. Thank you for taking the time to talk with me today. I hope you and your family are fine during these uncertain times.

- A few months ago, Partners HealthCare began undertaking a comprehensive community health assessment effort to gain a greater understanding of the health of community residents, how health needs are currently being addressed, and whether there might be opportunities to address these issues more effectively. The data from this assessment will inform the priorities for future investments into the community in the next several years on the upstream factors that affect health.

- We recognize this is a unique time we are in. Given the coronavirus crisis, an assessment of the community's needs and strengths is even more important. The pandemic has brought to light both the capabilities and the gaps in our healthcare system, public health infrastructure, and social services networks.

- As part of the community health assessment process, we are conducting interviews with leaders in the community and focus groups with residents to understand different people's perspectives on these issues. We greatly appreciate your feedback, insight, and honesty. The findings from these conversations will inform decisions around future investments to improve the community's health.

- Our interview will last about 30-40 minutes. After all of the data gathering is completed, we will be writing a summary report of the general themes that have emerged during the discussions. We will not include any names or identifying information. All names and responses will remain confidential. Nothing sensitive that you say here will be connected directly to you in our report.

- Do you have any questions before we begin?

## II. INTRODUCTION (5 MINUTES)

1. Can you tell me a bit about your organization/agency? [TAILOR PROBES DEPENDING ON AGENCY OR IF COMMUNITY LEADER NOT AFFILIATED WITH ORGANIZATION]

a. [PROBE ON ORGANIZATION: What is your organization's mission/services? What communities do you work in? Who are the main clients/audiences?]

   i. Prior to the pandemic, what were some of the biggest challenges your organization faced in conducting your work in the community?
   ii. During the pandemic, what are some of the biggest challenges your organization has faced in conducting your work in the community? What new challenges do you anticipate going forward?

b. Do you currently partner with any other organizations or institutions in your work? Have there been any changes in these partnerships in light of the pandemic and its economic consequences?

## III. COMMUNITY PERCEPTIONS AND SOCIAL/ECONOMIC FACTORS (15-20 MINUTES)

2. How would you describe the community served by your organization/ that you serve? (NOTE THAT WE ARE DEFINING COMMUNITY BROADLY – NOT NECESSARILY GEOGRAPHICALLY BASED)

c. How have you seen the community change over the last several years?

d. What do you consider to be the community's strongest <u>assets/strengths?</u>

For the following questions, please consider issues and concerns your community had BEFORE the pandemic, issues RELATED TO the pandemic, and issues and concerns you anticipate will arise as a result of the pandemic and its economic consequences.

e. What are some of its <u>biggest concerns/issues</u> in general? What challenges do residents face in their day-to-day lives? [PROBE ON, IF NOT YET MENTIONED: transportation; affordable housing; discrimination; financial stress; food security; violence; employment; cultural understanding; language access; impacts of environmental problems and climate change, etc.) <u>REPEAT QUESTIONS FOR DIFFERENT ISSUES]</u>

   i. What population groups (geography, age, race/ethnicity, immigration status, gender, income/education, etc.) do you see as being most affected by these issues?

   ii. How has [ISSUE] affected their daily lives?

3. What do you think are the most pressing <u>health</u> concerns in the community/among the residents you work with? Why? [PROBE ON SPECIFICS. PROBE FOR HEALTH ISSUES NOT DIRECTLY RELATED TO COVID-19, OR ISSUES THAT HAVE CHANGED BECAUSE OF COVID-19]

    a. How has [HEALTH ISSUE] affected the residents you work with? [PROBE FOR DETAILS: IN WHAT WAY? CAN YOU PROVIDE SOME EXAMPLES?]

        i. From your experience, what are peoples' biggest challenges to addressing [THIS ISSUE]?

        ii. To what extent, do you see [BARRIER] to addressing this issue among the residents you work with/your organization serves?

    [PROBE ON BARRIERS BROUGHT UP/MOST APPROPRIATE FOR POPULATION GROUP: Cost or economic hardship, transportation, stigma, attitudes towards seeking services, built environment, availability/access to resources or services, knowledge of existing resources/services, social support, discrimination, insurance coverage, etc.]

4. What are current or emerging trends that could have an impact on the public health system or the community? Has anything become apparent due to the Coronavirus pandemic?

## IV. *TAILORED SECTION* - SPECIFIC QUESTIONS ON PARTICULAR ISSUES, DEPENDING ON WHO THE INTERVIEWEE IS. SELECT QUESTIONS TAILORED TO INDIVIDUAL EXPERTISE AND ASK A FEW QUESTIONS IF NOT YET BROUGHT UP. (5-10 MINUTES)

**For Interviewees Working in Housing and Transportation**

For the following questions, please consider issues your community had BEFORE the pandemic, issues RELATED TO the pandemic, and issues and concerns you anticipate will arise as a result of the pandemic and its economic consequences.

- What barriers do you see residents experiencing around accessing affordable and healthy housing? How about with transportation?
- What has been working well in the city to improve access to healthy, affordable housing? How about related to transportation? What has been challenging or not working well? Where are there opportunities for improvement or innovation?
- Are there any approaches to improving housing or transportation access that you think will have to change in light of the pandemic, social distancing, and economic impacts?

**For Interviewees Working in Financial Instability, Employment, and Workforce Development**

- In the wake of the pandemic and expected ongoing social distancing measures, what challenges are residents facing regarding hiring, employment, or job security?
- Thinking back to the time before the pandemic, what were the needs in this community around workforce development? What was previously needed to improve residents' employability? What training or resources were needed?
- Now that the pandemic and social distancing measures have changed so much about the economy and employment options, what are the NEW needs in this community around workforce

development? What is NOW needed to improve residents' employability? What training or resources are needed to adapt to this new reality?

**For Interviewees Working with Communities where Immigration and/or Discrimination is a Concern**
For the following questions, please consider issues your community had BEFORE the pandemic, issues RELATED TO the pandemic, and issues and concerns you anticipate will arise as a result of the pandemic and its economic consequences.

- What are some of the specific challenges around immigration issues or discrimination that your communities face? How has this changed since the pandemic?
- What should health care and social service providers consider when treating health and other issues in diverse populations? How can institutions best respond to the needs of diverse groups? (e.g. religious, racial/ethnic, etc.)

**For Interviewees Working with Seniors/Older Adults**
I expect that the past weeks and months have been very difficult, considering the work you do. Thank you again for providing your unique perspective to this important work.

- Could you describe the emerging issues the population you work with faces as a result of the pandemic? What do you anticipate will be the longer-term needs?
- Are there particular structural, institutional, or policy-related barriers that have affected seniors in this region before the pandemic – and now?
- What are your major concerns for the future? What has been going "right" that could be built on going forward?

**For Interviewees Working in the Areas of Violence, Trauma, and Safety**
[For interviewees working on domestic violence:] I expect that the past weeks and months have been very difficult, considering the work you do. Thank you again for providing your unique perspective to this important work.

- Could you describe the emerging issues that the population you work with faces as a result of the pandemic, social distancing, and economic crisis? What do you anticipate will be the longer term needs?
- Are there particular structural, institutional, or policy-related barriers that have affected the communities you work with in this region before the pandemic – and now?
- In the wake of the pandemic, and expected ongoing social distancing measures, what challenges are community members facing regarding domestic or interpersonal violence?
- What are your major concerns for the future? What has been going "right" that could be built on going forward?

**For Interviewees Working in the Areas of Substance Use or Mental Health**
I expect that the past weeks and months have been very difficult, considering the work you do. Thank you again for providing your unique perspective to this important work.

- Could you describe the emerging issues the population you work with faces as a result of the pandemic, social distancing, and economic crisis? What do you anticipate will be the longer term needs?
- Are there particular structural, institutional, or policy-related barriers that have affected the communities you work with in this region before the pandemic – and now?
- In the wake of the pandemic, and expected ongoing social distancing measures, what challenges are community members facing regarding substance use or mental health?

- What are your major concerns for the future? What has been going "right" that could be built on going forward?

**V. VISION FOR THE FUTURE (10-15 MINUTES)**

5. I'd like you to think ahead about the future of your community. When you think about the community 3 years from now, what would you like to see? What's your vision?

    a. What do you see as the next steps in helping this vision become reality?

    b. We talked about a number of strengths or assets in the community. [MENTION POTENTIAL STRENGTHS- Community resilience, diversity, number of organization/services available, community engagement, etc.] How can we build on or tap into these strengths to move us towards a healthier community?

6. As you think about your vision, what do you think needs to be in place to support <u>sustainable</u> change?

    a. How do we move forward with lasting change across <u>organizations and systems</u>?

    b. Where do you see yourself or your organization in this?

7. We talked about a lot of issues today, if you had to narrow down the list to 3 or so issues – thinking about what would make the most impact, who is most affected by the issues, and how realistic it is to make change: What do you think are the 3 highest priority issues for future action? If there were greater investments made in your community, what 3 issues should receive this funding?

**VI. CLOSING (5 MINUTES)**

Thank you so much for your time and sharing your opinions. This is a very difficult time for everyone, and your perspective about the communities you work with will be a great help in determining how to improve the systems that affect the health of this population. Before we end the discussion, is there anything that you wanted to add that you didn't get a chance to bring up earlier?

Thank you again. Your feedback is valuable, and we greatly appreciate your time and for sharing your opinion.

# APPENDIX D: FOCUS GROUP GUIDE

Health Resources in Action
Partners Ambulatory Care (PAC) Mass General Brigham CHNAs
Westborough, Westwood, and Woburn Service Areas
General Focus Group Guide

Goals of the focus group:

- To determine perceptions of the strengths and needs of the community
- To explore how these issues can be addressed in the future
- To identify the gaps, challenges, and opportunities for addressing community needs more effectively

**I. BACKGROUND (10 minutes)**

- Hello, my name is _____, and I work for Health Resources in Action, a non-profit public health organization in Boston. Thank you for taking the time to talk with me today. I hope you and your families are fine during these uncertain times.

- This discussion will last about 60 minutes. [DEPENDING ON FORMAT OF FOCUS GROUP] Please turn on your video, if possible, so that we can all see each other speaking. As a reminder, please keep yourself on MUTE until you want to speak.

NORMALLY, WE WOULD BE DOING THIS IN-PERSON AS A GROUP.

- We're going to be having a focus group today. Has anyone here been part of a focus group before? You are here because we want to hear your opinions. I want everyone to know there are no right or wrong answers during our discussion. We want to know your opinions, and those opinions might differ. This is fine. Please feel free to share your opinions, both positive and negative.

- A few months ago, Partners HealthCare began undertaking a comprehensive community health assessment effort to gain a greater understanding of the health of residents and how the community's needs are currently being addressed. As part of this process, we are having discussions like these around the region with a wide range of people - community members, government officials, leaders in the faith community, health care and social service providers, and staff from a range of community organizations. We are interested in hearing people's feedback on the strengths and needs of the community and suggestions for the future.

- We recognize this is a unique time we are in. Given the coronavirus crisis, an assessment of the community's needs and strengths is even more important. The pandemic has brought to light both the capabilities and the gaps in our healthcare system, public health infrastructure, and social services networks.

- We will be conducting several of these discussion groups around the area. After all of the groups are done, we will be writing a summary report of the general opinions that have come up. In that report, we might provide some general information on what we discussed tonight, but I will not include any names or identifying information. Your responses will be strictly confidential. In the report, nothing you say here will be connected to your name.

- We plan to audio record these conversations just to ensure we have captured the main points of the discussion in case there are any interruptions in the note-taking. No one but the analysts at Health Resources in Action, who are writing the report, will be listening to the audio recordings. Does anyone have any concerns with me turning the recorder on now?

- Any questions before we begin our introductions and discussion?

**II. INTRODUCTIONS (10 minutes)**

Now, first let's spend a little time getting to know one another. When I call your name, please unmute yourself and tell us: 1) Your first name; 2) what city or town you live in; and 3) something about yourself you'd like to share– such as how many children you have or what activities you like to do for fun. [AFTER ALL PARTICIPANTS INTRODUCE THEMSELVES, MODERATOR TO ANSWER INTRO QUESTIONS]

**III. COMMUNITY ASSETS AND CONCERNS**

1. Today, we're going to be talking a lot about the community that you live in. How would you describe your community?

For the following questions, we will be discussing the strengths and concerns in your community, both prior to the coronavirus pandemic, and now. To begin with, please think back to a time before the pandemic – for example, in December during the holiday season.

2. Thinking about a few months before the coronavirus pandemic -- If someone was thinking about moving into your community, what would you have said are some of its biggest strengths about your community - or the most positive things about it? [PROBE ON COMMUNITY AND ORGANIZATIONAL ASSETS/STRENGTHS]

    a. What would you have said were the biggest problems or concerns in your community back then – a few months before the pandemic? [PROBE ON ISSUES IF NEEDED – HEALTH, ECONOMIC, SOCIAL, SAFETY, ETC.]

3. What do you think were the most pressing *health* concerns in your community back in December?

    a. How did these health issues affect your community? In what way?

    b. What specific population groups were most at-risk for these issues?

Next, please think about the same issues, now, in the midst of the pandemic, and moving forward. RIGHT NOW….

4. What do you think are the biggest strengths about your community? What are the most positive things about it? Are they different than before? [PROBE ON COMMUNITY AND ORGANIZATIONAL ASSETS/STRENGTHS]

5. What do you think are the biggest concerns in your community now? Are they different than before?

6. What do you think are the most pressing ***health*** concerns in your community now? How are they different?

7. Social isolation, anxiety, concerned about going out

    a. How do these health issues affect your community? In what way?

        i. What are the biggest barriers or challenges that people have to seeking services for these issues?

    b. What specific population groups are most at-risk for these issues?

**IV. PERCEPTIONS OF HEALTH ISSUES, HEALTH CARE AND BARRIERS**

What are the top three issues that were mentioned? It would be good to discuss issues that have arisen during the current health crisis, as well as issues that were big concerns before, that are ongoing or may return. (If needed, identify together or vote on top 3 issues.) Let's talk about some of the issues.

8. Do you agree with this list? Is there anything missing?
9. Traffic, affordable housing, accessing heath, technology – internet issues, transportation, navigating MassHealth, childcare, don't feel comfortable going out

10. What do you see as some of the biggest barriers or challenges to addressing these issues?

11. What do you think the community should do to address these issues? [PROBE SPECIFICALLY ON WHAT THAT WOULD LOOK LIKE AND WHO WOULD BE INVOLVED TO MAKE THAT HAPPEN]

**V. SPECIFIC PROBES FOR DISTINCT POPULATION GROUPS (10 minutes)**

**For Groups Where Housing and Transportation are a Concern**
For the following questions, please consider issues your community had BEFORE the pandemic, issues RELATED TO the pandemic, and issues and concerns you anticipate will arise as a result of the pandemic and its economic consequences.

- How much of an issue is affordable housing in your community? How has it impacted your day-to-day life?
- What barriers do residents (or you) experience around accessing affordable and healthy housing? How hard is it to find housing that is appropriate for you/your family?
- How much of an issue is accessing transportation? How has it impacted your day-to-day life?
- Are there any approaches to improving housing or transportation access that you think will have to change in light of the pandemic, social distancing, and economic impacts?

**For Groups Where Financial Instability, Employment & Workforce are a Concern**

- Thinking back to the time before the pandemic (for example, during the holiday season), what challenges were residents (or you) facing back then regarding hiring, employment, or job security?

- [PROBE FOR THOSE WHERE ENGLISH ISN'T PRIMARY LANGUAGE]- How much do your language skills limit the type of job you can get?
- Now that the pandemic and social distancing measures have changed so much about the economy and employment options, what are the NEW needs in this community around employment? What is NOW needed to improve residents' employability?
- When people or families that you know are dealing with financial hardship, what are some of the issues that are most weighing on them? How do they deal with that?
- What resources or support do residents (or you) need to address financial hardship?

**For Groups Where Immigration and Discrimination are Concerns**

For the following questions, please consider issues your community had BEFORE the pandemic, issues RELATED TO the pandemic, and issues and concerns you anticipate will arise as a result of the pandemic and its economic consequences.

- Have you ever felt discriminated against because of your race, ethnicity, language, or where you were born? What specifically?
  - Have you encountered this when trying to seek specific services (e.g., housing, healthcare, employment, education)?
- What are some of the specific challenges that your community faces related to immigration issues or discrimination? How has this changed since the pandemic?
- What should health care providers consider when treating health issues in diverse populations? How can health care institutions best respond to the needs of diverse groups? (e.g. religious, racial/ethnic, etc.)

**VI. VISION OF COMMUNITY HEALTH IMPROVEMENT AND INVOLVEMENT**

12. I'd like you to think ahead about the future of your community. When you think about the community 3-5 years from now, what would you like to see? What is your vision for the future?

    a. What do you think needs to happen in the community to make this vision a reality?

    b. Who should be involved in this effort?

13. We talked about a lot of issues today, if you had to narrow down the list to 3 or so issues – thinking about what would make the most impact, who is most affected by the issues, and how realistic it is to make change: What do you think are the 3 highest priority issues for future action? If there were greater investments made in your community, what 3 issues should receive funding?

**VII. CLOSING**

Thank you so much for your time. This is a very difficult time for everyone, and your perspective about the communities you live in will be a great help in determining how to improve the systems that affect the health of this population.

That's it for my questions. Is there anything else that you would like to mention that we didn't discuss today? Thank you again. Have a good afternoon. [TALK ABOUT NEXT STEPS OF THE PROCESS, SPECIFICALLY HOW PARTICIPANTS CAN GET INVOLVED FURTHER OR RECEIVE THE FINAL REPORT OR SUMMARY OF THE REPORT.]

# APPENDIX E: SURVEY INSTRUMENT

Partners Ambulatory Care (PAC) Mass General Brigham CHNAs
- Community Priorities Survey

Unformatted version of the online survey

*To complete the survey in Spanish, please use the drop-down menu above to select your language.*
*To complete the survey in Portuguese, please use the drop-down menu above to select your language.*
*To complete the survey in Mandarin, please use the drop-down menu above to select your language.*

Being a healthy community is about more than delivering quality health care to residents. Where you live, learn, work, and play all have an enormous impact on your health.

Partners HealthCare is hoping to get a better understanding of the health of residents in your community—including all the factors that affect a community's health—and which community needs are most important to address. Please take this survey to provide feedback. It should take no more than 5-10 minutes. Filling out the survey is voluntary, and your responses are anonymous. You will not be asked your name, address, or any other information that can identify you.

This study has been underway for several months, starting before the coronavirus spread in the U.S. We recognize this is a unique time we are in. With the coronavirus crisis, understanding the community's needs and strengths has become even more important. This survey will be asking you about your concerns now, as well as several months ago.

Thank you for your time and participation. At the end of this survey is an opportunity to enter a raffle for a $200 Amazon gift card. Thank you for your feedback to improve your community's health.

1. What zip code do you live in? _____

2. We recognize this is a unique time we are in. We would like to understand what issues have **personally affected you and your family** now and 6 months ago – around the time of the holiday season. For each issue, please check if the issue was something that affected you or your family personally now and/or 6 months ago - or has not affected you or your family at either time period. You can check any that apply.

| | **Currently affects me or my family.** | **Affected me or my family 6 months ago** | **Does not affect me or my family now nor 6 months ago.** |
|---|---|---|---|
| Financial insecurity/unemployment/lack of job opportunities | O | O | O |
| Problems getting workforce training to get job skills | O | O | O |

| | | | |
|---|---|---|---|
| Concerns around housing (such as finding affordable housing, fear of eviction, overcrowding, housing quality) | O | O | O |
| Problems getting to places because of lack of transportation | O | O | O |
| Cannot be active/get exercise because of lack of sidewalks or parks | O | O | O |
| Hard to eat well because of lack of supermarkets/lack of healthy food options I can afford | O | O | O |
| Fear of safety in the community/community violence (gangs, robberies. etc.) | O | O | O |
| Fear of safety at home/domestic violence (spouse or partner abuse, child abuse) | O | O | O |
| Discrimination because of my race, ethnicity, gender, language, sexual orientation, country of origin, etc. | O | O | O |
| Mental health issues (such as depression, anxiety, etc.) | O | O | O |
| Alcohol and drug (marijuana, heroin, opioids, etc.) use | O | O | O |
| Chronic or long-term diseases (like cancer, diabetes, heart disease, stroke, etc.) | O | O | O |
| Overweight/obesity | O | O | O |
| Coronavirus/COVID-19 | O | O | O |
| Other infectious diseases (like pneumonia, flu, etc.) | O | O | O |
| Concerns related to older adults (dementia/Alzheimer's, falls, etc.) | O | O | O |
| Concerns related to children (premature birth, developmental delays, ADHD, etc.) | O | O | O |
| Problems getting the health or social services I need because they are not available in my community | O | O | O |
| Other: _____ | O | O | O |

**2a - If you or your family felt discriminated against recently or in the last 6 months, what do you think are the <u>main reasons</u> for these experiences? (Please check all that apply.)**

- o Your race
- o Your ethnicity, ancestry, or country of origin

- Your language
- Your gender
- Your sexual orientation
- Your religion
- Your education or income level
- Some aspect of your physical appearance (e.g., height, weight, disability, etc.)
- Prefer not to answer/Don't know

**3. Either now or in the past 6 months, have any of these factors made it <u>harder</u> for you to get the medical, mental health, or social services (like housing, food, job training, etc.) you have needed? (Please check all that apply.)**

- Services not available in my community
- Lack of information/ I don't know what services are available or where to go
- Lack of transportation
- Cost of services
- Lack of evening or weekend services
- Unfriendly staff or providers
- Felt discriminated against because of my race, ethnicity, gender, language, sexual orientation, country of origin, etc.
- Afraid to ask questions or talk to staff or providers
- Afraid if I take the time off to get services, I'll lose my job
- Long wait for an appointment
- My information is not kept confidential
- Language problems/could not communicate with staff or provider
- None of the above
- Other (Please specify) _____

4. Now we'd like to ask you about your community overall. Your community can be your town, your neighborhood, the group of people you care about, etc. What do you see as the overall **strengths** of your community? (Please check all that apply.)

- o My community has medical services to address physical health conditions that people can access.
- o My community has mental health services that people can access.
- o My community has social services (e.g. food, job training, etc.) that people can access.
- o My community has good schools.
- o My community has good public transportation.
- o My community has enough parks/green space.
- o My community has sidewalks so residents can take a walk easily and safely.
- o My community has bike paths so residents can bike easily and safely.
- o My community helps people in need.
- o Neighbors know each other in this community.
- o People care about improving this community.
- o People feel like they belong in this community.
- o My community has people of many races and cultures.
- o People can deal with challenges in this community.
- o When people have disagreements, they are able to resolve their differences and determine a path forward.
- o There are innovations and new ideas in this community.
- o People accept others who are different than themselves in this community.
- o None of the above.
- o Other (Please specify) _____

5. Please think about the most important issues in your community for taking action. Consider the following when thinking about these issues:

   - **Concern:** *How much does this issue affect our community? How urgent is this issue? How much does this issue impact people's lives?*
   - **Equity:** *Will addressing this issue substantially benefit those most in need? Does this issue address the root causes of inequities?*
   - **Effectiveness:** *Can we make a difference if we work on this issue? Can working on this issue achieve both short-term and long-term change?*
   - **Feasibility:** *Can we do it? Is it possible to address this issue in our community given the infrastructure, capacity, and community commitment?*

Given these questions, **what are the top 5 most important issues for action in your community <u>in the next few years</u>?** (Please check 5.)

| | |
|---|---|
| Financial insecurity/unemployment/lack of job opportunities | O |
| Workforce training to get job skills | O |
| Housing (such as finding affordable housing, fear of eviction, overcrowding, housing quality) | O |
| Transportation issues | O |
| Availability of sidewalks or parks | O |
| Availability of supermarkets/healthy food options people can afford | O |
| Safety in the community/community violence (gangs, robberies. etc.) | O |
| Safety in people's homes/domestic violence (spouse or partner abuse, child abuse) | O |
| Addressing systemic racism/racial injustice | O |
| Mental health issues (such as depression, anxiety, etc.) | O |
| Alcohol and drug use (marijuana, heroin, opioids, etc.) | O |
| Chronic or long-term diseases (like cancer, diabetes, heart disease, stroke, etc.) | O |
| Overweight/obesity | O |
| Coronavirus/COVID-19 testing and/or the possibility of a new outbreak | O |
| Other infectious diseases (like pneumonia, flu, etc.) | O |
| Concerns related to older adults (dementia/Alzheimer's, falls, etc.) | O |
| Concerns related to children (premature birth, developmental delays, ADHD, etc.) | O |
| Availability of health or social services in the community | O |
| Other (please specify): _____ | O |

It is helpful to get an understanding of who is answering this survey to ensure we get a cross-section of perspectives. Please answer the following questions, which are anonymous.

6. What category best describes your age?

- ○ Under 18 years old
- ○ 18-29 years old
- ○ 30-49 years old
- ○ 50-64 years old
- ○ 65-74 years old
- ○ 75 years old or older

7. What is your current sex or gender identity?

- Male
- Female
- Transgender Male
- Transgender Female
- Additional Gender Category: _____

8. What is your sexual orientation?

- Straight/heterosexual
- Gay or lesbian
- Bisexual
- Prefer to self-describe: _____

9. How would you describe your ethnic/racial/cultural background? (Please check all that apply.)

- African American/Black
- American Indian/Native American
- East Asian /Pacific Islander (e.g. Japan, China, Taiwan, Korea, Vietnam, Laos, Cambodia, the Philippines, Samoa)
- South Asian (e.g., India, Pakistan, Bangladesh, Sri Lanka, Nepal)
- White
- Hispanic/Latino(a)
- Middle Eastern/North African
- Other (please specify) _____

10. What is the primary language(s) spoken in your home? (Please check all that apply.)

- English
- Spanish
- Portuguese/Cape Verdean Creole
- Chinese (including Mandarin and Cantonese)
- French or Haitian Creole
- Russian
- Hindi
- Arabic
- Other (Please specify) _____

11. Were you born in the United States?

- Yes (automatic skip pattern to Q13)
- No (automatic skip pattern to Q12)
- Prefer not to answer (automatic skip pattern to Q13)

12. If no, how long have you lived in the United States?

- Less than 1 year
- 1 year to less than 3 years
- 3 years to less than 5 years
- 5 years to less than 10 years
- 10 years to less than 15 years
- 15 years to less than 20 years
- 20 years or more
- Prefer not to answer

13. What is the highest level of education that you have completed?

- Primary or middle school
- Some high school
- High school graduate or GED
- Some college
- Associate or technical degree/certificate
- College graduate
- Graduate or professional degree

14. What is your current employment status? (Please check all that apply)

- Employed full-time
- Employed part-time
- Not employed and currently looking for work
- Student
- Retired
- Stay-at-home parent / significant other
- Unable to work

15. Has your financial situation gotten worse, improved, or stayed the same since coronavirus/COVID-19?

- Gotten worse
- Has improved
- Has stayed the same

16. What was your total household income before taxes during the past 12 months?

- Less than $25,000
- $25,000 to $34,999
- $35,000 to $49,999
- $50,000 to $74,999
- $75,000 to $99,999
- $100,000 to $149,999
- $150,000 to $199,999
- $200,000 or more
- I don’t know or don’t want to say

This concludes our survey. Thank you for your time. We greatly appreciate your participation. Participants who complete this survey are eligible to enter a raffle for a $200 Amazon gift card. You will be automatically redirected to a form after this survey to enter the raffle. Your name and information will not be connected to the responses on your survey.

## APPENDIX F: ADDITIONAL SURVEY DATA

**Appendix Table 1: CHNA Community Priorities Survey Respondent Characteristics**

| | Number | % |
|---|---|---|
| **Age** | | |
| Under 18 years old | 0 | 0.0% |
| 18-29 years old | 26 | 5.6% |
| 30-49 years old | 177 | 37.8% |
| 50-64 years old | 171 | 36.5% |
| 65-74 years old | 86 | 18.4% |
| 75 years old or older | 8 | 1.7% |
| **Sex or Gender identity** | | |
| Male | 108 | 23.2% |
| Female | 355 | 76.2% |
| Transgender Male | 1 | 0.2% |
| Other Gender Cat | 2 | 0.4% |
| **Sexual Orientation** | | |
| Straight/heterosexual | 437 | 93.8% |
| Gay or lesbian | 12 | 2.6% |
| Bisexual | 13 | 2.8% |
| Prefer to self-describe | 4 | 0.9% |
| **Ethnic/racial/cultural background*** | | |
| African American/Black | 10 | 1.8% |
| American Indian/Native American | 1 | 0.2% |
| East Asian /Pacific Islander | 16 | 2.9% |
| South Asian | 6 | 1.1% |
| White | 425 | 77.0% |
| Hispanic/Latino(a) | 12 | 2.2% |
| Middle Eastern/North African | 3 | 0.5% |
| Other | 3 | 0.5% |
| **Primary language(s) spoken at home*** | | |
| English | 457 | 82.8% |
| Spanish | 8 | 1.4% |
| Portuguese/Cape Verdean Creole | 3 | 0.5% |
| Chinese (including Mandarin and Cantonese) | 3 | 0.5% |
| French or Haitian Creole | 2 | 0.4% |
| Russian | 1 | 0.2% |
| Hindi | 1 | 0.2% |
| Arabic | 0 | 0.0% |
| Other (Please specify | 8 | 1.4% |

| | Number | % |
|---|---|---|
| **Born in the United States** | | |
| Yes | 429 | 93.1% |
| No | 30 | 6.5% |
| Prefer not to answer | 2 | 0.4% |
| **Length of time living in the United States**** | | |
| Less than 1 year | 0 | 0.0% |
| 1 year to less than 3 years | 0 | 0.0% |
| 3 years to less than 5 years | 0 | 0.0% |
| 5 years to less than 10 years | 1 | 3.3% |
| 10 years to less than 15 years | 3 | 10.0% |
| 15 years to less than 20 years | 5 | 16.7% |
| 20 years or more | 20 | 66.7% |
| Prefer not to answer | 1 | 3.3% |
| **Highest level of education** | | |
| Primary or middle school | 1 | 0.2% |
| Some high school | 1 | 0.2% |
| High school graduate or GED | 14 | 3.0% |
| Some college | 44 | 9.5% |
| Associate or technical degree/certificate | 33 | 7.1% |
| College graduate | 162 | 35.1% |
| Graduate or professional degree | 207 | 44.8% |
| **Current employment status*** | | |
| Employed full-time | 262 | 47.5% |
| Employed part-time | 72 | 13.0% |
| Not employed and currently looking for work | 31 | 5.6% |
| Student | 11 | 2.0% |
| Retired | 73 | 13.2% |
| Stay-at-home parent / significant other | 21 | 3.8% |
| Unable to work | 14 | 2.5% |
| **Total household income in last 12 months** | | |
| Less than $25,000 | 18 | 4.0% |
| $25,000 to $34,999 | 14 | 3.1% |
| $35,000 to $49,999 | 17 | 3.7% |
| $50,000 to $74,999 | 52 | 11.4% |
| $75,000 to $99,999 | 56 | 12.3% |
| $100,000 to $149,999 | 101 | 22.2% |
| $150,000 to $199,999 | 70 | 15.4% |
| $200,000 or more | 60 | 13.2% |
| I don’t know or don’t want to say | 68 | 14.9% |

NOTE: Asterisk (*) indicates the question in the survey allowed for multiple responses; therefore, percentages may not add up to 100%; Double asterisk (**) indicates that the question includes only those who specified not being born in the United States.
DATA SOURCE: PAC CHNA Community Priorities Survey, 2020.

**Appendix Table 2: Percent of CHNA Community Priorities Survey Respondents Reporting Being Affected Currently and/or 6 months ago by Issues, by Type of Issue, 2020**

| | Number | Affected Currently Only | Affected 6 Months Ago Only | Affect Both Currently and 6 Months Ago | Never Affected |
|---|---|---|---|---|---|
| Accessing health or social services | 521 | 6.0% | 2.1% | 1.9% | 90.0% |
| Alcohol and drug use | 522 | 7.1% | 3.5% | 2.5% | 87.0% |
| Cannot be active due to lack of sidewalks or parks | 521 | 14.0% | 4.0% | 1.5% | 80.4% |
| Chronic or long-term diseases | 525 | 22.3% | 2.7% | 7.2% | 67.8% |
| Community violence | 522 | 5.8% | 2.5% | 1.3% | 90.4% |
| Concerns around housing | 519 | 6.6% | 4.2% | 1.7% | 87.5% |
| Concerns related to children | 521 | 8.6% | 1.7% | 4.6% | 85.0% |
| Concerns related to older adults | 525 | 21.1% | 3.4% | 8.8% | 66.7% |
| Coronavirus/COVID-19 | 515 | 19.8% | 4.5% | 3.1% | 72.6% |
| Discrimination | 518 | 5.2% | 2.5% | 3.5% | 88.8% |
| Domestic violence | 519 | 0.8% | 1.4% | 0.6% | 97.3% |
| Financial insecurity | 546 | 29.1% | 7.1% | 4.6% | 59.2% |
| Lack of access to affordable healthy food | 521 | 8.1% | 5.8% | 1.7% | 84.5% |
| Lack of transportation | 522 | 6.3% | 2.7% | 1.9% | 89.1% |
| Mental health issues | 530 | 33.0% | 7.0% | 10.6% | 49.4% |
| Other infectious diseases | 519 | 3.1% | 8.5% | 0.6% | 87.9% |
| Overweight/obesity | 520 | 26.0% | 3.5% | 9.4% | 61.2% |
| Problems getting workforce training | 519 | 8.5% | 3.7% | 0.8% | 87.1% |
| Other issue | 259 | 6.2% | 0.0% | 0.4% | 93.4% |

NOTE: Question in the survey allowed for multiple responses; therefore, percentages may not add up to 100%.
DATA SOURCE: PAC CHNA Community Priorities Survey, 2020.