

Town of Weymouth Housing Production Plan

FY2018-FY2022

HEALTH ADDENDUM

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Introduction

Although adequate housing and health are closely linked, they are often studied and acted on separately. The following Health Addendum is intended to provide information to support the link between the goals and strategies found in the Weymouth Housing Production Plan and the beneficial impact on the overall health of the community. Included here is general information that provides a picture of the health of Weymouth’s residents and how it is impacted by housing, as well as recommendations to improve the health and wellbeing of the community. The Health Addendum is divided into three parts explaining the links between housing and health, Weymouth’s overall health profile, and recommendations to address health issues identified as part of this process.

THE LINKS BETWEEN HOUSING & HEALTH

Where one lives, and how that location plays into an individual’s ability to access health care, wellness programs, and generally healthy surroundings and environmental elements, can play a large role in an individual’s overall health and longevity. This interplay between health and housing can be better understood by an analysis of four key factors including the housing quality, affordability, and location and its relationship to the surrounding community and environment.

- Housing Quality

The quality of a housing unit can be a strong influence over the health of its inhabitants. Housing that is safe, dry, clean, well-maintained, pest-free, adequately ventilated, and free from contaminants reduces the likelihood of injuries and illnesses such as asthma, cancer, neurotoxicity, cardiovascular disease, and poor mental health. Other factors which can impact the quality of housing include excessive noise, which can lead to anxiety; stress and deteriorated cognitive function; lack of daylight, which can lead to depression; physical injuries; and cancer.

- Housing Affordability

A lack of affordable housing impacts both an individual’s ability to find quality housing as well as their ability to pay for other necessities such as food, medical care, and utilities. Not only does the loss of these necessities lead to negative health outcomes such as malnutrition and diabetes, but the mental stress of dealing with this imbalance can also lead to anxiety and depression. Without affordable housing individuals are more likely to live in overcrowded conditions, substandard housing, and locations which lack



Sources: Information gathered from National Center for Healthy Housing report "A Systematic Review of Health Impact Assessments on Housing Decision and Guidance for Future

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community and service resources, or become homeless. The instability caused by these situations can further exacerbate existing medical and mental health conditions as well.

- **Housing Location**
Proximity to community services and resources plays an important role in one's health and mental outlook. Housing that has easy access to public transportation, parks and recreation areas, good schools, and jobs, provides both physical and mental health benefits. Additionally, easy access to healthy foods and medical care can reduce chronic disease and injury. In comparison, housing that is in blighted neighborhoods or which is exposed to industrial uses, highways, or waste sites places can lead to pollution and unhealthy physical environments. This can lead to injury, chronic illness, and mental health concerns.
- **Housing Community or Neighborhoods**
This criterion considers makeup of the community and the relationships of its residents. Neighborhoods which are free from segregation and concentrated poverty improve physical and mental health by reducing stress and exposure to violence and crime. Further, neighborhoods where residents have a strong bond and are supportive of one another further increases the health benefits of the community, as to areas with access to good schools and civic engagement as it provides a sense of control and community participation which benefits mental health and overall well-being.

The results of the HPP and separate public health survey suggest that housing quality, affordability, location, and community are the main elements that Weymouth should focus on in the future

KEY SUMMARY:

Compared to state averages, Weymouth's senior population has higher instances of stroke, COPD, and other illnesses and more annual hospital stays than the state average.¹ In a public health survey of Weymouth residents, most agreed with the following:

- Residents feel safe and comfortable in their neighborhoods, but less than half of the town's residents are aware of projects to improve health outcomes or public safety in their neighborhoods.
- Less than half of residents find that healthy foods are easily accessible at stores that can be reached by walking, biking or public transportation.
- Weymouth's available walking and biking paths and trails, including sidewalks, could be improved and expanded

¹ Massachusetts Healthy Aging Collaborative Weymouth Profile. https://mahealthyagingcollaborative.org/wp-content/themes/mhac/pdf/community_profiles/towncode336.pdf.

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- The town’s public transportation is used by less than half of its residents. Those that use it find that the facilities and infrastructure needs to be improved and the services expanded to reach the employment areas, medical offices, schools, etc. within the community.
- Many residents are not aware of the town’s existing health and preventative care programs, or of its senior assistance programs.
- Nearly all respondents to the survey have a primary care doctor and less than twenty percent avoided medical treatments in the last year due to health costs.
- Substance abuse concerns center on preventing prescription drug and alcohol abuse within the community.

The Housing Production Plan is in line with several of these points, particularly in addressing the needs of the senior population and the availability of affordable housing with access to public transportation and alternative transportation options (walking and biking). Increasing the availability of affordable, quality housing is complementary to the goals of both the HPP and this health addendum.

KEY DEMOGRAPHIC FACTORS

Income, race, and education are amongst the most important demographic predictors of lifetime health outcomes. Weymouth residents primarily identify racially as white (95 percent) with Asian as the second highest group at 1.6 percent and Black or African American in third place at 1.4 percent.² Approximately 32 percent of Weymouth’s population has a bachelor’s degree or higher and 37 percent have a high school diploma or less. Weymouth also has a very low poverty rate (4.8%), 92 homeless residents and eight homeless families, and a median income of \$69,123 which is comparable to the median income of Massachusetts.

Vulnerable populations

Vulnerable populations include those who are low-income, linguistically, or otherwise isolated, populations with disabilities, the very young, and the elderly. As noted above, Weymouth is a predominantly white, well-educated community with very little poverty. Although Weymouth’s minority population has increased slightly in recent years, the number of non-English speaking households is only about 6 percent. This population is in danger of being linguistically isolated, meaning that the household’s limited ability to understand and communicate in English might become a barrier for receiving medical and social services. This makes these households more vulnerable during emergency situations and as such, creates a health concern for the community. As Weymouth’s proportion of linguistically isolated households is believed to be low, linguistic isolation is a low risk factor in this case. Weymouth’s school enrollment has declined 9 percent since 2011, which is in line with a projected 18 percent decline in school age children through 2030. In comparison, Weymouth’s population of householder’s over the age of 65 is on the rise. Per MAPC projections, seniors will make up approximately 45 percent of Weymouth’s

² Information taken from 2010 U.S. Census documentation

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households by 2030. Based on this information and analysis, Weymouth’s primary vulnerable population is its residents who are 65 or older.

HEALTH METRICS

A study of the current health status of Weymouth residents can be used to establish a baseline for the community's housing related health issues. By reviewing hospitalizations, the prevalence of chronic diseases, and community health behaviors, Weymouth can develop a clearer picture of its existing health status and community needs. This effort is assisted by demographic and health-related housing indicators to predict the future health needs of Weymouth's residents.

TOP HOUSING RELATED HEALTH ISSUES

The following issues were identified in the Town of Weymouth Public health survey. The findings of the survey have been categorized per the key factors linking housing and health issues.

Housing Quality and Affordability

- Improvements, particularly for accessibility, are needed for the community's older building stock

Housing Location

- Improved access to local food stores with healthy food options
- Promote healthy eating options within the community including at restaurants, stores, community meetings and events
- Improved public transportation options and infrastructure, including better shelters and routes which provide better access to medical facilities, employment, healthy food stores, and schools

Housing Community or Neighborhood

- Improving sidewalks, walking, and biking routes, both in existing neighborhoods and new developments
- Developing routes that are accessible for persons with disabilities
- Improve the visibility of local groups that influence or promote healthy living (Healthy Wey, Mass in Motion, Weymouth Neighborhood Associations)
- Encouraging new and expanded physical activities in neighborhoods
- Increased availability of community recreation and wellness facilities, including indoor walking and recreation areas
- Improve visibility of existing health programs and services focusing on education and prevention of chronic diseases, including information on health care and social service workers

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The following health metrics shown in the matrix below are drawn from the Massachusetts Department of Public Health and the Massachusetts Healthy Aging Collaborative. Overall, data on the prevalence of chronic diseases, health behaviors, and hospitalizations highlight health issues that are more prevalent in Weymouth compared with state averages. Weymouth residents have higher prevalence than overall state averages of chronic illnesses including asthma, chronic obstructive pulmonary disease, obesity, and coronary heart disease as well as mental health illnesses including substance abuse, excessive drinking, and depression.

ADULTS

	Health Metric	Weymouth	State	Performance
Quality	Estimated Current Tobacco Smokers	8.2%	9.1%	Better
Quality & Location	Age-Adjusted Asthma Hospitalizations per 10,000	69.7	73.9	Better
	Asthma Prevalence	12.5%	11.8%	Worse
Affordability & Stability	Chronic Obstructive Pulmonary Disease (COPD) prevalence	29.1	23.3	Worse
	% 65 and over who did not see a doctor due to cost	4.0%	3.7%	Worse
All	% 65 and over satisfied with life	95.6%	95.8%	No difference
	Consume 5 or more vegetables a day	23.1%	24.9%	Better
	Estimated Obesity Prevalence	23.1%	22.6%	Worse
	Substance Abuse Emergency Department Visits per 100,000	1311.2	986.5	Worse
	Excessive Drinking	12.0%	9.2%	Worse
	Age-Adjusted Coronary (Ischemic) Heart Disease Hospitalizations per 100,000	317.7	264.5	Worse
	Diabetes Prevalence	31.9%	32.1%	Better
	Self-Reported Poor Mental Health (15+ days/month)	6.0%	6.7%	Better
	Age-Adjusted Mental Health Emergency Department Visits per 100,000	3032.7	2304.4	Better
	% 65 and over ever Diagnosed with Depression	29.3%	28.6%	Worse
	Low Birth Weight	8.4%	7.7%	Worse
	Infant Mortality Rate	5.8%	4.3%	Worse

CHILDREN AND YOUTH

	Health Metric	Weymouth	State	Performance
Quality	Blood Lead Levels	Lower	3.6	Better
Quality & Location	Age-Specific Asthma Hospitalizations per 10,000 people (ages 0-14)	74.9	58.1	Worse

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Affordability & Stability	Asthma Prevalence in K-8 kids	12.3 %	12.2%	No difference
	Asthma Emergency Department Visits per 10,000 people (ages 0-14)	140.8	192.0	Better
	Science and Tech/Eng. MCAS 2017, proficient or higher, all grades	53%	54%	Worse
	Science and Tech/Eng. 2015 MCAS, needs improvement or warning/failing, all grades	47%	45%	Worse
	% attending college or university	72.2%	76.2%	Worse
	High school dropout rate	1.8%	5.1%	Better

	Health Metric	Weymouth	State	Performance	
Chronic Disease	Alzheimer’s disease or related dementias	13.5%	14.4%	Better	
	Ever had a heart attack	4.9%	5.0%	No difference	
	Coronary (Ischemic) heart disease	48%	44.1%	Worse	
Living with Disability	Osteoporosis	20.5%	21.7%	Better	
	Osteoarthritis/rheumatoid arthritis	50.1%	50.2%	No difference	
	4+ chronic conditions	63.7%	61.5%	Worse	
	% disabled for a year or more	31.1%	31.0%	No difference	
	Hearing impairment				
	% 65-74 with hearing difficulty	8.4%	7.4%	Worse	
	% 75+ with hearing difficulty	17.4%	21.2%	Better	
	Vision impairment				
	65-74 with vision difficulty	1.2%	3.2%	Better	
	75+ with vision difficulty	5.3%	9.3%	Better	
	Cognition impairment				
	65-74 with cognition difficulty	5.3%	4.7%	Worse	
	75+ with cognition difficulty	12.6%	12.1%	Worse	
	Ambulatory impairment				
	65-74 with ambulatory difficulty	5.3%	12.9%	Better	
	75+ with ambulatory difficulty	28.2%	29.4%	Better	
Self-care impairment					
65-74 with self-care difficulty	1.8%	3.7%	Better		
75+ with self-care difficulty	11.3%	12.2%	Better		
Independent living impairment					
65-74 with independent living difficulty	5.5%	7.2%	Better		
75+ with independent living difficulty	25.6%	24.3%	Worse		
Access to Care	Medicare managed care enrollees	15.8%	21.2%	Better	
	% with a regular doctor	95.0%	96.2%	Worse	
	Emergency room visits/1000 persons (65+ only)	647	646	No difference	

Service Utilization	Inpatient hospital stays/1000 persons (65+ only)	390	354	Worse
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Seniors

SPOTLIGHT ON SENIOR HEALTH

Seniors in Weymouth have more prevalence of coronary heart disease, hearing impairment (age 65-74 years), and cognition difficulty. Additionally, they have less access to a regular doctor and more inpatient hospital stays. One primary housing-related health challenge is that the town’s older housing stock and car-centric design may not accommodate the needs of an aging population. Weymouth’s worse than average numbers for chronic health issues suggests that supportive services will continue to be an important part of the town’s senior services in the future, as will educational and transportation services. The reason behind Weymouth’s higher chronic disease numbers is not immediately clear from the information at hand. It may also be due to environmental, and/or behavioral issues which are not addressed in these statistics.

HOUSING DETERMINANTS

Lead: Most of the town’s single-family housing stock is older construction and can be assumed to have at one time contained lead paint. As such, this will continue to be a risk factor for the town that should be monitored over time. Children ages 0-6 are the most vulnerable to lead poisoning. Although this group projected to continue to decrease through 2030, the town is encouraged to continue its programs to screen and monitor lead levels within this vulnerable population. Pests, mold, mildew, allergens, and indoor pollutants were not highlighted as issues at the stakeholders meeting or in the public health survey.

Food Insecurity: The Department of Elementary and Secondary Education (DESE) has been reporting since 2015 on the proportion of “economically disadvantaged”³ students in school districts, which includes students receiving free or reduced lunch. In 2017, 27.2 percent of Weymouth’s student population was considered economically disadvantaged, which is nearly equal to the state average of 27.4 percent.

Access to Healthcare: Amongst Weymouth’s seniors, approximately 4 percent did not see their doctor when needed due to cost. This is slightly higher than the state average of 3.7 percent. Information on both the proportion of renters vs. homeowners and cost burdened households is included in the HPP. Overall, both demonstrate the significant need for more affordable and stable housing.

Transportation: While Weymouth is well served by a public transit system which connects the community to the greater Boston region, responses to the public health survey show that there

³ Calculated 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). Source: DESE.

is strong support for service enhancements and improvements. Residents responses note that the routes do not provide adequate access to employment, medical facilities, or healthy shopping destinations, and that the town's public transit infrastructure needs improvement.

Walkability: The town of Weymouth received an overall walkability score of 38 from the Walk Score website,⁴ with the neighborhoods of North Weymouth, Weymouth Landing and East Weymouth noted to be the most walkable. Walk Score considers this rating to designate Weymouth as a “car dependent” community where completing most errands requires a car.⁵

Healthy Food Access: Weymouth has three full service grocery stores (Shaw's, Whole Foods, and Stop and Shop) and numerous smaller community shops, all of which serve fresh produce. However, many responses to the public health survey expressed a concern that the community lacked access to healthy foods. The town has a farmer's market in the summer months as well.

Green Space: Despite being a fully developed urban community, Weymouth offers a variety of green and open space options including forests, wetlands, salt marshes, and waterfront options. Open and green spaces are discussed in detail in the Housing Production plan, but there is growing evidence that green and open spaces within a community can provide mental health benefits and encourages socialization and community interactions which are both necessary for the health of the growing senior population and a noted need of the public health survey.

Pollution: Weymouth is an urban community with substantial through traffic and many areas of the community are within 500 feet of heavily trafficked roadways are susceptible to the impacts of ultrafine particulate matter pollution.⁶ Evidence suggests that residents exposed to 30,000 vehicles/day could begin to impact health while those exposed to over 50,000 vehicles/day would see severe impacts. The main consequences of ultrafine particulate matter are cardiovascular disease and to a lesser extent, pulmonary disease.

Social Cohesion and Crime: Just over 80 percent of Weymouth residents feel they have adequate emotional support, and both property and violent crime rates are well below state averages. These indicators suggest that Weymouth has a health promoting social environment. Several comments made during the public health survey, however, suggest that residents are looking for more community interactions and connections and would like to see more opportunities for activities in their neighborhoods.

RECOMMENDATIONS

The following recommendations are based on this assessment of Weymouth's community health indicators as related to the quality, affordability, and location of housing and the make-up of the community and relationship of its residents.

⁴ https://www.walkscore.com/MA/Weymouth_Town

⁵ <https://www.walkscore.com/methodology.shtml>

⁶ https://www.epa.gov/sites/production/files/2015-11/documents/420f14044_0.pdf

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1. Allow mixed use development that promotes neighborhood-scale retail on the first floor and apartments above.
2. Identify and prioritize locations within lower income areas for new parks, adjacent to existing residential areas and make connections to neighborhoods with sidewalks, walking paths, bike paths, etc.
3. Provide transit options for reaching healthy food access points.
4. Develop a sidewalk condition (and lack of sidewalks) inventory in residential area and prioritize area for improvement or new installations. This will help guide the use of funds.
5. New subdivisions should
 - Incorporate transit, walking, and biking amenities (bus stop/shelters, sidewalks, walking paths, bike paths, bike racks, etc.) into the design of new subdivisions.
 - Require pedestrian and bike connections with adjacent developments (residential, recreation, and commercial). (ALL development really – “park once” approach)
 - Require “fee in lieu” if sidewalks are granted waivers, and put in a dedicated fund to make improvements to existing sidewalks or install sidewalks where they are needed.
6. For cluster subdivisions (if applicable), make sure the dedicated open space is usable for passive recreation (walking trails or paths) and trails connect to neighboring open spaces and recreation areas to build a greenway network.
7. Promote the installation of kiosks or community boards in neighborhoods (new development and elsewhere) that can be used by the town to post information about community resources, upcoming events, etc.
8. Promote the use of Universal Design principles for new public spaces and upgrades to existing ones.
9. Ensure the location, structural/safety features, and indoor environmental quality of air, water, and materials represent building standards/code/BMPs (utilize Healthy Homes approaches).

Primary Data Source Description

South Shore Hospital Community Health Needs Assessment

Under the Affordable Care Act all non-profit hospitals are required to conduct a Community Health Needs Assessment (CHNA) every three years to identify the most pressing health issues in the community needing preventative actions. These geographies are based on a hospital's self-defined primary service area. Weymouth falls under South Shore Hospital's primary service area.

Massachusetts Environmental Public Health Tracking Data

This data source is managed by the Bureau of Environmental Health at the Massachusetts Department of Public Health and is funded by a National Effort from the Centers for Disease Control (CDC) to increase the tracking of environmental health determinants. The data portal includes air quality, blood lead, cancer, asthma, and other data related to health. The data pulled for this report is under the "community profile" link.

Massachusetts Healthy Aging Collaborative Data

The Massachusetts Healthy Aging Collaborative is a network of leaders in community, health and wellness, government, advocacy, research, business, education, and philanthropy who have come together to advance healthy aging. These data, funded by Tufts Health Connector, details individual town data alongside of state averages, allowing for a comparison of how a town is doing relative to the rest of the state by each variable. Multi-dimensional indicators of healthy aging and healthy aging programs are identified along with GIS analyses that will enable communities to address local challenges and better allocate resources to those areas (physical, social and health) of greater need. Learn more about the [Healthy Aging Data Report](#).

Massachusetts Department of Elementary and Secondary Education Weymouth District Profile, 2017

This data source provided information on student education levels and MCAS scores for Weymouth in 2017.

Interpreting Data in This Document

The data presented in this Health Addendum is intended as a supplement to the data presented in the main Housing Production Plan.

Weymouth Numbers

Most the data collected for Weymouth is drawn from estimates generated through statistical modeling for the town itself. The data on health care utilization by seniors (65+) is the only exception, as it is taken directly from health insurance sources.

School Performance

Links have been found between a lack of housing affordability and stability and behavioral problems and school performance in small children and adolescents. The data included here is drawn from the Massachusetts Department of Elementary and Secondary Education and available MCAS score information as they are the only source of publicly available data for school performance across school districts. This information is intended to be interpreted only as a possible monitoring tool rather than clear causal evidence.

Performance

All interpretations as to whether Weymouth is performing better, worse, or no differently than the state average are based on statistical significance. The statistical significance information for this document is drawn from either the Massachusetts Department of Public Health or the Massachusetts Healthy Aging Collaborative, both of which are based on 95% confidence intervals. This approach is used because the town numbers represented below are the midpoint of a statistically-derived range estimated from larger geographies. An explanation of how these numbers has been calculated is available on the Massachusetts Healthy Aging Collaborative website at: <https://mahealthyagingcollaborative.org/data-report/explore-the-profiles/data-sources-and-methods/#data>

Data Sources

The full comprehensive housing metrics from the Massachusetts Healthy Aging Collaborative, South Shore Community Health Needs Assessment and Environmental Public Health Tracking Data Reports are included as appendices.