

This CHIP focuses on the municipalities of the Central Massachusetts Regional Public Health Alliance (CMRPHA), which includes the six communities of Holden, Leicester, Millbury, Shrewsbury, West Boylston, and Worcester.

GREATER WORCESTER REGION COMMUNITY HEALTH IMPROVEMENT PLAN

VISION:

Worcester will be the healthiest city and CMRPHA the healthiest region in New England by 2020.

Executive Summary

Improving the health of a community is critical for not only enhancing residents' quality of life but also for supporting their future prosperity.

To this end, the City of Worcester Division of Public Health (lead agency of the Central Massachusetts Regional Public Health Alliance), UMass Memorial Medical Center, and Common Pathways, a Healthy Communities coalition, led a comprehensive community health planning effort to measurably improve the health of Greater Worcester region residents including the communities of Holden, Leicester, Millbury, Shrewsbury, West Boylston, and Worcester. Our focus on these five towns and the City of Worcester is primarily due to regionalization of public health services with the aforementioned communities, which are collectively known as the Central Massachusetts Regional Public Health Alliance. The Central Massachusetts Regional Public Health Alliance (CMRPHA) serves a total population of 265,899 residents. Additionally, the largest populations that are the primary target areas of CMRPHA are vulnerable, low-income, and immigrant communities.

Partnering with area healthcare providers, academic institutions, community based organizations, and municipalities is key to not only improving upon the services provided to residents, but also strengthening the public health system in Central Massachusetts as a whole.

The Community Health Improvement Planning process includes two major components:

1. A Community Health Assessment (CHA) to identify the health-related needs and strengths of the Greater Worcester region; and
2. A Community Health Improvement Plan (CHIP) to determine major health priorities, overarching goals, specific objectives, and strategies that can be implemented in a coordinated way across the region.

The CHIP is not intended to be a static report; rather, it is intended to focus and guide a continuous health improvement process that will monitor and evaluate health priorities and systems changes in an ongoing manner. The Greater Worcester Region CHIP provides an approach that is structured and specific enough to guide decisions, and flexible enough to respond to new health challenges. Its inclusive process represents a common framework for all stakeholders to use when implementing strategies for improving population health.

This full report presents the amended CHIP, which was developed using the key findings from the CHA and a detailed literature review to inform discussions and select the following data-driven priority health issues, goals, objectives, and strategies, and an annual report that details the progress made to date.

DOMAIN AREA 1. HEALTHY EATING & ACTIVE LIVING

Goal	Objective
1. Create an environment and community that support people's ability to make healthy eating and active living choices that promote health and well-being.	1.1 Increase availability of and access to affordable fresh and local fruits and vegetables for low-income residents by 10% by 2015, as measured by walking distance.
	1.2 Identify, prioritize, and implement improvements to increase residents' access to physical activity resources by 10% by 2015 as measured by walking distance.
	1.3 Increase the percentage of children in grade 1 who are a healthy weight by 3% by 2015.

DOMAIN AREA 2. BEHAVIORAL HEALTH

Goal	Objective
2. Foster an accepting community that supports positive mental health; and reduce substance abuse in a comprehensive and holistic way for all who live, learn, work, and play in the Greater Worcester region.	2.1 Reduce the proportion of high school students using tobacco products to below state rates between 2013 and 2020.
	2.2 Reduce the proportion of high school students using alcohol to below state rates between 2013 and 2020.
	2.3 Reduce the proportion of high school students misusing and abusing prescription drugs to below state rates between 2013 and 2020.
	2.4 Prevent an increase in the rate of prescription drug and opiate overdoses between 2013 and 2020.
	2.5 Increase 500 key community members' understanding of mental health issues and improve gatekeepers/systems reaction to common problems by 2015.
	2.6 Improve the assessment of regional mental health needs in order to increase continuity of care among vulnerable populations by 2020.

DOMAIN AREA 3. PRIMARY CARE & WELLNESS

Goal	Objective
3. Create a respectful and culturally responsive environment that encourages prevention of chronic disease, reduction of infant mortality, and access to quality comprehensive care for all.	3.1 Reduce non-urgent or preventable use of the emergency department by 8% by 2015.
	3.2 Reduce the rate of STIs in residents age 15-24 years by 10% by 2015.
	3.3 Reduce the rate of dental caries in residents age 4-19 by 3% by 2015.

DOMAIN AREA 4. VIOLENCE & INJURY PREVENTION

Goal	Objective
4. Improve safety, reduce violence and injury, and inform public perceptions by educating and mobilizing the community around effective, targeted prevention, and intervention strategies.	4.1 Reduce fall-related injuries in children age 10 and under by 5% and in adults age 65 and over by 8% by 2015.
	4.2 Increase public safety by 3% by 2015 as measured by crime rates and perceptions of safety.
	4.3 Reduce the rate of motor vehicle-related pedestrian, cyclist, and occupant injuries by 10% by 2015.

DOMAIN AREA 5. HEALTH EQUITY & HEALTH DISPARITIES

Goal	Objective
5. Improve population health by systematically eliminating institutional racism and the pathology of oppression and discrimination by promoting equitable access to, and use of, health promoting resources in the community, and significantly reducing the structural and environmental factors that contribute to health disparities.	5.1 By 2015, modify or implement two key, city-level public health policies that have the greatest impact on the systems that contribute to health disparities (e.g., zoning changes, housing policies, general education policies, etc.).
	5.2 By 2015, increase the capacity of over 100 grassroots adult and youth leaders (people who have lived experience in communities with disparities) to effectively influence the development of policies that address health disparities.
	5.3 By 2015, develop the capacity and will of 20 cross-sector institutions to address and eliminate institutional oppression in their own organizations.
	5.4 Ensure that each public health priority area in the CHIP identifies strategies to address oppression and the social determinants of health.

Domain Area 1: Healthy Eating & Active Living

Concerns regarding obesity and behaviors associated with obesity, such as nutrition and physical activity, are important health concerns cited by respondents in all communities in the Greater Worcester area. The data supports considering these conditions critical given that heart disease and diabetes are among the leading causes of morbidity and mortality. Of particular concern is limited access to healthy foods and environments that support active living for vulnerable populations and immigrant communities. Concerns in relation to access and high costs of healthy foods, inadequate public transportation, fees for use of recreational facilities and activities, neighborhood safety in parks and outdoor spaces, accessible walkable spaces, time constraints, and the stress of living on the edge were raised as challenges related to healthy eating and active living. Therefore, ensuring equitable resources for active living and healthy eating requires a comprehensive approach, given that multiple sectors – including health care, education, public works, transportation, local government, and the business community – need to collaborate to improve current conditions.

Similar to patterns nationwide, the issue of obesity – including healthy eating and physical activity – are important health concerns in the region associated with prevalent chronic diseases such as heart disease and diabetes. Statistics indicate that only 25.6% of residents in Worcester County reported consuming the recommended 5 or more fruits and vegetables daily and 76.2% of residents in Worcester County indicated getting any leisure time physical activity in the past month, according to the Behavioral Risk Factor Surveillance Survey (BRFSS). [1]

According to BRFSS 2008-2011 estimates, approximately 61% of adults in the city of Worcester were overweight or obese, compared to 59% of Massachusetts adults.[1] 2010 data demonstrate a clear trend among lowest income residents in Worcester County, as having the highest prevalence of overweight (72%) and obesity (33%).[2] Non-Hispanic Blacks in Worcester County have a higher prevalence of obesity and overweight (77.2%) than Non-Hispanic Blacks in the State (66.4%) and Non-Hispanic Whites in Worcester County (61.2%) in 2010.[3] In 2011, Hispanic youth had the highest prevalence of obesity (27%) compared to their peers in Worcester.[4]

[1] Massachusetts Behavioral Risk Factor Surveillance System (BRFSS), 2008.

[2] MDPH, MassCHIP, BRFSS 2010.

[3] MDPH, MassCHIP, BRFSS 2010.

[4] MDPH, Essential School Health Service (ESHS) data Reports for Worcester and Massachusetts.

GOAL 1. Create an environment and community that support people’s ability to make healthy eating and active living choices that promote health and well-being.

2013 revisions. As of this report, Objective 1.4 has been removed from the CHIP, and the strategies within the objective reassigned or removed. Strategy 1.4.1 has been reassigned to Objective 1.1 and Strategy 1.4.2 has been placed under Objective 1.2. These changes create a more cohesive set of strategies for each objective. The Domain 1 workgroup has removed Strategy 1.4.3 from the CHIP due to the a lack of supporting evidence based on the Community Health Assessment; the workgroup recognized that although eating disorders are an issue of public health concern, it is not currently a priority in the region.

Health equity considerations. The Domain 1 workgroup strives to ensure that all work is conducted through the lens of the social determinants of health model and that the group strongly considers potential impacts of the work on health equity. Several strategies within Domain 1 are considered best practices for reducing health disparities such as the healthy markets initiative and joint use agreements. The Regional Environmental Council’s (REC) mobile farmers’ market offers a 50% match to SNAP/WIC dollars used to purchase produce which renders produce from the market affordable for most families. The Worcester Food and Active Living Policy Council (FALPC) prioritized SNAP policy and awareness of the SNAP program in 2013, recognizing that proposed changes to the program would disproportionately affect recipients of color. During 2013, the group identified a need for additional training in this area to guide future work. Members of the workgroup will participate in a Cultural InSight training early in 2014 to improve cultural competency.

Table 9. Prevalence of Health Behaviors/Status in Adults

	Worcester	Massachusetts
Overweight/obesity	61.38%	58.85%
≥5 daily fruit & vegetable consumption*	24.29%	27.43%
Physical activity**	52.22%	46.64%

Source: Massachusetts Department of Public Health, Behavioral Risk Factor Surveillance System CY 2008-2011. *CY 2001, 2003, 2005, 2007, 2009. **CY 2006-2010.

Table 10. Overweight & Obesity Prevalence in Area High Schools

	Wachusett**	Leicester	Millbury	Shrewsbury	Worcester*	Massachusetts
Overweight	13.3%	22.3%	18.0%	17.1%	18.9%	16.7%
Obese	9.3%	17.4%	21.4%	11.0%	20.9%	15.7%
Overweight or Obese	22.6%	39.7%	39.3%	28.2%	39.8%	32.3%
Grade 1	16.0%	33.1%	31.6%	26.8%	35.2%	28.4%
Overweight or Obese						

Source: Massachusetts Department of Public Health, School Health Unit, “The Status of Childhood Weight in Massachusetts, 2011.” *Worcester data do not include Grade 10, which may lower overall rate. **Wachusett School District includes Town of Holden.

DOMAIN AREA 1. HEALTHY EATING & ACTIVE LIVING

1.1

Objective

Strategies

1.1 Increase availability of and access to affordable fresh and local fruits and vegetables for low-income residents by 10% by 2015, as measured by walking distance.

- 1.1.1 Strengthen, grow and coordinate existing strategies prioritized by the Regional Environmental Council of Central Massachusetts and the Food and Active Living Policy Council such as farmers' markets, urban agriculture, Cooking Matters, and Farm to School programs.

- 1.1.2 Enhance and expand the Mobile Farmers' Market in seven low income/food desert communities and on college campuses in Worcester.

- 1.1.3 Coordinate and lead the Mass in Motion Corner Store initiative.

- 1.1.4 Advance the policy priorities of the Worcester Food and Active Living Policy Council, such as zoning regulations to promote community gardens, urban agriculture, and policies to increase physical activity.

- 1.1.5 Enhance Community Gardens educational programs in alignment with a minimum of 70 community-based garden efforts.

- 1.1.6 Advertise and promote the availability of food resources to low income individuals in targeted neighborhoods.

1.2

Objective

Strategies

1.2 Identify, prioritize, and implement improvements to increase residents' access to physical activity resources by 10% by 2015 as measured by walking distance.

- 1.2.1 Increase consideration of pedestrian and bicycle accommodation in routine decision making through adoption of Complete Streets transportation policy throughout the region.

- 1.2.2 Establish four joint use agreements with schools in low-income neighborhoods to allow the use of both indoor and outdoor facilities by the public during non-school hours on a regular basis.

- 1.2.3 Establish a district-wide Safe Routes to School task force for ongoing identification and implementation of systems, policies, and school-level changes to support increased walking and biking to school.

- 1.2.4 Assess and identify priorities for improving access to existing parks and open spaces, including public works improvements and public safety enhancements as well as facilities improvements or amenities; prioritize needs based on access criteria and deliverables identified in Worcester's Open Space and Recreation Plan.

- 1.2.5 Conduct a social norms campaign to define and change perceptions of violence and community safety and thereby increase utilization of community resources. (see 4.2.2)

1.3

Objective

Strategies

1.3 Increase the percentage of children in grade 1 who are a healthy weight by 3% by 2015.

- 1.3.1 Implement professional development/education program for teachers and early childhood care providers related to physical activity to increase their awareness of its connection with learning.

- 1.3.2 Advocate for policies to increase food/nutrition standards for snacks/meals at public and private preschools and kindergarten classes.

- 1.3.3 Assess and explore adoption of other evidence-based obesity reduction programs such as I am Moving, I am Learning, Hip Hop to Health, and others.

- 1.3.4 Advocate for recommended hours of physical education in schools.

- 1.3.5 Conduct and coordinate communication, public awareness, outreach, and mass media campaign.

GOAL 1. Create an environment and community that support people’s ability to make healthy eating and active living choices that promote health and well-being.

1.1

Strengthen, grow and coordinate existing strategies prioritized by the Regional Environmental Council of Central Massachusetts and the Food and Active Living Policy Council such as farmers’ markets, urban agriculture, Cooking Matters, and Farm to School programs.

2013 Update. After one year of implementation, the Domain 1 workgroup determined that enough data has been collected to assign a goal of 10% for increasing access to healthy food resources. This value was derived from projections based on current availability to low-income residents in Worcester, as measured by survey and GIS mapping. Access to fresh fruits and vegetables is defined as living within 1/4 mile walking distance from a retail outlet or farmers market that sells fresh or frozen produce, low fat milk, and whole wheat bread.

New in this report is the addition of Strategy 1.1.5 (formerly 1.4.1) to Objective 1.1. This change was made simply to streamline processes, since Strategies 1.1.1 and 1.1.4 are related to the community garden efforts contained in Strategy 1.1.5. The former Strategy 1.1.5 has become Strategy 1.1.6.

Lead Agency: Worcester Food and Active Living Policy Council

Current Partners: Regional Environmental Council, Mass in Motion, Worcester Division of Public Health, Mass Farm to School, Cooking Matters, Greater Worcester County Food Bank, Fallon Health

1.1.1 Strengthen, grow and coordinate existing strategies prioritized by the Regional Environmental Council of Central Massachusetts and the Food and Active Living Policy Council such as farmers’ markets, urban agriculture, Cooking Matters, and Farm to School programs.

Rationale. Healthy People 2020 prioritizes increasing access to fruits/vegetables locally, as well as increasing the incorporation of fruits and vegetables into individuals’ diets by increasing the proportion of calories that come from these foods. Strategies for achieving these objectives contained in Healthy People include strengthening local food policy councils.

Research shows that a variety of environmental factors can influence the size of food deserts. While physical distance to a food retailer is a factor, access to transportation and public safety also influence food desert locations. The current programs of REC, such as mobile farmers’ markets, can reduce the effects of these barriers and improve access.

Policies that support urban agriculture have been shown to increase food security, physical and psychological well-being, social cohesion, and even physical activity.

Current status. The Domain 1 workgroup was able make significant progress on Strategy 1.1.1 in 2013. Three farmers markets were open during the summer months; REC managed one at the Main South YMCA and the other at Beaver Brook Park. Both REC markets accept EBT, WIC, and Senior Coupons and offer a 50% match for those programs for most of the summer. A third market was opened by Crompton Collective in Kelley Square. The number of community gardens in the city of Worcester grew to 42 total, 18 of which are part of the School Garden network. Seventeen gardening workshops were offered to the public to promote healthy eating.

The group also made progress on policy advocacy, with the Urban Agriculture subcommittee promoting a city-wide policy to expand opportunities for growing in Worcester. A one-page fact sheet has been developed explaining the potential benefits of the policy.

2014 Plans. During 2014, the REC will provide a summary report of the summer farmers’ market statistics to the domain workgroup. The report will include both successes and challenges and make recommendations for the 2014 markets. The group will also continue to promote gardening workshops. The group will meet with City of Worcester elected officials to gauge interest, baseline knowledge, and priorities moving forward regarding urban agriculture policy initiatives.

Outcome Measures. Number of Community Gardens per 1000; Number of Farmers’ Markets per 1000

1.1.2 Enhance and expand the mobile farmers' market in seven low income/food desert communities and on college campuses in Worcester.

Rationale. Healthy People 2020 prioritizes increasing access to fruits/vegetables locally, as well as increasing the incorporation of fruits and vegetables into individuals' diets by increasing the proportion of calories that come from these foods. Additional goals include increasing access to retail outlets that sell foods recommended by the Dietary Guidelines for Americans. Increasing access to healthy foods is also a recommendation of the National Prevention Strategy.

Increasing the number of food retailers, including temporary food establishments such as mobile grocers, has been shown to increase food security in traditional food insecure locations. In the summer months, when these options are most abundant, food deserts can shrink and in some cases disappear temporarily. CDC recommends expanding farmers' market coverage as a strategy for increasing access to healthy foods and reducing the local burden of chronic disease.

Current Status. In 2013, the mobile farmers' market was able to successfully expand its services. During the summer, the market was able to make 16 stops per week to Worcester's low-income neighborhoods. The market accepts WIC, EBT, and Senior Coupons at all locations and offers a 50% match through most of the summer.

2014 Plans. REC will summarize and report the statistics of the Mobile Farmers' Markets to the Domain 1 workgroup. The group will utilize this information to improve and expand the markets during summer 2014, prioritizing neighborhoods with limited access to healthy foods. In order to promote the market, REC will work with Mass in Motion (MIM) to advertise schedule and locations through largest employers in Worcester and through a summer CHIP media campaign. REC will meet with all host sites prior to the season to develop plans for improved collaboration.

Outcome Measures. Number of farmers' markets per 1000

1.1.3 Coordinate and lead the Mass in Motion Corner Store initiative.

Rationale. Healthy People 2020 prioritizes increasing access to fruits/vegetables locally, as well as increasing the incorporation of fruits and vegetables into individuals' diets by increasing the proportion of calories that come from these foods. Additional goals include increasing access to retail outlets that sell foods recommended by the Dietary Guidelines for Americans.

Corner store initiatives have been shown to increase both supply and demand for fresh fruits and vegetables in low income neighborhoods and neighborhoods with high proportion of racial and ethnic minorities. Additional research has shown that customers purchasing the majority of their foods from small corner stores would be interested in increasing the variety and availability of produce in these outlets. Business incentives would encourage retailers to make these foods available.

Mass in Motion is a priority program funded by the Massachusetts Department of Public Health of which Worcester is a grantee. MIM works to improve the policies, systems, and environments that influence individuals' abilities to eat well and be physically active.

Current status. The Corner Store Initiative was very successful in 2013. Over 240 stores in the region were assessed for proximity to other food resources, proximity to schools, and participation in SNAP and WIC. From that pool, 40 stores were selected for more intensive assessment of feasibility, interest in participating, and current store conditions. Three stores are currently participating fully, two in Worcester and one in Millbury. Full participation requires stores to stock four new types of produce. MIM has partnered with the REC to assist store owners in sourcing local produce. GIS mapping was completed to assess the reach and proximity of current food resources and to prioritize stores and neighborhoods for focus in 2014.

2014 Plans. Currently, there are four more stores interested in achieving full participation by summer 2014, and an additional five being targeted for fall 2014. The goal is to have 12 stores fully participating by September 2014, with current stores selling higher volumes of healthy options.

Outcome Measures. Average walking distance to a store that sells healthy foods, average price of competitive foods

1.1.4 Advance the policy priorities of the Worcester Food and Active Living Policy Council, such as zoning regulations to promote community gardens, urban agriculture, and policies to increase physical activity.

Rationale. Healthy People 2020 prioritizes increasing access to fruits/vegetables locally, as well as increasing the incorporation of fruits and vegetables into individuals' diets by increasing the proportion of calories that come from these foods. Strategies for these objectives include strengthening local food policy councils.

Policies that support urban agriculture have been shown to increase food security, physical and psychological well-being, social cohesion, and even physical activity. Policies that support community gardens and urban farming have been shown to potentially increase consumption of healthy food and are seen as best-practices for a number of other public health concerns such as neighborhood safety and physical activity.

Current status. FALPC has focused efforts in year one on strengthening administrative processes. For example, the SNAP working group has been developing a long-term communications plan, and the Urban Agriculture subcommittee has developed a one-page policy brief.

2014 Plans. The Urban Agriculture subcommittee will refine their policy strategy for 2014 and will meet with city officials to inform the process. The group also aims to submit, at minimum, three stories to print media and participate in two radio/tv interviews.

Outcome Measures. Number of policies introduced and implemented

As of this report, the language of this strategy has been edited for clarity. The intent of the strategy and implementation plans have not changed.

1.1.5 Enhance Community Gardens educational programs in alignment with a minimum of 70 community-based garden efforts.

Rationale. While neither the National Prevention Strategy nor Healthy People 2020 specifically refer to the improving healthy food access and decreasing obesity rates through community garden expansion, both highlight the importance of increasing people's intake of fruits and vegetables and controlling body weight.

A review of the literature revealed an association between the presence of community gardens and increased fruit and vegetable intake. One review article recommends that local communities expand access to community gardens by bringing together city administrators (planners, health departments, etc.) and community groups to identify appropriate locations and pool resources. This model is reflected in the approach to implementation for this strategy which is achieved through collaboration facilitated by FALPC.

Current Status. The number of community gardens in the city of Worcester grew to 42 total, 18 of which are part of the School Garden network. REC offered 17 gardening workshops to the public and community garden sponsors to promote healthy eating.

2014 Plans. In 2014, REC will work to expand participation in their community garden educational programming, as well as expand funding for community garden programming. As new school and community gardens enter the network, REC will work with those organizations to provide support in establishing and maintaining those gardens.

Outcome Measures. Number of community gardens per 1000

This strategy (formerly contained in Objective 1.4) has been placed within Objective 1.1 as of this report. This change was made to increase coordination of efforts within the objective as a whole. Because Strategies 1.1.1 and 1.1.4 are aimed at supporting and promoting efforts, including community gardens, it is appropriate to group these strategies together.

1.1.6 Advertise and promote the availability of food resources to low income individuals in targeted neighborhoods.

Rationale. Improving access to healthy foods is addressed within the Healthy People objective that aims to increase the proportion of retail food outlet that offer fresh fruits and vegetables. Similarly, the National Prevention Strategy recommends increasing local access to healthy foods as a method to promote healthy eating.

Literature review has revealed that the availability of healthy foods in low-income areas can increase through the expansion of farmers’ markets, corner store produce sales, etc. Therefore, in order to maximize the benefits of such projects, it is necessary to conduct marketing campaigns and outreach to ensure that the community can take full advantage of the opportunities.

Current status. The Domain 1 workgroup has made significant investments in expanding marketing and communications efforts during 2013. Efforts for both the mobile market and stationary farmers’ markets include advertising through posters, flyers, mini-flyer handouts, social media, website, and radio.

2014 Plans. Implementation of the current FALPC marketing plan will continue through 2014. A multi-component CHIP communications campaign will advertise and promote the availability of food and physical activity resources throughout summer 2014. The Worcester Division of Public Health also plans to promote food resources through interactive mapping on their website in 2014.

Outcome Measures. Number of individuals reached per media campaign or outreach initiative

The language of the strategy has been edited to broaden the scope of the work. The original strategy limited the promotion of the work group’s efforts to work relating to Strategies 1.1.1 and 1.1.3. The new language allows the workgroup the freedom to promote any of the progress made toward achieving Objective 1.1.

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1.2

Identify, prioritize, and implement improvements to increase residents' access to physical activity resources by 10% by 2015 as measured by walking distance.

2013 Update. After one year of implementation, the Domain 1 workgroup has chosen to edit Objective 1.2. After reviewing additional data, the group recognized that increasing the absolute number of opportunities for physical activity is not the best indicator of increased overall physical activity of residents, especially if these opportunities are not conveniently located. Therefore, the group decided to change the objective to reflect the overall level of access to opportunities for physical activity. The target value of 10% was obtained by reviewing Healthy People 2020 objectives and projections for increased access due to the strategies contained below (joint use agreements, complete streets policy, etc.). The work group considers this value a feasible, yet challenging goal that will achieve meaningful improvements in health.

Lead Agencies: WalkBike Worcester, Mass in Motion, Worcester Division of Public Health

Current Partners: Central MA Regional Planning Commission, WPI, Fallong Health

1.2.1 Increase consideration of pedestrian and bicycle accommodation in routine decision making through adoption of Complete Streets transportation policy throughout the region.

Rationale. Increasing physical activity is a priority of national health agencies. Healthy People 2020 includes 15 objectives relating to increasing physical activity across age groups, as well as increasing access to opportunities for physical activity. The Guide to Community Preventive Services recommends street-scale urban design and land use policies for increasing physical activity in the community.

Observational research found traffic speed and volume to be among the neighborhood environment features with the greatest association with youth physical activity. People living in areas with lower traffic speeds reported using parks more frequently. In a study of African American public housing residents, lower traffic speed was linked to more walking for men and women. A literature review demonstrated the positive impacts that infrastructure changes, like the improving sidewalks or adding bike lanes can have on physical activity. Not only do such changes increase physical activity in the community, but also improve attitudes toward active transportation, for example, people reported that they feel safer while walking after infrastructure improvements are made.

Current status. During 2013, the workgroup made large strides in promoting Complete Streets, with WalkBike Worcester holding a training for key stakeholders co-sponsored by the Worcester City Council Public Works and Transportation Subcommittee and Traffic and Parking Subcommittee. WDPH also hosted a Complete Streets training for the Office of Human Rights and Disabilities. WalkBike Worcester participated in several road safety audits, as well as preliminary design hearings for road projects in the city. Worcester City Council formally supported the MA Active Streets bill co-sponsored by Sen. Chandler (An Act Relative to Active Streets and Healthy Communities). WalkBike Worcester worked with City of Worcester Department of Public Works (DPW) and Worcester Polytechnic Institute (WPI) to identify “low-hanging fruit” for striping bike lanes on recently resurfaced roads and roads to be resurfaced during the FY15 construction season.

2014 Plans. In 2014, the group plans to build stakeholder support through education and outreach, conduct targeted assessments of health impact of Complete Streets in three neighborhoods of the city, create materials for use by city officials and partner organizations to educate others about Complete Streets, provide opportunities for education regarding healthy community design to city boards, commissions, and departments, work with DPW to craft an approach to bicyclist and pedestrian accommodations, and build WDPH capacity for input on community design.

Outcome Measures. Number of municipalities implementing a complete streets policy; Number of people walking and biking to work per 1000; Number of children walking and biking to school per 1000; Miles of bike lanes

1.2.2 Establish four joint use agreements with schools in low-income neighborhoods to allow the use of both indoor and outdoor facilities by the public during non-school hours on a regular basis.

Rationale. Within the objectives relating to increasing physical activity, Healthy People 2020 includes a goal of increasing the percentage of schools that provide access to facilities for physical activity during non-school hours by 10%. The National Prevention Strategy similarly recommends encouraging community design and development to facilitate access to safe, accessible, and affordable places for physical activity.

Studies have found that playgrounds are a critical resource for physical activity, especially in urban environments. Increased access to facilities and recreational opportunities increases physical activity in children. This strategy was chosen based on the strong evidence base and its potential benefits to the community.

Current status. The Domain 1 workgroup has invested significant time and energy to implementing Strategy 1.2.2 in 2013. WDPH, in partnership with the Worcester Public Schools (WPS), submitted a grant application to KaBOOM!, a non-profit that supports expanded playground resources for children. Extensive assessment of current playground access was completed over the summer in advance of the grant application.

2014 Plans. Activities planned for 2014 are contingent upon grant funding. If awarded, the KaBOOM! grant will support the implementation of a district-wide joint use agreement with WPS. The grant will fund educational trainings for city administrators on the benefit of joint use agreements, legal counsel, and infrastructure improvements for school facilities such as new signage, lighting, etc. The workgroup has developed a timeline for implementation that it would like to see adopted by city administrators in early 2014.

Outcome Measures. Number of joint-use agreements implemented; Number of residents with access to physical activity resources, as measured by walking distance

This strategy has been edited as of this report to reflect the possibility of establishing joint use agreements throughout the alliance communities, as the previous language suggested the strategy was limited to Worcester.

1.2.3 Establish a district-wide Safe Routes to School task force for ongoing identification and implementation of systems, policies, and school-level changes to support increased walking and biking to school.

Rationale. Increasing the proportion of trips less than one mile that are made by walking for both children and adults is an objective of Healthy People 2020. Safe Routes to School is a nationally promoted program that aims to improve health by increasing physical activity, reducing air pollution, and improving safety for pedestrians. Safe Routes to School policies that consider bussing distances, traffic patterns surrounding schools, speed limits etc. can increase the proportion of students that walk to school.

Current status. Parents at six elementary schools were surveyed for participation in a SRTS pilot program in 2013. Three pilot programs were established at schools with high potential for travel-mode shift. A SRTS committee was established, safety audits of the surrounding streets have been conducted at one school, and meetings to engage parents and administrators were held at all three schools.

2014 Plans. In 2014, the SRTS Task Force will convene SRTS committees at the remaining two pilot schools, will continue conducting walk audits at all three schools, including mapping of existing conditions and recommended walking routes. A SRTS newsletter will be distributed to partner schools and interested parties. School specific education and encouragement activities will be created and 2nd grade pedestrian safety training will be conducted. An evaluation and final report will be written about the three pilot schools, and the next round of schools will be solicited. Recommendations to the district will be reported.

Outcome Measures. Number of children walking and biking to school per 1000

This strategy has been edited as of this report to better reflect the work of the group. The language of the original strategy suggested that the local Safe Routes to School efforts are equivalent to the practices and impact of the state-wide program of the same name.

1.2.4 Assess and identify priorities for improving access to existing parks and open spaces, including public works improvements and public safety enhancements as well as facilities improvements or amenities; prioritize needs based on access criteria and deliverables identified in Worcester’s Open Space and Recreation Plan.

Rationale. Increasing physical activity is a priority of national health agencies. Healthy People 2020 includes 15 objectives relating to increasing physical activity across age groups, as well as increasing access to opportunities for physical activity. The Guide to Community Preventive Services recommends street-scale urban design and land use policies for increasing physical activity in the community.

In addition, studies have found that the most frequently cited enablers of physical activity among adults is the availability of open space for exercise. Increasing access to safe public parks can increase physical activity in the community.

Current status. Mapping of active environments throughout Worcester has begun; all city-owned parks, playgrounds, and bike lanes have been mapped by WDPH.

2014 Plans. When the Worcester Open Space and Recreation Plan is finalized, additional GIS layers will be made available for mapping. Additionally, features from the Greater Worcester Land Trust and Broadmeadow Brook will be mapped. Once finalized, this map will be made available to the public via the city’s website.

Outcome Measures. Number of people with access to physical activity resources, as measured by walking distance

1.2.5 Conduct a social norms campaign to define and change perceptions of violence and community safety and thereby increase utilization of community resources. (see 4.2.2)

Rationale. The Guide to Community Preventive Services recommends community-wide campaigns with support across various sectors (government, schools, healthcare etc.) as a method to promote physical activity. Although neither the Community Guide, or the National Prevention Strategy address perceptions of violence as barriers to physical activity, there is still a strong evidence base to support selection of this strategy.

Data collected during the Community Health Assessment process suggest that a one barrier to physical activity is safety concerns of neighborhood residents. However, the true safety threat is often lower than it is perceived, and violence and crime rates may be lower than individuals believe. This trend is also cited in the literature and supports the inclusion of this strategy in the CHIP.

Current status. Progress has yet to be established for this strategy.

2014 Plans. In early 2014, members of the Domain 1 workgroup will meet with members of the Domain 4 violence prevention subcommittee to discuss a plan of action for this strategy.

Outcome Measures. Results from perceptions surveys

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1.3

Increase the percentage of children in grade 1 who are a healthy weight by 3% by 2015.

2013 Update. Objective 1.3 has been edited in this report for two reasons: to promote a more positive approach to healthy eating/active living by aiming to increase the percentage of children at a healthy weight vs. reducing the obesity rates, and the inclusion of a 3% target value for this improvement. The value of 3% was selected to reflect a trend in active Mass in Motion communities over the last five years. The original Strategy 1.3.3 (develop a community/primary care collaborative program model) has been removed as of this report due to lack of feasibility.

Lead Agency: Food and Active Living Policy Council-Early Childhood Obesity Working Group

Current Partners: Edward Street Child Services, Cooking Matters, WIC, UMass Memorial, Guild of St. Agnes, Early Education and Care, Worcester Comprehensive Child Care, Pernet Family Health, Mass in Motion, Guild of St. Agnes, Head Start, Worcester Fitness, Elm Park Center for Early Childhood Education, Edward M. Kennedy Health Center, Family Health Center of Worcester, Rainbow Child Development, Worcester Community Connections Coalition, Family Health Center of Worcester, Fallon Health

1.3.1 Implement professional development/education program for teachers and early childhood care providers related to physical activity to increase their awareness of its connection with learning.

Rationale. Increased physical activity during the school day is an objective of Healthy People 2020. Included in the objective is increasing scheduled recess and physical education classes, as well as increasing the number of states that have licensing programs for child care facilities to ensure children participate in physical activities of equal quality. Educating teachers and child care providers is an important step toward ensuring high quality physical education programming for students in the region.

Increased physical activity and health education in schools can positively impact the health of children. Obesity prevention efforts in schools have been more effective when they integrate increased activity, education, and support for teachers trying to implement health promotion into the curricula.

Current status. Through the Early Childhood Obesity Working Group, several models of physical activity/obesity prevention programming for preschools and childcare centers were examined and discussed. Through other efforts such as Safe Routes to School, the connection between exercise and learning has been promoted to educators and administration.

2014 Plans. In 2014, the group will continue to review best practices and discuss possibilities for implementing programs in preschools and child care settings. SRTS Task Force and the Joint Use Agreement Task Force (*see 1.2.2*) will continue promoting the connection between physical activity and learning.

Outcome Measures. Number of teachers/childcare providers trained

1.3.2 Advocate for policies to increase food/nutrition standards for snacks/meals at public and private preschools and kindergarten classes.

Rationale. Improving nutrition for children in school and childcare facilities is related to several objectives in Healthy People 2020. For example, improving nutrition in schools beyond school lunch programs, making fruits and vegetables available whenever food is sold, and limiting sugary drinks available to students are objectives. In addition, increasing the number of states with established nutrition standards for preschools and day care centers is also an objective.

Policies that aim to improve nutrition standards in schools and child-care have been shown to be effective at improving the food environment and dietary intake. Policies that are part of a larger obesity-prevention effort have had measurable impacts on BMI.

Current status. The Childhood Obesity Working group of the FALPC is developing a set of recommendations for childcare centers that promotes nutrition by eliminating sugar-rich foods and beverages. Centers were encouraged to swap out fruit juices for water or low-fat milk and a piece of fruit, which many of them agreed to.

2014 Plans. In 2014, the group will continue to develop recommendations to prevent childhood obesity and advocate for the implementation of those recommendations.

Outcome Measures. Number of schools and childcare centers with new or revised nutrition policies

1.3.3 Assess and explore adoption of other evidence-based obesity reduction programs such as I am Moving, I am Learning, Hip Hop to Health, and others.

Rationale. Healthy People 2020 objectives include increasing the proportion of students that are physically active during the school-day by increasing the proportion of schools requiring regular physical activity and that have regularly scheduled recess. Although the Guide to Community Preventive Services has found insufficient evidence to support school-based obesity intervention programs due to a lack of comparable outcome measures, a review has not been conducted since 2003 and much additional research has become available since that time.

A literature review conducted regarding this strategy concluded that there is evidence to support the potential benefit of school-based exercise and obesity reduction programs. One review noted that school-based exercise interventions generally lead to an increase in the proportion of children engaged in moderate to vigorous physical activity during the day. The number of studies reporting benefits of school-based interventions suggest that similar interventions would be both feasible and appropriate for the central Massachusetts region.

Current status. Through the Early Childhood Obesity Working Group, several models of physical activity and obesity prevention programming for preschools and childcare centers were examined and discussed. The Worcester Public Schools Health Advisory Council has also vetted several models of obesity prevention programs that increase day-to-day physical activity, though school resources and funding are a significant barrier.

2014 Plans. In 2014, the group will continue to review best practices and discuss possibilities for implementing programs in preschools and child care settings. SRTS Task Force and the Joint Use Agreement Task Force (*see 1.2.2*) will continue promoting the connection between physical activity and learning.

Outcome Measures. Number of schools and childcare centers with new or revised programs

1.3.4 Advocate for recommended hours of physical education in schools.

Rationale. Healthy People 2020 objectives include increasing the proportion of students that are physically active during the school-day by increasing the proportion of schools requiring regular physical activity and that have regularly scheduled recess.

A review of the literature shows that most schools throughout the country do not offer enough physical education for their pupils to make a significant impact on health. Increasing hours of physical activity in schools has been shown to supplement out-of-school activity and prevent an increase in BMI.

Current Status. During the first year of CHIP implementation, FALPC identified current state-level policy issues to support, specifically the ActFRESH campaign run by the MA Public Health Association. A public hearing was held with the state legislature in September 2013 and FALPC submitted written testimony.

2014 Plans. As opportunities arise for advocating for recommended hours of physical activity in schools, FALPC will respond appropriately. Members of FALPC will remain active on the Worcester School Health Advisory Council, where they can interact with school and city administration as well as elected officials. In the alliance communities, WDPH will continue working to establish wellness committees or reinvigorate school health committees where this type of advocacy is appropriate.

Outcome Measures. Proportion of children receiving recommended hours of physical education during the school day

1.3.5 Conduct and coordinate communication, public awareness, outreach, and mass media campaign.

Rationale. This strategy (formerly 1.4.2) has been placed into Objective 1.3 as of this report. This decision was made to increase the cohesiveness of the domain. Because the Objective 1.3 looks to promote healthy weight in children, it is appropriate to include a strategy relating to public education and outreach within the objective, especially promoting the policy initiatives (Strategies 1.3.2, 1.3.3, 1.3.4).

Current status. In 2013, two members of FALPC's Childhood Obesity working group, Dianne Bruce and Patty Flanagan, appeared on WCCA-TV to discuss the work of the CHIP and the issue of childhood obesity in the community. In addition, the group continued to expand its social media presence with the launching of a FALPC blog and increases in the numbers of followers on both Twitter and Facebook.

2014 Plans. During 2014, the group will initiate a "5-2-1-0" public education campaign, including televised public service announcements as part of a broader CHIP media campaign to promote the availability of food and physical activity resources in the community.

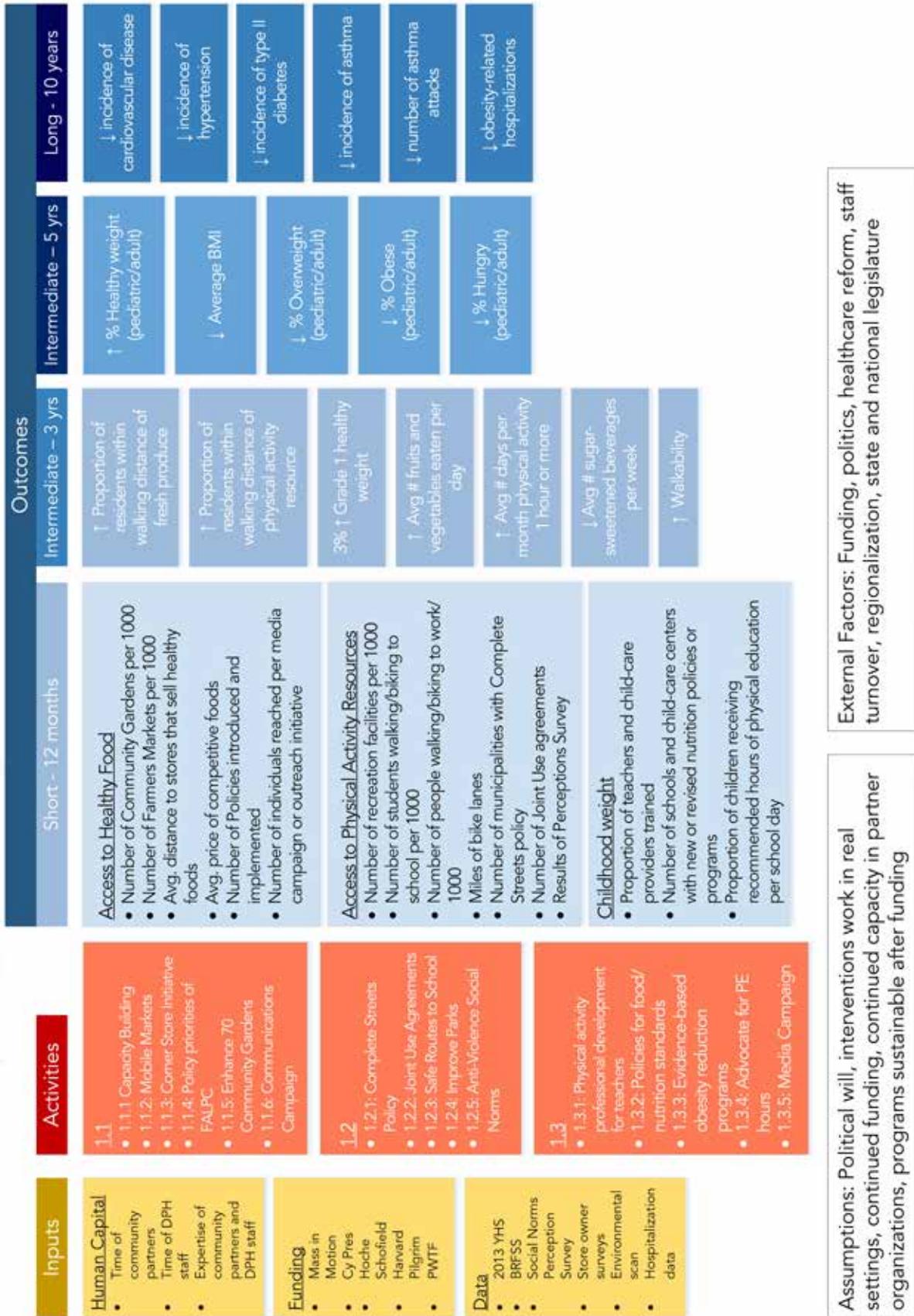
Outcome Measures. Number of individuals reached by each education campaign or outreach effort

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Domain Logic Models

Domain 1: Healthy Eating, Active Living





Public Health
Prevent. Promote. Protect.

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