AN APPLE A DAY

HOW OBESITY IMPACTS MILWAUKEE AND AN ANALYSIS OF PREVENTION STRATEGIES FROM OTHER CITIES

PUBLIC POLICY FORUM

About the Public Policy Forum

Milwaukee-based Public Policy Forum – which was established in 1913 as a local government watchdog – is a nonpartisan, nonprofit organization dedicated to enhancing the effectiveness of government and the development of southeastern Wisconsin through objective research of regional public policy issues.

Preface and Acknowledgments

This report was made possible by the family of Norman N. Gill, who was the director of the Forum for 39 years when it was known as the Citizens Governmental Research Bureau. The Gill family's generous contribution has provided for the creation of the Norman N. Gill Civic Engagement Fellowship, under which the Public Policy Forum annually hires a graduate student research fellow to conduct a research project under the tutelage of its staff. The 2015-16 Norman N. Gill Fellow, Chris Spahr, was the lead author of this report.

We would like to thank the Forum's Social Services Committee, officials from the Milwaukee Health Department, and the dozens of individuals from stakeholder organizations who patiently answered our questions and shared their data and expertise.

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July 2016

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Introduction

Obesity is linked to many chronic diseases that are among the leading causes of death in the U.S., including heart disease, stroke, diabetes, and certain types of cancer. Obesity is prevalent in Milwaukee, where more than one-third of the population is obese. In fact, Milwaukee demonstrates many characteristics that suggest obesity will continue to be a significant health and financial burden unless comprehensive efforts are taken to address it. Those characteristics are complex and interwoven and include high levels of concentrated poverty, a history of racial segregation, limited access to healthy food in poor neighborhoods, and a strong dependence on the automobile as the primary mode of transportation.

The latest Milwaukee Health Report, published in 2013, called upon health professionals, elected officials, community stakeholders, and policy-makers to "work together to help change public policy so that individuals are more likely to live, work, and interact in environments that facilitate and support healthy behaviors and healthier outcomes." The report emphasizes the importance of governmental and institutional policies that improve the built environment, educational attainment, and social cohesion, as well as policies that seek to reduce unemployment, racism and poverty.[1]

But what specific policies and programs are other cities employing to create healthier environments that could facilitate a citywide obesity prevention strategy? With this specific question in mind, the Public Policy Forum assessed the current burden of obesity in Milwaukee and considered opportunities to build on existing assets to comprehensively address the epidemic at the local level.

To do so, we gathered and reviewed data from the Wisconsin Interactive Statistics on Health, the Center for Disease Control and Prevention's (CDC) Behavioral Risk Factor Surveillance System Survey, the U.S. Census Bureau, the Center for Urban Population Health, the Milwaukee Health Department (MHD), and other national and local data sources. We supplemented our data collection with key stakeholder interviews and participation in local collaborations around healthy eating and physical activity. Interviewees included local government officials, members of academia, and grassroots community leaders. Recognizing funding challenges and competing priorities within Milwaukee, we also researched best practices from other cities with similar challenges.

MHD recently completed its 2016 Community Health Assessment (CHA), which is the foundation for improving and promoting the health of city residents. The next step in the process is to develop the Community Health Improvement Plan (CHIP), which is a process for selecting priority issues upon which to focus, developing and implementing strategies for action, outlining the responsibilities of various stakeholders, and establishing accountability to ensure measurable health improvement. While not the initial objective of our research, this report provides a valuable perspective that should be considered as City leaders set out to prioritize local health issues.

[1] Greer, DM, DJ Baumgardner, FD Bridgewater, D.A. Frazer, C.L. Kessler, E.S. LeCounte, G.R. Swain, and R.A. Cisler. 2013. Milwaukee Health Report 2013: Health Disparities in Milwaukee by Socioeconomic Status

Background

What is obesity?

To understand how obesity affects the people of Milwaukee, it is first important to understand the disease itself and some of the factors that cause it. Obesity is defined as having a body mass index (BMI) greater than or equal to 30 kg/m^2. BMI is a measure of body fat based on height and weight that applies to adult men and women.[2]

Obesity typically results from energy consumption exceeding energy expenditure. In other words, when individuals consume more calories than they burn off through physical activity and resting metabolism, they may store that excess as body fat, which in certain cases can lead to obesity.

A strong body of research has found that people who are obese are at increased risk for many diseases and health conditions, including:

- High blood pressure
- Type 2 diabetes
- Coronary heart disease
- Stroke
- Sleep apnea and breathing problems
- Some cancers
- Mental illness such as clinical depression, anxiety, and other mental disorders
- Body pain and difficulty with physical functioning

Additionally, pre-pregnancy obesity is strongly associated with premature birth and infant mortality.[3]

Obesity not only impacts the quality of life of those afflicted with it, but it also produces economic consequences. Medical costs associated with obesity may be both direct and indirect. Direct medical costs include preventive, diagnostic, and treatment services. Indirect costs may include costs related to productivity, which can include absenteeism or decreased productivity while at work, as well as premature mortality and disability.[4]

Obesity has been defined as a national epidemic,[5] and its causes are complex. Research has shown that since the early 1970s, the consumption of food and beverages, the percentage of meals eaten outside of the home, portion sizes, and energy density have increased substantially. Awareness campaigns have been successful in causing a decrease in the consumption of saturated fats and cholesterol, but calories consumed may have increased. In addition, rates of physical activity have decreased over time. The range of factors that is believed to contribute to childhood obesity is shown in **Chart 1**.

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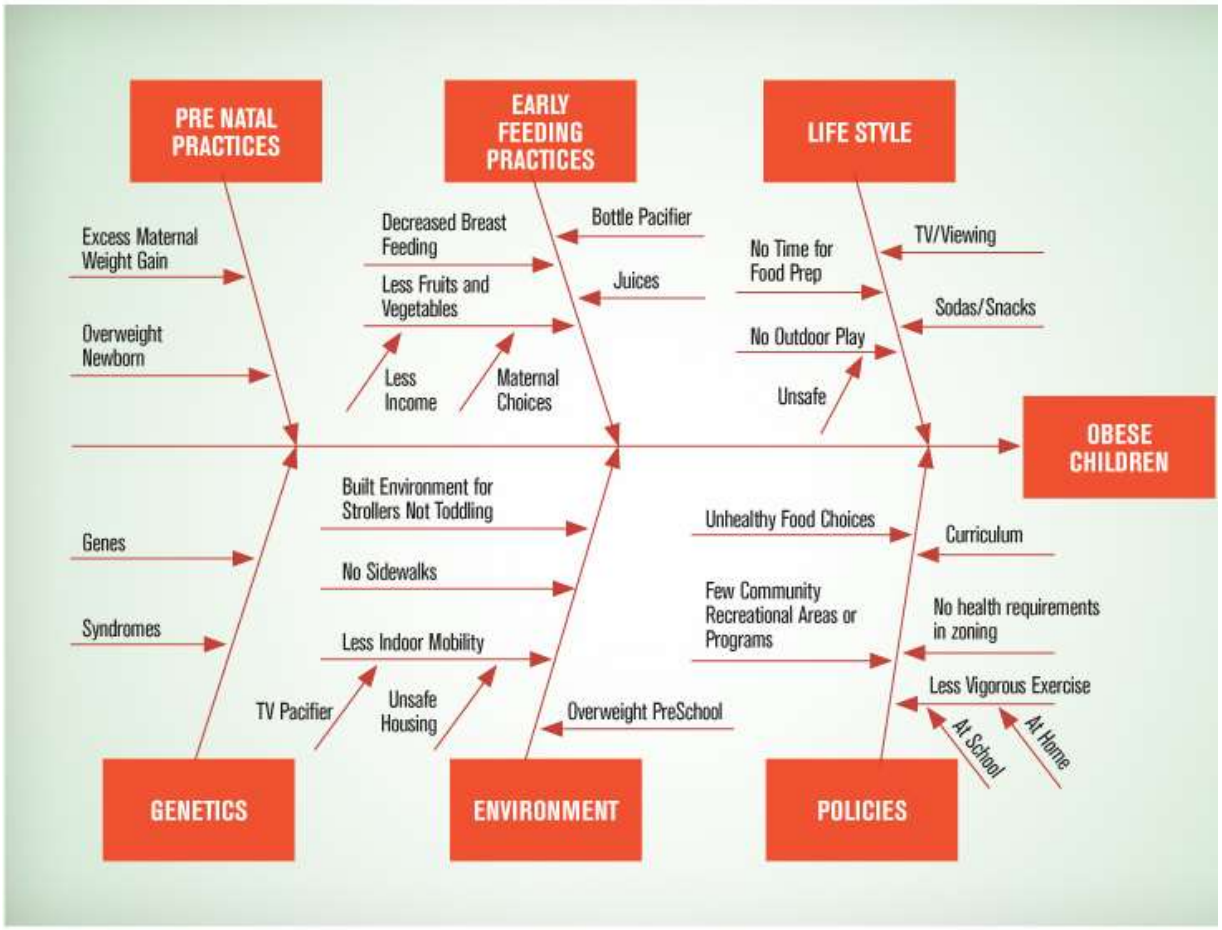
[2] BMI is calculated as a respondent's reported weight in pounds divided by reported height in inches, squared.
[3] Declercq, Eugene, Marian MacDorman, Howard Cabral, and Naomi Stotland. 2016. Prepregnancy body mass index and infant mortality in 38 US states, 2012–2013. *Obstetrics & Gynecology* 127 (2): 279-287. Web
[4] Hammond, Ross and Levine. 2010. The economic impact of obesity in the United States. *Diabetes, Metabolic Syndrome and Obesity: Targets and Therapy* Volume 3:285-295. Web
[5] The CDC defines epidemic as the occurrence of more cases of disease, injury, or other health conditions than expected in a given area or among a specific group of persons during a particular period.

Chart 1: Fishbone diagram showing the root causes of childhood obesity



Source: Public Health Foundation

The national obesity epidemic does not affect all demographic and economic groups equally. While U.S. rates of obesity have steadied since 2003, they are rising in some groups. For example, Black and Hispanic adults have higher rates of obesity than non-Hispanic White adults. Researchers have suggested that if obesity trends continue, by 2030, 51.1% of adults will be obese. Black women and Mexican American men would be the most affected.[6]

It is also important to note that the prevalence of obesity in children and adolescents is increasing, and youth are becoming overweight[7] and obese at earlier ages.[8] Nationally, one out of six children and adolescents ages 2 to 19 are obese and one out of three are overweight or obese.

Many factors contribute to the disparities that exist between different racial and socioeconomic groups with regard to obesity. Those may include barriers to achieving a healthy diet, including limited access to healthy and affordable food for the urban poor. Within urban communities,

[6] KM, Flegal, Carroll MD, Kit BK, and Ogden CL. 2012. Prevalence of obesity and trends in the distribution of body mass index among us adults, 1999-2010. JAMA 307:491-497
[7] Overweight is defined as having a BMI between 25 and 30.
[8] Cynthia L. Ogden, PhD, Margaret D. Caroll, MSPH, Brian K. Kit, MD, MPH, and Katherine M. Flegal, PhD. 2014. Prevalence of childhood and adult obesity in the united states, 2011-2012. *Journal of the American Medical Association* 311 (8): 806-814

residents also may face challenges such as crime and perceptions of crime that deter physical activity. For example, abandoned buildings, vacant lots, and poor lighting can deter outdoor activity such as walking and using parks or playgrounds. Additionally, a growing body of research suggests that the chronic conditions caused by obesity may present more of a challenge for the poor, who often lack access to necessary ongoing medical provision.

Obesity Prevention Approaches

Historically, obesity treatment and prevention approaches were focused primarily on individual behavior, targeting weight loss treatment in obese adults. Research has found that the long-term effects of that approach were limited, however.

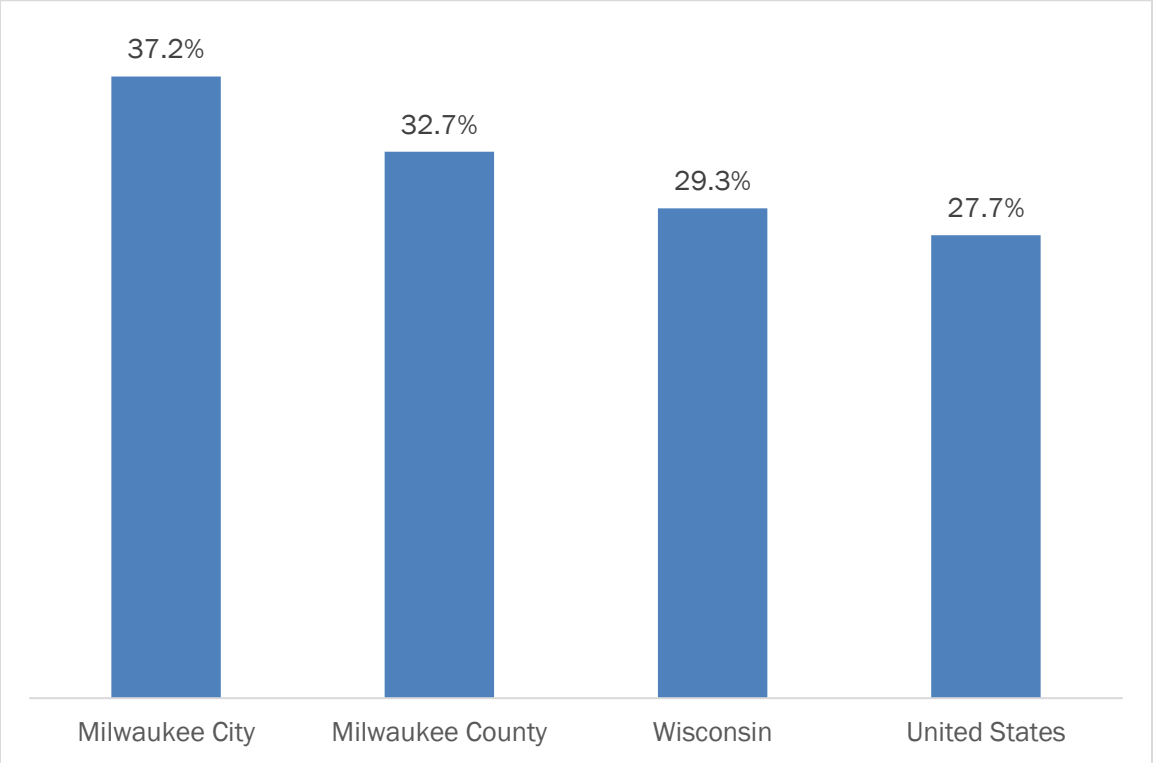
Recognizing that the factors contributing to the obesity epidemic are very complex, multiple disciplines – within and outside of health care – have determined that the biomedical model of medicine, which focuses attention on personal risk factors such as diet and exercise, may not be the most effective approach to obesity prevention. Instead, social epidemiology has pushed for more comprehensive strategies and consideration of how poverty, economic inequality, stress, discrimination, and social capital help explain persistent patterns of inequitable distributions of disease and well-being across different population groups and geographic areas. Moreover, it is argued that comprehensive strategies have produced far wider benefits to populations at a much lower cost than the historical treatment and prevention approaches.

Comprehensive strategies require new skills and nontraditional partnerships with individuals and organizations working outside of public health. As an example, to address physical barriers to an active lifestyle in the U.S., cities need the expertise of urban planners, transportation professionals, and persons working in schools and parks and recreation to develop environmental and political changes that promote physical activity. Sustainable progress in obesity prevention is most probable if active-living and healthy-eating environments are institutionalized and sustained. For this to happen, policy change is critical.

Obesity in Milwaukee

As shown in **Chart 2**, as of 2014, the Wisconsin Department of Health Services estimated that 37.2% of the City of Milwaukee's residents were obese, compared to 32.7% in Milwaukee County, 29.3% in Wisconsin, and 27.7% nationally.[9]

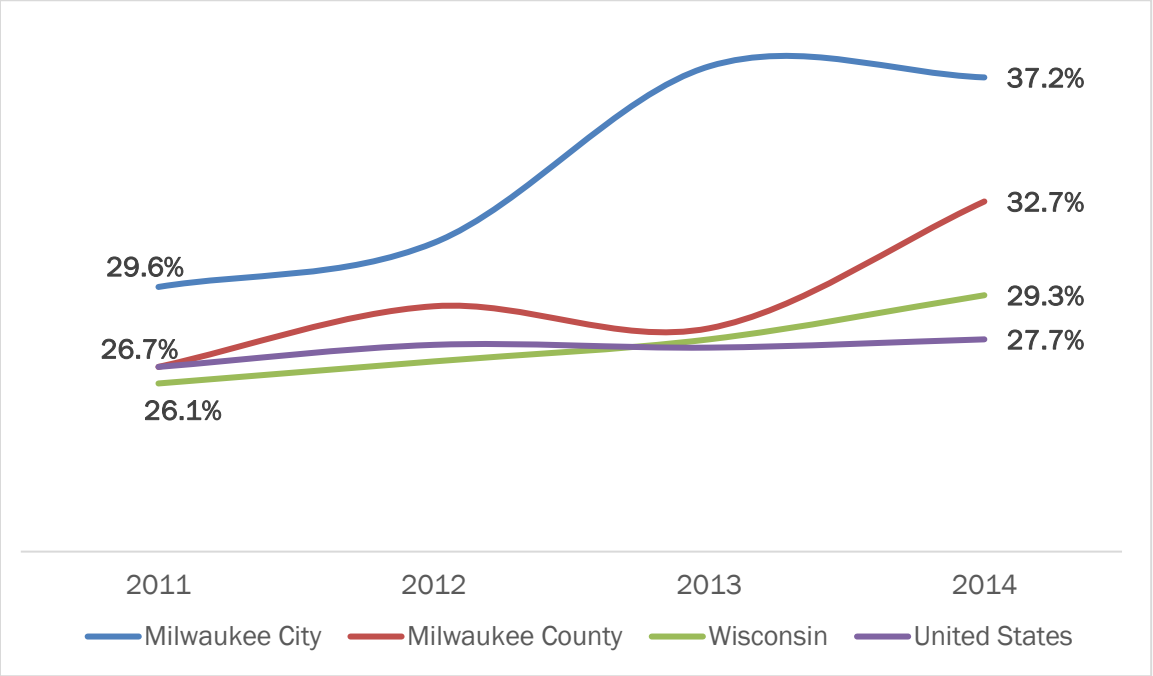
Chart 2: 2014 Obesity Rates in Milwaukee City and County, Wisconsin, and the U.S.



While moderate increases in the obesity rate occurred nationally and statewide over the past four years (2–3 percentage points), the City of Milwaukee has seen a much greater increase of eight percentage points, as shown in **Chart 3**.

[9] Wisconsin data comes from Wisconsin Interactive Statistics on Health https://www.dhs.wisconsin.gov/wish/population/form.htm. National figure comes from Gallup http://www.gallup.com/poll/181271/obesity-rate-inches-2014.aspx.

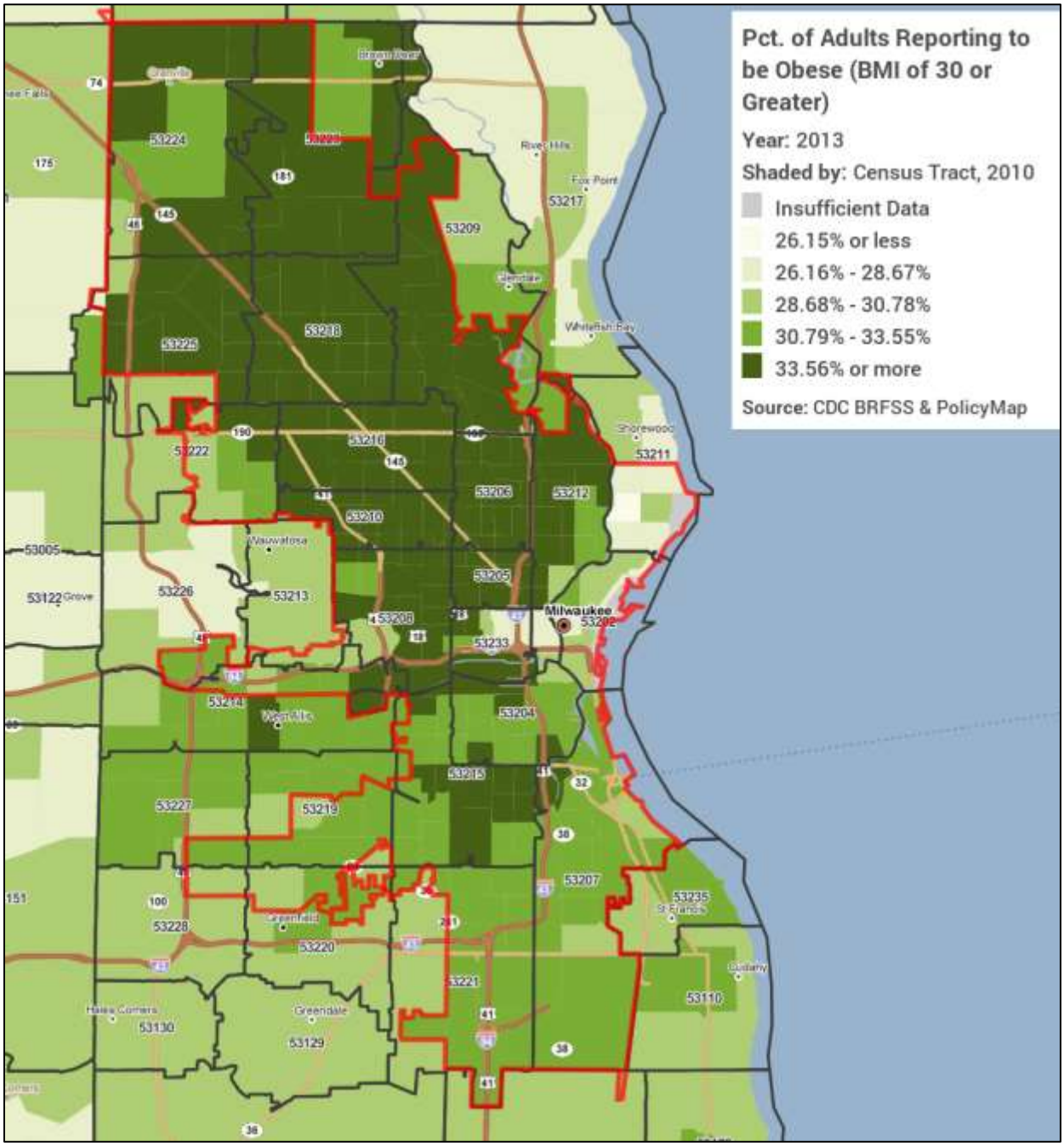
Chart 3: Obesity trends from 2011 to 2014



A spatial analysis of estimates of obesity in Milwaukee shows that the highest rates of obesity (33.6% or more) appear in the near south side and throughout much of the north side of the city (**Map 1**).[10]

[10] Estimates are population-weighted averages based on data from the CDC Behavioral Risk Factor Surveillance System survey, Census Metropolitan delineation files, and 2009-2013 Census American Community Survey 5-year estimates for adult population and household income by age and race.

Map 1: Estimated percentage of Milwaukee adults reporting to be obese in 2013



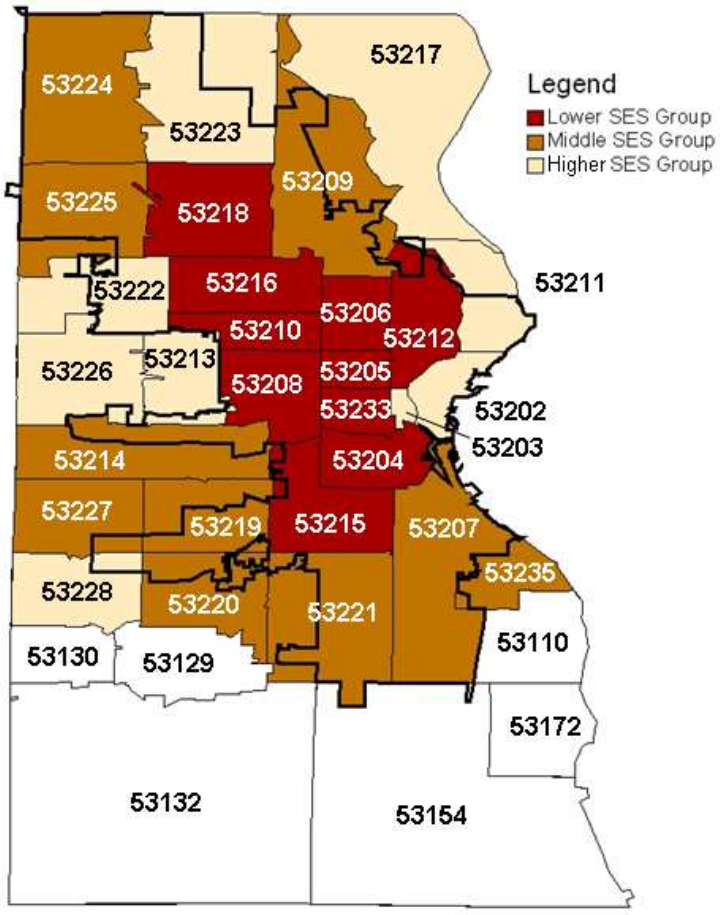
As previously discussed, obesity is a very complex issue that cannot be adequately addressed through focusing exclusively on individual behavior change. It is important also to recognize the complexities created by poverty, race, and neighborhood conditions that contribute to the prevalence of obesity.

Poverty

The poverty rate in Milwaukee is among the highest in the U.S.[11] Much of the city's poverty is concentrated on the north and near south sides. Concentrated poverty often results in neighborhoods with poor housing, a lack of quality food options, and concentrated crime, which are all factors that contribute to the obesity epidemic. In Milwaukee, the obesity rate is 43.5% among individuals with a lower socio-economic status (SES), compared to 26.2% for the higher SES group.[12]

A map (**Map 2**)[13] produced as part of the Milwaukee Health Report shows that the lower SES ZIP codes align closely with the areas of the city with the highest rates of obesity. Lower SES ZIP codes in Milwaukee have many socio-demographic differences relative to the middle and upper SES groups, including higher levels of poverty, lower levels of education, much higher population density, and lower median income.

Map 2: Socioeconomic Status in Milwaukee



Source: Center for Urban Population Health

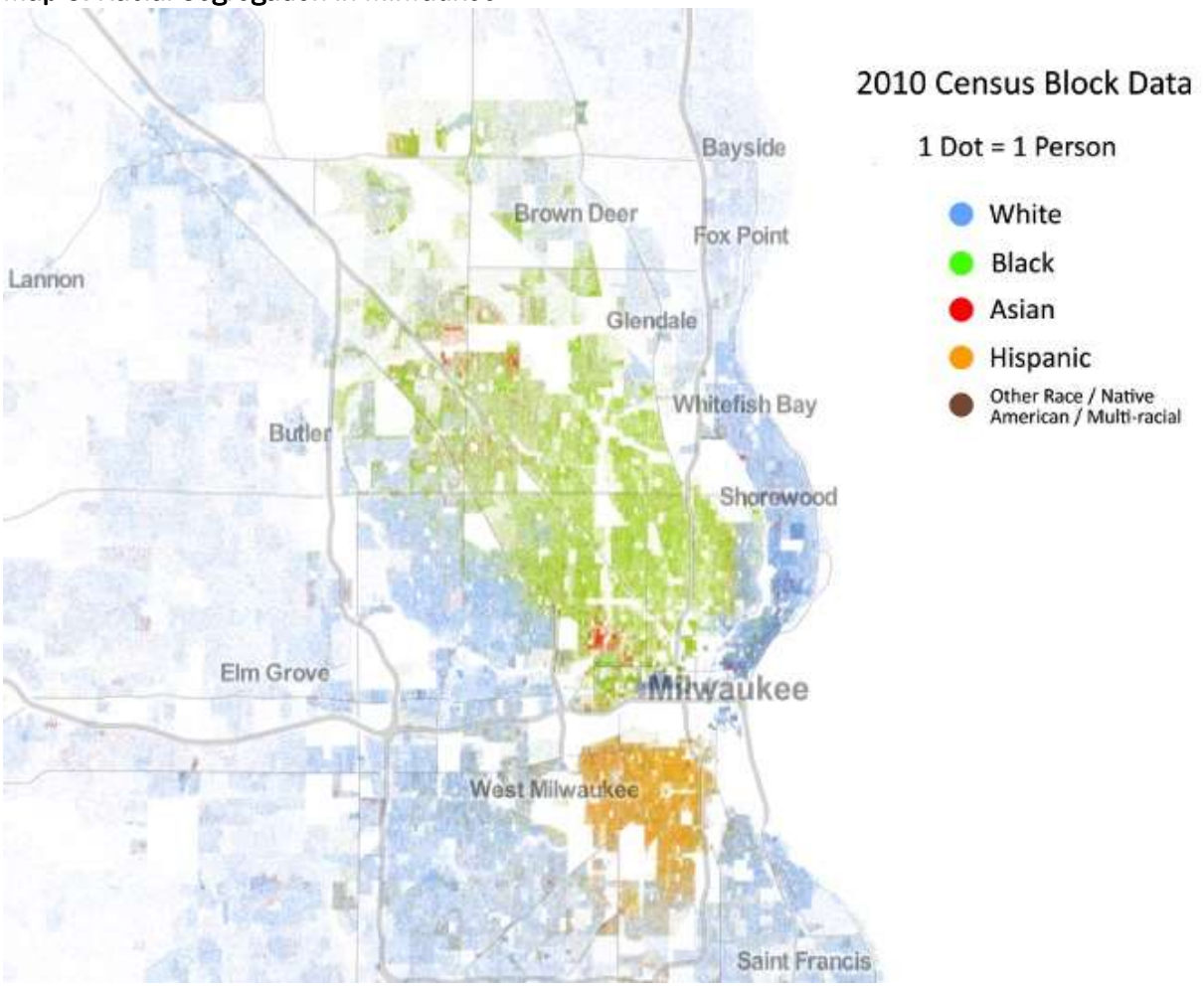
[11] Chiles, Ryan. These Are the 33 Poorest American Cities. Find The Home. http://places.findthehome.com/stories/3421/the-33-poorest-cities-america#Intro (accessed June 21, 2016)
[12] Greer, DM, DJ Baumgardner, FD Bridgewater, D.A. Frazer, C.L. Kessler, E.S. LeCounte, G.R. Swain, and R.A. Cisler. 2013. Milwaukee Health Report 2013: Health Disparities in Milwaukee by Socioeconomic Status
[13] SES is based on an index composed of two equally weighted components. These components were based on 2007 data and included (1) An index of income based on median reported income values within the ZIP codes; and (2) An index of education based on the percentages of people with bachelor's degrees.

Race

Metro Milwaukee has been cited as one of the most segregated metropolitan areas in the U.S.[14] A spatial analysis of race in the City of Milwaukee shows that the Black population is concentrated in the north side of the city, the Hispanic population is primarily found in the near south side, and the White population is concentrated on the east and south sides as well as the surrounding suburbs (

Map 3).

Map 3: Racial Segregation in Milwaukee



Source: Dustin A. Cable, University of Virginia, Weldon Cooper Center for Public Service, Stamen Design, Google

Major racial disparities exist in Milwaukee with regard to obesity. For example, 45.1 % of the Black population is obese compared to 31.4% of the White population.[15]

[14] *Milwaukee, segregation, and the echo of welfare reform.* Brookings. http://www.brookings.edu/blogs/social-mobility-memos/posts/2016/02/17-milwaukee-segregation-welfare-reform-reeves (accessed May 23, 2016)
[15] *WISH-Wisconsin Interactive Statistics on Health.* Wisconsin Department of Health Services. https://www.dhs.wisconsin.gov/wish/index.htm (accessed July 16, 2016)

National research has shown that two to three times as many fast food outlets are located in segregated Black neighborhoods than in White neighborhoods of comparable socioeconomic status, contributing to higher consumption of fatty meals and widening racial disparities in obesity and diabetes within Black neighborhoods.[16] Moreover, a growing body of research has established that Black neighborhoods generally contain two to three times fewer supermarkets than comparable White neighborhoods, creating low food security[17] that makes it difficult for residents who depend on public transportation to purchase the fresh fruits and vegetables that make for a healthy diet.[18]

Other established research has found that Black neighborhoods have less access to recreational outlets than do White neighborhoods, compounding obesity challenges. For example, one study limited to New York, Maryland, and North Carolina found that Black neighborhoods were three times more likely to lack recreational facilities where residents could exercise and relieve stress.[19]

Representatives from the Sixteenth Street Community Health Center, which provides health services to a primarily Hispanic population on the south side of Milwaukee, have discussed the challenges faced by their patient population, of which 77% of adults are overweight or obese.[20] Among those challenges are lack of nutritional information, lack of time due to work and family demands, and adopting a fast food culture that is more common in the U.S. than in their countries of origin.

Food Access

There is much evidence that a diet with a sufficient level of fruits and vegetables can lead to decreased risk of obesity. Fruit and vegetable consumption is considered inadequate if an individual reports that he or she consumes less than five servings of fruits and/or vegetables per day. According to the 2013 Milwaukee Health Report, 69.7% of the lower SES populations in Milwaukee consumed an inadequate amount of fruits and vegetables compared to 62.9% of the higher SES population.

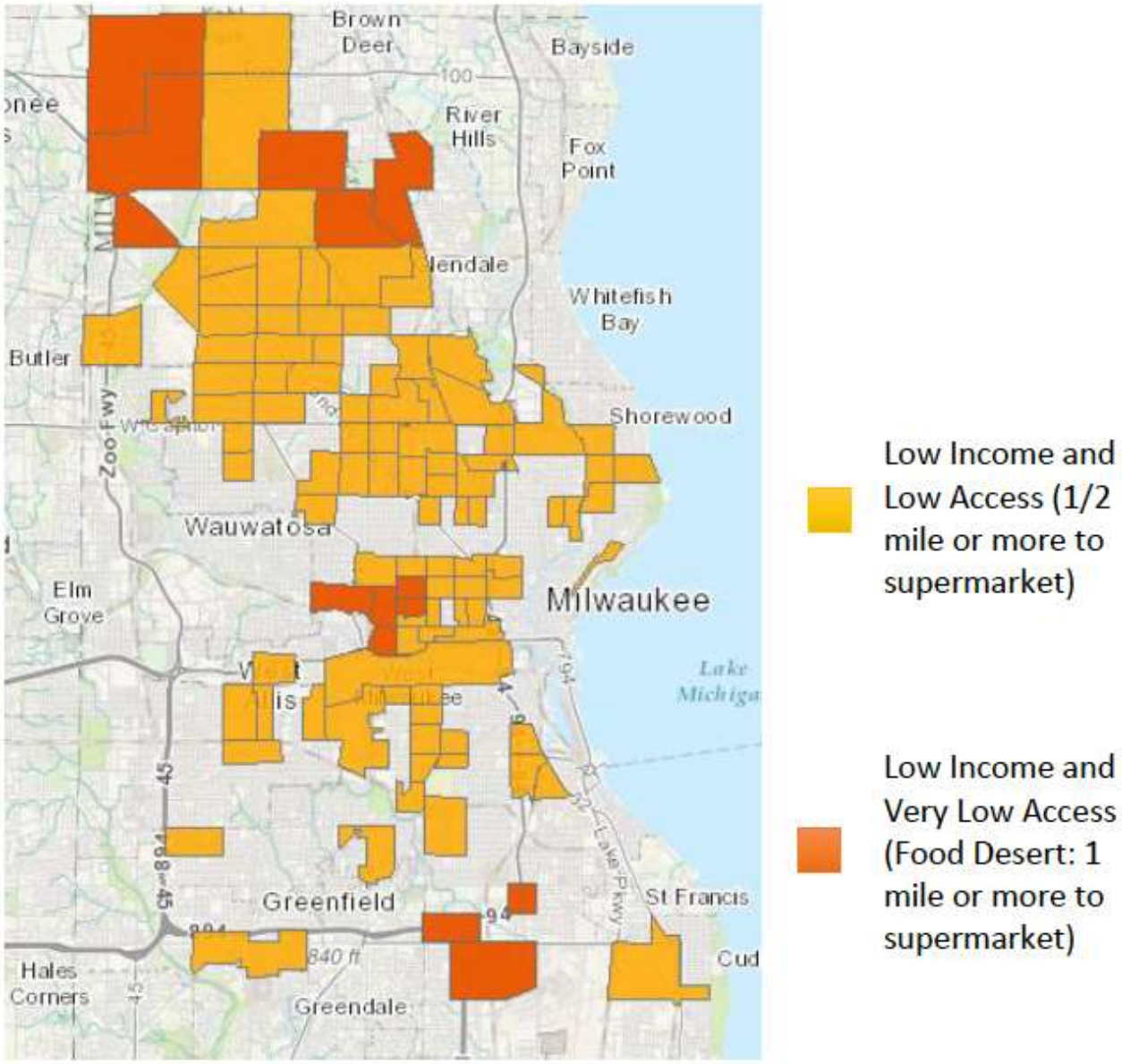
As shown in **Map 4**, low SES residents in Milwaukee also lack access to large grocery stores that are most likely to stock fresh fruits and vegetables (low access is defined as a Census tract with at least 500 people, or 33 percent of the population, living more than .5 miles from the nearest supermarket, supercenter, or large grocery store). This is important because low-income families often may not have an automobile to travel to a large grocery store and transport their groceries back to their home.

In Milwaukee, more than 18% of the population lacks access to an automobile. In the Lindsay Heights Neighborhood, located in one of the low SES zip codes (53205), 32% of the population has

[16] Powell, Lisa M., Frank J. Chaloupka, and Yanjun Bao. 2007. The availability of fast-food and full-service restaurants in the United States. *American Journal of Preventive Medicine* 33 (4): S240-S245. Web
[17] USDA defines low food security as reduced quality, variety, or desirability of diet. Little or no indication of reduced food intake.
[18] Morland, Kimberly and Susan Filomena. 2007. Disparities in the availability of fruits and vegetables between racially segregated urban neighbourhoods. *Public Health Nutr* 10 (12): 1481-1489
[19] Landrine, Hope and Irma Corral. 2009. Separate and unequal: Residential segregation and black health disparities. *Ethnicity & Disease* 19 (2): 179
[20] Maida, Tatiana. 2013. Healthy stores, healthy choices, healthy community. https://wilocalfood.files.wordpress.com/2012/11/healthy-stores-choices-community1.pdf (accessed May 23, 2016

no car.[21] Families without cars are most likely to use food outlets that are closest to their homes, which may be corner stores that often lack quality fresh fruits and vegetables.[22]

Map 4: Food Access by Census Tract, 2012.



Source: 2016 Milwaukee Health Assessment

[21] U.S. Census Bureau; American Community Survey, 2010 American Community Survey Summary File 1; generated by PolicyMap; using American FactFinder; http://factfinder.census.gov; (May 23, 2016).
[22] Interestingly, the near south side of Milwaukee may be an exception. That area of the city, also identified as a low income and low access area, has multiple smaller options for fruits and vegetables within walking distance.

Physical Activity

Individuals who are considered physically inactive do not meet the recommended levels of moderate physical activity (30 minutes per day for more than five days per week) or vigorous physical activity (20 minutes per day for more than three days per week). Regular physical activity has been shown to prevent or reduce the severity of obesity.

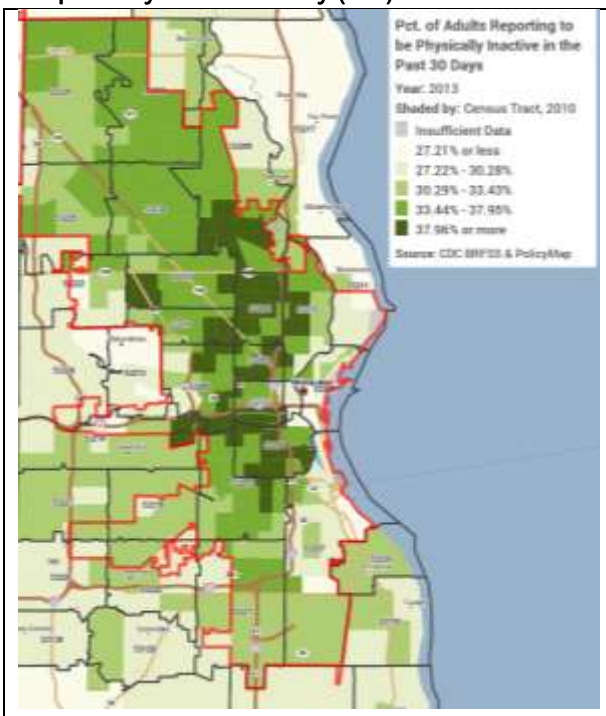
According to the 2013 Milwaukee Health Report, 45.5% of Milwaukee residents are physically inactive. This compares to 42.6% of Wisconsin residents and 48.6% of the U.S. population. Within Milwaukee, 47.2% of residents in the lower SES group are physically inactive compared to 40.8% of those in the higher SES group. While physical inactivity is somewhat dispersed throughout the city, there are concentrations of it in locations where lower SES groups live, as shown in **Map 5**.

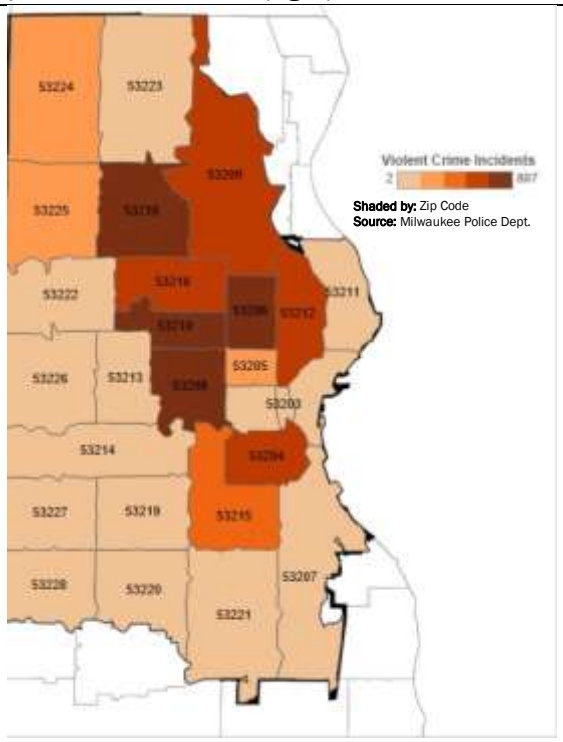
Physical inactivity may not be as simple as an individual decision not to exercise. As also shown in **Map 5**, Milwaukee's violent crime is concentrated in many of the same areas where obesity is prevalent. Hence, if we use violent crime rates as an indicator of real and perceived neighborhood safety, then the least safe neighborhoods are those where the most people are physically inactive and where obesity is prevalent. Residents in those neighborhoods may fear walking, jogging, bicycling, or performing other forms of exercise during certain hours within their neighborhoods. Those hours often are in the early morning or evening when people are home from work and may be inclined to exercise, but also when neighborhoods are most likely to feel unsafe.

While no studies on this topic specific to Milwaukee have been performed, a recent study in Detroit found that attractors to walking in higher SES neighborhoods, such as open spaces (parks), were sometimes viewed as deterrents to walking in lower SES neighborhoods because of reported fears of crime.[23]

[23] Wineman, Jean D., Robert W. Marans, Amy J. Schulz, Diaan Louis van der Westhuizen, Graciela B. Mentz, and Paul Max. 2014. Designing healthy neighborhoods contributions of the built environment to physical activity in Detroit. *Journal of Planning Education and Research* 34 (2): 180-189

Map 5: Physical Inactivity (left) and Violent Crime per 1,000 residents (right), 2013





Role of the Milwaukee Health Department

As the City of Milwaukee department whose mission is to "improve and protect the health of individuals, families, and the community," the Milwaukee Health Department (MHD) would be the logical entity to lead or coordinate efforts to respond to the obesity challenge in Milwaukee. As documented in previous Public Policy Forum fiscal reports and budget briefs, however, MHD has faced capacity challenges in light of the City's overall budget pressures.

In our 2009 assessment of the City's finances, we documented how the prioritization of public safety in the face of stagnant revenue streams had "come at a cost to other departments." In fact, this set of circumstances had reduced staffing at MHD by 34 positions from 2004 to 2008 and had required the department "to become more targeted with its resources".[24]

Per its 2016 budget, MHD today is prioritizing six specific objectives:[25]

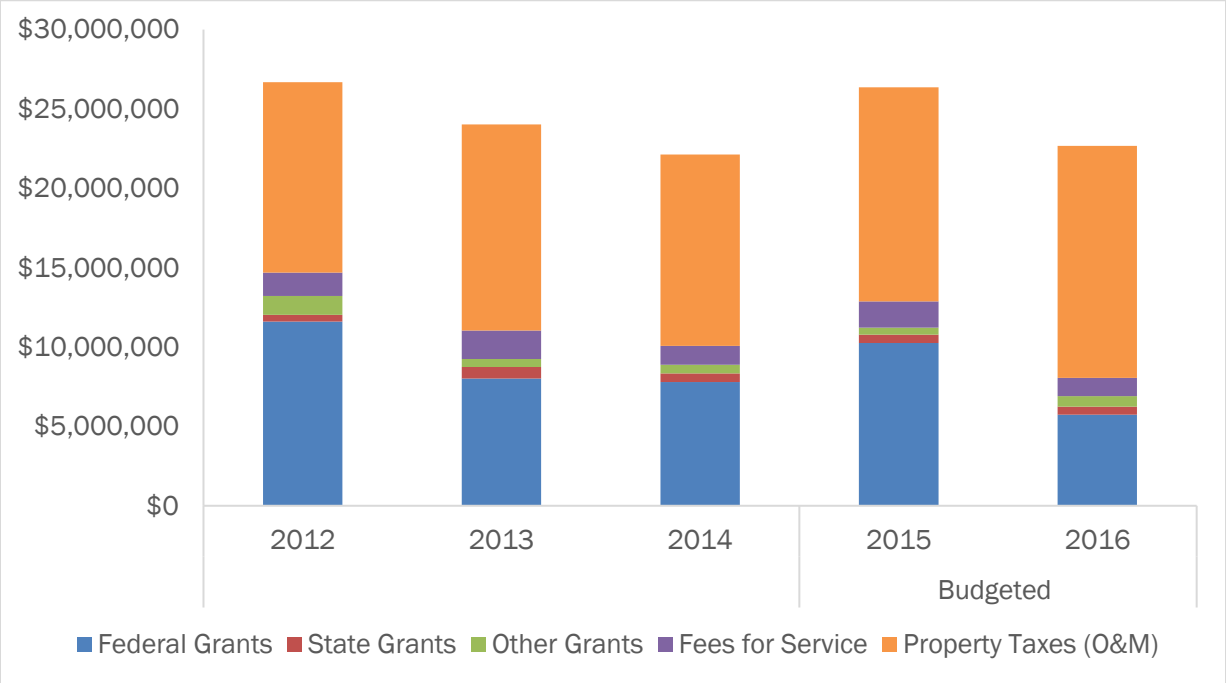
1. Control the spread of communicable disease
2. Reduce the number of children with lead poisoning
3. Reduce injuries, disabilities, and deaths due to violence
4. Prevent the spread of food borne disease
5. Reduce the infant mortality rate
6. Improve immunization compliance within Milwaukee Public Schools

MHD's ability to expand its priorities to include obesity prevention will be linked to the resources it receives not only from City taxpayers (local property tax is the largest source of revenue in MHD's general operating budget), but also from its other various funding sources. Those include federal and state tax dollars, as well as fees for service, grants from nongovernment sources, and donations.

The MHD budget is organized so that funding for operations and maintenance primarily comes from property taxes, while funding for indirect costs and contracted services is tied to grant dollars from the state and federal governments. Chart 4 shows the five-year trend in total revenues broken down by source. While most funding sources have remained fairly constant over the five-year period, federal dollars have decreased.

[24] Public Policy Forum, *Between a Rock and a Hard Place,* August 2009, p.36. http://publicpolicyforum.org/research/city-milwaukees-fiscal-condition-between-rock-and-hard-place.
[25] Milwaukee Health Department 2016 Budget Summary

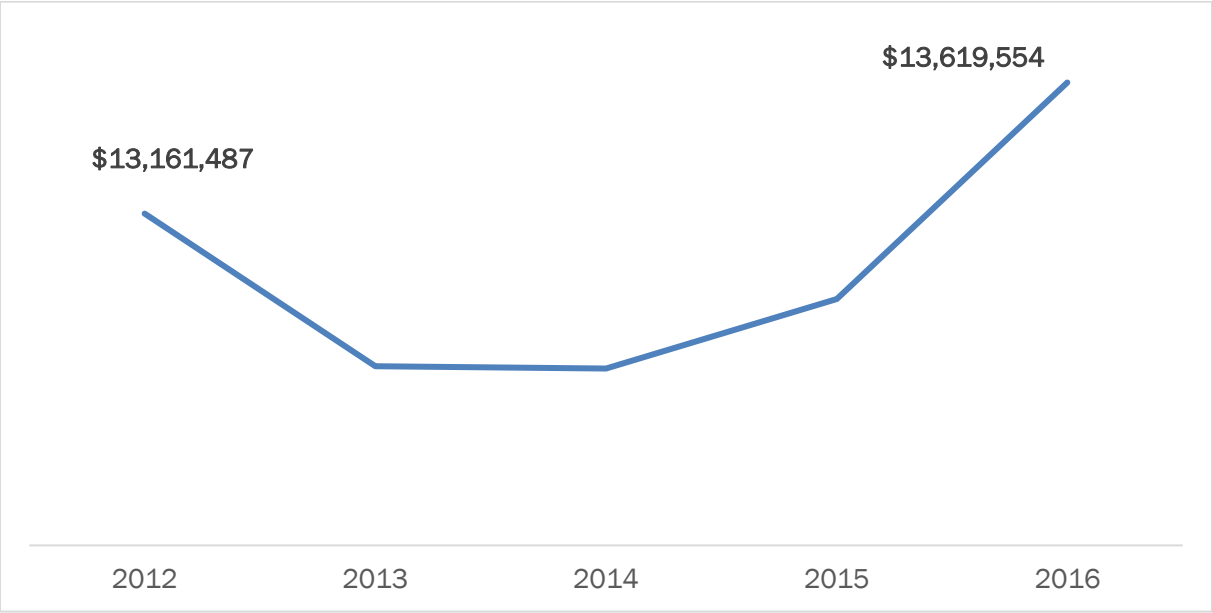
Chart 4: Milwaukee Health Department Revenues, 2012-2016



Source: Milwaukee Health Department

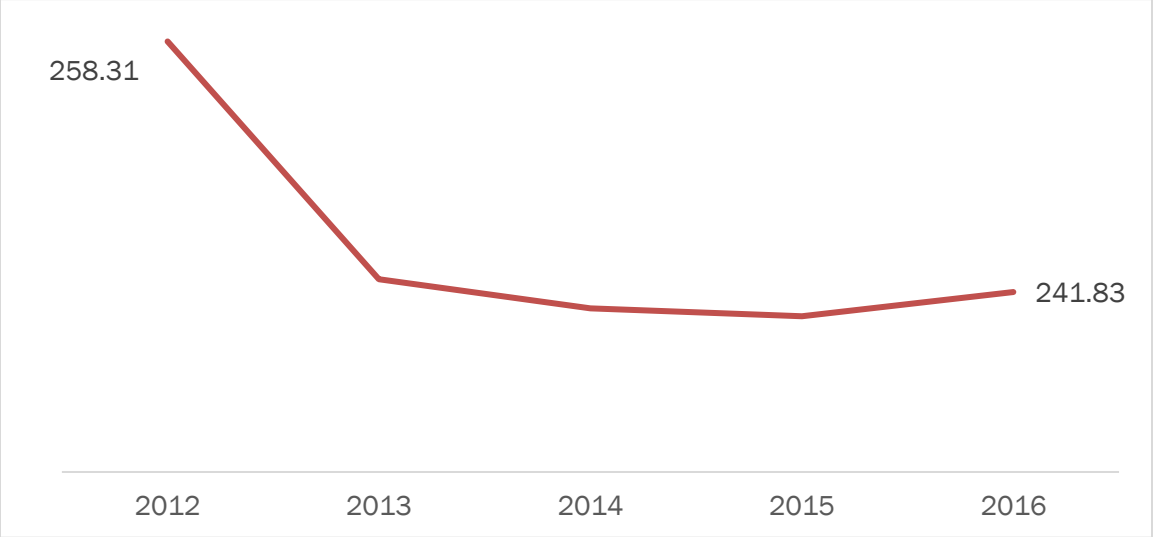
When isolating MHD's budget to include only general operations that are financed mostly by local revenue sources, a five-year fiscal trend analysis shows that funding and capacity have not changed dramatically. MHD's 2016 adopted operating budget is $13.6 million, which works out to $23.12 per capita. Since 2012, MHD's budgeted operational expenditures have increased by 3% (about 1.5 percentage points below the rate of inflation) while its staffing level has decreased by 7%, as shown in **Chart 5** and **Chart 6**.

Chart 5: Milwaukee Health Department Operating Budgets, 2012-2016



Source: City of Milwaukee City Budgets

Chart 6: Milwaukee Health Department Budgeted FTEs, 2012-2016 (All Funding Sources)



Source: City of Milwaukee City Budgets

MHD's federal funding is based on a mixture of population-based formula grant programs (often based on disease rates or other incidence formulas) and a series of grants for which MHD often must compete with other cities. A major source of federal funding for public health is the CDC. While we were not able to find a city-by-city comparison, Wisconsin ranks 49th among states in CDC funding at $16.40 per capita.

Within the CDC funding is the Prevention and Public Health Fund (PPHF), the most important source of support for proven strategies to improve health outcomes. This is a more recent federal funding source established under the Patient Protection and Affordable Care Act of 2010. It is the nation's first mandatory funding stream dedicated to improving the nation's public health system. By law, the Prevention Fund must be used "to provide for expanded and sustained national investment in prevention and public health programs to improve health and help restrain the rate of growth in private and public health care costs." In 2014, Wisconsin received approximately $12.3 million in PPHF funding.

Meanwhile, the largest form of federal funding for public health is the Health Resources and Services Administration (HRSA). Again, while we do not have city data, Wisconsin ranks 48th among the 50 states in HRSA per capita funding, receiving $17.17 per person.[26]

With regard to state funding, Wisconsin ranks 41st in the nation for the size of its public health budget, designating $15.10 per capita to public health. The median state public health budget is $33.50 per capita.

[26] Hamburg, Richard, Laura M. Segal, and Alejandra Martin. 2016. Investing in America's Health: A State-by-State Look at Public Health Funding and Key Health Facts Trust for America's Health

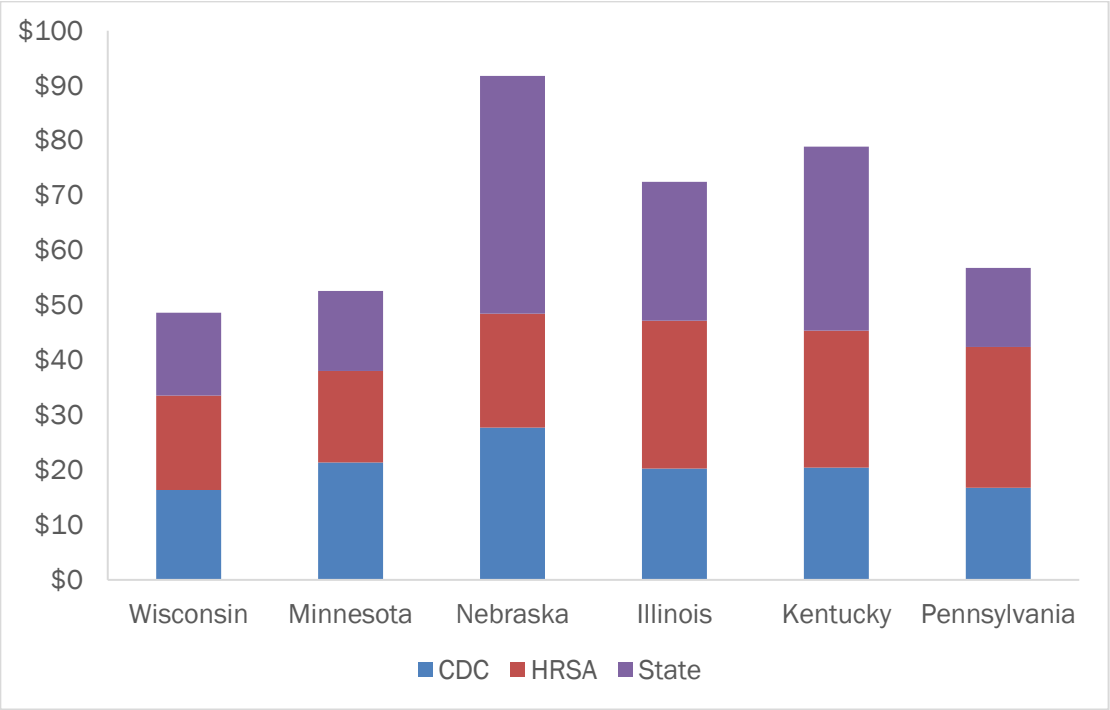
Table 1 and

Chart 7 compare Wisconsin with other states with regard to major federal funding sources and state funding for public health on a per capita basis. The states were selected to coincide with the peer city case studies used later in this report. When compared to these peers, Wisconsin ranks last in total per capita federal/state funding for public health.

Table 1: Rankings of selected states for federal and state public health funding received, 2015 (per capita funding amounts in parentheses).

Source	Wisconsin	Minnesota	Nebraska	Illinois	Kentucky	Pennsylvania
CDC	49 ($16.40)	31 ($21.40)	11 ($27.71)	35 ($20.27)	34 ($20.46)	46 ($16.76)
HRSA	48 ($17.17)	49 ($16.64)	43 ($20.77)	28 ($26.92)	33 ($24.93)	31 ($25.66)
State	41 ($15.10)	42 ($14.60)	19 ($43.30)	32 ($25.30)	26 ($33.50)	43 ($14.40)

Chart 7: Primary sources of per capita public health funding in selected states, 2015



Source: Trust for America's Health and Robert Wood Johnson Foundation

A few caveats are in order when considering this information. First, state-level comparisons involving federal and state allocations do not allow us to draw firm conclusions on where Milwaukee stands when compared to city peers in terms of public health spending. These comparisons, however, can be an important indicator of the financial capacity of city health departments given the heavy reliance that most have on state and federal funding.

Also, it is important to note that comparisons of public health funding across states (and cities) may be misleading, as different states and municipalities may define the public health function differently. For example, health departments can provide varied functions, from food inspections to

prevention. In some states and cities, different governmental departments may perform some of the duties performed by public health departments in other states and cities. Nevertheless, the numbers presented here suggest that municipal public health departments in Wisconsin may not have as much capacity to support public health efforts to combat obesity as those in other states that are facing similar obesity challenges.

Overall, given its wide range of public health demands and stagnant public revenue sources, MHD's ability to launch comprehensive obesity prevention strategies likely will be difficult to achieve barring an influx of outside, dedicated grant funding. For this reason, it is important to look at the resources that exist in Milwaukee outside of MHD and the extent to which they might coalesce to build a comprehensive obesity prevention effort. We provide such an overview in the next section of this report.

Leveraging Milwaukee's Existing Resources for Obesity Prevention

A growing body of research has identified the importance of policy, systems, and environmental changes – along with specific obesity prevention programs – to comprehensively address obesity.[27] Policy, systems and environmental changes can make healthy choices practical and available to all community members, though they also need to be accompanied by programming. Programming can come in the form of public service messages, trainings, and education. As an example, building infrastructure to provide safer routes for students bicycling or walking to school could be accompanied by bicycle safety workshops for children.

In this section, we highlight local examples of how these types of changes are occurring in Milwaukee. We selected these projects based on findings from key stakeholder interviews. Additionally, a more comprehensive list of non-categorized activities occurring within the city is provided. Most of these activities are not specifically designed to address obesity; however, if framed correctly, each could play a role in a comprehensive obesity prevention effort.

Policy

Mayor's HOME GR/OWN Initiative
Location: Primarily North Side

Launched in 2013, HOME GR/OWN Milwaukee is an initiative of the Milwaukee Mayor and is housed within the City's Environmental Collaboration Office. Its purpose is to increase access to fruits and vegetables with the following mission:

- Transform targeted neighborhoods by concentrating City and partner resources, catalyzing new, healthy food access and green space developments.
- Streamline processes, permitting, and ordinances to make it easier to grow and distribute healthy food, start new food-based businesses, and improve vacant lots.
- Work within Milwaukee's community food system to link local growers to local markets, increase urban food-based businesses, and improve vacant lots.

[27] Lyn, Rodney, Semra Aytur, Tobey A Davis, Amy A Eyler, Kelly R Evenson, Jamie F Chriqui, Angie L Cradock, Karin Valentine Goins, Jill Litt, and Ross C Brownson. 2013. Policy, systems, and environmental approaches for obesity prevention: A framework to inform local and state action. *Journal of Public Health Management and Practice* 19:S23-S33

While food access is the primary goal of HOME GR/OWN, it is built on a model that addresses multiple contributors to obesity, including crime and poverty. For example, HOME GR/OWN is a part of the Mayor's Strong Neighborhoods Investment Plan,[28] which leverages city funding to intensify the marketing of salvageable tax-foreclosed homes, raze those that are beyond repair, and fund vacant-lot rehabilitation. HOME GR/OWN helps neighborhood associations, nonprofits, and social entrepreneurs turn vacant properties into pieces of a new distributed food system. Thus far, the initiative has worked on 27 vacant lots (of which 26 are used for growing food) and planted 230 trees.

HOME GR/OWN leverages existing resources and social capital already present in the neighborhoods targeted for revitalization. The program has consistently focused on the North Avenue corridor and the Lindsay Heights neighborhood in the 53205 ZIP code, which has been identified by the Milwaukee Health Report as a low SES ZIP code. This neighborhood already contains a rich network of funders and nonprofits that can collaborate with the City to emphasize the mission of HOMEGR/OWN.

Gillespie Park on N. 14th Street and W. Wright Street on Milwaukee's North Side

HOMEGR/OWN also coordinates the activities of several City departments and agencies to lower implementation costs and streamline City policies across departments. The goal of these efforts is to catalyze food systems change in the Milwaukee neighborhoods with the greatest demand for access to healthy food. The departments and activities involved include the following:

- Office of the Mayor: Coordination with Strong Neighborhoods Plan
- Department of City Development: City-owned real estate, site planning, and food policy
- Department of Public Works: Forestry services, composting, lot maintenance
- Milwaukee Health Department: Food safety, licensing, and ordinance revisions
- Department of Neighborhood Services: Permits, and ordinance revisions
- Community Development Grants Administration: Support for HOMEGR/OWN staffing

HOMEGR/OWN collaborates with more than 35 community partners including the Greater Milwaukee Foundation, Growing Power, Walnut Way, Outpost Natural Foods, Center for Resilient Cities, Milwaukee Food Council, the Institute for Urban Agriculture and Nutrition, and UWM School of Architecture and Urban Planning.

[28] "Strong Neighborhoods". PlanCity of Milwaukee. http://city.milwaukee.gov/Directory/mayor/Initiatives/SNP.htm#.VzHtRGOskpJ (accessed May 10, 2016)

Systems

The Milwaukee Childhood Obesity Prevention Project
Location: Citywide

The Milwaukee Childhood Obesity Prevention Project (MCOPP) is an inclusive coalition with the goal of reducing childhood obesity in Milwaukee through environmental and organizational policy changes that promote healthy eating and active living. The United Neighborhood Centers of Milwaukee (UNCOM) is the lead MCOPP agency, with the Medical College of Wisconsin (MCW) as the academic partner. UNCOM is a collaborative group of eight agencies serving Milwaukee's most economically distressed areas. MCW is working collaboratively with these community centers to shape policy and programming aimed at healthy eating and physical activity.

MCOPP began with funding from MCW's Healthier Wisconsin Partnership Program. The project is now being expanded through funding from the Robert Wood Johnson Foundation. Its goals are to:

1. Promote community change strategies for healthy eating and active living though an inclusive coalition.
2. Adopt healthy food and beverage policy and environment change strategies.
3. Adopt land use policy and environment change strategies focused on healthy eating and active living within the area surrounding each agency.
4. Adopt active living policy and environment change strategies for youth and staff.
5. Support the use of evidence-based curriculum and provide evidence-based professional development for staff.

One example of an MCOPP neighborhood project involves the Agape Community Center, which offers a dinner program that serves more than 14,500 adults and children annually. The project encouraged the Center to change its menu to emphasize fresh fruits and vegetables, salads, lean proteins, and whole grains. Vending machines with unhealthy snacks and beverages were removed and a community garden was planted.

Agape Teaching Garden

MCOPP partnerships and programs have expanded to involve the resources and expertise of many other organizations, including: Milwaukee Public Schools, Children's Health Education Center, Milwaukee Area Technical College, Badgerland Striders, MHD, Boys and Girls Clubs, Milwaukee Bicycle Works, Milwaukee County Parks, Walnut Way, UW School of Medicine and Public Health, Sixteenth Street Community Health Center, YMCAs of Greater Milwaukee, Planning Council, Playworks Milwaukee, Zilber Initiative, Y-Eat Right, Active Across America, Marquette University, and the Wisconsin Milk Marketing Board.

Milwaukee Public Schools
Location: Citywide

Milwaukee Public Schools' (MPS) Student Wellness and Prevention focuses on health and physical education within the Milwaukee public school system. MPS uses the nationally recognized SPARK curriculum for grades K-8. This curriculum focuses on using a variety of activities to engage students and promote physical activity in and out of school.

MPS' physical education at the high school level encourages students to develop healthy habits that they will use every day for the rest of their lives. Within this curriculum students learn how to analyze influences, access accurate health information, use positive communication skills, make healthy decisions, set goals, practice healthy/safe behaviors, and advocate for the health of themselves and those around them.

In addition to the physical education curriculum, MPS has put a strong emphasis on "brain breaks" in the classroom. Brain breaks are designed to integrate physical activity into everyday classroom activities. They can take many forms. One example is instant recess, which is an evidence-based model designed to improve health and learning that involves carefully developed 5-10 minute physical activity breaks integrated into the school day.

Environmental

Path to Platinum
Location: Citywide

"Path to Platinum" is an effort to improve bicycling in Milwaukee. The League of American Bicyclists recently deemed Milwaukee a bronze-level Bicycle Friendly Community. "Path to Platinum" reflects the goal of being recognized as a platinum-level community by the League. This initiative is reaching out to neighborhoods and organizations throughout Milwaukee, including places that have had little involvement in bicycle advocacy in the past, and is bringing groups together to talk about how bicycling can be a path to health, public safety, prosperity, and independence for all neighborhoods in Milwaukee.

Path to Platinum is building upon existing efforts among government, nonprofit, and private sector groups to improve bicycling and pedestrian infrastructure in Milwaukee. The City of Milwaukee currently operates under a Complete Streets approach with a Complete Streets Policy currently under development. This approach is targeted toward major capital construction projects regardless of location or neighborhood. Additionally, the City reviews its standard maintenance paving projects to understand what changes are necessary to improve bicycling conditions when implementing these projects.

Fondy Food Center
Location: Primarily North Side

As previously noted, Milwaukee's North Side is disproportionately affected by poverty and diet-related diseases such as obesity, diabetes, and heart disease. A growing body of research has established that farmers markets are associated with increased consumption of fruits and

vegetables. Yet, nationally, farmers markets only make up 0.01% of total national Supplemental Nutrition Assistance (SNAP) electronic benefit transfer (EBT) sales. Additionally, a majority of markets that do accept SNAP/EBT only have a small number of sales to low-income consumers using SNAP/EBT.[29]

The Fondy Food Center was created to ensure a supply of healthy food to Milwaukee's North Side residents. To do this, the center runs various programs, including the following:

- Fondy Farmers Market: This is Milwaukee's largest and most diverse farmers market and the springboard for the Center's healthy food efforts. It is an open-air market with more than 30 producers selling local fruits and vegetables from May through November. In 2015, more than 51,000 people visited the market, primarily drawing from Milwaukee's North Side.

  More than 54% of families in the neighborhood in which the Fondy Food Market is located receive SNAP benefits. The market was the first in Wisconsin to accept SNAP/EBT benefits and the only farmers market in Wisconsin to provide a dollar-for-dollar match to market customers using their federal nutrition benefits through a SNAP Market Match & WIC farmers market nutrition program. Each year, fundraising dollars are committed to support the Match. Fondy's SNAP/EBT sales reached over $57,000 in 2015, compared to the nationwide average of $4,628 per market authorized to accept SNAP/EBT.

- Fondy Market @ Schlitz Park: Fondy Food Center started the Fondy Farmers Market at Schlitz Park in Downtown Milwaukee in 2015 as a way to create additional economic opportunity for small farmers and to bring fresh, local food to another part of the city. Fondy Market @ Schlitz Park is open every Tuesday from 11 am – 2 pm, June through October.

- Fondy Farm: The Fondy Farm Project was established in 2010 to support farmers selling at the Fondy Farmers Market. The Fondy Farm offers affordable, long-term leases on quality land as well as support with irrigation, greenhouses, tractors, and technical and business assistance. Supported by grants from the US Department of Agriculture, the Ceres Foundation, the Brico Fund, individual donations, and annual farm income, this farm ensures the continued supply of sustainably grown, local produce to neighborhoods with little access to healthy food.

  Fondy Farm supports primarily low income, immigrant Hmong farmers but also provides programs for beginning farmers. Through innovative collaborations with Alice's Garden and Walnut Way Conservation Corp, Fondy Farm is training young people from Milwaukee' s North side who are interested in exploring careers in organic farming and food production/marketing.

[29] Leone, Lucia A, Diane Beth, Scott B Ickes, Kathleen MacGuire, Erica Nelson, Robert Andrew Smith, Deborah F Tate, and Alice S Ammerman. 2012. Attitudes toward fruit and vegetable consumption and farmers' market usage among low-income north carolinians. *Journal of Hunger & Environmental Nutrition* 7 (1): 64–76

Program

Sixteenth Street Community Health Center
Location: Near South Side

About 84% of the patients at the Sixteenth Street Community Health Center (SSCHC) on Milwaukee's south side are Hispanic. Of these patients, 77% of adults are either obese or overweight and frequently struggle with related conditions, like diabetes.[30] Consequently, in 2010, SSCHC initiated a Healthy Choices Program[31] that educates residents about healthy eating and physical activity. Since then, the Healthy Choices Program has impacted over 500 families through its 12-week health education program, which is specifically tailored for adults and children respecting their cultural background as well as their age and language of preference. After years of successful results in terms of behavioral changes leading to BMI reductions, the Healthy Choices bilingual curriculum in nutrition, cooking, physical activity, and stress management has become a model that can be replicated by other organizations.

Some graduates of the Healthy Choices program are invited to be a part of *Latinos por la Salud*, a community health advocacy group with the mission of expanding health education and increasing healthy options in the community. Since the initiative started in 2012, more than 40 men and women have been trained and are currently leading or actively participating in several community projects, such as:

- The Community Health Needs Assessment
- Walkability and Bikeability Assessments
- Healthy Grocery Stores Campaign
- Annual Southside Bicycle Day
- The Healthy Latino Schools Initiative
- The Walking/Exercise Club and the Bicycle Club
- Nutrition and cooking classes in churches, schools, health fairs and farmers markets

The Healthy Choices Program and Latinos por la Salud work with thousands of adults and children every year with the goal of improving the nutrition and physical activity environment and gradually creating a new culture of healthy eating and active living.

Walnut Way Conservation Corps
Location: Northwest Side

Walnut Way Conservation Corps is a nonprofit neighborhood organization founded in 2000 and dedicated to urban revitalization. Walnut Way residents and volunteers have developed numerous urban-ecology based initiatives, including creating and managing multiple high-production community gardens, successfully selling garden produce, conducting ongoing gardening and

[30] *Latino Group Works to Add Healthier Foods at Stores in Milwaukee Neighborhood.* Salud America via Community Commons. http://www.communitycommons.org/groups/salud-america/heroes/latino-group-works-to-add-healthier-foods-at-stores-in-milwaukee-neighborhood/ (accessed May 17, 2016)
[31] *Healthy Choices Program.* Sixteenth Street Community Health Center. http://sschc.org/health-community/healthy-choices-program/ (accessed May 17, 2016)

nutrition programs for youth and adults, and establishing a small shade-tree nursery to expand the urban tree canopy.

Walnut Way conducts many programs that can play a role in reducing obesity in Milwaukee. They include the following:

- **Wellness Appointments and Classes:** Walnut Way provides weekly health and wellness classes and programs including Massage, Yoga, Exercise, Reiki, and Dance Classes.
- **Urban Agriculture:** Walnut Way's campus demonstrates innovations in urban agriculture, where residents have transformed vacant lots into production gardens and orchards. The group also has constructed hoop houses and rainwater storage systems and worked on composting systems and apiaries. Food produced on the campus is shared with neighbors, sold at local markets, restaurants, and grocery stores, and transformed into value-added products by youth interns.
- **Farmers Markets:** Walnut Way sells produce and canned goods during the growing season at the Fondy Farmers Market, Milwaukee City Hall, Newaukee Night Market, Body and Soul Healing Arts Center, and Walnut Way Annual Harvest Day Festival.
- **The Innovations and Wellness Commons:** The Commons is a commercial catalytic development project that intends to restore the North Avenue business corridor to its historically vibrant state. The Commons will add 15,000 sq. ft. of mixed-use retail and commercial building space and bring more than 45 jobs and $6 million in direct investment to the Lindsay Heights neighborhood. Phase 1 of the Commons is open, housing The Juice Kitchen, Outpost Natural Foods, Fondy Food Center Offices, and the Milwaukee Center for Independence's commercial kitchen.

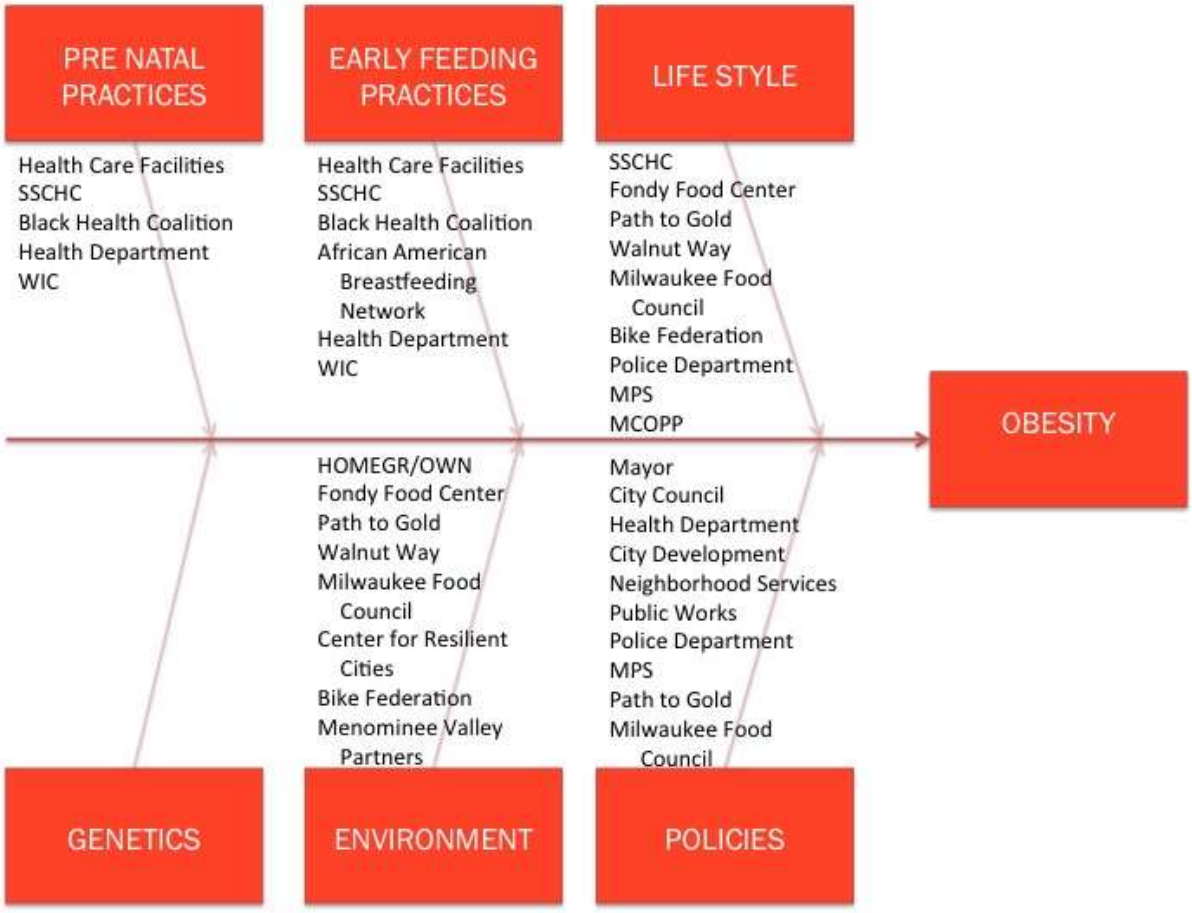
Walnut Way has established strong working relationships with Growing Power, Keep Greater Milwaukee Beautiful, City of Milwaukee Economic Development Corp, the Department of City Development, Madison Area Technical College's Horticultural Program, University of Wisconsin-Extension, University of Wisconsin-Milwaukee, Medical College of Wisconsin, University of Wisconsin School of Medicine and Public Health, and the Wisconsin Housing and Economic Development Authority.

Appendix A shows a list of additional organizations and initiatives across Milwaukee that play an important role in obesity prevention. While most of these organizations do not cite obesity prevention as a primary objective, their focus on healthy foods and physical activity play an important role in obesity prevention.

All of the above-mentioned initiatives and those listed in **Appendix A** are only a small percentage of the assets that Milwaukee can leverage to take a collaborative and comprehensive approach to obesity prevention. The Center for Urban Population Health (CUPH) is developing a more extensive catalogue of Milwaukee organizations that can contribute to obesity prevention. Through social network analysis, CUPH hopes to show the realized or unrealized connections between organizations and to demonstrate how collaboration could have a multiplicative effect on obesity prevention.

Even with the incomplete list of assets identified above, we can look back at the fishbone diagram showing the root causes of childhood obesity (**Chart 1**) presented early in this report and consider how these organizations and initiatives can begin to address the multiple pathways to obesity, as shown in **Chart 8**.

Chart 8: Fishbone diagram of the root causes of obesity and some of Milwaukee's assets for addressing these root causes.



Peer City Case Studies

Milwaukee is not the only city facing obesity challenges. With the U.S. obesity rate continuing to increase, cities across the country are seeking ways to navigate funding challenges and political struggles and build trust among residents to tackle the obesity epidemic. Additionally, cities are recognizing the interconnectedness of segregation, poverty, violence, and obesity. As a result, policymakers in several jurisdictions are enacting policies and setting funding priorities designed to improve access to healthier food and beverage options while also improving active transportation infrastructure.

This section provides case studies of obesity prevention efforts in five U.S. cities. These cities were selected based on several factors that make them comparable or relevant to Milwaukee, including size (Minneapolis, Omaha, Louisville), demographic makeup (Philadelphia), and geographic proximity (Chicago, Minneapolis). **Table 2** shows obesity rates and important demographic characteristics of the five cities and Milwaukee.

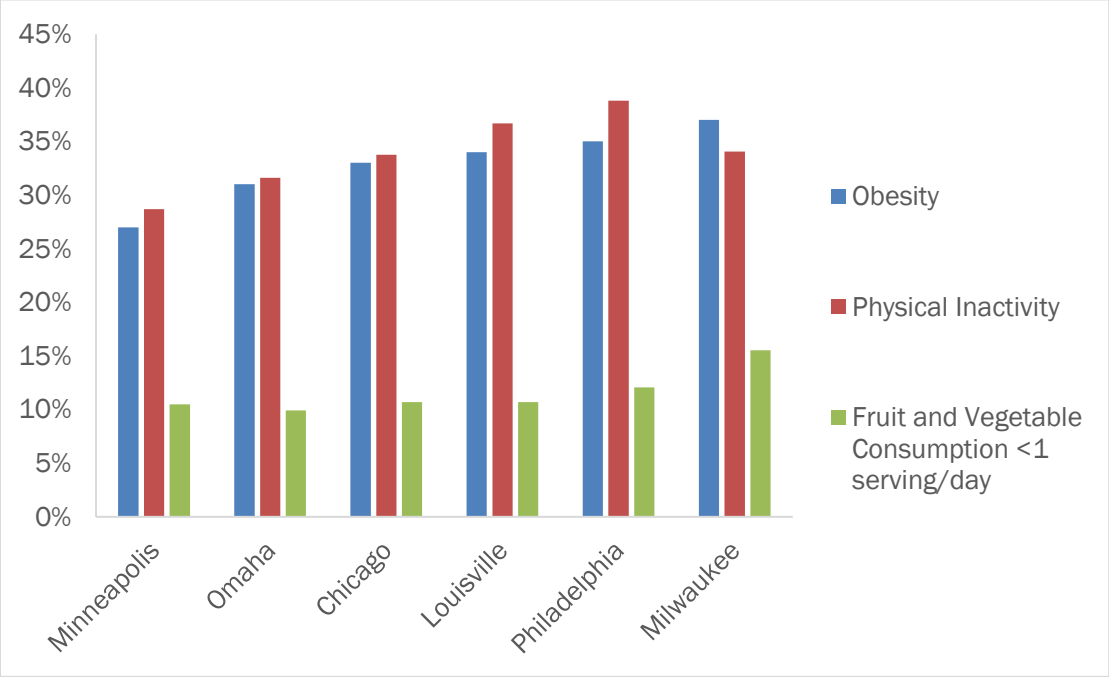
Table 2: Selected statistics from Milwaukee's peer cities.

City	Obesity Rate	City Population	Poverty Rate	% Black	% Hispanic
Minneapolis	28%	394,424	22.6%	17.85%	9.8%
Omaha	31%	435,454	16.8%	12.8%	13.3%
Chicago	33%	2,712,608	22.7%	31.9%	28.9%
Louisville	34%	605,762	18.4%	22.6%	4.6%
Philadelphia	35%	1,546,920	26.7%	43.0%	13.0%
Milwaukee	37%	589,078	29.4%	39.3%	17.7%

Sources: 2013 Milwaukee Health Report, Policy Map, CDC BRFSS, and2014 American Community Survey

As shown in **Chart 9**, each of the selected cities has faced similar challenges with regard to obesity, yet each has constructed strategies that may provide important insights for Milwaukee policymakers. For each case study, we again provide examples of initiatives that are categorized as policy, systems, and environmental changes, as well as programs. **Appendix B** provides additional activities for each city not highlighted in the following case studies.

Chart 9: Comparison of obesity, physical inactivity, and fruit/vegetable consumption among Milwaukee's peer cities.



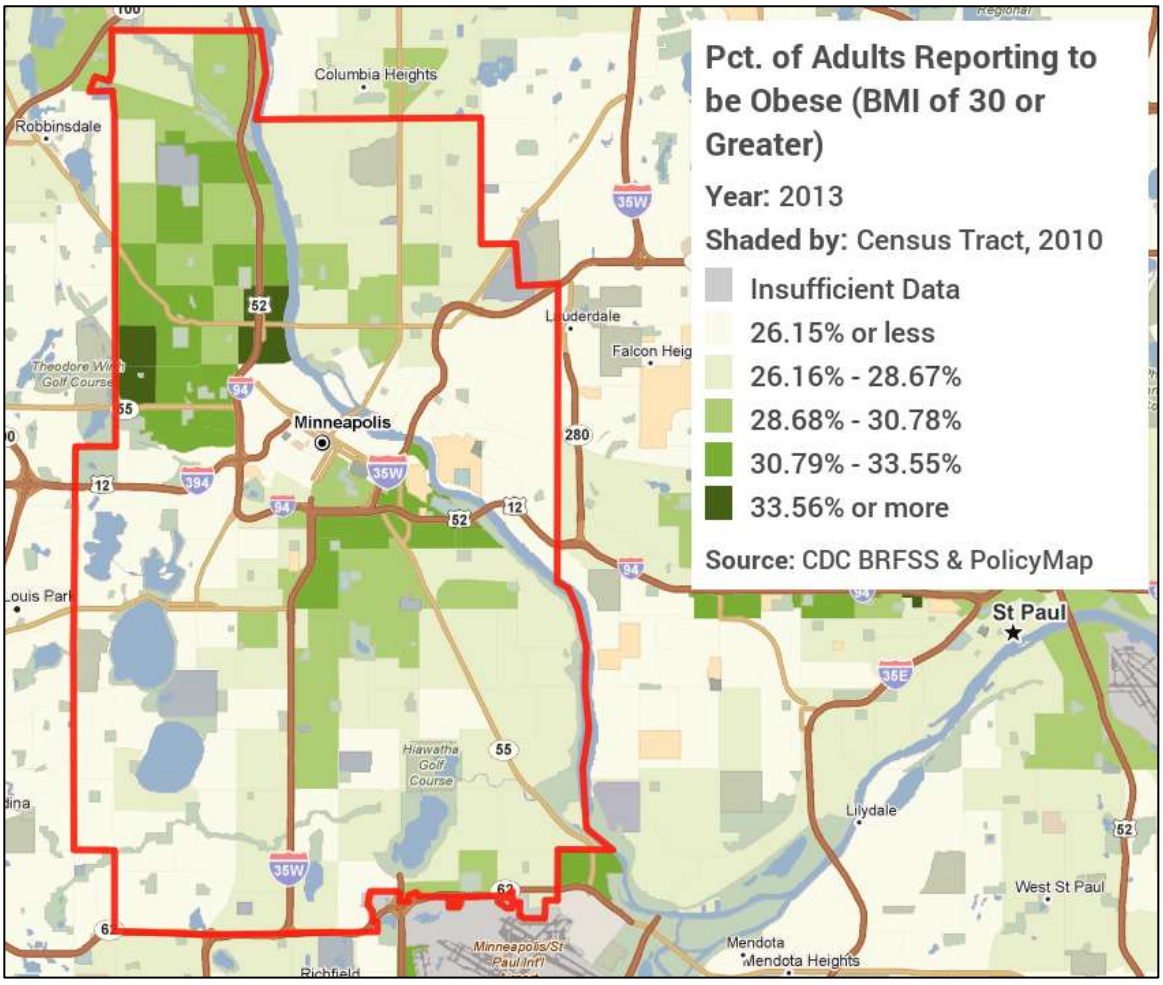
Sources: PolicyMap, CDC BRFSS, & U.S. Department of Agriculture

Minneapolis

Challenges

More than one in four adults in Minneapolis is obese (**Map 6**) and 23.1% of public school students are overweight or obese. While Minneapolis is much more racially integrated than Milwaukee, obesity is similarly more prevalent among Black and Hispanic residents on the north side of the city. North Minneapolis has significant health disparities, including some of the highest rates of chronic diseases linked to obesity in Minneapolis. Residents of that area of the city also have limited access to grocery stores with fresh fruits and vegetables. Many barriers related to access and cost exist, preventing many residents from increasing physical activity levels and purchasing healthy, fresh foods.

Map 6: Estimated percentage of Minneapolis adults reporting to be obese in 2013



Activities to Address Challenges

The Minneapolis Health Department (MHD) determined that the nature of obesity prevention requires a community-wide effort in multiple settings that could include city streets and sidewalks, food vendors and restaurants, schools, workplaces, homes, and health care settings. This approach was chosen for its potential to influence individuals from diverse directions and to reach disparate groups within the community through the effects of multiple complimentary strategies.

Minneapolis has leveraged funding from federal, state, and local sources to take a multi-setting approach. MHD also has recognized that a limited public health budget and capacity challenges within the health department make it necessary to engage other partners in the public sector as well as members of the private and nonprofit sectors. Those include the Mayor's Office, City Council, the Park and Recreation Board, Public Schools, the Urban League, Allina Hospital System, the Bike Walk Ambassadors Program, the Division of Indian Work, the Hennepin County Public Health Department, the Little Earth of United Tribes, and MIGIZI Communications, among others.

Minneapolis Statistics

Obesity Rate: 28%

Poverty Rate: 22.6%

Nutrition and Physical Activity
Only 20.3% of adults eat the recommended daily servings of fruits and vegetables. Approximately 29% of Minneapolis residents are physically inactive with higher levels of physical activity concentrated in the northwest and near south sides of the city.

Public Health Funding
Minneapolis spends $50.71 per capita on public health.

Minnesota public health funding national rankings:
CDC: 31st
HRSA: 49th
State: 42nd

Policy

Staple Foods Ordinance

In 2008, Minneapolis became the first city in the nation to use licensing to regulate nutritional standards in food stores. The Staple Foods Ordinance[32] amends city codes to require that all small food stores and grocery stores (with some exceptions) stock a minimum number of perishable and non-perishable "staple foods" from the following categories: vegetables and fruits; meat, poultry, fish and/or vegetable proteins; bread and/or cereal; and dairy products and/or substitutes.

Interestingly, the Staple Foods Ordinance, while passed in part as an effort to introduce healthier foods into communities, was principally a crime prevention measure. The main motivation for passing the legislation was to protect public safety, as small convenience stores that sell mostly alcohol, tobacco, and junk food can promote neighborhood crime.

The city's Regulatory Services Department is responsible for inspecting stores for compliance with health and safety laws and issuing business licenses. License inspectors were trained on additional requirements created by the new ordinance and were charged with visiting each store roughly three

[32] Minneapolis Code of Ordinances, Title 10, Ch 203

times a year. Through the city's Healthy Corner Store Program, the health department provides additional support and technical assistance to store owners to increase their capacity to sell healthy foods and comply with the ordinance.

While this can be considered an example of a policy change option, compliance across all stores is a challenge. Health department staff and license inspectors have observed that support is very important to help owners comply with the law. Most stores need help with stocking produce and marketing and business planning. The city is exploring how it can further support healthy corner stores as a sustainable, profitable business model.

Systems

Healthy Living Minneapolis

The *Healthy Living* campaign is a community-driven approach to healthy living. Community-driven healthy living is built on the idea that people are experts in their own communities and that community change often works best when community members take the lead. The Minneapolis Health Department supports community-driven change in two ways:

1. **Healthy Living Grantees:** Neighborhood-based and culturally-based communities carry out projects to make it easier for residents to eat healthy foods and exercise.

2. **Resources and Education:** The Health Department assists groups to carry out a healthy living project. Examples include helping groups to adopt healthy food policies or providing connections to biking and walking resources.

Since 2012, MHD has worked with at least five Healthy Living grantees. Those include neighborhood associations and nonprofits serving the large immigrant population in Minneapolis. Together, these grantees have implemented several initiatives:

- **Healthy eating:** Community-based grantees have made community garden plots available for free to families and increased access to gardening resources. They have recruited corner stores to the Healthy Corner Store Program and promoted these stores to residents. They also have created a system at a farmers market to collect produce donations for food shelves and have connected residents to cooking classes.
- **Physical activity**: The community-based grantees have improved park programming for immigrants who live nearby and have coordinated the creation of a bike library. They also have connected residents to a low-cost fitness center. Additionally, they have supported Safe Routes to School efforts at nearby schools, advocated for better support for biking and walking in development projects, and connected new cyclists to biking programs.
- **Communications and coordination efforts**: The community-based grantees have promoted healthy living opportunities via community newspapers, websites, local TV, events, and asset maps. In addition, they have created networks of residents and community organizations to work together to improve healthy living environments.

Environmental

New Bike-share Kiosks in North Minneapolis

Minneapolis is increasing physical activity through the expansion of bike-share kiosks to underserved areas of the city. To date, the city's *Nice Ride* bike-share program has added eight new kiosks in North Minneapolis for a total of 11 kiosks in that part of the city. While North Minneapolis does not enjoy the same level of bike access and infrastructure as other areas of Minneapolis, this effort is increasing transportation options for residents and is contributing to the area's biking and walking culture. Over a three-month period, residents took more than 1,800 rides from new bike kiosks.[33]

Programming

Safe Routes to School

In 2006, the Minneapolis mayor initiated a Safe Routes to School strategic planning process with various City departments (Public Works, Health, and Police) and Minneapolis Public Schools (MPS). That process generated recommendations for increasing biking and walking to school and established a strong foundation for City and school district collaboration.

The City and MPS have worked at various levels to support Safe Routes to School. With CDC funding, MPS provided intensive technical assistance to 10 schools (eight elementary, one middle, and one high school) to help assess existing Safe Routes practices and policies and develop a customized plan for increasing biking and walking opportunities for students. CDC funding also allowed MPS to purchase two "bike fleets" (a set of 15 bikes, helmets, and locks) plus safety vests, hand-held stop signs, and other supplies to support the newly adopted Safe Routes activities at various school sites.

As a result of these efforts, Minneapolis school students have experienced new opportunities for walking and biking to school. These include "walking school buses," bike/walk to school days, an expanded school safety patrol, an increased network of parents and staff championing Safe Routes to School activities, and Walking Routes for Youth Maps, which identify the safest streets for walking to and from schools.

[33] *Communities Putting Prevention to Work.* Centers for Disease Control and Prevention. http://www.cdc.gov/nccdphp/dch/programs/communitiesputtingpreventiontowork/communities/profiles/obesity-mn_minneapolis.htm (accessed June 13, 2016)

OMAHA

Challenges

Close to one in three residents of Omaha are obese. Within Douglas County – of which Omaha comprises about 86% of the population – 28.4% of youth are obese. Obesity is much more common among minority, primarily Black residents on the northeast side of the city (Map 7). Most of the east side of Omaha experiences limited access to grocery stores with fresh fruits and vegetables. Limited fruit and vegetable consumption and physical inactivity have been identified as contributors to youth obesity in Douglas County, as 96.6% of youth do not meet the Federal government's guidelines for fruit and vegetable consumption and nearly 60% of youth do not get the recommended daily amounts of physical activity.

Omaha Statistics

Obesity Rate: 31%

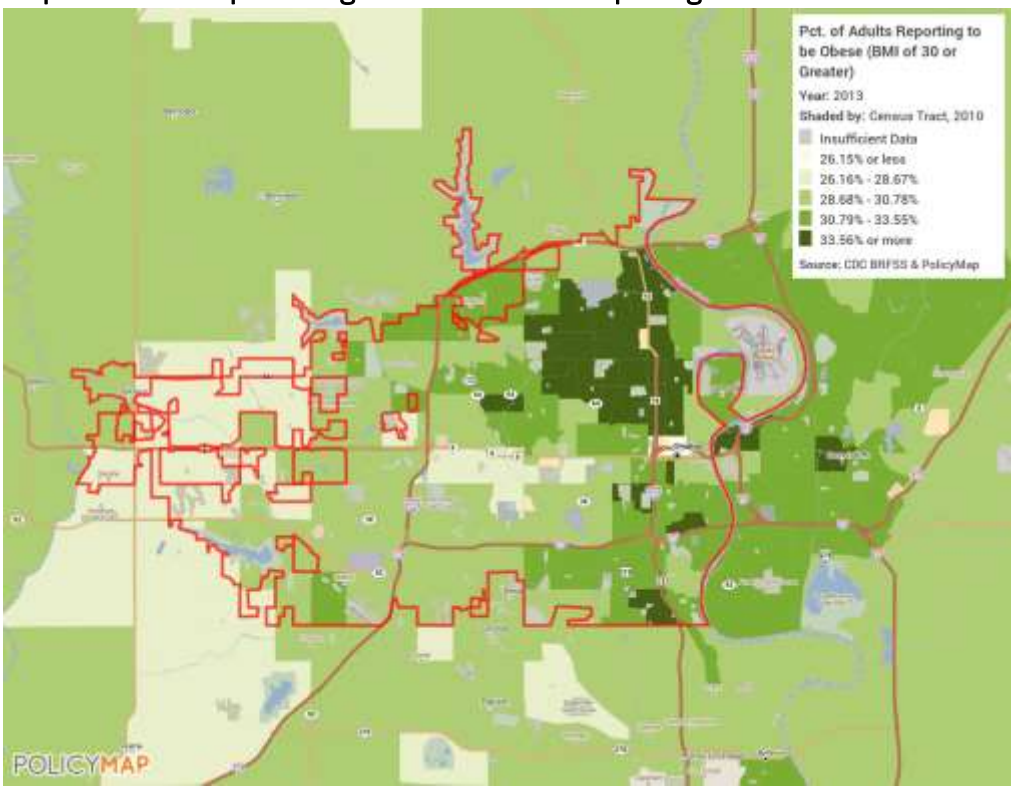
Poverty Rate: 16.8%

Nutrition and Physical Activity
Citywide, only 14.7% of adults eat the recommended daily servings of fruits and vegetables. Approximately 31.6% of Omaha's population is physically inactive, with higher levels of physical inactivity concentrated in the northeast side of the city.

Public Health Funding
Omaha spends $33.52 per capita on public health.

Nebraska public health funding national rankings:
CDC: 11th
HRSA: 43rd
State: 19th

Map 7: Estimated percentage of Omaha adults reporting to be obese in 2013



Activities to Address Challenges

Live Well Omaha is an effort that connects multi-sector partners together to take action toward improving the health of residents. The work focuses on healthy eating and active transportation and supports the priorities of the Douglass County Community Health Improvement Plan.

An offshoot of *Live Well Omaha* is *Live Well Omaha Kids*, which works collaboratively to reduce and prevent childhood obesity in Greater Omaha through advocacy, education, policy development, and environmental change. *Live Well Omaha* is taking a holistic approach to obesity prevention through engaging multiple partners to make progress toward policy, systems, and environmental changes. Some of these partners include:

- Charles Drew Health Center
- Douglass County Health Department
- Hy-Vee grocery stores
- Midwest Dairy Council
- Nebraska Action for Healthy Kids
- Nebraska Breastfeeding Coalition
- Nebraska Department of Education
- Nebraska Department of Health and Human Services
- Omaha City Council
- Omaha Public Works Department
- Omaha Planning Department

- One World Community Health Centers
- Omaha Mayor's Office
- University of Nebraska at Lincoln Extension
- University of Nebraska at Omaha
- University of Nebraska Medical Center, College of Public Health
- Visiting Nurses Association
- YMCA of Greater Omaha

Policy

Complete Streets Policy

In August 2015, the Omaha City Council approved a Complete Streets Policy as amendments to the Transportation Element of the City of Omaha's Master Plan. A Complete Streets Policy requires that design elements to accommodate all users – including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities – be considered when building or reconstructing roads. One of the goals of the new policy is to promote active forms of transportation as a means of improving community health.

The City is fostering partnerships internally and with the State of Nebraska, public transit agencies, neighboring communities and counties, and business and school districts to develop facilities and accommodations that further the City's Complete Streets Policy and to continue such infrastructure beyond the City's borders.

The success of the City's Complete Streets initiative is being gauged using performance measures such as:

- Linear feet of new/reconstructed sidewalks
- Linear miles of new/restriped on-street bicycle facilities
- Number of new/reconstructed curb ramps
- Number of traffic calming projects approved and implemented
- Number of crosswalks and intersection improvements

This policy applies to all public and private street design, construction, and retrofit projects managed and implemented by the City and initiated after the policy adoption, except in unusual or extraordinary circumstances.

Currently, the Public Works and Planning departments and other relevant agencies are incorporating Complete Streets principles into all existing plans, manuals, checklists, decision-trees, rules, regulations, and programs. These institutional partners are reviewing current design standards for subdivisions and new roadways to ensure that they reflect the best available design standards and effectively implement Complete Streets principles in accordance with the City's new policy.

In addition, the City is encouraging professional development and training for staff on non-motorized transportation issues. The City and partner organizations are providing ongoing public information and education about Complete Streets to Omaha residents; community groups and leaders; transportation, planning, design, and engineering professionals; and the private development

community. The City plans to meet at least once a year with Metro Transit, Douglas County, the Metro Area Planning Agency, and the Nebraska Department of Roads to review Complete Streets implementation best practices and to evaluate cross-agency efforts.

Systems

Workplace Wellness

The Wellness Council of the Midlands (WELLCOM), a local nonprofit focused on workplace wellness, is coordinating an initiative called Partners for a Healthy City (PHC) that focuses on two important elements within the workplace: making healthier food options available and supporting more opportunities for physical activity. PHC is hoping to create systems change within workplaces by:

- Making water available and easily accessible
- Improving workplace stairwells and encouraging people to take the stairs
- Establishing a wellness committee
- Supporting breastfeeding in the workplace
- Starting or expanding a farm-to-institution program by partnering with local growers.

WELLCOM is providing technical assistance through community trainers. Nearly 450 organizations have implemented more than 1,000 policies to increase access to healthy food options and support physical activity and more than 100,000 employees now have workplace options to encourage healthy living as a result of this effort.

Environmental

Healthy Neighborhood Stores

The Healthy Neighborhood Stores program used data from the Douglas County Health Department to identify areas where healthy, affordable fresh food options were not available. This research identified and recruited 10 stores that had the capacity to carry healthy foods. With support from the Nebraska Grocers Association, storeowners were interviewed to better understand their business needs and educated on how to make changes to their offerings successfully. Price, placement, and promotional strategies were used to create awareness of the project and to increase customer demand for healthier options.

Examples of these strategies include competitive pricing, reward cards, and placing healthier options at eye level. Storeowners were also provided with branded, customized in-store and exterior signage advertising the availability of vegetables and fruits, whole grains, low-fat or non-fat dairy products, and lean meats.

The University of Nebraska Lincoln – Extension conducted on-site cooking demonstrations and tasting events where customers were able to sample healthy foods, learn about nutrition information and get recipes showing how to prepare healthy foods at home. This improvement in the food environment also has produced economic benefits in the form of increased sales.

Programming

Partners for Healthy Schools

Partners for Healthy Schools is a professional development program that develops school staff to create practice, policy, and built environment changes that promote healthy eating and physical activity. Some of these changes include:

- Before-school walking clubs
- Active transportation routes to help children walk or bicycle safely to schools, community centers, and libraries
- Water-friendly options for students and staff
- School gardens to help children understand the origin of healthy foods and the process of growing food
- "Grab & Go" breakfasts, which makes breakfast available for all students on their way to their classrooms
- Healthy foods at birthday parties and celebrations
- Removing loss of recess as a punishment.

These efforts reached more than 8,000 children in the 2014-15 school year.

Chicago

Challenges

One-third of Chicago residents are obese. Moreover, the Chicago public school district recently assessed 88,000 exam records of students enrolled in kindergarten, sixth grade, and ninth grade and found that the overall prevalence of obesity for the three grades was 25%. Consistent with national trends, at all three grade levels the prevalence of obesity in Hispanic and non-Hispanic Black students was higher than in non- Hispanic Whites and non-Hispanic Asian or Pacific Islanders.[34]

Geographically, obesity rates were primarily concentrated in lower-income minority neighborhoods (**Map 8**). As an example, rates were as low as 13% in students residing in Lincoln Park, where a predominantly White, higher-income population resides, and as high as 33% among those living in South Lawndale, a predominantly Hispanic, lower-income population. The low-income South Side of Chicago experiences low access to grocery stores.

Chicago Statistics

Obesity Rate: 33%

Poverty Rate: 22.7%

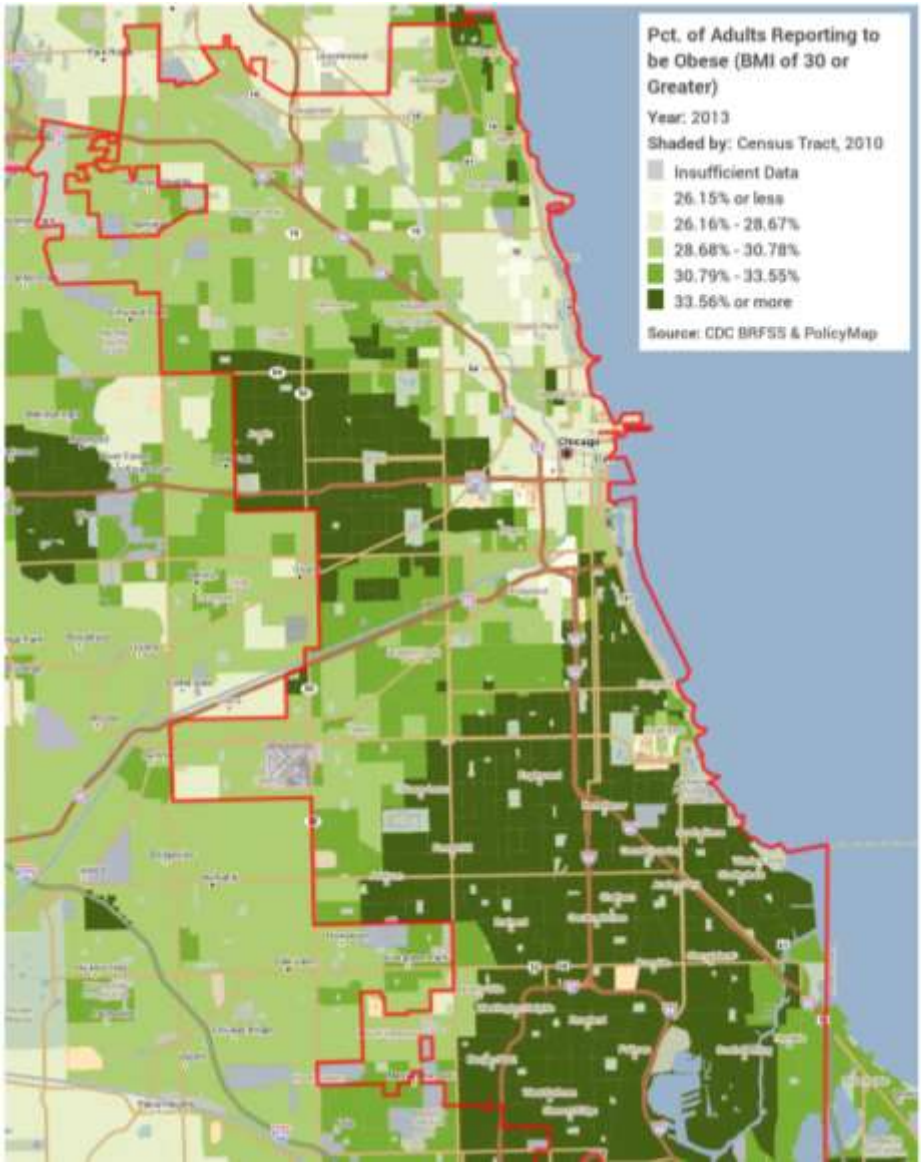
Nutrition and Physical Activity
Only 15.3% of adults eat the recommended daily servings of fruits and vegetables. Approximately 33.8% of Chicago's population is physically inactive.

Public Health Funding
Chicago spends about $57.07 per capita on public health.

Illinois public health funding national rankings:
CDC: 35th
HRSA: 33rd
State: 32nd

[34] *Healthy Chicago Transforming the Health of Our City.* 2013. Healthy Chicago Transforming the Health of Our City Overweight and Obesity among Chicago Public Schools Students, 2010-11. The City of Chicago.

Map 8: Estimated percentage of Chicago adults reporting to be obese in 2013



Activities to Address Challenges

As a response to the obesity challenges, the City of Chicago developed *Healthy Chicago,* the City's first-ever comprehensive plan for public health, in 2013. As part of that plan, the City has partnered with the Consortium to Lower Obesity in Chicago Children (CLOCC) to implement sustainable policies and environmental changes to combat obesity.

The City's approach focuses on five critical areas or environments for change:

1. Environments for physical activity
2. Food and beverage environments
3. Message environments
4. Health care and work environments
5. School environments

These priorities are the focus of activities of the Chicago Department of Public Health (CDPH) and the Chicago Public Schools (CPS). Current initiatives include the expansion of programs that make healthy foods more readily available to residents of all Chicago neighborhoods; the establishment of nutrition, physical activity and screen time standards for children in child care settings; and neighborhood assessments to assist in defining policies that will make Chicago's parks easier and safer to access by foot or bike.

Within CPS, an Office of Student Health and Wellness (OSHW) was created. A Chief Health Officer leads the OSHW and reports to both the school district and City health department. The Chief Health Officer is tasked with developing and implementing a *Healthy CPS* agenda and removing health-related barriers for learning by advancing health promotion, health education, and health policy in CPS.

As part of *Healthy Places,* CPS has adopted school meals that meet or exceed the gold standard established by the U.S. Department of Agriculture. Individual schools are working to meet the certification requirements of the Healthier U.S. School Challenge (HUSSC), which is part of First Lady Michelle Obama's Let's Move initiative. HUSSC certification is achieved when schools show commitment to student wellness through student access to healthy food at school (including school meals, celebrations and fund raising), nutrition education, and physical activity.

Policy

Healthy Snack and Beverage Policy

In November 2012, the Chicago Board of Education approved a Healthy Snack and Beverage Policy to ensure that any snack or drink available to students throughout the school day is of high nutritional value.[35] Federally reimbursable meals, which include school lunches for a wide range of students, already are required to meet nutrition standards. Chicago's policy goes above and beyond these standards and requires that all foods and beverages that are not federally reimbursable meals meet rigorous nutrition standards.

The policy strengthens vending machine standards that were put into place by a policy in 2004. It also encourages schools to adopt healthy school fundraisers and promote healthy celebrations where foods and beverages with less fat, calories, sodium, and sugar are served. The policy also prohibits distributing food as a reward or withholding it as a punishment and prohibits the sale of unhealthy food items by independent vendors on school property.

Systems

The Consortium to Lower Obesity in Chicago Children

The Consortium to Lower Obesity in Chicago Children (CLOCC), housed at the Ann and Robert H. Lurie Children's Hospital, was founded in 2002 and has been working across multiple settings to promote systems change towards healthier lifestyles for children. Its mission is to "facilitate

[35] This does not cover the school meals program, which is addressed by a separate Local School Wellness Policy.

connections between childhood obesity prevention researchers, public health advocates and practitioners, and the children, families, and communities of Chicagoland."[36]

CLOCC has built a broad-based network of more than 3,000 participants and 1,200 organizations. Using data and evidence, CLOCC is committed to building capacity among its partners. CLOCC's strategies include environmental change, public education, advocacy, research, outcome measurement, and program evaluation. CLOCC's goals include:

- To improve the science and practice of childhood obesity prevention
- To expand and strengthen the community of public health practitioners, community leaders and organizations, clinicians, researchers, corporations, and policymakers working collaboratively to confront childhood obesity in Chicago and beyond
- To cultivate a long-term broad base of government, philanthropic, and industry funding to sustain childhood obesity prevention work in Chicago and beyond
- To identify culturally appropriate and relevant childhood obesity reduction approaches that work, and to disseminate and institutionalize them at all levels of social ecology (individual, family, community, institutional, public policy)

A specific program developed by CLOCC is "5-4-3-2-1 Go!," a public education message containing recommendations for children and families to promote a healthy lifestyle. The numbers stand for:

- 5 servings of fruits and vegetables a day
- 4 servings of water a day
- 3 servings of low-fat dairy a day
- 2 or less hours of screen time a day
- 1 or more hours of physical activity a day

CLOCC has developed a Neighborhood Walkability Assessment Tool to identify and address barriers to walking and bicycling. It hosts Healthy Food Access Workshops, which are interactive and are led by a panel of local experts who discuss topics such as farmer's markets and healthy corner stores. CLOCC also is working with 14 of the 19 labor and delivery hospitals in Chicago to help them achieve Baby-Friendly USA status to promote breastfeeding in hospitals.

Funding for CLOCC comes from several foundations. The initiative is housed in the Robert H. Lurie Children's Hospital (which also provides financial support). CLOCC's executive director cites the identification of a solid home for the initiative as a key to its sustainability.

PlayStreets in a Chicago neighborhood
Source: John Greenfield via Flickr

Environmental

PlayStreets, Open Streets, and *B-Ball on the Block*

With support from Blue Cross and Blue Shield, the CDPH began implementing *PlayStreets, Open Streets,* and *B-Ball on*

[36] "What Is CLOCC?". What is CLOCC?. http://www.clocc.net/about-us/ (accessed April 13, 2016)

the Block in neighborhoods across the city where park space is limited in 2012. The goal is to promote health and wellness by increasing access to safe play spaces for children and adults in Chicago and to replace sedentary activity with play and physical activity.

Programming

Physical Education

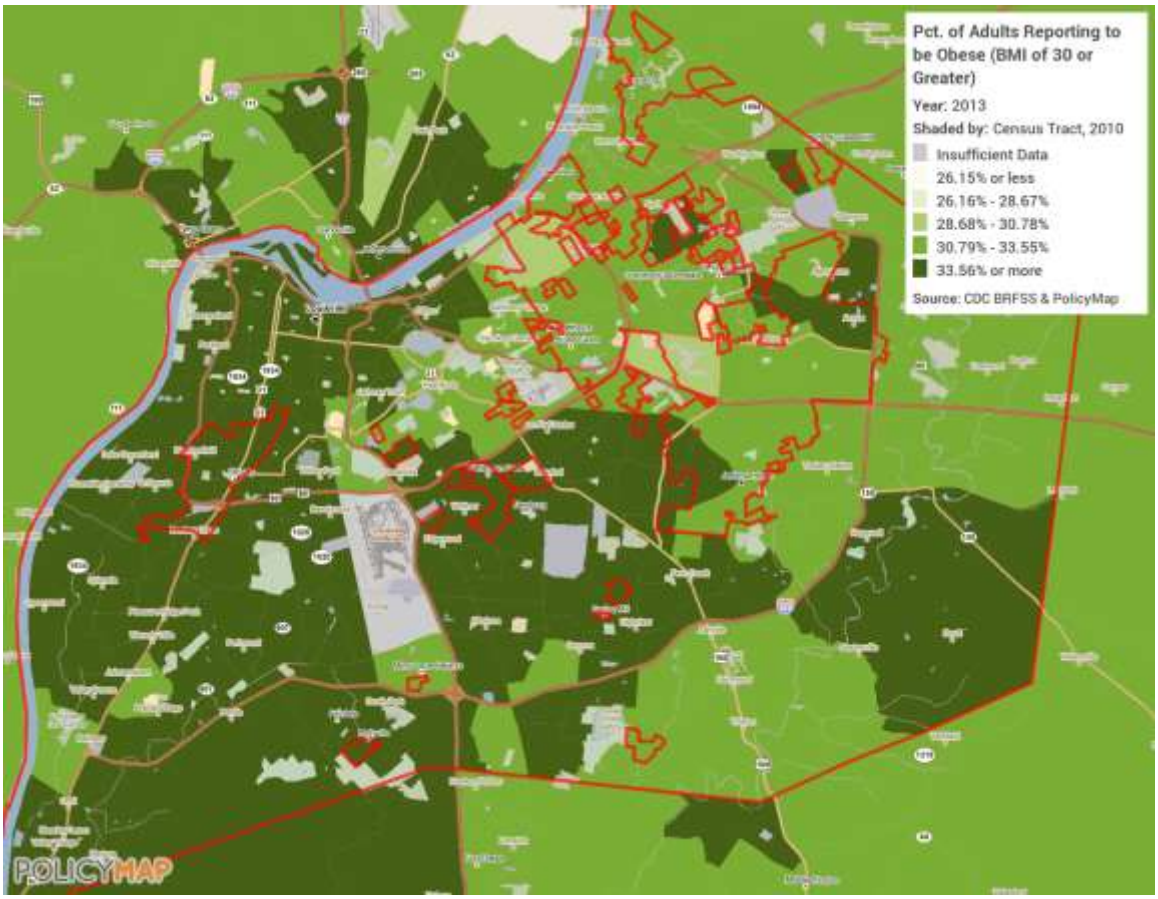
OSHW is working to increase the quality and quantity of Physical Education (PE) that students receive by developing curriculum, assessments, and ongoing professional development for PE teachers.

Louisville

Challenges

Over one-third of the population of Louisville is obese and obesity rates are disproportionately high in 12 low-income neighborhoods (**Map 9**). These neighborhoods are predominantly Black and many are considered food insecure in that affordable, healthy food is not widely available. In Louisville, 72.7% of Black adults are overweight or obese compared to 61.8% of Whites. This is higher than the adult rates of overweight and obesity in Kentucky and nationwide.

Map 9: Estimated percent of Louisville adults reporting to be obese in 2013



Activities to Address Challenges

With the support of CDC's Communities Putting Prevention to Work, Louisville has implemented several strategies specifically focused on the areas of the city where health disparities are most prevalent. High-level community leaders from multiple sectors have collaborated on obesity prevention initiatives throughout the city. Some of these leaders include:

- The Office of the Mayor
- Greater Louisville YMCA
- Jefferson County Public Schools
- Louisville Metro Board of Health
- Louisville Metro Council
- Louisville Metro Department of Public Health & Wellness
- Louisville Metro Housing Authority
- Louisville Metro Parks and Cultural Affairs
- Louisville Urban League
- Transit Authority of River City
- University of Louisville School of Public Health and Information Sciences.

Louisville Statistics

Obesity Rate: 34%

Poverty Rate: 18.4%

Nutrition and Physical Activity
Only 14.4% of adults eat the recommended daily servings of fruits and vegetables. Approximately 35.7% of the population is physically inactive.

Public Health Funding
Louisville spends about $32.32 per capita on public health.

Kentucky public health funding national rankings:
CDC: 34th
HRSA: 33rd
State: 26th

Policy

Complete Streets Policy

The Louisville Metro Complete Streets Policy,[37] approved in 2008, ensures that specific objectives are achieved for all future transportation projects, including the following:

1. Bicycle and pedestrian ways are established in most new construction and reconstruction projects.
2. In rural areas, shoulders should be included in all new construction and reconstruction roadway projects unless the addition of shoulders is constrained by existing topographic and/or natural features.
3. Sidewalks, shared-use paths, street crossings (including over- and under-crossings), pedestrian signals, signs, street furniture, transit stops and facilities, and all connecting pathways will be designed, constructed, operated, and maintained so that all pedestrians, including people with disabilities, can travel safely and independently.
4. The design and development of transportation infrastructure will be designed to be sensitive to its context and character of the built or natural environment.

[37] "Complete Streets.". Complete Streets. https://louisvilleky.gov/government/bike-louisville/complete-streets (accessed May 3, 2016)

The accompanying Complete Streets Manual is among the most comprehensive documents of its kind in the U.S.

Systems

A growing body of research has concluded that breastfeeding is protective against obesity in children.[38] Louisville is supporting efforts to enhance systems that support breastfeeding. Fourteen lactation stations in government facilities have been established so that working mothers can pump breast milk at work. Four major hospitals have standardized guidelines to encourage and support breastfeeding. In addition, "Lunch and Learn" sessions have been initiated for doctors and medical staff to provide information about the benefits of breastfeeding and to help new mothers overcome common obstacles. Participants in these sessions are encouraged to refer mothers having trouble with breastfeeding to outpatient lactation centers at four Louisville hospitals.

Environmental

"Healthy in a Hurry" Corner Stores

Stores that have not previously sold fresh and highly perishable foods like fruits and vegetables face many obstacles and risks in attempting to introduce these products. These include a lack of experience handling and selecting produce, a lack of resources for marketing it, and a lack of infrastructure, such as walk-in coolers and in-store refrigerated display cases.

In 2009, Louisville started the "Healthy in a Hurry" Corner Store effort focused on increasing healthy food access for lower-income consumers. This partnership between the Jefferson County Department of Health and Wellness's Center for Health Equity and the YMCA supports corner stores in Louisville neighborhoods that have been identified as food insecure with infrastructure, technical assistance, and merchandising supports to expand the fresh produce selection in their stores.

Through "Healthy in a Hurry," stores receive grant funds for marketing, refrigeration, community outreach support, and technical assistance. As of 2011, seven participating stores were selling $8,000 - $9,000 worth of produce every month.

Programming

Healthy Hometown Restaurant Initiative

In 2010, Louisville Metro Public Health and Wellness (LMPHW) implemented the Healthy Hometown Restaurant Initiative to encourage restaurants to provide healthier options for their patrons. A voluntary menu-labeling resolution was implemented that included a nutritional analysis of meals with printed calorie information and recommendations for healthier menu choices.

To start the program, LMPHW conducted community surveys through the University of Louisville and local youth, hosted professional cooking demonstrations, and attended business association meetings to spread the word about the initiative to residents and restaurant owners. When

[38] Monasta, L., G. D. Batty, A. Cattaneo, V. Lutje, L. Ronfani, F. J. Van Lenthe, and J. Brug. 2010. Early-life determinants of overweight and obesity: A review of systematic reviews. *Obesity Reviews* 11 (10): 695-708.

organizers found that only restaurants located in affluent neighborhoods were responding, outreach coordinators personally visited restaurants in low-income neighborhoods. LMPHW also engaged champions, including a neighborhood association and the owner of a local restaurant who had previously signed onto the initiative. Currently, 16 restaurants, 33 locations, and one caterer have volunteered for the Healthy Hometown Restaurant Initiative.

Philadelphia

Challenges

More than one-third of Philadelphia residents are obese. Of the 10 largest U.S. cities, Philadelphia has the highest prevalence of obesity among adults (one in three) and the third highest prevalence of obesity among youth (one in five children). Thirty-eight percent of all Philadelphia residents, and almost half of Black residents, have high blood pressure. Approximately 2,000 deaths in Philadelphia annually are linked to poor diet and physical inactivity.[39]

While Philadelphia is much more racially integrated than Milwaukee, obesity is concentrated primarily among Black and Hispanic residents on the north side and southwest side of the city (Map 10). Residents of low-income neighborhoods are half as likely to have access to quality grocery stores as residents of high-income neighborhoods.

Philadelphia Statistics

Obesity Rate: 35%

Poverty Rate: 26.7%

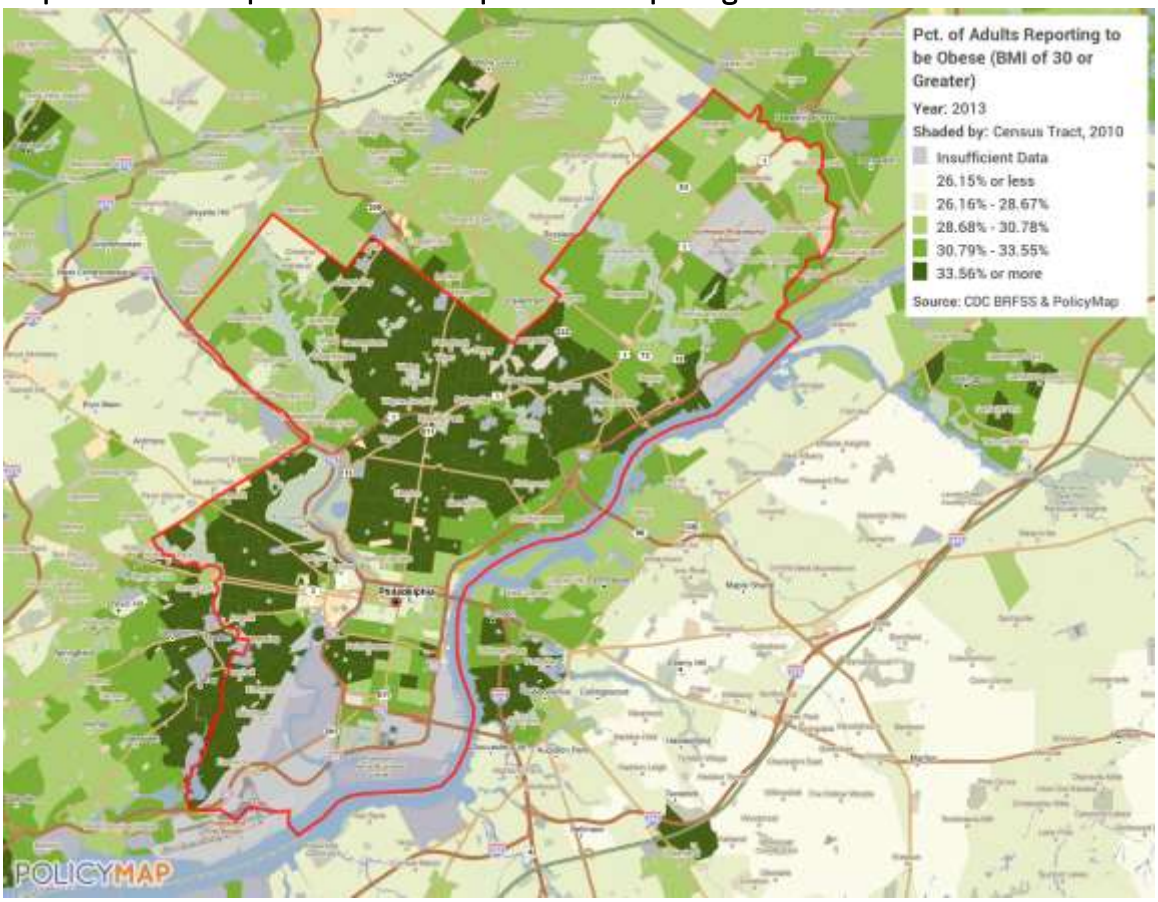
Nutrition and Physical Activity
Only 14.6% of adults eat the recommended daily servings of fruits and vegetables. Approximately 38.8% of the population is physically inactive.

Public Health Funding
Philadelphia spends about $75.14 per capita on public health.

Pennsylvania public health funding national rankings:
CDC: 46th
HRSA: 31st
State: 43rd

[39] "Citywide Nutrition Standards.". Citywide Nutrition Standards. http://www.phila.gov/health/ChronicDisease/Workplace.html (accessed April 26, 2016)

Map 10: Estimated percent of Philadelphia adults reporting to be obese in 2013



Activities to Address Challenges

Get Healthy Philly is a groundbreaking public health initiative that implements policy, systems, and environmental changes to make it easier for Philadelphia residents to make healthy choices.

Policy

Citywide Nutrition Standards

The City of Philadelphia issued an Executive Order in 2014[40] that established nutrition standards for food and beverages purchased, prepared, or served by City agencies. The standards are intended to ensure that all food provided or paid for by the City is healthy, appealing, and locally grown whenever possible. The City hopes that nutrition standards for city government will serve as a model for other large institutions and employers, and send a market signal to suppliers to provide and competitively price healthy food options.

Philadelphia's comprehensive food standards apply to all agencies that purchase, serve, sell, or otherwise provide food to clients, patients, employees and the general public, including contracted vendors. These standards are primarily based on the 2010 U.S. Departments of Agriculture and

[40] Establishing Nutrition Standards for Food and Beverages Purchased, Prepared, or Served by City Agencies. http://www.phila.gov/health/pdfs/Executive%20Order.pdf

Health and Human Services Dietary Guidelines.[41] The standards are then augmented based on lessons learned from food standards adopted by other local and federal governments as well as review and feedback from Philadelphia city agencies. These standards impact correctional facilities, youth detention centers, city-funded afterschool and summer programming, shelters, health care facilities, and vending machines on public property. They are made up of two parts:

1. Nutrition Standards: required and recommended guidelines for foods purchased, meals and snacks served, and vending machines
2. Best Practices Guidelines: recommended guidelines for special occasions, concessions, catering, and special events.

The Philadelphia Department of Public Health provides support to agencies to incorporate the food standards into meal services. It has created a Comprehensive Food Standards and Implementation Guide to provide tools and tips to help implement these standards in government facilities.[42]

Systems

Community Access to Healthy Foods

Get Healthy Philly has worked with retailers – including corner stores, farmers markets, and Chinese take-out restaurants – to promote healthy food sales and better access to healthy food within the community. Get Healthy Philly has teamed up with the Food Trust to work with corner stores to improve access to healthy foods. Healthy corner stores also provide colorful signs that provide easy-to-use nutrition information. As of September 2014, 23 corner stores had been officially labeled and advertised as "Healthy Corner Stores".

Each corner store in the Philadelphia Healthy Corner Store Network has introduced at least four new healthy options, including fresh produce, low-fat dairy products, and whole grain products. Exceeding expectations, the Healthy Corner Store Network has introduced, on average, 46 new healthy products. Point-of-sale data from two pilot stores showed that produce sales increased by more than 60% following installation of kiosks that made fruits and vegetables the focal point of the store.

New farmer's markets have moved into low-income neighborhoods, and Philadelphia residents can use food stamps at 30 participating markets. Each resident will receive a $2 Philly Food Bucks coupon for fruits and vegetables for every $5 that is spent.

In addition, the Philadelphia Healthy Chinese Take-Out Initiative, "Less Salt, Healthier Eating," is working to prevent high blood pressure in Philadelphia residents by reducing the amount of salt in Chinese take-out restaurant dishes. It is a joint effort of the Philadelphia Chinese Restaurant Association, the Center for Asian Health of Temple University, the Asian Community Health Coalition, and the Philadelphia Department of Public Health. Some of the strategies being used include:

- Decreasing the amount of sauce
- Using lower-sodium ingredients

[41] U.S. Department of Agriculture and U.S. Department of Health and Human Services. *Dietary Guidelines for Americans, 2010.* 7th Edition, Washington, DC: U.S. Government Printing Office, December 2010.
[42] Comprehensive Food Standards and Implementation Guide. Philadelphia Department of Public Health. http://www.phila.gov/health/pdfs/NutritionToolkit_FINALweb.pdf

- Using more fresh vegetables instead of canned
- Not adding table salt
- Using a standardized measuring spoon to add sauce
- Limiting distribution of soy sauce packets to customers

Environmental

Philadelphia's most recent zoning code update in 2010[43] introduced a number of new health-supportive regulations. Those related to obesity include the following:

- Mixed-Use Districts: "Neighborhood Commercial Mixed-Use" and "Industrial Residential Mixed-Use" districts will enable people to live closer to their jobs, minimizing the need for auto ownership and improving walkability.
- Transit-Oriented Development Standards: Areas around designated stations must conform to design standards that encourage a pleasant pedestrian environment, require active ground floor uses, and prohibit auto-centric uses. This is intended to encourage people to live closer to transit and use it more often. Another goal is to make it easier to walk to transit stops, thus encouraging more active living.
- Food Access: Urban agriculture and community gardens no longer require a zoning variance in most residential and commercial districts.
- Open Space: New design standards require contiguous open spaces that are focal points of new large developments and deed-restricted to prevent future development. The new code encourages open space design that connects to other open spaces.
- Sidewalk standards: Projects of a certain size now undergo a civic design review from a committee to assess the potential impacts they might have on sidewalks and other aspects of the pedestrian environment.
- Bicycle parking spaces are required in all new public parking lots, multi-family buildings with 12 or more units, and developments with more than 7,500 square feet of floor area.

Programming

Get Healthy Philly has engaged youth as leaders in health and wellness in their schools and communities through annual HYPE (Healthy You, Positive Energy) summits. The HYPE campaign supports youth councils in approximately 100 middle and high schools to help improve access to healthy foods, decrease the availability of unhealthy foods, and increase opportunities for physical activity. This program is a partnership with the School District of Philadelphia and the Philadelphia Department of Public Health.

Through this initiative, youth councils plan and implement a wide range of healthy activities including fitness clubs, movement breaks, healthy fundraisers, and school gardens. Additionally, youth

[43] "Zoning.". Zoning. City of Philadelphia. http://www.phila.gov/li/Pages/Zoning.aspx (accessed May 4, 2016)

councils can attend the annual "Youth for Healthy Change" leadership summit. Students meet peers from other schools, participate in leadership development activities, and create healthy action plans.

Summary

These case studies provide examples of five cities across the U.S. with obesity-related challenges similar to those faced by Milwaukee. Reductions in body mass index as an indicator of falling obesity rates will take time in each of these cities. So while our overview of obesity prevention efforts cannot speak to effectiveness, the case studies do provide important insights into how peer cities have developed, coordinated, and funded comprehensive obesity prevention efforts.

Each of these cities is engaging some form of collaboration that leverages the resources of public, private, and non-profit partners from multiple sectors to address obesity. Additionally these cities have recognized that obesity cannot be sufficiently addressed through a single policy, environmental change, or program. Moreover, there is recognition in these case studies that a mix of policy, systems, and environmental changes supported by educational programming is necessary to address obesity prevention.

All of these cities, including Milwaukee, have leveraged some form of CDC grant funding. But, while federal grants can provide an important influx of funding for obesity prevention, more sustained funding and administrative support are critical to maintain a strong obesity prevention effort that can sustain itself long enough to experience true changes in the obesity rate and the resulting benefits to quality of life.

Chicago and Philadelphia have shown particularly strong efforts to garner political will and financial resources for sustainable obesity prevention efforts. By establishing CLOCC, Chicago has created a convener of partners and a sustained infusion of resources. The strong partnership between CLOCC and the City of Chicago also demonstrates the existence of political will to address obesity. Meanwhile, Philadelphia has used nutrition standards for city government to institutionalize healthy eating efforts. Even more recently, Mayor Jim Kenney proposed and the City Council approved a tax on sugar-sweetened and diet beverages (sodas, sports drinks, iced tea, lemonade and others),[44] making Philadelphia only the second city in the U.S. to impose a tax on soda and similar beverages.

These case studies provide examples that Milwaukee leaders should consult if they wish to pursue a comprehensive obesity prevention effort. In addition, it is important to learn from collaborations that have sought to reduce other health concerns in Milwaukee. The following section highlights two such initiatives.

[44] "Philadelphia City Council to Vote on Soda Tax.". 2016. *The Philadelphia Inquirer*, June 16. http://www.philly.com/philly/news/politics/20160617_Philadelphia_City_Council_to_vote_on_soda_tax.html

Learning from the Progress of Existing Collaborations in Milwaukee

Our review of comprehensive obesity prevention strategies in five other cities shows that those strategies typically engage a wide range of relevant partners in a collaborative effort. Collaboration has also been used to address the issues of teen pregnancy and infant mortality in Milwaukee, and lessons could be learned from those efforts, as well.

Teen Pregnancy Prevention

In 2006, Milwaukee had one of the highest rates of teen births in the nation with 52 births per thousand teenage girls ages 15-17. However, a Collective Impact[45] campaign involving the United Way of Greater Milwaukee and Waukesha County (UWGMWC) as a local convener has produced a 54% decrease in teen pregnancy rates.[46] This success was predicated, at least in part, by recognition among the effort's leaders that teen pregnancy is not an isolated issue, but rather is linked closely to the broader community issues of education, cultural norms, public safety, and poverty. Moreover, there was a commitment to addressing teen pregnancy at all levels: policy, systems, and environment.

UWGMWC convenes the Teen Pregnancy Prevention Oversight Committee, which is chaired by Elizabeth Brenner, the former president and publisher of the *Milwaukee Journal Sentinel,* and Bevan Baker, the City's Commissioner of Health. The committee brought together a broad cross section of public officials, service providers, researchers, and funders. The specific goal was to reduce the teen birth rate by 46% by 2015, bringing Milwaukee in line with the national average and well below the average for a large U.S. city.

One of the greatest strengths of the campaign was its programming to raise public awareness. For example, in partnership with the Milwaukee Public Schools (MPS), the collaborative trained close to 1,000 teachers. This effort increased the proportion of MPS' students receiving age-appropriate, science-based curriculum on sexuality. A public awareness campaign included advertisements emphasizing the economic cost of teen pregnancy. Later, teens were engaged through a series of provocative ads, radio spots, and even a fake movie premiere. The collaborative also reached out to parents, providing them with a "Let's Talk" toolkit to help them talk about sexuality with their kids.

Teen Pregnancy Prevention Advertising Campaign

The campaign also benefited from having dedicated capacity and an agreed-upon and adequately resourced structure. In this case, UWGMWC provided a full suite of administrative support. The oversight committee still holds quarterly meetings open to the public, receiving input and advice for the effort. Four subcommittees

[45] Collective impact is defined as the commitment of a group of important actors from different sectors to a common agenda for solving a specific social problem.
[46] *Teen Pregnancy Prevention.* United Way. https://www.unitedwaygmwc.org/Teen-Pregnancy-Prevention (accessed January 20, 2016)

meet monthly to focus on public awareness, sexual victimization, collaborative funding, and the faith community. A UWGMWC staff person assigned to each of the committees maintains a roadmap and logic model, creates agendas, handles public relations, and provides talking points. UWGMWC supports these activities in-kind with its own full-time staff, supplementing with interns, fellows, and volunteers when needed.

To sustain the initiative, a collaborative fund was developed with nine foundation members.[47] Each funding partner contributes $50,000 and actively participates in the grant making process.

Milwaukee's teen pregnancy prevention initiative was recognized by the National Campaign to Prevent Teen and Unplanned Pregnancy, which cited the collaborative's broad partnership, focus on evidence-based interventions, and ambitious goal setting.

Infant Mortality

The Milwaukee Lifecourse Initiative for Healthy Families (LIHF) was developed with catalytic funding from the Wisconsin Partnership Program at the University of Wisconsin Madison as an innovative community-academic collaboration designed to improve community conditions that lead to healthier birth outcomes among African American families in Beloit, Kenosha, Milwaukee, and Racine.[48] These four cities account for 90% of African American births in the state.

LIHF is hoping to ensure that Milwaukee has a sustainable community collaborative that contributes to the elimination of racial disparities in healthy birth outcomes. As the current convener, the United Way of Greater Milwaukee & Waukesha County has worked together with leaders from affected communities, businesses, nonprofits, the faith community, the academic community, healthcare, and the public sector to address the issue.

Milwaukee's LIHF work is being guided by a Community Action Plan to align programs across the city and develop shared metrics. Several committees have been formed to implement the plan, including the following:

- Communications Committee
- Faith Roundtable
- Fund Development Committee
- Health Care Access Committee
- Policy, Systems and Environmental Change Committee
- Strengthening African American Families/Fatherhood and Male Engagement Committee

To impact racial disparities, the collaborative focuses on three interconnected goals:

[47] Those members were: Brico Fund, Faye McBeath Foundation, Greater Milwaukee Foundation, Johnson Controls, Inc. Foundation, Rockwell Automation, UWGMWC, Aurora Health Care Foundation, The Davis Family Fund, and the Daniel M. Soref Charitable Trust.

[48] *Milwaukee Lifecourse Initiative for Healthy Families Collaborative.* United Way. https://www.unitedwaygmwc.org/Milwaukee-Lifecourse (accessed May 20, 2016)

1. Expanding health care access over the life course of parents and children
2. Strengthening father involvement
3. Reducing poverty and environmental stress

The Milwaukee LIHF Collaborative focuses extra efforts within the 53205, 53206 and 53210 ZIP codes, which have high rates of African American infant deaths. Lower-than-average household incomes, high male unemployment, and high numbers of residents involved in the corrections system affect these neighborhoods.

Milwaukee LIHF Collaborative funded partners include (but are not limited to):

- The African American Breastfeeding Network
- The Children's Service Society of Wisconsin
- The Milwaukee Health Department
- The Lovell Johnson Quality of Life Center Inc. (St. Mark AME Church)
- Mental Health America of Wisconsin
- Milwaukee Health Services
- Planning Council for Health and Human Services
- United Neighborhood Centers of Milwaukee
- Walnut Way Conservation Corps
- Wheaton Franciscan – St. Joseph Foundation
- The Milwaukee Health Care Partnership
- Aurora Health Care

Small decreases in the infant mortality rate have been reported between 2011 and 2015, but there is much room for progress. A June 30, 2016 policy brief[49] from the Milwaukee LIHF identifies, among others, the following cross-sector policy recommendations:

- Expanding and maintaining mass transit and high-quality, affordable transportation services to provide access to health services and employment opportunities.
- Improve access to affordable housing that supports families, mothers, fathers, and babies.
- Increase funding for transitional jobs and apprenticeships (e.g. Compete Milwaukee, UpLift Milwaukee).
- Adopt living wage ordinances to better support the needs of working families.
- Require health impact assessments on all new proposed city and county ordinances.
- Increase support for City of Milwaukee Health Department programming including home visits, STI/HIV services, immunizations, pregnancy testing, and WIC.

Summary

Our case studies and examples from Milwaukee all demonstrate that collaboration across agencies and even disciplines is important to make progress on complex social challenges. One form of this collaboration is Collective Impact,[50] which, among other characteristics, requires a convener that

[49] Lifecourse Initiatives for Healthy Families Milwaukee. 2016. Policy Brief. https://www.unitedwaygmwc.org/UnitedWayMilwaukee/Public/LIHFCollaborativeReportFINALIA.pdf
[50] Kania, John, Kramer, Mark. 2011. Collective impact. *Stanford Social Innovation Review*, no. Winter 2011.

provides the necessary administrative support. However, Collective Impact and other institutional collaborative efforts tend to minimize the role of grassroots, community-based organizations in addressing social issues. Some evidence suggests that these forms of collaboration could benefit from insights of grassroots community organizers who understand those most directly affected by the systems that are targeted for change. A growing body of research on grassroots organizing efforts indicates that involvement of residents in these processes is likely to build capacity at multiple levels for sustaining obesity prevention efforts.[51] This has been seen in Minneapolis with the *Healthy Living* Campaign (see case study). There is potential for both an institutional collaborative effort and grassroots community organizing initiative to complement and strengthen one another in efforts to address obesity in Milwaukee.

[51] Christens, Brian D. and Paula Tran Inzeo. 2015. Widening the view: Situating Collective Impact among frameworks for community-led change. *Community Development* 46 (4): 420-435

Policy Options and Conclusion

Overall, we have found that obesity is a serious and substantive public health challenge in the City of Milwaukee. Failure to address it in a comprehensive manner could impact the quality of life of Milwaukee residents, burden the city's health care system, and exacerbate the rise in health care costs.

It is important to recognize that a variety of Milwaukee-based organizations already are addressing this issue by enhancing opportunities for physical activity and working to ensure that all Milwaukee residents have access to fresh fruits and vegetables. **Yet, our review of other cities shows that what may be missing here is a strong convener of these organizations and leaders that provides robust collaboration with shared accountability for better outcomes**.

The convener – which could be City government, an individual collaboration like the Milwaukee Childhood Obesity Prevention Project (MCOPP), or a partnership between these or other entities – could serve the following purposes:

- weave existing efforts into a comprehensive obesity prevention strategy (including creation of a healthy living public awareness campaign);
- ensure resource growth and sustainability;
- measure and provide accountability for results; and
- press for policies that will place obesity prevention on the front burner of citywide public health efforts.

In light of the competing high-priority demands on the Milwaukee Health Department and the fact that it appears to lack capacity to spearhead a comprehensive obesity prevention strategy, MCOPP would be a logical choice to play this role. Much like how the City of Chicago works with the Consortium to Lower Obesity in Chicago Children (CLOCC), the City of Milwaukee could work directly with MCOPP to plan and coordinate a comprehensive strategy to address obesity in Milwaukee.

Such an effort, of course, would necessitate a sustainable influx of resources to MCOPP or an alternative convener. We acknowledge that the City may not have the capability to provide such support, but it could be a leader in engaging the philanthropic community and/or in helping the convener to identify and secure grants from national philanthropic or federal funding sources.

A far more politically controversial approach to supporting MCOPP or an alternative convener would be for City leaders to push for taxing options to generate a constant revenue stream that could be directed to a comprehensive obesity prevention strategy. Unlike Philadelphia's tax on sugar-sweetened and diet beverages, however, such a taxing mechanism in Milwaukee likely could not be adopted without authorization from state government.

In whatever form this sustainable influx of resources would come, it would be important for a Milwaukee obesity prevention collaboration to align with other collaborations in the city that are seeking to address violence, infant mortality, educational attainment, and health care. As discussed throughout this report, obesity prevention is linked to a range of societal factors. Aligning with other collaborative initiatives could reduce competition for resources and create a more effective strategy in addressing interconnected challenges.

Finally, in addition to helping to establish and appropriately resource a convener organization, City leaders could consider pursuing more modest initiatives that would contribute to obesity prevention:

- **Finalize a Complete Streets Policy**. As mentioned previously, the City currently operates under a Complete Streets approach and a Complete Streets Policy is under development. Furthermore, the Path to Platinum initiative already is serving as a convener of public, private, non-profit, and grassroots organizations concerned about active transportation in the City. City leaders could use Path to Platinum as its avenue for engaging the public in future discussions concerning the need to improve local roads to accommodate *all* users (bicycles, pedestrians, automobiles, and transit vehicles).

  The City also could engage the Milwaukee County Parks Department to ensure that the network of Complete Streets builds on the parks system and connects Milwaukee residents to individual parks. One of Milwaukee's greatest built environment assets is the parks system, but connectivity to those parks through active forms of transportation is necessary to ensure that all residents can use them for recreational purposes.

  Finally, as part of the Complete Streets Policy, the City would be well-advised to follow the Omaha model and develop a system for measuring its success by using performance measures.

- **Expand the Mayor's HOMEGR/OWN Initiative**. The HOMEGR/OWN initiative is a nationally recognized effort to improve food security and re-purpose city-owned vacant lots, but it currently only targets the Lindsay Heights neighborhood on Milwaukee's North Side. The project could be expanded to include other neighborhoods throughout the city. An expanded program should continue to focus on lower SES neighborhoods but also take a strong community engagement approach to ensure that individual neighborhoods embrace the project.

  As is currently occurring in Lindsay Heights, community-based organizations could be valuable assets in planning for implementation. As an example, the Sixteenth Street Community Health Center would be a potential resource for neighborhood planning efforts on the near South Side of the city. In addition to engaging community-based organizations, the City should continue to call upon the expertise of the Milwaukee Food Council and the Institute for Urban Agriculture and Nutrition for technical assistance.

- **Establish nutrition standards.** Like Philadelphia, Milwaukee could establish nutrition standards for foods and beverages purchased, prepared, or served by City agencies. However, given that City government is not a major food preparation or purchasing entity (as it does not run a public hospital or other major institutions), it may make sense for the City to approach Milwaukee County and/or Milwaukee Public Schools[52] about extending such an effort to those governmental bodies, as well. Such standards could ensure that all food provided or funded by major public sector entities in the city are healthy, appealing, and locally-grown whenever possible. They also would make those governments a model for other large institutions and employers, and send a market signal to suppliers to provide and competitively price healthy food options.

[52] In the case of Milwaukee Public Schools, this would build upon already existing school nutrition guidelines.

The Milwaukee Health Department could provide support to agencies to incorporate the food standards into meal services. As in Philadelphia, the department also could create a Comprehensive Food Standards and Implementation Guide to provide tools and tips to help implement these standards in government facilities.[53]

[53] Comprehensive Food Standards and Implementation Guide. Philadelphia Department of Public Health. http://www.phila.gov/health/pdfs/NutritionToolkit_FINALweb.pdf

Appendix A: Additional Obesity Prevention activities in Milwaukee

Action	Description
Milwaukee County Parks	With over 140 parks and parkways totaling nearly 15,000 acres, Milwaukee County Parks are a key asset in ensuring easy access to physical activity for Milwaukee residents.
Milwaukee Food Council	MFC is a coalition of diverse stakeholders committed to building a food system that is healthy, ecologically sustainable, economically vibrant, culturally relevant, and socially just. The Food Council began meeting in 2007 and meets every other month to develop strategies for a healthy, affordable, equitable food system. Participants include community members, professionals, and government officials.
Core/El Centro	A volunteer-driven organization that provides Chinese Medicine, Massage Therapy, Energy Work and Holistic Exercise. Serving a variety of populations, this organization treats victims of trauma, those with chronic disease, survivors of cancer, and beyond. One specific project is *Mujeres con Poder*, which is looking at recycling and environmental protection as a way to address obesity.
Center for Resilient Cities	A nonprofit organization that focuses on community engagement, connected systems, and restorative environmental design. One notable project was a partnership with the Lindsay Heights community to create the Johnsons Park Initiative, an effort to transform vacant property and acres of asphalt into space for outdoor recreation and urban gardening. The Center also led community efforts to transform Brown Street Academy's schoolyard into green space designed for outdoor recreation and connection with nature.
Institute for Urban Agriculture and Nutrition (IUAN)	A cooperative of universities, community organizations, businesses, and public agencies advancing the principles and practices of sustainable urban agriculture, healthy nutrition practices, and economic development through innovative collaboration. This cooperative includes representatives from Growing Power, UW-Milwaukee, The Medical College of Wisconsin, UW-Madison, Fondy Food Center, and many other organizations. It helps community efforts to secure funding for work that furthers sustainable urban agriculture and nutrition, initiates a community-led research agenda, works to improve the health and nutrition of urban residents, and works to build a sustainable food system.
Black Health Coalition, Inc.	A group of local organizations and individuals whose collaborative goal is to address the health problems of African Americans in Wisconsin. This group conducts research, provides technical assistance, training, and advocacy to support African American Health.

Wisconsin Bike Federation	A nonprofit organization that represents thousands of members and the interests of Wisconsin bicyclists. It focuses on advancing pro-biking legislation, education and activities. In Milwaukee, the Bike Federation conducts bike trainings and supports the 53212 neighborhood-based outreach program, which connects residents through walking, biking, and busing. It also supports MPS with its Safe Routes to School program and has advocated for a Complete Streets policy.
Alice's Garden	A Milwaukee County-owned garden that includes 127 rental farming plots. The purpose is to expose teenagers, community volunteers, and local residents to cultivating fresh food in city places and to bring fruits and vegetables to the underserved Lindsay Heights Neighborhood.
The Victory Garden	A nonprofit organization that promotes urban permaculture, builds gardens, organizes communities, grows food forests, and cultivates leadership.
Menomonee Valley Partners, Inc.	Founded in 1999, this nonprofit organization has served as the lead agency in the redevelopment of Milwaukee's Menomonee Valley. The Valley includes more than 60 acres of new trails and park space that make it easier for residents of surrounding neighborhoods to be physically active.
The Happy Project	The Healthy Activities Partnership Program for Youth (HAPPY) allows students at the Bruce Guadalupe Community School on the city's near south side to learn how to use their local neighborhood to increase their physical activity and improve their nutrition. Some of the activities include mapping their local community using GPS devices and counting their steps using pedometers.
Bublr Bikes	Launched in 2014, this is Milwaukee's bikeshare program. Bublr hopes to install 100+ bike share stations in at least four municipalities by 2018.
African American Breastfeeding Network	Formed in 2008, this network has four goals: (1) to address breastfeeding disparities, (2) to increase awareness of the benefits and value of mother's milk (3) to build community allies, and (4) to de-normalize formula use.
WIC	The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) provides Federal grants to states for supplemental foods, health care referrals, and nutrition education for low-income pregnant, breastfeeding, and non-breastfeeding postpartum women, and to infants and children up to age five who are found to be at nutritional risk. In Milwaukee, the WIC program provides health screenings, nutrition education, and breastfeeding education and support. Additionally, it supplies fresh fruits and vegetables, iron fortified infant formula, milk, eggs, cereal, peanut butter, and beans to qualifying families.
Wisconsin Nutrition Education Program (WNEP)	Milwaukee County UW-Extension participates in WNEP, which helps limited resource families and individuals choose healthy diets, purchase and prepare healthy food, and become more food secure by learning how to spend their food dollars on healthy products. WNEP collaborates with many partners

	including but not limited to Milwaukee Public Schools, Milwaukee County Department of Aging, Social Development Commission Head Start, Children's Outing Association, Milwaukee County WIC, Second Harvest, Hunger Task Force, and Milwaukee County Corrections.
SEED Initiative	Sowing, Empowering, and Eliminating Deserts of Food (SEED) is a Milwaukee County initiative that provides mobile food markets for staple foods such as produce, vegetables, and meat at a discounted price to neighborhoods that do not have a grocery store within walking distance. The initiative also includes activities around community gardens and a focus on food preservation led by the Hunger Task Force. Preserved food goes to food pantries as well as to seniors in need of healthy food. This initiative was adopted by Milwaukee County at the end of June as we were concluding this report; consequently, we did not have time to provide a detailed analysis.
Walk 100 Miles in 100 Days	An initiative of Mayor Tom Barrett, this is a citywide effort to encourage residents to stay active. Participants are encouraged to join in on community walks to work toward the goal of 100 miles in 100 days and to track their progress using a an online tracking tool on the City's website.
Growing Power	A national nonprofit organization and land trust headquartered in Milwaukee that helps provide equal access to healthy, high-quality, safe, and affordable food to people in all communities. Growing Power's food production allows local residents to eat fresh, local foods. As an example, Growing Power supplies many vegetables to MPS.

Appendix B: Additional obesity prevention activities by case study city

Table B1: Additional obesity prevention activities in Minneapolis

Source: CDC and Minneapolis Health Department

Action	Description
EBT system	Enables residents to use Electronic Benefit Transfer (EBT) cards to purchase fresh produce, and offers a Market *Bucks* program that incentivizes EBT card use through a dollar-for-dollar match for residents purchasing farmers market tokens on their EBT cards.
Healthy Food in Schools	Helps all Minneapolis schools create healthier food environments for students by establishing systems for successful salad bars in schools, decreasing the availability of unhealthy competitive foods like snacks and treats, identifying opportunities to incorporate more physical activity before and after school and during the school day.
Signage	Has installed 244 signs throughout the city to help residents identify safe walking and biking routes as well as distances to major destinations.
Community Gardens	Gives residents the opportunity to grow their own fruits and vegetables on Minneapolis Public Housing Authority land and rental property and exploring revisions to City policies to better connect community gardeners with vacant land, water, and composting resources.
Public Awareness	*Making it Better* is a partnership between the Minnesota Department of Health and Olmstead County that promotes healthy lifestyles through physical activity and healthy eating. This initiative is estimated to reach more than 1.36 million people.
Local Food Resource Hubs	Provides Minneapolis residents and community gardeners with the tools and education needed to grow, preserve, cook, and compost their own produce.
Healthy Food Shelves	Supports food shelves' efforts to provide healthy food to people in need.
Healthy Restaurant Program	Assists small, independently owned restaurants in creating and promoting healthy meals.
Healthy Meals Coalition	Increases healthy food and beverage options in emergency meal programs. This effort is designed to support meal program staff and volunteers to increase healthy food options and ensure that whole grains, fresh fruits and veggies, and other nutritious foods are regularly served to clients.
Healthy Food in Worksites	Assists employers in creating healthier work environments for employees.
Healthy Vending in Parks	The Health Department has partnered with 10 Minneapolis parks to pilot a healthy vending project to develop a sustainable and successful model of healthy vending in public places.

Table B2: Additional obesity prevention activities in Omaha.
Source: CDC and Douglas County Health Department

Action	Description
Commuter Challenge	A program to encourage people to try active transportation. From May 1 – September 30, participants can track their progress and compete against others for riding, walking, or taking transit.
Safe Routes to School	Encourages communities to make walking and bicycling to school a safe and routine activity.
Active Transportation for College Students	A collaboration of four colleges and universities in Douglas County to make it easier for students to engage in active transportation through initiatives such as increasing bike parking, developing bike share programs, and conducting bike safety classes.
Movin' After School	An initiative that was adopted in public schools to increase physical activity and eliminate unhealthy beverages in before and afterschool programs.
Healthy School Meals	Through a partnership with the Gretchen Swanson Center for Nutrition, Omaha Public Schools made a commitment to serving healthier meals to more than 49,000 students that the school system feeds each day. This will increase the availability of locally produced foods, including fruits, vegetables, milk, meat, cheese, whole wheat tortillas, and bread. Meals also have lower amounts of sodium and sugar. Omaha Public Schools has also installed school gardens in some schools to teach students about fresh produce and to increase access to nutritious meal options.
Heartland B-cycle	A program that offers 150 shared bicycles at more than 30 stations. The program recorded more than 7,000 rides in the first six months in 2016.

Table B3: Additional obesity prevention activities in Chicago

Source: City of Chicago and CLOCC

Action	Description
Chicago Park District Vending Policy	Requires Park District vending machines to be stocked with healthy snacks. The vending machine nutritional standards include limitations on calories, sodium, fat, and sugar per serving.
City-owned Buildings Vending Policy	A contract that will provide healthier vending options in all machines in City-owned or operated buildings.
Chicago Zoning Code Amendment	In September of 2011, the Chicago City Council passed an ordinance[54] amending the Chicago Zoning Code to more clearly define and regulate urban agricultural uses. This includes permitting rooftop farms, apiaries, community gardens, and farmers' markets. It also permits the transformation of vacant lots into urban farms.
Child Care Standards	These were issued by the Chicago Board of Health and provide guidance for nutrition, physical activity, and screen time for children in child care settings. The standards have been imposed by the Chicago Department of Family and Support Services on all of its Head Start, Early Head Start and childcare centers, which impact more than 20,000 Chicago children.
Healthy Produce Carts	In collaboration with the Chicago Department of Housing and Economic Development, the Chicago Department of Public Health is supporting the launch of an entrepreneurial venture to fund Healthy Produce Carts as a means to increase the availability of fruits and vegetables to Chicago communities, including those with limited access to fresh produce.
Fresh Fruits and Vegetables	The city received commitments from grocers to supply fresh fruits and vegetables in 18 new stores and 18 retrofitted stores located in low-access areas.
Farmers Markets	New farmers markets have opened in West side neighborhoods that have limited grocery options. These farmers markets are a result of partnerships between the City of Chicago and several organizations, including Kraft Foods and Safeway Foundation, each donating $75,000 to cover the costs of opening and maintaining the market for the next five years. The markets will accept EBT cards and provide access to fresh and healthy foods.
Bike Share Program	Chicago's bike sharing system, DIVVY, consists of 4,760 bikes and 476 stations across the city. It is a program of the Chicago Department of Transportation, which owns all of the system's bikes, stations and vehicles. Initial funding came from federal grants and Chicago's Tax Increment Financing program. The system is operated by Motivate, a private firm that focuses on operating large-scale bike share programs. Blue Cross and Blue Shield of Illinois sponsor much of the program as a way of promoting health and wellness.

[54] Urban Agriculture FAQ. (n.d.). Urban agriculture FAQ. [Web page]. Retrieved from http://www.cityofchicago.org/city/en/depts/dcd/supp_info/urban_agriculturefaq.htm

Table B4: Additional obesity prevention activities in Louisville

Source: CDC and City of Louisville

Action	Description
Fresh Produce in Schools	Louisville has adopted two plans to provide fresh produce in local schools. Those plans balance supply and demand for both in- and out-of-season local produce to ensure a guaranteed market for growers and a steady supply of fresh food for the Louisville School District, which serves approximately 100,000 students.
"Louisville by Bicycle" Maps	These maps include bike lanes, shared roadways, and safety tips and were distributed at local bike shops, visitor centers, and libraries.
School Gardens	School gardens and greenhouses were built to incorporate fresh fruits and vegetables in public school classrooms and cafeterias.
The Louisville Loop	This is a 100-mile bike path circling the city that has continually been improved through adding trails and signage to improve safety.
How to Win a Food Fight: Make Healthy Choices	This initiative used billboards and television commercials aimed at school-age children to depict a variety of "fights" between healthy and unhealthy options. The healthy option always wins the fight because of its nutritional value.

Table B5: Additional obesity prevention activities in Philadelphia

Source: Philadelphia Department of Public Health

Action	Description
"Do You Know What Your Kids Are Drinking"	This was a multi-media campaign that educated caregivers about the link between sugary drinks, obesity, and type 2 diabetes among children.
Nutrition Education	Provided to all public school students whose families are eligible for SNAP.
Healthy Vending in Schools	In 2004, all sodas and sugar-sweetened beverages were removed from public school vending machines.
District-wide School Wellness Policy	This was implemented in 2006 and included guidelines for school meals, snacks, and drinks, physical activity, and nutrition education.
Healthy School Meals	In 2009, deep fryers were banned in school kitchens. Also, schools switched from serving 2% milk to 1% milk and skim milk.