COMMUNITY DEVELOPMENT AND HEALTH

A HEALTH IMPACT ASSESSMENT TO INFORM THE COMMUNITY INVESTMENT TAX CREDIT PROGRAM

Health Resources in Action

Metropolitan Area Planning Council

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GUIDE TO THIS DOCUMENT

This Health Impact Assessment (HIA) documents the relationship between the activities of Community Development Corporations (CDCs) and health in order to inform the allocation of tax credits to CDCs across the Commonwealth of Massachusetts as determined by the Department of Housing and Community Development (DHCD) through the Community Investment Tax Credit (CITC) Program.

This document is divided into five Parts. Part I provides the background and context for this HIA. It describes the CITC program, what activities certified CDCs engage in, and the stakeholder engagement process for this HIA. Part II provides an in-depth analysis of the specific CDC activities across the state and selected baseline demographic and health characteristics of the populations in the communities that certified CDCs serve. Part III describes in detail how the activities that fall under each of the categories link to health. Next, Part IV assesses how the allocation of tax credits through the CITC will likely impact CDC activities and consequently, community health. Finally, Part V provides recommendations based on the HIA findings and that aim to maximize any positive impacts on health while mitigating any potential negative impacts. Recommendations are provided for DHCD to consider in the implementation and administration of the CITC program in regards to individual and community health; recommendations are also provided to CDCs themselves and the organizations that play important supporting roles in the CITC program, such as Community Support Organizations (CSOs) and Community Partnership Fund Providers.

This HIA was conducted through a partnership between the Massachusetts Department of Public Health (MDPH), Health Resources in Action (HRiA), and the Metropolitan Area Planning Council (MAPC). The HIA was supported by funding from the Health Impact Project, a national initiative designed to promote the use of HIAs as a decision-making tool for policymakers. The Health Impact Project is a collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts.

PART I: BACKGROUND

COMMUNITY DEVELOPMENT CORPORATIONS

Community Development Corporations (CDCs) are not-for-profit organizations whose mission is to support the social, economic, and physical development of the communities they serve in order to expand opportunities for their residents and enhance their quality of life. CDCs accomplish this by engaging local residents, businesses, and leaders to work together to undertake programs and activities that help promote sustainable community growth, particularly for low-and-moderate income people. Some of the primary activities CDCs engage in include real estate development, small business development, asset building, community empowerment, and resident engagement. In this way, CDCs are one of the primary vehicles of community development in Massachusetts.

THE COMMUNITY INVESTMENT TAX CREDIT

BACKGROUND

The Community Investment Tax Credit (CITC) is a piece of state legislation which is "designed to enable local residents and stakeholders to work with and through community development corporations to partner with nonprofit, public, and private entities to improve economic opportunities for low and moderate income households and other residents in urban, rural, and suburban communities across the Commonwealth."[1] To accomplish this, the program will provide selected CDCs, and a limited number of supporting organizations, with an allocation of tax credits. The tax credits are intended to attract private sector funding to support core community development activities, thereby creating more stable and long-term sources of funding for the CDCs.

In order to obtain the tax credits, CDCs have to go through a two-step process. The first is to become certified[2] by the Department of Housing and Community Development (DHCD). Certification requires that the CDC demonstrate that:

- They are a non-profit corporation
- They focus a majority of their work on a constituency that is economically disadvantaged

[1] 760 Code of Massachusetts Regulations (CMR) 68.01. More background on the CITC is provided in Appendix A.

[2] The Commonwealth of Massachusetts passed legislation in 2012 (MGL Chapter 40H) that set certification standards for CDC. The legislation standardized what qualifies and defines an organization as a CDC in the state.

- They engage local residents and businesses to work together to undertake community development programs
- Their constituency, including low and moderate income people, is meaningfully represented on their board of directors

As of August 1, 2013, there were 41 certified CDCs in the Commonwealth; prior to the passage of MGL Chapter 40H, there was no formal state certification for CDCs. A list of the certified CDCs is included in Appendix B.

The second step of the process is to develop and adopt a Community Investment Plan (CIP) that will serve as an organizational business plan and provide a work plan for the activities that are to be supported by the tax credits. CIPs will be submitted to DHCD in support of their tax credit allocation request and awarded CDCs will receive a tax credit allocation. A CDC could receive up to $150,000 in tax credits per year for three years, which would then be used to attract up to $300,000 in private funding for each year since the credits require a 1:1 match (i.e., credits are equal to 50% of the donation).

Informing the Decision-Making Process

DHCD is the agency responsible for administering the CITC process. DHCD initially developed regulations for the CITC to guide the program and set parameters for the tax allocations. DHCD was advised on the development of the CITC program by a CITC Implementation Advisory Group that consisted of representatives from state agencies, CDCs and Community Support Organizations (CSOs), housing organizations, municipalities, foundations, banks, and financing institutions. The role of CSOs is to provide capacity building services and assist CDCs with the implementation of their CIP and CITC supported activities.

Administration of the CITC tax allocation program incorporates the development of Notices of Funding Availability (NOFA) for each program year (2014-2019), review of proposals submitted by CDCs (including their CIPs), and provision of the award of tax credits to selected CDCs. Based on the 2013 NOFA[3] (for calendar year 2014 allocations), selections will be based on DHCD's evaluation of submitted CIPs and the track record of the submitting CDC, or, in the case of a CSO, the strength of its capacity-building proposal for CDCs. DHCD states that "allocation decisions will reflect the Department's determination that investment of tax credits in an organization is supported by the application materials submitted." A CDC that is selected for tax credits will be identified as a "Community Partner."

[3] Released November 8, 2013

The CITC program also has an evaluation component through which DHCD will track and measure the results of the program. Through the CIPs, CDCs will have to track their work that is supported by the CITC and provide descriptions of the tools and methodologies for how they will do this. It is expected that CDCs will report on these activities and their results to DHCD, who will have a program-wide tracking and evaluation tool for the CITC program.

Health Impact Assessment

HIAs aim to describe the potential health effects of plans, policies, or programs (National Research Council 2011). This is an intermediate HIA, not a comprehensive HIA, as the assessment did involve significant time and resources and complex pathways, broad stakeholder engagement, and detailed analysis but did not include the collection of new data.[4]

Goals of the CITC HIA

The core activities of CDCs are intimately linked to the physical, mental, and social determinants of health in the communities they serve; however, this relationship has yet to be fully explored and documented. Since the funds made available through the CITC program will impact CDC core activities, the additional funds will likely impact health as well. Thus, the primary goal of the CITC HIA was to investigate how and to what extent CDC activities affect these health determinants, how the CITC program may impact these activities, and consequently, community health across the state. For example, certain activities may be funded and maintained at current rates, such as the development of affordable housing, whereas other activities like resident services and community empowerment initiatives may increase due to additional funding. The HIA sought to explore how activities would change, if at all, and how these changes could affect health outcomes. Additionally, related to this goal, the HIA looked to identify ways in which linkages between community development work and health outcomes can be incorporated into the administration of tax credits and evaluation measures that DHCD may use to track the success of the program.

A secondary goal of this HIA was to begin to document how community development activities as a whole affect health and to provide additional relevant and actionable information that can be used to evaluate local health impacts and benefits of these activities. This understanding will provide useful and actionable information that can be used by CDCs as they promote their work, build partnerships, and seek funding. The information in this HIA will also be incorporated at regional, state, and national levels as part of the wider dialogue about the health impacts of community development work.

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[4] Categories of Health Impact Assessments. Improving Health in the United States: The Role of Health Impact Assessment. National Research Council (US) Committee on Health Impact Assessment. http://www.ncbi.nlm.nih.gov/books/NBK83540/

The HIA Process

In order to assess how community development activities impact health and how those activities might be impacted by the CITC program, MAPC, HRiA, and MDPH:

- Met with staff from DHCD, the Massachusetts Association of Community Development Corporations (MACDC), certified CDCs, CSOs, municipal staff, and other stakeholders to discuss ways community development work could impact health of the constituencies that they serve;
- Reviewed public health, social science, transportation, economic, and housing literature to understand how community development work relates to known determinants of health;
- Gathered health, demographic, and economic data for areas and populations served by certified CDCs, the state, and areas not served by certified CDCs;
- Working with MACDC, gathered data about CDC activities from the Growing Opportunities, Assets, and Leaders across the Commonwealth (GOALs) reports for the past 10 years;
- Surveyed Board members of certified CDCs and discussed the HIA with CDCs at the annual MACDC conference and through an online webinar.

These activities were conducted according to the standard steps of an HIA including screening, scoping, assessment, recommendations, reporting, and monitoring as follows:

Screening

The screening phase of the HIA process determines whether or not the proposed plan, project, or in this case, policy, has the potential to significantly impact health and subsequently whether or not conducting an HIA will add value to the decision-making process.

The screening phase of this HIA began as part of the 2012 Call for Proposals program grant and continued through the spring of 2013. Screening was conducted by MAPC, HRiA, and MDPH. Using findings from this phase, it was determined that the funding made available through the CITC would influence the core operations of CDCs across the state and thus have the potential to significantly influence the physical, mental, and social determinants of health in the communities they serve. Since health was not accounted for in the decision-making process, it was determined that conducting an HIA on the potential health impacts of the CITC was needed and would add value.

Scoping

The scoping phase is the second phase of the HIA process. The purpose of this phase is to develop a work plan for conducting the HIA, further define the population(s) of interest, and describe the pathways through which the policy, program, or project in question could impact the health of that population.

Two scoping sessions were conducted with stakeholders from across the state that worked or were interested in community development. In order to be representative of the various geographies across the state, one session was conducted in the western part of the state (Northampton, MA) and one in the eastern part (Boston, MA). Stakeholders included CDCs, CSOs, state agencies, municipal staff, and other non-profit organizations. In order to represent the diversity of CDCs and their activities as comprehensively as possible, key informant interviews were also conducted with stakeholders (particularly CDCs) who were unable to attend scoping sessions. For more details, please see the Stakeholder Engagement section below and information included in Appendix E.

The scoping phase of the HIA also included the development of methods to: understand the four categories of CDC activities (i.e., Physical Development and Community Planning, Economic Development, Asset Development, and Community Organizing, Building, and Empowerment) geographically explore the potential implications of the CITC program (e.g., CDC Service Areas and Non-CDC Service Areas), and characterize baseline conditions and relevant health indicators. Relevant datasets were identified regarding demographics, health behaviors and issues, community characteristics, and activities performed by CDCs in Massachusetts.

Assessment and Recommendations

Assessment provides a profile of the baseline, or "existing," relevant conditions among the populations impacted and evaluates the potential health impacts the CITC could have on the baseline conditions. The Assessment phase of this HIA is divided into Part II, Part III, and Part IV. Part II focuses on baseline conditions and contains: (1) a baseline profile that examines the distribution of activities performed by CDCs eligible to apply for the CITC as well as results that certified and non-certified CDCs have produced across the state and (2) a comparison of the demographic, selected health, and selected community characteristics of communities represented by the CDC and non-CDC Service Areas. Part III describes the pathways through which community development activities impact health. Part IV then presents a qualitative assessment on how the CITC is predicted to impact the core CDC activities and how this could impact health outcomes.

The baseline conditions examine the distribution of activities that CDCs currently perform and the demographic, health, and environmental profile of the populations these CDCs serve. The assessment portion of this HIA is primarily qualitative; focusing initially how the impact CITC will impact core CDC activities and then on how changes in these core activities could impact the health of the communities they serve. To conduct the assessment with the time and resources available, this HIA focused on accessible secondary resources with the guidance of stakeholders.

These are followed by evidence-based recommendations (Part V) to mitigate negative and maximize positive health impacts of the CITC program.

Reporting

Reporting communicates the findings and recommendations gleaned during the HIA process to stakeholders and decision makers. The report considers the nature and magnitude of the health impacts and their distribution in the population. It summarizes the key health impact issues, and is followed by recommendations to improve heath determinants and outcomes. Recommendations are aimed at three main audiences: DHCD as the administrator of the CITC program, certified CDCs whose activities will be influenced by the CITC, and CSOs and Community Partnership Fund Providers, both of whom will support CDC activities as part of the CITC program.

Monitoring

Once HIA findings are disseminated in a report, the monitoring phase begins. The objective of monitoring is to review the effectiveness of the HIA process and evaluate the actual health outcomes as a result of the project. Both a process and impact evaluation will be conducted during as part of this HIA to understand the strengths and challenges of the HIA process, as well as its immediate impacts. Details on the monitoring and evaluation plan are included in Appendix F.

Finally, given that DHCD will have a program-wide tracking and evaluation tool as part of the CITC program, the HIA aims to influence the metrics they will use during so that they include health-related activities and outcomes.

Stakeholder Engagement

Stakeholder input to inform and guide the HIA is essential. Stakeholder engagement began during the screening—or first—phase of the HIA process with a series of discussions between the HIA team MDPH, MAPC, HRiA, DHCD, and MACDC. These discussions focused on the potential value of making health a more explicit consideration in CDC work and increase the understanding that government and support or advocacy organizations have of this connection.

Next, in order to set up the scoping phase, invitations were extended to CDCs and those interested in community development and public health to participate in the scoping sessions.

DHCD, MACDC, MDPH, and HRiA were responsible for reaching out to CDCs and CSOs, while MAPC engaged other stakeholders through internal communications to their subregions[5] (e.g., the Inner Core Committee and the MetroWest Regional Collaborative) and with DPH through the Mass in Motion[6] (MiM) weekly update newsletter that includes 52 MiM coalitions in cities and towns across the state.

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[5] For more on MAPC subregions: http://www.mapc.org/subregions

[6] The Mass in Motion program is MDPH's program for increasing healthy eating and active living in Massachusetts's cities and towns:

The invitations provided information about the scoping sessions that were planned across the state and included a project fact sheet and flyer that described the HIA, background on the CITC, and contact information for the project team.

Stakeholder input also included engagement with two advisory committees to the CITC process. DHCD has a CITC Advisory Committee comprised of CDCs, CSOs, state agencies, municipal representatives, NGOs, and private sector organizations. A presentation was made to this group on June 28, 2013 and focused on the desired impact of the HIA and coordination of the HIA process with implementation of the CITC program. Through this meeting, a recommendation was made to reach out to Community Action Agencies as stakeholders. Using a contact list provided by DHCD, invitations for the scoping sessions were sent to the agencies.

MACDC has a CITC Advisory Committee as well. Through MACDC, the committee was provided with the project fact sheet, and staff at MACDC discussed the HIA with the committee. Both MACDC and the committee were vital to the outreach for the scoping session and continued to play a role in sharing information and communications about the HIA and its findings.

Community Development Activities

CDCs perform a wide range of activities depending on their mission, capacity, geography, and target constituency. Using the definition of community development provided by the CITC[7] and feedback from the scoping sessions, the HIA separated the types of CDC activities in Massachusetts into four categories. These include:

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http://www.mass.gov/eohhs/gov/departments/dph/programs/community-health/mass-in-motion/

[7] The CITC program defines community development specifically as "physical development, including affordable housing and commercial real estate development and preservation; community planning pertaining to physical and economic development; economic development, including business assistance and development; and asset development to build the economic capacity, mobility, and stability of low-income persons (e.g., homeownership assistance, financial education, foreclosure prevention, Individual Development Accounts (IDAs), and savings programs, and job training and creation programs)."

Physical Development and Community Planning

Economic Development

Asset Development

Community Organizing, Building, and Empowerment

Each category of activities focuses on a different element of the community. ***Physical Development and Community Planning*** deals with the planning and construction of physical space, and includes activities such as affordable housing development, commercial real-estate development, and the preservation of open spaces in a community. Community planning can have a broad definition, but for this HIA it is used to describe coordination with individuals and groups that are stakeholders as part of a specific physical development project. Broader community engagement to identify and determine development goals and new projects is included in the Community Organizing, Building, and Empowerment category.

Transit-oriented development activities, which also occur under this category, includes advocacy to encourage physical development near and around public transit to increase access to these transportation options. Other activities include the creation of community spaces (community gardens, parks, food pantries, or youth/senior centers), brownfield remediation, and light industrial development, the last of which focuses on the production of small consumer goods such as clothes or furniture.

Economic Development activities focus on building the economic vitality that exists within the physical space. The creation of jobs through commercial real-estate development is one means through which certified CDCs directly promote economic growth in their communities, but the primary activities in this category promote the development, maintenance, and growth of small businesses through microloans, technical assistance, and training programs.

The ***Asset Development*** category focuses on building assets for the individuals and families served by the CDCs. Asset development activities include building individual skills that increase the independence, stability of housing, employability, and financial abilities of individuals and families within the community. Activities that promote housing stability may deal with covering the

incremental costs of housing that low income households cannot afford, such as rent or mortgage payments, high utilities bills, or basic home repairs. These types of activities fall into two categories: resident services, which provide rental and/or fuel assistance to families who are struggling to pay rent, mortgages, or utilities bills, as well as home energy upgrades and weatherization programs that seek to lower these costs; and property maintenance activities, which focus on improving or maintaining housing quality by providing home repair services and de-leading loans. They also include activities that more generally promote long-term housing stability, such as homeownership assistance programs and foreclosure prevention counseling. Activities that promote financial stability aim to increase financial independence through financial education courses, tax preparation assistance programs (e.g., Volunteer Income Tax Assistance), Individual Development Accounts (IDAs) and other savings programs, and budget counseling programs. Activities that promote employability focus on workforce training activities and career counseling. Finally, activities which promote general stability and independence include English for speakers other languages courses (ESOL), programs that address basic needs such as food, clothing, childcare, and legal services, as well as those that provide substance abuse and mental health support.

Finally, ***Community Organizing, Building, and Empowerment*** activities invest in the strength and cohesiveness of a community by bringing people together, building connections between them, and strengthening community input and engagement in the political process. Activities in this category thus start with community outreach and engagement activities, which strengthen other CDC activities in this category, including community organizing and advocacy efforts. They also expand the reach of community events, community groups and coalitions (e.g., neighborhood watch groups), and community meetings. Other activities in this category focus on empowering adult community members through leadership development trainings and youth through other programs. Many CDCs have volunteer programs that foster mutual support amongst community members.

PART II: BASELINE PROFILES

Part II of this document provides a profile of the current, or "existing", distribution of CDC activities as well as a profile of the demographic, health, and community characteristics of the communities that reside in the CDC Service Area compared to the area not served by certified CDCs. The CDC Activity Profile focuses on the current distribution of core activities amongst those certified CDCs across the state and the CDC Population Profile focuses on the profile of the populations served by those CDCs.

PART IIA: CDC ACTIVITY PROFILE

Thus far, this HIA has provided a general overview of the CITC program and the work that certified CDCs in Massachusetts conduct. The purpose of the CDC Activity Profile is to provide a more in depth account of CDC activities. For each category of activities, the numbers and types of CDCs that engage in each type of activity are described as are the results of those activities (where data is available).

METHODS

When describing the number of CDCs engaging in each specific activity, this HIA focused only on the 41 certified CDCs eligible for the CITC tax credit. The number of CDCs engaging in each activity was calculated based on the information listed on each organization's website, the information provided in CIPs and related materials submitted for the CITC grant program[8], and feedback from scoping sessions and key informant interviews. This mixture of information sources was used to create as consistent and comprehensive a picture of certified CDC activities as possible given resource and data constraints.

Key stakeholders also provided additional feedback during the review process in order to ensure that this information was adequately captured. Based on this it should be noted that the numbers are likely conservative estimates as stakeholder review and input has indicated that more CDCs may engage in activities that are outlined in the following section than this HIA accounts.

Feedback from the scoping sessions and key informant interviews made it clear that urban and rural communities face a variety of challenges based on the constituency they serve. One of the major themes that emerged from these sessions was the different challenges and needs of urban

[8] In March 2013, DHCD administered the CITC Grant Program, which was a start-up program designed to assist certified CDCs to develop capacity to apply for and implement the CITC. In particular, it made available resources for certified CDCs to develop or refine their CIP, which is the primary element required in order to be eligible for and to receive tax credits through the CITC.

versus rural communities. Based on this, it was determined that it would be important to consider these differences in the analysis of the CDC Activity Profile and to account for them in the recommendations in Part V.

To better understand the distribution of activities across community types, CDCs serving communities with predominantly urban characteristics were compared to those CDCs serving those with predominantly rural characteristics. Since CDCs service areas can range from a single neighborhood to many municipalities, CDCs were categorized according to the types of communities they predominantly serve. Each municipality was categorized as "urban", "urban: gateway" or "rural" based on DHCD's definitions as per the CITC legislation. Communities in gateway cities were separated from other urban community types since they are specifically called out in the CITC legislation, which recommends that 30 percent of the awards go towards community partners who serve gateway municipalities[9]. Other municipalities with urban characteristics were then further subdivided into core urban or suburban based on MAPC's community type definitions.[10] For cities and towns that did not fall into either category MAPC's definitions were also used.

Based on these methods, the final CDC "community types" include urban: core, urban: suburban, urban: gateway, and rural.

Next, to illustrate the cumulative impacts of CDC activities in their communities, data is presented on the cumulative accomplishments of CDCs in Massachusetts. Since certain activities, such as affordable housing development, can take many years to complete, data over the last 10 years will be presented. This was illustrated using the data from the MACDC GOALs reports, which consists of self-reported data that was collected by MACDC via a survey they administer to their 91 member organizations. Not all of MACDC's member organizations are certified CDCs; however all certified CDCs are members or associate members of MACDC.

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[9] According to the Executive Office of Housing and Economic Development (EOHED) under M.G.L. c. 23A section 3A, a Gateway City in Massachusetts is defined as a municipality with (1) a population greater than 35,000 and less than 250,000; (2) a median household income below the state average; and (3) a rate of educational attainment of a bachelor's degree or above that is below the state average. There are currently 26 cities that meet this definition.

[10] In order to support planning, analysis and policy development, MAPC created a classification system for municipalities in Massachusetts. MAPC has identified five basic community types across the state, four of which can be subdivided further into nine sub-types. The criteria used to type each city or town include land use and housing patterns, recent growth trends and projected development patterns: http://www.mapc.org/sites/default/files/Massachusetts_Community_Types_-_July_2008.pdf

The survey was administered to all MACDC members on a voluntary basis and the number of respondents varied depending on the year. In 2010, 2011, and 2012 67 CDCs responded, 35 of which are currently certified CDCs. Since the certification process for CDCs only began in 2010, data reported by all participating CDCs was included, regardless of whether they were certified or not. Thus, the results of this survey do not offer a comprehensive image of what certified CDCs have produced. Rather, these results are meant to illustrate the diversity of effects that CDC activities can have on the growth of a community.

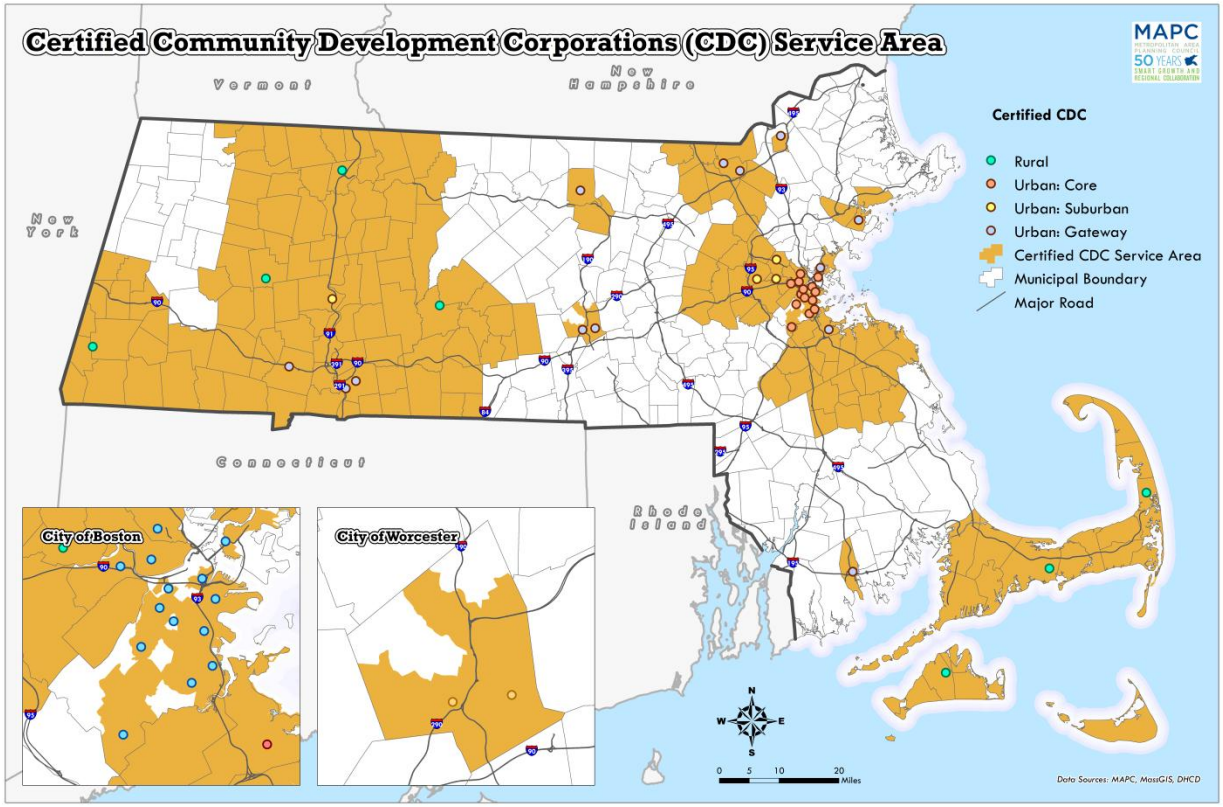
CDC Community Types

Based on the methods outlined above, 34 (83%) certified CDCs serve communities with predominantly urban characteristics and seven (17%) serve communities with predominantly rural characteristics. Thus according to this breakdown, the vast majority of certified CDCs in Massachusetts serve predominantly urban communities.

The CDCs that serve urban communities include 16 CDCs that serve dense urban or "core" communities, which are higher density inner city areas that are built out, 4 that serve suburban communities, which tend to be moderate density and nearly built out towns, and 14 which primarily serve gateway cities or neighborhoods in gateway cities, which share characteristics with the urban communities. Core and suburban communities are grouped together into one category based on feedback from the scoping sessions; also, the data do not suggest there were very large differences between them.

Figure 1 below shows the spatial distribution of these CDCs (to see a complete listing of which CDCs fall into each category, see Appendix B).

FIGURE 1. MAP OF CERTIFIED CDCS BY COMMUNITY TYPE



PHYSICAL DEVELOPMENT AND COMMUNITY PLANNING

CDCs engage in multi-faceted work to build safe and vibrant communities. Physical development and community planning—the planning for and creation of physical space—is one of the mechanisms through which they aim to do this. These activities deal directly with the creation or alteration of physical space such as dwelling units, storefronts, warehousing facilities, or parks. The physical development of a building, a neighborhood, and a community directly influence the behaviors, risk factors, and physical and mental health outcomes for those living and working in these areas. For example, safe and affordable homes built within walking distance to a variety of destinations may increase physical activity, whereas a construction of residential units on formerly industrial land that has not been cleaned up to existing standards can increase potential health risks associated with residual contamination.

SUMMARY OF CERTIFIED CDC WORK

All but one of the 41 certified CDCs in Massachusetts reported engaging in activities that fall under the domain of physical development and community planning, making it the most widespread of the four categories of activities that CDCs perform. Only one CDC serving a gateway urban community does not engage in physical development or community planning, and instead focuses on economic development and community organizing activities. Each of the

activities in this category affects different risk factors and behaviors that influence physical and mental health outcomes for area residents.

The activities listed below are not mutually exclusive—for example, a CDC may promote transit-oriented development as a part of their affordable housing development plan—but distribution of activities is as follows:

- 38 (93%) create affordable housing units;
- 12 (29%) develop commercial real estate or mixed use projects;
- 19 (46%) have created some kind of community space (e.g., community or cultural centers, recreational or educational facilities, homeless shelters or shelters for victims of violence, etc.);
- 6 (15%) specifically work to preserve open space;
- 7 (17%) promote transit-oriented development by engaging in transportation planning and/or advocacy work;
- 2 (5%) perform brownfield remediation; and
- 3 (7%) create industrial or light industrial space.

In contrast, only 6 (15%) of CDCs explicitly report engaging in community planning as a formal activity. Although nearly every certified CDC in Massachusetts engages in physical development regardless of the type of community they serve, the type of physical development activity varies depending on what type of community they serve. Table 1 below shows this distribution.

TABLE 1. BREAKDOWN OF PHYSICAL DEVELOPMENT & COMMUNITY PLANNING ACTIVITIES BY COMMUNITY TYPE

	Urban						Rural		Total	
	Core & Suburban		Gateway		Total Urban					
	No.	%	No.	%	No.	%	No.	%	No.	%
Physical Development (any kind)	20	50%	13	33%	33	83%	7	17%	40	98%
Community Planning	4	67%	1	17%	5	83%	1	17%	6	15%
Affordable Housing Development	20	51%	13	35%	32	86%	5	14%	38	90%
Commercial Real-Estate Development	7	58%	3	25%	10	83%	2	17%	12	29%
Community Space	8	42%	6	32%	14	74%	5	26%	19	46%
Open Space	5	83%	1	17%	6	100%	0	0%	6	15%
Industrial or Light Industrial Development	1	33%	1	33%	2	67%	1	33%	3	7%
Transportation Planning/Advocacy	6	86%	1	14%	7	100%	0	0%	7	17%

	Urban						Rural		Total	
	Core & Suburban		Gateway		Total Urban					
	No.	%	No.	%	No.	%	No.	%	No.	%
Brownfield Remediation	1	50%	1	50%	2	100%	0	0%	2	5%

As Table 1 shows, about 83% of the certified CDC-driven physical development occurs in urban settings. This distribution—which is nearly identical to the overall distribution of CDCs by community type—is expected as nearly all certified CDCs (except for one urban) engage in physical development activities. Urban CDCs focus on a much broader range of activities than rural communities, who focus primarily on affordable housing development and the provision of community space. Transportation planning / advocacy, open space preservation, and brownfield remediation occur almost exclusively in urban service areas.

Affordable housing development remains the most widespread of CDC activities with 97% of urban CDCs (100% core & suburban and 93% gateway) and all rural CDCs reporting it as a core activity.

Summary of certified and non-certified CDC accomplishments

Over the last 10 years (from 2003-2012), CDCs have:

- Built or preserved over 13,000 housing units, which produced 28,000 construction jobs;
- Developed just under 810,000 square feet of commercial and mixed use space, including office, commercial, and retail space, as well as residential units in mixed use developments; and
- Developed or preserved over 840,000 square feet of open space (~ 20 acres), which includes community gardens, schoolyards, playgrounds, plazas, and parks.

Every year for the past decade, CDCs reported that they have (on average):

- Built or preserved an average of 1,300 units for individuals and families, which increased from about 1,050 units in 2003 to 1,511 units in 2012;
- Developed 80,000 square feet of commercial and mixed use space; and
- Preserved or developed 93,000 square feet (or 2 acres) of open space.

Overall, physical development activities have increased over the last several years. Affordable housing has increased about 30%, from 1,180 units that were built or preserved in 2010, to 1,379 in 2011, to 1,511 in 2012. Commercial real estate development has fluctuated over the past three years with the largest amount developed in 2010 (39,000 square feet), and open space preservation has slowed with 15,000 square feet (0.34 acres) preserved in 2010 but none in 2011 or 2012.

Economic Development

CDCs work to improve the economic health of an area and its residents. They bolster the standard of living in their communities in many ways, and some CDC activities directly increase employment opportunities for residents. Specifically, CDC activities enhance local employment options by supporting new or existing small businesses through loans and technical assistance, and attracting employers to available commercial developments. These activities can contribute to increases in residents' income, which enables individuals and families to afford food, clothes, housing, medical care, and more.

Summary of Certified CDC Work

Approximately half of the certified CDCs engage directly in small business-related economic development activity. Of these 21 CDCs,

- 9 (22%) engage in small business development aimed at the creation of new businesses;
- 12 (29%) provide small business technical assistance or other support aimed at preserving existing small businesses.

In addition to this, 12 of the 41 certified CDCs (29%) undertake commercial real estate development, which contributes to the economic vitality of communities by bringing jobs to the area and creating space for local small businesses to exist.

TABLE 2. BREAKDOWN OF ECONOMIC DEVELOPMENT ACTIVITIES BY COMMUNITY TYPE

	Urban Core & Suburban		Gateway		Total Urban		Rural		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Small business development	2	22%	3	33%	5	56%	4	44%	9	22%
Small business TA	4	33%	4	33%	8	67%	4	33%	12	29%

According to the data in the Table 2, CDCs serving predominantly rural communities put more emphasis on small business development and preservation activities compared to those serving predominantly urban communities. In fact, while 5 of 7 (over 70%) CDCs that serve rural communities invest in these types of activities, only 14 of 34 (about 40%) of CDCs serving urban communities do overall. Urban CDCs instead focus more on creating economic opportunity in their communities through commercial development activities.

Summary of certified and non-certified CDC accomplishments

In 2012 alone, CDCs created or preserved more than 4,100 job opportunities and assisted over 2,700 entrepreneurs to start, grow, or stabilize their businesses. This number represents an increase from 2010 and 2011, where around 2,100 and 2,000 local businesses received technical and financial support, and roughly 2,000 and 1,900 job opportunities were created or preserved, respectively.

When looking over the last 10 years (from 2003-2012), CDCs have:

- Secured over $57M in small business financing;
- Provided technical and financial assistance to 15,000 small businesses; and
- Created or preserved 22,400 jobs to sustain and grow small businesses in their communities.

Asset Development

Besides increasing the number of employment opportunities, as discussed previously, CDCs support residents' economic standing in other ways. Activities under the asset development domain specifically support individuals and their families. The activities help to increase financial security through resident services, property maintenance, homeownership programs, education and training for employment, and financial education and savings programs. As noted previously, having financial security enables families to afford essential items like food, clothes, housing, and medical care and contributes to health through these mechanisms and others.

Summary of Certified CDC Work

Asset development activities can be sorted into four broad categories: those that promote housing stability, those that promote financial stability, those that promote general stability, and those that promote employability. Services that promote housing stability include resident services, property maintenance, homeownership assistance, and foreclosure prevention services. Financial stability activities take the form of budget counseling, savings programs and IDA accounts, financial education, and tax preparation assistance. Activities that promote overall stability include activities such as English classes, substance abuse and mental health support, free legal services, and programs that provide food, clothing, childcare, or other basic services to individuals and families that need the support. Finally, activities that promote employability include career counseling and workforce training.

As shown in Table 3, 39 of 41 (95%) CDCs reported engage in at least one asset development activity. Of these:

- 34 (83%) provide support for housing stability;
- 15 (37%) provide services that promote financial stability;
- 12 (29%) focus on activities that specifically promote employability; and

- 12 (29%) provide programs that support overall stability.

TABLE 3. BREAKDOWN OF ASSET DEVELOPMENT ACTIVITIES BY COMMUNITY TYPE

	Urban						Rural		Total	
	Core & Suburban		Gateway		Total Urban					
	No.	%	No.	%	No.	%	No.	%	No.	%
Asset Development (any kind)	19	49%	14	36%	33	85%	6	15%	39	95%
Housing Stability	18	53%	12	35%	30	88%	4	12%	34	83%
Financial Services	6	40%	5	33%	11	73%	4	27%	15	37%
Employment Support	6	50%	4	33%	10	83%	2	17%	12	29%
General Stability	6	50%	4	33%	10	83%	2	17%	12	29%

Similar to the concentration on the development of affordable housing units in physical development, the most widespread set of activities in asset development focuses on promoting housing stability. Almost 90% of CDCs serving urban communities promote housing stability while about 12% of CDCs serving rural communities do. Within this category, most CDCs promote housing stability by providing homeownership assistance. Only about 40% and 30% of CDCs serving urban and rural communities, respectively, provide resident services and about 25% and 30% provide property maintenance services.

Asset development activities that promote financial stability, such as savings programs and budget counseling, are most common amongst gateway CDCs. These gateway CDCs also are responsible for most of the tax preparation assistance that is provided by certified CDCs in the state. With the exception of legal support, which was an activity identified by a single rural CDC, other asset development activities are much more common among CDCs serving predominantly urban communities rather than rural communities.

Summary of certified and non-certified CDC accomplishments

Given the nature of asset development activities, their impact extends beyond the individual who receives their services to those who surround and depend on them. Over the last 10 years (2003-2012), CDCs have supported nearly 290,000 families by providing services aimed at stabilizing housing, strengthening financial independence, increasing employment potential and supporting them in everyday aspects of their lives. This number includes all of the residents in buildings served by CDCS and thus represents the reach of CDC asset development work.

In 2012 alone, CDCs across Massachusetts supported nearly 52,000 families through their asset development activities, which are 13,000 more families than they supported in 2011 and in 2010.

In the category of housing stability, CDCs have:

- Assisted approximately 6,000 households with pre-purchase first time homebuyer counseling;
- Supported nearly 5,000 households with foreclosure prevention counseling/assistance;
- Assisted 200 households purchase homes either through down payment assistance or financing for the purchase, totaling in $4.6M;
- Obtain housing for 1,650 individuals or families that were homeless or at risk of homelessness;
- Assisted more than 150 households through home improvement loans (cumulative of over $1.3M) they directly made or secured;
- Provided lead paint removal/containment services to 1,200 households; and
- Provided 720 households with funds for energy efficiency improvements.

In the category of financial stability, CDCs efforts have resulted in:

- About $3.1M in assets saved through IDA programs; and
- A total of $1.8M in Earned Income Tax Credit dollars returned to 3200 families through the tax assistance programs.

In support of individuals and their families maintaining general stability in their lives, CDCs have:

- Provided ESOL courses to over 4,600 individuals.

Finally, in order to help individuals increase their skills and opportunities in the job market, CDCs have:

- Supported 677 adults increase their skills through adult basic education programs; and
- Secured 22,400 jobs through their workforce development programs.

Community Organizing, Building, and Empowerment

Community organizing, building, and empowerment is a broader category, and refers to CDC activities that bring people together to determine or pursue common causes. Such organizing can help previously disconnected groups work or advocate collectively through community meetings, events, and rallies. Examples of such advocacy efforts include the lobbying of city councils to expand public transit access in underserved areas and public safety campaigns leading to partnerships with police to create safer communities. It can also encompass community building and empowerment activities that occur through outreach and engagement, leadership development, and youth empowerment programs. Many studies show that efforts such as these, which help build resilient and politically engaged communities that increase social ties and support and have the ability to directly influence infrastructure and policy changes occurring around them,

helps to improve residents' quality of life and overall community health (Minkler 2000; W. K. Cook 2008; L. F. Berkman and Kawachi 2000; Richard et al. 2009).

Summary of Certified CDC Work

Table 4 shows that 30 of 41 CDCs (73%) reported engaging in Community Organizing, Building, and Empowerment activities. Of these:

- 21 (51%) engage in community organizing activities;
- 10 (24%) explicitly report performing community engagement;
- 3 (7%) have volunteer programs;
- 2 (5%) specifically promote civic engagement;
- 16 engage in leadership development and empowerment for youth and adults (4 provide adult leadership training (10%) and 12 focus on youth development (29%));
- 18 (44%) host community events;
- 8 (20%) bring together community groups or coalitions;
- 3 (7%) host community meetings; and
- 11 (27%) engage in advocacy work on behalf of the community.

TABLE 4. BREAKDOWN OF COMMUNITY ORGANIZING, BUILDING, & EMPOWERMENT ACTIVITIES BY COMMUNITY TYPE

	Urban						Rural		Total	
	Core & Suburban		Gateway		Total Urban					
	No.	%	No.	%	No.	%	No.	%	No.	%
All	18	60%	11	37%	29	97%	1	3%	30	73%
Community Organizing	13	62%	8	38%	21	100%	0	0%	21	51%
Community Engagement	6	60%	3	30%	9	90%	1	10%	10	24%
Volunteer programs	2	67%	1	33%	3	100%	0	0%	3	7%
Civic Engagement	2	100%	0	0%	2	100%	0	0%	2	5%
Leadership development	1	25%	3	75%	4	100%	0	0%	4	10%
Youth development/ empowerment	8	67%	4	33%	12	100%	0	0%	12	29%
Community events	11	61%	6	33%	17	100%	1	0%	18	44%
Community groups/coalitions	5	63%	3	38%	8	94%	0	6%	8	20%
Community meetings	1	33%	2	67%	3	100%	0	0%	3	7%
Advocacy	7	64%	3	27%	10	100%	1	0%	11	27%

As the table above shows, community organizing, building, and empowerment activities almost exclusively occur in urban communities. Only one CDC serving a predominantly rural community engages in activities in this category.

With the exception of leadership development and community meetings, Table 4 suggests that activities in this category are slightly more concentrated in core and suburban communities rather than gateway communities. In most categories this difference is relatively small, however. For community organizing, for example, the proportion of core and suburban communities engaging in that activity is 65%, compared to about 60% in gateway cities.

Summary of certified and non-certified CDC accomplishments

Community organizing, building, and empowerment activities have experienced the least growth in the last several years and even declined substantially in certain categories. About 3,100 youth were engaged in 2012, which is about 200 more than the number engaged in 2011 but 300 fewer than were engaged in 2010. Community leadership engagement has held steady, with a slight decline, from 2010 to 2012, going from 2,166 to 2,053 volunteer community leaders engaged in CDC activities. Participation in arts-related community events went down by the largest amount, declining from 20,000 in 2010 to 1,490 in 2011 and then 876 in 2012. Participation in culture-related community events fluctuated from 2010 to 2012, increasing overall, and participation in community festivals remained relatively consistent.

Over the last 10 years, CDC community organizing, building, and empowerment activities have:

- Engaged 3,000 youth;
- Engaged 5,000 elderly through elder-specific programs;
- Brought 22,000 people together to participate in community arts programming and 6,000 people together to participate in cultural programs; and
- Engaged nearly 20,000 volunteer leaders in CDC activities across the state.

Conclusion/Summary

While certain categories of activities are consistently represented across CDCs based on the types of communities they serve, a few notable differences emerged. Almost all CDCs engage in some form of Physical Development and Community Planning activity, with the largest percentage engaging in affordable housing development. With the exception with the formation of community space, which is largely employed in rural areas, other forms of development occur almost exclusively in urban areas.

While Economic Development activities are relatively consistent across community types, a greater proportion of CDCs serving predominantly rural communities seem to focus on activities that promote small business development and growth compared to urban communities.

Asset Development activities are consistently employed by CDCs serving all community types. Activities which promote housing stability are the most heavily represented of those in this category.

Finally, Community Organizing, Building, and Empowerment activities are almost exclusively carried out by CDCs serving urban communities.

Overall, these trends align with stakeholder feedback and show that CDCs serving different community types engage in different activities. It is important to note that while these data may suggest that CDCs are responding to their community's needs, they may also simply reflect varying resource constraints or other differences that were not reported in the data analyzed in the present section.

Part IIB: CDC Population Profile

The goal of population profile is to describe demographic and selected health and community characteristics of the populations served by CDCs. In addition to providing baseline information on the populations potentially affected by the CITC program for the assessment, these data allow us to better understand the populations served by CDCs and what issues they might face with respect to physical, social, and mental health. This was accomplished by comparing demographic and selected health indicators in communities served by certified CDCs that are eligible for the CITC ("CDC Service Area"), and communities not served by certified CDCs ("Non-CDC Service Area"). To provide context for this information, data are also presented for the state as a whole ("Massachusetts").

These categories were chosen for several reasons. First, since certified CDCs primarily serve low-and-moderate income households and communities, there is reason to believe the characteristics of the collective populations they serve may differ from the area not served by CDCs. Presenting collective data also allows this HIA to capture the characteristics of the wider population that CDCs serve beyond their primary target constituencies. As demonstrated by their mission statements and interviews, CDCs serve as a resource for other residents in their community regardless of their economic status. Finally, given that CDCs operate in different contexts across the state (e.g., in rural towns, groupings of suburban towns, and urban neighborhoods) across the state, establishing collective CDC characteristics will help us develop a deeper understanding of how individual communities might differ from each other.

Since the CITC program would only apply to certified CDCs, this approach provided an opportunity to compare the baseline conditions and potential impacts of the CITC program across geographic areas served and not served by certified CDCs. To accomplish this, the HIA relied upon readily-available data that could easily be aggregated into these distinct geographic areas. In addition, MDPH provided hospitalization discharge rates for selected outcomes for the

geographies encompassed in the certified CDC and non-CDC areas. This HIA did not engage in primary data collection.

As discussed in Part I, the population profile and datasets can provided in the HIA can also serve as a source for CDCs and other organizations look for locally relevant data on baseline environmental conditions, relevant health indicators, and vulnerable populations to inform proposed decisions in their communities. Data points and sources are included in Appendix C.

METHODS

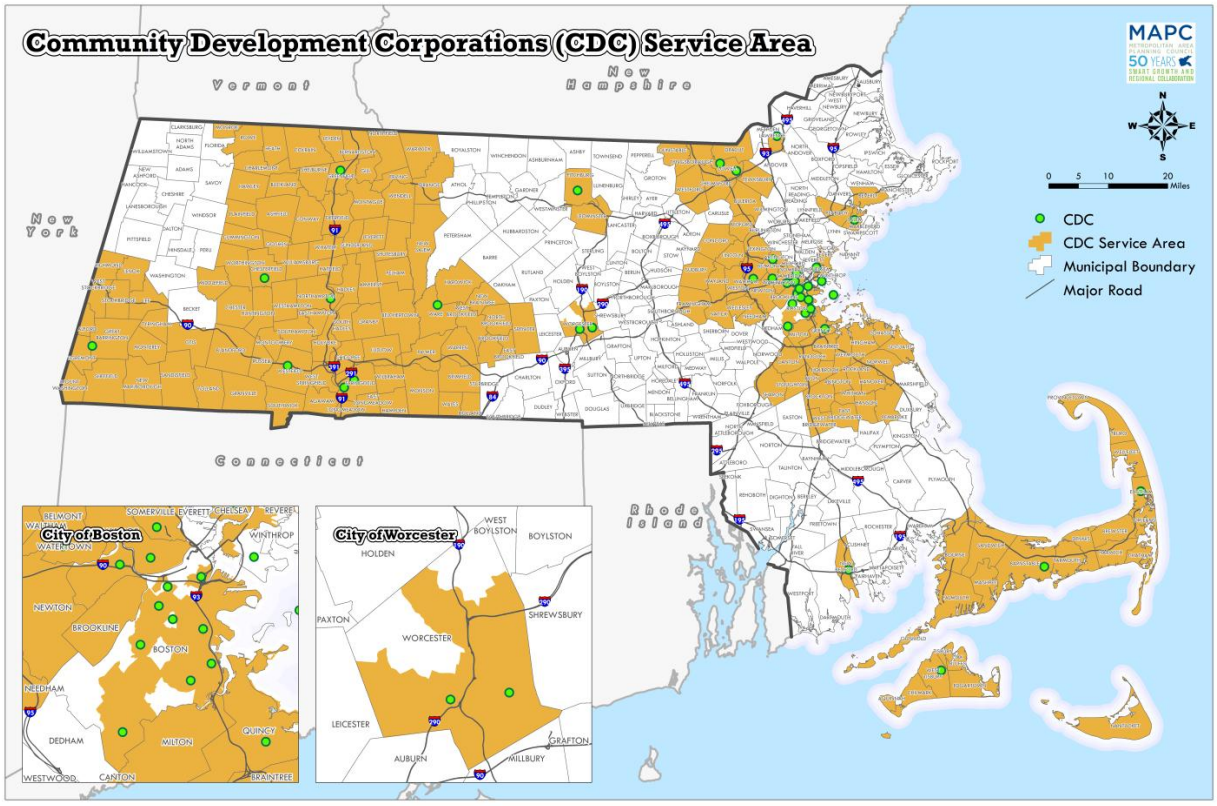
For the purposes of this HIA, each CDC service area was defined based on the primary geographies where certified CDCs are currently active. Geographies were selected based on municipalities, except for Boston, Worcester, and one neighborhood in Lowell, where specific neighborhood data was collected at the census tract level (i.e., census tracts that best overlapped with CDC defined neighborhood service areas). Once each individual CDC service area was defined, they were combined to create the collective "CDC Service Area".

The CDC Service Area is shown in orange in Figure 2 below, while the Non-CDC Service Area, which represents the remainder of the state, is shown in white. The green dots correspond to the geocoded addresses of the CDC offices.

Within those areas, the populations of focus were those most likely to be served by CDCs, which include primarily low-and-moderate income households and racial/ethnic minority groups Since the CITC legislation only applies to certified CDCs, this does not include geographies that are served by CDCs who have yet to be certified in Massachusetts. Where possible (given available data and resources) and appropriate, a comparison is made between the characteristics of the population in CDC Service Areas and "Non-CDC Service Area," which is the area in Massachusetts not served by a certified CDC.

Data sources used in this HIA include: the 2010 United States Census, the American Community Survey (ACS), the Comprehensive Housing Affordability Survey (CHAS), Massachusetts Geographic Information Services (MassGIS), Hospitalization data provided by MDPH, Health data drawn from the Massachusetts Community Health Information Profile (MassCHIP) the Behavioral Risk Factor Surveillance Survey (BRFSS), Registered Voter and Ballots Cast data from the Massachusetts Secretary of State, and the FBI Universal Crime Report (UCR) database. Citations for all of these data sources can be found in Appendix D.

FIGURE 2. MAP OF THE CERTIFIED CDC SERVICE AREA



WHO CDCS SERVE

Certified CDCs collectively serve roughly 3.7 million people, about half the population of Massachusetts. These people can be found in every type of community throughout the Commonwealth, from the rural countryside to the heart of Boston (see Figure 2). CDCs are community-based organizations that are based in and around the communities they serve. CDCs serve a range of geographies; those in rural areas can serve entire counties while urban CDCs in Boston or Worcester might focus on single neighborhoods or specific ethnic groups. Given this, the communities CDCs serve will vary widely in their composition and also face diverse challenges. For example, mobility may be a key issue of concern in rural communities while violence is a more important issue in urban neighborhoods.

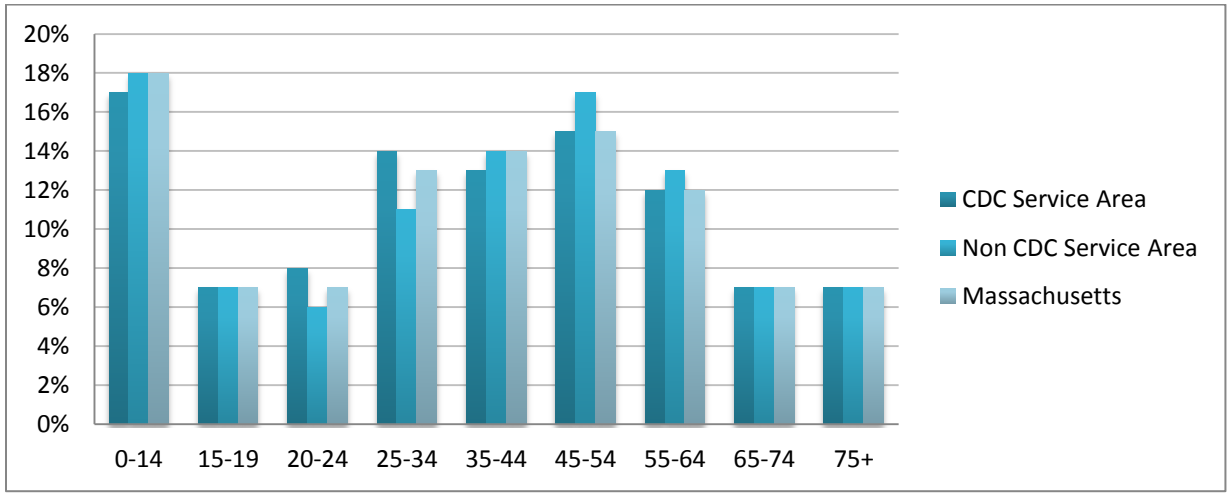
DEMOGRAPHIC CHARACTERISTICS

The demographic characteristics evaluated in this HIA are age, race/ethnicity, income, and education.

As Figure 3 shows, the population within the area that CDCs serve is slightly younger than the state as a whole. Young adults aged 20-34 make up a larger percentage of the CDC Service Area population than the statewide average would predict. The CDC Service Area has a slightly lower

proportion of youth aged 0-14 and adults aged 35-44. In contrast, the population in the areas not served by CDCs is slightly older, with more 45-64 year olds and fewer 20-34 year olds than the state average. Overall, the areas served by certified CDCs are younger than areas not served by one of these 41 certified CDCs in Massachusetts.

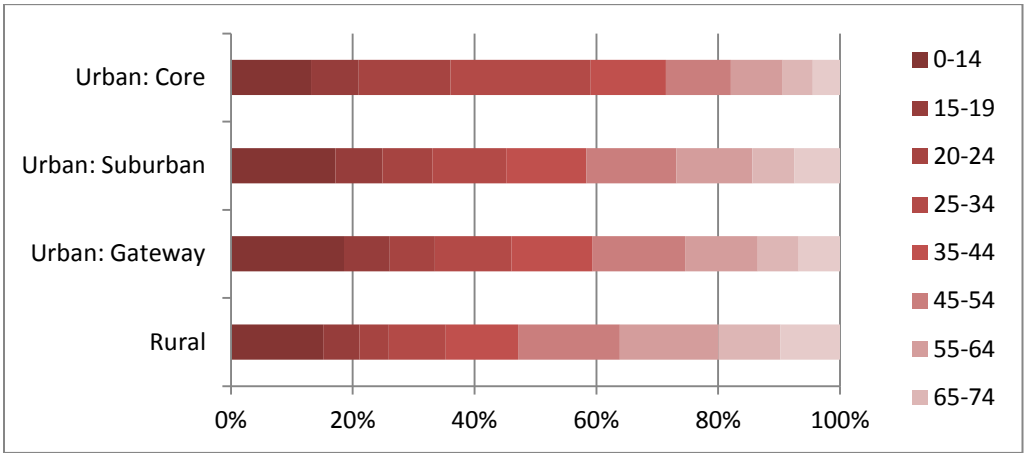
FIGURE 3. POPULATION BY AGE



Source: 2010 Census

Since feedback from stakeholders suggested that their demographics may vary, the distribution of ages was broken down based on whether CDCs serve rural or urban (core, suburban, and gateway) communities. Categories are consistent with those created in the section above (see Part IIA: CDC Activity Profile). In Figure 4 below, the darker the bars are, the younger the population is overall. As this table shows, the population in the service areas of CDCs serving urban: core populations is significantly younger than the populations in any of the other service area types. This skewed age demographic is mostly due to a greater proportion of young adults aged 20-34 compared to the other service areas. Populations in urban: suburban and urban: gateway areas contain the greatest proportion of children aged 0-14 (nearly 20% in both) while populations in rural areas fall on the other end of the spectrum, with a larger distribution of older folks than the other three service area types.

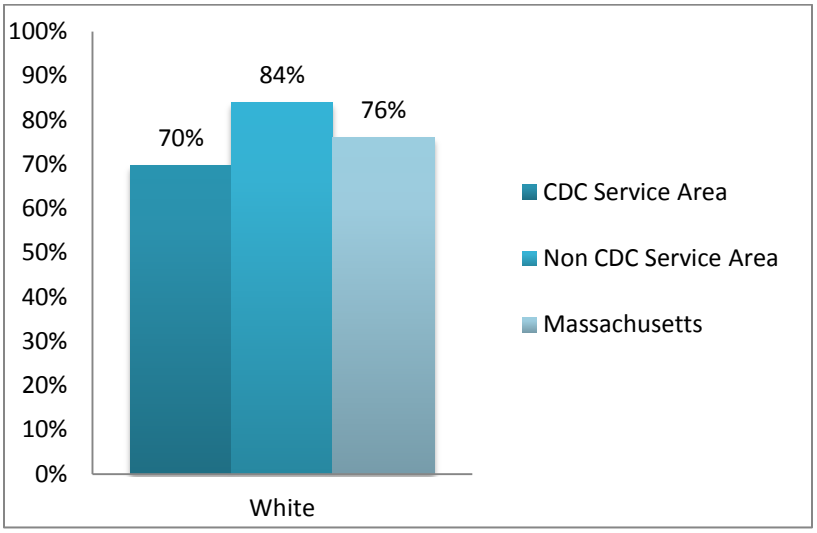
FIGURE 4. POPULATION BY AGE AND REGION



Source: 2010 Census

According to 2010 Census data, the CDC service areas have a lower number of white residents as can be seen in Figure 5, and a larger number of ethnic minorities compared to the state average (see Figure 6). This contrast is even larger when compared to the area not served by CDCs.

FIGURE 5. WHITE POPULATION BY GEOGRAPHIC AREA



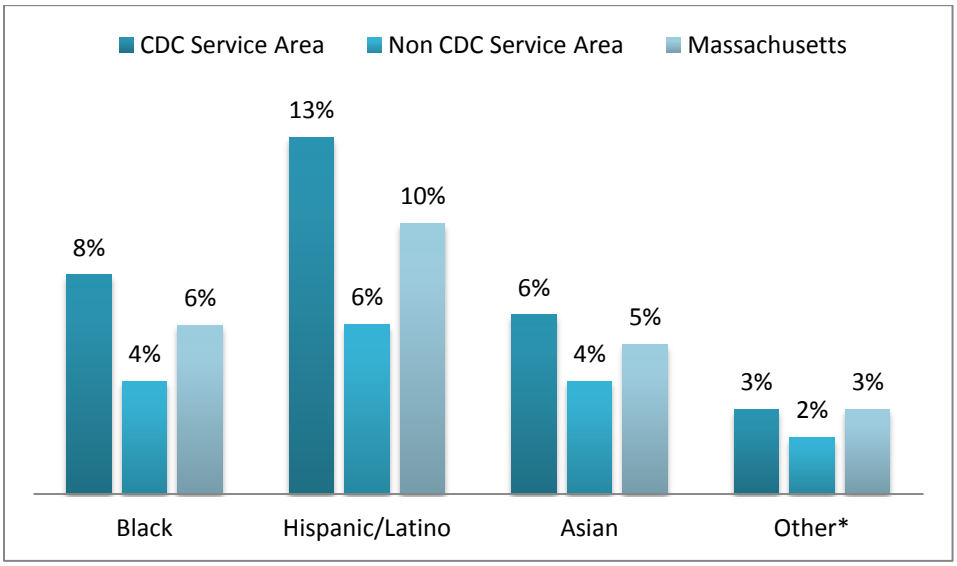
Source: 2010 Census

Of the 3.7 million people that live in a CDC service area, 70% are White, 8% are Black, 13% are Latino, 6% are Asian, and approximately 3% report being of another or mixed race. In Massachusetts, this distribution is 76% White, 6% Black, 10% Latino, 5% Asian, and 3% other; while in Non-CDC service areas it is 84% White, 4% Black, 6% Latino, 4% Asian, and 2% other.

As this data shows, the CDC Service Area has a greater proportion of racial/ethnic minorities than the rest of the state and particularly when compared to the Non-CDC Service Area (Figure 6 below). In fact, Latino and Black populations—the two largest racial/ethnic minority groups in the

state—are roughly double overall in CDC service areas when compared to the Non-CDC Service areas.

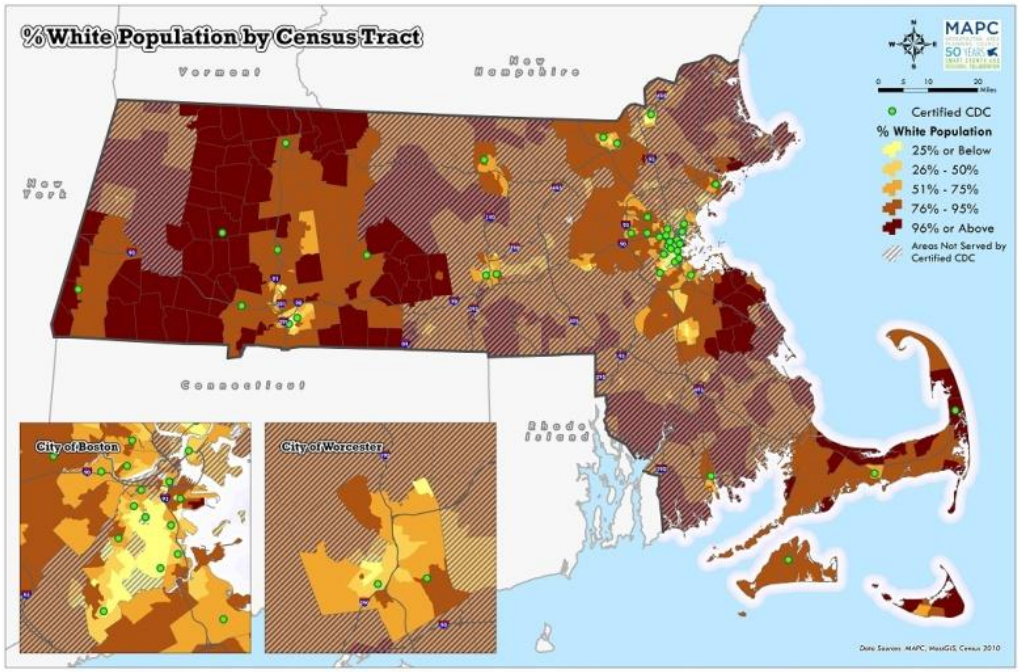
FIGURE 6. RACIAL/ETHNIC MINORITY POPULATIONS BY GEOGRAPHIC AREA



Source: 2010 Census; *Other includes Native American, Pacific Islander, Other and those of Two or More Races

Despite these trends, as the maps below show, the racial/ethnic distribution of these groups can vary quite dramatically across the state (Figures 7-11). Ethnic minority groups are clustered in urban areas such as Boston, Worcester, and Springfield where the White populations are significantly lower than in some other areas in the State. The reverse is true for more rural areas such as Western Massachusetts, where the percentage of White residents can reach above 96%. As these maps show, the communities CDCs serve vary widely in terms of their demographic breakdowns. All of the maps were based on 2010 US Census data.

FIGURE 7. DISTRIBUTION OF WHITE POPULATION BY CENSUS TRACT IN MASSACHUSETTS

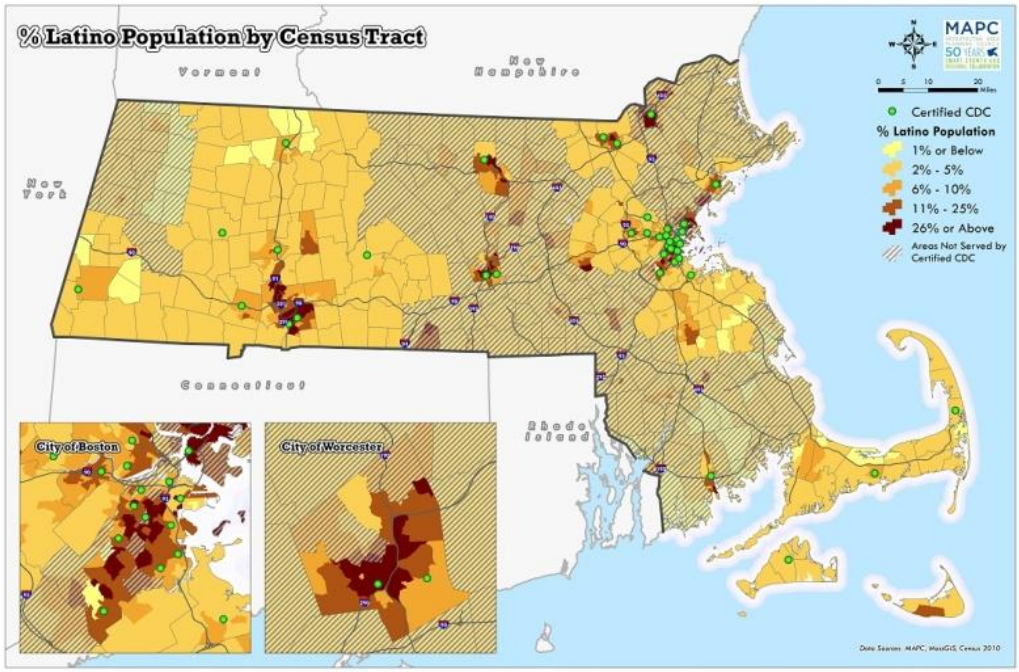


Source: 2010 Census

At about 10% of the population of the state as a whole, the Latino population is the largest ethnic minority group in Massachusetts. Of the 630,000 Latinos in Massachusetts, roughly 75% (470,000) reside in a certified CDC service area. As the map below illustrates, Latino communities are clustered throughout the state—both in urban and non-urban areas—making up over a quarter of the population in many of these neighborhoods. Areas around Lowell, Lawrence, and Fitchburg and Leominster also have very high densities of Latino populations.

More Latinos are within than outside of the CDC Service Area; however, some communities that are over a quarter Latino (such as Southbridge) are not served by a certified CDC.

FIGURE 8. DISTRIBUTION OF LATINO POPULATION BY CENSUS TRACT IN MASSACHUSETTS

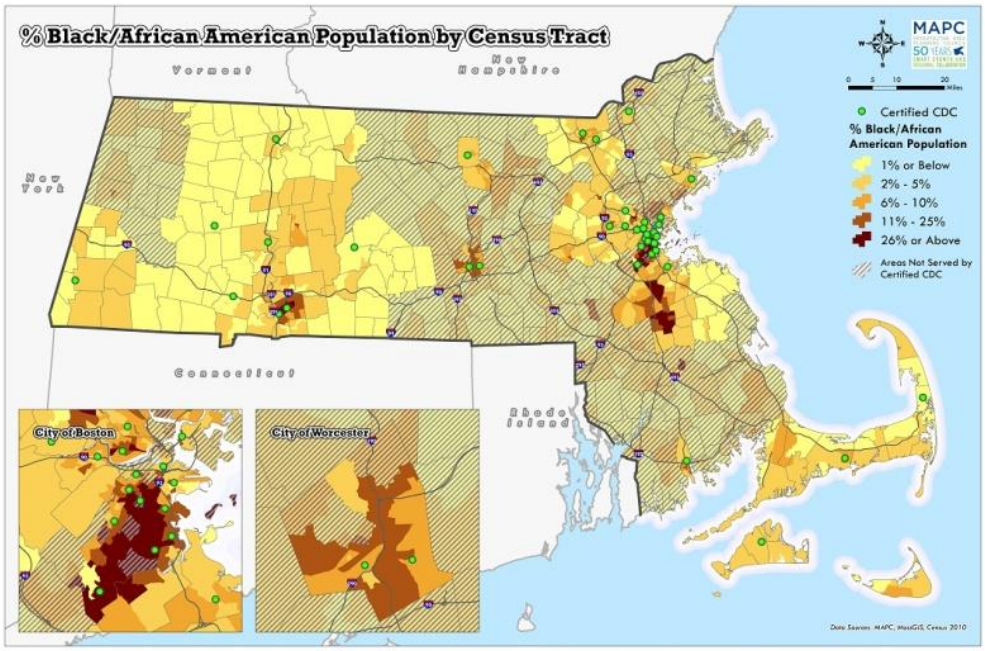


Source: 2010 Census

At approximately 390,000 people, the Black population is the second largest minority population in Massachusetts. Roughly three-quarters of this population in fact live in the CDC Service Area. These 290,000 Blacks make up 8% of the total CDC Service Area population, as compare to the 6% they make up in the Commonwealth as a whole.

As Figure 9 below shows, unlike the Latino population, the black population is heavily represented in the neighborhoods south of downtown Boston, in Springfield, and in a few non-urban municipalities such as Randolph and Brockton. According to these data, almost all the areas with the highest density of Blacks are served by a certified CDC.

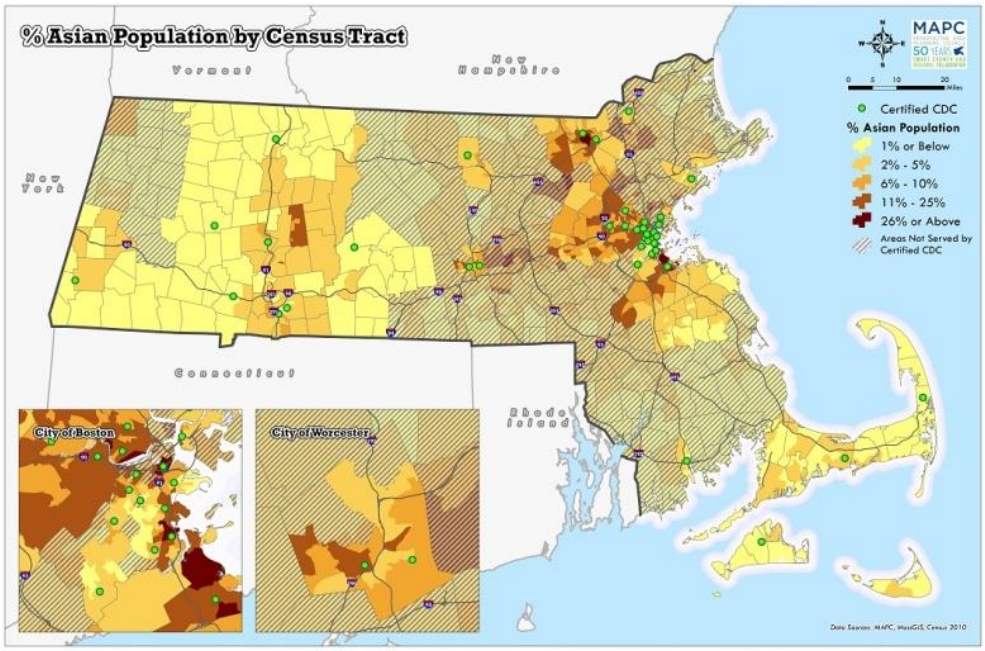
FIGURE 9. DISTRIBUTION OF BLACK POPULATION BY CENSUS TRACT IN MASSACHUSETTS



Source: 2010 Census

Making up about 5% of the total population, the Asian population in Massachusetts consists of about 350,000 people, 240,000 of whom reside in the CDC Service Area (Figure 10). Most of the Asian population is concentrated in and around Boston, with some in Lowell.

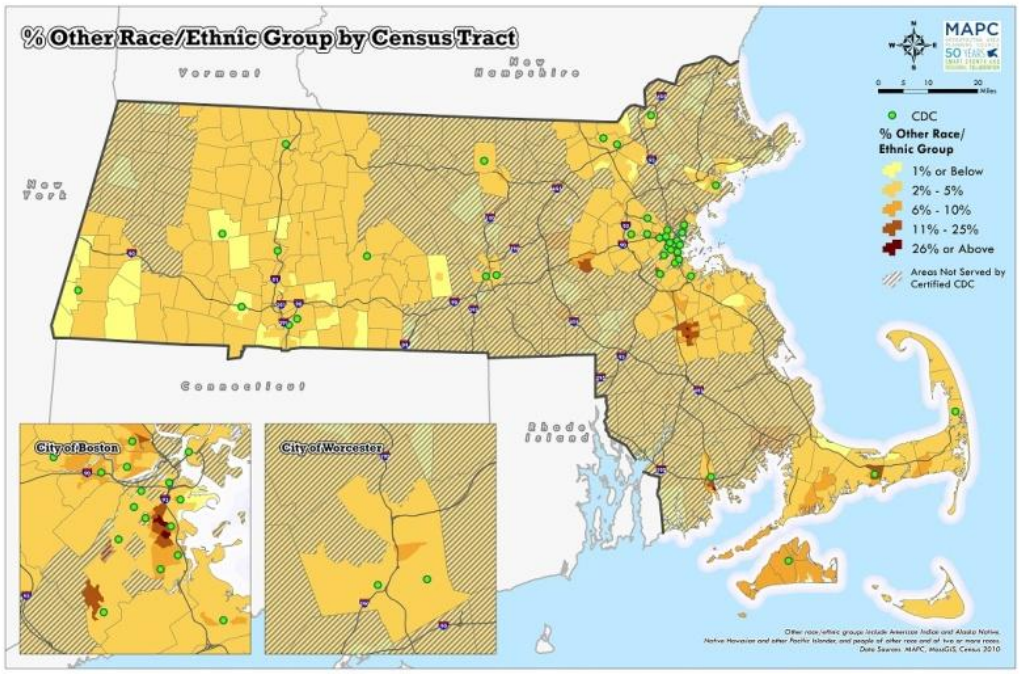
FIGURE 10. DISTRIBUTION OF ASIAN POPULATIONS BY CENSUS TRACT IN MASSACHUSETTS



Source: 2010 Census

Finally, around 200,000 Massachusetts residents are of another racial/ethnic minority group or a mixture thereof (Figure 11). 130,000 of these individuals live in the CDC Service Area. The highest densities of these groups are in a few neighborhoods in Boston as well as in Brockton.

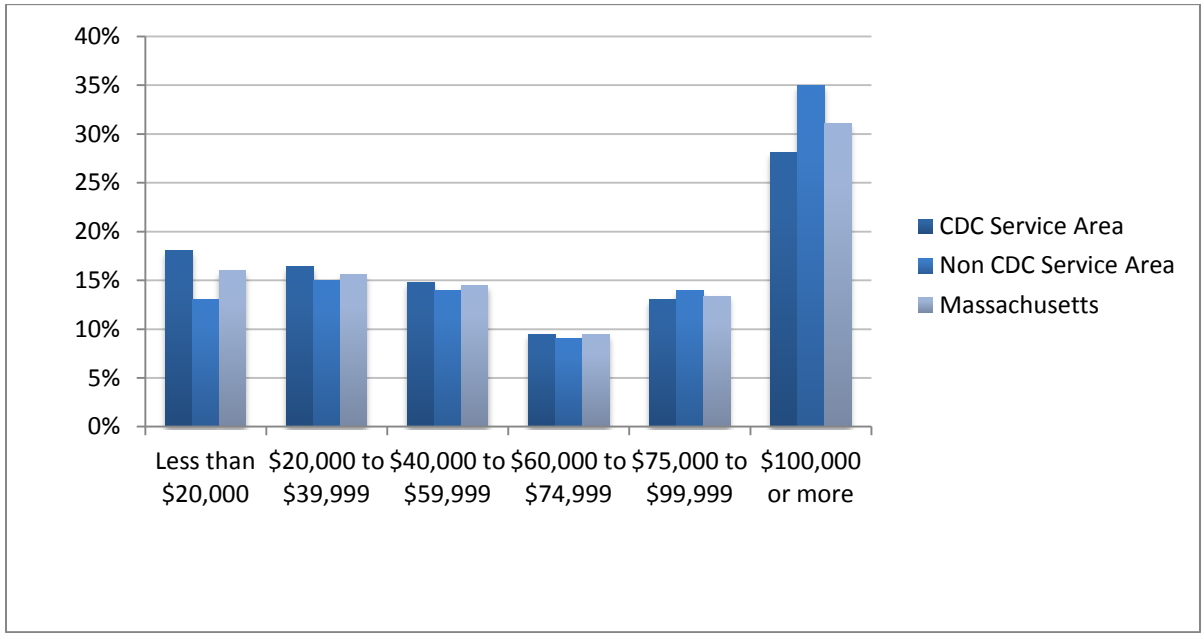
FIGURE 11. DISTRIBUTION OF OTHER GROUPS BY CENSUS TRACT IN MASSACHUSETTS*



Source: 2010 Census *Other includes: American-Indian/Alaskan Natives, Native Hawaiian/Pacific Islanders, those who report their race as "other", and those of two or more races;

CDCs primarily focus on low-to-moderate income populations with the intention of creating greater economic opportunity for them. As shown in Figure 12, the household income of the residents in municipalities served by CDCs is skewed towards the lower income brackets, particularly when compared to the residents in municipalities residing outside of the CDC Service Area.

FIGURE 12. HOUSEHOLD INCOME DISTRIBUTIONS



Source: 2010 Census

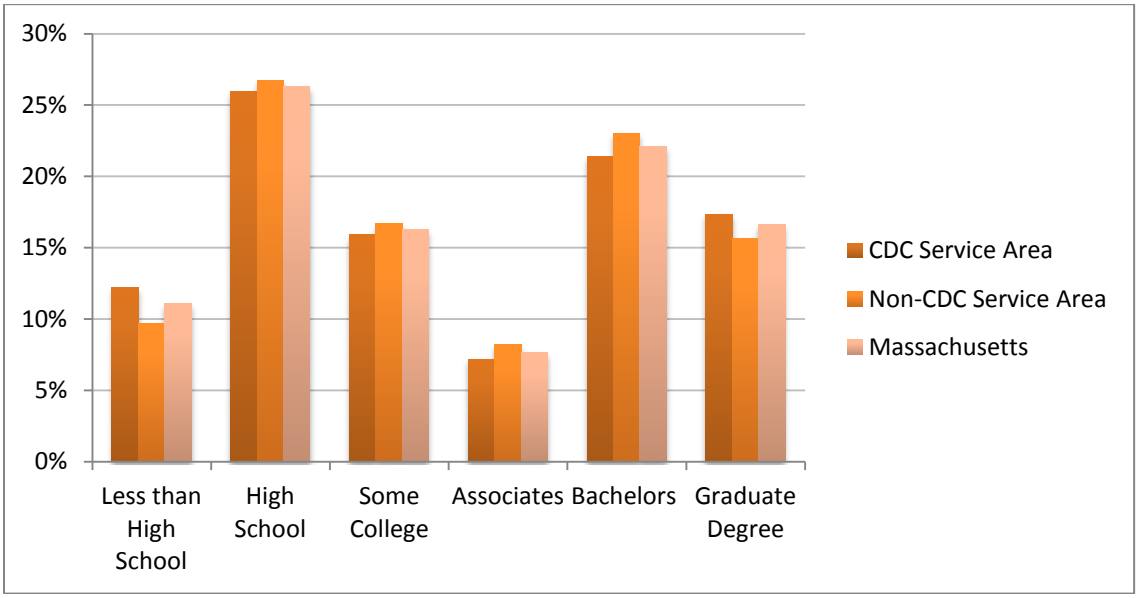
Since median household income data was not available at the CDC service level, an approximate measure of median household income was created in order to get a rough estimate. This measure was calculated by multiplying the median household income of each designated geographic area by its population size to give it a relative weight, then adding all those values together and dividing them by the overall population of all of those areas. In Boston and Worcester, census tracts were used to define the geographic areas in order to capture the specific neighborhoods in which CDCs work in. All other geographic areas were at the municipal level.

Overall, the weighted median household income for all CDC service areas is $65,106, which is only slightly lower than the actual median household income for Massachusetts of $65,981.

Educational attainment is intimately related to income and employment. As Figure 13 shows, there is little difference in overall educational attainment between the CDC Service Area and the state overall. This does not account for any differences between racial/ethnic groups or income groups, however.

The CDC Service Area has slightly lower educational attainment rates compared to the Non-CDC Service Area in every category except for those who obtain a graduate degree or who do not complete high school, which are both higher in the CDC Service Area. The greatest disparity in educational attainment is in the rate of those who obtain less than a high school degree, which is about 3% higher in the CDC Service Area compared to the Non-CDC Service area.

FIGURE 13. EDUCATIONAL ATTAINMENT



Source: ACS 2006-2010

Much of the work CDCs do focuses on promoting economic opportunity in their communities. According to data collected by the Bureau of Labor Statistics (BLS), the 2012 unemployment rates in the CDC Service Area, Non-CDC Service Area, and Massachusetts are all roughly 6.7%. While this is somewhat surprising given that there is a greater proportion of cost-burdened, racial/ethnic minority, and low-income populations in the CDC Service Area compared to elsewhere, this statistic may be a consequence of how the BLS data are collected. Since a person has to be actively seeking work to qualify as unemployed, those who are not employed but not seeking work are not counted. Statistics on those who have dropped out of the labor force are only collected at the national level, and thus this population is not represented in the HIA.

VULNERABLE POPULATIONS

Area median income (AMI) is an indicator of income disparity that is often used by Public Agencies to stratify income groups and to define housing affordability. AMI measures the median of the family-income range for a metropolitan statistical area or for non-metropolitan parts of a state. Specific AMI geographies are based on designations according to the ACS and the definitions are as follows:

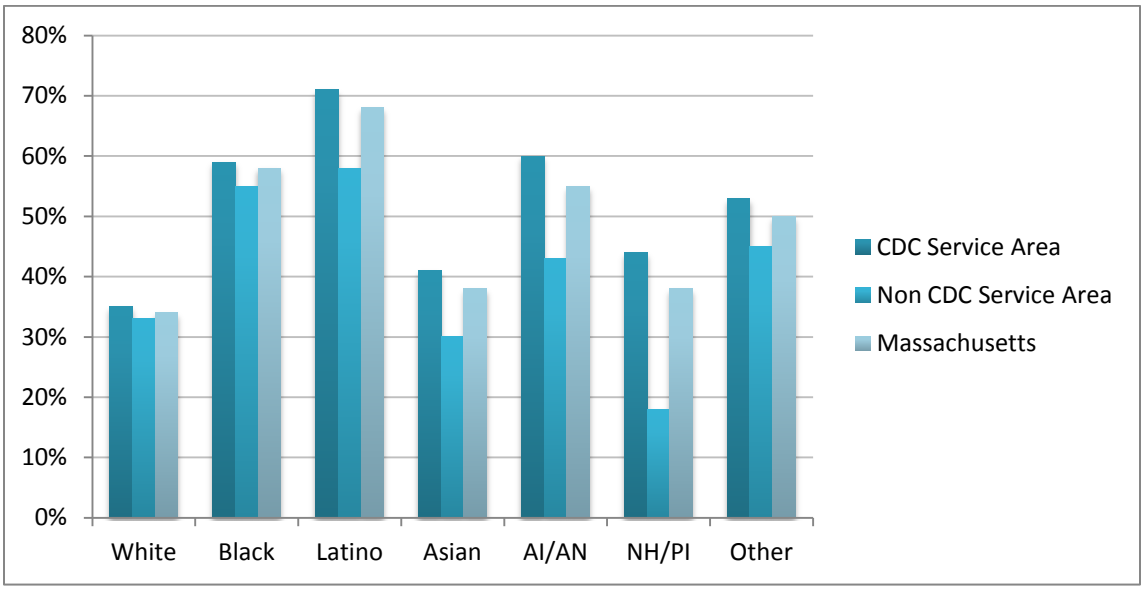
- Moderate-Income - Households earning between 120 and 80 percent AMI
- Low-Income - Households earning below 80 percent AMI
- Very Low-Income - Households earning below 50 percent AMI
- Extremely Low -Income - Households earning below 30 percent AMI

According to data from the Comprehensive Housing Affordability Survey (CHAS) - a subset of ACS data specifically formulated for the Department of Housing and Urban Development (HUD)

- 40% of households are at or below 80% of the area median income (AMI) in the CDC Service Area. This is slightly greater than the 38% of households at or under 80% AMI in Massachusetts and the 34% in the Non-CDC Service Area.

CHAS data can also be broken down by racial/ethnic group. When broken down, ethnic minorities are significantly overrepresented in the low income bracket (80% AMI) when compared to their White counterparts, as seen in Figure 14 below. In fact, almost 60% of Black and American-Indian/Alaskan Natives and 70% of Latinos are at or below 50% AMI.

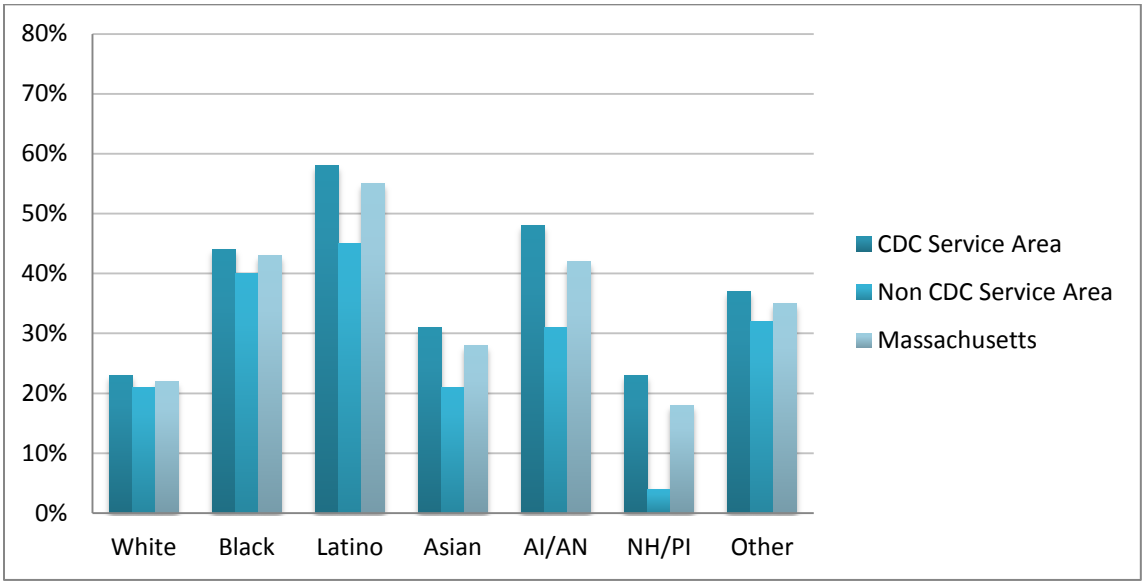
FIGURE 14. PERCENTAGE OF HOUSEHOLDS AT 80% AREA MEDIAN INCOME (AMI) BY RACIAL/ETHNIC GROUP



Source: CHAS 2006-2010; * AI/AN: American-Indian/Alaskan Native; NH/P: Native Hawaiian/Pacific Islander

These disparities remain relatively consistent as the data being presented moves from 80% AMI to 50% AMI (Figure 15). In both cases, White residents have one of the lowest percentages and the Latino populations in the CDC Service Area and Massachusetts are most affected, with over half of the total population at or below 80% AMI in both Massachusetts and the CDC Service Area.

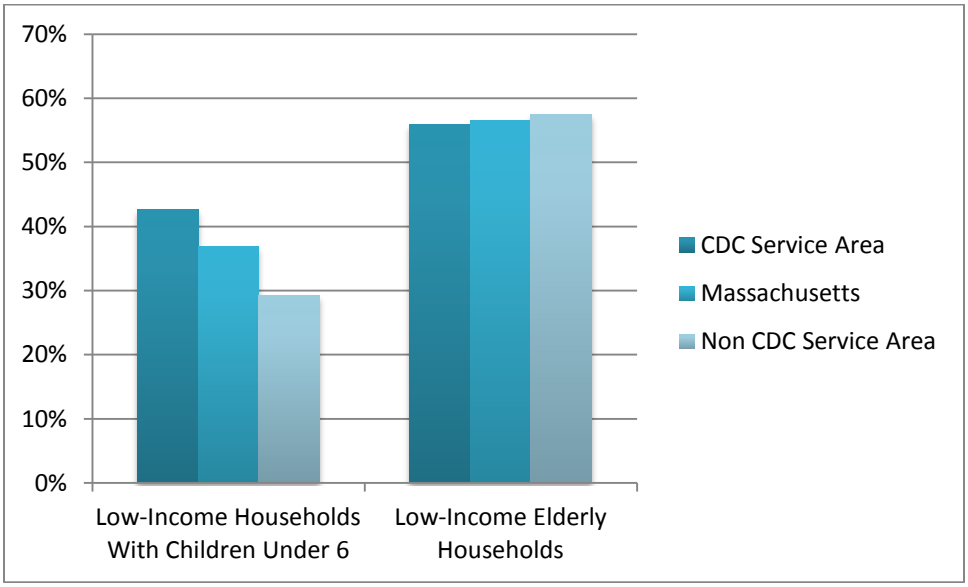
FIGURE 15. PERCENTAGE OF HOUSEHOLDS AT 50% AREA MEDIAN INCOME (AMI) BY RACIAL/ETHNIC GROUP



Source: CHAS 2006-2010; *AI/AN: American-Indian/Alaskan Native; NH/P: Native Hawaiian/Pacific Islander;

Within low-income groups, children and the elderly are particularly vulnerable to the effects of poverty (L. F. Berkman and Kawachi 2000; Brooks-Gunn and Duncan 1997). As Figure 16 demonstrates, there are more low income households with young children (43%) in the areas served by CDCs as compared to areas not served by CDCs (29%). For the elderly, the percentages are more consistent across the three geographies – 56%, 57%, and 57%.

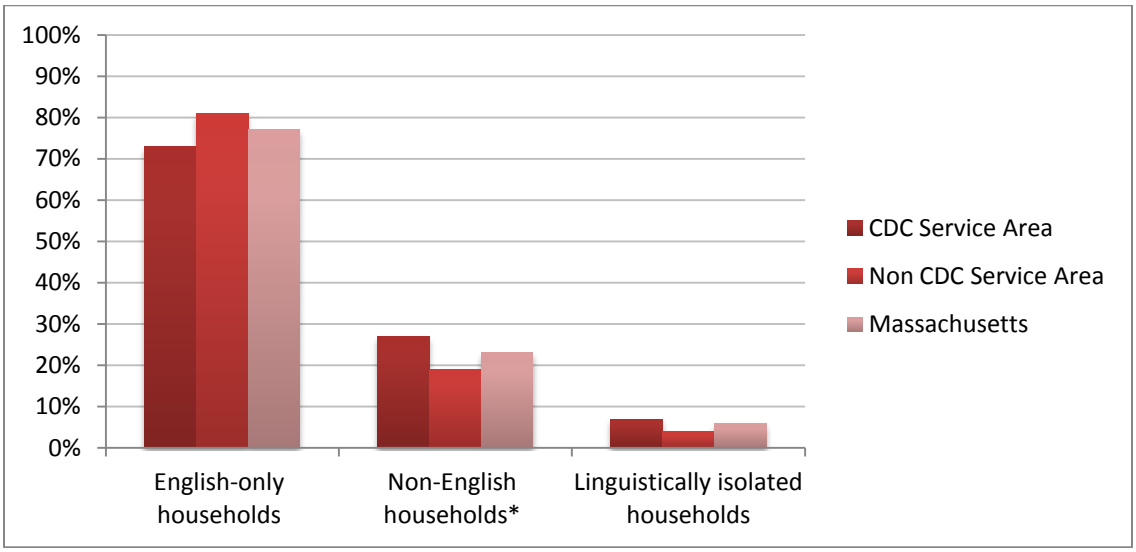
FIGURE 16. CHILDREN AND ELDERLY IN LOW-INCOME HOUSEHOLDS



Source: CHAS 2006-2010; elderly households are defined as households where at least one member of the household is ≥ the age of 62;

Linguistically isolated populations are another group that can be especially vulnerable to the effects of poverty (Lisa F Berkman and Kawachi 2000a). As Figure 17 below shows, the percentage of linguistically isolated households—defined as a household in which all adults have some limitation in communicating English, i.e. no household member age 14 years and over speaks English "very well"—is higher in the CDC Service Area than in the Non-CDC Service Area or the state in total. In addition, the percentage of households that speak only English is lower and those that speak a language other than English at home is higher in the CDC Service Area compared to the state as a whole, and particularly the Non-CDC Service Area, as well.

FIGURE 17. HOUSEHOLDS BY LINGUISTIC ISOLATION



Source: ACS 2006-2010; *defined as households with at least one member age 14 years and over speak language other than English at home

Formally, the Massachusetts Executive Office of Energy and Environmental Affairs designates "environmental justice" groups in order to identify populations that may be particularly vulnerable to inequities. Environmental justice (EJ) efforts attempt to give all people – regardless of their race, color, nation or origin or income – the opportunity to enjoy equally high levels of environmental protection and access to decision-making processes to have a healthy environment.

EJ communities in Massachusetts are identified as census block groups[11] that meet one or more of the following criteria, where:

- 25% or more of the residents are racial/ethnic minorities;
- The median annual household income is at or below 65% of the statewide median income;
- 25% or more of the residents are foreign born; or

[11] Block groups are statistical divisions of census tracts and are generally defined to contain between 600 and 3,000 people and used to present data and control block numbering.

- 25% or more of the residents are lacking English language proficiency.

According to MassGIS and 2010 Census data, 45% of the block groups in the CDC Service Area have been designated as EJ communities, which is more than double the number of EJ communities in the areas not served by CDCs. The table below gives a detailed breakdown of the number of EJ groups and individuals across the state based on the type of geography (see Figure 1 for geography reference).

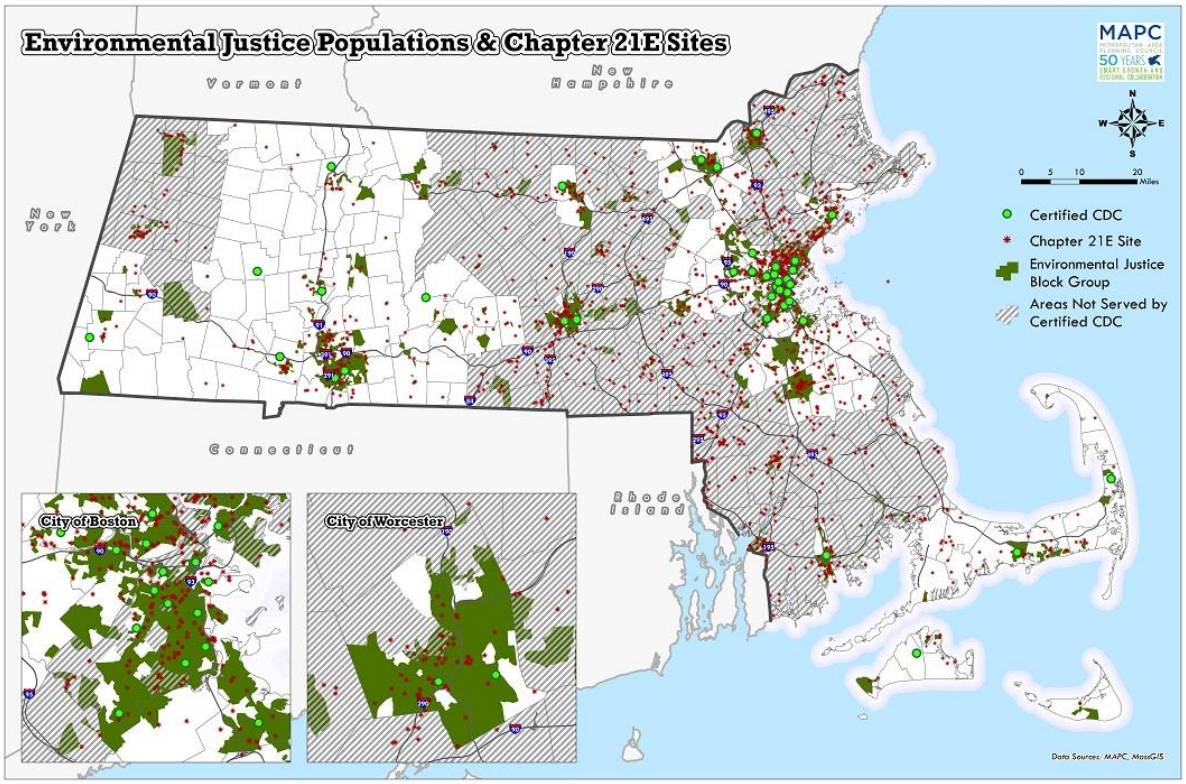
TABLE 5. ENVIRONMENTAL JUSTICE POPULATION

Environmental Justice (EJ)	CDC Service Area	Non-CDC Service Area	Massachusetts
EJ Block Groups # of groups # of acres	 1,346 226,488	 492 130,855	 1,838 357,343
Block groups per 100,000 Acres	594	376	514
Total EJ Population	1,681,033	596,024	2,277,057
Percent of population part of an EJ group	45%	22%	35%

Source: MassGIS and 2010 Census

All of this environmental data is also represented in the map in Figure 18 below, where the white areas represent those geographies served by CDCs and the gray represent those who are not. As this map shows, EJ block groups are distributed across the state—both around cities and in more rural areas of the state.

FIGURE 18. ENVIRONMENTAL JUSTICE POPULATIONS AND CHAPTER 21E SITES IN MASSACHUSETTS*



Source: MassGIS; *Note: this data includes tiered sites only. To get a complete listing, please see the data source listed in Appendix C.

HOUSING CHARACTERISTICS

One of the primary areas that CDCs focus on is the promotion of housing stability, whether through affordable housing development and preservation, the promotion of homeownership, or foreclosure prevention counseling. As Table 6 below illustrates, homeownership is slightly lower in the CDC Service Area than in the rest of the state, and accordingly, rental rates are higher in CDC service areas. However, while there are more households with incomes below 80% of the AMI in areas served by certified CDCs, there is a greater ratio of affordable housing units available to those that fall within these lower income brackets.

TABLE 6. POPULATION HOUSING CHARACTERISTICS

	CDC Service Area		Massachusetts	
Population Characteristics	Count	Percent	Count	Percent
2010 Population	3,701,300	-	6,547,629	-
Occupied Housing Units	1,433,377	97%	2,512,565	97%

	CDC Service Area		Massachusetts	
Households with Incomes Below 80% AMI	579,652	40%	951,499	38%
Total Units Affordable to Households with Incomes Below 80% AMI*	382,316	66%	612,071	64%
Owner-Occupied Housing Units	847,323	59%	1,608,520	64%
Owner-Occupied Housing Units Below 80% AMI	215,049	25%	395,990	25%
Cost Burdened Owner-Occupied Units Below 80% AMI	144,982	67%	265,660	67%
Severely Cost Burdened Owner-Occupied Units Below 80% AMI	87,536	41%	161,044	41%
Renter-Occupied Housing Units	586,019	41%	904,065	36%
Renter-Occupied Housing Units Below 80% AMI	364,575	62%	555,530	61%
Cost Burdened Renter-Occupied Units Below 80% AMI	239,647	66%	358,528	65%
Severely Cost Burdened Renter-Occupied Units Below 80% AMI	137,556	38%	201,667	36%

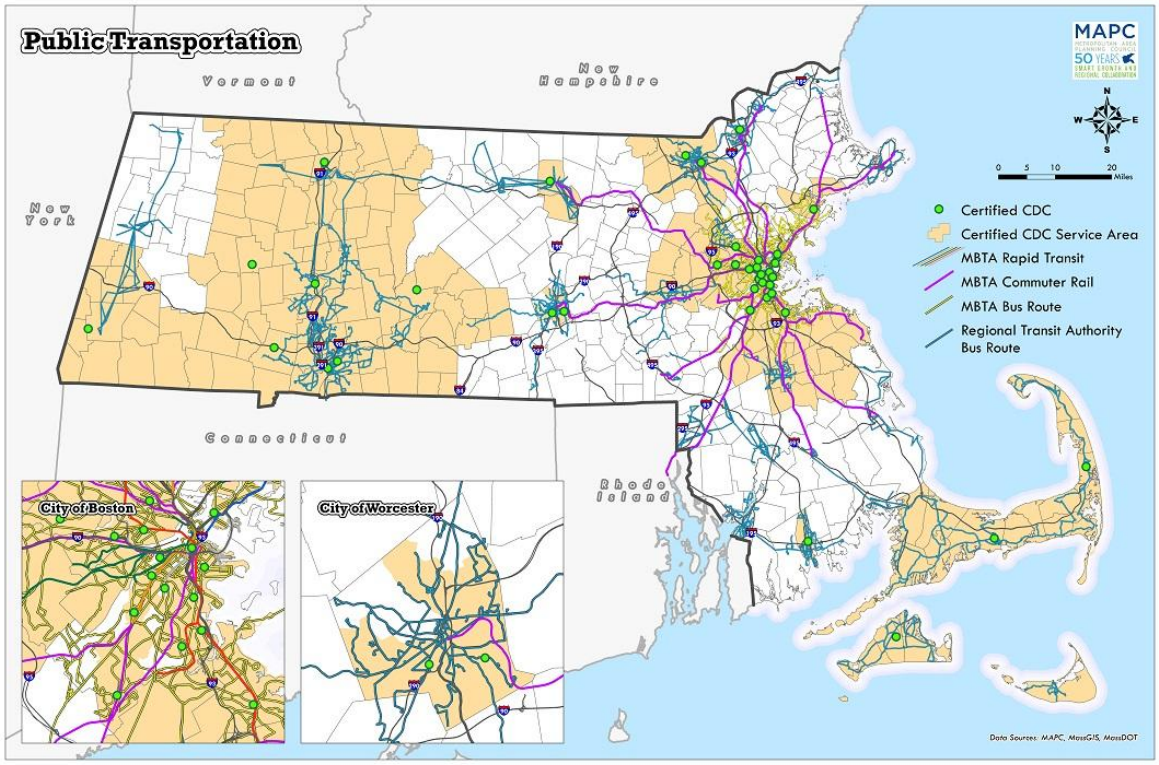
Source: CHAS 2006-2010
*Affordable Units are defined as those which cost no more than thirty percent of a household's monthly income

Transportation Characteristics

A number of CDCs focus on transportation planning and advocacy. As the map below shows (Figure 19), the available public transit across the state varies significantly across regions and from city to town. Most of the municipalities in the state have very limited access to public transit, which outside of the Massachusetts Bay Transportation Authority (MBTA), consists only of bus and shuttle routes primarily provided by other Regional Transit Authorities (RTAs) like the Pioneer Valley RTA, the Worcester RTA and the MetroWest RTA. While urban CDCs tend to be clustered closer around transit lines, the map shows that rural CDCs tend to be located in isolated areas with limited access to public transit. This is particularly true in Western Massachusetts, where a few CDCs are at least a mile away from any public transit route (which is not equivalent to a stop, which could be further away).

Next, to better understand what type of transit people rely on, if available, commute mode data was reviewed. While these data do not account for the transportation patterns of those who are unemployed, retired, students, or homemakers, they do provide us with some initial understanding of general transportation patterns.

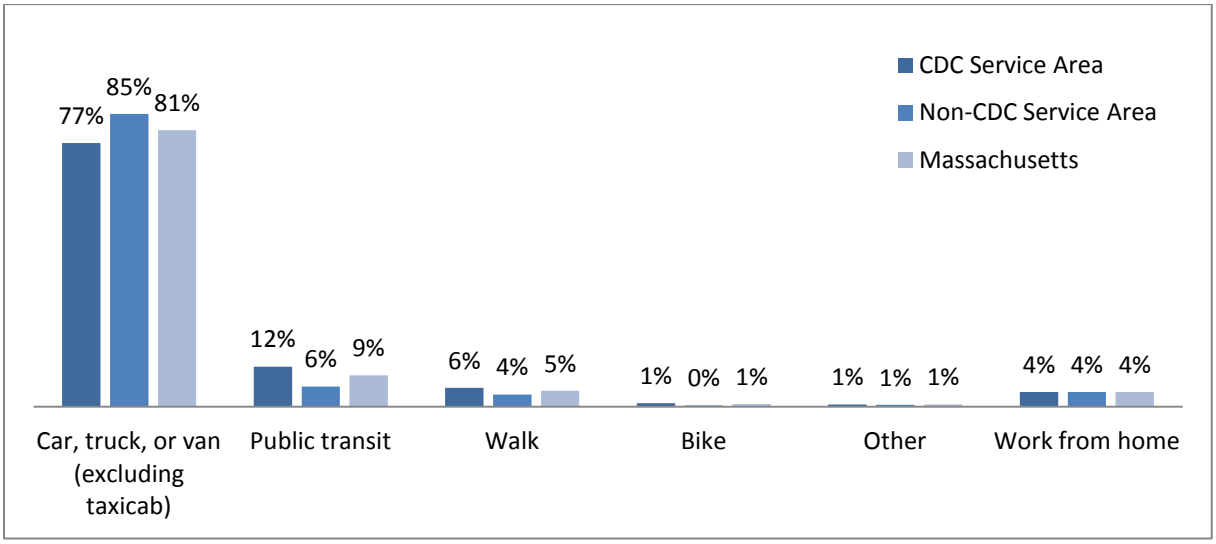
FIGURE 19. MAP OF PUBLIC TRANSPORTATION IN MASSACHUSETTS



Source: MassGIS

Figure 20 shows more people rely on public transit and walking to get to work in CDC service areas compared to the state as a whole, a proportion of which is significantly larger in CDC service areas when compared to areas not served by CDCs. Furthermore, in areas not served by CDCs, more people use personal vehicles to commute to work when compared to the state average, while fewer do in areas that CDCs serve.

FIGURE 20. MODE TO WORK



Source: ACS 2007-2011

ENVIRONMENTAL CHARACTERISTICS

As discussed in the introduction to Part II, for the purposes of this HIA, the environmental characteristics evaluated in this HIA were limited to readily-available data that could be aggregated into the geographies used to build the population profile. These include limited information on environmental contamination and open space.

Although the scope of this study precluded the analysis of other environmental data in the CDC and Non-CDC Service Areas, it is important that these data (e.g., air quality, water quality) be considered in evaluating and mitigating the potential health impacts of community development projects. Exposure to environmental contamination can have numerous health effects depending on prior land use and the materials remaining on the site that might be harmful to human health. CDCs may clean up and reinvest in brownfield properties, for example, which has the potential to improve and protect the environment, economy, and surrounding community's health and well-being (MassDEP 2012; EPA 2006).

For details on how environmental exposure impacts individual and community health and relevant data sets for evaluating projects, please see Appendix C.

Since CDCs engage in activities which impact levels of environmental contamination and open space, a limited profile was created of the CDC Service Area compared to the Non-CDC Service Area.

Chapter 21E[12] sites are used to identify environmental contamination sites in the state. While the comprehensive list of 21E sites in Massachusetts could not be accessed due to time and resource constraints, a partial list was obtained from a MassGIS data set to get a limited understanding of the site distribution. According to these data, there are 1,764 sites in Massachusetts, 956 (54%) of which are found in CDC service areas.

A few CDCs engage in open space preservation activities and as the table below shows, there is slightly more open space in the areas served by CDCs compared to the entire state. The CDC Service Area has about 750,000 acres of open space which makes up about 28% of its land mass, while the Non-CDC Service Area has about 670,000 or 26%. About 27% of the state qualifies as open space.

TABLE 7. ACRES OF OPEN SPACE

Open Space	CDC Service Area	Non-CDC Service Area	Massachusetts
Acres of Open Space	744,713	672,909	1,417,622
Total Acres	2,616,454	2,558,448	5,174,902
Percentage Open Space	28%	26%	27%

Source: MassGIS

HEALTH PROFILE

PHYSICAL AND MENTAL HEALTH

As outlined earlier in this document, community development activities are intimately linked to mental and physical health outcomes. To better understand the health profiles of the communities that CDCs serve, data was collected on health behaviors and hospitalization rates throughout the state. Unless otherwise noted, all data were obtained through MDPH.

Feedback from the scoping sessions and key informant interviews suggested that different community types (urban, gateway, rural) across the state face different challenges. Thus, in order to understand whether and how these trends vary based on community type, prevalence of health outcomes were compared by municipality.

SUMMARY

Overall, the communities within the CDC Service Area that continually have a greater burden of disease, poor mental health, and poor health behaviors compared to the state as a whole are also

[12] Massachusetts General Law, Chapter 21E, the state Superfund law, was originally enacted in 1983 (and amended in 1992, 1995, and 1998) and created the waste site cleanup program, which is managed by the Massachusetts Department of Environmental Protection (MassDEP). Contaminated properties regulated under this law are often called 21E sites.

those communities that have greater low-income and ethnic minority populations. These municipalities, which include Boston, Lowell, Fitchburg, Springfield, Worcester, Randolph, and Brockton, are also the areas that certified CDCs are located in or around.

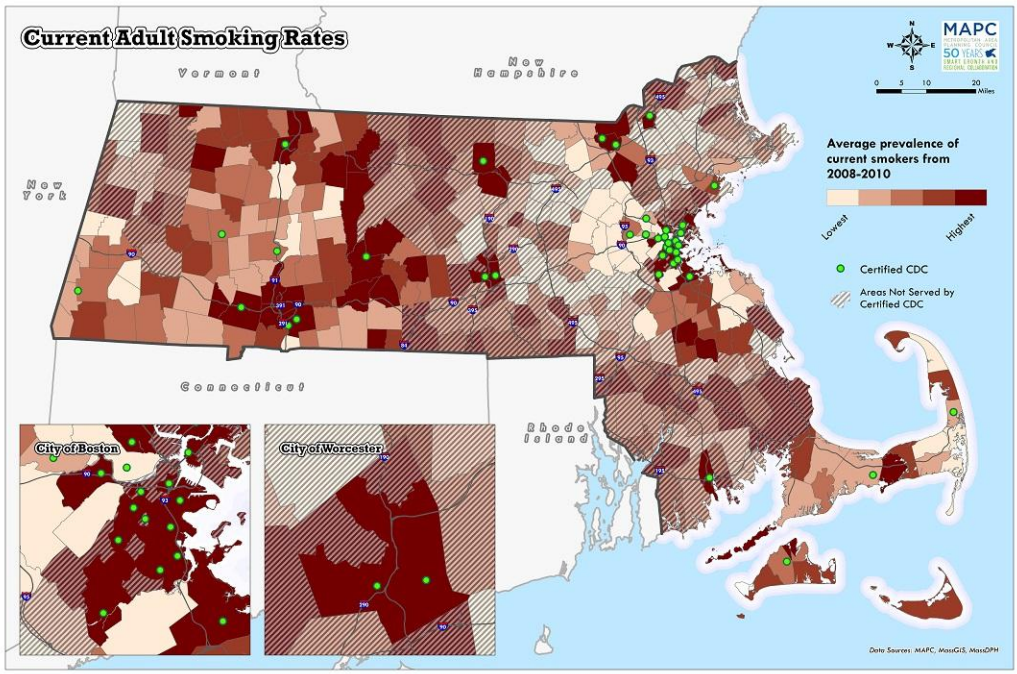
The only exception to this trend is the prevalence of substance use, which is very high in some of the more rural communities such as those on the Cape, those in Franklin County and those in Western Massachusetts.

HEALTH BEHAVIORS

Health behaviors are important determinants of health outcomes later in life. Behaviors such as smoking, drinking, and not eating a healthy diet are all widely recognized risk factors for developing disease. Smoking, for example, is a widely recognized risk factor for developing a wide range of cancers (Jemal et al. 2008). Thus, health behaviors are a critical indicator of the health of these communities. In the next series of figures, the darker municipalities have worse health behaviors and higher prevalence of self-reported disease relative to the lighter municipalities within the state.

As Figure 21 illustrates, the prevalence of smoking is highest in more urbanized areas across the state. These trends are more localized around Boston, Brockton, Lowell, Fitchburg, and Worcester, and more widespread around Springfield and other municipalities in the Western part of the state.

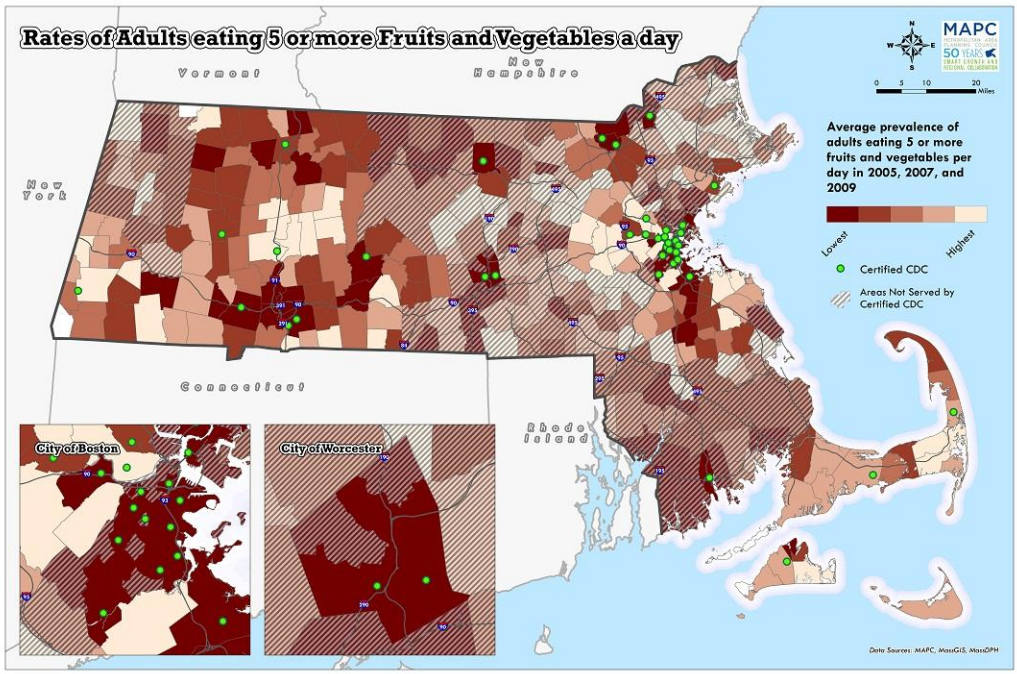
FIGURE 21. ADULT SMOKING PREVALENCE BY MUNICIPALITY



Source BRFSS: 2008-2010

These data overlap somewhat with the consumption of fruits and vegetables. In the CDC service areas, the areas around Springfield, Fitchburg, Lowell, Worcester, and Boston show the lowest percentages of people who eat 5 or more fruits and vegetables a day in Massachusetts. Randolph, Brockton, and New Bedford are amongst the lowest municipalities as well.

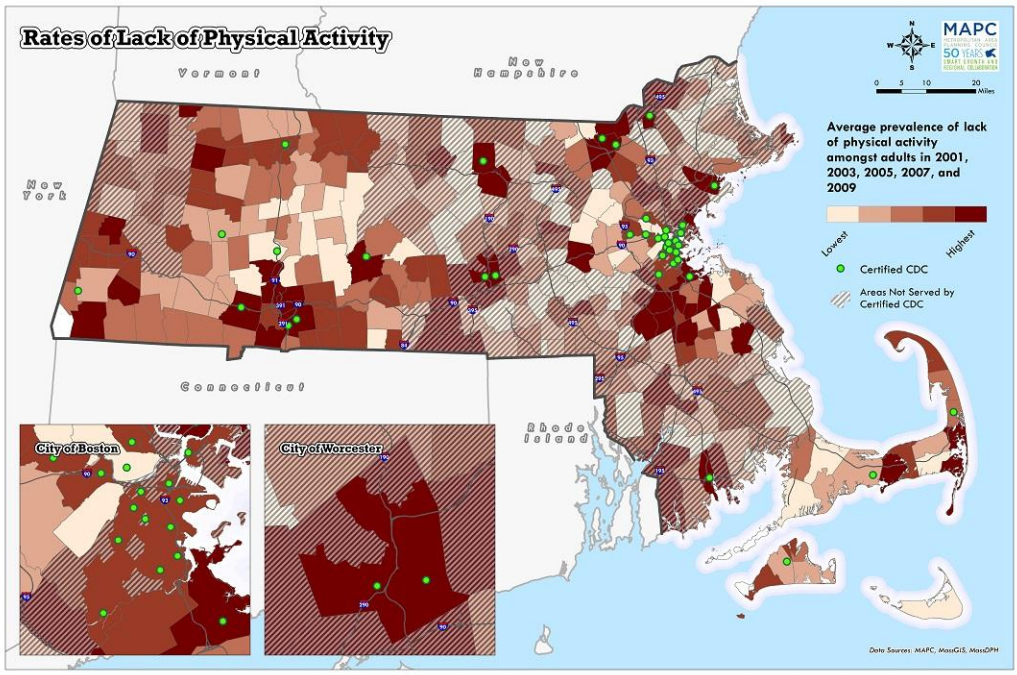
FIGURE 22. PREVALENCE OF ADULTS EATING 5+ FRUITS AND VEGETABLES A DAY



Source BRFSS: 2005, 2007, and 2009

The following map, Figure 23, compares how physically inactive the different municipalities in Massachusetts are relative to each other. As mentioned earlier (see section on Physical Development and Community Planning in Part III: Pathways Linking Community Development Activities and Health), physical inactivity (i.e. being sedentary) is an important risk factor for numerous health conditions including coronary heart disease, diabetes, various cancers and premature mortality (Lee et al. 2012). Conversely, physical activity plays an important role in preventing many of the same conditions (Pate RR et al. 1995; Warburton, Nicol, and Bredin 2006). The municipalities with the highest levels of inactivity are relatively similar to those in Figure 22 above, with the exception of Boston, which now performs at the median level of the state.

FIGURE 23. PREVALENCE OF PHYSICAL INACTIVITY



Source BRFSS: 2001, 2003, 2005, 2007, and 2009

Next Massachusetts hospitalization discharge data was used to look at the actual rates of disease and injury in these communities. These data were also supplemented with additional data drawn from MassCHIP on hospitalizations related to alcohol and substance abuse, as well as cancer, injuries and poisonings. These data are illustrated in the tables below.

As Tables 8 and 9 show, the rates of mental health and alcohol and substance abuse related hospitalizations are higher in the area that CDCs serve compared to the rest of the state. However, rates of hospitalizations for other conditions, such as cancer, diseases of the circulatory system, and respiratory diseases (e.g., asthma and chronic obstructive pulmonary disease (COPD)) in CDC service areas are similar to rates in Massachusetts. These rates of hospitalizations for chronic diseases may mean that the burden of disease is actually similar in these communities, but it may also indicate that people who are sick are not being hospitalized for their conditions.

TABLE 8. AGE-ADJUSTED HOSPITALIZATION RATES PER 100,000 PEOPLE

Geography	CDC Service Area	Massachusetts Total
	Rate per 100,000	Rate per 100,000
Alcohol / Substance Related - Hospitalizations	361.84	338.77
Cancer: All Types - Hospitalizations	414.37	414.82
Injuries & Poisonings: All - Hospitalizations	876.22	875.86

Source: MassCHIP Hospital Discharge Data 2005-2009

TABLE 9. HOSPITALIZATION RATES PER 100,000 PEOPLE

Geography	CDC Service Area	Massachusetts Total
	Rate per 100,000	Rate per 100,000
Cardiovascular Disease Hospitalizations*	1628.85	1587.49
Coronary Heart Disease	369.86	367.54
Stroke	267.73	266.5
Diabetes Hospitalizations**	149.75	146.12
Mental Health Hospitalizations*	905.63	873.82
Asthma Hospitalizations**	160.58	158.34
COPD & related Hospitalizations	391.39	401.01

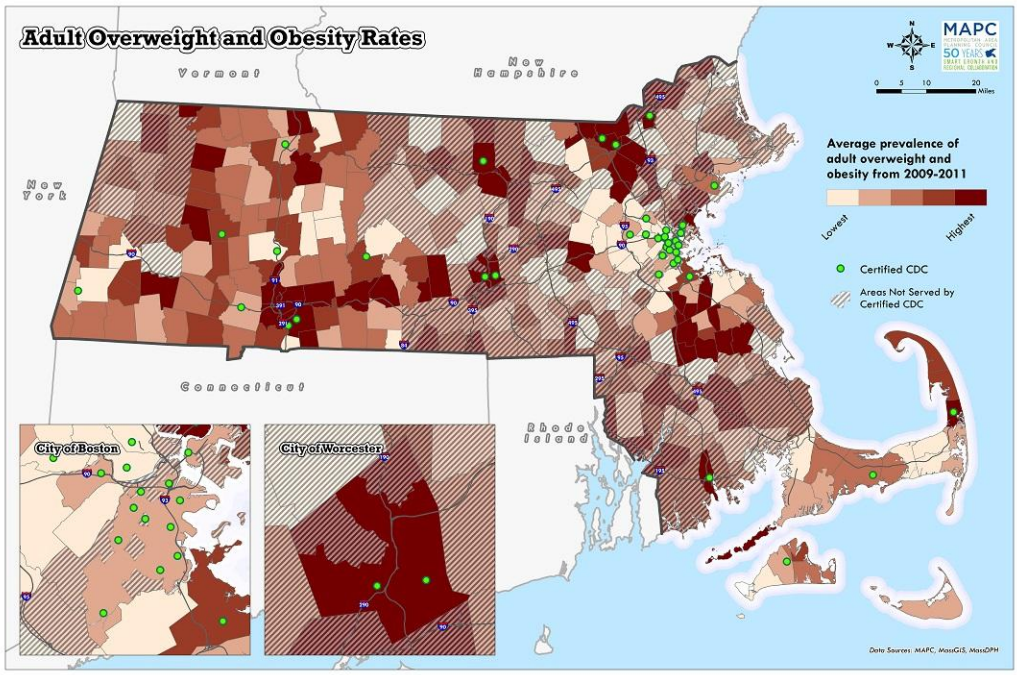
Source: Hospital Discharge Data (*FY2010; **FY2008-2010)

Obesity and Cardiovascular Disease

Obesity is a well known risk factor for developing cardiovascular disease—which refers to any disease that affects the cardiovascular system, which involve the heart, any kind of blood vessel, or both—as well as cancer and a number of other conditions. Being overweight increases the chances of being obese and thus, both are important indicators of population-level cardiovascular health, which is one of the leading causes of death in Massachusetts and the leading cause of death worldwide (Reilly et al. 2003; Guh et al. 2009; Hubert et al. 1983; M 2012).

As the Figures 24 and 25 below show, the communities with the highest rates of overweight (which includes obesity) and obesity are widely distributed across the state. In fact, these maps suggest that the number of municipalities below the state average is rather evenly distributed between the CDC Service Area and Non-CDC Service Area.

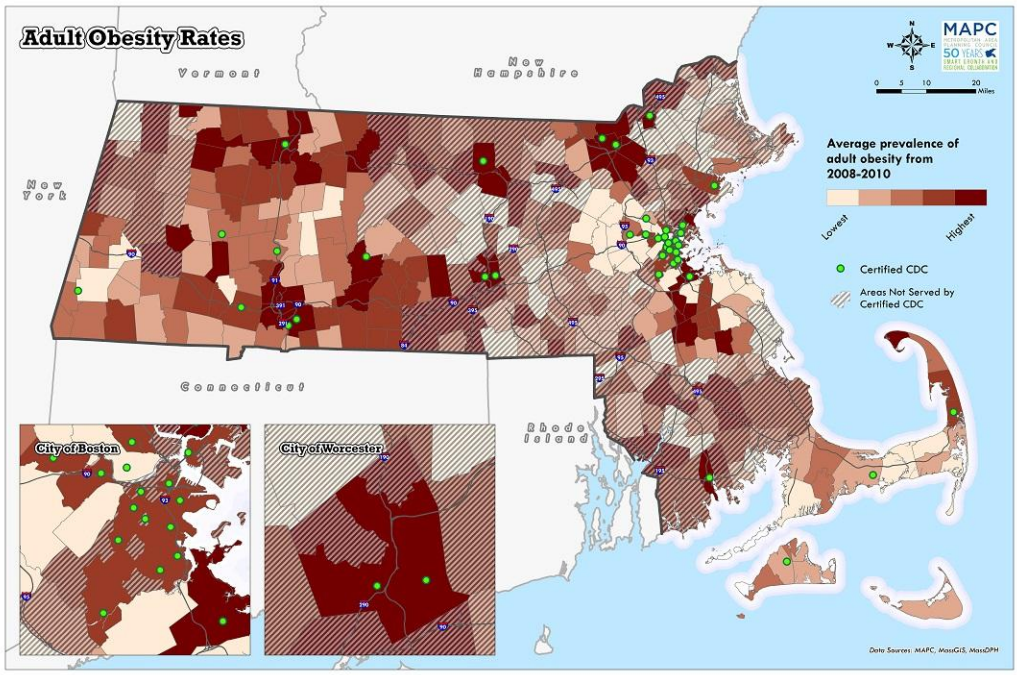
FIGURE 24. ADULT OVERWEIGHT AND OBESITY PREVALENCE



Source BRFSS: 2009-2011

Within the CDC Service Area, the trends of the least healthy municipalities—Springfield, Worcester, Fitchburg, Lowell, Randolph, and Brockton—remain consistent. One exception is Boston, where there is a lower prevalence of overweight and obesity than the state average. There is no obvious pattern between urban and rural communities.

FIGURE 25. ADULT OBESITY PREVALENCE BY MUNICIPALITY

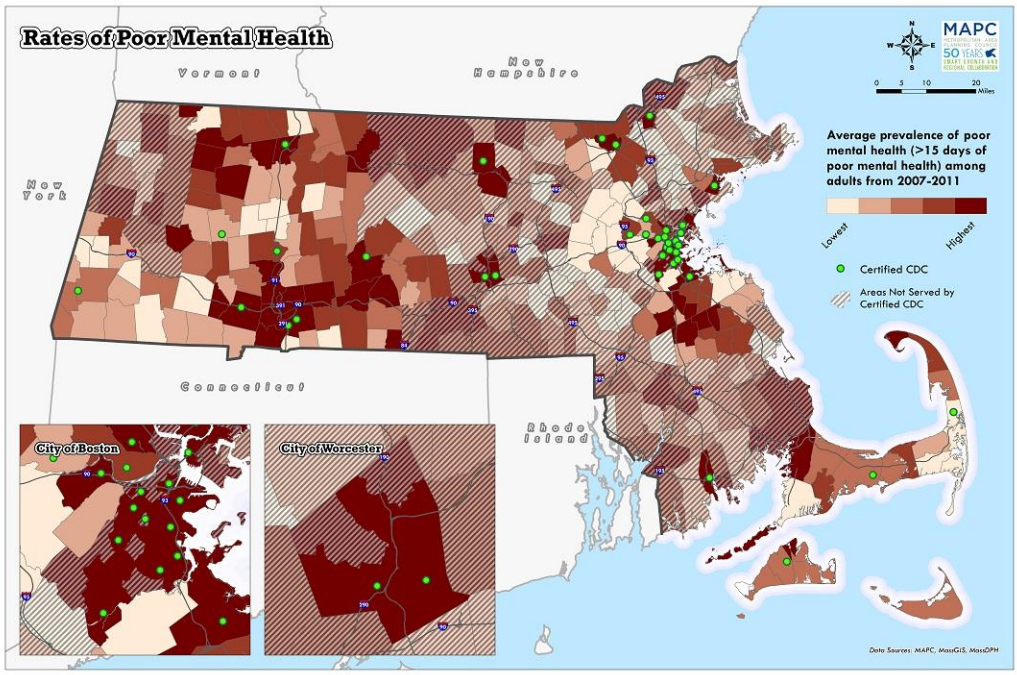


Source BRFSS: 2008-2010

MENTAL HEALTH

Of the prioritized health conditions, mental health was most consistently cited as a priority by stakeholders across all community types. As shown in the map below (Figure 26), the prevalence of poor mental health is higher in the same urban areas that have a higher prevalence of poor health behaviors and self-reported cardiovascular disease according to BRFSS data.

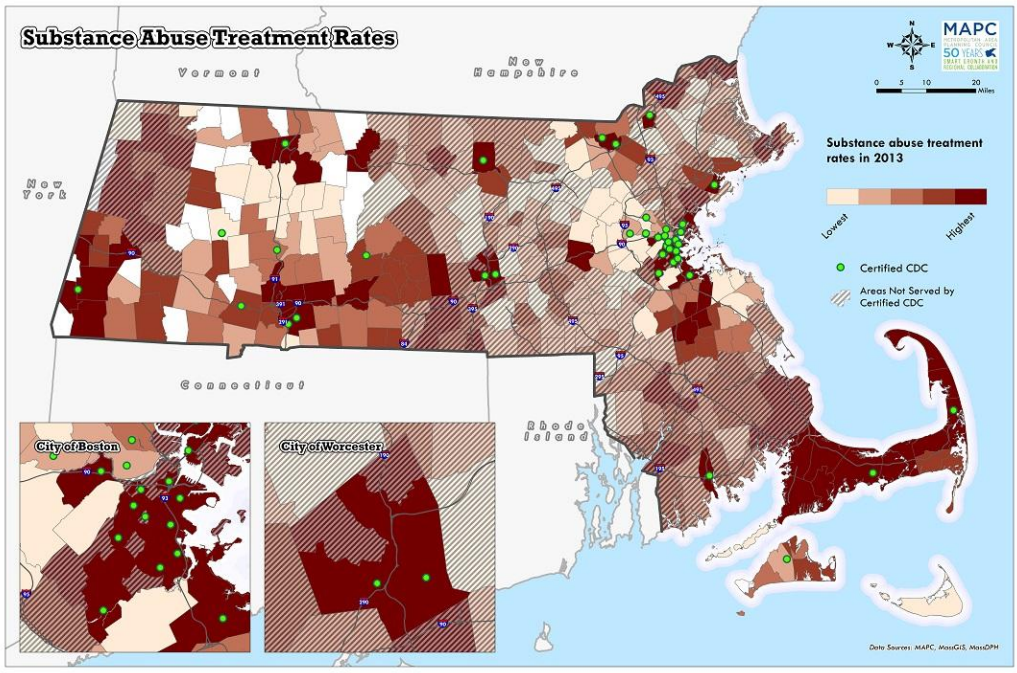
FIGURE 26. PREVALENCE OF POOR MENTAL HEALTH



Source BRFSS: 2007-2011

While the prevalence of substance abuse treatment continues to be high in many of these same municipalities, higher prevalences tend to be more concentrated around the center of those areas rather than expanding into the surrounding municipalities (Figure 27). Conversely, substance abuse prevalence is higher in rural communities. These include the Cape, as well as municipalities in Franklin County and Western Massachusetts.

FIGURE 27. SUBSTANCE ABUSE TREATMENT PREVALENCE



Source BRFSS: 2013

Social Health

As outlined in the background section of this document (see Part III: Pathways Linking Community Development Activities and Health), social ties and engagement impact the health of individuals and groups within that community.

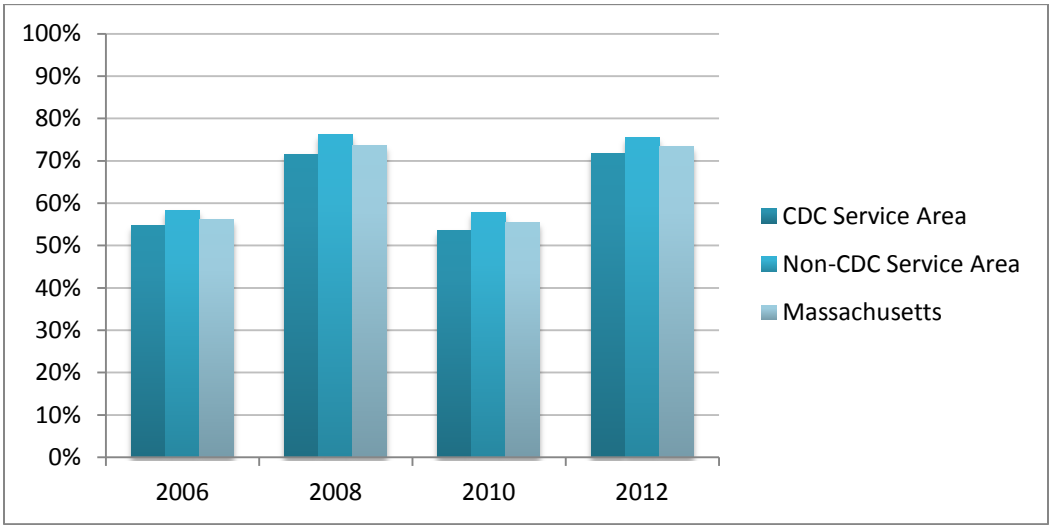
Given the role of social health, as well as the fact that the community organizing and empowerment activities are fundamental to the CDCs' mission and activities, it is important that the social health profile of the CDC Service Area is understood as well.

Civic Engagement

While a very crude measure, voter turnout is often used as a proxy of civic engagement. In order to measure voter turnout, the number of ballots cast according to the official data released by the Massachusetts Secretary of State were divided by the total number of registered voters. Note that this slightly overestimates the voting rates, as not all adults who can vote are registered.

According to these data, voter turnout is consistently very high in Massachusetts, with voting rates at approximately 74% during election years and 58% during off-election years. As Figure 28 below shows, CDC service areas have consistently lower voter turnout rates than Non-CDC service areas and the rest of the state. In fact, voter turnout is consistently 4% lower in the CDC Service Area compared to the Non-CDC Service Area across all years.

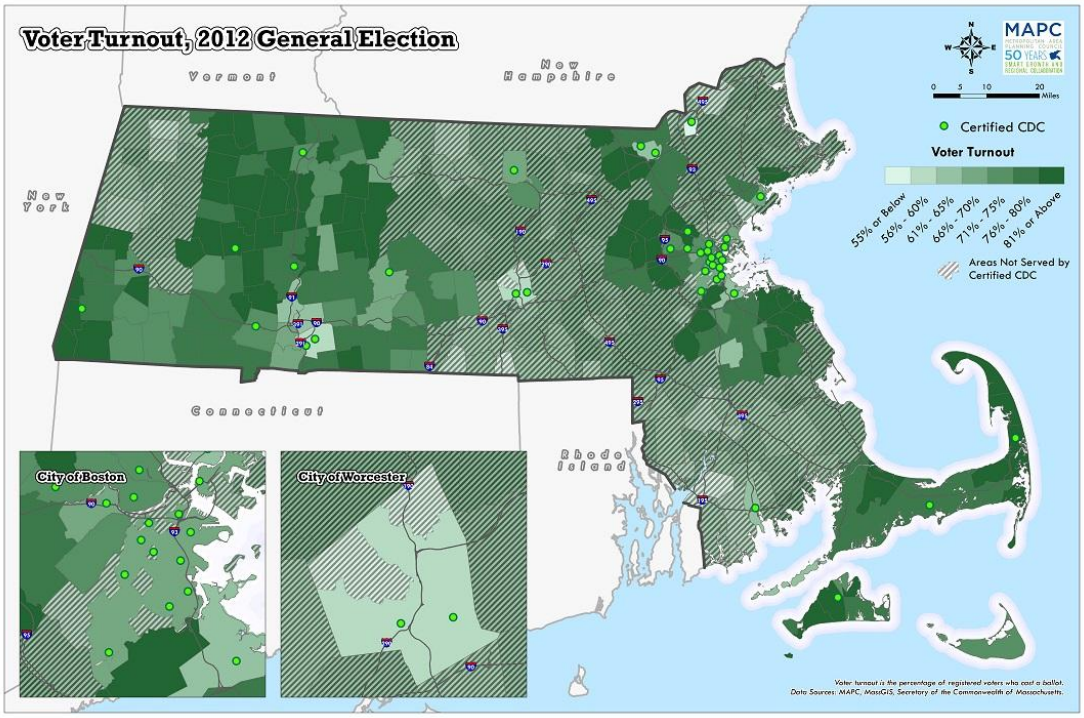
FIGURE 28. VOTER TURNOUT AMONGST REGISTERED VOTERS IN MA FROM 2006-2012



Source: Secretary of State Registered Voter and Ballots Cast data 2006-2012

The following map displays the voter turnout by municipality in 2012 (Figure 29). The darker green represents higher voter turnout rates, which the map shows are highest in rural communities. Of the municipalities that CDCs serve, Springfield and Worcester have the lowest voter turnout at nearly 20% less than the state average. Rural communities, on the other hand, have voter turnout rates higher than the state average.

FIGURE 29. VOTER TURNOUT AMONGST REGISTERED VOTERS IN MA IN THE 2012 GENERAL ELECTION



Source: Secretary of State Registered Voter and Ballots Cast data 2006-2012

CRIME

Crime is another important indicator of social health. Crime—particularly *perceived* rates of violent crime—can have a negative impact on community health (see in Part III, Community Organizing, Building, and Empowerment: Links to Health for explanation). In order to better understand the crime profiles of the communities served by certified CDCS, data on property crimes and violent crimes were collected from the FBI universal crime report (UCR) database.

As Table 10 shows, the rates of violent crime are higher in the CDC Service Area compared to the Non-CDC Service Area and Massachusetts as a whole, across all types of violent crime. In fact, the overall rates of violent crime are twice as high in the CDC Service Area compared to the Non-CDC Service Area and the rates of murder and non-negligent manslaughter and robbery are nearly three times as high.

TABLE 10: AVERAGE VIOLENT CRIME RATES PER 100,000 PEOPLE FROM 2010-2012

	Violent crime	Murder & non-negligent manslaughter	Forcible rape	Robbery	Aggravated assault

	Violent crime	Murder & non-negligent manslaughter	Forcible rape	Robbery	Aggravated assault
CDC Service Area	542.1	3.7	28.3	138.4	372.5
Non-CDC Service Area	276.7	1.3	20.1	49.3	206.4
Massachusetts	439.7	2.7	25.1	104.0	308.4

Source: FBI Universal Crime Report Database, 2010-2012

A similar trend is true of property crime, which is more than twice as high overall in the CDC Service Area compared to the Non-CDC Service Area (Table 11). Each type of property crime is also higher in the CDC Service Area than in the non-CDC Service Area and Massachusetts, but only motor vehicle theft rates continue to be twice as high.

TABLE 11. AVERAGE PROPERTY CRIME RATES PER 100,000 PEOPLE FROM 2010-2012

	Property crime	Burglary	Larceny-theft	Motor vehicle theft	Arson
CDC Service Area	2520.4	628.7	1687.9	203.7	9.5
Non-CDC Service Area	1769.7	440.3	1228.0	101.4	8.7
Massachusetts	2230.9	556.1	1510.5	164.2	9.2

Source: FBI Universal Crime Report Database, 2010-2012

SUMMARY

Based on these metrics, the overall social health of the CDC service areas is worse than the rest of the state. In some cases, such as with violent crime and certain property crimes, the differences are stark and suggest that these communities suffer significantly worse social health than the other regions in the state.

Part III: Pathways Linking Community Development Activities and Health

Part III of this document describes the pathways through which community development activities impact health. Pathway is a term used to consider the links through which a proposed change, in this case the CITC program, could impact health. Pathways are so named because their impact on health occurs through a chain of events, where one action (e.g., CITC funding) affects a determinant of health (such as housing, air quality, and stress) that in turn impacts one or more health-related outcomes (such as obesity, stress, cardiovascular disease, respiratory disease, injuries, and premature mortality). The following four sections explain how CDC activities impact the social and physical environments that in turn affect the health of those who live in those environments. Each of the four categories includes a written description of the links between CDC activities and health and a pathway diagram in the summary section, which provides an overview of the potential impacts and health outcomes.

Methods

A comprehensive literature review was conducted through PubMed and Google Scholar to identify the established links between core CDC activities, the determinants of health they link to, and the physical and mental health outcomes. Articles included were limited to peer-reviewed articles, gray literature, and official US government documents. The strength of evidence for each pathway was ranked on a scale with three categories: "weak" when there are a few cross-sectional or weakly associational studies; "medium" when there are a few strong studies or there is a larger body of literature but the evidence is mixed or lacking in stronger studies that bolster a case for causality (such as longitudinal studies); and "strong" when there is large robust body of literature that supports causal relationships. Given that each pathway description below represents a composite description of how these activities link to health, the strength of evidence rankings are not explicitly discussed for each activity in this portion of the document. However, the strength of the literature is a key consideration in the strength of evidence rankings in the Assessment portion of the HIA (see Part IV).

Physical Development and Community Planning

Background

Physical development and community planning activities focus on improving the physical environment of communities. These activities are present in the material components of a community, from affordable housing development and preservation, to real estate development (including commercial) and community space development (e.g. parks, community centers), to

traditional land use and transportation planning projects. The built environments that CDCs help shape through their physical development work—from the safety and sanctuary of the home to the vibrancy of the public sphere—affect the behaviors and risk factors that influence the physical and mental health outcomes for those who reside in these communities.

Affordable Housing

CDCs contribute to the availability and accessibility of affordable housing by preserving it and developing it anew. When families live in housing they cannot afford without having trouble paying rent or other housing costs, they may cut back on essentials like food, utilities, or healthcare. They may live temporarily in homeless shelters, in substandard housing that is overcrowded or unsanitary, or move frequently, seeking affordable housing. Crowded or substandard housing can expose residents to the risk of poor mental health, lead poisoning, asthma, and injury (Krieger and Higgins 2002; Reid, Vittinghoff, and Kushel 2008; Braubach and Fairburn 2010).

Furthermore, families who can only find affordable housing in high-poverty areas may be prone to greater stress and exposure to violent or traumatic events (Kling, Liebman, and Katz 2007a). Therefore, when CDCs provide residents with affordable housing options, it allows families to access and afford basic necessities such as healthy food, healthcare, and education, which can improve mental and physical health. When this housing is developed in neighborhoods that are safer and have increased access to amenities, such as job opportunities and high-quality schools, it can generate even more health benefits (Kling, Liebman, and Katz 2007a; Leventhal and Dupéré 2011a).

CDCs also focus on the quality of housing that they provide to their communities. This is critical because housing that is poorly constructed or low quality can pose health risks that increase rates of allergies, respiratory diseases, and poisonings due to unsafe or unsanitary conditions (Krieger and Higgins 2002). When it is high quality, however, moderate affordable housing, including green housing, reduces the risk of health hazards associated with substandard housing (Lubell, Crain, and Cohen 2007). Green housing can lower utility costs through improved insulation, for example, which can further free up household financial resources for the purchase of nutritious food and the payment of utility bills.

Transportation Planning

How and whether one gets from one place to another is determined, in part, by proximity to destinations and the layout of the roads that connect destinations (Ewing and Cervero 2010; Freeman et al. 2012; Giles-Corti et al. 2013; Besser and Dannenberg 2005a). In urban and rural communities, the challenges with respect to transportation are different.

Access to transportation is particularly important in rural communities, where the lack of transportation options is one of the primary barriers residents face when accessing health care (Arcury et al. 2005; Goins et al. 2005), employment opportunities, or even basic necessities such as grocery stores (Kaufman 1999). Without the ability to access the goods and services they need, individuals in these communities may miss screenings or doctor's appointments that could detect preventable diseases or have issues go untreated when they are sick. They may also be increasingly socially isolated, which can increase the risk of substance abuse and mental health problems (Lisa F Berkman and Kawachi 2000a; Kawachi and Kennedy 1997), an issue which is already very salient in rural communities (Fortney and Booth 2001).

While CDCs serving rural communities may not engage in transportation planning activities, they often address the challenge of mobility by directly providing transportation services themselves or by connecting community members with each other or existing services.

In urban communities, CDCs may engage more directly in transportation planning. For example, they may advocate for increased public transit access for the residents of the areas they serve, or develop housing or other amenities near existing transportation to facilitate access. This is important as increased transportation access can improve employment opportunities for those who benefit from it, which is particularly valuable for low-income people and working families (Reconnecting America 2013). The links between employment and health, which are well-established and numerous, are explained in the section on Economic Development.

CDCs may also encourage walking, biking, or taking transit by developing housing or commercial real estate that encourage people to travel by active forms of transportation and not by car. For example, CDCs that support affordable housing may focus on building housing close to public transit or include bicycle parking in the site plans. The idea behind this is that streets that are designed not only for cars, but for everyone, may make it possible for people to integrate more physical activity into their daily lives by through active transport and by taking transit. Though the evidence on this is somewhat mixed (Lee, Ewing, and Sesso 2009), some research suggests that building communities that support walking, biking, or taking transit can help a person reach their recommended daily levels of physical activity on most days of the week (Centers for Disease Control and Prevention 2010; Besser and Dannenberg 2005a; Freeland et al. 2013). The links between physical activity and health, on the other hand, are clear. Being physically active is important in both the primary and secondary prevention of many chronic diseases, including cardiovascular disease, diabetes, cancer, hypertension, obesity, depression, and osteoporosis, as well as the prevention of premature death (Pate RR et al. 1995; Warburton, Nicol, and Bredin 2006; Lee, Ewing, and Sesso 2009; L. D. Frank, Andresen, and Schmid 2004). Conversely, it is estimated that sedentary behavior—or physical *in*activity—causes an estimated 6% of the global burden of disease from coronary heart disease, 7% of type 2 diabetes, 10% of breast cancer, 10% of colon cancer, and 9% of premature mortality (Lee et al. 2012).

Developing near transit can have negative health impacts, however. For example, developing near rail stations can expose residents to diesel emissions from locomotives if those emissions are not controlled (Brugge, Durant, and Rioux 2007; Öhrström 1997). This exposure can result in hospitalizations due to asthma exacerbation, chronic lung disease, heart attacks, ischemic heart disease, and major cardiovascular disease (US EPA and Abt Associates, Inc 2010; Roman et al. 2008; Schwartz et al. 2008; Health Effects Institute 2003; Moolgavkar 2000b; Moolgavkar 2000a; Peters et al. 2001a).

Commercial Real Estate

Commercial real estate incorporates office, industrial, or retail space and property that can be bought or sold in a real estate market (National Association of Realtors 2002). CDCs build commercial uses, including mixed-use developments with commercial and housing components, as a means to promote local economic success. By placing goods and services in places where people already live, this kind of mixed-use development can positively impact health in many ways.

For example, walkable, mixed-use neighborhoods underpinned by commercial development allow residents to encounter each other socially and build social capital, making them more likely to know their neighbors, trust others, and participate in the political process (Leyden, 2003). Such developments also promote "eyes on the street," improving perceived safety and reducing crime (CPTED, 2003). Retail areas accessible by walking may also promote physical activity (Besser and Dannenberg 2005a; Freeland et al. 2013), a protective factor against many diseases (Warburton, Nicol, and Bredin 2006; McCann and Ewing 2003; L. D. Frank, Andresen, and Schmid 2004; Lee, Ewing, and Sesso 2009). Full-service grocery stores or supermarkets can help anchor local economic development by creating jobs and tax revenue (The Reinvestment Fund, 2008) and while evidence is mixed, these stores may help improve diets by increasing access to healthy, affordable food in underserved areas (Morland et al. 2002; Lewis et al. 2005). Diet-related illnesses comprise a leading cause of preventable deaths in the U.S. (U.S. Department of Health and Human Services, 2001), and low-income populations are disproportionately burdened by overweight and obesity (NCHS, 2004).

Commercial development can also provide local employment to residents by creating new spaces for local businesses start and grow. This is important because employment and income are some of the most important drivers of health (Marmot, 2002). Businesses in the neighborhood help shore up the local economy, preventing the neighborhood-level deprivation that, independent of residents' individual socioeconomic status, is associated with increased rates of chronic disease, premature mortality, and harmful health impacts resulting from health risk behaviors such as smoking (Pickett and Pearl, 2001).

As with other physical development activities, it is important to consider how the commercial development is carried out. Certain types of businesses, such as liquor stores, are associated with

negative impacts on community health (Lipton et al. 2013) and should therefore be accounted for when assessing the impact of this form of development on health.

Community and Open Space

Community and open spaces play important roles in the life of a neighborhood by providing people space for physical activity, social interaction, and relaxation. Parks and open spaces, particularly in walkable neighborhoods, can promote increased social interactions among neighbors which strengthen community ties and build mutual trust (Sullivan et al., 2004). Many CDCs develop public community space where residents can gather, which increases opportunities for residents to interact. Walkable neighborhoods with more public space also tend to be safer and have greater levels of social and civic engagement than their counterparts (Richard, Gauvin, Gosselin, & Laforest, 2009; Trust for Public Land, 2005).

Low income and minority communities are less likely to have access to recreational facilities than wealthier or primarily white communities (Moore et al., 2008). Parks and open spaces may promote increased physical activity, especially among low-income and minority groups, by providing places to exercise as well as destinations to which people walk (Maas et al., 2008; Cohen et al., 2007). Access to parks, open space, and green space can protect against poor mental health outcomes in part by encouraging socialization (Fan, Das, and Chen 2011). Parks and open spaces can also serve as sanctuaries, reducing stress and depression (Maller et al., 2005). Vegetation and other natural elements of parks and open spaces help improve the environment in ways that support health. For example, trees and other vegetation remove air pollutants and promote cleaner and more breathable air (Nowak et al., 2013). They also may dampen sound, reducing noise pollution (Beattie et al., 2000). By shading streets and buildings, trees mitigate heat islands that contribute to global warming and can also reduce UV exposure and skin cancer risk by providing shade (Grant et al., 2002).

When poorly maintained however, parks or other open spaces may be avoided for fear that they are unsafe. This fear can heighten feelings of anxiety and may constrain some people's social and physical activities as they attempt to avoid certain places or situations that they perceive to be unsafe (Foster, Giles-Corti, and Knuiman 2010; Hale 1996; Liska, Sanchirico, and Reed 1988). On the other hand, when these places are well-lit and well-maintained, walkable spaces with good visibility and access to shops, parks, and other amenities have been shown to reduce rates of crime and fear of crime (Foster, Giles-Corti, and Knuiman 2010; Hedayati Marzbali et al. 2012; Nasar and Jones 1997; Paulsen 2012; Dannenberg et al. 2003; Anderson et al. 2013).

Brownfield Remediation

Brownfields, vacant or underused land formerly put to commercial or industrial use, are more often found in low-income communities (Greenberg et al., 2000). Brownfields can pose health

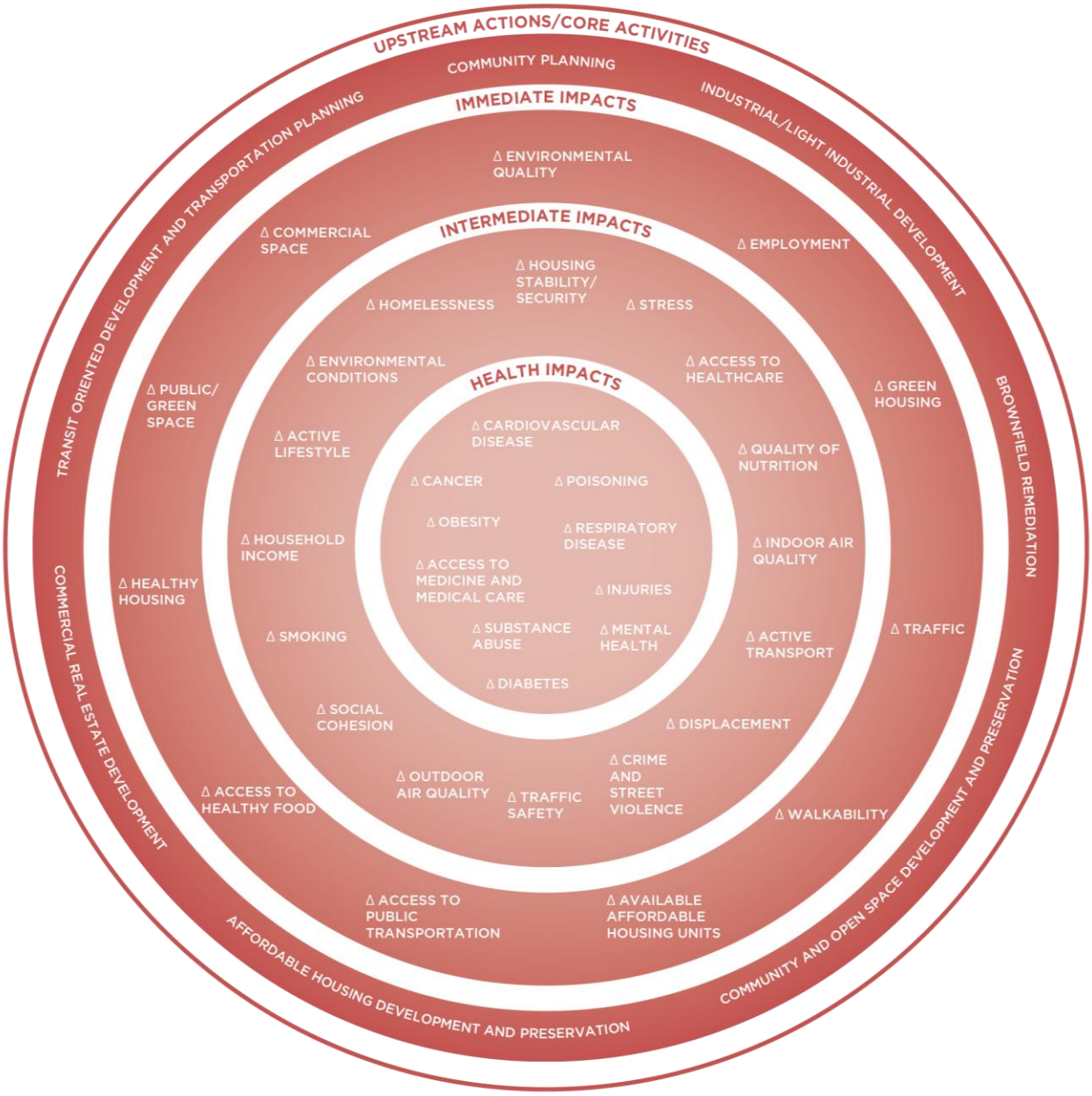
risks by providing access to abandoned unsafe structures or open foundations, increasing exposure to biological or chemical contaminants, and contributing to neighborhood disorder and attracting illicit activity (EPA, 2012). The possible negative health consequences are numerous and vary according to the land's former use; they range from accidents and injuries to exposure to lead and other contaminants. Additionally, brownfields may affect health through neighborhood deprivation since they may reduce the local tax base and depress property values in the vicinity (EPA, 2012).

CDCs focus on remediating brownfields through redevelopment, which they often leverage to create more and livelier land uses and community space. Cleaning up and reinvesting in brownfields has the potential to improve and protect the environment, economy, and surrounding community's health and well-being (EPA, 2012). Remediated brownfields can be designated for many of the beneficial land uses detailed above, providing vibrant commercial or public space in which to exercise, socialize, access needed services and retail options, and more.

Summary

The following is a graphic representation of the description above linking the activities that fall under Physical Development and Community Planning to health.

THE LINKS BETWEEN PHYSICAL DEVELOPMENT AND COMMUNITY PLANNING ACTIVITIES AND HEALTH



Economic Development

Background

Economic development refers to the actions undertaken to improve the standard of living and economic health of a specific area. While most CDC activities support economic development in their communities to some degree (e.g., providing housing affordable to employees in a neighborhood), some focus specifically on increasing the number of job opportunities, which bears directly on income and health.

These activities that specifically create economic opportunities do so primarily by supporting the launch and growth of small businesses through loans and technical assistance programs, and by attracting new employers through commercial development activities.

Employment impacts the health of individuals and families in numerous ways. First, and most clearly, employment generates income. Income grants the ability to buy food, clothes, and afford a home. It affects housing quality and neighborhood safety, school quality, job choice and working conditions, access to healthy foods, and access to medical care. For example, people who earn a living wage can afford to live in decent housing and in safer neighborhoods, send their children to higher quality schools, and provide them with healthy food, all of which affect health positively (Brooks-Gunn and Duncan 1997; Crepinsek and Burstein 2004). In addition to income, employment can offer other benefits such as health insurance, which improves access to quality medical care (Andersen and Newman 1973), and retirement savings programs.

Conversely, being poor or unemployed increases a person's odds of developing a variety of conditions including cardiovascular disease and diabetes (Drewnowski 2009a); alcohol dependence and substance abuse issues; and even premature death (Jin, Shah, and Svoboda 1997; Rehkopf et al. 2008). Mental health is another consequence of unemployment. Unemployed people are more likely to be diagnosed with depression and to say they had experienced sadness and worry than employed people (Paul and Moser 2009).

Finally, type of employment may also impact social status and the degree to which people control their own life circumstances (Marmot, 2002).

Small Business Development

As detailed above, employment promotes health by increasing access to higher quality housing, schools, and healthy food. An advantage of developing local businesses is that it can reduce unemployment rates for whole neighborhoods, thereby reducing their burden of disease (Sundquist et al. 2006). Locating businesses, and thus jobs, in disadvantaged neighborhoods may help reduce income inequality, which is associated with lower life expectancy rates and higher rates of violence (Kawachi et al. 1997; Lynch et al. 1998).

CDCs help create jobs by assisting with the launch of new small businesses. Low-income communities often have limited access to resources, making the supportive services CDCs offer such as business plan development, market analysis, analysis of funding needs, and connections to potential funders highly impactful. The small businesses that CDCs work with are often located in disadvantaged neighborhoods, thus providing job opportunities to residents who may otherwise lack access to employment opportunities.

Small Business Technical Assistance

In addition to helping with the creation of small businesses, CDCs help to sustain them by providing technical assistance and education. Services CDCs offer may include assistance related to marketing, record-keeping, tax preparation, employee management, and cash flow analysis and projection. Helping existing businesses to thrive and expand can help maintain existing jobs in the area, as well as increase the need for employers to hire additional workers. As with income level and employment, job stability is an important predictor of lifelong health (Prause et al, 2009). Workers threatened with job loss can suffer adverse changes in sleep patterns, decreased psychological health, and increased chronic stress (Mattiasson et al. 1990; Lisa F Berkman and Kawachi 2000a)

The small businesses that CDCs assist may have better working conditions than would otherwise be available, especially for minority workers. Minorities tend to be overrepresented in hazardous occupations (Berdal 2008), have higher rates of occupational injuries and illnesses (Shannon et al, 2009), and work nonstandard hours, which leads to greater health risks such as cancer (Pressner, 2003). Helping small businesses thrive can ensure that employees receive fair wages, which also predicts lifelong health outcomes for parents and, even more so, their children (Yen and Bhatia, 2002).

Employees of small businesses are not the only ones who benefit from the creation and sustainability of small businesses in a community; rather, the community at large can benefit through enhancing the vitality of the neighborhood. A neighborhood that is unable to sustain retail establishments can lead to empty storefronts and increased neighborhood deterioration. Poor neighborhood economic and physical conditions may foster violence, crime, and drug use (Yonas et al, 2007). Neighborhood deterioration may also increase stress and depressive symptoms through increased safety concerns (Kruger et al, 2007). Neighborhood deprivation is associated with increased risk of physical inactivity, unhealthy diet, smoking, and obesity. This suggests that regardless of individual attributes, neighborhood context influences both individual health behaviors and health outcomes, underscoring the importance of maintaining active businesses in the area (Riva et al, 2007).

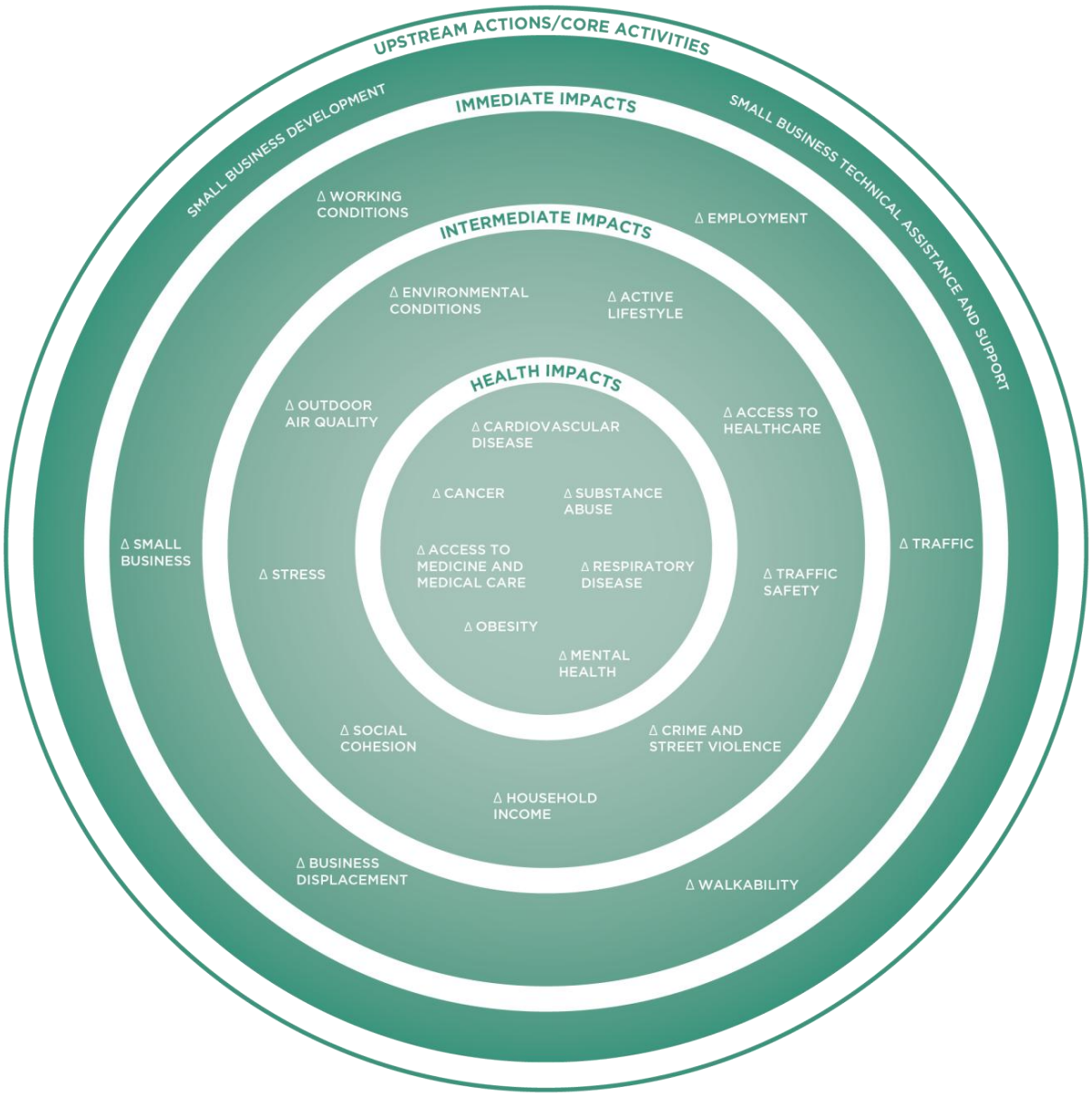
Furthermore, assisting small businesses may have a greater effect on a neighborhood's well-being than large chain stores do because small employers tend to have a greater impact on the local

economy than large businesses (ILSR, 2007). Finally, locating businesses in neighborhoods may reduce vehicle travel and increase physical activity levels of neighborhood residents, thereby decreasing rates of chronic disease (Cervero and Duncan, 2006).

Summary

The following is a graphic representation of the description above linking the activities that fall under Economic Development to health.

THE LINKS BETWEEN ECONOMIC DEVELOPMENT ACTIVITIES AND HEALTH



Asset Development

Background

Asset development refers to activities that improve an individual's ability to acquire and maintain assets. The goal of asset development activities, which include the promotion of housing stability, homeownership, and employment, is to increase financial security and independence. Many CDCs in Massachusetts provide services to increase housing stability and homeownership, for example, through home-buying seminars, foreclosure prevention counseling, loans for housing maintenance, and resident services (e.g., individualized support like utilities assistance or mental health counseling). Other services offered by CDCs focus on building financial security to bolster an individual's employability through education, workforce training, and English language courses to increase successful workforce entry or re-entry.

Housing Stability

Housing instability often results from incremental costs that a family cannot meet over time, such as unduly high rent or mortgage payments, or difficult seasonal utility bills. When housing costs overwhelm the household budget, other needs (food, heating, medicine, healthcare) may go unmet (Guzman, Bhatia, and Durazo 2005a) (See Physical Development for more information on affordable housing need and availability). Adults who have trouble keeping up with bills and home repairs suffer psychologically and inadequate food and insufficient home heating can lead to poor health and developmental delays amongst their children (J. T. Cook and Frank 2008a; Ettinger de Cuba et al. 2007a; Taylor, Pevalin, and Todd 2006). Homeless shelters can increase the transfer of communicable diseases, while temporary housing has been linked to behavioral problems, developmental delays, and poor mental health among children (Francis, 2000; Krieger and Higgins, 2002) and psychological distress among adults (Nettleton and Burrows, 1998). Furthermore, housing instability can negatively impact children as stressful displacements can have severe adverse effects on childhood development, school performance, and health (Guzman, Bhatia, and Durazo 2005a). School performance can in turn affect children's lifetime earning potential and quality of life (U.S. Department of Labor, 2006).

Resident Services

One of the ways in which CDCs combat these costs is by providing services that promote housing stability such as fuel assistance, rental assistance and Section 8 vouchers, energy use support to lower utilities bills, and tenant/landlord counseling services. Families who receive these services can maintain adequate living standards and redirect their scarce resources to health-promoting items like food, utilities, medicines, and healthcare (Bhatia and Guzman, 2004).

Homeownership Assistance

Owning one's home promotes housing stability. If the payments are manageable, the resulting wealth accumulation allows homeowners access to better amenities like grocery stores, places of recreation, good schools, and more (Sundquist and Johansson, 1997). For this reason, homeownership relative to renting may contribute to better overall physical and mental health outcomes across the socioeconomic spectrum (McIntyre et al., 1996; Cairney and Boyle, 2004). A mortgage that is too large, however, can increase stress (Cairney and Boyle, 2004) as was recently demonstrated in the recent housing crisis. CDCs help by providing homeownership assistance, including education, loans, or other financial assistance, as well as foreclosure counseling.

Property maintenance

Housing that is not properly maintained can pose many health risks. CDCs often provide property maintenance support for services that can otherwise be costly, which families might not be able to afford on their own. For example, they offer de-leading loans to combat the lead hazards that low-income families may live with, preventing brain and nervous system damage and delayed growth in children, and nervous system, cardiovascular, kidney and reproductive problems in adults (Gaitens et al., 2009; EPA, 2013). Loans can also be used for maintenance and pest-management, because substandard housing can contain mold, mildew, and pest infestations that cause or exacerbate respiratory diseases like asthma or allergic symptoms (Eggleston et al., 2005). Substandard housing can also put residents at risk for burns and unintentional injuries, so CDC loans may be used for safety devices like smoke detectors and window guards (DiGuiseppi et al., 2010).

Financial Stability

As described in the pathway linking Economic Development and health, income impacts health in numerous ways: from food access and medical care to housing quality and neighborhood safety, from children's schooling to workplace conditions, and even to people's ability to direct their own life circumstances (Marmot, 2002). Those from less affluent backgrounds are more likely to live in disadvantaged or dangerous neighborhoods and substandard housing, attend lower quality schools, work in more hazardous environments, receive inadequate healthcare, have less access to healthy food, and have fewer places to play or exercise. In fact, the lower a person's socioeconomic status, the greater his or her risk of illness and death (Lisa F Berkman and Kawachi 2000b).

Wealth-building activities that CDCs offer include financial education, tax preparation assistance, savings programs and budget counseling, and individual development accounts, which help low-income individuals and families save for a particular goal such as homeownership, secondary education, or small business ownership.

Workforce Stability

Many CDCs offer workforce training programs to raise the employment and earnings status of trainees through skills development. For those who grow up in poverty, low educational

attainment and poor job readiness can constrain employment opportunities. Workforce training may be industry-specific (e.g. health professions, trades, business, technology), or focused on general career development, and can occur in a designated training program, apprenticeship, or on the job. Career counseling and continuing education, though less intensive, can serve some of the same goals.

For more details on the links between income, employment and health, please see the section on Economic Development in Part III: Pathways Linking Community Development Activities and Health.

General Stability

Sometimes families do not have the most basic necessities, such as food, work-appropriate clothing, child care, or transportation to work. Without these, they cannot acquire or maintain a job. Many CDCs provide support for some of these most basic necessities, which have long been known as fundamental determinants of health (Lisa F Berkman and Kawachi 2000b). They do this through various activities such as clothing donation or exchange programs, food distribution programs, family support programs, and other work designed to free up time so that parents can find work and stay employed. Some CDCs also offer free legal services, which can be particularly critical for immigrants who aim to make the United States their home.

Substance Abuse and/or Mental Health Support

Personal problems may interfere with an individual's ability to maintain housing or employment, such as those related to substance abuse and poor mental health (Henkel, 2011; Harris et al., 2013). Mental health plays a major role in people's ability to maintain good physical health. Mental disorders are amongst the most common causes of disability, which illnesses, such as depression and anxiety, affect people's ability to participate in health-promoting behaviors. In turn, problems with physical health, such as chronic diseases, can have a serious impact on mental health and decrease a person's ability to participate in treatment and recovery.

While CDCs rarely directly provide mental health counseling or other services themselves, many CDCs build and manage supportive housing for their various populations. Supportive housing is housing that includes services which help vulnerable populations achieve residential stability, increase their skill levels and/or incomes, and obtain greater control and independence over their lives. Strong research suggests that supportive housing services such as mental health support, case management, and job trainings do in fact increase residential stability (Weitzman and Berry, 1994) and are associated with improved health outcomes (Hwang et al. 2011; Popkin et al. 2010; Popkin and Davies 2013). For example, one study found that supportive housing services was associated with lower rates of asthma, arthritis, diabetes, hypertension, and obesity among a "hard to house" population than among counterparts who did not receive this support (Popkin et al. 2010)

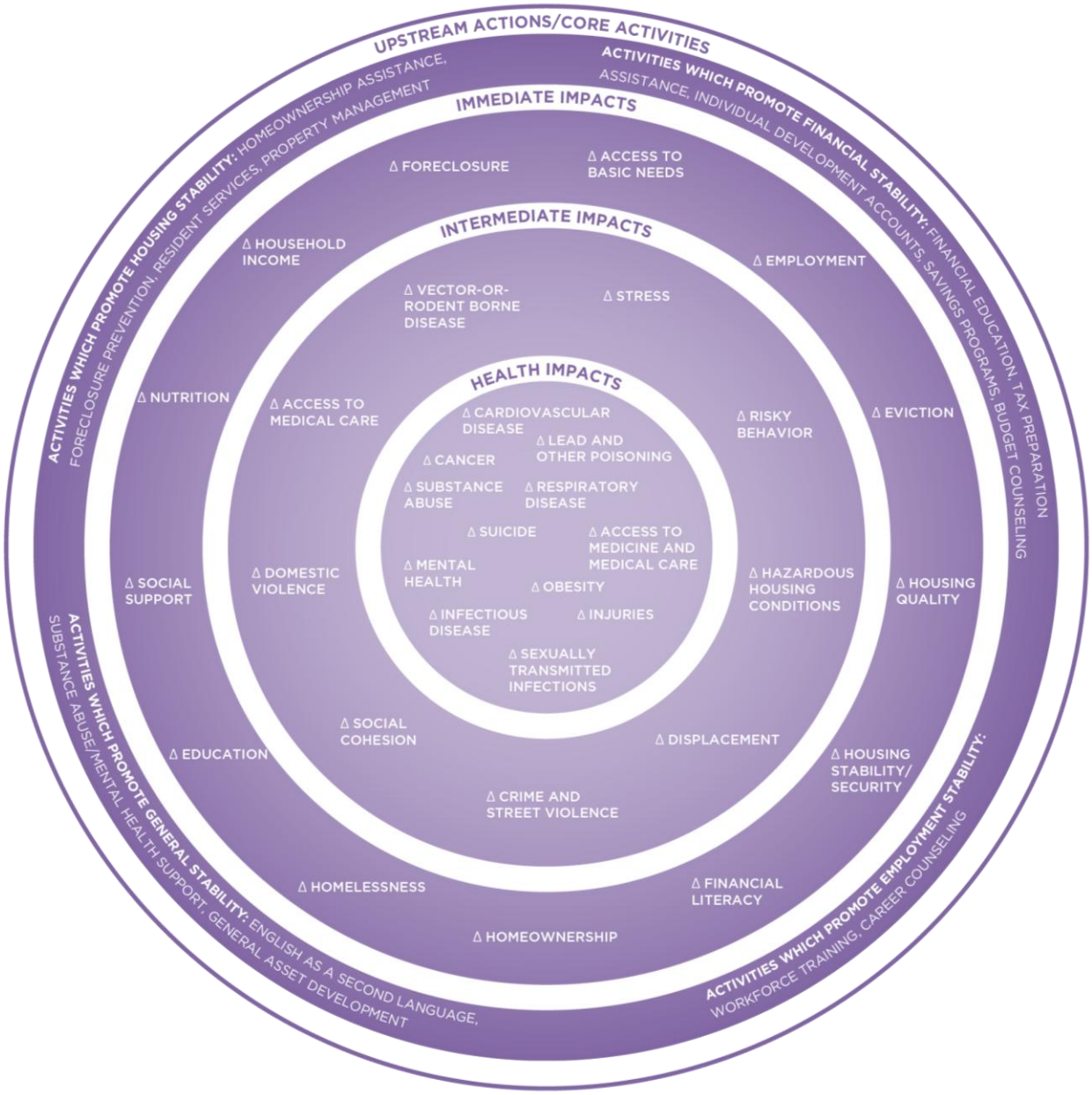
English Courses for Speakers of Other Languages

Those who do not speak English proficiently may not be able to participate as fully in activities that would promote their economic success and health. For example, they may have more trouble finding employment or increasing their wages, leading to inadequate income and the associated social disadvantage and health risks that arise from poverty. They may not be able to engage with their children's educational experiences, meaning that children derive less benefit from their education. People who do not speak English may have difficulty accessing healthcare and social services, which could directly affect their health. For example, they might defer treatment for a medical condition, or have trouble feeding their families without knowing how to apply for public benefits. They may have difficulty with daily activities that impinge on mobility and safety, for example using public transportation, reading road signs, or following safety instructions.

Many CDCs offer English for Speakers of Other Languages (ESOL) courses, which improve English speaking ability among those who take them. Speaking English can confer advantages on these students, such as gaining access to jobs or higher-paying jobs than they might otherwise, allowing them to participate in their children's educations, helping them access healthcare and social services, and making daily activities easier (Flores, Abreu, and Tomany-Korman 2005; DuBard and Gizlice 2008; Walter McManus, William Gould, and Finis Welch 1983; Rivera-Batiz 1990).

Summary

The following is a graphic representation of the description above linking the activities that fall under Asset Development to health.



Community Organizing, Building & Empowerment

Background

Community organizing refers to the process that brings a group of people together in pursuit of a common cause. These activities can organize individuals around a specific issue or process and act as a means of more broadly engaging a community to ensure that they have input into the processes that concern them. Community organizing activities consist of community meetings and events (e.g., neighborhood block parties or those held by neighborhood committees), the formation of community groups and coalitions (e.g., the neighborhood watch), as well as other forms of gathering such as rallies or demonstrations. As no one knows challenges in a community better than its residents, their input is an invaluable guide to community work.

Community building and empowerment activities occur through community outreach and engagement efforts, as well as advocacy, volunteer programs, leadership development, and youth empowerment programs. These act in parallel to community organizing activities, each activity building on and enhancing the other.

The goal of these efforts is to build resilient communities that are empowered to advocate for the services that would improve their quality of life and promote overall community health.

CDC activities are meant to strengthen and support the quality of life of the residents of the communities they serve. In this way, community organizing is one of the most critical activities that CDCs can carry out.

Community Organizing and Advocacy

By bringing people and groups together in pursuit of a common cause, community organizing and engagement activities foster good health by building and strengthening mutual trust within the community as well as by promoting the exchange of information. These characteristics are associated with healthier community profiles across the board: with lower levels of violence, disease, and mental health problems (Kawachi and Kennedy 1997; Marmot and Wilkinson 2009; Sampson 2003). For example, the community events, meetings, and other shared experiences that allow people to feel part of their communities and public affairs also create opportunities for them to build stronger ties among each other. Broader and inclusive social networks in turn facilitate the exchange of information—from something as simple as sharing how to cook a healthy meal, to as essential as learning where to access mental health support services or where there may be a new job opportunity—which can be invaluable to a person's health (L. F. Berkman and Kawachi 2000).

Deeper connections between people increase social support—manifesting in ways such as emotional support during difficult times or a ride to work when the family car breaks down—which also can promote mental and physical health (L. F. Berkman and Kawachi 2000; Uchino,

Cacioppo, and Kiecolt-Glaser 1996). These connections also decrease social isolation and stress, which researchers have long known can lead to many negative health impacts including increased risk of heart disease, mental health problems, and even death (L. F. Berkman and Kawachi 2000; Kawachi and Kennedy 1997).

In addition to bringing the community together, community organizations such as CDCs can advocate on behalf of the community. For example, community organizations often advocate for better public education. Education has been shown to reduce risky behaviors, increase preventative care, and reduce mortality (Feinstein et al. 2006). CDCs also frequently seeks transit improvements, which can increase physical activity associated with transit use (Besser and Dannenberg 2005b), improve air quality and respiratory health (Friedman MS et al. 2001), and reduce vehicle-related injuries and fatalities (Lourens, Vissers, and Jessurun 1999). Finally, CDCs can advocate for improved or stable housing conditions to maintain the affordability of housing and prevent residential displacement, (Dahmann and Dennison 2013) which as outlined earlier, is intimately tied to health (J. T. Cook and Frank 2008b; Guzman, Bhatia, and Durazo 2005b; Krieger and Higgins 2002)

CDC activities are underscored by community organizing activities. Though according to feedback from the scoping sessions and key informant interviews it is one of the most traditionally underfunded CDC activities, community organizing is the process that creates a functioning civic culture and allows the community to drive change. In this way, community organizing empowers residents to advocate for fundamental services that meet their needs, improve their quality of life, and promote overall community health.

Civic Engagement, Leadership Development, and Youth Programs

CDCs facilitate civic engagement and leadership development through activities that create a sense of ownership in the community and empower residents to influence events in their lives (Höppner, Frick, and Buchecker 2008; North et al. 1996)—a belief which plays very important role in health behaviors such as smoking cessation (Gulliver et al. 1995), depression (McFarlane, Bellissimo, and Norman 1995) and general emotional well-being (Bandura 2010; Strecher et al. 1986). Developing leaders amongst community residents also plays a very important role in sustaining community organizing efforts beyond CDCs and other community organizations.

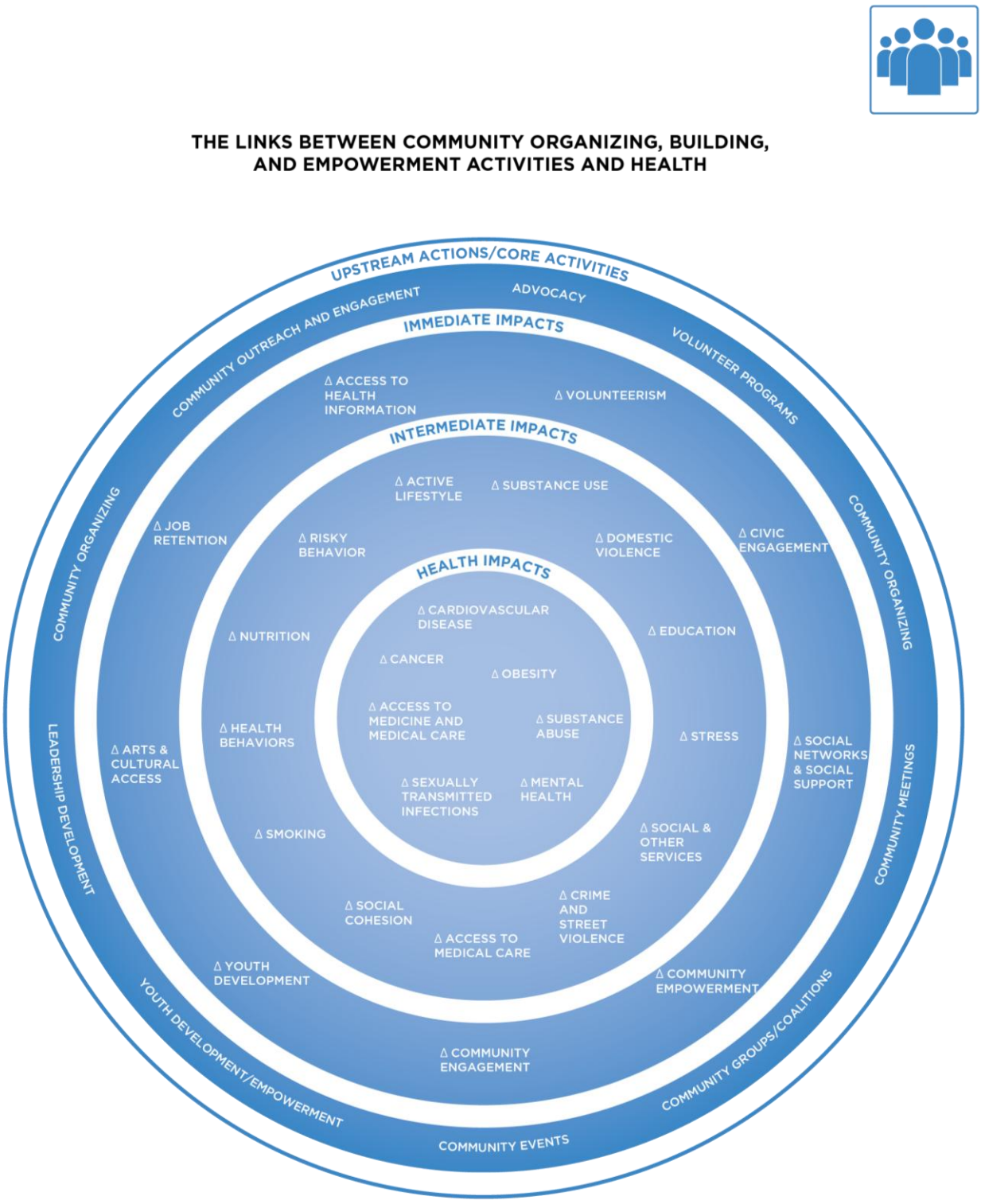
In addition to promoting leadership through general community organizing, many CDCs engage in specific leadership development activities to train future generations of leaders. By training adults and youth alike to lead change in their communities, these programs promote the ability of communities to advocate on their behalf through these leaders in the future. This also empowers members of the community and increases their feelings of "self-efficacy" or their beliefs that they can accomplish important tasks. This feeling is associated with many positive health behaviors such as exercising and smoking cessation as well as mental health outcomes such as depression

(Gulliver et al. 1995; McFarlane, Bellissimo, and Norman 1995). Finally, developing local leaders that engage in the community is an integral to the sustainability of CDC efforts beyond their own staff capacity as it encourages the community to take action on their behalf, strengthens their voice in development efforts, and allows CDCs to better serve the wishes of their communities.

CDCs engage in other youth-specific development activities such as youth empowerment programs, summer camps, youth volunteer groups, environmental awareness programs, and job training programs. These programs may impact a wide range of health behaviors and outcomes as well as help to reduce risky and unhealthy behaviors, such as smoking or risky sex, and promote more positive behaviors in this group (Markham et al. 2010; McFarlane, Bellissimo, and Norman 1995).

Summary

The following is a graphic representation of the description above linking the activities that fall under Community Organizing, Building, and Empowerment to health.



PART IV: ASSESSMENT

The goal of assessment is to estimate how the CITC will influence or change certified CDC activities and how these changes will consequently impact health. To do this, it was first determined based on the nature of the CITC program and stakeholder input whether the available tax credits would enhance, reduce, or maintain each set of core activities of the CDCs. Next, changes in these activities and their impact on the social determinants of health and therefore health outcomes of the populations they serve were predicted based on the peer-reviewed literature.

Part IV is divided into four sections based on each category of CDC activities: Physical Development and Community Planning, Economic Development, Asset Development, and Community Organizing, Building, and Empowerment. The findings of each assessment and how CDC activities impact health are summarized at the end of each section in an impact table. Note that even activities that this HIA finds will likely be maintained under the CITC will continue to have health impacts, thus these are included in the summary tables as well. For reference, a legend for the summary tables is included at the end of this section.

METHODS

To start, a review was conducted using feedback from the scoping sessions, key informant interviews, CIPS, and a survey administered to CDC board members of certified CDCs. The scoping sessions and key informant interviews featured direct feedback from CDC and CSO staff and were used to develop a framework of how activities under the four categories of activities (Physical Development and Community Planning, Economic Development, Asset Development, and Community Organizing, Building, and Empowerment) would most likely be impacted by the CITC. These findings were supplemented with in depth information about specific activities that would be affected by the CITC from CIPs submitted for the CITC Grant Program in the summer of 2013, additional feedback from interviews, and CDC board member survey results.

Activities were separated into three categories based on the likelihood that they would experience an increase, decrease, or no change in funding. Likelihood was ranked according to the consistency of stakeholder feedback and separated into three categories: “very likely”, “likely”, and “possible.” Activities that stakeholder evidence suggested would continue at the same rate of funding or be slightly modified were categorized as “maintained”, whereas those activities that this HIA found could experience a significant increase or decrease in funding were categorized as “enhanced” or “reduced”, respectively.

For the activities that will likely be reduced, maintained, or enhanced by the CITC, the literature was used to determine the health impacts and to identify the most vulnerable populations. Strength of overall evidence was rated on a four-point scale based on a combination of the strength and consistency of the literature as well as the strength of the stakeholder feedback. These categories include:

- Low: Limited or no clear stakeholder feedback and weak evidence in the literature;
- Moderate: Some stakeholder feedback and moderate evidence in the literature;
- Moderate-High: Moderate-to-strong stakeholder feedback and moderate or strong evidence in the literature; and
- High: Strong stakeholder feedback and strong evidence in the literature.

For more details on how the strength of literature was categorized, please see Part III: Pathways Linking Community Development Activities and Health.

CITC Assessment

Using the methodology outlined above, it was determined that no activity will be reduced as a result of the CITC but that a activities would be maintained or enhanced in response to new funding from the tax credits. This is consistent with the nature of the CITC, which is a program whose goal is to supplement, not eliminate, funding for CDCs. There was no information shared or collected that indicated a reduction in current funding programs would occur as a result of the tax credit program.

Feedback from the scoping sessions revealed that certain types of CDC activities are traditionally underfunded and will therefore be most impacted by an unrestricted (i.e., not project specific) funding mechanism such as the CITC. CDCs indicated that these activities - which fall mostly under the categories of Asset Development and Community Organizing, Building, and Empowerment - are either supported by fees from development projects or are challenging to obtain funding for because their impacts occur over the long term and are typically harder to quantify. Thus, given that the CITC is a source of funding that is not tied to a specific project, the CITC is a unique mechanism for CDCs to fund these types of activities.

Furthermore, based on the CIPs, these activities that are programmatic in nature also cost significantly less than those that fall under other activity categories, such as Physical Development and Community Planning. Therefore, these programmatic activities can be impacted more by the funding available under CITC.

The results for each category of activities are summarized below.

	Maintained Overall	Enhanced Overall	Traditionally Underfunded
Physical Development and Community Planning	X		

	Maintained Overall	Enhanced Overall	Traditionally Underfunded
Economic Development	X		X
Asset Development		X	X
Community Organizing, Building, & Empowerment		X	X

As the goal of this assessment was to evaluate the potential statewide impacts of the CITC, it does not account for impacts from specific CDCs who only or primarily focus on activities in categories projected to be maintained. For example, some CDCs focus on activities in a single category, such as Economic Development. Though this category is expected to be maintained in general at a statewide level, it may be enhanced for that individual CDC in their specific service area (e.g., Small Business Development, etc.).

VULNERABLE POPULATIONS

While CDC activities can benefit the community as a whole, certain groups are more likely to benefit compared to others. According to the literature, the vulnerable populations that CDCs directly impact through their work include:

- Low-income individuals and families, especially children (<6) and the elderly (≥62),
- Racial-and-ethnic minority groups, particularly Black and Latino populations; and
- Linguistically isolated (non-English speaking) populations.

These vulnerable populations are significantly more likely to lack access to the amenities CDCs create and offer, such as affordable housing and ESOL programs, and are often the most susceptible to the loss of these services when compared to other populations. They also often bear the greatest burden of disease yet have the fewest resources to improve their conditions when compared to healthier, and more economically advantaged, groups (Lisa F Berkman and Kawachi 2000a).

Low-income populations are specifically highlighted in the CITC legislation, but evidence shows that children, the elderly, racial/ethnic minorities and groups with limited knowledge of English should also be considered vulnerable (L. F. Berkman and Kawachi 2000). Other vulnerable populations, such as those who are physically disabled, are typically not directly served through CDC work and were therefore not included in this analysis. As seen in the existing conditions section of this document, the CDC Service Area has a significantly higher proportion of racial-and-ethnic minorities, more low-income households, and a greater percentage of linguistically isolated households than the areas not served by certified CDCs. While there is no notable difference in the distribution of low-income elderly over the entire CDC Service Area compared to Non-CDC Service Areas, rural areas have a significantly larger proportion of elderly residents than other

communities do. Finally, CDC service areas have a significantly greater percentage of low-income young children when compared to areas not served by CDCs.

Several steps were used to estimate how activities likely to be enhanced under the CITC might reach these vulnerable populations. First, CDCs were categorized based on the community types[13] they serve and the activities they conduct as seen in Part II of this document. For example, all CDCs that engage in resident services activities in rural settings were grouped together. Next, the total population size of each vulnerable population group (e.g. low-income children) within each CDC's service area was calculated using 2006-2010 CHAS data for low-income populations and 2010 Census data for racial/ethnic minority groups. Finally, the total vulnerable population estimates for each category of CDCs (e.g. CDCs that serve gateway communities and do leadership trainings) was aggregated to provide an estimate of the vulnerable populations that would be most likely affected by the CITC.

Physical Development and Community Planning

The activities that fall under the Physical Development and Community Planning category are likely to be maintained, rather than reduced or enhanced, under the CITC. Several reasons for this were identified in feedback from the scoping sessions and key informant interviews.

First, most of the activities in this category have existing funding programs. For example, affordable housing development and brownfield remediation programs are often funded through low-income housing tax credits and other private, federal, and state sources. Out of the four categories of activities, those under Physical Development and Community Planning tend to be the most reliable of the CDC activity categories for which funding is available. In addition, commercial real estate development can provide a return on investment, which can make it attractive to funders, as well as be self-sustaining if any financial gains are generated. Costs associated with an individual physical development project are also significantly higher (e.g. $1M+) than the maximum cap of $150,000 ($300,00 total with matching funds) than the CITC program offers; thus, this program will likely not directly affect the number of housing units being created or new commercial space being constructed.

Based on this, the activities that would likely be maintained are:

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[13] Community types include rural, urban: core, urban: suburban, and urban: gateway. Community types for individual municipalities in the certified CDC service areas were categorized based on DHCD's definitions of rural and gateway cities per the CITC legislation and supplemented by MAPC's community type definitions for cities and towns that did not fall into either category. CDCs were then categorized based on what types of communities they predominantly served. When a CDC service area included a mixture of community types, it was categorized according to the type of community predominantly served, which was confirmed using the CIPs.

- Affordable housing development
- Commercial development
- Community planning
- Other (community space development, transit-oriented development, and industrial development)
- Open space preservation

CDCs made it clear that they consider these activities central to their core mission and would continue them at their current level. While it is not sufficient to categorize any of the activities as "enhanced", the activities in the Physical Development and Community Planning category will likely experience a small increase in support due to the CITC. The CIPs suggested that the CITC could support community planning in general, as well as provide additional support for up-front development costs related to planning, design and engineering work for development. Furthermore, physical development activities could be indirectly impacted by the CITC, as funds that were previously taken and used to support traditionally underfunded activities in Asset Development and Community Organizing, Building, and Empowerment, can now be kept in physical development.

Health Impact

Although, the Physical Development and Community Planning category will not be substantially changed due to the CITC, the continuation of these activities can still have important impacts. Strong evidence suggests that the availability of high quality affordable housing allows families to avoid substandard housing conditions or, homelessness, have access to housing in safer neighborhoods with better schools, and accrue additional funds that they can spend on essentials like food and healthcare (Reid, Vittinghoff, and Kushel 2008; Kushel et al. 2006; Cutts et al. 2011; Pollack, Griffin, and Lynch 2010). By supporting conditions that promote improved nutrition, educational outcomes, and bringing people into cleaner environments and safer neighborhoods, affordable housing development improves mental health and can lower an individual and their family's risk of developing cardiovascular disease, cancer, obesity, and respiratory diseases (Krieger and Higgins 2002; Kling, Liebman, and Katz 2007b; Leventhal and Dupéré 2011b; Lisa F Berkman and Kawachi 2000a; Behavior, Berkman, and Cabot 2003; Sundquist et al. 2006).

There is scant literature that looks at the direct impact that commercial development has on the determinants of health. Rather, it focuses on what the consequences of commercial development may be—such as creating space for local business to grow, bring in more jobs, and promote economic growth in the area (Plazzi, Torous, and Valkanov 2010). Other evidence suggests that depending on its design, development can increase the walkability of a community, encouraging community members to engage in more active lifestyles (Leyden 2003; Ewing, Brownson, and Berrigan 2006; Pothukuchi 2005). However, commercial developments that generate higher rates

of vehicular traffic can reduce air quality and increase the potential for crashes, and residential developments that expose people to high levels of air pollution or environmental contamination can reduce the overall positive health impacts of increased physical activity (Ewing et al. 2011; Teschke et al. 2013).

A strong body of evidence suggests that developing close to public transit has an overall positive effect on health. Literature suggests that developing near public transportation improves neighborhood walkability, increasing physical activity for residents and reducing their rates of chronic disease (Centers for Disease Control and Prevention 2010; Besser and Dannenberg 2005b). By encouraging people to walk around and interact with each other, it also encourages neighbors to build trust in each other, which is associated with lower rates of crime and violence (Billings, Leland, and Swindell 2011; Lisa F Berkman and Kawachi 2000a). When this kind of transit-oriented development occurs in low-income communities, it can also increase economic opportunities for the residents of those developments by giving them easier access to potential jobs (Lisa F Berkman and Kawachi 2000a; Center for Transit-Oriented Development 2011) and services they need, such as health care (Arcury et al. 2005). Conversely, developing near transit can increase neighborhood residents' exposure to air pollution and diesel fuel emissions from the transit lines, which could contribute to respiratory disease (McCellan 1986). Overall, the evidence suggests that the positive health impacts outweigh those that are negative, however (Litman 2013).

Strong literature also suggests that environmental contamination or other hazards resulting from brownfields can pose health risks and attracting illicit activity (EPA, 2012) and that their remediation has the potential to improve and protect the environment, economy, and surrounding community's health and well-being (EPA, 2012).

Finally, some literature suggests again that the development of community and open space can have important positive implications for health. By creating a space for people to gather, interact more with their neighbors, and decompress, these types of places reduce stress and social isolation which some literature suggests may improve mental health outcomes (Richard, Gauvin, Gosselin, & Laforest, 2009; Trust for Public Land, 2005). Green open spaces are independently linked to positive mental health outcomes. Green spaces are also linked to increased physical activity for both children and adults, thereby promoting their cardiovascular health (Maas et al. 2008; D. A. Cohen et al. 2007).

It is important to note that the means through which physical development occurs and the quality of the final developments is critical to maintaining positive impacts on health. Among the categories of CDC activities, those that fall under physical development have the greatest potential to affect health negatively. Affordable housing that does not meet indoor air quality standards, for example, could result in an increased burden of asthma, allergies, or other respiratory diseases for residents (J. D. Spengler and Sexton 1983; John D. Spengler and Chen 2000). Furthermore,

developing near roadways or railways can also increase exposure to air pollution and noise levels which can negatively impact health (McCellan 1986). In addition, transportation planning that encourages more walking without including recommended safety measures could increase rates of fatal pedestrian crashes (Teschke et al. 2013). Thus, consideration should be taken with these activities so that their implementation maximizes the health benefits they can provide, rather than having a negative impact on health.

Summary

Overall, the activities within the Physical Development and Community Planning[14] category will likely be maintained with additional funding from the CITC. Strong evidence suggests that the continuation of these activities has an overall positive impact on chronic disease outcomes, cardiovascular health, and mental health, particularly for low-income individuals and families and racial and ethnic minorities. Some additional evidence suggests that it may also reduce the rates of violence and cancer. The table below summarizes these results for each activity area.

Activity	Activity Level under CITC	Likelihood	Populations Potentially Impacted	Degree of Impact	Breadth of Impact	Health Impacts	Strength of Overall Evidence
Affordable Housing Development	Maintained	Likely	All vulnerable populations	High; affects daily function and well-being	Low for each development; impacts an individual or single family	↓ Cardiovascular disease ↓ Cancer ↓ Obesity ↓ Respiratory disease ↑ Mental Health	High
Commercial Real Estate Development	Maintained	Likely	Community where development occurs	High; affects daily function and well-being	High; can impact entire community	↓ Cardiovascular disease ↓ Obesity ↓ Respiratory disease ↑ Physical Activity	Moderate-High
Community Space	Maintained	Possible	All vulnerable populations	Low; can affect social well-being particularly over the long term	High; can impact entire community	↑ Mental health ↑ Physical Activity	Moderate

[14] Community planning was assessed as part of Physical Development as it was used for this for this HIA to describe coordination with individuals and groups that a stakeholders as part of a specific physical development project. Broader community engagement to determine development goals and new projects is assessed as part of the Community Organizing, Building, and Empowerment category.

Transit-Oriented Development	Maintained	Likely	All vulnerable populations	High; affects daily function and well-being	High; can impact entire community	↓ Crime & Violence ↓ Respiratory disease ↓ Cardiovascular disease ↓ Obesity ↑ Physical Activity	Moderate-High
Open Space Preservation	Maintained	Likely	All vulnerable populations	High; affects daily function and well-being	Medium; impacts specific neighborhood	↓ Cardiovascular disease ↑ Mental health ↑ Physical Activity	Moderate-High
Other Development (Light Industrial Development, Brownfield Remediation)	Maintained	Likely	Low-income households Racial-and-ethnic minorities	Low; affects health and well-being over long term	Medium; impacts specific neighborhood	↓ Lead & other poisonings	High

Economic Development

Overall, Economic Development activities will likely be maintained under the CITC. Feedback from the scoping sessions, key informant interviews, and CIPs suggested several reasons for this.

First, these activities like small business development and financing can be eligible for support through existing programs, although these programs are more limited when compared to the funding available for physical development. For example, a CDC could directly or be an avenue to provide low interest financing that would be paid back (potentially even with some interest) and which could be used again to support local business development. Economic development activities also produce results that are more easily quantified, like the number of small businesses created or the number of businesses receiving technical assistance.

Second, although some feedback from the stakeholders and the CIPs suggested that small business development and TA activities may be enhanced for a few CDCs, these trends were not consistent across CDCs in the state. Furthermore, CDCs serving urban communities—which make up over 80% of certified CDCs in Massachusetts—focus primarily on commercial real estate development activities rather than small business support. As described in the previous section, physical development like commercial real estate development has its own funding streams and is not likely to be enhanced by the CITC. Thus, the Economic Development activities for the vast majority of CDCs are likely to be maintained under the CITC. These activities include:

- Small business development
- Small business technical assistance

Health Impact

Economic Development activities lead to employment opportunities and increased income, which increases a family's potential to afford healthier and higher quality food and live in healthy hazard- and pest-free housing in safer communities with better schools for their children. This leads to numerous health impacts, including better mental health outcomes, lower rates of diabetes, respiratory diseases, and alcohol dependence and substance abuse issues (Khlat et al, 2004; Jin et al, 1995; Lindahl 2002; Rehkopf et al. 2008).

Supporting local businesses has important impacts beyond increasing employment opportunities and income for community residents. It can reduce unemployment rates for whole neighborhoods, thereby also reducing their burden of disease (Sundquist et al, 2006) and locating businesses, and thus jobs, in disadvantaged neighborhoods may help reduce income inequality, which is associated with lower life expectancy rates and higher rates of violence (Lynch et al, 1998). By developing small businesses, CDCs also prevent or mitigate neighborhood deterioration, which is linked to levels of violence, crime, and drug use (Yonas et al, 2007) and may increase stress and depressive symptoms of neighborhood residents through increased safety concerns (Kruger et al, 2007).

As with those activities that fall under Physical Development and Community Planning, the types and mechanisms through which small businesses are supported are important to consider. Certain types of businesses, such as drycleaners who use traditional cleaning materials or certain light industrial plants, may pollute the surrounding area, while others, such as liquor stores, are associated with increased rates of crime. Thus these factors must be taken into consideration when assessing the type of impact Economic Development activities may have on health.

Summary

Overall, the activities under the Economic Development category will likely be maintained with additional funding from the CITC. Most of the evidence linked to the impacts of Economic Development comes from the benefits that increased job opportunities and income yields for health, the latter of which is one of the most robust predictors of lifetime health outcomes. Thus very strong evidence suggests that the continuation of these activities has an overall positive impact on respiratory diseases, chronic disease outcomes, cardiovascular health, substance abuse issues, and mental health, particularly for low-income individuals and families and racial and ethnic minorities. The table below summarizes these results for each activity area.

Activity	Activity Level under CITC	Likelihood	Populations Potentially Impacted	Degree of Impact	Breadth of Impact	Health Outcomes	Strength of Overall Evidence
Small Business Development	Maintained	Likely	Low-income households Racial-and-ethnic minorities	High; affects daily function and well-being	Low; impacts small businesses owners and their families	↓ Cardiovascular disease ↓ Respiratory disease ↓ Substance abuse ↓ Crime & violence ↑ Mental health ↑ Medical care	Moderate-High
Small Business Technical Assistance and Support	Maintained	Likely	Low-income households Racial-and-ethnic minorities	Low; affects long-term economic success and well-being	Low; impacts small businesses owners, employees, and their families	↓ Cardiovascular disease ↓ Respiratory disease ↓ Substance abuse ↓ Crime & violence ↑ Mental health ↑ Medical care	Moderate-High

Asset Development

Some of the activities that fall under the Asset Development category will likely be enhanced by the CITC while others will likely be maintained. The activities that will likely be enhanced by the CITC are those that were identified as traditionally underfunded activities during the scoping sessions. Given that the CITC is a source of funding that is not tied to a specific project, it is thus a unique mechanism for CDCs to fund these kinds of activities.

Asset Development activities focus on building individual assets and skills meant to stabilize housing conditions, economic prospects, financial autonomy, and general well-being. Three activities under Asset Development were identified during the scoping sessions as traditionally underfunded activities. These include resident services, property maintenance, and substance abuse/mental health support.

Resident services and property maintenance services support stable and safe housing for residents by dealing with incremental costs that may overwhelm small budgets or go unaddressed because of limited personal income. Based on feedback from the scoping sessions and key informant interviews, the impacts of these kinds of activities can be difficult to measure, particularly because they often occur over the long term. For example, a family might avoid homelessness by being able to pay rent on time thanks to rental assistance or avoid issues of domestic violence or substance abuse that can be brought on by extreme stress. Based on feedback from scoping sessions, this makes these kinds of activities significantly more challenging to obtain funding for, forcing them to be either supported by fees from projects or other resources.

In the case of substance abuse and mental health support, feedback from scoping sessions and key informant interviews emphasized the general lack of funding available for these activities. Very few

CDCs provide direct services in this area (as seen in the Existing Conditions section); yet the need to provide these services the lessen the potential for mental health issues was a consistent and recurring theme throughout the scoping sessions, key informant interviews, and subsequent follow-up surveys with CDC representatives.

Based on this, it was determined that these were the most likely of the Asset Development activities to be enhanced under the CITC.

- In the category of housing stability, these include:
    - Resident services (e.g., rental and utilities assistance, housing vouchers, tenant/landlord counseling, and services referrals); and
    - Property maintenance (e.g., de-leading loans and home repair loans and services).
- In the category of general stability, this includes:
    - Substance abuse and mental health support.

Further feedback from the scoping sessions and key informant interviews suggested that the other Asset Development activities would be continued at their current rates.

- In the category of housing stability this includes:
    - Homeownership assistance (e.g., first time homebuyer classes, mortgage loans, etc.); and
    - Foreclosure prevention services.
- In the category of employability, this includes:
    - Workforce development (e.g., career counseling, workforce training).
- In the category of financial stability this includes:
    - Savings programs and Individual Development Accounts (IDAs);
    - Budget counseling;
    - Financial education courses; and
    - Tax preparation assistance.
- Finally, in the category of general stability this includes:
    - General Asset Development (e.g., support for basic necessities such as clothing, food, childcare, mobility);
    - ESOL classes; and
    - Legal services.

Health Impact

This analysis suggests that the CITC will increase resident services and property maintenance support in CDC service areas, which will positively impact a wide range of physical and mental health outcomes in the communities those CDCs serve.

It is predicted that by increasing housing stability, an increase in resident services will improve mental health outcomes and reduce the risk of developing cardiovascular disease, as well as improve a wide array of outcomes linked to improved nutrition (for more details, see section on Physical Development and Community Planning: Links to Health in Part I). Resident services, such as rental assistance, utilities assistance, energy upgrades, and Section 8 vouchers, make housing more affordable for low-income families, who can then spend the remaining income on necessities such as food and healthcare. Utilities assistance and energy upgrades, in particular, may improve family nutritional outcomes especially in the winter when these costs compete with the funds low income families have available to spend on food (J. Wilson et al. 2013; D. A. Frank et al. 2006). Some research suggests that reducing this burden leads to better nutritional outcomes for low income families and particularly their children (J. Wilson et al. 2013), thereby reducing their risk of developing myriad negative health outcomes that can result from a poor diet. These outcomes include cardiovascular disease (Bhattacharya et al. 2003; Drewnowski 2009b; Ettinger de Cuba et al. 2007b), reduced resistance to infection, fatigue, shortened attention span, decreased work capacity, and impaired intellectual performance (CDC Guidelines for school health programs to promote life-long healthy eating). Utilities assistance and energy upgrades programs have also been linked to reduced emergency hospitalizations for low-income children (≤ 3 years old) during the winter (D. A. Frank et al. 2006). Finally, reducing financial burdens such as these have also been shown to significantly reduce stress, domestic violence, and later, violence in children (Lisa F Berkman and Kawachi 2000a; Pavao et al. 2007; Evans and English 2002; Middlemiss 2003). Finally, strong evidence suggests that housing stability is an important predictor of obesity and educational performance in children (Krieger and Higgins 2002; Dahmann and Dennison 2013). Obesity is a well-known risk factor for cardiovascular disease and various cancers while education is strongly linked to lifetime income and reduced all-cause mortality (Feinstein et al. 2006; Reilly et al. 2003; Guh et al. 2009).

Another prediction is that enhanced property maintenance will lead to reduced rates of respiratory disease, injuries, and poisonings. Property maintenance activities improve the quality and maintenance of housing conditions. Strong evidence suggests that poor housing conditions contribute to the burden of respiratory disease, injuries, infectious disease, and poisonings caused by lead hazards, mold, mildew, pest infestations, and unsafe infrastructure (e.g., lack of fire alarms). This suggests that an increase in property maintenance activities will contribute to reductions of all these health burdens. These impacts could be particularly important for vulnerable populations such as linguistically isolated populations, the elderly, children, and those who are more susceptible to respiratory disease or other hazards.

Based on the literature, strong evidence suggests improved substance abuse and mental health support will result in reduced rates of domestic violence, child abuse, street violence, risky behavior that leads to sexually transmitted infections (STIs), and suicide in youth. By reducing social isolation, research suggests that improved mental health support is linked to reduced rates of

depression and suicide and increased health-promoting behaviors such as increased physical activity and healthier eating, which are in turn associated with lower rates of cardiovascular disease. Increased support may also lower levels of arthritis, diabetes, asthma, hypertension, and obesity in the affected community (L. F. Berkman and Kawachi 2000).

Summary

Several activities in the Asset Development category will likely be enhanced with additional funding from the CITC. Evidence suggests that an increase in resident services will promote better cardiovascular and mental health and reduce violence. Strong evidence suggests that children are particularly impacted by housing stability and that increased stability will improve their cardiovascular health, educational performance, and thus lifetime health outcomes. Additional strong evidence suggests that an increase in improved housing conditions brought about by property maintenance services will reduce the burden of injuries, poisonings, and respiratory diseases, particularly for children and the elderly. Finally, there is also strong evidence that an increase in substance abuse and mental health support activities are linked to improved mental health outcomes, reduced rates of suicide, and better cardiovascular disease outcomes.

Although the rest of the activities in the Asset Development category will likely be maintained under the CITC, the literature also suggests that they have important impacts on health outcomes. The table below summarizes these results.

Activity	Activity Level under CITC	Likelihood	Populations Potentially Impacted	Degree of Impact	Breadth of Impact	Health Impacts	Strength of Overall Evidence
Resident Services	Enhanced	Likely	All vulnerable populations, particularly low-income children	High; affects daily function and well-being	Low for all; impacts individuals who receive direct support and their families	↓ Cardiovascular disease ↓ Domestic Violence ↓ Childhood obesity ↑ Medical care	Moderate-High
Homeownership assistance	Maintained	Likely	Low income households Racial-and-ethnic minorities	Low; affects long-term housing stability and well-being	Low for all; see above	↓ Cardiovascular disease ↓ Domestic Violence ↓ Childhood obesity	Moderate-High
Foreclosure prevention	Maintained	Likely	All vulnerable populations	Medium; can have severe short-to-medium-term impacts	Low for all; see above	↓ Cardiovascular disease ↓ Domestic Violence ↓ Childhood obesity	Moderate-High

Activity	Activity Level under CITC	Likelihood	Populations Potentially Impacted	Degree of Impact	Breadth of Impact	Health Impacts	Strength of Overall Evidence
Property maintenance	Enhanced	Likely	All vulnerable populations	High; affects daily function and well-being	Low for all; see above	↓ Lead & other poisonings ↓ Injuries ↓ Respiratory disease ↓ Infectious disease	Moderate-High
Financial Stability*	Maintained	Likely	Low income youth and adults Racial-and-ethnic minorities	Medium; can have significant impacts on financial stability	Low for all; see above	↓ Cardiovascular disease ↓ Obesity ↓ Cancer ↓ Mortality ↑ Medical care ↑ Mental health	High
Employment Stability **	Maintained	Likely	Low income youth and adults Racial-and-ethnic minorities	Medium; can have significant impacts on economic stability	Low for all; see above	↓ Cardiovascular disease ↓ Obesity ↓ Cancer ↓ Mortality ↑ Medical care ↑ Mental health	High
Substance Abuse/Mental Health Support	Enhanced	Very Likely	All vulnerable populations	High; affects daily function and well-being	Low for all; see above	↓ Substance abuse ↓ Crime & violence ↓ Domestic violence ↓ Suicide ↓ STIs ↑ Mental health	High
General Asset Development, ESOL, & Legal services	Maintained	Likely	All vulnerable populations	High; affects daily function and well-being	Low for all; see above	↓ Cardiovascular disease ↓ Obesity ↓ Cancer ↑ Mental health	High

* (IDA accounts, savings programs, budget counseling, financial education courses, tax preparation assistance)
**(Workforce development, career counseling)

Community Organizing, Building, and Empowerment

Based on feedback from the scoping sessions and key informant interviews, Community Organizing, Building, and Empowerment (COBE) activities are where the CITC can be expected to make its most significant contribution. Similar to activities under Asset Development, COBE

activities are considered traditionally underfunded. There are several reasons why the CITC will likely have the greatest impact on this category of activities.

First, unlike the activities under Asset Development, nearly all of the activities within this category are considered traditionally underfunded. Furthermore, although these activities may not cost as much overall, they often require more human resources and time to carry out than other activities do. For example, community outreach activities often require significant amounts of staff time; yet their results, while foundational, can be more difficult to quantify than some of the other groups of activities. Furthermore, feedback suggests that the funding streams that support COBE activities are even more limited than those that support Asset Development. Thus, these activities also tend to be funded through other sources—such as development funds—or they are simply put on hold until a time when sufficient resources are available.

Although COBE activities identified through this HIA primarily take place in urban settings (as seen in the Existing Conditions section), CDCs across all community types cited these activities as priorities in the scoping sessions, key informant interviews, and CIPs.

While a majority of the activities in this category will likely be enhanced by the CITC to some degree, a few were highlighted as the most fundamental and will therefore likely be the categories that are most notably impacted by the CITC. These include:

- Community Outreach and Engagement (as a means of community organizing)
- Leadership Development
- Youth Empowerment (e.g., youth volunteer programs, leadership development, etc.)

Health Impact

Based on the literature, all of the enhanced activities in this category will improve social and mental health outcomes over the long term. Community outreach and engagement and leadership development activities aim to get people more involved in their communities and encourage them to exert greater influence on the circumstances occurring around them. The literature strongly suggests that involving people more with their community in this way empowers those community members, increases their levels of social support, and can reduce social isolation and its associated stress. Researchers have long known that social isolation and stress in particular contribute to negative health outcomes, including increased rates of substance abuse, domestic and street violence, depression, and worse mental health (L. F. Berkman and Kawachi 2000; Kawachi and Kennedy 1997). Stress also has well documented impacts on cardiovascular disease and other chronic conditions, which could be reduced with increased community engagement (Marmot and Wilkinson 2009; S. Cohen and Wills 1985). Although the impacts of community engagement efforts need to accumulate over time, it is predicted that an increase in community outreach and engagement activities under the CITC will contribute to improved mental health outcomes,

reduced domestic and street violence, and decreased rates of substance abuse in the CDC Service Area.

There is less evidence specifically linking leadership development and empowerment to health outcomes. Some literature exists which suggests that empowerment leads to increased feelings of self-worth and belief in one's ability to effect change, both of which promote an increase in health-promoting behavior. Stronger evidence suggests that powerlessness, or lack of control over destiny, is a risk factor for disease (Nina Wallerstein 1992; Seeman and Lewis 1995). By engaging residents in leadership trainings and community-wide decision making processes, and putting them in leadership positions in their community, CDC efforts may increase health-promoting behavior such as smoking cessation and exercise, thereby reducing rates of cardiovascular disease, cancer, and improving mental health outcomes (Schaap et al. 2009; Mayer-Davis et al. 2004; Spence and Lee 2003). Having positive role models for health may also influence health behaviors more broadly amongst community members. Based on the literature, empowerment activities also reduce depression and improve general emotional well-being (Nina Wallerstein 1992; Glanz, Rimer, and Viswanath 2008; N Wallerstein 2006).

Stronger evidence suggests that youth empowerment is linked to health outcomes (N. Wilson et al. 2008; Nina Wallerstein 2002). For youth this is particularly important as it is associated with reduced risky behavior, such as smoking or risky sexual behavior, which are significantly more prevalent among youth aged 12-18 (Tapert et al. 2001; Luster and Small 1994). This is particularly true for low-income and racial-and-ethnic minority groups, who have significantly higher levels of sexually transmitted infections, early pregnancies, and substance abuse problems when compared to other groups (Vega et al. 1993; Tapert et al. 2001). Some literature also suggests that having positive role models amongst peers (and elders) can play an important role in influencing the behaviors of their peers. Thus, this HIA predicts that an increase in youth empowerment activities will lead to a reduction in sexually transmitted infections, cancer, substance abuse, and violence.

Summary

Based on the literature, evidence suggests that increased community outreach and engagement will improve mental health outcomes as well as decrease rates of substance abuse, domestic violence, and street violence. Strong literature suggests that leadership development and other empowerment activities are linked to improved mental health outcomes and somewhat weaker evidence suggests that they promote positive health behaviors that may reduce rates of substance abuse and improve cardiovascular health. Finally, stronger evidence suggest that youth empowerment activities may lead to reduced rates of sexually transmitted infections, cancer, and substance abuse while improving mental health and reducing social isolation for those groups as well.

Activity	Activity Level under CITC	Likelihood	Populations Potentially Impacted	Degree of Impact	Breadth of Impact	Health Impacts	Strength of Overall Evidence
Community Organizing, Outreach & Engagement	Enhanced	Very Likely	Low income youth and adults Racial-and-ethnic minorities	Medium-to-High; can affect impact daily function and well-being	High; can impact entire community	↓ Domestic Violence ↓ Crime & violence ↓ Substance abuse ↑ Mental health ↑ Medical care	High
Advocacy	Maintained	Likely	All vulnerable populations	Medium-to-High; can affect impact daily function and well-being	High; see above	↓ Domestic violence ↓ Crime & violence ↓ Substance abuse ↑ Mental health ↑ Medical care	Moderate-High
Volunteer Programs	Maintained	Likely	All vulnerable populations	Medium; can affect daily function and well-being	High; see above	↓ Domestic violence ↓ Crime & violence ↓ Substance abuse ↑ Mental health ↑ Medical care	Moderate-High
Community Events, Community Groups/ Coalitions, Community Meetings	Maintained	Possible	All vulnerable populations	Low; affects long term social health and well-being	High; see above	↓ Domestic violence ↓ Crime & violence ↓ Substance abuse ↑ Mental health ↑ Medical care	Moderate
Leadership Development	Enhanced	Likely	Low income youth and adults Racial-and-ethnic minorities	High; affects daily function and well-being	High; see above	↓ Cardiovascular disease ↓ Cancer ↑ Mental health	Moderate-High
Youth Development & Empowerment	Enhanced	Possible	Low income youth, particularly racial-and-ethnic minorities	High; affects daily function and well-being	High; see above	↓ Cardiovascular disease ↓ STIs ↓ Cancer ↓ Substance abuse ↓ Crime & violence ↑ Mental health	Moderate

Summary of findings

This HIA predicts that no CDC activities will be diminished as a result of the CITC but that certain activities will either remain steady or be enhanced in response to the CITC program.

The following table summarizes the activities that are predicted to be enhanced by the CITC as well as the health impacts that would result from increasing those activities according to the literature cited above.* A legend for the table is provided following the summary table.

Note that the findings propose that the activities likely to be enhanced fall under the categories of Asset Development and Community Organizing, Building, and Empowerment.

Summary of Activities and health Outcomes that will likely be Impacted by the CITC

Activity	Activity Level under CITC	Likelihood	Populations Potentially Impacted	Degree of Impact	Breadth of Impact	Health Impacts	Strength of Overall Evidence
Resident Services	Enhanced	Likely	All vulnerable populations, particularly low-income children	High; affects daily function and well-being	Low for all; impacts individuals who receive direct support and their families	↓ Cardiovascular disease ↓ Domestic Violence ↓ Childhood obesity ↑ Medical care	Moderate-High
Property maintenance	Enhanced	Likely	All vulnerable populations	High; affects daily function and well-being	Low for all; see above	↓ Lead & other poisonings ↓ Injuries ↓ Respiratory disease ↓ Infectious disease	Moderate-High
Substance Abuse/Mental Health Support	Enhanced	Likely	All vulnerable populations	High; affects daily function and well-being	Low for all; see above	↓ Substance abuse ↓ Crime & violence ↓ Domestic violence ↓ Suicide ↓ STIs ↑ Mental health	High
Community Organizing, Outreach & Engagement	Enhanced	Very Likely	Low income youth and adults Racial-and-ethnic minorities	Medium-to-High; can affect daily function and well-being	High; can impact entire commun	↓ Domestic Violence ↓ Crime & violence ↓ Substance abuse ↑ Mental health ↑ Medical care	High

Activity	Activity Level under CITC	Likelihood	Populations Potentially Impacted	Degree of Impact	Breadth of Impact	Health Impacts	Strength of Overall Evidence
					ity		
Leadership Development	Enhanced	Likely	Low income youth and adults Racial-and-ethnic minorities	High; affects daily function and well-being	High; see above	↓ Cardiovascular disease ↓ Cancer ↑ Mental health	Moderate-High
Youth Development & Empowerment	Enhanced	Possible	Low income youth, particularly racial-and-ethnic minorities	High; affects daily function and well-being	High; see above	↓ Cardiovascular disease ↓ STIs ↓ Cancer ↓ Substance abuse ↓ Crime & violence ↑ Mental health	Moderate

*For more details on specific studies, please see the write-up in this section (Part IV: Assessment) or Part III: Pathways Linking Community Development Activities and Health.

This prediction pertains to the CITC program and CDC activities statewide.

Impact Table Legend

Activity	Specific activity within pathway			
Activity Level under CITC	**Enhanced** Stakeholder evidence suggested the activity would experience a increase in funding	**Maintained** Stakeholder evidence suggested the activity would continue at the same rate of funding or be slightly modified		
Likelihood	**Very Likely** Stakeholder input/feedback suggested this change will occur	**Likely** Stakeholder input/feedback suggested this change would occur	**Possible** **Stakeholder input/feedback suggested this change was anticipated to occur**	
Populations Potentially Impacted	Identifies if and which vulnerable populations would be affected by the activity			
Degree of Impact	**High** Predicted to impact daily function and well being	**Medium** Predicted to impact daily function or well being on intermittent basis	**Low** **Predicted to impact daily function or well being on an infrequent basis**	
Breadth of Impact	**High** Predicted to impact entire neighborhood or community	**Medium** Predicted to impact specific households or population groups in a neighborhood or community	**Low** **Predicted to impact specific individuals within a neighborhood or community**	
Health Impacts	↓ Predicted Reduction (applies to both maintained and enhanced activities)	↑ Predicted Improvement (applies to both maintained and enhanced activities)		
Strength of Overall Evidence	**High** Strong stakeholder feedback and strong evidence in the literature	**Moderate-High** Moderate-to-strong stakeholder feedback and moderate or strong evidence in the literature	**Moderate** Some stakeholder feedback and moderate evidence in the literature	**Low** Limited or no clear stakeholder feedback and weak evidence in the literature

PART V: RECOMMENDATIONS

By the end of the 6th year of the CITC, a potential total of $66M in additional funding could be invested through certified CDCs across the Commonwealth. This investment in the people and places that CDCs serve, even if only partially achieved, would represent a significant infusion of resources for community development work in the state.

Based on findings and recommendations presented in the Parts III and IV of this document, the CITC could be a mechanism with the potential to amplify impact of community development activities in Massachusetts. In particular, the tax credits have the potential to change the level of support for CDC programmatic activities that have long been underfunded.

SUMMARY OF ASSESSMENT FINDINGS

This HIA predicts that the CITC will have an overall positive impact on public health of low- and moderate-income households across the state served by the certified CDCs (see Part II: Baseline Profiles).

Utilizing a literature review and an examination of demographic and health data, and informed by input from certified CDCs and Board members and others in the community development field, four categories of CDC activities and the pathways through which these activities impact health were reviewed. The activities were then evaluated in light of the CITC program to determine the likelihood that they would experience an increase, decrease, or no change in funding due to the tax credits. Based on this approach, it was determined that no activity would be reduced, but that certain activities would remain steady or be strengthened by the CITC program. Based on feedback from stakeholders, it was also determined that the nature of the CITC funding mechanism could provide support for activities that were frequently underfunded or lacked a consistent source of funding.

Below is a summary of how each pathway and its associated activities are predicted to change as a result of the CITC.

- **Activities under the pathway of Physical Development and Community Planning will be maintained as a result of the CITC.** These activities, such as the development of affordable housing, are associated with multiple factors that protect and promote health: avoidance of substandard housing and homelessness, access to cleaner neighborhoods and better performing schools, and conditions supportive of improved nutrition. In many ways,

physical development[15] as performed by CDCs can be a foundation for improved health outcomes among low- and moderate-income households. Under a maintained scenario, the majority of certified CDCs would continue to annually produce hundreds of units of affordable housing across the Commonwealth.

- **Activities under the pathway of Economic Development will be maintained as a result of the CITC**. These activities, which include small business development and technical assistance, are important to small business stability and growth, which in turn helps provide financial resources for small business owners and their employees. Evidence demonstrates increased job opportunities and income yield benefits for health; income, specifically, is one of the most robust predictors of lifetime health outcomes. By maintaining this activity at rates similar to the past 10 years, the approximately 20 certified CDCs that engage in economic development activities would continue producing or preserving hundreds of jobs and providing financial and technical assistance to hundreds of small businesses each year.

- **Activities under the pathway of Asset Development will be enhanced as a result of the CITC.** Under Asset Development, certain activities related to housing stability and general stability are most likely to be enhanced.

  Under the category of housing stability, these include:
  - Resident services (e.g., rental and utilities assistance, housing vouchers, tenant/landlord counseling, and services referrals); and
  - Property maintenance (e.g., de-leading loans and home repair loans and services).

  Under the category of general stability, this includes:
  - Substance abuse and mental health support.

  The enhancement of these activities will positively impact a wide range of physical and mental health outcomes by improving conditions that promote chronic disease reduction and better mental health outcomes. Since nearly all of the certified CDCs perform these activities, they will assist a large number of low and moderate income households in finding and maintaining housing as well as gaining new personal skills to assist them in

[15] Physical development characterizes the type of development typically created by CDCs as described in Sections III and IV). Specific developments may have positive and/or negative impacts depending on the specific characteristics of the project, such as amount of vehicular traffic generated, support for active transportation, proximity to sources of air or water pollution, influence on displacement of vulnerable populations and remediation of environmental contaminants on a property.

achieving better economic and mental health outcomes. Already thousands of individuals and hundreds of families have been assisted each year for the past decade by CDCs, and this number is expected to grow with the CITC. It is also expected that the full range of vulnerable population served by CDCs - low-income individuals and families, especially children and the elderly, racial- and-ethnic minority groups, and linguistically isolated populations – would be directly impacted by an increase in these activities.

- **Activities under the pathway of Community Organizing, Building, & Empowerment will be enhanced as a result of the CITC.** The activities that will most likely be enhanced include:
    - Community Outreach and Engagement activities;
    - Leadership Development; and
    - Those related to Youth Development and Empowerment.

  Our findings suggest that enhancing of these activities will improve social and mental health outcomes over the long term. These activities will invite and encourage communities to exert greater influence on the circumstances occurring around them, actions that are associated with better mental health outcomes and reduced rates of social isolation and violence. With approximately two thirds of the CDCs engaging in these activities, more residents will be engaged in the future of their communities and more will be offered the leadership skills to organize for and guide change in their neighborhoods. It is also expected that the vulnerable population served by CDCs, specifically youth from low-income households and racial- and-ethnic minority groups, will be directly impacted by an increase in these activities.

RECOMMENDATIONS

The recommendations section of this HIA has two goals. The primary goal is to propose actions, tools, or alternatives that will enhance any positive impacts and mitigate any negative impacts on health that the CITC may have based on this assessment. A secondary goal is to inform CDCs, and other organizations engaged in community development work, of the impact their activities have on population health and the connections that can be made in support of their work.

RECOMMENDATIONS SPECIFIC TO THE CITC

These recommendations are intended for DHCD, which is the organization responsible for administering and evaluating the CITC. The recommendations are based on input received during the process, findings from the HIA and identification of opportunities to integrate health considerations into the CITC process. The latter element reflects the breadth of community development work that could be support by the tax credits and the impacts the work could have on health determinants.

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT

Recommendation	*Impact of Recommendation*
Amend 760 CMR 68 - Community Tax Investment Grant and Tax Credit Program. Specifically, under 68.02: Definitions, revise the definition of Community Development to include: "community organizing and leadership development to more deeply engage constituencies in determining the need for community programs, projects and activities."	The inclusion of these activities would acknowledge their place in the CIPs and be explicit about their inclusion in activities to be undertaken (Section 4 of CIP). Including the definition would recognize the importance of these activities to CDCs, the role that the activities have in communities determining their own direction for sustainable growth, and the connections between self empowerment and improved health outcomes. This recommendation will take a longer time to implement as the change will require regulatory action; however, a step to formally recognize the role of community organizing and leadership development could have significant consequences for CDC work. In addition, it would align the community development definition with evidence that organizing and empowerment strengthens community ties and, in turn, population health. *Indicator: Revised Regulation* *Proposed Timeframe: 2014-2016*
Revise Future Notices of Funding Availability (NOFA)[16] Scoring Criteria by reducing scores on elements such as Plan Goals and Other – Track Record, Sustainable Development while increasing scores for Activities and Evaluation.	This recommendation would place a greater emphasis on activities and evaluation. CDCs would be encouraged to provide more details about their proposed activities, making it easier to monitor their work and determine impacts, especially for connections between specific activities and health outcomes. The revision also would assist DHCD with its evaluation of the CITC program and other evaluations that build from the reported CDC activities and resulting impacts. *Indicator: Revised NOFA*

[16] These comments are based the 2013 NOFA

Recommendation	*Impact of Recommendation*
	Proposed Timeframe: 2014
Revise Future Notices of Funding Availability (NOFA) - Community Investment Plans. Modify the CIP to : • Include in *Section 1* a prompt for health related data as part of characterizing constituencies to be served. • Update *Section 4* with the proposed change to the Community Development definition. • Identify in *Section 6* health care and public health organizations as suggested stakeholders. • Include in *Section 7* a prompt for additional information on the plan's consistency with other area plans, including health related plans.	The revision of the CIP with the recommended language would encourage certified CDCs to consider health related data and connections with health care and public health organizations are part of their CIP. The connections could highlight existing linkages or identify new opportunities to use CITC supported activities to improve economic opportunities while addressing health issues particular to a CDC's service area. Sources for the health data are: • Behavioral Risk Factor Surveillance System (BRFSS) • Massachusetts Department of Public Health/Bureau of Environmental Health website • Massachusetts Environmental Public Health Tracking System • Massachusetts Community Health Information Profile (MassCHIP) • OurHealthyMass.org Appendix C includes a table with the health data available from each site. *Indicator: Revised NOFA* *Proposed Timeframe: 2014-2015*
For the CITC program evaluation, utilize an existing surveillance tool that CDCs already use for monitoring and evaluation of the CITC and include tracking of health related activities such as: • Healthy design element in physical	The use of a monitoring tool that is already in place for proposed measurement and evaluation of the CITC and CIPs (i.e. Section 5) would speed up the evaluation process and reduce the time necessary for CDCs to report on their activities. Additionally, use of an existing tool

Recommendation	*Impact of Recommendation*
developments (e.g., sidewalks, asthma safe housing, etc.) • Programming to increase healthy behaviors (e.g., healthy cooking classes, group exercise classes, etc.) • Support service programs that address mental health (e.g., counseling programs or services) • Community programs to reduce violence (e.g., community-police partnerships) • Programming to support elder residents (e.g., partnership with a Elder Network or Council on Aging)	would allow the CITC evaluation to overlap with monitoring and evaluation work that is already occurring in partnership with CDCs. The MACDC GOALS structure, which was used in this HIA, could assist in tracking work and allowing for quicker development of the evaluation of the plans and the program. If this tool is used, it will need to be adjusted to account for CITC program evaluation items and to include categories for health-specific activities. *Indicator: Identification of evaluation approach to the plans and the program* *Proposed Timeframe: 2014-2015*

As DHCD administers this program, it is also recommended that the department coordinate with the Federal Reserve Bank's Healthy Communities Initiative. For the past several years, Federal Reserve Bank locations, including San Francisco and Boston, have led healthy community initiatives to inform place-based work that can both revitalize neighborhoods and improve health outcomes. By establishing this connection, DHCD would maintain Massachusetts' role at the forefront of community development work and connect CITC work with local and national initiatives in order to learn and share findings.

Recommendations Broadly Linking the CITC, Community Development Activities, and Health

As the HIA documents, community development work focuses on factors that are recognized as social and environmental determinants of health. These factors, such as income; the physical environment; social connections and support; and housing choice and affordability, contribute significantly to individual and family wellness and overall health.

Given the intersection at which CDCs sit – serving economically challenged populations through project and program-based work – they are well situated to advance prevention-focused health interventions and to make upstream investments that promote community health and wellness. Investment in prevention of illness and disease is well recognized as a more cost-effective method

of enhancing population health compared to treating disease through the health care system[17]. The work of CDCs can be part of the effort to target the foundations of health that begin in neighborhoods and are expressed in the choices people have. In doing so, CDCs not only can provide a roof over a family's head and give a young person a feeling of ownership over the future, they can change the health profile of the residents they serve. This then improves the probability for health care savings as health disparities are addressed through the prevention of costs that can later be accrued in hospital settings. For example, in the past couple of years, the State of New York's Medicaid Redesign effort has used a grant program, drawn from state Medicaid funds, to provide resources for supportive housing for high-risk patients in order to reduce nursing facility and inpatient costs[18].

The recommendations below suggest actions that CDCs, CSOs and others invested in the CITC can take to have their CIPs and approaches reflect potential health impacts of their work.

COMMUNITY DEVELOPMENT CORPORATIONS

Recommendation	*Impact of Recommendation*
Promote the relationship between development work and health outcomes as part of fundraising and communications	Communicating the impact of community development activities could potentially assist in CDC fundraising for the CITC. This is especially the case as many health care and public health focused organizations are looking outside clinical settings to achieve patient and population health goals. CDCs are well poised to partner in advancing preventative health work and communicate their. To support communications on this topic, a white paper and series of videos will be produced that highlight the findings of the HIA. These resources will be made available to CDCs and others to inform potential donors as well as those who are served by the organizations. *Indicator: Promotional materials and annual reports from CDCs that include a health related information and communications. Distribution and media resulting from the white paper and videos*

[17] Return on Investments in Public Health: Saving Lives and Money. Robert Wood Johnson Foundation, December 2013. http://www.rwjf.org/content/dam/farm/reports/issue_briefs/2013/rwjf72446

[18] Medicaid Redesign Team Supportive Housing Initiatives: http://www.health.ny.gov/health_care/medicaid/redesign/2013-2014_support_housing_initiatives.htm

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Recommendation	*Impact of Recommendation*
	developed in coordination with HIA. *Proposed Timeframe: 2014-2016*
Use connections and results from community organizing initiatives to push for policy changes	CDCs can leverage their community organizing, empowerment and leadership activities into policy recommendations for local and state legislators and decision makers. As many of the organizing activities are related to understanding community needs and desires, the findings could be shared among certified CDCs. When common opportunities and obstacles are identified, CDCs collectively should look for the chance to suggest policy changes that would address identified issues. This could include local policy changes and environmental strategies to address public and traffic issues safety as well as support for mental health programs to support populations served by urban and rural CDCs. *Indicator: Certified CDCs developed or supported policies or legislative changes.* *Proposed Timeframe: 2014-2017*
Incorporate community organizing activities and approaches that are shown to increase positive health behaviors and community ownership	CDCs could utilize evidence-based approaches that directly support positive health behaviors while implementing community organizing activities to build greater community connectedness. Such approaches, like a fitness program in community settings and group activities for older adults, have been shown to increase opportunities for residents to be physically active, improve public safety, and reduce social isolation. A resource for information about these approaches is the *County Health Rankings and Roadmaps* program's 'What Works for Health' (http://www.countyhealthrankings.org/roadmaps/what-works-for-health). There are certified CDCs that currently have community gardens and programs for seniors. Another aspect of this recommendation would be opportunities for peer-sharing and program models so that CDCs stating this work would have a path to follow.

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Recommendation	*Impact of Recommendation*
	Indicator: CIPs that include activities that directly promote physical, social, and/ or emotional wellness as part of the 'Activities to be undertaken' (section 4 of CIP). *Proposed Timeframe: 2014-2017*
Connect with health care providers regarding Community Benefits and Determinations of Need process in order to participate in their community health improvement plans	These linkages would serve as potential funding sources for CDCs as well as partnership opportunities to target community development work related to certain populations (e.g., low income children, seniors). Community Benefits are initiatives and programs implemented by non-profit hospitals to improve health in the areas and patient populations that they serve. Although much of community benefit resources currently go to charity care[19], there is increasingly an emphasis for the benefits to be used as investments the populations served by a health care provider. It is recommended that CDCs establish connections with hospitals and HMOs that serve elements of their populations in order to be included in analysis of community health needs and Community Benefit investments. Similarly, CDCs should learn about the Determination of Need (DoN) process and how the associated community health initiative (CHI) resources can be connected with community development work. CDCs should identify contacts at their local hospitals that are responsible for making the determinations and participate in decisions related to the CHIs. MDPH can assist CDCs in exploring these resources. *Indicator: CIPs and CITC reporting materials that include documentation of outreach regarding Community Benefits and/or Determination of Need processes as part of financing strategy (section 8 of CIP).*

[19] Charity care is the term used to describe health care that is administered by hospitals or other health care providers at low or no cost to patients, who typically have no insurance and/or are financially disadvantaged.

COMMUNITY DEVELOPMENT CORPORATIONS

Recommendation	*Impact of Recommendation*
	Proposed Timeframe: 2014-2017
Make connections with Community Health Workers as part of Stakeholder Base and as part of Asset Building and Community Organizing Activities	The connection with community health workers (CHWs) would increase the stakeholder base for CDCs and provide the possibility of targeting populations served jointly both CDCs and CHWs. CHW involvement would also benefit planning for and support of asset development activities and community organizing, especially in relation to mental health. CHWs are public health outreach professionals who apply their unique understanding of the experiences and culture of the populations that they serve. CHWs connect those in need to health and human services, and have a focus on eliminating racial, ethnic, and socioeconomic health disparities among vulnerable and underserved communities. Resources for CHWs in the Commonwealth are the MDPH Office of Community Health Workers, the Massachusetts Association of Community Health Workers (MACHW), and the Community Health Education Center (CHEC) at the Boston Public Health Commission (BPHC). *Indicator: CIPs that include documentation of outreach and partnership with CHWs as stakeholders (sections 2 and 6 of CIP).* *Proposed Timeframe: 2014-2017*
Make connections with state, municipal, and community level organizations working in the field of public health	The stakeholder base, and opportunities for collaboration and advocacy of community development work, would be strengthened as CDCs connect with governmental bodies and private organizations that are addressing community health. Their work focuses on policy, systems, and environmental (PSE) changes that address the root causes of chronic disease, such as health determinants – an area where much CDC work occurs. The connection between CDCs and community health focused organizations could provide more backing for CITC related work and assist with the sustainability of initiatives, particularly those that could be helped by policy changes. An example of partner is the Mass in Motion (MiM) program, which is MDPH's program for increasing healthy eating and

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Recommendation	*Impact of Recommendation*
	active living in Massachusetts's cities and towns, and located in 52 municipalities across the state. MiM uses a multi-sectoral approach to promote wellness and empowers local municipalities to effect policy and environmental change to improve health outcomes. Possible connections include: • Business counseling or financial assistance with corner stores looking to carry healthier foods • Collaborations to work with school districts for joint use agreements, which would allow for more use of school facilities by community residents • Partnerships to introduce smoke free housing policies into public and privately owned affordable housing units Other possible partners include: MDPH, city and town public health departments, public health institutes (such as HRiA), regional planning agencies, and statewide membership organizations like the Massachusetts Public Health Association (MPHA). *Indicator: CIPs that include documentation of outreach and partnership with organizations citing a PSE focus (sections 2, 6, and 7 of CIP).* *Proposed Timeframe: 2014-2017*
Ensure that physical development activities are health promoting	CDC work is supportive of healthy behaviors and choices and creates opportunities for those who may be more economically challenged. However, the predicted beneficial impacts could be reduced or negated if certain activities do not account for environmental health issues. Environmental pollution and hazards have the potential to negatively impact health and safety through exposures in indoor air (via vapor intrusion from contaminated groundwater), exposures in outdoor air (e.g., housing without proper HVAC units located next to or in close proximity to highway corridors or diesel train locomotives), direct contact with soil (e.g., in recreational spaces if soil is not remediated to regulatory standards), and opportunities for exposures during demolition and construction activities (e.g., detailed plans must be in place to

Recommendation	*Impact of Recommendation*
	mitigate fugitive dust emissions). Environmental justice work considers the history of how lower income populations and communities of color were often burdened with such exposures. Through input from CDC staff and Board members, it is clear that there is an awareness of this history and the impact environmental exposures can have. This awareness will continue to be an essential consideration in the activities implemented by CDCs, especially regarding Physical Development, so that the populations served do not disproportionally face health threats from environmental exposures. A resource to assist in considering impacts and approaches for specific projects is the Healthy Neighborhoods Equity Fund (HNEF)[20] Health Impact Assessment (HIA). The HIA examined the potential health impacts that could result from three Transit Oriented Development (TOD) case study projects in the City of Boston (Bartlett Place, Madison Tropical Parcel 10, and Parcel 25). The three projects, each of which was proposed by a CDC, were selected since they aligned with the type of projects that could be supported by the fund. Although the HIA is informing the health-related metrics of the fund, the assessment methods and findings can be used to understand the social and economic changes that could result from development projects. The HIA also highlights best practices that can be used to enhance positive or mitigate negative health impacts of a proposed project. More information about the HNEF HIA can be accessed here: http://www.mapc.org/hnef. *Indicator: CIPs or CDC activities that report using Brownfield mitigation, HNEF or a related funding source to address reduce existing environmental contamination or increase health promoting*

[20] The HNEF is a proposed private equity fund model by The Conservation Law Foundation (CLF) and the Massachusetts Housing Investment Corporation (MHIC) that would consider the community, environmental, and health benefits of a proposed project as well as the financial risks and returns.

COMMUNITY DEVELOPMENT CORPORATIONS

Recommendation	*Impact of Recommendation*
	features of their physical developments. *Proposed Timeframe: 2014-2017*

COMMUNITY SUPPORT ORGANIZATIONS[21]

Recommendation	*Impact of Recommendation*
Track additional metrics in ongoing monitoring programs	A monitoring program that includes more than traditional measures, like the number of housing units or jobs created, will assist in tracking and understanding the impacts of CITC supported activities and health outcomes. As an organization in a support role, CSOs are well suited to do this work. It is recommended that metrics under a new "Community Health" category be included. This new category would capture current and future direct health related activities that CDCs are doing. Using a framework similar to that of Family Asset Building or Youth Programs categories in the MACDC's GOALs survey, a set of headings should be created to capture this work. To start, the following headings are recommended: • Healthy Community Design (e.g., bicycle and pedestrian investments as part of a physical development, asthma safe housing units included in housing projects) • Physical Activity Programs (e.g., group physical activities like walks or exercise classes for seniors)

[21] CSOs are nonprofit organizations that are not CDCs but that have provided capacity building services to community development corporations. Up to two organizations can be selected for tax credits under the CITC.

COMMUNITY SUPPORT ORGANIZATIONS[21]

Recommendation	*Impact of Recommendation*
	• Mental Health Programs (e.g., counseling programs or services) • Anti-Violence Programs (e.g., community-police partnerships) • Senior Programs (e.g., services in partnership with a Elder Network or Council on Aging) *Indicator: Creation/use of a monitoring program by a CSO that identifies specific health program metrics* *Proposed Timeframe: 2014-2015*
Provide training and support for activities related to health determinants, health promotion, and disease prevention	Specific training and support by CSOs would ensure that awareness of the community development and health connection can be built on and maintained by CDCs. CDCs may be limited in their current capacity or time to build on the connections, but with a more global view, CSOs can provide support and even update information for CDCs on this topic. Programming such as workshops with CHWs or webinars with guest speakers from the Boston REACH coalition would provide the space for networking and capacity building in the CDCs while serving as reminder of the wider impacts that community development work can have. Also, programming could assist CDCs within their different contexts, as CDCs serving urban locations cited different health priorities that rural serving CDCs. For instance, programs that address activities that support health care access may be of interest to one set of CDCs, whereas programs that show best practices for activities that reduce *Indicator: Program calendar for CSO that includes at least 3 programs addressing community development work and health determinants.* *Proposed Timeframe: 2014-2016*
Support CDCs with developing communication strategies regarding the relationship	Similar to the previous recommendation, CDCs may require support in developing and sharing information about the health impacts of community development work. CSOs can

COMMUNITY SUPPORT ORGANIZATIONS[21]

Recommendation	*Impact of Recommendation*
between community development work and health outcomes	assist CDCs in crafting these messages, as well as making connections to and the sharing the information with new audiences. CSO efforts can provide more time for CDCs to do their work by serving as a communication resource. Also, as mentioned earlier, a white paper and series of videos will be produced to highlight findings of the assessment. These resources will be made available to CSOs as well as CDCs for communicating the connections between community development work and health determinants. *Indicator: Promotional materials and annual reports from CSOs that include health related information and communications.* *Proposed Timeframe: 2014-2016*

COMMUNITY PARTNERSHIP FUND PROVIDERS[22]

Recommendation	*Impact of Recommendation*
Collaborate and coordinate with CSOs and CDCs on fundraising and communications to develop a cohesive communications approach	The nonprofit organization(s) selected to administer a Community Partnership Fund offers another outlet to CDCs for support and outreach. It is recommended that the organizations in this role work collaboratively with CDCs and CSOs to ensure there is a consistent message about community development and its connection to health. Because this message may be communicated to inform as well as to fundraise, consistency of messaging is critical. Rather than being a separate piece in this process, it is recommended that a partnership model be used to organize efforts in support of financing and implementing activities through the

[22] Up to two nonprofit organizations can be selected as part of the CITC to solicit, administer, and re-grant qualified investments and can advance the purposes of the program. These organizations will assist in fundraising and make resources available to be access by CDCs with CITC allocations.

Recommendation	*Impact of Recommendation*
	CITC. *Indicator: Promotional materials and annual reports from Community Partnership Fund provider(s) that include a health related information and communications.* *Proposed Timeframe: 2014-2016*

Additional Considerations

Although there is much evidence about how community development activities affect health, more work is needed to expand the evidence base of how specific activities and programs impact health. For example, with community development work focused on economic development, there is evidence that stable employment and higher incomes through employment support better health outcomes. However, more research in different settings (e.g., small vs. larger cities, urban vs. rural settings) could be conducted to explore the direct impacts community development work, specifically that of CDCs, has on job creation and income growth. The certified CDCs and the CSOs, with DHCD, may want to consider partnering with universities or other partners to use the CITC as means to deepen knowledge of community development's impact on health. A research program could be created to track outcomes and provide more information about evidence-based community development activities that are proven to lead to physical changes as well as healthier behavior and outcomes.

As mentioned earlier, offices within the Federal Reserve Bank system and Robert Wood Johnson Foundation having been exploring the many outcomes from community development work, especially as it relates to public health. Through the Healthy Communities Initiative, the Investing in What Works for America's Communities program (which includes the Low Income Investment Fund) and the Commission to Build a Healthier America, there are larger efforts at work that recognize the connections between access to opportunity, community investments and health outcomes. It is hoped that this HIA contributes to these efforts, brings to the light the important work being performed by CDCs and CSOs in Massachusetts through the CITC, and instigates a connection among the various efforts.

Conclusion

The purpose of the CITC is "to enable local residents and stakeholders to work with and through community development corporations to partner with nonprofit, public, and private entities to improve economic opportunities for low and moderate income households and other residents in

urban, rural, and suburban communities across the commonwealth." Clearly work has occurred over the past decade by CDCs to improve economic and housing choices for these households. However, it is just as apparent that the activities which are supportive of these choices and provide long term stability, like resident services and community empowerment, have not received the level or consistency of support as is desired. Similarly, it was heard through the HIA process, direct work between CDCs and their communities typically occurs on a project-to-project basis, which limits how deeply and how often they can engage those that they serve in mutual direction setting.

The CITC has the potential to change this scenario. Through this program, the type and consistency of community development work could change. While physical and economic development will likely continue at the current pace, activities that sustain and empower low- and moderate-income populations may grow. By bringing these activities into balance, the CITC could reduce inequality. While boding well in economic and residential measures, these changes portend improved health outcomes among those who face the most difficult personal and family circumstances. As a result, this HIA predicts that the implementation of the CITC will leave the residents of the Commonwealth on a path to better health.

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APPENDIX A: COMMUNITY INVESTMENT TAX CREDIT BACKGROUND

(The description below comes from the CITC program background from the Massachusetts Association of Community Development Corporations: http://www.macdc.org/community-investment-tax-credit)

Program Principle & Process

- *Principle*: So every family and every community can participate in and benefit from our Commonwealth's economy.
- *Process*: Providing a 50% tax credit for donations to certified Community Development Corporations in Massachusetts.

Program Background

The Community Investment Tax Credit (CITC) was signed into law by Governor Deval Patrick on August 6, 2012 as part of a larger economic development bill called *An Act Relative to Infrastructure, Enhanced Competitiveness and Economic Growth in the Commonwealth*. It was originally sponsored by Representative Linda Dorcena Forry and Senator Sal DiDomenico. It is designed to support high-impact community-led economic development initiatives through a strategic, market-based approach that leverages private contributions and builds strong local partnerships.

According to the statute, the purpose of this program is "to enable local residents and stakeholders to work with and through community development corporations to partner with nonprofit, public, and private entities to improve economic opportunities for low- and moderate-income households and other residents in urban, rural, and suburban communities across the Commonwealth." In other words, this program can be used to support a broad array of community development efforts as determined by the local community.

The program works as follows:

- State-certified CDCs (as defined in MGL Chapter 40H) develop high quality and high impact, multi-year business plans for community improvement and economic development.
- These plans detail how local residents and businesses helped to craft the strategy, how it will improve the community and expand opportunity within a comprehensive framework, and how it will leverage federal and private resources.
- The Executive Office of Housing and Economic Development, through the DHCD, ranks the plans to identify those most effective in meeting local and state-wide goals for

community economic development. A percentage of the tax credits will be allocated for rural areas (20%) and Gateway Cities (30%.)

- The strongest plans are awarded up to $150,000 in state Community Investment Tax Credits per year for three years that the local CDC will use to attract up to $300,000 in private investment each year. The tax credits are equal to 50% of the donation made by corporate or individual taxpayer.

- Donors invest in the CDC's business plan, thereby providing flexible working capital that can be used to seed new programs, fill funding gaps, leverage other resources and achieve maximum impact.

- Oversight is shared by the community-based boards of directors, DHCD, and the private donors, with CDCs submitting annual progress reports to DHCD that would be available to the legislature and the public.

- The Act limits the tax credits and delay implementation so that the cost to the Commonwealth will be $3 million in 2014 and $6 million from 2015 thru 2019. The program sunsets on December 31, 2019.The program complies with the recommendations of the Tax Credit Expenditure Commission. It requires the Department of Revenue to review the tax credit before it takes effect in 2014; it has a hard sunset in 2019 and a fixed cap each year; and it has strong disclosure and reporting requirements. In short, CITC would be a model of transparency and accountability for a tax credit program.

APPENDIX B: CDCS BY SERVICE AREA COMMUNITY TYPE[23]

CDCs which primarily serve Rural Areas include:

HAC Cape Cod;
Hilltown CDC;
Island Housing Trust;
Quaboag Valley CDC;
CDC of South Berkshire;
Community Development Partnership; and
Franklin County CDC.

Urban CDCs which serve Gateway cities or neighborhoods in Gateway cities include:

Coalition for a Better Acre;
Community Economic Development Center of Southeastern MA;
Community Teamwork;
Domus Inc.;
HAP Housing;
Lawrence Community Works;
Main South CDC;
NeighborWorks of Southern Mass.
North Shore Community Development Coalition;
Oak Hill CDC;
Springfield Neighborhood Housing Services;
The Neighborhood Developers;
Twin Cities CDC; and
Worcester East Side CDC.

Urban CDCs serving suburban areas include:

Housing Corp. of Arlington; and
Metro West Collaborative Development;
Valley CDC; and

[23] According to DHCD definitions and MAPC community subtypes

Watch CDC.

Urban CDCs serving "core" areas include:

Allston Brighton CDC;
Asian CDC;
Codman Square Neighborhood Development Corp;
Dorchester Bay Economic Development Corp;
Fenway CDC;
Homeowner's Rehab;
Jamaica Plain Neighborhood Development Corp.;
Madison Park CDC;
Mission Hill Neighborhood Housing Services;
NOAH;
Nuestra Comunidad;
Somerville Community Corp.;
South Boston Neighborhood Development Corp.;
Southwest Boston CDC;
Urban Edge; and
Viet Aid.

APPENDIX C: PLACE BASED DATA SOURCES

For more details on data sources and how to use them, please see the Health Neighborhoods Equity Fund Health Impact Assessment available at: http://www.mapc.org/hnef.

Additional information can also be found at the Metropolitan Area Planning Council's website www.mapc.org.

Neighborhood Characteristic Data Sources	
Census/American Community Survey	Population, population by race/ethnicity, Median Household Income, Unemployment Rate
Department of Neighborhood Development, Boston Redevelopment Authority	Occupied Housing Units, Average Household Size of All Occupied Units, Affordable Units, Owner-Occupied Housing Units, Average Household Size of Owner-Occupied Units, Renter-Occupied Housing Units, Average Household Size of Renter-Occupied Units

Neighborhood Health Profile Data Sources	
Behavioral Risk Factor Surveillance System (BRFSS)	Adult Smoking, Adults Lacking Regular PA, Adult Obesity, Adult Diabetes, Adults Eating 5 Fruits/Vegetables per Day, Adult Hypertension, Adult Asthma (by zip code from MDPH)
Massachusetts Department of Public Health/Bureau of Environmental Health website	Pediatric Diabetes Data (by municipality and/or school)
Massachusetts Environmental Public Health Tracking System	Pediatric Asthma (by school and/or community), Childhood Blood Lead Data[24], Reproductive and Birth Outcome Data, Asthma and Heart Attack Hospitalization Data
MassCHIP	Leading causes of hospitalizations (by municipality)
OurHealthyMass.org	Chronic disease death rate, coronary heart disease hospitalization rate, heart attack hospitalization rate, stroke hospitalization rate, substance abuse hospitalization rate (by

[24] It is important to consider screening rates. Data on percentage of children screened should be reviewed and included when reporting childhood blood lead levels. The Massachusetts Environmental Public Health Tracking System is a reliable, ongoing source for investigating blood lead prevalence that is routinely updated as CDC refines their guidance on blood lead prevalence.

Neighborhood Health Profile Data Sources	
	municipality)
All Payers Claims Database	This database is comprised of medical, pharmacy, and dental claims, as well as information about member eligibility, benefit design, and providers for all payers covering Massachusetts residents (not currently available)

Health Determinant	Health Determinant Metrics	Recommended Data Sources
Walkability/Active Transport	State of Place score[25] Number of bicycle and pedestrian accommodations Number of parking spaces[26]	State of Place Project Notification Forms
Safety from Crime	Geocoded crime reports Presence of CPTED strategies	Local Police Department, FBI Uniform Crime Reports Project plans
Economic Opportunity	Project plan job projections by job type Educational Attainment Per Capita Income Labor Force Participation	Project plans American Community Survey
Food Access	Food Access Score[27] Account for unhealthy food access in the region by totaling validated NAICS coded data on "fast food" and "liquor" stores	San Francisco Sustainable Communities Food Access Score InfoUSA
Safety from Traffic	Geocoded crashes by type in neighborhood Transportation access by mode	Registry of Motor Vehicle Crash data Project plans
Affordable Housing	Number of affordable housing units	Project plans

[25] State of Place is an assessment tool that requires on ground level audits. Although this is very time and resource intensive, the tool can provide important metrics to estimate health determinants. However, if State of Place is used for each development proposal, State of Place can be used to cross-reference many of these metrics to increase accuracy.

[26] Encourage developments with low parking ratios that are below the current neighborhood residential vehicle availability.

[27] Use the Food Access Score to assess healthy food access. Validate NAICS coded data by looking on Yelp and Google Street view for the storefront, add in farmer's markets, and sum up each type of business and multiple by the corresponding weighted score. The total score will be equivalent to the number of supermarkets in the area. If new high quality food resources such as supermarkets are being added, calculate the percentage of the area that is within 0.5 miles and then 1 mile of that new development to measure for what proportion the store is within easy and reasonable walking range, relatively speaking. Account for unhealthy food access in the region by totaling validated NAICS coded data on "fast food" and "liquor" stores using the same validation technique as for the Food Access Score.

Health Determinant	Health Determinant Metrics	Recommended Data Sources
		Subsidized Housing Inventory
Green Housing	Number of certified green housing units[28]	Project plans
Green Space	Acres per capita of open space Percentage of tree canopy coverage	MassGIS i-Tree Canopy
Social Cohesion	Voter turnout rate by ward/precinct	Municipal government
Displacement/ Gentrification	Percent of cost-burdened households in the neighborhood Percent of households making less than $35,000 in the neighborhood	American Community Survey (Cost Burdened Households by Income and Tenure) American Community Survey (Household Income by Tenure)
Air Quality	Particulate matter and NO_2 can be evaluated in terms of traffic density, air dispersion modeling, or proximity to roadways (i.e., residents living within 300 feet). Background air pollution concentrations need to be considered.	Project plans
Environmental Contamination	Potential exposures associated with the presence of onsite and near site 21E sites and National Priority List (NPL) sites as well as onsite and nearby RCRA facilities out of compliance with environmental regulatory standards	Project plans and reports (such as due diligence and contractor reports) MassDEP website (site files related to 21E sites, brownfields and RCRA facilities) USEPA website (files related to NPL sites, brownfields, and RCRA facilities)

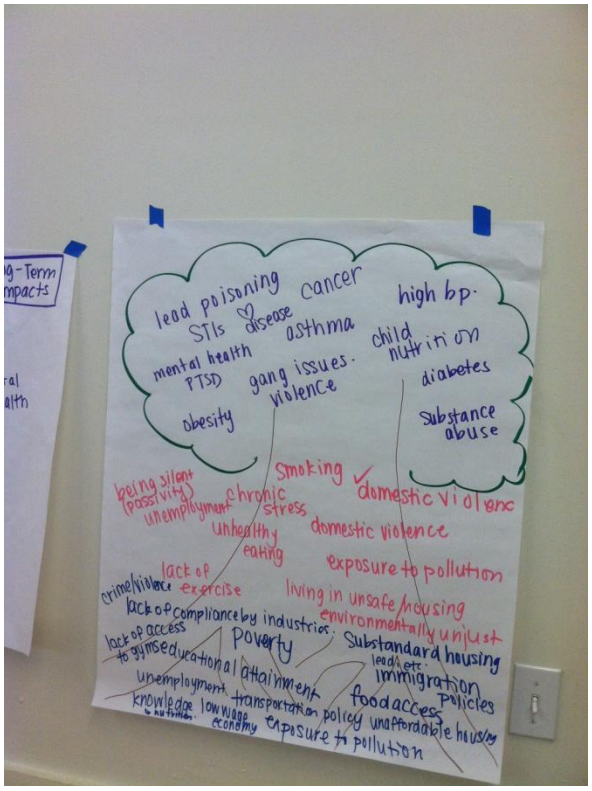
[28] Potential rating systems for certification include LEED, Energy Star, and Enterprise Green Communities Criteria.

APPENDIX D: PUBLIC DATA SOURCES

ACS	U.S. Census Bureau. American Community Survey (ACS). Suitland, Maryland: U.S. Department of Commerce, U.S. Census Bureau, 2007-2011.
BRFSS	Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2001-2010.
Census	U.S. Census Bureau. U.S. Census. Suitland, Maryland: U.S. Department of Commerce, U.S. Census Bureau, 2010.
CHAS	U.S Department of Housing and Urban Development (HUD). Comprehensive Housing Affordability Strategy (CHAS). Washington D.C.: U.S Department of Housing and Urban Development, 2006-2010.
FBI UCR	Federal Bureau of Investigation (FBI). Uniform Crime Reports (UCR). Washington D.C.: U.S. Department of Justice, Federal Bureau of Investigation, 2010-2012.
MassCHIP	Massachusetts Community Health Information Profile (MassCHIP). Health Data. Boston, Massachusetts: Massachusetts Executive Office of Health and Human Services, Massachusetts Community Health Information Profile, 2005-2009.
MDPH	Massachusetts Department of Public Health (MDPH). Hospitalization Data. Boston, Massachusetts: Massachusetts Executive Office of Health and Human Services, Massachusetts Department of Public Health, 2006-2011.
MassGIS	Massachusetts Office of Geographic Information (MassGIS). MassGIS Datalayers. Boston, Massachusetts: Massachusetts Executive Office for Administration and Finance, Massachusetts Office of Geographic Information, 2013.
Massachusetts Registered Voter and Ballots Cast Data	Massachusetts Secretary of the Commonwealth. Election Results. Boston, Massachusetts: Massachusetts Secretary of the Commonwealth, 2006-2012.

APPENDIX E: SCOPING SESSION DOCUMENTATION

CITC Scoping Session at Urban Edge in Roxbury **July 22, 2013**
Boston Region



Summary of Root Causes Exercise

- Health Outcomes CDCs deal with:
  - Cancer
  - Heart disease, Obesity, Diabetes, High blood pressure
  - Violence
  - Mental Health
  - Substance Abuse
  - Asthma
  - STIs
  - Lead poisoning
  - Childhood nutrition
  - Violence (and gang-related issues)
  - PTSD
- Behaviors that lead to this:
  - Violence
  - Physical Activity (PA)
  - Unhealthy eating
  - Unemployment
  - Living in unsafe/environmentally Unjust housing
  - Chronic Stress
  - Smoking
  - Domestic Violence
- Upstream root causes:
  - Poverty
  - Education
  - Information access/Knowledge (about nutrition etc…)
  - Lack of industry compliance
  - Access to health provisions (health care, healthy food, places to engage in PA)
  - Economic Access
  - Housing: unaffordable housing, substandard housing quality
  - Environmental Contaminations
  - Domestic Violence
  - Transportation policy
  - Exposure to pollution
  - Lack of access to physical activity outlets (gyms etc…)
  - Immigration policies

Community Development Activities (as listed by the CDC representatives present)

- Community Organizing
    - around things such as proposed developments, civic engagement, and transportation issues
- Affordable Housing
    - Caveat: key stakeholder noted that there are many different types of affordable housing, so probably worth defining this
- Workforce Development
- Resident Services: main goal of this is to keep residents from being evicted, so the services provided often cater to things that relate to substance abuse (mitigation?)
- Open Space preservation
- Commercial development for job creation
- Services to increase access to good jobs
- Leadership Development
- Early education/afterschool programming
- Family Advocacy
- Financial Education/Asset Building
- Property Management
- Community Space Development
    - E.g. community gardens, parks, bike lanes
- Small business support
- Community planning
- Tenant Clinic

Activities that the CITC would most encourage

- Rather than expanding the scope of CDC activities, it would enhance and build capacity that would support current activities
- From Key stakeholder: most underfunded activities are those that are not directly revenue generating (a lot of CDC activities get tied up in development because of this)
    - Deep community engagement
    - Resident services (which are really meant to move people out of poverty and help them avoid eviction)
- Some expansion might include:
    - A focus on evaluation (i.e. tracking the efficiency of CDC efforts)
    - Mental Health-related efforts including:
        - Community education on mental health issues
        - A focus on the efficacy of mental health first aid
    - Greater capacity for fundraising
    - ++ connection between locals and local jobs
    - Support for what types of local organizations/jobs become available

Highlighted health issues (final exercise)

- **Mental Health** (trauma, PTSD, stress-related illnesses)
- Substance abuse

- **Chronic disease/heart disease/obesity/nutrition/high blood pressure**
- Respiratory illnesses (asthma, other)
- Access to health care
- Domestic Violence
- Street Violence
- **Social isolation/cohesion**, which can be broken down into three components:
    1. Access to Services:
        - Connections for isolated populations (seniors, perpetrators of violence, poor/immigrant populations, victims of violence)
    2. Social Aspects (inclusion, community feel, collective voice)
        - Connecting ethnic communities located by each other, combating displacement, place-based approach
    3. Political Action (which leadership development aims to boost, for example)
        - Engagement through organizing, location/quality/connectedness of properties

Sample Pathways

Chronic Disease

Upstream Actions/ Core Activities	**Immediate Impacts**	**Intermediate Impacts**	**Long-Term Impacts**
Improve access to healthy foods Education Awareness/knowledge	Δ access to healthy foods Δ eating healthy foods Δ choice Δ daily routine/lifestyle Δ awareness of healthy food Δ budget Δ gardening/community behavior	Δ blood pressure Δ diabetes incidence Δ weight Δ hospitalization Δ eating habits for youth Δ local business capacity to provide Δ social dynamics	Δ Chronic Disease

Mental Health

Upstream Actions/Core Activities	**Immediate Impacts**	**Intermediate Impacts**	**Long-Term impacts**
Good local job access	Δ income Δ utilization of services Δ employment Δ time w/family	Δ ability to pay bills Δ stress Δ getting services Δ housing	Δ Mental Health

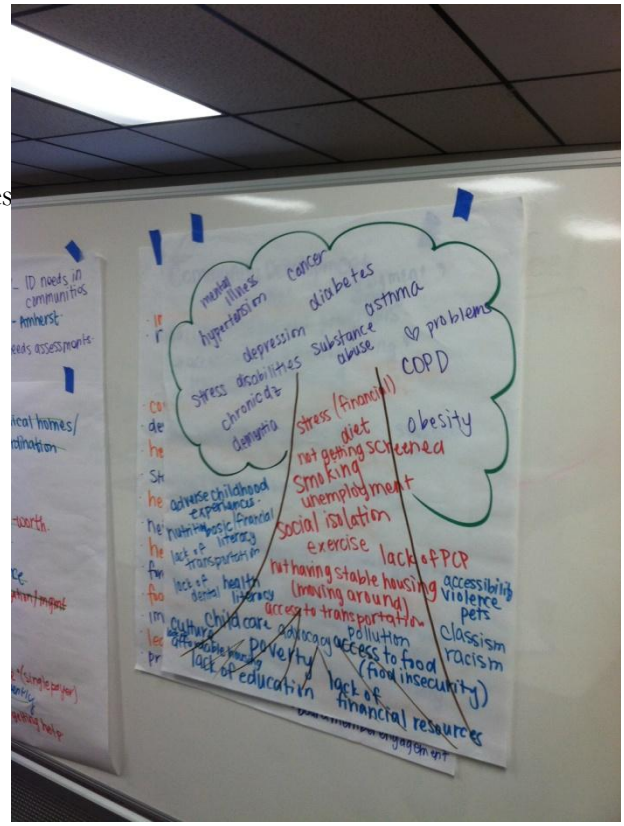
Upstream Actions/Core Activities	Immediate Impacts	Intermediate Impacts	Long-Term impacts
	Δ healthcare access Δ relationships w/coworkers	Δ ability to provide Δ commute Δ stress Δ leisure Δ substance abuse use Δ violence Δ self-esteem Δ social isolation Δ social perceptions	

CITC Scoping Session Northampton **July 24, 2013**
Western Mass Region

Summary of Root Causes Exercise

Health outcomes CDCs deal with:

- Hypertension
- COPD
- Chronic diseases: obesity, asthma, diabetes
- Mental illness
- Depression
- Dementia
- Cancer
- Cardiac disease/heart problems
- Substance abuse
- Disabilities



Behaviors that might lead to these outcomes:

- Smoking
- Social isolation
- Diet
- Stress
- Exercise
- Lack of health care
- Unstable housing/moving
- Unemployment
- Lack of mobility
- Lack of disease screening

Root Causes:

- Adverse childhood experiences

- Accessibility
- Financial literacy
- Pollution
- Lack of health care
- Lack of education/literacy
- Poverty/Lack of financial resources
- Child care (or lack thereof)
- Food access
- Social norms
- Lack of access to transportation
- Classism, racism
- Health literacy

CDC activities:

- Mobility management programs (transportation option identification, active living promotion)
- Community organizing (giving people a voice in their community)
- Housing development for specific populations
- Starting & growing small businesses
- Tenant housing assistance (helping tenants retain and maintain housing)
- Connecting people to public services
- Neighborhood revitalization & stabilization (with a focus on rehabilitation of existing buildings and new construction on vacant lots)
- Healthy housing
- Foreclosure prevention
- Food processing center (to help increase healthy food access)
- Leadership development
- Provision of health care?
- Brownfield redevelopment
- Increased access to public facilities
- Promotion of the coordination between service delivery systems
- Family support (through things such as provision of child care)
- Asset building (literacy courses, financial literacy courses)
- Provision of transportation services & advocacy
- TOD

Activities the CITC might enhance

- Activities that are traditionally underfunded (or not at all)
    - Community Organizing
    - Community outreach, building, & empowerment
    - Promotion of participatory governance
    - Building of economic security

Prioritized Health Outcomes

- Chronic disease (obesity, cancer, hypertension, asthma)
- Mental health
- Substance abuse
- **Access to primary care & care coordination**
- Prioritized activities:
    - **Community engagement/activation/connection** (i.e. social cohesion)
    - **Economic security/independence**

Sample Pathways

Community engagement/activation/connection

Upstream Actions/ Core Activities	**Immediate Impacts**	**Intermediate Impacts**	**Long-Term Impacts**
Community Meetings/Surveys	Δ information Δ people having a voice Δ group behavior Δ inclusive strategic planning Δ bringing groups together to talk (in one place) Δ bringing population served to the table	Δpeople do not have to repeat stories, submit documentation multiple times Δ (better) services Δ (better) coordination Δ people feeling a part of things & connected, supported Δ (more efficient) prioritization Δ (more and successful) funding applications	Δ Community engagement/ activation/ connection

Notes:

- From key stakeholder: rigidity of funding allocation is one of the biggest constraints in the type of work CDCs do (i.e. forced allocation of budgets), so advocating for flexibility could really impact their ability to perform
    - Would also allow CDCs to make independent assessments based on the needs of their specific community, rather than being constrained by outside-imposed restrictions

APPENDIX F: CITC HIA EVALUATION PLAN AND MONITORING PLAN RECOMMENDATIONS

Background

Health Resources in Action, in collaboration with the Massachusetts Department of Public Health (MDPH) and the Metropolitan Area Planning Commission (MAPC), conducted a health impact assessment (HIA) to inform the Massachusetts Department of Housing and Community Development (DHCD) on the impact of funding opportunities for Community Development Corporations (CDCs) through the Community Investment Tax Credit (CITC) Grant Program. The HIA examined the connections between community development activities and their impacts on health, and identified health metrics (health outcomes that result from the investment of tax credits in communities) to be measured and evaluated based on information provided by CDCs in their Community Investment Plans CIPs).

The *evaluation plan* of the CITC HIA has been designed to provide information to the collaborative of HRiA, MDPH, and MAPC on the process and impact of the HIA. The *monitoring plan* will be designed to collect and analyze data related to impact of community development activities on identified environmental or social determinants of health and health outcomes.

Evaluation Plan

The evaluation component of the CITC HIA has been designed to consider both process, why and how did the CITC HIA work as well as impact, what was the value of the CITC HIA. Questions for this HIA evaluation include:

PROCESS

- What resources were used by HRiA, MDPH and MAPC to complete the HIA?
    - Were resources beyond those identified in the initial plan for the HIA used? If so, how did they contribute to the success of the HIA?
- To what extent were DHDC, CDCs and the community involved and engaged in the HIA process?
- To what extent did the community engagement activities:
    - Improve the participants' understanding of the connection between community development and health?
    - Engage participants in brainstorming and prioritizing health issues?
    - Engage participants in developing the pathway diagram(s)?
    - Engage participants in developing recommendations?
    - Improve the participants' understanding of HIA?
- What process and criteria were utilized to formulate and prioritize recommendations?

    - What are the perceptions of the participants in this process on its success?
    - What recommendations do participants have for improvements to this process as it progresses?
- How well did dissemination and communication activities inform stakeholders, including decision-makers, of the HIA?
- How well did the timeline for the HIA work to impact the development of the NOFA?
- To what degree did the CITC HIA adhere to general HIA practice standards?
- What opportunities exist for improving the process of future HIAs?
    - What were the successes and challenges of this process?
    - What learnings may be used to improve future HIAs?

IMPACT

- How did the HIA process influence the decision making of the DHDC and the development of the NOFA (perceived impact)?
    - What changes were made to the NOFA as a result of comments or feedback provided?
- How and when were the recommendations of the CITC HIA reviewed and implemented by DHDC?
- Health was explicitly inserted in the language of the CITC NOFA. How has the HIA process changed MACDC's monitoring and evaluation tool – GOALS – to reflect health items?
    - How has this HIA influenced the health metrics that MACDC included in GOALS?
- To what extent did the CITC HIA meet the aims and objectives originally identified?
- What were the additional impacts of the HIA process and recommendations on DHDC, CDCs and others?
    - What new partnerships/collaborations are CDCs engaged in
        - For potential CITC related activities?
        - For other activities?
    - What new funders are supporting CDCs?

Methodology

Qualitative data collection will allow for gathering in-depth information on participant's experiences with the HIA, their challenges and successes and suggestions for improvement. To address the questions to be answered by the process and impact evaluations, data will be collected through:

- Scoping and Webinar Session Evaluations
- Document Review

- Interviews

Scoping and Webinar Session Evaluations: Participants in the scoping and webinar sessions were asked to complete a brief evaluation at the conclusion of each event. The results of these evaluations will be compiled and analyzed to address the extent to which the community engagement activities:

  - Improve the participants' understanding of the connection between community development and health?
  - Engage participants in brainstorming and prioritizing health issues?
  - Engage participants in developing the pathway diagram(s)?
  - Engage participants in developing recommendations?
  - Improve the participants' understanding of HIA?

Document Review: HRiA will use the findings of the scoping and assessment phases and additional information collected from a review of documents (e.g., participant lists, meeting minutes, CDC proposals), and other information collected on the process and resources used in the CITC HIA to continue to address questions posed in the process and impact evaluations as well as to inform the development of tools for the key stakeholder and partner interviews.

Interviews: For both the process and impact elements of the evaluation, HRiA will conduct a series of 3 interviews with leads from HRiA, MDPH and MAPC to collect data on the steps being utilized for the HIA, their perception of the process and the impact of the HIA, and suggestions for improvements to future HIAs. At the end of the HIA process, 3 to 5 interviews will be conducted with key stakeholders and partners (e.g. CDC representatives, MACDC, DHCD) who were identified during the scoping sessions, engaged later in the process, or who were influenced by the HIA process and the recommendations. Each interview will last 30 to 45 minutes and be conducted by a trained staff member utilizing an interview guide to gather information for each key stakeholder or partner. Evaluation staff will work with lead project staff to identify potential interviewees.

In addition to the formal activities related to the process and impact evaluations, the HIA Team (HRiA, MAPC, and MDPH) will meet throughout the HIA process to review progress, discuss successes and challenges, and identify strategies to overcome the challenges.

A final evaluation report will be provided upon completion of the interviews and document review (approximately June 30, 2014) and will include recommendations for monitoring. Process evaluation findings will be used to provide feedback to lead staff on the process of the HIA, to evaluate this HIA, and to inform future HIAs. Impact evaluation findings will be provided to describe the impact of the CITC HIA on decision-making.

Development of a Recommended Monitoring Plan

As the CITC HIA is completed, a recommended monitoring plan will be developed to provide a set of recommended strategies for tracking the impact of the community development activities on environmental or social determinants health and health outcomes. This recommended monitoring plan will be designed to reflect learnings identified in the process and impact evaluations, minimize the burden on those conducting the monitoring and maximize existing resources in the community (e.g., utilizing an existing reporting tool for CDCs – MACDCs GOALs survey).

To align with published practice standards, the monitoring plan will include, if appropriate:

- Goals for short and long term monitoring
- Outcomes and indicators for monitoring
- Recommendations for lead individuals or organizations to conduct monitoring
- A mechanism to report monitoring outcomes to decision-makers and HIA stakeholders
- Identified resources to conduct, complete and report monitoring

Recommendations for a monitoring plan are expected to be completed by May 31, 2014.