Greater New Haven
Community Index 2013

Benchmarking the **People, Economic Opportunity, Health Needs, and Civic Life** of Our Region

A Core Program of DataHaven

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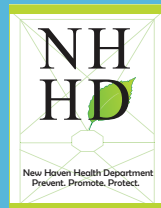Celebrating 20 Years of Data for Community Action

In Collaboration with Community, Government and Scientific Partners

Greater New Haven Community Index 2013

Benchmarking the People, Economic Opportunity,
Health Needs, and Civic Life of Our Region

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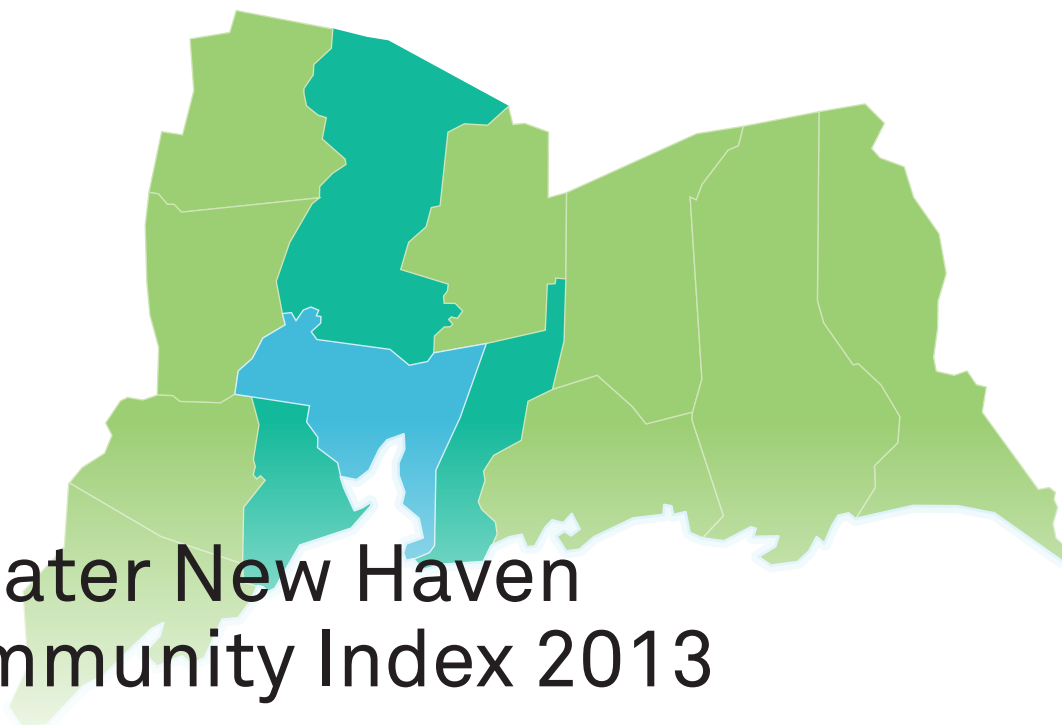Alliance for Research and Engagement
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Greater New Haven Community Index 2013

Benchmarking the Progress of Our People and the Economic Opportunity, Health Needs and Civic Life of Our Region

The purpose of the Greater New Haven Community Index is to begin a story about the opportunities and challenges that face the metropolitan region where we live, work, study, and play. We invite you to continue it by engaging your neighbors, policy makers, businesses, and institutions in a dialogue about the future of Greater New Haven. We believe that the research in this report – much of it published for the first time – enables us to see, as a community, things that we might not otherwise see, and do, together, things we could not otherwise do. 1

A Unified Region
By national standards, each of the thirteen cities and towns that comprise Greater New Haven are unusually small in terms of land area (see pages 3-4). The proverb that "all politics is local" is as true today as it was hundreds of years ago when these boundaries were drawn, primarily based on walking distances. But over time, the population and infrastructure of our region has grown significantly. Today, over two-thirds of workers within each municipality either commute into Downtown New Haven or to another nearby city or town.

Using any definition of what constitutes a "city," our individual towns are as intertwined and dependent upon one another as are the individual neighborhoods of any other major city in the world.

Our neighborhoods are influenced by a delicate ecology of human capabilities, economic investments, resident perceptions, and civic engagement. To improve our quality of life, we must make measurable progress within each of these areas.

Broader changes within the community have a particularly acute impact on our schools and colleges. Although in-school factors like peer groups and teacher quality can shape how successful our students are, the overwhelming majority of academic achievement is predicted by factors from outside the classroom: the health of the students and their families and the wellbeing of the neighborhoods where they grow up. 2

Toward a Stronger Region
We are witnessing rapid economic and environmental change both at home and abroad. We know that the best way to strengthen our community's resiliency is to ensure that each of our neighborhoods becomes a place of great opportunity for persons of all ages and backgrounds.

We intend to update this Community Index on a regular basis and improve its underlying data. We hope that it will serve as a jumping-off place for your stories, and for a robust discussion of the best ways to measure – and accelerate – the progress of our region.

Mark Abraham
Executive Director, DataHaven

Measuring Quality of Life

Quality of life rankings can help bring a broader context to any discussion of community issues. Dozens of such rankings are published each year by researchers and advocates. Connecticut tends to perform well on them by national standards, but we could do better. The table below contains examples of some of the most recent rankings, which can be tracked each year as an indicator of change.

Throughout this report, and in our other work, we have drilled down into statewide data by neighborhood, income, and demographic group in order to assess the performance of specific communities over time.

At their best, rankings like these can help us come together around key issues of public interest using easy-to-understand data, while providing further context on how such measures might diverge by age, race, gender, neighborhood, or income status. Unfortunately, in a time where editorial fact-checking has become optional, there are also many media outlets that use misleading data to try to garner headlines. For example, several rankings directly compare densely-packed Northeastern municipalities of a few square miles to consolidated metropolitan areas in the West that are up to 50 times larger in land area. This approach results in "grape to watermelon" comparisons that are statistically invalid and essentially meaningless. Also common are economic competitiveness rankings that penalize Connecticut for having a relatively high number of public employees and/or unions, without justifying why they view those as negative indicators. Since progress depends on having good data, we often have to set the record straight. 3

The prosperity of Greater New Haven is linked to the prosperity of the state, as well as the broader Northeast region. While differences exist on specific measures, statistical portraits of our 13 towns often look similar to those of Connecticut as a whole.

State Rankings i.1
Ranking: #1 Best, #50 Worst

Report (Year) – Publisher	CT	MA	RI	NY	NJ
Measure of America (2013) – Social Science Research Council Composite ranking of life expectancy, education and median earnings.	1	2	14	8	3
America's Health Rankings (2012) – United Health Foundation Study of health behaviors, environmental and social barriers to health, health care and disease risk.	6	4	10	18	8
State Energy Efficiency Scorecard (2012) – ACEEE Assessment of policies and programs that promote energy efficiency.	6	1	7	3	16
Kids Count (2013) – Annie E. Casey Foundation Composite index of children's economic security, education and health.	9	3	26	29	5
New Economy Index (2012) – Information Tech & Innovation Fdn (ITIF) Index of digital economy, economic dynamism and global integration.	9	1	23	11	10
State Technology and Science Index (2013) – Milken Institute Study of economic performance in technology and science.	9	1	17	13	15
State Long-Term Services and Supports Scorecard (2011) – AARP Measures systems that help older people and adults with disabilities.	11	30	34	41	22
State of Wellbeing (2012) – Gallup Composite score based on happiness, emotional health, economic wellbeing and other topics.	16	10	37	30	32
Civic Life Index (2007) – Corporation for National & Community Service Composite score based on volunteering, civic engagement and charity.	26	28	42	48	46

Table of Contents

Introduction

The Greater New Haven Community Index identifies information (indicators) that can be used by citizens and policymakers to help answer questions about the progress of our people and our neighborhoods over time. These questions, grouped by chapter, include:

Chapter 1: How happy and optimistic are we? All things considered, how do we compare to other metropolitan areas in the United States?

Chapter 2: Is Greater New Haven becoming more diverse? Which areas are retaining children and young adults? Are we preparing our youth for lifelong success?

Chapter 3: Where are living-wage jobs located, and who has access to them? Do people have the income, housing, and transportation that they need to get by? How economically competitive are we, relative to other cities?

Chapter 4: How healthy are we? How do health and safety differ between low-income and wealthier neighborhoods?

Chapter 5: Are residents engaged in civic life? How vibrant are our civic institutions and neighborhoods? What can we do to improve the wellbeing of our region?

Unlike typical economic measures like tax revenue or "gross domestic product," the information in this report is based primarily on how individuals in our region are doing in their day-to-day lives.

We do not claim that this first edition of the Community Index is comprehensive; it is a work in progress, and we intend to add to it over time. We selected indicators to include based on the work of many other local and state-wide initiatives over the past decade, such as the State of Connecticut's Common Cross-Agency Population Results Work Group, The Community Foundation for Greater New Haven "Learn" website, the 2003 Greater New Haven Community Compass, the community-based advisory boards of the Community Alliance for Research and Engagement (CARE) at the Yale School of Public Health and the Robert Wood Johnson Foundation Clinical Scholars Program at Yale University, and other programs, each of which has benefited from years of work by area residents. [4] In cases where information about our region was not readily available from existing public sources, we conducted our own research.

Many of the topics in this report have been the subject of other studies. However, there has never been a report that attempted to synthesize all of this information into a comprehensive picture of regional wellbeing, examine issues at a neighborhood level, or begin to measure the progress of our community within a broader regional or national context. For these reasons, we feel that a cross-sector report on the quality of life, health, and competitiveness of Greater New Haven is long overdue.

Using Data for Community Action

Using statistics to monitor quality of life is a challenge. Much like investigative journalism, data must be combined with local narrative, dialogue, and action in order to have a long-term impact.

In planning this report, DataHaven has attempted to overcome the common obstacles to the use of data in public dialogue. We recognize that there is no such thing as a "perfect" dataset. Datasets can be analyzed from different angles, and statistical averages may obscure enormous variations within the population or within a neighborhood. Nevertheless, local research shows that our community leaders agree that making data accessible, and understanding our community in as specific and objective a manner as possible is of utmost importance to future progress.

Our selection of data sources strikes a balance between current availability, accuracy, comparability across the Greater New Haven Region and its neighborhoods, and our ability to provide a national or statewide context. In some cases, more recent data may have been available but did not allow for the types of regional comparisons or the level of accuracy that we felt was required for this report. In general, our assessment responds to an exponential increase in the availability of public datasets that contain finely-grained information.

Thanks to the generosity of local funders, in conducting this assessment we have had the opportunity to collect high-quality data ourselves about topics that were not covered at a local level by any Federal or State survey. In September and October 2012, DataHaven conducted its Community Wellbeing Survey, the largest survey ever conducted in our metropolitan region, involving interviews with 1,307 randomly selected households by landline and cellular phone. CARE simultaneously conducted its second New Haven Health Survey involving interviews of 1,298 randomly-selected households living in low-income neighborhoods of New Haven (see map on next page). These surveys were designed collaboratively, and featured overlapping questions about economic wellbeing, health, civic life, and neighborhoods to enable direct comparisons. 5

In addition to the primary data collected through these two surveys, our report uses the most recent neighborhood-level data available from a variety of State and Federal sources. Much of it comes from the U.S. Census Bureau's 2011 five-year American Community Survey (ACS). With the exception of the 100% population count that is still done by law each decade, the ACS has replaced the Decennial Census's previous approach of collecting social and economic data once every ten years through a so-called "long form" survey (1980, 1990, 2000). Instead, the collection of economic data is now continuous, and provides communities with much more current information for use in policymaking and budgeting decisions (such as how to allocate over $400 billion in Federal money each year). The flip side of the change is that in order to examine neighborhood and regional trends simultaneously, one must use data that has been aggregated over a five-year period. In our case, we have used estimates based on tens of thousands of households surveyed in our region from 2007 through the end of 2011. Was your household surveyed?

The increase in data availability about our region is partly due to technological change, but is also the result of efforts to secure government data and improve the collection of primary data. Much like the community collaboration that is embodied by this report, efforts to unlock various sources of information for public use have involved leaders from philanthropy, business, health care, academia, and government who seek to help their community use good data as a resource to drive progress. Additionally, we have benefited from the rich life context provided by residents in numerous community dialogues and forums held to help interpret the survey data and other research.

Benchmarking Greater New Haven

The United States is a nation of metropolitan areas. According to The Brookings Institution, 84% of Americans live in metropolitan areas, and these areas are home to 91% of the nation's economy and 93% of adults with college degrees.

A metropolitan area is defined as the geography where the majority of people share the places where they live and conduct business. Metropolitan regions surround a central "core city" and decrease in density as one moves outward. Historically, as cities grew, many suburban or rural areas were absorbed into their corresponding "core city." However, this was not always the case in the Northeast, particularly in New England, which is a patchwork of hundreds of independent municipalities. Because of these discrepancies in the boundaries of core cities, researchers focus on metropolitan areas when analyzing urban populations or economic activity on a national basis. In specialized cases, they use standardized measures, such as similarly sized city blocks or neighborhoods, or areas within a certain distance radius of downtown, but always with the metropolitan area as a reference point.

This report often compares Greater New Haven to other metropolitan areas in Connecticut and in the United States. Like every other metropolitan area, Greater New Haven functions as an integrated economic unit, created by decades of immigration, invention, and investment.

The boundaries of a metropolitan area can seem somewhat arbitrary, particularly in a state such as Connecticut that has no county government. Greater New Haven is often grouped together with Waterbury using a metropolitan area definition that encompasses all of New Haven County. In some studies of metropolitan regions, New Haven is also grouped with Fairfield County, Greater Hartford, and/or Greater New York City. Although Greater New Haven is closely linked to each of these areas, we feel that these definitions are based more on statistical convenience (e.g., county boundaries) than on the reality of where people live and work. For this reason, we have used a group of thirteen towns as the basis of our analysis, both in the 2012 Community Wellbeing Survey and throughout this report, unless otherwise noted. Towns covered include the City of New Haven, and its Inner Ring (East Haven, Hamden, West Haven), and Outer Ring suburbs (from west to east, Milford, Orange, Woodbridge, Bethany, North Haven, Branford, North Branford, Guilford, and Madison). The Lower Naugatuck Valley area, and the Meriden area (along with Wallingford and Cheshire) were not included here because they recently conducted their own community assessments. See page 6 for a preliminary analysis that shows how Greater New Haven compares to other metropolitan areas.

Measuring Neighborhoods

Within America's metropolitan areas, wellbeing and opportunity are spread unevenly across neighborhoods. Citywide trends can be misleading, because even as a city improves, the conditions within its disadvantaged neighborhoods may be getting worse. 6 To make good decisions about resources and monitor progress, we must have reliable measurements at the neighborhood level.

Looking at towns and neighborhoods in aggregate allows us to present information about our region with a degree of lucidity that would not be possible if we were to only share data collected from individual city blocks. For this reason, we generally follow the commonly-used geographic definitions shown here. Although neighborhoods are defined by government for planning purposes, we recognize that there are no official boundaries.

To illustrate the power of neighborhood-level analysis, the next page shows a few of the results from our Wellbeing Survey. Levels of city and work satisfaction were high across the board, with the exception of low income areas within New Haven. This is likely a reflection of greater urban stress in those areas. Meanwhile, optimism was higher throughout New Haven than it was in the Inner Ring and Outer Ring suburbs. Since results by age, race, and gender were consistent, this optimism may reflect our city center's comparatively robust economic trends. DataHaven can make much more finely-grained information available upon request, but it often must be interpreted with more caution.

Geography of Greater New Haven 1.1
Town and neighborhood areas used in this report

Key

Outer Ring
These towns gained most of their population after World War II and the construction of highways.

Inner Ring
These towns border the City of New Haven, and share much of its historical development pattern and diversity.

New Haven
New Haven is among the largest economic centers in the Northeast, and has one of the nation's most densely populated and diverse city centers.

High Income
While diverse, households in these neighborhoods are predominantly middle-class or higher income. 7

Medium Income
These areas generally have the widest range of incomes and housing.

Low Income
These are areas with lower income levels and historically have been home to a higher concentration of public housing. They were identified by a longstanding community process spearheaded by CARE and the City of New Haven.
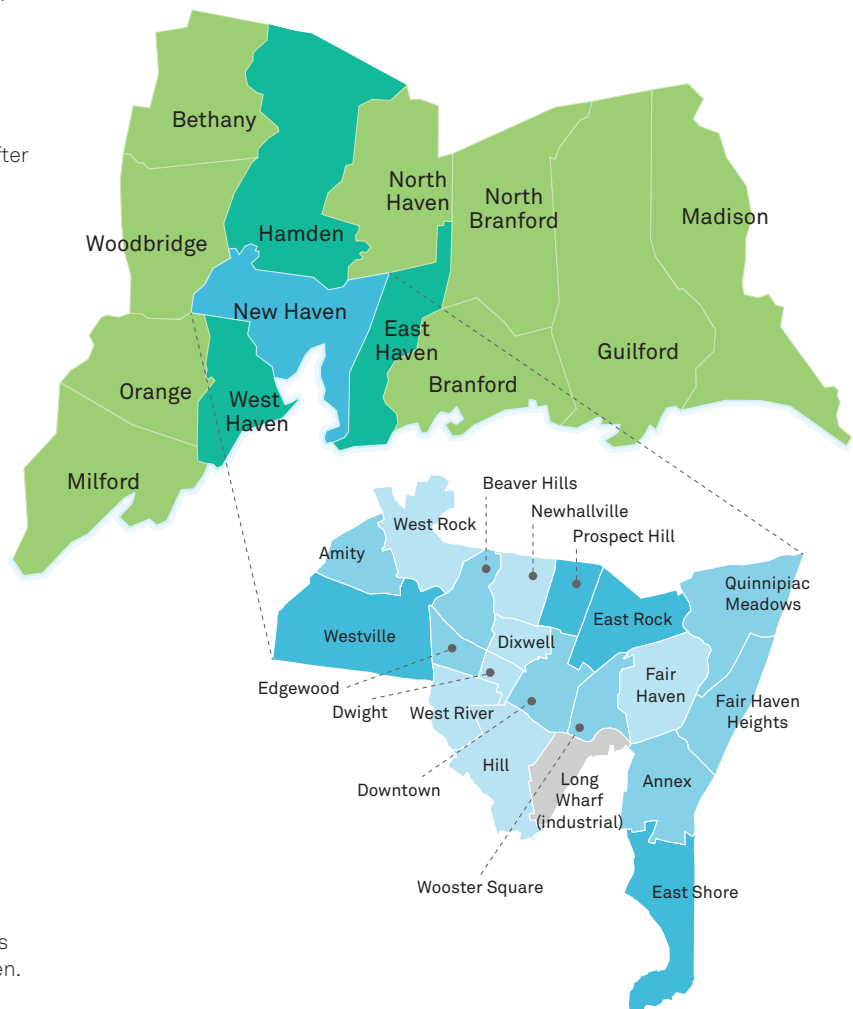
Satisfaction and City Optimism 1.2

What is it? Public opinion questions from the Fall 2012 Greater New Haven Wellbeing Survey represent common measures of community strength and happiness.

Why is it important? Areas that improve satisfaction levels are happier, and may see increased investment and retention of workers and families. Subjective wellbeing can be reliably measured in surveys and used to help inform policy making. 8

Yes
No

Satisfied with City
Are you satisfied with the city or area where you live?

Satisfied with Work
Thinking about [the job, vocation or tasks in which you engage on a daily basis], are you [satisfied]?

City Optimism
As a place to live, is the city or area where you live [getting better or worse]?

Total Region — 82% — 82% — 20% / 28% / 51%

Outer Ring — 91% — 86% — 10% / 25% / 63%

Inner Ring — 82% — 81% — 26% / 21% / 52%

New Haven — 68% — 78% — 24% / 38% / 36%

High Income — 76% — 92%

Medium Income — 74% — 85%

Low Income — 58% — 70%

Getting Better
Staying the Same
Getting Worse

New Haven Neighborhood Areas

Index of Wellbeing

Greater New Haven:
19 out of 130 in Overall Wellbeing

Using a selection of the quality of life indicators identified by this report, DataHaven has developed an index of U.S. metropolitan areas. This preliminary index helps place the Greater New Haven region within a national context. We believe that it will help support our forward progress by encouraging community leaders to agree on the most important ways to measure our success and to identify the most important issues to tackle.

Measurement devices like these should never be seen as definitive of Greater New Haven in its entirety. In the United States, there is almost always far more variation within an urban area than between one urban area and any other. For example, while higher-poverty urban areas such as Memphis or Miami often rank toward the bottom of lists like this one, wealthier individuals living in those cities often experience a quality of life that is similar to that experienced by their counterparts in wealthier metropolitan areas.

In addition to looking at overall population health, this index focuses on measures that reveal inequality and may predict future economic competitiveness. For example, our index includes housing cost burden, health insurance, and youth resources, rather than aggregate income, health, or employment growth statistics.

We used indicators only if Greater New Haven (or New Haven County, in the case of the broad measures of income inequality and segregation) could be compared to every other urban region in the United States using the exact same data source. To calculate a total index score for each region, we created an index for each selected indicator based on the 95th percentile of values across the 180 largest U.S. metropolitan areas, then merged the scores together with an equal weighting by topic. Please refer to the table of figures for details.

If Greater New Haven's leaders wish to improve our metropolitan area's overall health and economic competitiveness, this index may provide a starting point for discussion. We will expand it over time with community input. Elsewhere within this report, we provide charts that show how Greater New Haven ranks among the 370 largest metropolitan areas and/or among a group of comparison metropolitan areas.

Note: Geographical areas within Greater New Haven are inserted to show relative strength, not to be indicative of a direct comparison given differences in population and geographic scale.

Composite Index of Wellbeing 1.3

130 Largest U.S. metropolitan areas (population 400,000 or more) ranked from highest to lowest wellbeing

Rank	Metropolitan Area	Index
1	**Madison, WI***	.849
●	New Haven High Income	.785
2	Washington, DC	.783
3	Des Moines, IA	.772
4	Minneapolis-St. Paul, MN	.757
5	Honolulu, HI	.734
6	Raleigh, NC	.731
7	Provo, UT	.727
8	San Jose, CA	.726
9	Ogden, UT	.719
10	**Boston, MA***	.718
11	Albany, NY	.708
12	Portland, ME	.706
13	Harrisburg, PA	.705
14	Seattle, WA	.702
15	Manchester, NH	.697
●	Outer Ring Suburbs	.649
16	Omaha, NE	.682
17	**Hartford, CT***	.679
18	Pittsburgh, PA	.669
19	Greater New Haven, CT	.667
20	Salt Lake City, UT	.663
21	Virginia Beach, VA	.645
22	San Francisco, CA	.643
23	**Bridgeport-Stamford, CT***	.642
24	Poughkeepsie, NY	.634
25	Worcester, MA	.630
26	Colorado Springs, CO	.621
27	Portland, OR	.620
28	Rochester, NY	.617
29	Baltimore, MD	.617
●	Inner Ring Suburbs	.614
30	Syracuse, NY	.614
31	Richmond, VA	.611
32	Lexington, KY	.609
33	Lancaster, PA	.608
34	New Haven County (incl. Waterbury), CT	.608
35	**Durham-Chapel Hill, NC***	.604
36	York, PA	.604
37	Lansing, MI	.603
38	Columbus, OH	.601
39	Austin, TX	.597
40	Allentown, PA	.593
41	Denver, CO	.590
42	Spokane, WA	.585
43	Kansas City, MO	.582
44	Cincinnati, OH	.581
45	St. Louis, MO	.580
46	Scranton, PA	.574
47	Chicago, IL	.570
48	**Buffalo, NY***	.564
49	Philadelphia, PA	.564
50	Fort Wayne, IN	.562
51	Columbia, SC	.562
52	Charleston, SC	.562
53	Dayton, OH	.560
54	Akron, OH	.559
●	New Haven Med. Income	.558
55	Boise City, ID	.557
56	**New York, NY***	.555
57	**Providence, RI***	.552
58	Milwaukee, WI	.550
59	Asheville, NC	.549
60	Killeen, TX	.547
61	Oxnard, CA	.544
62	Knoxville, TN	.544
63	San Diego, CA	.543

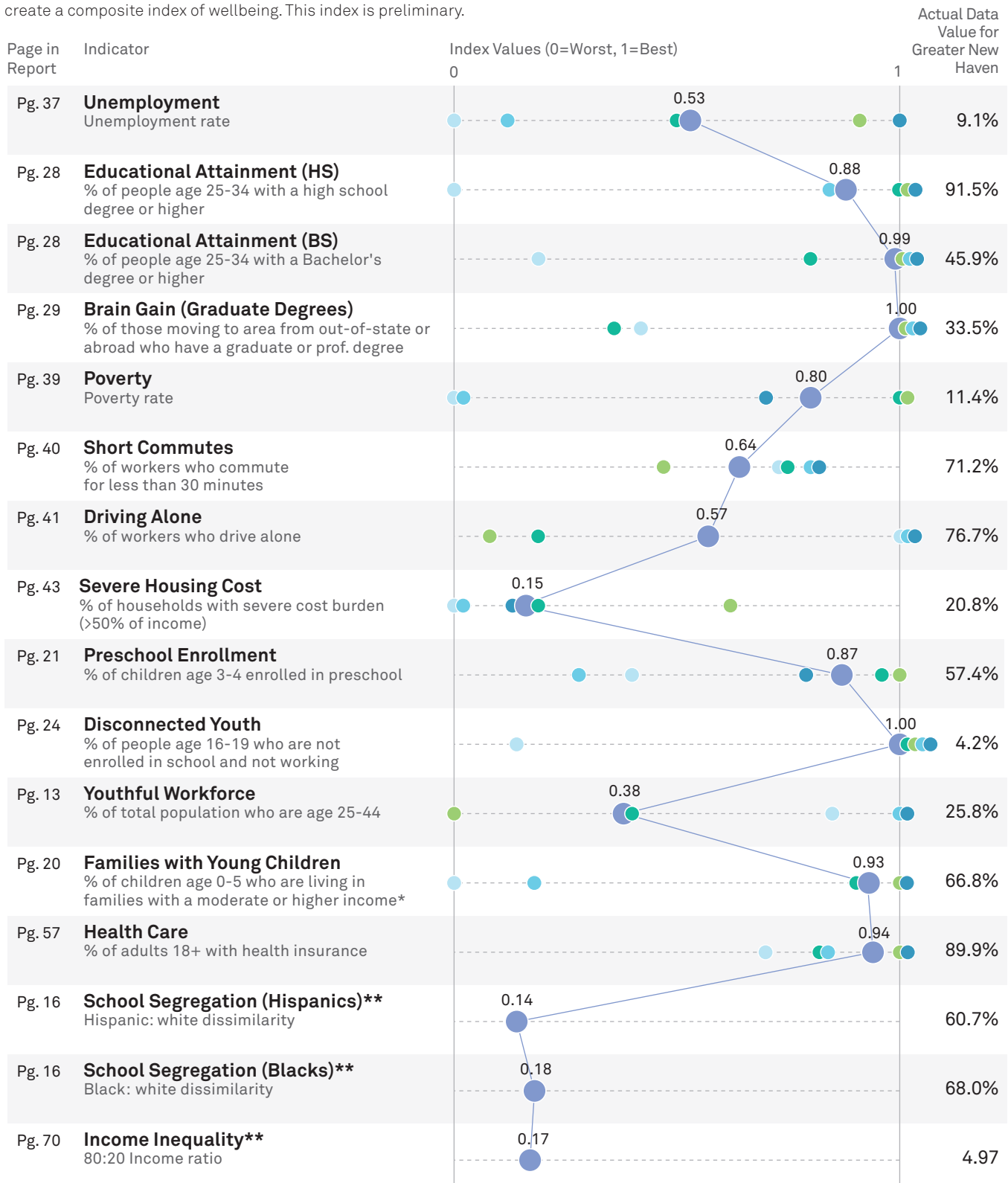| Rank	Metropolitan Area	Index
64	Charlotte, NC	.541
65	Fayetteville, AR	.540
66	Santa Rosa, CA	.535
67	Reading, PA	.528
68	Louisville, KY	.524
69	Sacramento, CA	.517
70	Wichita, KS	.514
71	Huntsville, AL	.513
72	Springfield, MO	.507
73	Nashville, TN	.506
74	Santa Barbara, CA	.503
75	Grand Rapids, MI	.501
76	Canton, OH	.499
77	Vallejo, CA	.497
78	Indianapolis, IN	.493
79	Atlanta, GA	.489
80	Little Rock, AR	.486
81	Cleveland, OH	.482
82	Oklahoma City, OK	.479
83	Greenville, SC	.475
84	Jacksonville, FL	.473
85	Tulsa, OK	.463
86	**Springfield, MA***	.461
87	Reno-Sparks, NV	.459
88	Dallas, TX	.454
89	Palm Bay, FL	.451
90	San Antonio, TX	.449
91	Pensacola, FL	.442
92	Birmingham, AL	.437
93	Baton Rouge, LA	.437
94	Toledo, OH	.437
95	Greensboro, NC	.432
96	Jackson, MS	.432
97	Orlando, FL	.432
98	Youngstown, OH	.431
99	Albuquerque, NM	.430
100	Phoenix, AZ	.424
101	Winston-Salem, NC	.420
102	Tampa, FL	.420
103	Tucson, AZ	.417
104	Chattanooga, TN	.410
105	New Orleans, LA	.408
106	Los Angeles, CA	.400
107	North Port, FL	.392
108	Houston, TX	.376
109	Salinas, CA	.368
110	Augusta, GA	.367
111	Deltona, FL	.363
112	Corpus Christi, TX	.362
113	Detroit, MI	.362
114	Cape Coral, FL	.360
115	**El Paso, TX***	.358
116	Las Vegas, NV	.357
117	Port St. Lucie, FL	.356
118	Miami, FL	.338
119	Lakeland, FL	.325
●	New Haven Low Income	.317
120	Brownsville, TX	.296
121	Riverside, CA	.290
122	Flint, MI	.289
123	McAllen, TX	.286
124	Mobile, AL	.285
125	Visalia, CA	.272
126	Memphis, TN	.269
127	Stockton, CA	.258
128	Modesto, CA	.253
129	Fresno, CA	.224
130	Bakersfield, CA	.200

*Comparison Metro Used Elsewhere in the Report

Index of Wellbeing by Indicator 1.4

What is it? Based on a review of state and national studies, DataHaven identified 15 key indicators. The Index Value is based on how the actual data value for each indicator compares to the nation's 180 largest metro areas.
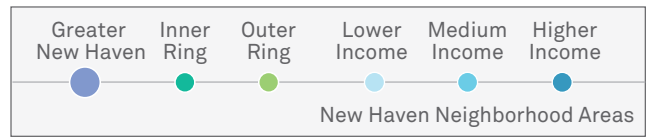
Why is it important? Values for each indicator can be aggregated to create a composite index of wellbeing. This index is preliminary.

Key

Greater New Haven	Inner Ring	Outer Ring	Lower Income	Medium Income	Higher Income

New Haven Neighborhood Areas

Page in Report	Indicator	Index Values (0=Worst, 1=Best) 0 ... 1	Actual Data Value for Greater New Haven
Pg. 37	**Unemployment** Unemployment rate	0.53	9.1%
Pg. 28	**Educational Attainment (HS)** % of people age 25-34 with a high school degree or higher	0.88	91.5%
Pg. 28	**Educational Attainment (BS)** % of people age 25-34 with a Bachelor's degree or higher	0.99	45.9%
Pg. 29	**Brain Gain (Graduate Degrees)** % of those moving to area from out-of-state or abroad who have a graduate or prof. degree	1.00	33.5%
Pg. 39	**Poverty** Poverty rate	0.80	11.4%
Pg. 40	**Short Commutes** % of workers who commute for less than 30 minutes	0.64	71.2%
Pg. 41	**Driving Alone** % of workers who drive alone	0.57	76.7%
Pg. 43	**Severe Housing Cost** % of households with severe cost burden (>50% of income)	0.15	20.8%
Pg. 21	**Preschool Enrollment** % of children age 3-4 enrolled in preschool	0.87	57.4%
Pg. 24	**Disconnected Youth** % of people age 16-19 who are not enrolled in school and not working	1.00	4.2%
Pg. 13	**Youthful Workforce** % of total population who are age 25-44	0.38	25.8%
Pg. 20	**Families with Young Children** % of children age 0-5 who are living in families with a moderate or higher income*	0.93	66.8%
Pg. 57	**Health Care** % of adults 18+ with health insurance	0.94	89.9%
Pg. 16	**School Segregation (Hispanics)**** Hispanic: white dissimilarity	0.14	60.7%
Pg. 16	**School Segregation (Blacks)**** Black: white dissimilarity	0.18	68.0%
Pg. 70	**Income Inequality**** 80:20 Income ratio	0.17	4.97

*Incomes that are twice the federal poverty level or higher   ** For last 3 indicators, value is for New Haven County (see appendix)

DataHaven Greater New Haven Community Index 2013

Summary

Based on a preliminary selection of data points used in national evaluations of wellbeing, Greater New Haven ranks within the top 20 percent of metropolitan areas in the United States. More than four out of every five residents in our region are satisfied with the place where they live, and similar proportions are satisfied with their daily lives and work. This is similar to national polling using the same question format, such as the Gallup poll, which found that 85 percent of U.S. adults were satisfied with the place where they lived in 2012. 9 Although overall levels of satisfaction in Greater New Haven are high, adults living in lower-resource neighborhoods of New Haven are significantly less likely to be satisfied with the place where they live.

Residents are generally optimistic about the potential for their area to improve, particularly those living within the City of New Haven. Yet additional data from the 2012 Greater New Haven Wellbeing Survey 10 reveals that, while residents are optimistic about their own personal circumstances, their city, and their potential to succeed, they have major concerns about various aspects of life, particularly job access, cost of living, responsiveness of local government, assistance for low-income residents, and, in some areas, public safety and youth opportunities. The following chapters of this report explore each of the issues that contribute to personal and community wellbeing in more detail.

Chapter 2

People

Introduction

Due to population growth, immigration, and industrialization, the demographics of Greater New Haven have seen dramatic changes during every decade of the past 400 years. Because the process of population change takes place quickly, our policies and perceptions do not always keep pace with it. In order to plan for our future needs and maximize our region's economic competitiveness, we must understand the interrelationships between population growth and aging, migration, child and youth development, educational achievement, and the local infrastructure that supports these aspects of life.

The education level of our people may be the single measure that best predicts Greater New Haven's long-term health and quality of life. The so-called "talent dividend" suggests that raising college degree attainment in

Connecticut by just one percentage point could add several billion dollars to our population's total earnings each year, therefore creating thousands of new jobs and adding hundreds of millions of dollars to state and local tax revenues. 11 While the City of New Haven has seen a net influx of nearly 3,000 young college graduates in just the past decade, suburban towns in the remainder of the Greater New Haven region are continuing to lose this age group.

Our region as a whole could achieve this "talent dividend" by 2020 if it were to raise its graduation and college completion rates modestly while persuading an additional 300 college graduates each year to permanently move to the Inner and Outer Ring suburbs, while maintaining the growth seen in New Haven.

John DeStefano, Jr.

Mayor, City of New Haven

Population growth is essential to wealth creation, and in New Haven and in America, immigration has consistently driven that growth over our history. Countries that have stagnated, have by and large failed to integrate newcomers into their society and workforce. Connecticut and America are at their best when they are open and welcoming. New Haven has a diverse and welcoming community. It is this community fabric that helps us to grow and succeed. From the comprehensive school reform to community policing, our success is dependent upon engaging residents to see their mutual self interest and work together to accomplish greatness.

Dorsey Kendrick

President, Gateway Community College

From my perspective, the path to recovery and opportunity still lies in education. This is where innovation, retraining, creativity and opportunity begin. Greater New Haven has been particularly creative in the development of partnerships to create sustainable educational pathways, with initiatives like New Haven Promise, Boost, Parent University and the Middle College.

A lack of sufficient resources is the most challenging aspect of the current financial climate, which has had no discretion in its devastation. Families throughout our service region are experiencing circumstances which were once reserved for the poorest, urban households. As a society, we have no one to waste. Every human being must believe that they have access to the promise of this country – to realize his or her full potential. We all must work together as a community and as a state to make sure that all dreams are possible, and that no dreams should be deferred except by personal choice. Our youth deserve no less!

Population Change

Population Growth

Greater New Haven is one of the most rapidly-growing and densely populated urban areas in the Northeast. Between 2000 and 2010, Greater New Haven's population grew to 463,998, a gain of 18,469 residents that translated into a population growth rate of 4.1 percent. Although significantly lower than national averages, this growth rate is similar to the statewide population growth rate of 4.9 percent, and is higher than those of nearby metropolitan areas such as Boston (up 3.7%), New York City (up 3.1%), Springfield (up 1.9%) and Providence (up 1.1%). Population growth is characterized by increasing diversity and immigration, covered in the next section of this chapter.

Like other wealthy industrialized nations, the United States has an aging population. Greater New Haven is no exception, though in some ways our demographic patterns differ from other parts of the nation:

1) While the population under age 20 has been growing modestly in the USA, it has been essentially flat in Connecticut and Greater New Haven since 1990, particularly in recent years as the majority of our adult population matures beyond the typical child-bearing years.

2) The population of young adults age 25-44 is increasing in the USA. But since 1990, Connecticut and Greater New Haven have each seen a loss of 17 percent of this population. Over the past decade, the City of New Haven is the only town or city in the entire state that is an exception to this trend.

3) Nationally, the population of "baby boomers" age 45-64 has been growing more quickly than any other age group. Connecticut and Greater New Haven have been no exception, seeing increases of more than 50 percent in this age bracket since 1990.

4) The population age 65 and older is increasing nationally, and also increasing in some parts of Greater New Haven. In the coming decades, it is projected to increase much more rapidly as the majority of "baby boomers" reach retirement age.

Within-Region Trends

Population change within Greater New Haven appears to reflect a national trend towards urbanization, particularly among the working age population. The City of New Haven and its Inner Ring suburbs are growing much more quickly than the Outer Ring towns or the State as a whole.

From 2000 to 2010, New Haven had the largest net gain of residents of any single town or city in Connecticut. The relatively rapid growth of our urban center was driven by a 6 percent increase in the population of 25-44 year olds within the City of New Haven. This increase is especially striking when compared to the 22 percent decrease in young adults in Outer Ring towns, and 12 percent decrease in Connecticut. Related to this, the population of children under age 5 increased by 5 percent in the City of New Haven, but decreased by 26 percent in Outer Ring towns and decreased by 10 percent in Connecticut.

New Haven is the only municipality in the State of Connecticut that is seeing a significant increase in the population of young adults – in fact, if the City had experienced the same trend of population loss as the rest of Connecticut did between 2000 and 2010, it would be home to 7,200 fewer 25-44 year olds today. 12

At the other end of the age spectrum, the population age 65 and older grew by 17 percent in the Outer Ring towns (a net gain of 4,823 people), which outpaced the 15 percent increase seen at the national level from 2000 to 2010. Since 2000, this population has remained flat or declined slightly in the City of New Haven and Inner Ring towns.

Implications and Projections

Projections from the State of Connecticut estimate that Greater New Haven will continue along a similar population trajectory over the next decade, seeing a net gain of approximately 19,000 residents by 2020. Of these, roughly 11,000 will live within the City of New Haven, 7,000 in Inner Ring towns, and 1,000 in the Outer Ring. Greater New Haven requires new housing and infrastructure to accommodate these additional residents.

In particular, the population age 65 and older will increase much more quickly than it has in past decades, as the "population bubble" of those who are currently age 45-64 begin to reach retirement age. Greater New Haven is projected to have 20,000 more residents age 65 and older than it does today – a growth rate roughly four times faster than what we have seen in the past two decades for this age group.

As the population ages, older workers will be replaced by younger adults, including children who are currently enrolled in our school systems. The fact that the population of young adults and young children has seen a significant decline in the Greater New Haven region, except in the city center, has implications that we will discuss throughout this report. To nourish and retain a young and productive workforce, Greater New Haven leadership must examine economic strategies from other cities, ensure adequate housing, and create opportunities for immigrants and diverse populations. Leaders also must consider whether our early childhood and education systems are preparing a strong workforce.

Population Density

It is challenging to compare population densities in the Northeast USA, where each city center is situated within close proximity to several others. While any definition of Greater New Haven is subject to interpretation (see previous chapter), by any of the most commonly used measures of urban density, our region is among the most densely populated urban areas in the United States. In most of the world, increased population density is viewed as an economic opportunity. With appropriate city planning, higher numbers of people per square mile can bring benefits such as greater access to jobs and recreational facilities, higher levels of economic innovation, vibrant cultural life, greatly reduced household transportation costs, and neighborhoods that are walkable for all age groups. Without good planning, the challenges of density can include increased neighborhood stress, pollution, substandard housing stock, and higher costs of doing business.

The Census Bureau has developed standard density metrics based on the population by distance from the City Hall of the largest city within each metropolitan region. Based on the population living within two miles of City Hall, Greater New Haven has the 24th-densest city core in the United States, with a core population that is nearly identical to that of major metropolitan areas like San Diego, Houston, or Austin.

To account for differences in the nature of metropolitan area boundaries across the country, the Census Bureau also calculates a "population-weighted" measure of density. These data show that the "average" resident of the Greater New Haven region lives at a level of neighborhood density of around 4,000 persons per square mile. This is as high as that experienced by the "average" residents of large American metro areas like San Antonio, Cleveland, or Minneapolis – though still about half that of the average resident of Greater Boston, Philadelphia, or Chicago. These data are based on more objective comparisons than those that are simply based on municipal boundaries, and suggest that, as a city, we are larger than we sometimes think we are.

Population Growth, 1990-2020 2.1

	New Haven	Inner Ring	Outer Ring
1990	130,474	132,599	173,479
2000	123,626	137,462	184,441
2010	129,779	145,781	188,438
2020 (projected)	140,446	152,778	189,368
% Change 2000-2020 (projected)	+14%	+11%	+3%

Benchmarking the Region 2.2

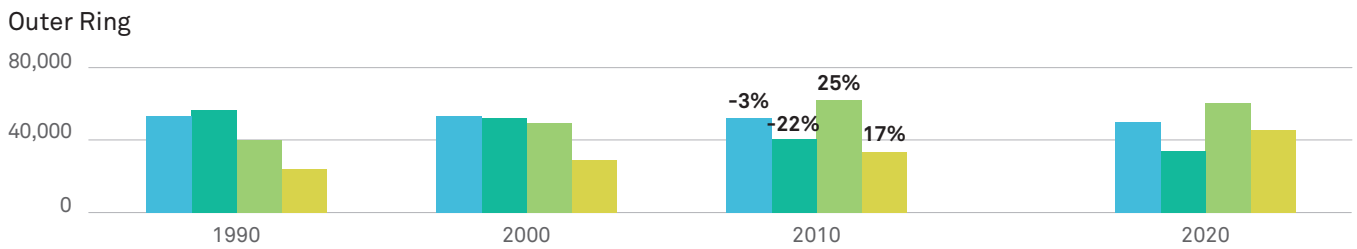Density: Population living within 2 miles of City Hall, 2010

National Metro Comparison

National Rank (of 366)	# of People
1 New York, NY	893,989
5 Boston, MA	361,659
12 Providence, RI	206,872
22 Bridgeport-Stamford, CT	167,206
23 Hartford, CT	158,881
24 Greater New Haven	158,886
35 Trenton, NJ	142,476
47 Springfield, MA	122,674
75 Buffalo, NY	97,983
80 Ann Arbor, MI	96,491
83 Madison, WI	96,254
104 Durham-Chapel Hill, NC	83,147
109 Boulder, CO	79,913
129 Santa Cruz, CA	74,147
239 El Paso, TX	59,582

Total Population by Age Group, 1990-2020 2.3

Key

0–24	25–44	45–65	65+

Total Region

Percent Change (2000–2010)

Projected

160,000
120,000
80,000
40,000
0

2%
-10%
26%
5%

1990   2000   2010   2020

City of New Haven

80,000
40,000
0

-1%
6%
23%
-5%

1990   2000   2010   2020

Inner Ring

80,000
40,000
0

10%
-8%
28%
-4%

1990   2000   2010   2020

Outer Ring

80,000
40,000
0

-3%
-22%
25%
17%

1990   2000   2010   2020
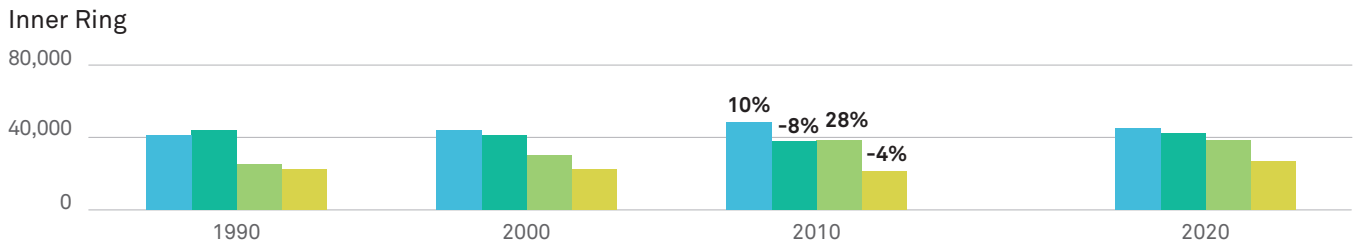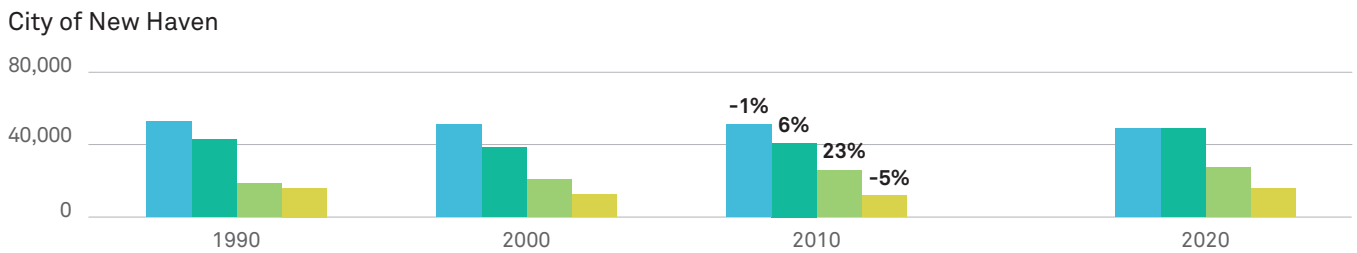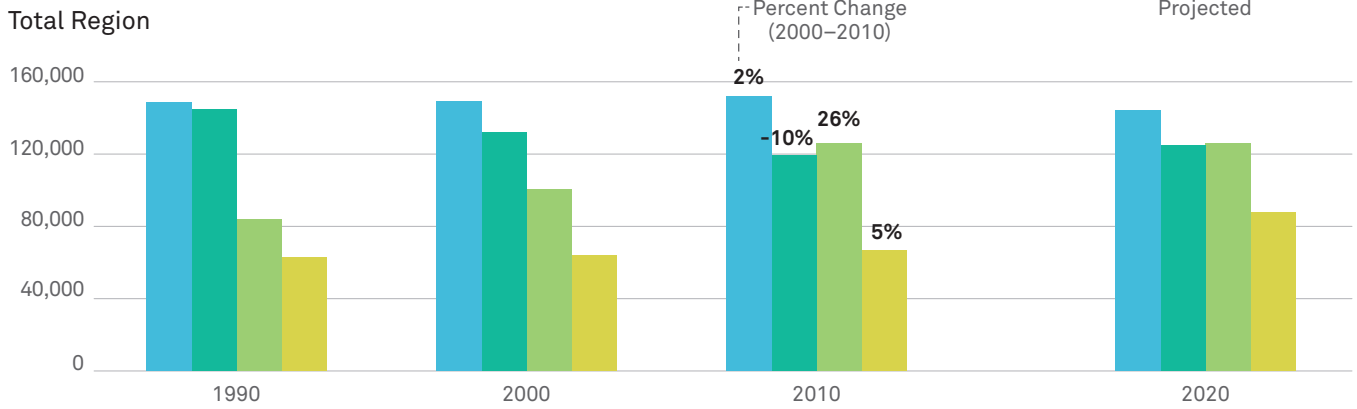
Race and Immigration

Why is Race Important?

Race is a social construct that responds to a wide array of variations in the appearance, behavior, ancestry, ethnicity, culture, and historical circumstances of people. Although the general public is highly aware of perceived differences in human populations, from a scientific standpoint, race can not be uniformly distinguished using visible physical differences or genetic tests. Racial categorizations can be misleading or harmful, and race itself is often inconsistently defined. However, self-reported race and ethnicity continue to have meaning as a way to study social, environmental, or genetic barriers to quality of life within communities, such as racial discrimination or geographic patterns of health outcomes. 13 While many scholars in Connecticut have focused exclusively on racial disparities as a way to study social challenges, this report is focused mainly on differences by geography or income. However, we acknowledge that for a variety of historical reasons, race, geography, and other social issues are closely related.

In order for metropolitan regions like Greater New Haven to succeed, they must work consciously to build an equal sense of economic and health opportunity among all racial and ethnic groups. With the rapid population change in all of our towns, we need to deal with the inevitable consequences of discrimination, segregation, and economic barriers.

Based on the racial diversity index, which calculates the probability that two randomly chosen people in an area will be of a different self-reported race or ethnicity, Greater New Haven's overall level of diversity is nearly identical to that of the United States as a whole. Our diversity should be viewed as an asset and an indicator of how many people seek greater opportunities in our metropolitan area.

Rising Diversity

Federal and State administrative data on self-reported race and ethnicity illustrate that the population of our region changes rapidly over time. The share of our region's population that identifies as a race or ethnicity other than "White" has grown from 91,119 (one in five) residents in 1990 to 160,812 (one in three) residents today. This change was driven by an increase in the number of residents who identify as Hispanic or Asian, which rose from 30,986 in 1990 to 81,691 in 2010 – a 164% increase. 14

During this time, the City of New Haven's non-White population rose by 33 percent, from 66,564 in 1990 to 88,549 in 2010. Non-White populations rose by 197 percent in the Inner Ring (an increase from 17,167 in 1990 to 50,906 in 2010) and by 189 percent in the Outer Ring (an increase from 7,388 in 1990 to 21,357 in 2010). As of 2010, the proportion of the total population that identifies as a race or ethnicity other than White is 68 percent in New Haven, 35 percent in the Inner Ring, and 11 percent in the Outer Ring.
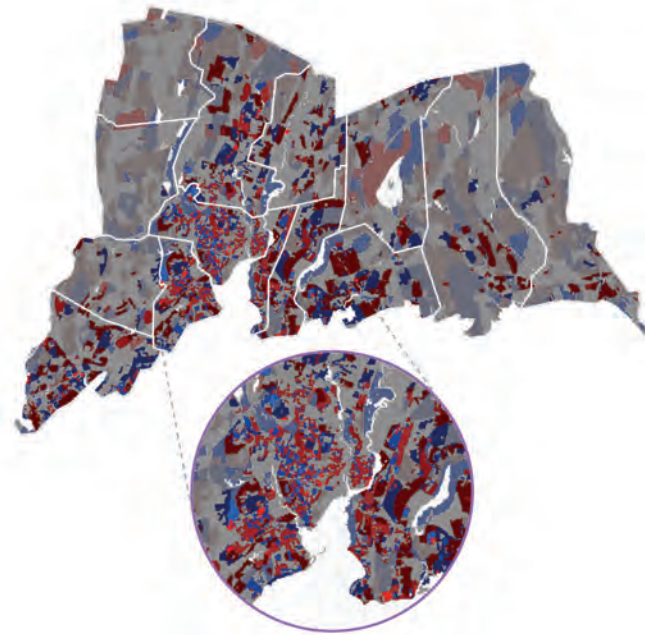
The maps here illustrate city block-level changes in population by race and ethnicity within Greater New Haven just since 2000. Over the past 10 years, the largest population shift took place in the Inner Ring, which gained 10,084 residents who identify as Hispanic, 5,569 who identify as Black, and 2,265 who identify as Asian, but lost 10,212 who identify as White. New Haven also experienced rapid change, but the picture by neighborhood is complex. Compared to other Connecticut cities, New Haven as a whole lost a relatively small number of White residents (a decrease of 2,749, or 6 percent). While nearly all of Connecticut towns and cities saw an increase in Black residents, New Haven's Black population fell by 1,266 (a 3 percent decrease). Most significantly, New Haven gained 9,148 Hispanic residents (a 35 percent increase), mostly in the Fair Haven, Fair Haven Heights, and Annex neighborhoods, as well as more than 1,088 Asian residents (a 23 percent increase), mostly in Downtown, East Rock, and Westville.

Block-Level Demographic Change in Greater New Haven, 2000-2010 2.4

What is it? 2000 and 2010 Census data at a city block level illustrates population change more precisely than at the town level. This map shows a ratio of the 2010 and 2000 population. A ratio of 2.0 would represent the doubling of the population, whereas a ratio of 0.5 means the population fell by half.

Why is it important? Understanding population growth is important to city planning. Maps of population change by self-reported race and ethnicity show which areas of the region are becoming more diverse.

Total

Black

Hispanic

White

Ratio, 2010 vs. 2000	<0.5	0.5-0.9	1.0	1.1-2.0	>2.0
<1,000 people/mi²					
1,000-5,000 people/mi²					
>5,000 people/mi²					

Loss ←———— No Change ————→ Growth

DataHaven Greater New Haven Community Index 2013
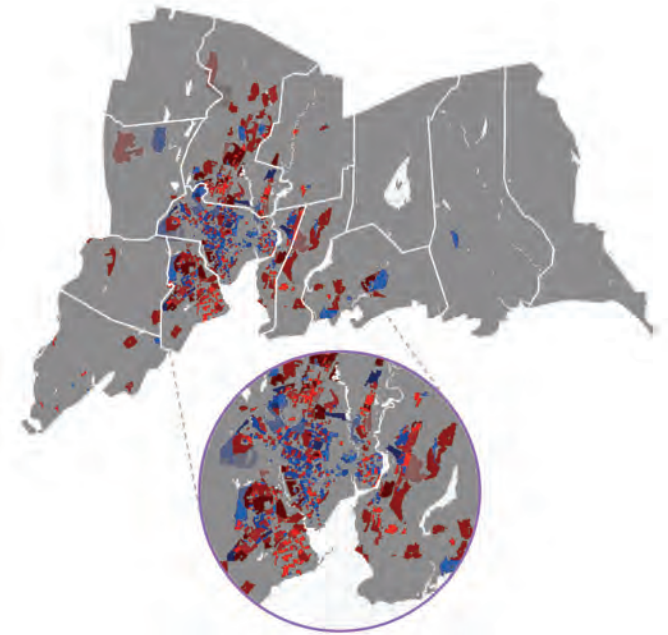
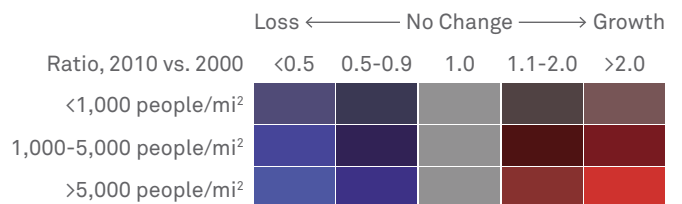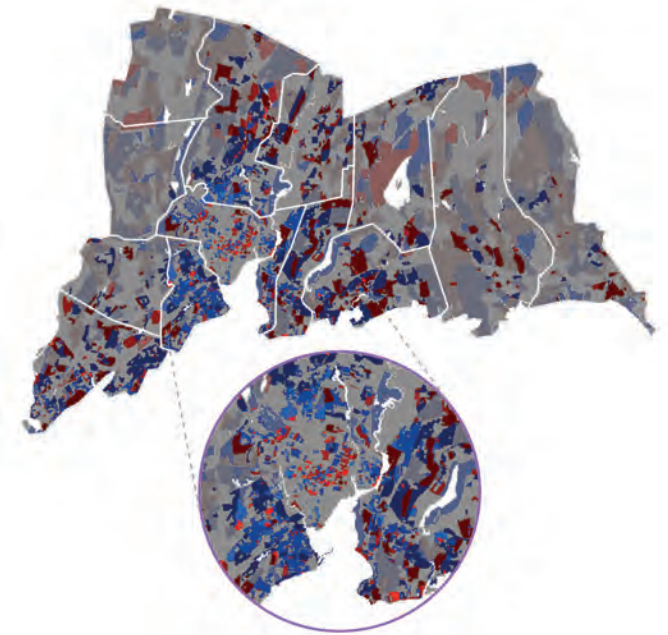## Residential and School Segregation

After many decades in which most African-American and Hispanic residents were confined to a handful of neighborhoods, racial residential segregation by neighborhood is now decreasing as suburbs become more racially diverse. By this measure, New Haven County is less segregated than most nearby metropolitan areas, including Hartford, Bridgeport-Stamford, Springfield, Boston, New York, Trenton, and Buffalo. 15

Although racial residential segregation is declining, the closely related issues of school segregation and economic segregation continue to be of great concern, particularly as they impact the wellbeing of our young children.

Within the thirteen towns of Greater New Haven, 64 percent of all Black children under age 5, and 57 percent of all Hispanic children under age 5 live within the City of New Haven's Low- and Medium-Income neighborhoods, compared to just 7 percent of White and 8 percent of Asian

children under age 5. 16 Most school attendance zones are based on these town and neighborhood boundaries, which leads to significant racial segregation by school.

The table below shows that while the level of school segregation in New Haven County is high by national standards, it is comparable to that in nearby metropolitan areas. While Black-White segregation in our region saw little change from 2000 to 2011, Hispanic-White segregation declined slightly. Asian-White segregation is comparatively low.

Economic segregation is an issue we discuss in more detail later in this report. According to the Greater New Haven NAACP, 85 percent of low income African-American residents in our region live within the City of New Haven. 17 Because of persistent residential and income segregation, in Connecticut, a Black or Hispanic child is four times more likely than a White child to attend a public school where the school poverty rate (based on free lunch eligibility) is higher than 40%. 18

Benchmarking the Region   2.5
School Segregation by Race/Ethnicity, 2011

What is it? The Harvard School of Public Health DiversityData program measures segregation by school using a dissimilarity statistic, which represents the proportion of one racial group that would need to switch schools in order for the racial makeup of each school to mirror the racial makeup of all students in the area as a whole. A value of 0% would represent the maximum possible level of integration, whereas a value of 100% would represent complete segregation. 19

Why is it important? Segregation can be a form of community isolation. Segregation can be a significant barrier to the long term educational success, economic security, and life expectancy of children and families.

National Metro Comparison

National Rank (of 366)	Average	Black-White	Hispanic-White	2000-2011 Trend
78 El Paso, TX	37%	30%	45%	Less
131 Boulder, CO	43%	32%	55%	Same
172 Ann Arbor, MI	47%	57%	36%	More
221 Madison, WI	52%	55%	48%	Less
266 Santa Cruz, CA	56%	43%	70%	More
268 Durham-Chapel Hill, NC	56%	60%	53%	More
325 Providence, RI	63%	60%	65%	Less
333 Greater New Haven*	64%	68%	61%	Less
339 Trenton, NJ	66%	72%	59%	Less
343 Hartford, CT	67%	69%	64%	Less
346 Bridgeport-Stamford, CT	67%	71%	63%	Same
354 Boston, MA	70%	70%	70%	More
355 Buffalo, NY	71%	75%	67%	More
360 Springfield, MA	74%	75%	72%	Same
362 New York, NY	75%	80%	70%	Less

*New Haven County

Immigration: A Changing Picture

Demographic change in our area is driven by immigration and migration, which bring new residents to the neighborhoods of Greater New Haven each year. In 1990, only 7 percent of those living in our region were born abroad. But in the past two decades, the proportion of Greater New Haven residents who were born abroad grew to 12 percent of total population, almost exactly mirroring the change within the United States as a whole. The share of immigrants from Africa, Asia, and Latin America has increased noticeably.

In New Haven, the foreign-born population increased from 10,633 in 1990 (8% of the total) to 21,570 in 2011 (17% of total), an increase of 10,937 people. Since 1990, the foreign-born population increased to 17,018 in the Inner Ring (a rise of 7,482) and to 16,696 in the Outer Ring (a rise of 7,635). DataHaven will expand this section of the Community Index after we review it with regional partners. Mollenkopf and Pastor argue that metropolitan leaders "will need to weave immigrants into their regional narratives and visions for their regional futures." [20]

Foreign-Born Population and Linguistic Isolation, 2011 2.6

What is it? Census data on the foreign-born population can offer a quick snapshot of regional diversity.

Why is it important? These data suggest issues that cities must address if they seek to successfully integrate the influx of foreign-born residents. For example, 7% of all Greater New Haven residents speak English at a level below "very well," including 13% of all residents in the City of New Haven and 4% of all residents in the Outer Ring.

	Foreign-Born Population	Increase Since 2000	Arrived Since 2000	Linguistic Isolation*	Individual Income > $35K Native-Born	Foreign-Born	Origin
United States	39,268,838	+26%	12,638,132	24,950,788	35%	27%	53% / 28% / 12% / 3% / 4%
% of Total	13%		4%	9%			
Connecticut	474,139	+28%	159,005	271,999	44%	37%	53% / 22% / 29% / 4% / 4%
% of Total	13%		4%	8%			
Greater New Haven	55,284	+36%	21,025	31,220	42%	37%	37% / 30% / 24% / 3% / 5%
% of Total	12%		5%	7%			
Outer Ring	16,696	+27%	4,150	6,540	51%	50%	38% / 40% / 14% / 4% / 4%
% of Total	9%		2%	4%			
Inner Ring	17,018	+28%	5,752	8,807	41%	36%	37% / 28% / 24% / 2% / 9%
% of Total	12%		4%	6%			
New Haven	21,570	+50%	11,123	15,873	28%	28%	55% / 23% / 14% / 4% / 4%
% of Total	17%		9%	13%			

* Total population age 5+ that speaks English less than "very well"

Origin Key: ■ Africa ■ Latin America ■ Europe □ Asia □ Other

DataHaven Greater New Haven Community Index 2013

Households and Families

The percent of total U.S. households that consist of married families with children fell from 40 percent in 1970 to 20 percent in 2012. During the same time period, the percent of households consisting of a single person rose from 17 percent to 27 percent, and the average number of people per household dropped from 3.1 to 2.6 people. 21 By 2025, the majority of households living in U.S. suburban areas are projected to have no children. 22
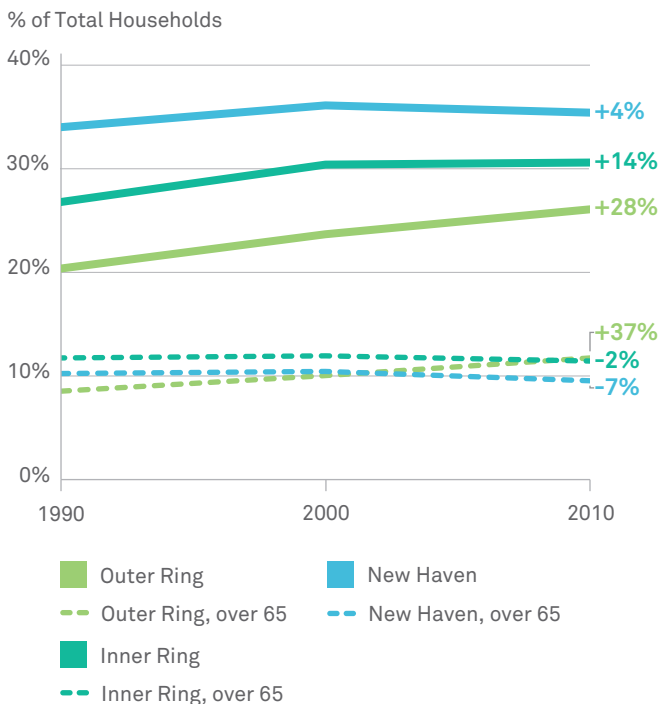
Greater New Haven is following the national trend. The number of households with only one resident has grown over time, and we project that it will grow even more rapidly in the coming decades as baby boomers age, the average age of marriage increases, and the impact of higher life expectancies are seen. Because the majority of housing in our region was built at a time when two-parent families with children were the most significant demographic group, this demographic shift has major implications for community development.

Within Greater New Haven, 30 percent of total households consisted of a single householder in 2010, compared to 27 percent statewide and nationally. Within the region, New Haven sees the highest rate of single households (35%), followed by the Inner Ring with 31% and the Outer Ring at 26%. But since 1990, suburban areas have seen more rapid growth in single households than the city.

Single households occupied by a resident age 65 or older have unique needs, such as a difficult time accessing transportation to essential services. A comparatively high portion of households in Greater New Haven – 11 percent of the total – now consists of solitary residents over age 65. This rate is higher than the U.S. (9%) and half a percentage point above Connecticut. In the Outer Ring, the proportion of these households has increased by 37% since 1990. While it has decreased slightly in New Haven and the Inner Ring, we project that it will begin rising in those areas also.

Single Households, 1990–2010 2.7
Households headed by a single person living alone

% of Total Households

Legend:
- Outer Ring
- Outer Ring, over 65
- Inner Ring
- Inner Ring, over 65
- New Haven
- New Haven, over 65

Single Parent Families, 1990–2010 2.8
Families with children headed by a single parent

% of Total Families with Children

Legend:
- Connecticut
- Total Region
- Outer Ring
- Inner Ring
- New Haven
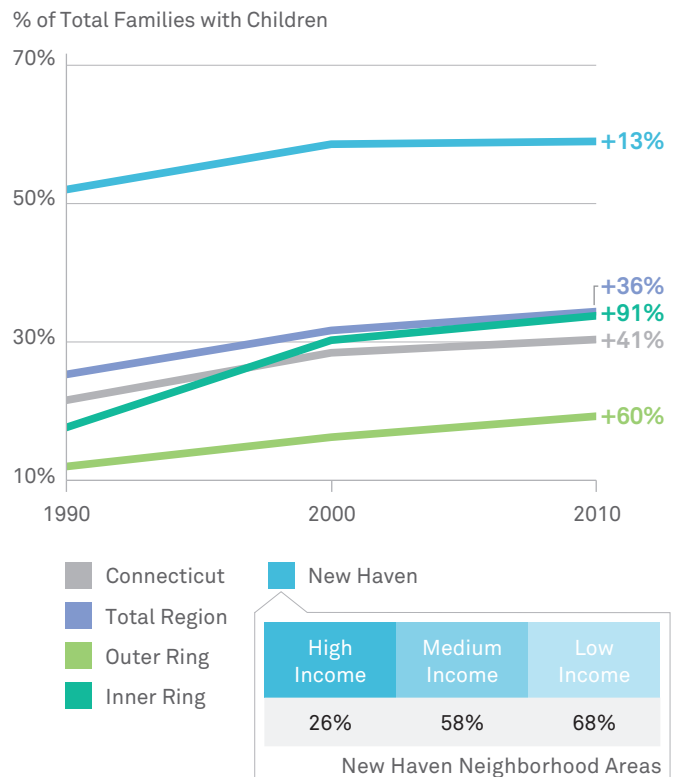
	High Income	Medium Income	Low Income
	26%	58%	68%

New Haven Neighborhood Areas

Single-Parent Households

Two-parent households are associated with a number of positive outcomes, including higher intergenerational income mobility among children. 23 In Greater New Haven, the percent of households with children under 18 that are headed by an unmarried parent has grown from 25% in 1990 to 34% in 2010, largely mirroring the statewide (from 21% to 30%) and national (from 24% to 32%) increases during the same period. Although Greater New Haven has a higher single-parent household rate than the nation and most of the comparison metropolitan areas used in this report, our region saw its biggest increase in the proportion of single-parent homes between 1990 and 2000 – 6 percentage points – while only increasing by 3 percentage points from 2000 to 2010. Nationally, however, this trend is reversed, with a 3 percentage point increase from 1990 to 2000, but a 5 point increase in the most recent decade.

Over the past decade, the proportion of single parent households increased by 3 percentage points in the Outer Ring and by 4 percentage points in the Inner Ring. New Haven's share remained virtually flat, mostly because of an increase in the number of married couples with young children. Within New Haven, the proportion of families with children headed by a single parent varies dramatically by neighborhood – from 26% in high-income areas to 68% in low-income areas.

Working Parents

The proportion of children living in families where all parents work has increased dramatically since 1990, particularly within the City of New Haven. This indicator is associated with demand for child care services. A recent issue brief by The Community Foundation for Greater New Haven found that there were 21,988 licensed Pre-K, day care, and part-day preschool spaces within Greater New Haven, but there were 41,000 children under age 6 living in the region, of whom 29,000 lived in families where all parents were in the workforce. 24
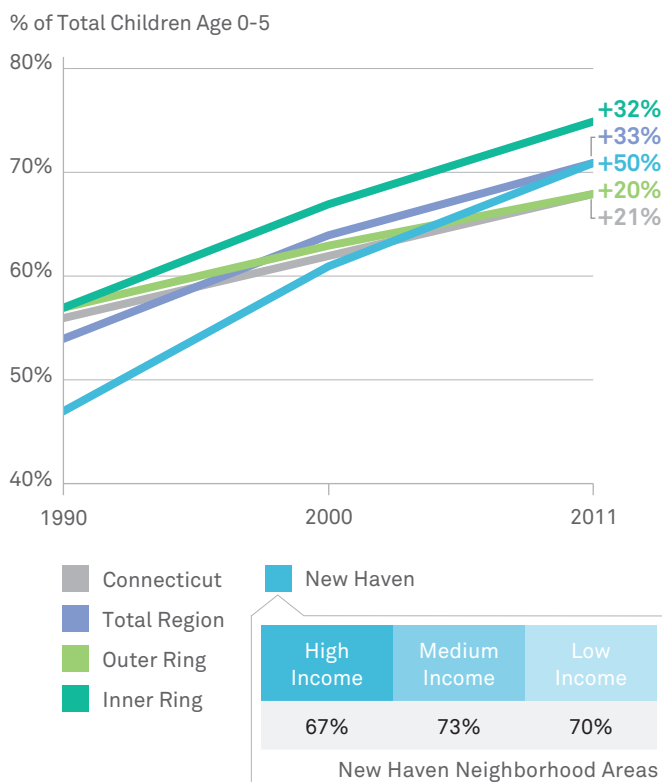
Recently, related stresses experienced by some working parents have increased: From 2005 to 2011, the number of Connecticut families with at least one unemployed parent rose by 65%, a significantly higher increase than the nation as a whole. 25

Working Parents, 1990-2011 2.9
Children under 6 with all parents in labor force

What is it? This indicator shows the share of children under age 6 whose parents are in the labor force. It is the total proportion of children who live in a married-couple family or subfamily where both parents are in the labor force plus the proportion in a one-parent family with that parent in the labor force. The labor force includes persons who are employed or have a business, plus those who are unemployed but actively looking for work.

Why is it important? This indicator is primarily a predictor of child care need, but reflects other changes within society. Although mothers who are employed generally spend less time with their children when compared to mothers who are not, one ethnographic study suggests that other aspects of parent behavior – particularly increased father involvement in direct child care, and reduced leisure time among parents – have shifted such that overall, the average parent spends as much if not more time with their children today than they did in the 1960s. 26

% of Total Children Age 0-5

	High Income	Medium Income	Low Income
	67%	73%	70%

New Haven Neighborhood Areas

Young Children

A child's earliest interactions with parents, caregivers, and other adults have a profound influence on his or her brain development. 27 A nurturing environment with positive feedback stimulates the neural connections that make a child receptive to learning and forming trusting relationships. Chronic stress, however, caused by neglect or inconsistent and inappropriate responses to a child's emotional needs can interrupt these connections, later making it difficult for a child to control impulses, focus on a task, and manage frustration.

Children living in poverty are at risk of experiencing chronic stresses that will create life-long disadvantages. Without intervention, these children enter kindergarten without the emotional and cognitive foundation needed to function in a school environment. Many of these children are never able to catch up, eventually dropping out of school. The highly malleable nature of the young brain, however, means that early intervention with positive adult relationships in a high-quality childcare or preschool setting has potentially life-changing implications. At-risk children who attend high-quality early care and education programs have significantly better outcomes than those who do not. 28 These children are better prepared for kindergarten and more likely to perform well throughout their school careers.
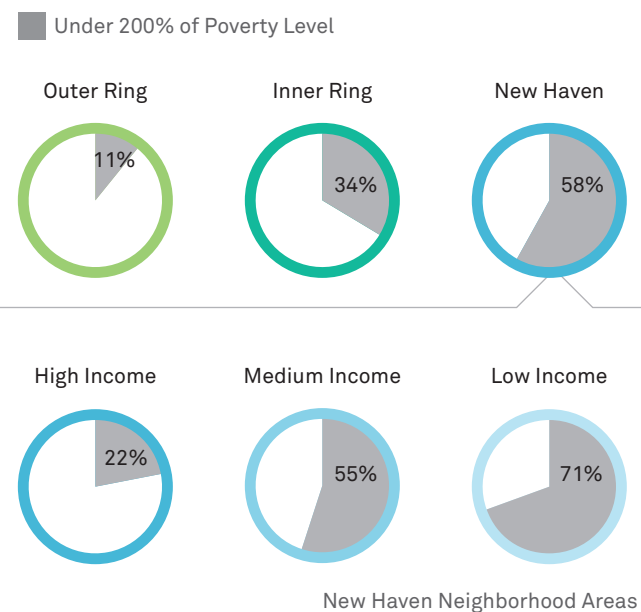
In this section, we consider Early Childhood to be the period from birth to Age 8. Chapter 4 contains additional information on the health of mothers and infants, which impact child development outcomes before and after birth.

Children in Low-Income Families, 2011 2.10
Children under 5 in low-income households

What is it? Individuals or families are considered "low-income" if their annual pretax cash income falls below twice (200%) the poverty threshold determined by the Federal government each year. In 2011 the poverty threshold, or FPL, was $23,021 for a family of four. For a child in a four-person family to not be considered low-income, their family would need to have more than $46,042 in income.

Why is it important? Income of below 200% of Federal Poverty Level (FPL) is a common measure of student poverty, and close to the marker used for free lunch eligibility. Young children who grow up in families making less than $50,000 per year have significantly lower access to even the most basic resources (see chart in Chapter 5), and often face chronic stress as they grow up. They tend to be less likely to be prepared for kindergarten.

■ Under 200% of Poverty Level

Outer Ring	Inner Ring	New Haven
11%	34%	58%

High Income	Medium Income	Low Income
22%	55%	71%

New Haven Neighborhood Areas

Benchmarking the Region 2.11
Children under 5 in low-income households

Overall Comparison

United States
45.6%

Connecticut
30.1%

National Metro Comparison

National Rank (of 366)	% children in low-income households
1 Bridgeport-Stamford, CT	24.3%
4 Boston, MA	26.2%
13 Madison, WI	31.0%
14 Ann Arbor, MI	31.2%
16 Hartford, CT	31.7%
25 Boulder, CO	32.6%
26 Trenton, NJ	32.7%
29 Greater New Haven	33.2%
58 New York, NY	37.4%
68 Providence, RI	38.5%
73 Santa Cruz, CA	39.5%
107 Buffalo, NY	43.1%
164 Springfield, MA	47.1%
176 Durham-Chapel Hill, NC	47.6%
358 El Paso, TX	66.2%

Barriers to Kindergarten Readiness

In Greater New Haven, as in much of the country, the supply of high-quality early education programs does not meet demand. The rise of working mothers, decline in multi-generational homes, and other demographic and economic pressures have led more parents than ever to place their children into professional childcare settings. The scarcity creates a competition for slots, which is a built in advantage for higher-income parents with the means to secure a placement in one of the best programs.

Cost is a major barrier for many families. In 2011, the average cost of child care in Connecticut ranged from $9,500 to $13,000 per year for infant/toddler care and from $9,100 to $10,600 for preschool; costs in Greater New Haven were nearly identical. 29 Working parents are often caught in the bind of earning too little to afford high quality programs but too much to qualify for needed subsidies.

Connecticut Voices for Children has found that 86 percent of all infants and toddlers, and at least 25 percent of preschoolers living in lower-income families (families earning under 75 percent of the state median income) are not served by any state or federal subsidy for early care and education. 30

The need for improved access to high-quality early childcare and pre-school is borne out by the Kindergarten Entrance Inventory, the state's annual snapshot of the skills that kindergarten students demonstrate, based on teachers' observations, at the beginning of the school year. In 2011, one in five entering kindergartners demonstrated limited skills in language, literacy, and numeracy. The data reveal that children who enter higher-income school districts are more likely to have the basic skills that are needed for kindergarten and subsequent grades.

Preschool and Kindergarten 2.12
Preschool Enrollment and Kindergarten Preparedness

What is it? The Census American Community Survey collects data on school enrollment, including preschool enrollment of 3 and 4 year olds. The Kindergarten Entrance Inventory is administered annually each fall to provide a statewide snapshot of the skills that students demonstrate, based on teachers' observations, at the beginning of the kindergarten year.

Why is it important? High-quality prekindergarten programs for 3- and 4-year-olds can improve school readiness, particularly for higher-risk children. Many children, particularly 3-year-olds, continue to lack access to preschool, which increases socioeconomic barriers to educational opportunity. The entrance inventory is an imperfect assessment, but it helps reveal barriers to kindergarten preparedness.

Percent of Children Age 3-4 Enrolled in Preschool, 2011

	Total age 3-4	Not enrolled	Enrolled	% enrolled
Outer Ring	3,804	1,369	2,435	64.0%
Inner Ring	3,322	1,340	1,982	59.7%
New Haven	3,049	1,628	1,421	46.6%

Kindergarten Preparedness: Entrance Inventory, 2010

	Highest Quartile	Lowest Quartile
Connecticut	30%	21%
Outer Ring	41%	12%
Inner Ring	27%	23%
New Haven	21%	26%

Benchmarking the Region 2.13
Percent of children age 3-4 enrolled in preschool

Overall Comparison

United States **48.1%**   Connecticut **63.4%**

National Metro Comparison

National Rank (of 366)		% enrolled in preschool
1	Bridgeport-Stamford, CT	68.4%
4	Hartford, CT	64.5%
5	Boulder, CO	63.9%
6	Trenton, NJ	63.7%
8	New York, NY	62.8%
9	Boston, MA	62.1%
23	Ann Arbor, MI	58.0%
29	Greater New Haven	57.4%
36	Santa Cruz, CA	56.6%
43	Buffalo, NY	54.9%
47	Springfield, MA	54.7%
100	Providence, RI	50.8%
131	Durham-Chapel Hill, NC	48.8%
175	Madison, WI	45.3%
219	El Paso, TX	43.4%

Third Grade Reading

By third grade, reading test scores very strongly predict students' chances of graduating from high school. Students who do not read proficiently by third grade are four times less likely to graduate than their peers who do read proficiently. Students who do not read proficiently, and who are also living in lower-income families, are 13 times less likely to graduate than their peers. 31

Test scores are closely linked to the broader social issues presented throughout this report, because they reflect the educational, health care, neighborhood, and family experiences of students during the years between birth and third grade. A key set of risk factors has been associated with early reading difficulties: having parents who have not completed high school; coming from a low-income family; living in a single-parent family; and having parents who speak a language other than English in the home. 32 Children who have one or more of these characteristics are significantly more likely to have difficulty in school, with disparities in basic skills evident at kindergarten entry.

Chronic Absenteeism and Health

Public data on chronic absence rates show that, while our region's chronic absence rate is similar to the statewide average, students in New Haven were four times more likely than students in Outer Ring suburbs to miss 10 percent or more of the school year. Since poor school attendance is an indicator of challenges to a student's social environment or health, these rates can be further disaggregated to help identify communities and families in need of support.

In addition, adverse health conditions are a barrier to student academic achievement. In a 2009 study across 12 randomly-selected New Haven schools, nearly one out of every two 5th and 6th graders were overweight or obese, 15 percent were at risk of hypertension, and 24 percent had asthma. Students with more health-promoting factors were significantly more likely to succeed on all three CMT tests, even controlling for school, race/ethnicity, gender, and free lunch eligibility (i.e., poverty). 33 These results suggest that strategies to ensure that all young children are ready to learn must include measures that extend well beyond the traditional scope of our school system.

Third Grade Reading Levels, 2008-2013 6-year Average 2.14

Percent of all third graders who are at or above goal, by geography, lunch status, and race/ethnicity
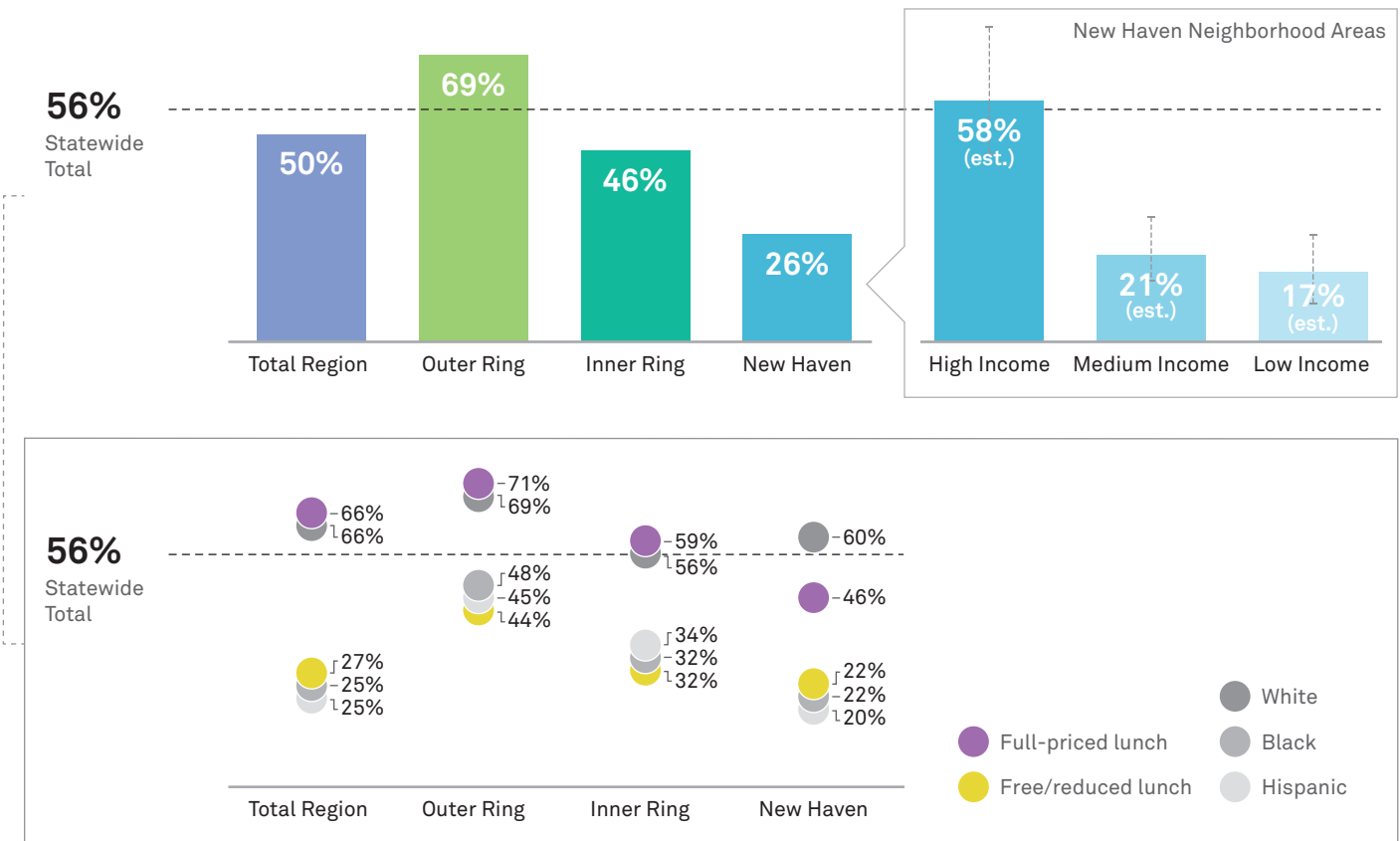
Trends in Third Grade Reading

Statewide, 56 percent of third grade students are reading at or above goal level, as measured by the state's CMT examination. But reading levels vary widely by neighborhood, poverty status (as measured by lunch eligibility), and race/ethnicity. The graph on the previous page illustrates that the performance of all students in the Outer Ring, of all students living in New Haven's higher-income neighborhoods such as Westville and East Rock, and of those students in each town who identify as White, appears to be at or above the state level. But regionally, only 25 percent of students identified as Black or Hispanic are at this level, indicating an "achievement gap" of more than 2 to 1.
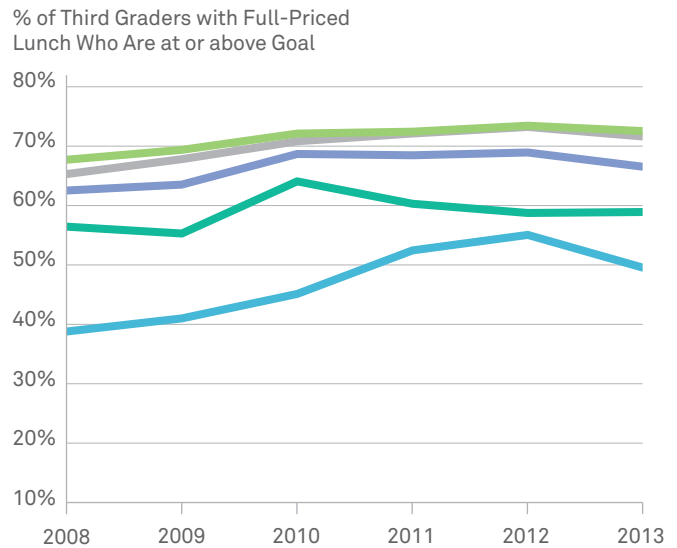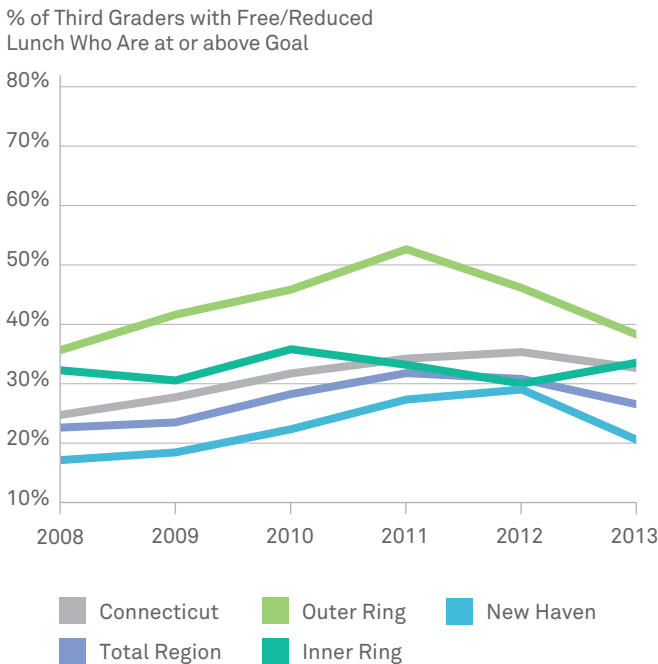
The improvement of third grade reading scores in the New Haven school district has been heralded as a sign of progress, but as a region, Greater New Haven has made little progress against the statewide average. In 2006, only 48 percent of Greater New Haven third graders were at or above "goal" on the CMT reading section, below the rates for Connecticut (54 percent), Hartford metro (56 percent)

and Bridgeport metro (59 percent). The discrepancy was largely due to dramatically lower performance in the City of New Haven, where only 18 percent of third graders were at or above "goal" compared to 44 percent of third graders in the Inner Ring and 70 percent in the Outer Ring. New Haven scores have risen over the six years since, with 33 percent reading at goal in 2012. Although this progress led Greater New Haven's overall rate to rise to 53 percent by 2012, our region as a whole continued to lag behind, in large part because reading test scores among students in the Inner Ring did not improve at the same pace. Similar trends were observed for students receiving free or reduced lunch.

In 2013, test scores declined statewide and in many communities. The lower 2013 scores can be attributed to a shift in the curriculum to meet the new Common Core State Standards (CCSS), which many districts throughout the state adopted over the past year. Many concepts still tested on the third grade CMT were not covered in the new third grade curriculum.

Third Grade Reading Levels Over Time 2.15

Percent at or above goal by lunch status

% of Third Graders with Free/Reduced
Lunch Who Are at or above Goal

% of Third Graders with Full-Priced
Lunch Who Are at or above Goal

Legend: Connecticut, Outer Ring, New Haven, Total Region, Inner Ring

Chronic Absence, Grades K-3, 2012 2.16

Area	% Chronically Absent
Connecticut	8.3%
Bridgeport-Stamford, CT Metro Area	6.8%
Hartford, CT Metro Area	10.0%
Greater New Haven	9.1%
Outer Ring	4.0%
Inner Ring	8.3%
New Haven	15.5%

DataHaven Greater New Haven Community Index 2013

Youth Opportunity

Our region compares favorably with other U.S. metro areas on this measure, although there is a high concentration of disconnected youth (11.4 percent of the total population age 16 to 19) within low-income neighborhoods in the City of New Haven. If youth in these seven neighborhoods had the same opportunity as youth throughout the rest of the city and region, then our area would avoid the many social and economic costs associated with this indicator.

One way to evaluate youth success is to evaluate the number of 16 to 19 year olds who are not enrolled in school (either high school or college) and who also are not employed in any job. This indicator is sometimes referred to as the number of disconnected youth. In Greater New Haven, 1,215 people age 16 to 19 are not in school and not working, representing 4.2 percent of the total population that age.

The DataHaven Wellbeing Survey asked adults a number of questions related to youth opportunity. Seventy-nine percent in the Outer Ring say that children in their area have the role models that they need, a much higher rate than adults living in the Inner Ring or New Haven. The proportion of adults who answered affirmatively to this question has not changed since 2003, when the same question was asked in a regional household survey. 34

Disconnected Youth, 2011 2.17

What is it? Young people between the ages of 16 and 19 who are not working and are not enrolled in school.

Why is it important? Youth who are not enrolled in school or working at this age are at a greater risk of never completing high school or college, and ultimately of being involved in the criminal justice system or chronically unemployed. Youth disconnectedness is sometimes interpreted as a measure of overall neighborhood disadvantage. Even after controlling for factors such as family economic security, a recent national study showed that growing up in the most disadvantaged one-fifth of neighborhoods (compared to the least disadvantaged) reduced the probability of high school graduation from 96 to 76 percent for Black children. 35

	# Not Working or Enrolled	Total Population age 16-19	% Not Working or Enrolled
Total Region	1,215	28,834	4.2%
Outer Ring	317	9,031	3.5%
Inner Ring	198	9,481	2.1%
New Haven	700	10,322	6.8%
High Income	19	892	2.1%
Medium Income	152	4,783	3.2%
Low Income	529	4,647	11.4%

New Haven Neighborhood Areas

Benchmarking the Region 2.18

Youth age 16-19 who are not working or enrolled in school

Overall Comparison

United States **8.3%**　　Connecticut **5.9%**

National Metro Comparison

National Rank (of 366)		% age 16-19 not in school or working
12	Ann Arbor, MI	2.9%
14	Boulder, CO	3.0%
24	Madison, WI	3.7%
26	Trenton, NJ	3.8%
31	Greater New Haven	4.2%
48	Santa Cruz, CA	4.9%
51	Boston, MA	5.0%
60	Durham-Chapel Hill, NC	5.4%
74	Bridgeport-Stamford, CT	5.8%
76	Hartford, CT	5.8%
109	Springfield, MA	6.3%
110	Providence, RI	6.4%
167	Buffalo, NY	7.6%
194	New York, NY	8.1%
270	El Paso, TX	9.8%

Youth Opportunity Questions from DataHaven Wellbeing Survey, Fall 2012 2.19

Yes
No
Don't know

Positive Role Models
Children and youth in my town generally have the positive role models they need around here.

Economic Mobility
Will the opportunities of children today to succeed be better than those you've had?

After School Activities
Did any of your children participate in any after-school activities in the community during the past school year?*

Total Region
7% · 37% · 55%
9% · 45% · 46%
24% · 76%

Outer Ring
5% · 16% · 79%
11% · 50% · 39%
15% · 85%

Inner Ring
9% · 40% · 50%
8% · 41% · 51%
31% · 69%

New Haven
10% · 64% · 26%
9% · 40% · 51%
31% · 69%

High Income
13% · 48% · 39%
14% · 55% · 31%
23% · 77%

Medium Income
9% · 65% · 25%
8% · 37% · 55%
24% · 76%

Low Income
7% · 72% · 21%
7% · 35% · 58%
41% · 59%

New Haven Neighborhood Areas

* This question was asked only to adults who have children in school.

College Readiness

In New Haven County in 2011, median annual earnings were $22,633 for individuals with no high school diploma, $33,088 for those who had completed high school only, $54,661 for those with a Bachelor's degree only, and $70,398 for those with an advanced degree.

Educational achievement is the foundation for a successful life and is a key determinant of our region's future health and economic prosperity. A high school or college degree is the most likely path to becoming an employed, productive member of the community. It is strongly associated with high voter participation and civic engagement, low rates of divorce and out-of-wedlock childbirth, better health, lower crime rates, less dependence on social services, and longer lives. 36 Individuals with no high school degree are several times

more likely to become unemployed or incarcerated, and receive $500,000 less in earnings over their lifetime than those who receive a diploma. 37

Because educational achievement is such a driver of health, the Federal Government's Healthy People 2020 program has identified the high school cohort graduation rate as one of its "Leading Health Indicators" and has set a 2020 target of 82.4 percent graduation. Connecticut's high school cohort graduation rate rose by three percentage points from 82 percent in 2010 to 85 percent in 2012, and therefore already meets this national target.

Although Connecticut's cohort graduation rate is above average by national standards, significant disparities by geography, school, and student need prevent it from achieving a high school graduation rate as high as those of the best-performing states, Vermont and Wisconsin (90 percent). The chart here shows that for Connecticut's high school class of 2012, students from low-income backgrounds were almost five times less likely to graduate than their higher-income peers who were not eligible for free lunch. Many areas within Greater New Haven, including three of the largest Outer Ring school districts, Branford, Madison, and Milford, met the Healthy People 2020 national target last year, but those with significantly greater student need generally did not. While graduation rates from the New Haven Public Schools rose by eight percentage points from 63 percent in 2010 to 71 percent in 2012, significant differences exist by individual high school and student demographic group.

High School Cohort Graduation Rates: Class of 2012 and 2010–2012 Change 2.20

Students who graduate with a regular diploma within 4 years of starting 9th grade

Change, 2010-2012	+3%	n/a	+5%	+8%	+1%	−1%	−15%	−2%	−5%	+8%	+3%	+9%	+9%

82.4%
Healthy People 2020 National Target

Connecticut	Connecticut Free Lunch Eligible	Connecticut Not Free Lunch Eligible	Branford	Madison	Milford	East Haven	Hamden	West Haven	New Haven	New Haven - White	New Haven - Black	New Haven - Hispanic
85%	67%	93%	93%	97%	86%	72%	84%	72%	71%	86%	70%	64%
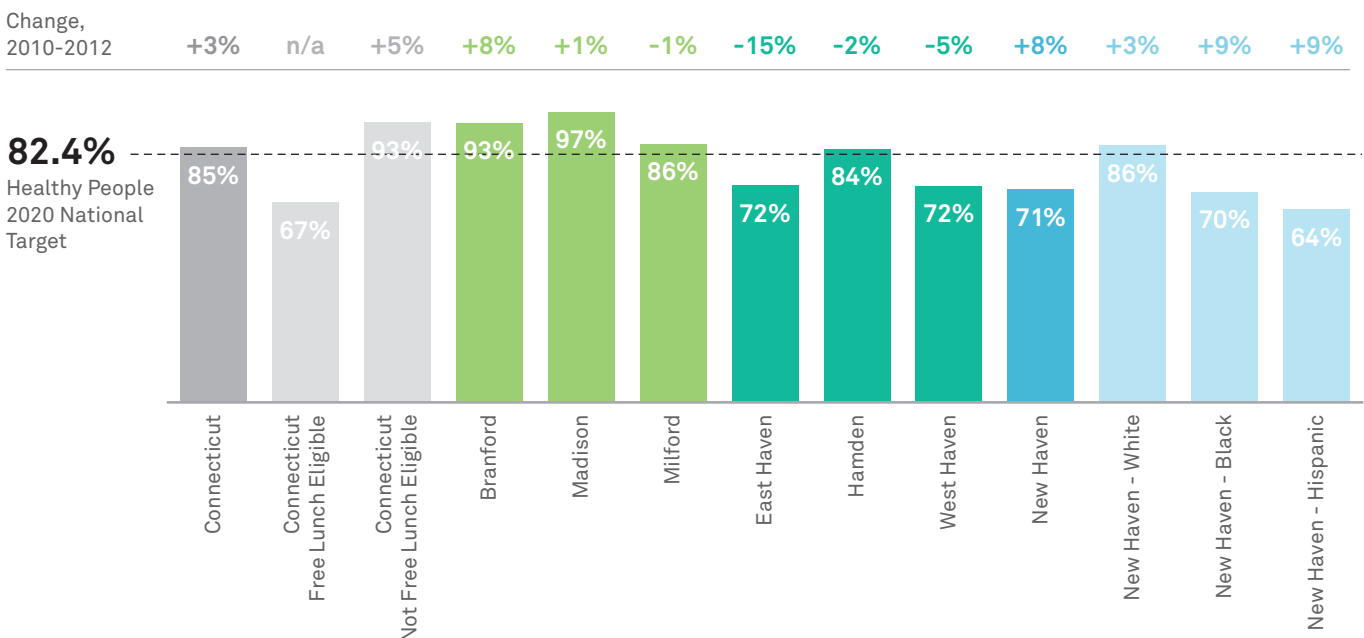
College Completion

A new national tracking system has allowed Connecticut to standardize the reporting of college graduation rates across all districts and schools. Out of all students who did graduate from Greater New Haven's high schools in the Class of 2004, only 41 percent had obtained any type of higher certificate or degree by 2010. This rate was identical to the statewide average, but slightly lower than that of the Hartford or Bridgeport-Stamford metropolitan areas. 38

One of the issues that impacts college completion rates in Greater New Haven is a lack of preparedness for college, which means that students are often placed into remedial or developmental courses that require them to spend time and money to repeat high school-level material before they can make any progress toward their degree. Seventy-one percent of high school graduates in Connecticut, and 82 percent in Greater New Haven, who enroll at a Connecticut community college or state university (other than UConn) are placed into remedial or developmental courses. 39

Like most metropolitan areas, educational disparities are a significant challenge to our region's future health and economic prosperity. When combined with data on high school graduation rates, school-by-school data on college completion rates suggest that only about one out of every ten students who entered New Haven's two largest high schools in the past decade achieved any type of post-high school credential by the time they reached 25 years old – compared to about half of students in Outer Ring districts.

Seizing the opportunity presented by this challenge would pay enormous economic dividends to our region. As described earlier, it would bolster the prosperity of people of all ages – particularly aging adults and senior citizens.

College Preparedness, Class of 2010 2.21

High school graduates in CT community college or university system who placed into remedial/developmental courses

	% of HS Graduates Enrolled in CT CC/CSU System	% Enrolled Placed in Remedial Courses	% of HS Graduates Enrolled in CT CC/CSU and Placed in Remedial Courses
Connecticut	28%	71%	20%
Hartford Metro	30%	65%	20%
Bridgeport Metro	27%	75%	20%
Total Region	28%	82%	23%
Outer Ring	24%	75%	18%
Inner Ring	33%	87%	29%
New Haven	31%	89%	27%

College Completion, Class of 2004 2.22

High school graduates who completed any postsecondary degree or certificate within 6 years

	High School Graduates	Completed Credential by 2010	Completion Rate
Connecticut	35,671	14,727	41%
Hartford Metro	11,997	5,328	44%
Bridgeport Metro	8,203	3,901	48%
Total Region	4,091	1,660	41%
Outer Ring	2,045	1,106	54%
Inner Ring	1,107	367	33%
New Haven	939	187	20%

Educated Workforce

In today's economy, a college or advanced degree is the best path to prosperity. This is especially true in Greater New Haven, where the dominant sources of well-paying jobs are in knowledge-based industries such as healthcare, education, and professional services. Leaders in advanced manufacturing, which remains a vital sector, often claim there is a mismatch between the available jobs and the skills of applicants. 40 At the same time, the share of wages and jobs for those with a high school education or less has declined. Workers' earnings in the retail sales sector, in particular, have lagged behind overall wage growth.

For Greater New Haven, educational attainment is an area of strength. Among all 366 U.S. metro areas, Greater New Haven has one of the highest proportions of young adults who have attained a Bachelor's degree or higher: 46 percent of adults age 25-34 have at least a Bachelor's degree, compared to 44 percent in the New York City region, 39 percent in Connecticut as a whole, 33 percent in the Providence, RI region, and 31 percent in the United States as a whole. These levels are highest in the Outer Ring, where 54 percent of young adults have attained at least a Bachelor's degree, and in New Haven's high income neighborhoods, where 84 percent have. Levels are lower in the Inner Ring suburbs and in the city's low income neighborhoods, where 40 percent and 22 percent of young adults, respectively, have attained at least a Bachelor's degree.

At the same time, a number of young adults – 5,000 in the Greater New Haven region – do not have a high school degree or equivalent. About half of these adults live within lower-income neighborhoods within the City of New Haven. These individuals are at greater risk of not finding jobs and facing food insecurity and chronic health conditions.

Benchmarking the Region: Educational Attainment, 2011 2.23
Adults ages 25-34 with a high school degree or higher, or a bachelor's degree or higher

Overall Comparison

United States **87.1%** Connecticut **90.4%**

Overall Comparison

United States **31.3%** Connecticut **39.3%**

National Metro Comparison

National Rank (of 366)		% age 25-34 with a high school degree
9	Ann Arbor, MI	95.6%
17	Madison, WI	94.9%
45	Boston, MA	93.2%
78	Buffalo, NY	91.8%
82	Greater New Haven	91.5%
83	Hartford, CT	91.5%
98	Boulder, CO	91.1%
175	Springfield, MA	88.6%
184	Bridgeport-Stamford, CT	88.3%
184	New York, NY	88.3%
192	Providence, RI	88.2%
225	Trenton, NJ	86.9%
256	Durham-Chapel Hill, NC	85.7%
282	El Paso, TX	84.6%
333	Santa Cruz, CA	81.3%

National Metro Comparison

National Rank (of 366)		% age 25-34 with a bachelor's degree
3	Ann Arbor, MI	56.8%
4	Boulder, CO	56.0%
6	Boston, MA	54.0%
13	Durham-Chapel Hill, NC	50.2%
15	Madison, WI	48.8%
21	Greater New Haven	45.9%
24	New York, NY	44.3%
27	Bridgeport-Stamford, CT	42.9%
34	Hartford, CT	40.3%
45	Trenton, NJ	39.7%
57	Buffalo, NY	37.6%
79	Santa Cruz, CA	34.7%
90	Providence, RI	33.4%
112	Springfield, MA	30.3%
258	El Paso, TX	21.1%

In 2011, the City of New Haven was home to roughly 11,000 young adults (age 25-34) with a Bachelor's degree or higher, representing 45 percent of the city's total population of young adults. This represents a significant increase over the 8,600 young adults with a Bachelor's degree or higher who were living in New Haven in 2000. During this time period, however, the Inner and Outer Ring saw no significant change in the size of this population.

Brain Gain

On the positive side, of the 7,428 adults who move to Greater New Haven from out of state or abroad each year, 34 percent (2,490 people) already have obtained a graduate or professional degree. This rate is more than twice the average among all interstate migrants nationally. On this "Brain Gain" measure, Greater New Haven ranks 12th out of the 366 largest metropolitan areas. Similarly,

Greater New Haven does very well if one considers the high school or college attainment levels of those moving into the area: for example, 95 percent already possess a high school diploma, which also places our region among the top 5 percent of metro areas nationally.

Greater New Haven has many pathways to the so-called "talent dividend" that we referenced in the introduction to this chapter. We must also look at ways to improve the quality, health, and safety of the neighborhoods where children grow up. Children spend most of their time out of school. As shown throughout this chapter, child development at all age levels from birth through adulthood is heavily dependent upon the economic resources of families – and over the past 30 years, the family income gap has grown substantially, with predictable impacts on our nation's children. 41 To sustain improvements to our economy, we must ensure that all young children are ready to learn by the time they reach kindergarten, boost opportunities for youth, and address the reasons why college completion rates are so low, in addition to attracting and retaining a strong workforce.

Educational Attainment of Young Adults 2.24
Ages 25-34

	No Degree		High School or higher		Bachelor's or higher	
	#	%	#	%	#	%
Total Region	5,031	8%	54,234	92%	27,189	46%
Outer Ring	536	3%	15,737	97%	8,809	54%
Inner Ring	1,109	6%	17,168	94%	7,333	40%
New Haven	3,386	14%	21,329	86%	11,048	45%
High Income	116	2%	5,309	98%	4,535	84%
Med Income	826	9%	8,287	91%	4,315	47%
Low Income	2,444	24%	7,733	76%	2,197	22%

New Haven Neighborhood Areas

Benchmarking the Region: Brain Gain, 2011 2.25
Percentage of adults moving into the area from out of state or abroad who have attained a graduate or professional degree

Overall Comparison

United States
16%

Connecticut
24%

National Metro Comparison

National Rank (of 366)		% brain gain
1	Ann Arbor, MI	38%
4	Madison, WI	36%
12	Greater New Haven	34%
17	Trenton, NJ	32%
19	Boston, MA	31%
20	Boulder, CO	31%
22	Durham-Chapel Hill, NC	30%
24	Bridgeport-Stamford, CT	28%
38	New York, NY	24%
48	Hartford, CT	22%
49	Santa Cruz, CA	22%
61	Providence, RI	20%
62	Buffalo, NY	20%
134	Springfield, MA	16%
248	El Paso, TX	10%

Summary

People are Greater New Haven's greatest asset – now, and in the future. The region was built by centuries of labor, investment, and innovation by the many generations of people who were raised here or moved here from other parts of the world. To be a sustainable place to live, our region must satisfy the needs and aspirations of its current and future residents.

As we describe throughout this Community Index, Greater New Haven is a relatively prosperous and healthy metropolitan area, but one that must respond to demographic and social change to secure its future position as a great place to live.

First, Greater New Haven must better understand how its population is aging. One of the more straightforward consequences of this includes the need to respond to an anticipated doubling of the number of apartments that are rented by senior citizens over the coming two decades, as well as a similar but slightly smaller increase in the number of homes that are owned by seniors. Ideally, these homes will be linked to the attractive public spaces and streets, transportation, cultural activities and community services that are desired by today's aging population.

Second, the quality of life experienced by our seniors and older adults will depend upon the ability of our immigrants and young people to succeed. Greater New Haven is as diverse as the United States as a whole. If we can maintain a high level of intergenerational opportunity, the children and younger adults of today will have the means to invest in housing and community improvements in our area over the coming decades. Ensuring the success of these groups, and enacting policies that can help attract and retain a young workforce, is particularly important to the hundreds of thousands of individuals who will retire and grow old here over the coming decades.

Third, we should address the inequities created when low-income children, and particularly low-income children of color, are concentrated within a limited number of neighborhoods and schools. Since these children represent our region's future workforce, the achievement gap that results from these high levels of segregation is something that must be addressed if we wish to remain a competitive region. Within a short period of time, the majority of children within our region's public schools will be of a non-White race or ethnicity. This diversity is an indicator of our growth, and is one of our region's major assets. But we must ensure children in higher-needs neighborhoods are prepared to succeed in school, and that they overcome race- and place-based barriers to health and opportunity.

> The metropolitan regions that respond to "sea changes" in population with the greatest agility will be the ones that maintain and grow their quality of life over the coming 20 to 30 years.

Additional Data on People

Chapter 5 of this report discusses next steps, including the launch of a Greater New Haven "community indicators" program, that can help us track our progress over time. In the process of writing this report, DataHaven analyzed a wide variety of data sources that could not be included in this print edition due to space constraints. Please contact DataHaven for more information or requests for technical assistance. We plan to add additional in-depth analyses to a future version of the Community Index, including data on movement of people from one county to another, changes in student enrollment patterns, child welfare, workforce development systems, and youth and adult involvement in the criminal justice system, as well as a more complete analysis of immigration and household structure changes. Chapters 3, 4, and 5 of this report present additional information on economic opportunity, community health needs, and civic engagement in our region.

Chapter 3

Economic Opportunity

Introduction

The previous chapter described how Greater New Haven is a growing and vibrant metropolitan area with boundless human potential. This chapter outlines some of the challenges we face as we work to ensure that all of our residents continue to experience a shared sense of opportunity.

As the population of our region continues to age, it will become even more of an economic imperative that we attract and retain a younger workforce, prepare all of our youth to graduate from high school, and give them the tools necessary to succeed in higher education, workforce training, or in their first jobs. Policymakers can align infrastructure to meet these goals, for example, by investing in the revitalization of neighborhoods that are struggling to keep up with the prosperity of the rest of our region, and by creating affordable housing and transportation so that younger workers can afford to live here.

Miles Lasater

President and Chairman of Higher One

Healthcare and education are robust drivers of the Greater New Haven economy, which we should celebrate and embrace. In addition, job growth in the US economy often comes from smaller and younger firms. As knowledge work becomes a more important part of our economy, providing a high quality of life for entrepreneurs, coders, project managers, and others is key. We've made great strides in improving the livability of our area and we can do more. The way to many hearts is through the stomach, so here's to our great restaurant and nightlife! Now let's concentrate on growing the pie and less on how to divide it up.

Carlton L. Highsmith

President (ret.), Specialized Packaging Group, Inc., Board Chair, Connecticut Center for Arts and Technology

Our region's economic growth and vitality, in my opinion, hinges on 1) how well we leverage innovation in how we think about educating and training our students; 2) how openly we embrace diversity, understanding that the majority of our future workers will come from our urban centers; and 3) how inclusive we are, by not leaving large numbers of displaced, unemployed and unskilled workers out of the economic mainstream.

I am encouraged by what appears to be real and substantive reform underway in the region's K-12 public school systems, including those innovative approaches that envision a possible K-13 or K-14 model targeting students interested in those high demand technical careers that do not require a traditional four-year college degree. I applaud the growth and expansion of the region's community college. This support should be increased and sustained to train a larger number of our next generation of workers. And we must not turn our backs on the thousands of displaced and unemployed workers who can be transformed from "liabilities" into "assets" with targeted job training and internship programs designed in collaboration with leading employers of the region.

Summary of Job Growth Data

From 2002 to 2012, there was no net gain in the number of jobs located within Connecticut or Greater New Haven. During this time, the Outer and Inner Ring suburbs of Greater New Haven lost nearly 7,000 jobs (a 5 percent decrease), while the City of New Haven added nearly 4,000 jobs (a 5 percent increase). Additionally, the average wages of jobs located in Greater New Haven remained unchanged, and again, wage growth was more robust within the City of New Haven than in our twelve suburban towns. Variation within the region may be explained in part by the fact that health care and education jobs are growing more quickly than other industry sectors. In Greater New Haven, higher-wage jobs within these sectors tend to be more heavily concentrated in Downtown New Haven.

Despite these flat trends, wages and household incomes in the Greater New Haven region remain significantly higher than the national average. The Job Access section of this chapter contains additional information on the distribution of these jobs, and of the workers who commute to them.

Comprehensive Economic Development Strategy

Leaders from throughout the Greater New Haven region have long been invested in the Comprehensive Economic Development Strategy (CEDS), a regional program that is developed under guidance of the United States Economic Development Administration and spearheaded by REX Development, formerly known as the Regional Growth Partnership. Participants in CEDS work together to identify key economic development goals, which in 2013, were:
1) Regional Marketing, Communications and Advocacy,
2) Infrastructure, 3) Business Development and Retention,
4) Workforce Enhancement and Housing, 5) Real Estate, Land Use and Sustainability, and 6) Funding and Implementation. The CEDS process identifies key indicators to track progress towards each goal: For example, airport, rail, and bus use are among the indicators used to measure the program's various Infrastructure objectives. Several of the key indicators identified by the group in 2013 are addressed within this report, and we envision that future editions of this Community Index will analyze these critical economic trends in greater detail.
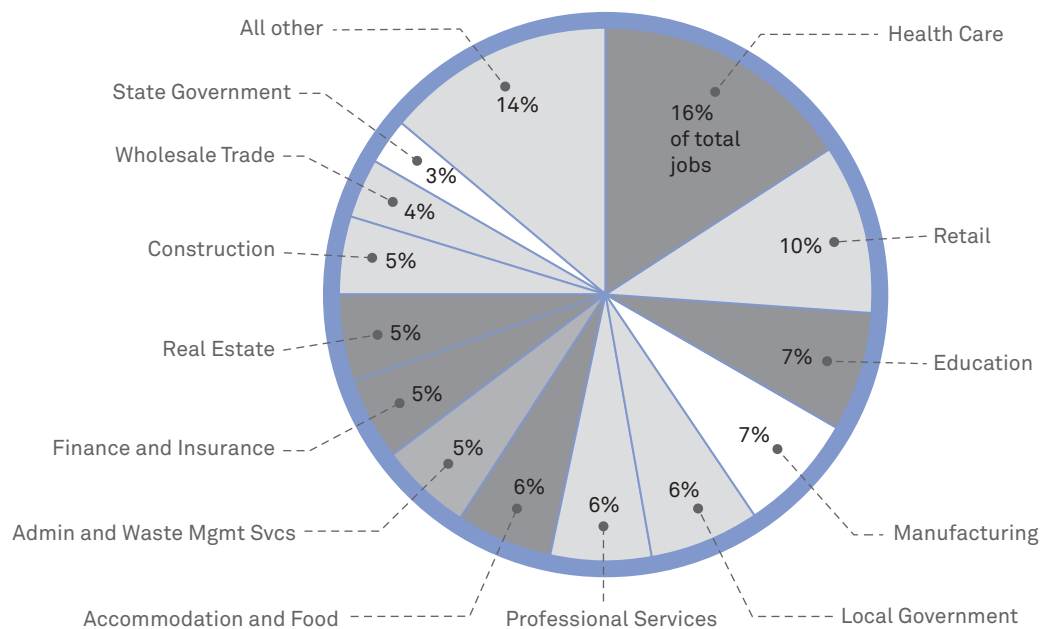
Jobs and Wages by Location, 2002-2012 3.1

	Connecticut	Total Region	Outer Ring	Inner Ring	New Haven
Total Jobs, 2012	1,628,101	210,032	89,804	40,949	79,279
Change in Total Jobs since 2002	-21,428	-2,749	-4,192	-2,390	3,833
Percent change since 2002	–1%	–1%	–4%	–6%	+5%
Average Wage, 2012	$62,157	$52,471	$47,352	$45,554	$61,841
Percent change since 2002, adjusted for inflation	+4%	0%	–4%	–6%	+6%

Jobs by Industry 3.2

New Haven County, 2011

Change in number of jobs, 2001-2011

- Up by 10% or more
- Up by less than 10%
- Down by less than 10%
- Down by 10% or more

Pie chart labels:
- All other — 14%
- State Government — 3%
- Wholesale Trade — 4%
- Construction — 5%
- Real Estate — 5%
- Finance and Insurance — 5%
- Admin and Waste Mgmt Svcs — 5%
- Accommodation and Food — 6%
- Professional Services — 6%
- Local Government — 6%
- Manufacturing — 7%
- Education — 7%
- Retail — 10%
- Health Care — 16% of total jobs

Job Access

These pages begin to illustrate where jobs are located in Greater New Haven, and who has access to them. In 2011, our 13 towns were home to 217,288 jobs, including 82,658 in the City of New Haven. While the 47,452 "living wage" jobs located in New Haven provided a massive share of income to commuters, only 19 percent of them were held of residents of the city – and only 4 percent by residents of the low-income neighborhoods identified in this report.

43,823 workers live in New Haven, but the majority of workers – particularly low-income workers – work outside of the city. Evaluating this "spatial mismatch" between jobs and neighborhoods is critical to understanding economic opportunity. According to Ihlanfeldt, lower-skill workers have less knowledge of suburban job openings because they rely on informal networks. They also rely heavily on buses, which typically reach only a fraction of suburban jobs. Finally, Blacks in particular encounter greater labor market discrimination in suburbs. 42

Benchmarking the Region 3.3
Job Access by Core City Residents

To compare regions on an equal basis, DataHaven analyzed the proportion of workers within each core city area who are able to access "living wage" jobs within the same area. Core cities are defined as the area located within a two mile radius from each City Hall, an area which in some cases may include small portions of surrounding suburban towns. We have identified several possible measures of

access. One is the relative likelihood that a commuter (a person who works in the core city area but who lives somewhere outside of it) has a living wage job, versus someone who lives and works in the same area. Although this measure has limitations, New Haven appears to perform fairly well on it, even though large disparities exist by neighborhood within the 2 mile radius.

New Haven

Core City Area
(2 mile radius
from City Hall)
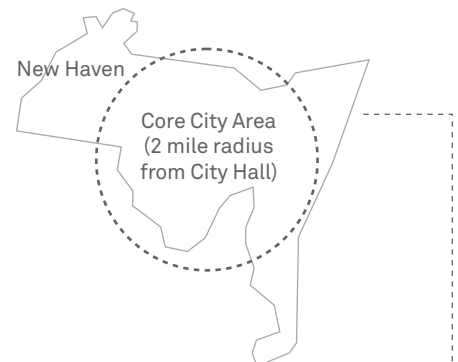
Comparison Core City Area	Average of Two Commuter: Resident Ratios	Chance that a commuter to the core city area has a living wage job	Chance that a core city resident who works in the core city area has a living wage job	Chance that a core city resident has a living wage job anywhere
Ann Arbor, MI	0.90	42%	45%	48%
Santa Cruz, CA	0.97	42%	42%	44%
NYC (Manhattan), NY	1.03	65%	64%	63%
Boulder, CO	1.06	44%	38%	45%
Stamford, CT	1.29	67%	50%	53%
Madison, WI	1.35	52%	39%	38%
New Haven, CT	1.45	62%	49%	38%
Durham, NC	1.49	45%	28%	32%
Waterbury, CT	1.54	46%	28%	32%
Providence, RI	1.58	46%	31%	27%
El Paso, TX	1.67	29%	17%	19%
Trenton, NJ	1.74	62%	35%	36%
Buffalo, NY	1.94	48%	25%	24%
Bridgeport, CT	2.02	55%	25%	30%
Hartford, CT	2.46	69%	31%	26%

Job Access: Where Workers Live and Where the "Living Wage" Jobs Are, 2011

What is it? Local Employment Dynamics is a new Census feature that allows comparisons between where workers live and where they work. A "living wage" job is defined here as one that pays more than $3,333 per month (equivalent to $40,000 per year). Please see Appendices for detail on each chart.

Why is it important? Spatial mismatch analysis measures the distribution of jobs and workers across a metropolitan area to determine gaps in employment, transportation, and worker housing. Having a "living wage" job often allows a person to avoid living in or near poverty.

Total Region

Inner Ring

Outer Ring

New Haven

City of New Haven

High Income

Medium Income

Low Income
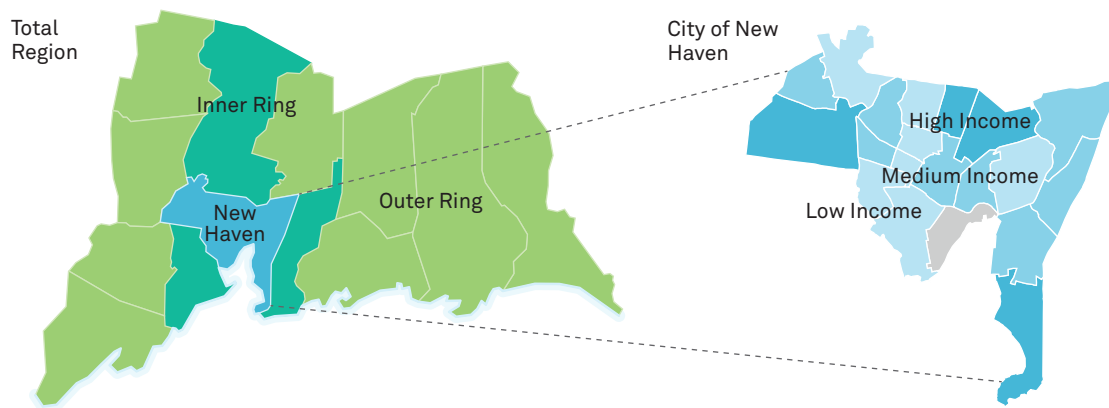
Living Wage   Non Living Wage

Where Workers Are Employed 3.4
Number of jobs by region and percent that pay a living wage
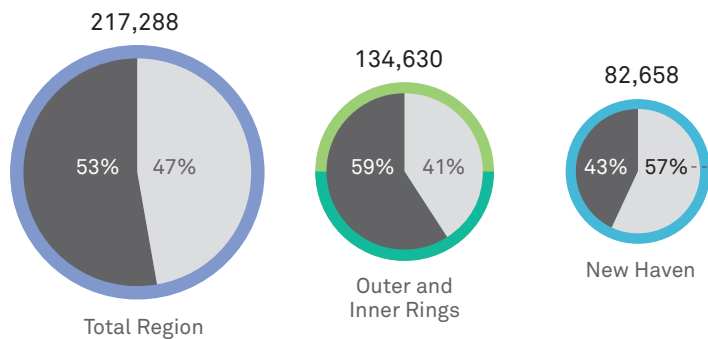
217,288

53%   47%

Total Region

134,630

59%   41%

Outer and Inner Rings

82,658

43%   57%

New Haven

Residents Who Work the 47,452 Living Wage Jobs Located in the City of New Haven 3.5

Commuters from Outside the Region
38%

Commuters from the Outer Ring
23%

Commuters from the Inner Ring
20%

8%   7%   4%
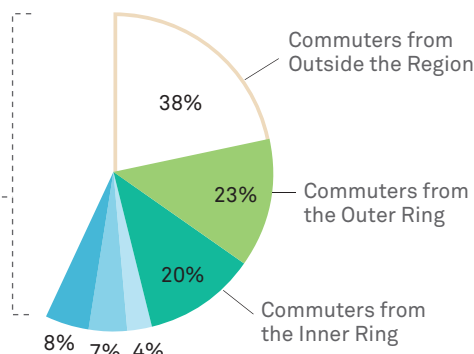
Residents of New Haven by Neighborhood Area
High Income   Medium Income   Low Income

Where Workers Live 3.6
Number of workers by region and percent earning a living wage

204,723

51%   49%

Total Region

160,900

48%   52%

Outer and Inner Rings

43,823

39%
61%

New Haven

10,114

44%   56%

High Income

16,779

60%   40%

Medium Income

16,930

72%   28%

Low Income

Where New Haven Residents Work 3.7

19,279

52%   48%

Inside New Haven

24,544

68%   32%
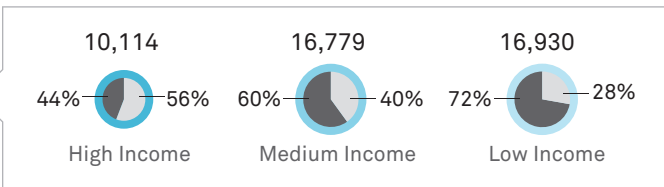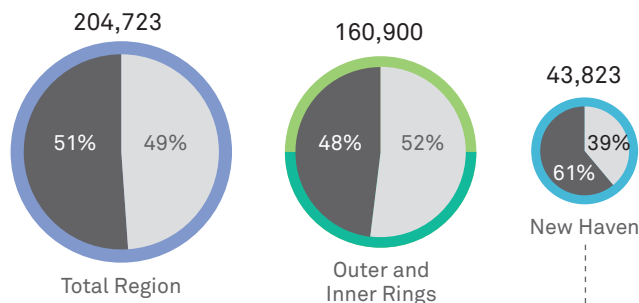
Outside New Haven
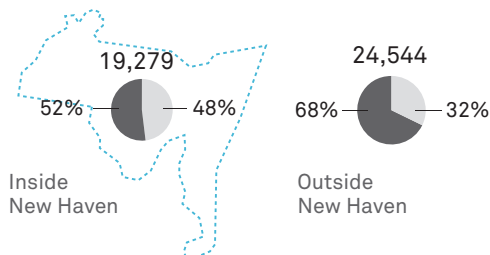
Unemployment

Although they have limitations, unemployment rates are published regularly and are a useful way to compare differences in jobs access within our communities. Unemployment is a critical quality of life issue, and persistent unemployment will have a substantial impact on mental health and long-term health costs. 43

In recent years, the Greater New Haven region has experienced levels of unemployment that are statistically similar to or slightly higher than those of Connecticut and other Northeastern regions. A review of the most current monthly data shows the unemployment rate within Greater New Haven has remained fairly constant near 9% ever

since it approximately doubled during the 2007-2009 recession. Between July 2008 and July 2009, the total number of unemployed individuals in our 13-town region jumped from 16,000 to 22,000, and it remains at 22,000 as of July 2013. This figure includes 7,266 residents of New Haven, 7,339 in the Inner Ring, and 7,298 in the Outer Ring. The unemployment rate in New Haven rose from 7% in 2007 to 12% by July 2009, held near 13% in the summers of 2010 through 2012, and has remained high since, at 12.4% as of July 2013. Meanwhile, rates have hovered near 9-10% in the Inner Ring and 7-8% in the Outer Ring. 44

The unemployment rate in the 2011 five-year American Community Survey (ACS) was 12.7% in the City of New Haven, but it ranged from 4.4% in high-income neighborhoods to 17.9% in low-income neighborhoods. Unemployment rates were 4% among city residents with a Bachelor's Degree or higher, but 16% among those who had completed only high school, and 19% among those with no high school diploma. Similar disparities are seen within the Inner and Outer Ring.

Monthly Unemployment Data, January 2008 – July 2013 3.8

% Unemployed

- Outer Ring
- Inner Ring
- New Haven
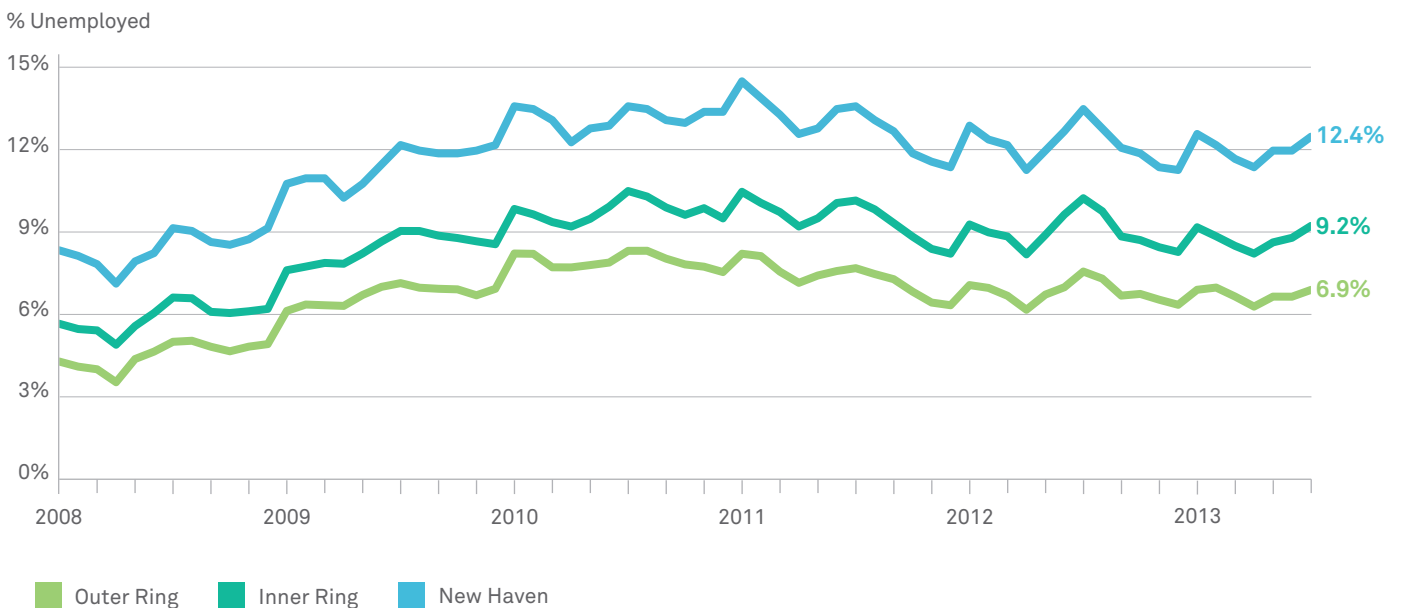
Employment Status by Race and Age in Connecticut, 2012 Annual Average 3.9

	Total	Total Age 16-19	White	Black	Hispanic
Adult Population	2,842,000	222,000	2,352,000	293,000	318,000
In Labor Force	1,881,000 (66%)	74,000 (34%)	1,545,000 (66%)	197,000 (67%)	210,000 (66%)
Employed	1,722,000 (61%)	56,000 (25%)	1,425,000 (61%)	167,000 (57%)	177,000 (55%)
Unemployment Rate	**8.4%**	**25.4%**	**7.8%**	**14.9%**	**15.7%**

Underemployment and Duration of Joblessness

Unemployment rates do not distinguish between full time and part time work, or jobs that a worker considers to be inadequate. The unemployment rate also does not count so-called "discouraged workers" who say they have given up looking for work altogether, even though if broad economic circumstances were different (e.g., if jobs paid more, or were more accessible), the same individuals might decide it was desirable to be working.

The Fall 2012 Greater New Haven Wellbeing Survey asked questions about part-time work in order to discern an "underemployment" rate, which is based on the percentage of people who are not working or who are working part-time because they are unable to find full-time work. The survey suggests that Greater New Haven's underemployment rate of 15% may be similar to the national average. 45 In low-income neighborhoods within New Haven, however, roughly 1 out of every 3 residents reported that they were underemployed. Although more comprehensive than the official unemployment rate, our data on underemployment

may underestimate the scope of the jobs access problem as well because they do not include individuals who have given up looking for work altogether. 46

The Wellbeing Survey also interviewed residents about the duration of their unemployment, finding that nearly two out of every three residents who wish to work have been without a job for six months or more. One out of every five unemployed residents – about 4,000 people living in our region – has been unable to find a job for more than two years.

Perceptions of Job Availability

In Fall 2012, only 20% of adults throughout Greater New Haven felt that the ability of residents to obtain suitable employment was "excellent" or "good," while 31% said it was only "fair," and 31% said that it was "poor." Residents who identify as Black or African-American were significantly more likely to say that the ability to find jobs is difficult, with just 15% saying it was "excellent" or "good," 29% saying that it was only "fair," and 46% saying it was "poor." Differences by family income level are shown in Chapter 5.

Benchmarking the Region 3.10
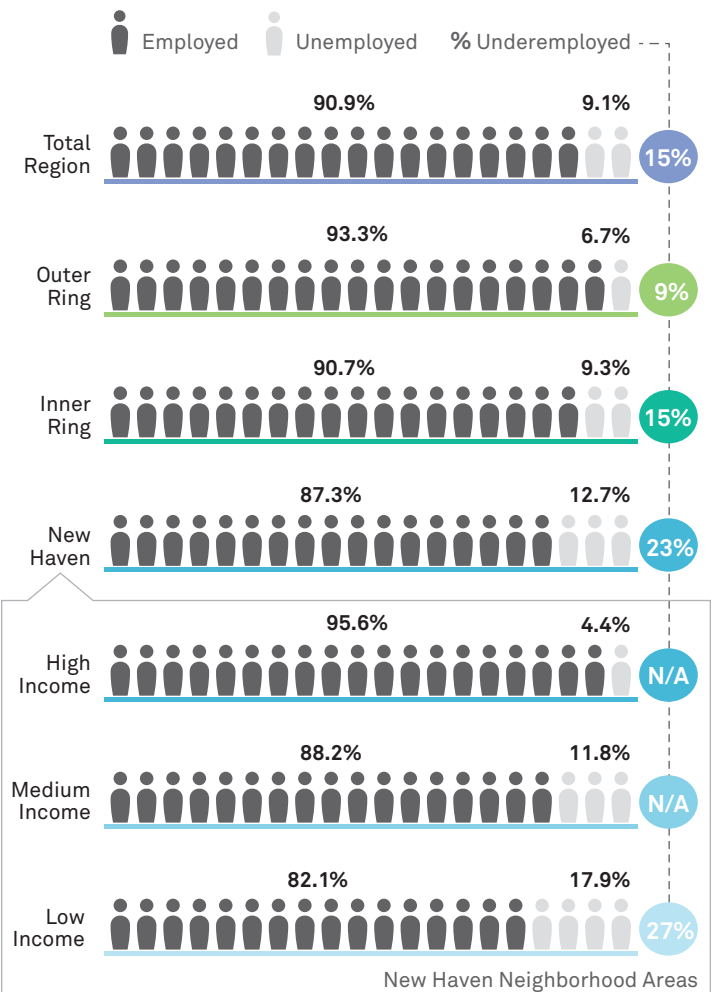Unemployment rate, 2011 5Y ACS

Overall Comparison

United States
8.7%

Connecticut
8.5%

National Metro Comparison

National Rank (of 366)		Unemployment Rate
22	Madison, WI	5.4%
70	Boulder, CO	6.7%
121	Boston, MA	7.6%
131	El Paso, TX	7.6%
148	Durham-Chapel Hill, NC	7.8%
162	Buffalo, NY	8.0%
180	Hartford, CT	8.3%
193	Santa Cruz, CA	8.4%
199	New York, NY	8.5%
202	Bridgeport-Stamford, CT	8.5%
215	Ann Arbor, MI	8.8%
226	Trenton, NJ	9.0%
238	Greater New Haven	9.1%
242	Providence, RI	9.2%
244	Springfield, MA	9.2%

Unemployment and Underemployment 3.11
Neighborhood unemployment and underemployment

● Employed   ○ Unemployed   % Underemployed - - -

	Employed	Unemployed	% Underemployed
Total Region	90.9%	9.1%	15%
Outer Ring	93.3%	6.7%	9%
Inner Ring	90.7%	9.3%	15%
New Haven	87.3%	12.7%	23%
High Income	95.6%	4.4%	N/A
Medium Income	88.2%	11.8%	N/A
Low Income	82.1%	17.9%	27%

New Haven Neighborhood Areas

Income and Poverty

Income levels strongly predict a community's resiliency and individual wellbeing. Greater New Haven has a relatively low poverty rate, and a strong middle class: 62% of our region's total population has an income of more than three times the Federal Poverty Level, qualifying them as "middle class" or higher. But the number of people living in poverty has been rising over time, particularly in the Inner Ring towns. Chapter 2 contains additional information on the income levels of families with children. Chapter 5 of this report contains additional data showing high levels of income inequality in Greater New Haven. The chapter also shows that while income levels are not the only factor that predicts an individual's quality of life, the lack of income – and subsequent inability to afford food or shelter – has a more strongly negative impact on wellbeing than any other factor.

Inability to Pay for Food and Housing

In Fall 2012, 6% of residents in Greater New Haven said that they did not have enough money to provide adequate shelter for themselves or their families in the past year. This figure ranged from an average of 4% in suburbs and high-income neighborhoods of the City of New Haven, to 16% within New Haven's low-income neighborhoods.

Additionally, 20% of residents in the region said that they did not have enough money to buy food. These levels of food insecurity ranged from 10% in Outer Ring suburbs, to 24% in Inner Ring suburbs and 31% in the City of New Haven (ranging from 15% in high-income neighborhood areas to 38% in low-income ones). Recognizing the many threats to our health and wellbeing caused by hunger, the Federal Government's Healthy People 2020 program has set an ambitious target of cutting the national food insecurity rate by more than half, from 15% to 6%, by 2020.

Poverty Rates over Time, 1990-2011 3.12
Changes in population living in poverty

Number of People in Poverty

Outer Ring · Inner Ring · City of New Haven: High Income, Medium Income, Low Income

+4% +83% +94% +38% +33%
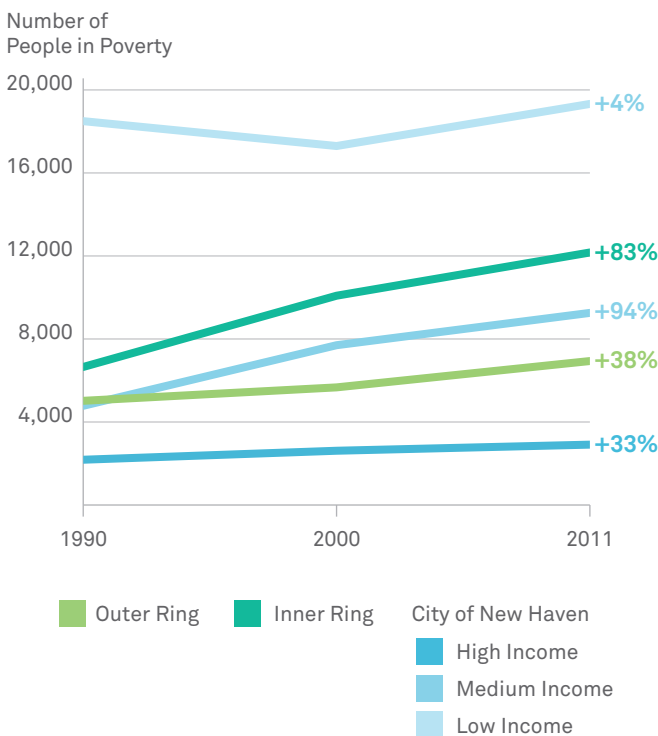
Benchmarking the Region 3.13
Comparison of population living in poverty

Overall Comparison

United States **14.3%** · Connecticut **9.5%**

National Metro Comparison

| National Rank (of 366)		% of Population in Poverty
8	Bridgeport–Stamford, CT	8.3%
25	Hartford, CT	9.8%
25	Boston, MA	9.8%
45	Trenton, NJ	10.7%
59	Greater New Haven	11.4%
66	Madison, WI	11.5%
86	Providence, RI	12.3%
110	New York, NY	13.1%
110	Boulder, CO	13.1%
137	Santa Cruz, CA	13.7%
148	Buffalo, NY	13.9%
158	Ann Arbor, MI	14.2%
196	Springfield, MA	15.1%
246	Durham-Chapel Hill, NC	16.4%
361	El Paso, TX	25.0%

Poverty Rate and Percent of Population that is "Near Poverty" or Low Income

What is it? Individuals or families are living in poverty if their annual pretax cash income falls below a dollar amount, or poverty threshold, determined by the Federal government each year. In 2011 the threshold was $23,021 for a family of four and $11,702 for a single person under age 65.
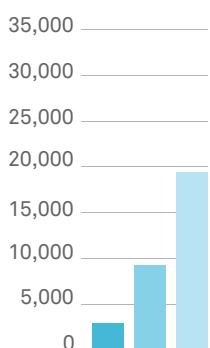
Why is it important? A family of four in Greater New Haven needs an annual income of $79,381 to meet a "secure yet modest living standard" – more than three times the federal poverty level. 47 People in poverty often struggle and are less likely to participate in civic life.

Total Number of Individuals in Poverty 3.14

Greater New Haven Region
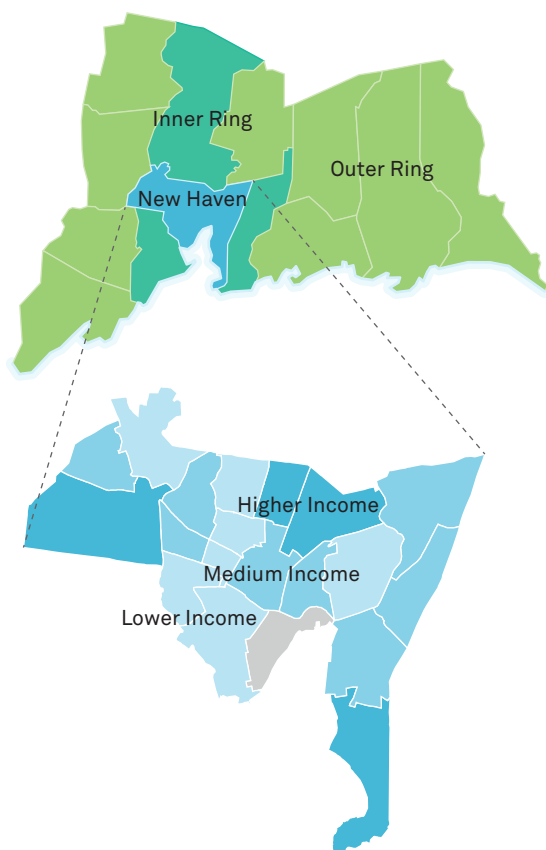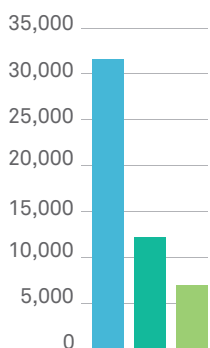
City of New Haven

Percent of Population by Ratio to Federal Poverty Level (FPL) 3.15

- ☐ Below 100% FPL: Living in poverty
- ☐ 100%–200% FPL: Near poverty
- ☐ 200%–300% FPL: Moderate income
- ☐ Above 300% FPL: Middle class or higher

Total Region: 62%, 13%, 14%, 11%

Outer Ring: 77%, 11%, 8%, 4%

Inner Ring: 61%, 16%, 14%, 9%

New Haven: 38%, 20%, 15%, 26%

High Income: 64%, 13%, 11%, 12%

Medium Income: 41%, 20%, 17%, 22%

Low Income: 25%, 25%, 15%, 36%
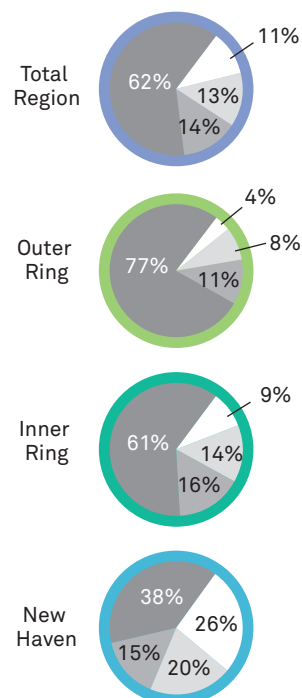
Within Greater New Haven 1 in 2 low-income individuals live in suburban towns.

Place and Race Matter: Concentrated Poverty
Poverty is heavily concentrated within certain neighborhoods and by race/ethnicity. Within the Greater New Haven area, 85% of low income African American residents live within the City of New Haven.

Concentrated poverty is considered a social determinant of health. It can be compounded by other factors – for example, low-income children who grow up in a poor neighborhood, and who are not performing well by third grade, are 13 times less likely to graduate from high school than their peers.

If one considers all Census Tracts with poverty rates of 20% or higher as "concentrated poverty" areas, since 1990 concentrated poverty has stayed the same in the City of New Haven but has increased by 300% in the suburbs.

Transportation

Transportation and Jobs

Transportation is frequently cited as the greatest barrier to employment. In 2013, 84% of those registering for CTWorks, a comprehensive statewide program for job seekers, identified transportation as a barrier – far more than those that identified child care (60%), lack of education (23%), housing (12%), inexperience (11%), or language barrier (11%). 48
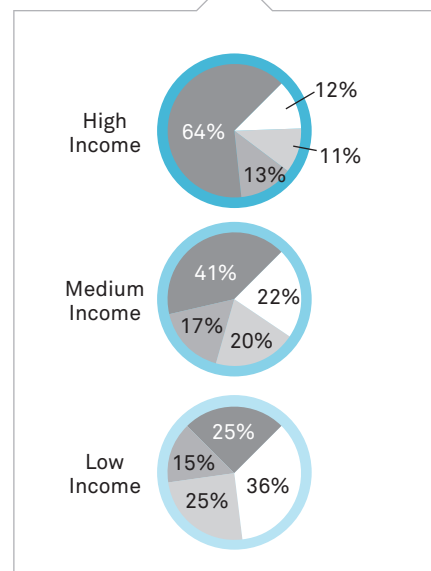
Successful cities are those where people can get around regardless of their income, age, or physical ability. In addition to being a barrier to economic opportunity, transportation is a barrier to the accessibility of health care and other resources, particularly for youth, older adults, low income families, and the disabled.

Although public transit stops exist throughout Greater New Haven, and rush-hour service frequency is generally similar to US metro area averages, public transit in the region is insufficient. According to The Brookings Institution, only 27% of jobs in the area are accessible via a 90 minute transit commute. 49 Although the system is slightly more efficient (about 42% within 90 minutes) for residents living within the City of New Haven, city residents with no reliable vehicle are still unable to access more than half of jobs in our region.

Trend: Commute Time, 1990-2011 3.16
Percent of commuters traveling 30 minutes or more

Percent of Commuters

Total Region   Inner Ring
Outer Ring   New Haven
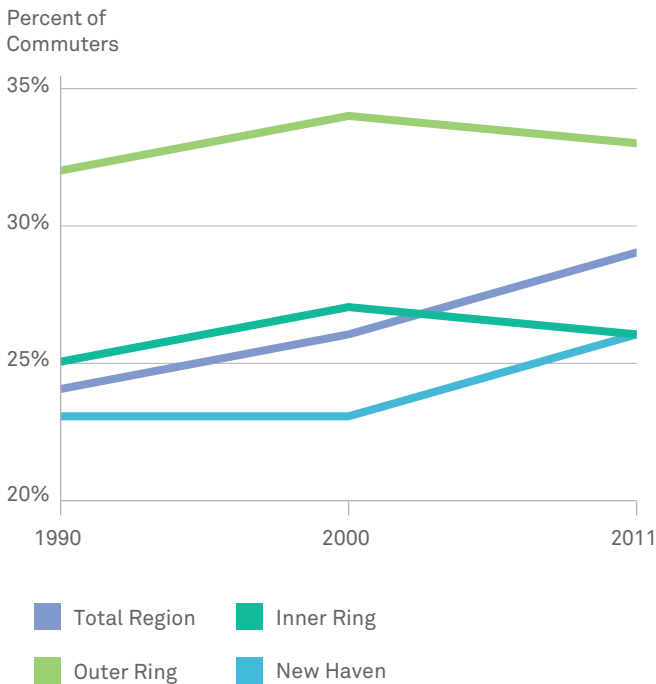
Benchmarking the Region: Commute Time 3.17
Comparison of commuters traveling 30 minutes or more

Overall Comparison

United States **35.2%**   Connecticut **32.6%**

National Metro Comparison

National Rank (of 366)		% Traveling 30 Minutes or More to Work
156	Buffalo, NY	24.4%
163	Madison, WI	24.8%
211	Boulder, CO	27.2%
232	Springfield, MA	28.4%
234	Greater New Haven	28.8%
242	Ann Arbor, MI	29.1%
244	Durham-Chapel Hill, NC	29.1%
256	Hartford, CT	30.1%
268	El Paso, TX	30.7%
281	Providence, RI	31.8%
292	Trenton, NJ	32.9%
327	Santa Cruz, CA	36.5%
330	Bridgeport-Stamford, CT	36.7%
362	Boston, MA	45.8%
365	New York, NY	54.9%

Car Access

In Greater New Haven, low income families with children making less than $50,000 per year are 10 times less likely to have access to a vehicle than families making $50,000 or more, according to the 2012 DataHaven Wellbeing Survey. In the City of New Haven, 27% of households (about 13,000 households) are "zero car" households with no car at all, and many more are considered "low car," meaning they have less than one car per worker. Additionally, about 10,000 "zero car" households live in surrounding suburbs.

Lack of a vehicle has a particular impact on older adults. Among seniors age 65-79 in the Greater New Haven area, about half have limited to no access to mass transit services. People over 65 who no longer drive make 15 percent fewer trips to the doctor than drivers of the same age, and also shop or visit friends and family less than half as often. 50

Transportation and Wellbeing

Transportation policy impacts the health and wellbeing of our region. Long commutes have adverse effects on physical health, as well as on individual relationships. 51 Greater New Haven has shorter commute times than most other metro areas of its size in the Northeast, and much lower than those of Greater New York and Boston. Many recognize this as one of our region's competitive assets. Additionally, persons who commute by public transit, walking, or biking are significantly more likely to meet the minimum daily recommendations for physical activity. Walking and biking are affordable, with an estimated cost of $150 per year, versus $7,000 per year to own and use a small car, 52 a potential savings which when realized over thousands of people, has enormous impacts on the economic prosperity of an area, including the ability of residents to spend their money locally. Within New Haven, high income neighborhoods have the lowest rates of driving.

Ultimately, the best transportation and economic development plan is a housing and land use plan. The disconnect between jobs, housing, and transportation is of particular concern within low income neighborhoods that were built around manufacturing enterprises. In previous generations, most of the people living in our cities walked to work. Today, the majority of jobs are located in suburbs. For example, Census data show that 3 out of 4 African-American male workers living in Connecticut cities commute to suburban areas for work – and yet these workers are several times more reliant on public transportation than non-minority residents. 53 The economic prospects of all residents can be improved if we plan our community's growth in a smarter way, and promote the development of mixed-income communities where people have an option to live near where they work.

Daily Means of Transport to Work, 2011 3.18

Percent of all workers

	Drive or Carpool	Public Transit	Walk or Bicycle	Other	Work at Home
US	86.3%	5.0%	3.4%	1.2%	4.2%
Total Region	84.9%	5.4%	5.3%	0.7%	3.8%
Outer Ring	91.1%	3.3%	2.9%	0.6%	2.1%
Inner Ring	90.1%	3.3%	0.9%	0.6%	5.1%
New Haven	68.4%	11.4%	15.4%	1.2%	3.7%
High Income	66.3%	8.3%	19.1%	1.3%	5.0%
Med Income	67.4%	10.8%	18.5%	0.8%	2.5%
Low Income	70.6%	14.1%	9.7%	1.5%	4.0%

Benchmarking the Region: Driving Alone 3.19

Overall Comparison

United States **76.1%**   Connecticut **78.8%**

National Metro Comparison

National Rank (of 366)		% Driving Alone to Work
1	New York, NY	50.3%
6	Boulder, CO	65.4%
14	Boston, MA	68.9%
18	Trenton, NJ	70.6%
19	Santa Cruz, CA	70.9%
35	Bridgeport-Stamford, CT	73.5%
41	Durham-Chapel Hill, NC	73.7%
42	Madison, WI	73.9%
43	Ann Arbor, MI	74.0%
80	Greater New Haven	76.7%
140	El Paso, TX	79.3%
152	Springfield, MA	79.9%
202	Providence, RI	80.9%
204	Hartford, CT	81.0%
232	Buffalo, NY	81.5%

Housing

Limitations of Housing Affordability Data

Housing cost data do not consider the impact of transportation costs within cities. In some cases, cities with the highest housing costs are actually cheaper to live in than their surrounding suburban areas, because the need for car ownership is reduced. A future edition of this report will consider these costs in more detail, but evidence throughout the rest of this chapter indicates a need for housing that is better connected to where jobs are located.

Business leadership groups are concerned that housing costs could deter workers and businesses from choosing to locate in Greater New Haven. Social service agencies and public schools are concerned because of the stress that high cost burdens cause to families and students, including the need to relocate on a frequent basis, the lack of disposable income for health care or enrichment, and even homelessness in some cases. Data on housing insecurity are presented in the Income and Poverty section of this chapter.

Housing costs are very high in Greater New Haven, and have risen substantially over time. Of the roughly 180,000 households in our region who own or rent their home, 79,000 (44% of the total) are considered to be cost-burdened by housing, meaning that they spend 30% or more of their income toward housing costs. An estimated 37,000 (21% of the total) households in our region are severely cost-burdened, meaning that they pay more than half of their annual income toward housing costs. Within New Haven, severe cost burden ranges from 21% of households in high income neighborhoods to 35% in low-income neighborhoods.

From 1990 to 2011, the proportion of households that are cost-burdened increased dramatically throughout Greater New Haven. The issue is particularly urgent among renters. An analysis of Census data by the Partnership for Strong Communities finds that from 2001 to 2011, the median household income of renters in Connecticut increased by 9%, but the median rent increased by 50%. 54 This analysis likely underestimates the impact of the problem on our economy, because Census data on rents does not consider "asking" rents for those who are attempting to move to an area or rent a new apartment.
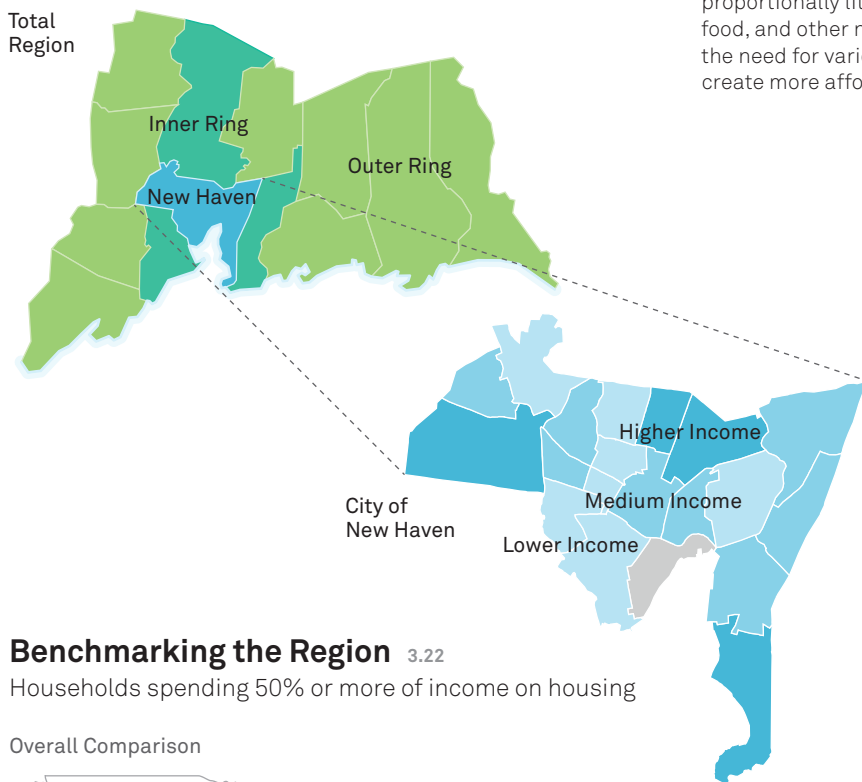
Cost-Burdened Households, 1990-2011 3.20
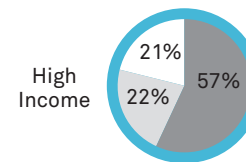
Households spending more than 30% of income on housing

% of Total
Households

Legend:
- Outer Ring
- Inner Ring
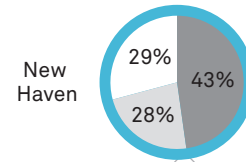- City of New Haven
  - High Income
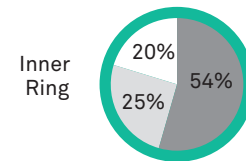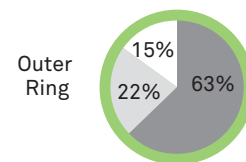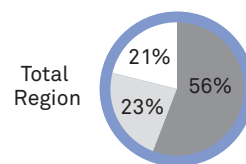 - Medium Income
  - Low Income

Housing Affordability 3.21

What is it? Data on housing cost burden considers the proportion of renters and owners who pay at least 30% (or 50%) of their household income toward housing costs.

Why is it important? A lack of affordable housing causes significant stress on households and individuals. Those that pay 50% or more of their income toward housing often suffer from significant deterioration of their quality of life, as they have proportionally little income to use for transportation, education, food, and other necessities. Housing cost trends can help measure the need for various policies, such as land use reform, that could create more affordable housing.

Total Region

Inner Ring

Outer Ring

New Haven

City of New Haven

Higher Income

Medium Income

Lower Income

Severe Cost Burden (Pay > 50%)

Cost-Burdened (Pay 30%-50%)

Not Cost-Burdened (Pay < 30%)

Total Region — 21% / 23% / 56%

Outer Ring — 15% / 22% / 63%

Inner Ring — 20% / 25% / 54%

New Haven — 29% / 28% / 43%

High Income — 21% / 22% / 57%

Medium Income — 28% / 24% / 48%

Low Income — 35% / 23% / 42%
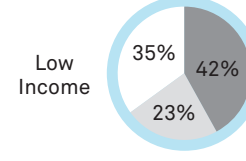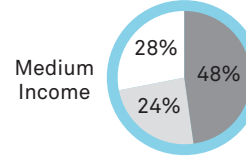
Benchmarking the Region 3.22

Households spending 50% or more of income on housing

Overall Comparison

United States **16.2%**

Connecticut **17.5%**

National Metro Comparison

National Rank (of 366)	% Severely Cost-Burdened
201 Buffalo, NY	14.7%
207 Madison, WI	14.8%
208 El Paso, TX	14.8%
235 Hartford, CT	15.6%
248 Durham-Chapel Hill, NC	16.0%
279 Trenton, NJ	17.0%
283 Springfield, MA	17.2%
294 Ann Arbor, MI	17.6%
298 Boston, MA	18.0%
300 Providence, RI	18.1%
302 Boulder, CO	18.2%
337 Bridgeport-Stamford, CT	20.5%
343 Greater New Haven	20.8%
358 New York, NY	22.9%
361 Santa Cruz, CA	23.0%

Summary

Moving Forward

As energy and construction costs rise, inefficient infrastructure is one of the greatest potential pitfalls along Greater New Haven's road to economic prosperity. Going forward, our policymakers must do better to align our infrastructure with economic needs. The cornerstones include the revitalization of neighborhoods that are struggling to keep up with the prosperity of the rest of our region, the re-purposing of urban land that does not currently function at its highest use (such as brownfields and obsolete highways), a more efficient connection of workers and jobs, and policy reforms to ensure a greater supply of attractive, accessible, and affordable housing. Please see the conclusion within Chapter 5 for a list of additional recommended policy practices.

Health is another potential barrier to the region's economic success. Although the people of Greater New Haven are healthy by national standards, we have much room to improve. The preponderance of evidence suggests that reducing levels of unemployment, stress caused by poverty and economic insecurity, and social disconnectedness would have a much larger impact on our health than any medical advances. Health is covered in more detail in other chapters of this report.

Finally, we must ensure that all of our residents experience high economic opportunity regardless of their age, gender, race, ethnicity, or immigration status. While this report focuses primarily on opportunity by neighborhood, we recognize that there are many other barriers to economic opportunity that go far beyond the scope of what can be included in a single report.

Additional Data on Economic Opportunity

In the process of writing this report, DataHaven considered a wide variety of data sources about the regional economy that could not be included this print edition due to space constraints. Please contact DataHaven for more information or requests for technical assistance. Public support and feedback will be necessary as we work with our partners, including our region's Comprehensive Economic Development Strategy (CEDS) program, to build a community indicators program that can track and build consensus around forward progress. Chapter 5 of this report discusses these next steps.

A few of the topics that we have recently analyzed at a neighborhood level are listed below. In many cases, overviews of these topics can be found within CEDS documents and reports that are posted online, as well as on websites of organizations such as the Workforce Alliance and the Partnership for Strong Communities. We plan to include a more in-depth analysis of these data in future releases of the Community Index:

- Workforce data: Quarterly wages, additional information about job growth, hiring, and firing patterns by industry sector, workforce development systems

- Transportation: Bus service quality as measured by route frequency and access to jobs and workers, walkability indices by neighborhood, bicycle and pedestrian infrastructure

- Housing data: New housing construction, housing permit activity, housing prices, vacant housing, foreclosures and foreclosure filings by town and neighborhood, homelessness

- Location affordability: Combined housing and transportation costs

- Economic development: Venture capital, IPOs, patents, planned development projects

Chapter 4

Community Health Needs

Introduction

The Importance of Health

In today's global economy, the wealth of a metropolitan area like Greater New Haven is largely determined by the health of its population. Employers and residents wish to invest in cities and neighborhoods where people are healthy, where the burden of health care costs is lower, and where productivity and human potential are at the highest possible level.

Greater New Haven historically has had a competitive advantage over other metropolitan areas, as we are a relatively healthy region compared to the United States on the whole. People in New Haven County are less likely to die prematurely than people in the US overall, and our area compares favorably with the United States on common measures of the leading causes of death. However, we have the potential to become an even healthier and more prosperous region.

Good Health Is Not Evenly Distributed

We believe that everyone should have the opportunity to lead a long and healthy life. But within Greater New Haven, health problems are significantly more common for some people, particularly for those who live in parts of the region with more limited resources.

Differences in health care access explain only a portion of the disparities in health outcomes that are observed within our region. Neighborhoods with more limited financial resources tend to have less access to other things that promote good health, like safe neighborhoods, high quality foods, and well paying jobs. Increasing access to educational opportunities, and resources like transportation, housing, and jobs within lower-income neighborhoods, would dramatically improve the health of our region as a whole. The interrelationship between health and other social issues is illustrated by Woolf, who estimates that if each adult in the United States had the death rate of those who attended college, the nation would save seven times more lives as the number of lives that are currently saved by medical advances. 55

Among the other conditions we look at, this assessment highlights the fact that premature births and injuries from violence disproportionately affect sections of the City of New Haven, especially its Black and Hispanic residents. Every year, these conditions cause a great loss of human potential and, cumulatively, the loss of many hundreds of years of life.

Chronic Diseases

According to the Centers for Disease Control, chronic diseases like heart disease, cancer, and diabetes are responsible for 70% of deaths and 75% of health care costs in the United States. Most of these diseases can be attributed in large part to excess weight, a lack of exercise, poor nutrition, and tobacco use. Because of this, our partner, CARE at the Yale School of Public Health, has focused on understanding the determinants and consequences of chronic disease and has been working to reduce obesity and chronic disease – especially in New Haven's low-income neighborhoods.

In this assessment, we find that Greater New Haven is no exception to the rising trend of overweight and obesity in the United States. According to a new study in the American Journal of Public Health, obesity may already account for 1 in 5 deaths of adults in the United States – a dramatic increase from previous generations. 56 Without major policy reforms to prevent obesity, the number of obesity-related deaths in America are likely to rise even further, because obesity among youth has tripled since 1980 (for those age 12-19, rising from 5% in 1980 to 18% in 2010). 57

Although smoking rates have declined nationally, from close to 50% of adults in the 1950s to around 20% today, many people in the Greater New Haven region still smoke on a regular basis. The good news is that the majority of daily smokers in our region have tried to quit in the last year. Programs focused on helping people who have decided to quit could reduce smoking rates in our area.

Cirrhosis, a chronic liver disease, is another issue of major concern to our health departments. A concerning number of residents within Greater New Haven are known to be at risk because they have a chronic Hepatitis C virus (HCV) infection. We believe that additional residents are unaware that they may also have this infection. Testing for HCV and ensuring the treatment of people with chronic HCV infection could significantly reduce the health impact of this public health problem.

About This Health Assessment

This chapter was created based on the work of a multi-agency coalition, the Partnership for a Healthier New Haven, described elsewhere in this report. Combined with the information on education, economics, and civic life presented throughout this entire Community Index, it is designed to meet Yale-New Haven Hospital's IRS requirements in Form 990 Schedule H and Notice 2011-52 that discuss the creation of a Community Health Needs Assessment, as well as to meet the New Haven Health Department's desire for a similar assessment as part of a national accreditation process.

For more information about the community health needs assessment process that led to this report, and the next steps that will take place under the framework of a Community Health Improvement Plan, please refer to the conclusion of this chapter.

Paul D. Cleary, Ph.D.

Dean, Yale School of Public Health

Although many residents of the Greater New Haven Region have relatively good health, there are unacceptable disparities by income and area of residence, which for many is related to socioeconomic status. One of the greatest opportunities for improving health in the region is to build bridges to the community, and translate cutting edge scientific findings into programs and actionable information for our most vulnerable neighbors. The Yale School of Public Health's Community Alliance for Research and Engagement (CARE), is a fitting example. CARE members have formed key public, private and neighborhood partnerships and are working actively to improve many of the conditions highlighted in this chapter, especially in the areas of the City with the highest prevalence of health problems.

A complex challenge to achieving optimal health lies in fostering an interdisciplinary approach to addressing the different issues highlighted in this report. For example, health is inextricably linked to economic opportunity, jobs, housing and civic engagement. This report is a comprehensive tool which can stimulate us all to think creatively and collaboratively about how to improve the health and overall quality of life of all those in the Greater New Haven Region, so that soon we can have an even better story to tell about all residents, not just the more fortunate among us.

Marna P. Borgstrom

Chief Executive Officer, Yale-New Haven Hospital

Improving the health of the communities we serve requires more than just the provision of healthcare services. There needs to be a commitment to education, to housing and to improving the overall quality of life in our community. It also requires people – people who are committed and passionate about what they do – people who can work collaboratively to make a difference in our community. This is the foundation for the development of the Community Index, which represents an opportunity to engage others in this dialogue. We are fortunate that in New Haven there are many organizations working together to help our community thrive and grow.

Health Outcomes and Targets

The Healthy People 2020 (HP2020) program sets ambitious health targets for the United States. Healthy People benchmarks and the 2020 targets allow us to monitor improvements to the health of the nation over time, and are often applicable at a local level as well.

The Healthy People 2020 program serves as a basis for many of the indicators selected to be included within this chapter, as well as in the report overall. For example, the high school graduation rate (see Chapter 2) is considered one of the program's "Leading Health Indicators" in part because high school graduates are significantly more likely to achieve their full health potential, are more likely to be employed, and less likely to become incarcerated, compared to those who do not complete high school.

Defined as New Haven County, our region already exceeds the Healthy People 2020 targets on many indicators. However, significant disparities exist by geography, income, race and ethnicity. Reducing these disparities – by removing the social and environmental barriers (or "social determinants of health") that prevent people from attaining their full health potential – is one of the best ways to achieve improved health outcomes across the entire Region.

Key Findings

Greater New Haven residents feel healthier than people in the United States. In the Center for Disease Control's 2012 Behavioral Risk Factor Surveillance System survey, 23% of residents in Connecticut and 23% in New Haven County reported their health as "excellent," compared to 19% of adults in the USA as a whole. In the 2012 DataHaven Wellbeing Survey, which asked the same question, 28% of adults in our 13-town region, including 33% in the Outer Ring, 28% in New Haven, and 24% in the Inner Ring, said they were in "excellent" health.

People in New Haven County are less likely to die prematurely when compared to people in the USA as a whole. Rates of premature death are particularly low within high-income neighborhoods in the City of New Haven, but are much higher in the city's low-income neighborhoods.

In the United States in 2011, the leading causes of death were heart disease, cancer, chronic lower respiratory disease, stroke, and accidents (unintentional injury). Injury (intentional and unintentional) was the leading cause of death in all people age 0 to 49. For heart disease, stroke, chronic lower respiratory disease, accidents, car accidents, suicide, and homicide, New Haven County's age-adjusted mortality rate is at or below the US rate, and also in many cases below the Federal Government's Healthy People 2020 target.

For breast and prostate cancers, both the death rate and the rate of new diagnosis were higher in New Haven County than they were in the United States. Death rates from lung cancer were lower within our area than they were in the United States.

In 2010, the percentage of people with diabetes and the obesity rate in New Haven County was similar to that of the United States. The percentage of people with asthma in New Haven County is higher than it is in the United States. Residents of low-income neighborhoods in New Haven are considerably more likely to have asthma.

From 2003 to 2009 in New Haven County, the percentage of babies born at a low birth weight, and the infant mortality rate, were similar to the rates seen in the United States as a whole.

The incidence rate of chlamydia was higher in New Haven County than it was in the US, but for gonorrhea the rate was lower. In 2009, the proportion of residents in New Haven County with HIV was higher than the US average.
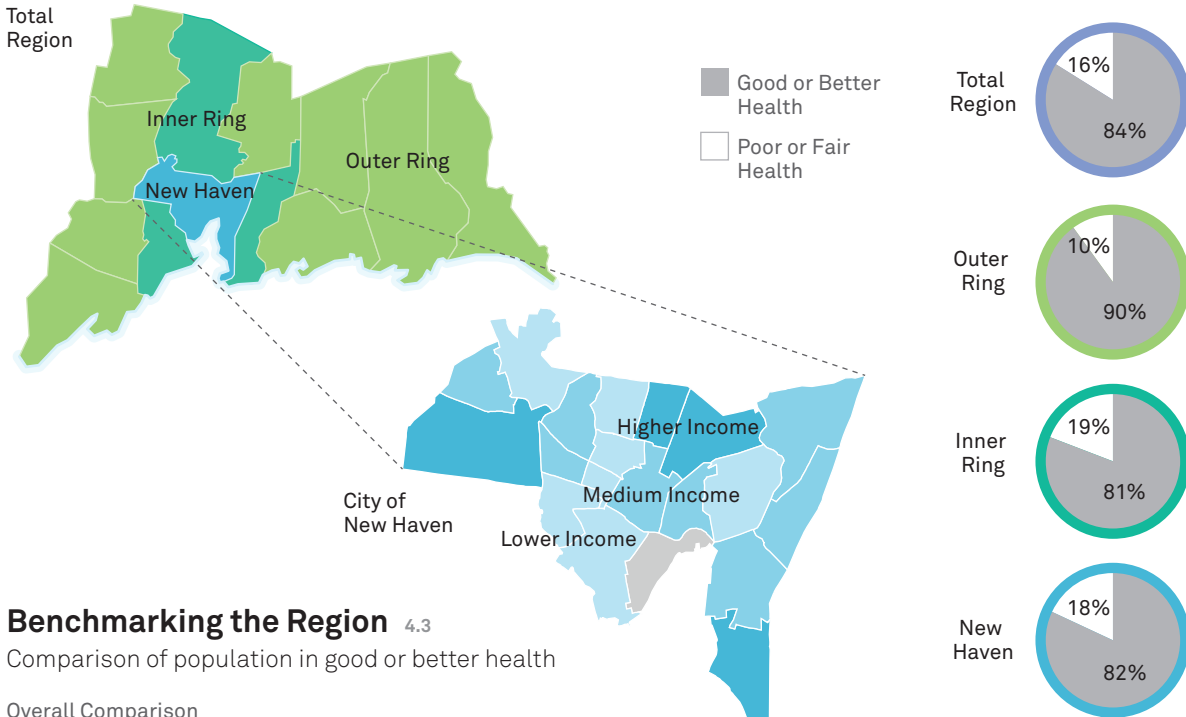
Comparisons of Healthy People 2020 Indicators 4.1

Indicator	Years	HP2020	US	CT	NH County	New Haven	High Income	Medium Income	Low Income
% health reported as excellent	2012	NA	19%	23%	23%	28%	38%	24%	25%
Premature Deaths per 100,000	2006-2010	NA	6851	5393	6029	8320	4533	7594	9011
Age Adjusted Mortality Rate per 100,000									
Heart Disease	2006-2010	101	135	102	99	115	70	118	104
Cancer (all types)	2006-2010	161	177	167	180	199	149	211	200
Cancer (female breast)	2006-2010	21	23	22	22	30	23	40	25
Cancer (lung)	2006-2010	46	42	33	34	44	34	49	46
Cancer (colorectal)	2006-2010	15	16	14	14	19	13	18	19
Cancer (prostate)	2006-2010	21	23	22	24	33	24	25	43
Chronic Lower Respiratory Disease	2006-2010	NA	42	33	34	31	19	34	29
Stroke	2006-2010	34	42	33	34	36	22	37	33
Accident (all types)	2006-2010	36	39	34	38	40	27	41	40
Accident (motor vehicle)	2006-2010	12	13	9	9	7	3	6	7
Accident (falls)	2006-2010	7	7	7	8	7	10	4	8
Intentional Injury (homicide)	2006-2010	6	6	4	4	10	4	7	15
Intentional Injury (suicide)	2006-2010	10	12	8	8	6	3	8	4
Diabetes	2006-2010	66	73	54	59	80	48	83	87
Cancer Incidence Rate per 100,000									
Female Breast	2006-2010	NA	120	136	136	NA	NA	NA	NA
Lung	2006-2010	NA	65	66	73	NA	NA	NA	NA
Colorectal	2006-2010	39	43	45	46	NA	NA	NA	NA
Prostate	2006-2010	NA	144	160	156	NA	NA	NA	NA
Prevalence 2010									
Obesity (adults >20)	2010/2012	31%	28%	23%	27%	29%	16%	34%	43%
Asthma	2010/2012	NA	13%	14%	14%	18%	14%	18%	23%
Diabetes	2010/2012	NA	9%	7%	9%	12%	3%	17%	14%
Cardiovascular Disease	2010/2012	NA	4%	4%	4%	NA	NA	NA	NA
Birth Outcomes									
Infant deaths per 1,000 live births	2003-2009	6	7	6	7	12	7	11	14
Low birth weight percentage	2003-2009	8%	8%	8%	8%	10%	8%	11%	11%
Infectious Diseases per 100,000									
Chlamydia Incidence	2010/2009	NA	452	382	479	1135	NA	NA	NA
Gonorrhea Incidence	2010/2009	NA	103	69	87	340	NA	NA	NA
HIV Prevalence	2010/2011	NA	340	360	452	1121	NA	NA	NA

Self-Rated Health Status, Fall 2012 4.2

What is it? The proportion of adults responding to a question asking them to rate their general or overall health as excellent, very good, good, fair, or poor.

Why is it important? Self-reported health status has been shown to be a relatively stable measure of general health and a good indicator of future disability, hospitalization or healthcare utilization, morbidity, and mortality.

Total Region

Inner Ring

Outer Ring

New Haven

City of New Haven

Higher Income

Medium Income

Lower Income

Good or Better Health

Poor or Fair Health

Total Region	16% / 84%
Outer Ring	10% / 90%
Inner Ring	19% / 81%
New Haven	18% / 82%
High Income	8% / 92%
Medium Income	20% / 80%
Low Income	22% / 78%

Benchmarking the Region 4.3

Comparison of population in good or better health

Overall Comparison

United States **83%**

Connecticut **86%**

National Metro Comparison

Comparison Metro Area	% in Poor or Fair Health	% in Good or Better Health
Madison, WI	9%	91%
Boulder, CO	9%	91%
Ann Arbor, MI	10%	90%
Bridgeport-Stamford, CT	10%	90%
Hartford, CT	10%	90%
New Haven County	12%	88%
Boston, MA	13%	87%
Springfield, MA	13%	87%
Buffalo, NY	14%	86%
Providence, RI	14%	86%
Trenton, NJ	15%	85%
Durham-Chapel Hill, NC	16%	84%
New York, NY	18%	82%
Santa Cruz, CA	18%	82%
El Paso, TX	26%	74%
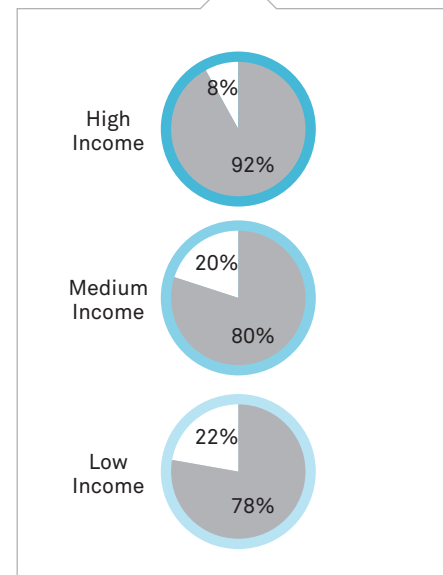
Compared to the nation, adults living in the Greater New Haven region are more likely to report their health as excellent. In 2012, in the Greater New Haven area overall, 84 percent of residents reported their health to be excellent, very good, or good, including 60 percent who reported it to be excellent or very good. In New Haven's Low Income neighborhoods, only 40 percent of residents reported their health to be excellent or very good.

Healthy Weight

Maintaining healthy weight significantly decreases risk of heart disease, stroke, diabetes, and certain cancers. Unfortunately, as a nation, only one of two adults and two of three children meet healthy weight guidelines. Similarly, in Greater New Haven, overweight, obesity and their consequent health conditions are far too common. Unaddressed, these health issues will result in massive costs to our regional economy and to population wellbeing.

The Partnership for a Healthier New Haven has identified healthy weight as one of the top priorities for improving the health of Greater New Haven. The Partnership is addressing this issue directly through multi-sector engagement ranging from City Hall to community based organizations and in neighborhoods, schools, faith-based organizations and businesses.

Adults

Although overweight and obesity were slightly less common in New Haven County than in the United States from 2002-2010, rates are still far too high. In 2012, 66 percent of adults in Greater New Haven were overweight or obese, including 64 percent in the City of New Haven, 69 percent in the surrounding Inner Ring, and 58 percent in the Outer Ring. In low-income neighborhoods within New Haven, 69 percent of adults are overweight and 43 percent are obese, putting them at serious risk for adverse health outcomes.

Children

Overweight and obesity are rapidly rising among children. For the first time ever, this generation of children is projected to have shorter life expectancies than their parents. One-third of children in the US between the ages of 2-19 are overweight or obese. [58] Maintaining healthy weight among children is of particular concern in New Haven: in 2011, one-half of middle school students in the city's public schools did not meet guidelines for healthy weight. Children who do not meet these guidelines are more likely to be at risk for overweight and obesity as adults. We must intervene with children as early as possible in order to reverse these trends.

Obesity Rates over Time 4.4

Changes in obesity levels, 2002-2010

Legend: United States, Connecticut, Greater New Haven
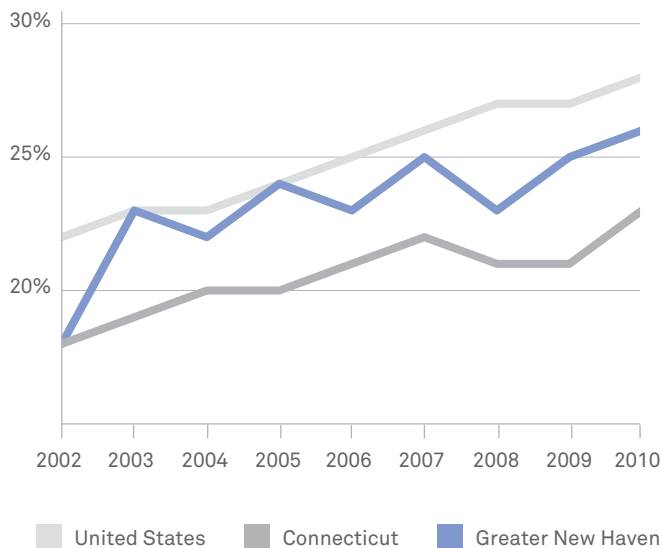
Benchmarking the Region 4.5

Comparison of population at healthy weight, 2006-2010

Overall Comparison

United States **36%** — Connecticut **39%**

National Metro Comparison

| Comparison Metro Area	% of Population at Healthy Weight
Boulder, CO	52%
Santa Cruz, CA	47%
Bridgeport-Stamford, CT	44%
Boston, MA	42%
New York, NY	41%
Hartford, CT	39%
Trenton, NJ	38%
Ann Arbor, MI	38%
Durham-Chapel Hill, NC	38%
El Paso, TX	38%
Springfield, MA	38%
Madison, WI	36%
New Haven County	36%
Providence, RI	35%
Buffalo, NY	35%

Overweight and Obesity: Disparities

Although unhealthy body weight is a health issue for the whole Greater New Haven region, it is much more of a challenge for low-income individuals and people who live in areas with limited economic resources.

In Greater New Haven in 2012, the percentage of people who are overweight was not very different between low income and high income neighborhoods. However, the percentage of people who were considered obese was considerably higher in low income neighborhoods than in high income neighborhoods.

Unhealthy Weight Disparities

Relationship of Fitness to School Poverty, 2011 4.6

Overweight and Obesity by Location, Fall 2012 4.7

New Haven Neighborhood Areas
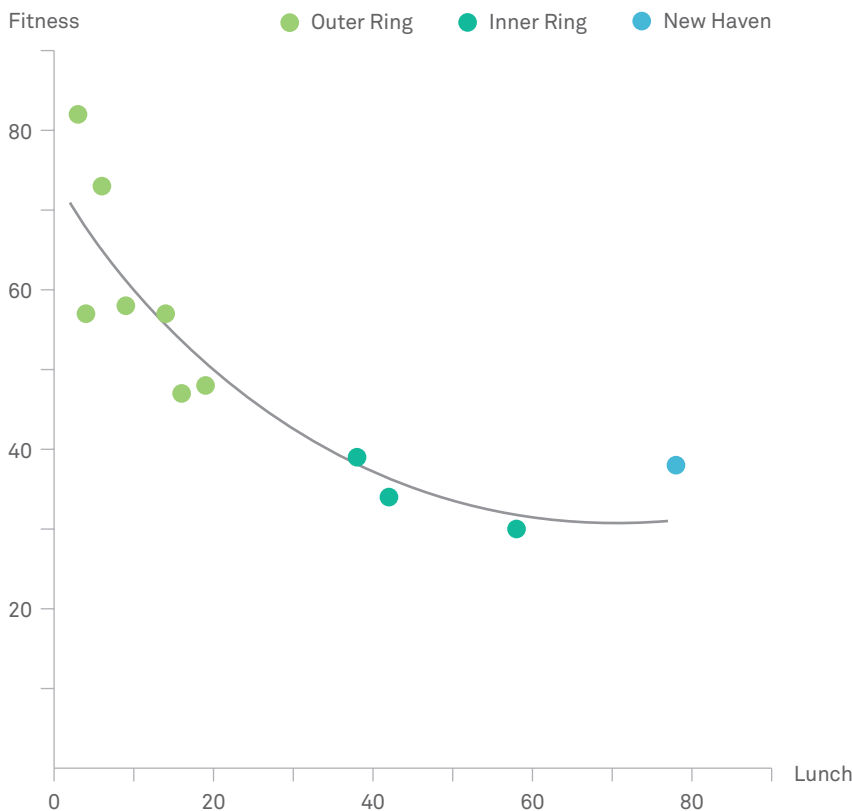
Children Body weight is associated with physical fitness. In 2010-2011, school districts with more students who are eligible for free and reduced lunch had a lower proportion of students meeting physical fitness standards. This suggests that household income level in some way relates to physical activity or diet in children. Several recent studies by CARE have documented associations between student achievement, "connectedness" that students feel towards their school, and body mass index. 59 This suggests that improving the health of students would lead to significant academic gains.
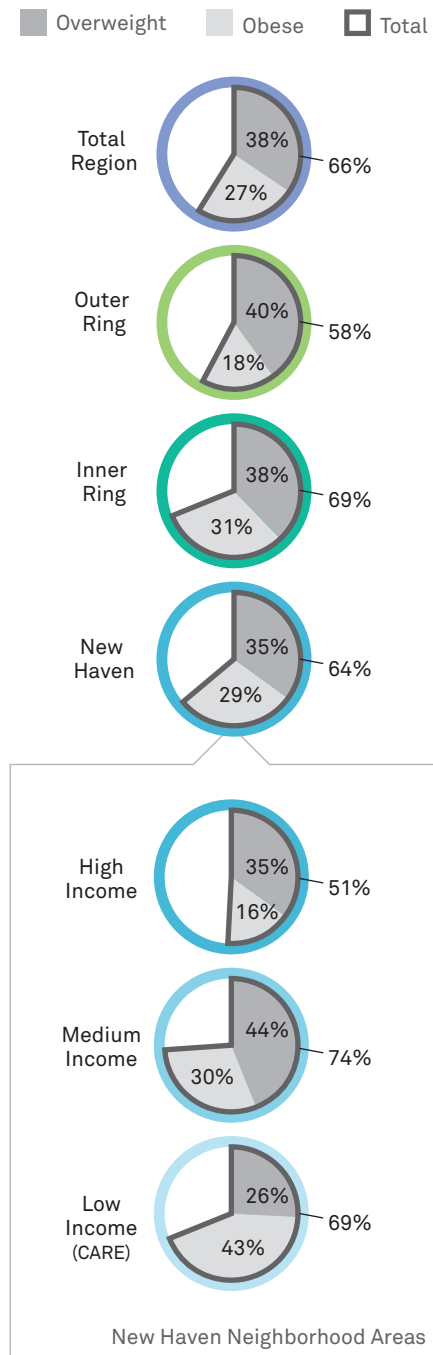
Overweight and Obesity: Determinants

The higher proportion of overweight and obesity in areas with more limited economic resources is due to the fact that these areas have lower access to resources that support good health, including healthy food. They also experience far greater levels of food insecurity. Urban communities are more likely to have environmental characteristics that support physical activity, like sidewalks, mixed-use neighborhoods with stores and places to go, and public transportation. On the other hand, there are also barriers to physical activity, including personal safety concerns and streets with traffic conditions that make it unpleasant to walk or bicycle.

Food Insecurity and "Healthy Food" Insecurity is significantly associated with the risk of overweight and obesity. The reasons for this may include the physiological and mental stress associated with financial insecurity, the habits of overeating when food is available, and the inability to consume higher-quality foods that cost more money or take more time to prepare. 60

In Greater New Haven in 2012, 20% of adults said that they did not have enough money to buy food in the last year. This figure was 10% in the Outer Ring, 15% in the city's high-income neighborhoods, 24% in the Inner Ring, 29% in the city's medium-income neighborhoods, and 38% in the city's low income neighborhoods. The greatest disparities were by household income level (see Chapter 5).

Results from the Fall 2012 CARE survey of New Haven's low-income neighborhoods provide additional evidence that access to healthy food is a major public health concern. For example, 44% of adults living in New Haven low-income neighborhoods worried that their food would run out before they got more money, and about 40% said they were not always able to afford to buy vegetables, fruit, healthy oils or whole grains. Drinking sugar sweetened beverages also was very common: 47% reported drinking sugar-sweetened beverages seven days per week (2012), in most cases two or more per day. Nearly 70% of restaurants within these neighborhoods were fast food establishments. 61 Furthermore, according to CARE's work within the New Haven Public Schools, the majority of students were not meeting daily fruit or vegetable consumption in 2011, with 82% consuming less than 5 servings a day.
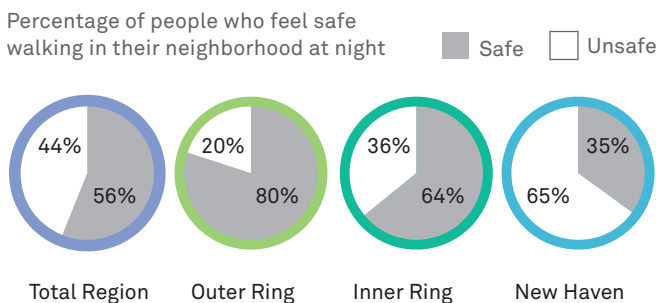
Physical Activity Research shows that people who live in more walkable communities are more likely to be active. 62 In 2012, residents of New Haven were significantly more likely than suburban residents to agree that their community had stores and other amenities within walking distance, safe sidewalks, and adequate public transportation, all of which can enhance walkablity and increase physical activity among residents. On the other hand, concerns about personal safety and the safety of bicycling in traffic were evident in many city neighborhoods. In most neighborhoods, city residents were also somewhat less likely to agree that they had access to high-quality recreational facilities or parks than were residents of suburban areas.

Unhealthy Weight Social Determinants

Food Access, Fall 2012 4.8

Always able to buy vegetables | Sometimes able to buy vegetables | Never able to buy vegetables

60%   **36%**   **4%**

New Haven Low Income Neighborhood Areas

Perceived Safety, Fall 2012 4.9

Percentage of people who feel safe walking in their neighborhood at night

Safe | Unsafe

44% / 56% — Total Region
20% / 80% — Outer Ring
36% / 64% — Inner Ring
35% / 65% — New Haven
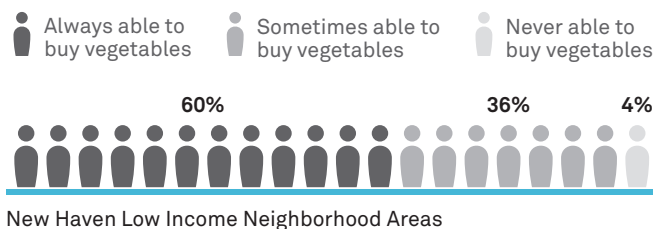
Benchmarking the Region 4.10

Population with no leisure time physical activity, 2010

National Metro Comparison

Comparison Metro Area	% with No Leisure Physical Activity
Boulder, CO	11%
Santa Cruz, CA	12%
Madison, WI	19%
Bridgeport-Stamford, CT	19%
Ann Arbor, MI	19%
Durham-Chapel Hill, NC	20%
Boston, MA	21%
El Paso, TX	22%
Hartford, CT	22%
Springfield, MA	24%
Trenton, NJ	25%
New York, NY	25%
New Haven County	26%
Providence, RI	26%
Buffalo, NY	27%

DataHaven Greater New Haven Community Index 2013

Health Disparities

While the health of the region is good overall, good health is not evenly distributed throughout Greater New Haven, and health outcomes differ by area. Similar to obesity, people with fewer economic resources are more likely to be affected by certain diseases.

Heart Disease
Heart disease is a common cause of death with the vast majority occurring in people over 65. Only about 20% of deaths occur in those who are less than 65 years. 63 Death from heart disease under 65 is considered premature. 64 Factors such as high blood pressure, obesity, diabetes and smoking increase the risk of premature heart disease. 65 Within Greater New Haven, premature heart disease/heart attack (in those under age 65) is higher in New Haven than in the Inner Ring or Outer Ring suburbs, and the New Haven Health Department observes large disparities in the mortality rate by neighborhood.

Asthma
Visits to the emergency room for asthma are considered largely avoidable if the disease is well controlled through medical management and by avoiding asthma triggers. 66 Avoiding environmental triggers may be more difficult in urban settings, however, where there is greater exposure to pollutants, transportation-related emissions, and airborne allergens. 67

From 2010 to 2012, there was a stark difference in the number of visits to an emergency room for asthma among New Haven, the Inner Ring and the Outer Ring. The prevalence of asthma is somewhat higher in New Haven than in the other communities, which may explain some of the difference. However, the higher number of severe attacks is also likely caused by barriers to primary care, poorer medical management of asthma, and greater exposure to environmental triggers.

Mental Health
Mental health is also an important issue in the region, and substantial disparities exist when the city is compared to the surrounding area. The age standardized rate of emergency department hospitalizations for neurosis and psychoses in New Haven was 4,149 per 100,000. The Inner Ring had a rate of 1,765 per 100,000, and the Outer Ring had a rate of 1,650 per 100,000. Data collected by the Wellbeing and CARE surveys in Fall 2012 also show that significant differences in mental health may exist between lower income and higher income residents. Due to limited space, this issue, along with many parallel concerns such as discrimination and stress, will be explored in more detail in future versions of this report.

Heart Disease
Prevalence and Age-Adjusted Mortality Rates

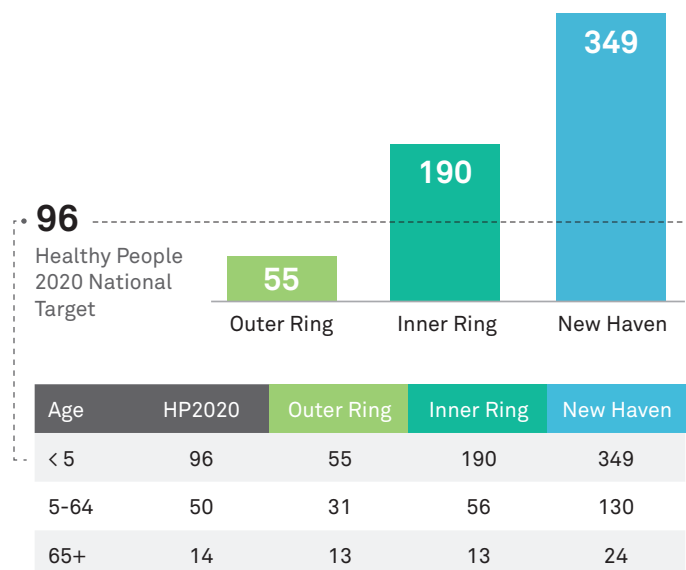### Prevalence by Age, Fall 2012 4.11

Age	Total Region	Outer Ring	Inner Ring	New Haven
< 65	5%	7%	9%	23%
65+	22%	21%	25%	14%

AAMR by New Haven Neighborhood Area, 2006-2010 4.12

Income Level	Age-Adjusted Mortality Rate
Low Income	104
Medium Income	118
High Income	70
Total	115

Asthma 4.13
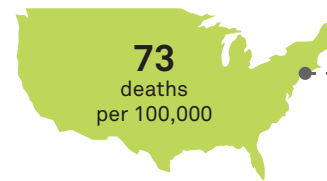ER visits per 10,000 people, annual average, 2010-2012

96
Healthy People 2020 National Target

Age	HP2020	Outer Ring	Inner Ring	New Haven
< 5	96	55	190	349
5-64	50	31	56	130
65+	14	13	13	24

Diabetes Age Adjusted Mortality Rates , 2006-2010 4.14

| 41-50 | 51-60 | 61-70 | 71-80 | 81-90 |

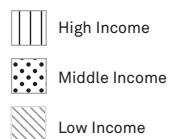Age Adjusted Mortality Rates (per 100,000)

United States

73
deaths
per 100,000

Connecticut

54
deaths
per 100,000

Total Region

Inner Ring

75
deaths
per 100,000

New Haven

80
deaths
per 100,000

Outer Ring

51
deaths
per 100,000

**Healthy People 2020
National Target**

66
deaths
per 100,000

City of New Haven

|||| High Income

Middle Income

Low Income

High Income

48
deaths
per 100,000

Low Income

87
deaths
per 100,000

Medium Income

83
deaths
per 100,000
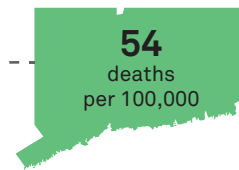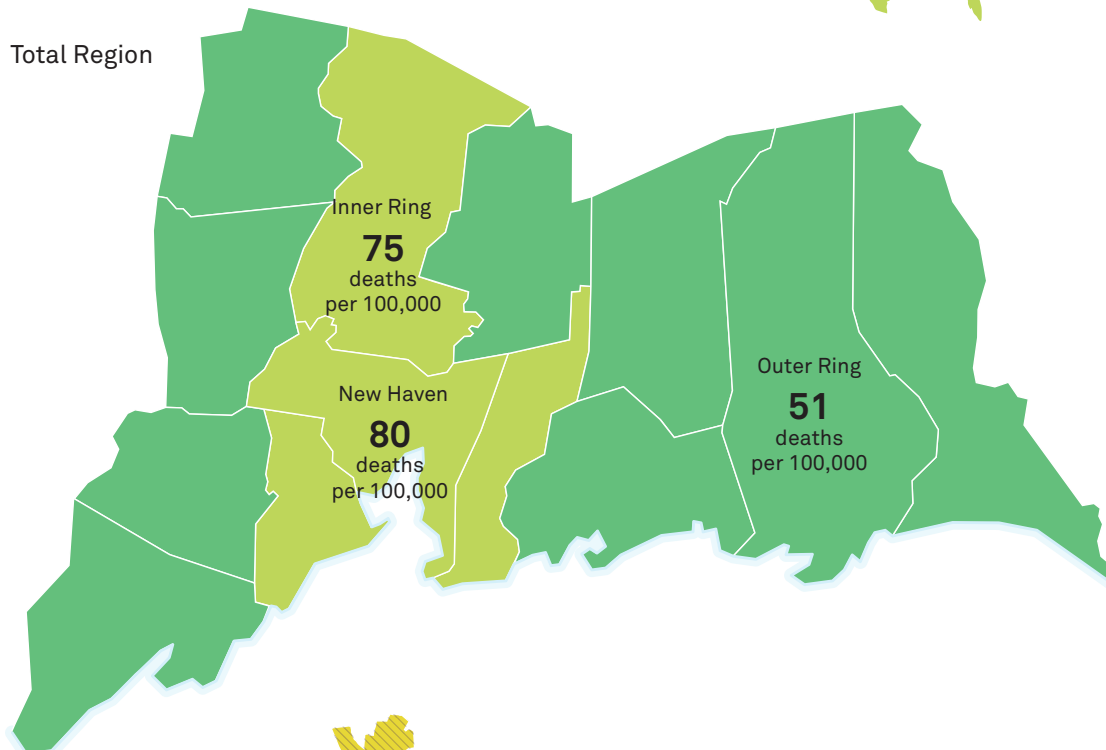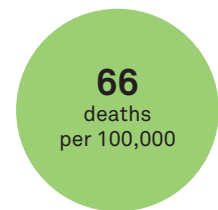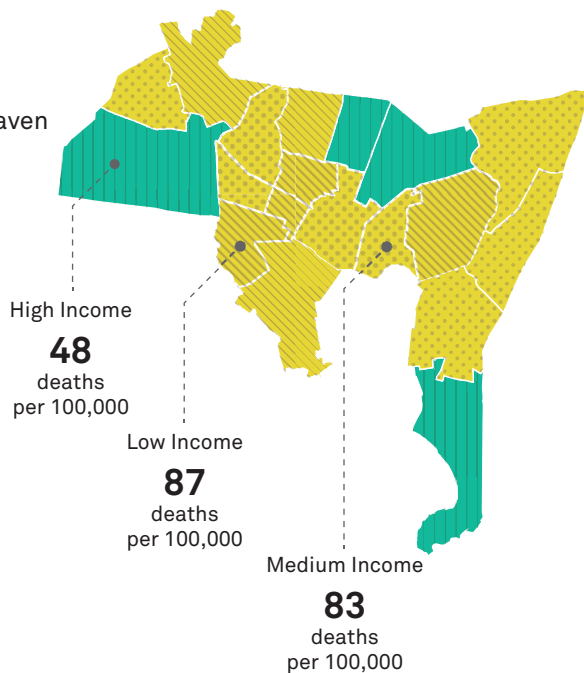
Diabetes

Diabetes has major adverse impacts on both the quality and length of life. From 2006-2009, the age adjusted death rate from diabetes was considerably higher for New Haven and the residents of Inner Ring communities than residents of the Outer Ring even though the percentage of people with diabetes in the different communities was similar. This suggests that people in New Haven and the Inner Ring communities have greater challenges managing the harmful effects of diabetes. These challenges may include poorer access to health care, high quality food and safe environments in which to exercise.

Please see page 49 for diabetes prevalence rates for all of the above geographies.

Health Insurance and Health Care

The vast majority of New Haven residents have health insurance coverage, but there are barriers to care that are more common among lower income residents. These barriers to care may contribute to the observed health disparities in the Greater New Haven region.
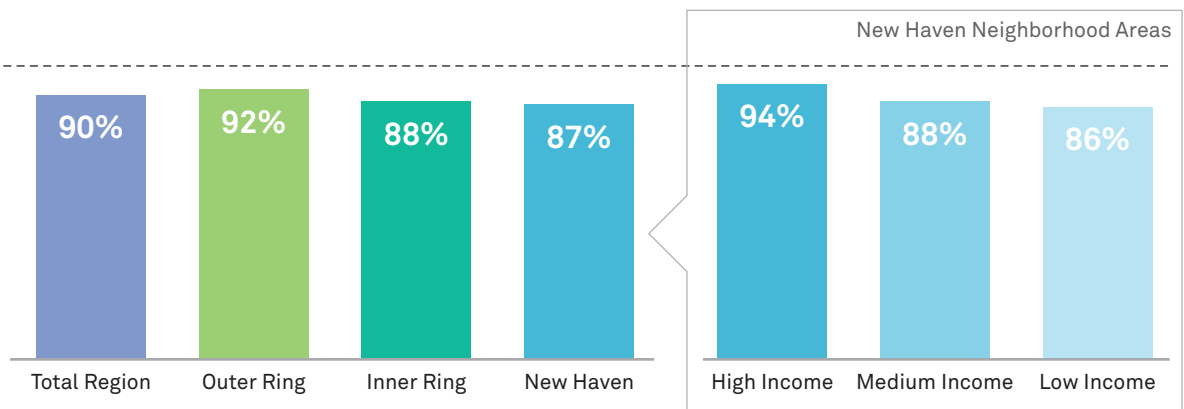
Health Insurance Coverage

In Greater New Haven in 2012, almost 100% of residents within the highest income group had health insurance coverage, but only 80% of those with incomes less than $30,000 had health insurance coverage.68 When looking at New Haven residents under the age of 65 in 2012, higher income residents were primarily covered through work with private insurance while lower income residents were primarily covered through governmental insurance programs like Medicare and Medicaid.

Access to health care has been identified as a priority issue by the Partnership for a Healthier New Haven, as well as by the State Department of Public Health. With the implementation of the Affordable Care Act, the number of uninsured adults in Connecticut is projected to decrease. We recognize that there are a variety of data sources available that can help illustrate current and potential levels of health insurance coverage among adults, and plan to publish an appendix with additional analysis of this topic in the coming year.

Health Insurance Among Adults
Age 18+, Fall 2012   4.15

				New Haven Neighborhood Areas		
100% Healthy People 2020 National Target	90%	92%	88%	87%	94%	88%	86%
	Total Region	Outer Ring	Inner Ring	New Haven	High Income	Medium Income	Low Income

Barriers to Care

Lack of health insurance is not the only potential financial barrier to health care. Other potential financial barriers include co-pays, deductibles, other gaps in insurance coverage and the need to take time off work to go to a medical appointment. In Fall 2012, 37% of adults with household incomes less than $50,000 put off medical or dental treatment because of cost, compared to 25% in the Greater New Haven region as a whole. 69 Additionally, within New Haven's low income neighborhoods, 2 out of 10 adults had difficulties paying for prescription medications. 70

The MOMS Partnership interviewed almost 900 mothers in New Haven in 2012. Three quarters of those interviewed reported an emotional health need, such as depression, stress, or a traumatic event. One third reported receiving treatment for stress, sadness, depression or anxiety. One mother reflected the sentiment of many when she reported that "[Mothers don't get help because of] fear, embarrassment, and not knowing where to look for help." 71

Emergency Department Utilization

In Greater New Haven, 4 in 10 lower income residents visited the emergency department in the past year, compared to only 2 in 10 higher income residents. A number of factors could cause people to be more likely to visit an emergency department. Lack of insurance or other financial constraints might cause people to develop more severe disease if, for example, they delay care or don't fill a prescription. A shortage of primary care providers that makes it difficult to get a primary care appointment could also increase use of emergency departments for urgent and non-urgent care. Finally some people may have a preference for getting non-urgent care in the emergency room. 72

Health Insurance Coverage Status, 2012 4.16

Estimates of uninsured population

Uninsured	United States	New Haven County		City of New Haven	
Total	15%	83,709	10%	17,837	14%
Age 0-17	7%	7,648	4%	1,708	6%
Age 18-64	21%	74,533	14%	16,050	19%
Age 65+	1%	1,528	1%	79	1%
Male	16%	47,084	12%	10,863	18%
Female	13%	36,625	8%	6,974	10%
Black	17%	12,981	12%	5,937	12%
White	10%	38,244	7%	2,351	6%
Hispanic	29%	26,876	20%	8,941	27%
Native Born	12%	58,221	8%	10,459	10%
Foreign Born	33%	25,488	24%	7,378	37%

Benchmarking the Region 4.17

Comparison of adults without health insurance, 2009-2011

Overall Comparison

United States **18%**

Connecticut **11%**

National Metro Comparison

National Rank (of 366)	% of Adults Without Health Insurance
3 Springfield, MA	5.2%
4 Boston, MA	5.6%
13 Madison, WI	8.2%
14 Buffalo, NY	8.6%
23 Ann Arbor, MI	9.0%
29 Hartford, CT	9.3%
43 New Haven County	10.1%
52 Providence, RI	10.6%
91 Boulder, CO	13.1%
100 Trenton, NJ	13.5%
110 Bridgeport-Stamford, CT	13.8%
164 New York, NY	15.7%
207 Durham-Chapel Hill, NC	17.4%
211 Santa Cruz, CA	17.7%
363 El Paso, TX	35.2%

Violence

Violence is an important health issue in New Haven, and there is a vast disparity in death rates due to violence when comparing the city to the Inner Ring and Outer Ring. Within New Haven, violence is also not evenly distributed, with some neighborhoods more affected than others. Gun violence disproportionately affects young Black and Hispanic males.

Deaths from Assault

From 2007-2010, there were approximately 12.1 deaths from violence per 100,000 residents per year in New Haven (crude death rate) and 3.4 deaths per 100,000 per year in the Inner Ring. There were only 3 deaths in the Outer Ring during this time period.

Nonfatal Assault

There are similar geographical disparities for nonfatal assaults. The annual number of emergency room visits for assault from 2010 to 2012 was 451 per 100,000 New Haven residents. This is more than twice as high as the Inner Ring (182 per 100,000) and four times as high as the Outer Ring (106 per 100,000).

Violent Crime Rates by Neighborhood

Violent crime includes murder, rape, robbery, and aggra-vated assault. Violent crime rates are similar to or below the statewide average (3 crimes per 1,000 residents per year) in the Inner and Outer Ring, although there are a few neighborhoods with higher rates. Within New Haven, vio-lent crime rates from 2005 through 2012 were much higher than the statewide average in the Hill, Newhallville, Dixwell, Dwight, Edgewood, West River, Wooster Square/Mill River, and Fair Haven, where rates by Census Tract ranged from 18 to 30 crimes per 1,000 residents per year. Meanwhile, violent crime rates in Westville and East Shore were lower than the state (2 per 1,000), and rates in East Rock and Fair Haven Heights (about 5 per 1,000), and West Rock, Pros-pect Hill, and Annex (about 8 per 1,000) were lower than the citywide average. Downtown is also relatively safe. 73

Deaths from Assault: Age Adjusted Mortality Rates, 2006-2010 4.18

Rate of Deaths from Assault (per 100,000)

| 3-4 | 5-6 | 7-8 | 9-10 | 11-15 |

City of New Haven

High Income
Middle Income
Low Income

High Income
4
deaths
per 100,000

Low Income
15
deaths
per 100,000

Medium Income
7
deaths
per 100,000

United States
6
deaths
per 100,000

Connecticut
4
deaths
per 100,000

New Haven County
4
deaths
per 100,000

Healthy People 2020
National Target
6
deaths
per 100,000

New Haven
10
deaths
per 100,000

Violence: Impacts

Homicide in New Haven leads to a great loss in human potential, since most victims are adolescents or young adults. Violence can also cause nonfatal injuries and psychological harm. The majority of New Haven residents will not be physically injured through violence, but the indirect impacts from a perceived lack of security can cause stress and reduce physical activity.

Deaths from Assault From 2000 to 2010, assault was the primary cause of death in only 1.6 percent of total deaths among New Haven residents. However, it was the cause of 32 percent of total deaths among all men age 15-34.

From 2000 to 2010, 79 percent of murders in New Haven involved guns. Almost all of the victims of gun violence were Black or Hispanic and male. Half of the murder victims were 30 years old or less.

Since most victims were young men who would have likely had many more years of life, assault contributes to a large number of potential years of life lost across the city, comparable to that of cancer, heart disease, and accidents.

Indirect Impacts from Violence Although most New Haven residents will not be physically harmed through violence, fear of violence can have detrimental effects on the mental health and physical activity of the community. 74

In most sections of Greater New Haven, including New Haven's high-income neighborhoods, the majority of adults report feeling safe to walk in their neighborhood at night. 75 But within New Haven's low income neighbor-hoods (Dixwell, Dwight, Fair Haven, Hill, Newhallville, West River, West Rock) between 67 and 77 percent of adults reported feeling unsafe to take walks at night, and 3 in 10 felt unsafe to take walks during the day. 76

In 2011, 823 New Haven residents were asked how they would envision a healthier New Haven. 77 One person wrote: "There are some great resources in the city for outdoor recreation - East Rock Park, Edgewood Park, streets with great sidewalks...I've ran a few times in the Dwight neighborhood, but it's poorly lit at dawn/dusk and I don't feel safe. I think that a healthier New Haven needs (1) a better infrastructure for people who want to be physically active, and (2) better safety measures, like lighting, to make people who are outside feel safe."

Deaths from Firearms in New Haven, 2000-2010 4.19

Percent of deaths by gender, race/ethnicity, and age (n = total number of deaths, 2000-2010)

Sex: 7% n=9 (Female), 93% n=118 (Male)

Race / Ethnicity: 4% n=5 (White), 19% n=24 (Hispanic), 76% n=96 (Black)

Age: 5% n=6, 2% n=3, 8% n=10, 40% n=51, 45% n=57 — 0-14, 15-24, 25-34, 35-44, 45+
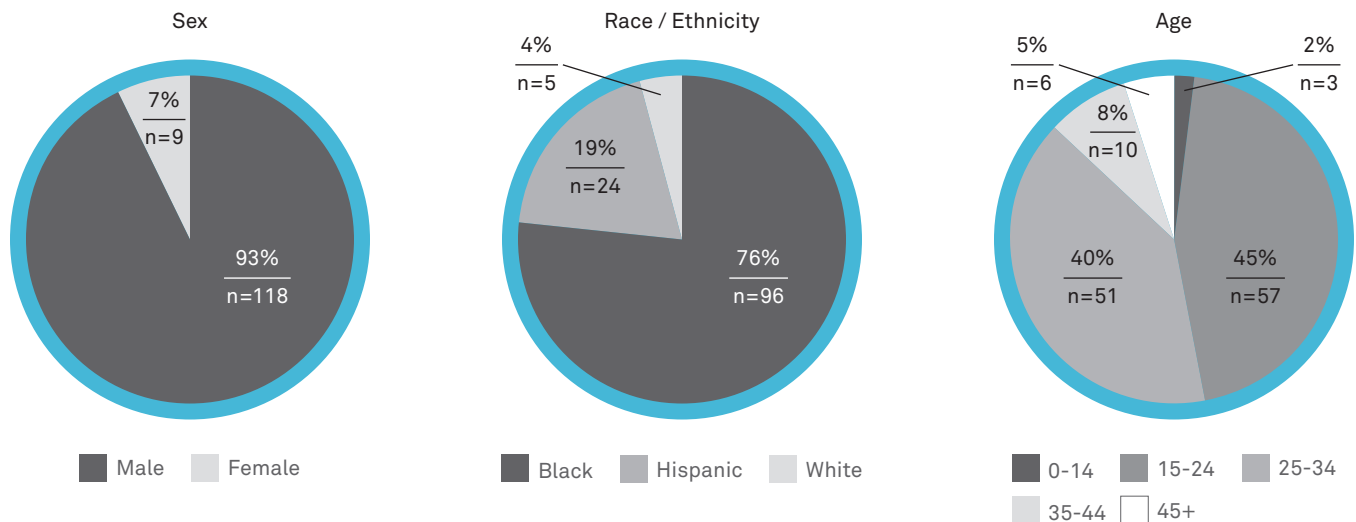
Years of Potential Life Lost (YPLL) to Age 65, 2006-2010 4.20

Cause	N	YPLL	Average YPLL
Heart Disease	880	2,704	3.1
Cancer	998	3,602	3.6
Accident	219	3,881	17.7
Assault	80	2,915	36.4
Perinatal Conditions	73	4,742	64.9

DataHaven Greater New Haven Community Index 2013

Maternal and Child Health

Infant and fetal mortality cause a substantial loss of human potential, and not all communities are equally affected. New Haven has higher infant and fetal death rates than the surrounding region. As is true across the United States, the infants of Black women have the highest death rates compared to those of both White and Hispanic women. This difference is primarily due to very low birth weight caused by premature birth.

Benchmarking the Region 4.21
Percent of births that are Low Birth Weight, 2003-2009

National Metro Comparison

Comparison Metro Area	% Low Birth Weight
Santa Cruz, CA	6%
Madison, WI	6%
Bridgeport-Stamford, CT	7%
Ann Arbor, MI	7%
Boulder, CO	8%
Providence, RI	8%
Boston, MA	8%
Springfield, MA	8%
Buffalo, NY	8%
Hartford, CT	8%
New Haven County	8%
New York, NY	9%
El Paso, TX	9%
Durham-Chapel Hill, NC	9%
Trenton, NJ	9%

Low Birth Weight
Low birth weight increases the risk of fetal and infant mortality, as well as the development of other chronic diseases later in life, such as high blood pressure, diabetes, and heart disease. Certain health behaviors, like smoking and using alcohol or drugs, may increase risk of premature births and low birth weight infants, defined as those who are born weighing less than 2,500 grams (5.5 pounds).

In the United States, Connecticut, New Haven County, and high-income neighborhoods within the City of New Haven, roughly 8 percent of all infants were born with a low birth weight between 2003 and 2009 (see page 49). However, in middle and low income neighborhoods within the City of New Haven, the low birth weight percentage was significantly higher – 11 percent of all infants. Black women were much more likely to have low birth weight babies than White or Hispanic women. Lower birth weights account for most of the excess deaths in the premature infants of Black women. Controlling for birth weight, the infants of Black mothers did not have lower survival. This suggests that social factors rather than health care access were responsible for the higher fetal and infant mortality rate for the infants of Black women.
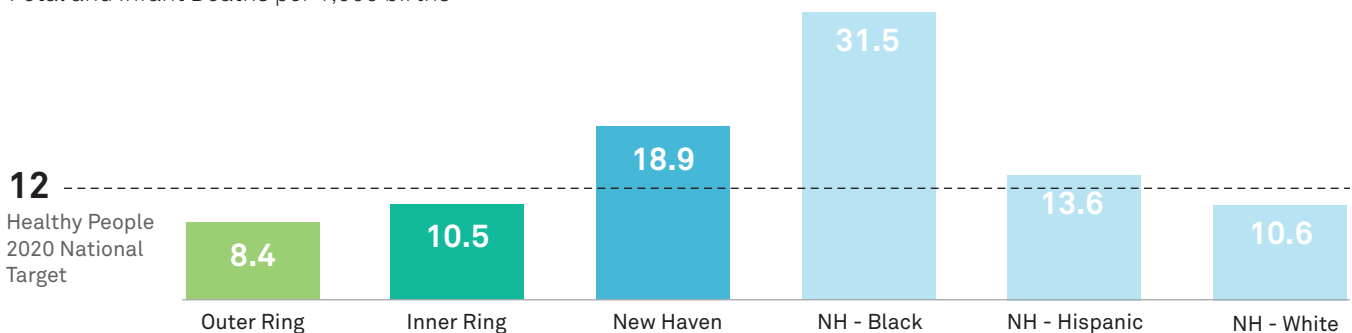
Fetal and Infant Deaths
From 2006 to 2010, the Infant and fetal death rates were higher than the Healthy People 2020 targets in New Haven, but are lower than the target in both the Inner Ring and Outer Ring. In New Haven, conditions originating in the perinatal period contributed to a total of 4,742 lost years of life from 2006-2010 (using age 65 as a cutoff), more than heart disease, cancer, violence or accident.

In New Haven in 2006-2010, the fetal and infant death rate among babies of Black women was above 30 per 1,000 births. This is considerably higher than that among the babies of White and Hispanic women, and is two and a half times higher than the Federal Government's Healthy People 2020 target of 12 per 1,000 births.

Fetal and Infant Mortality by Location and Race/Ethnicity, 2006-2010 4.22
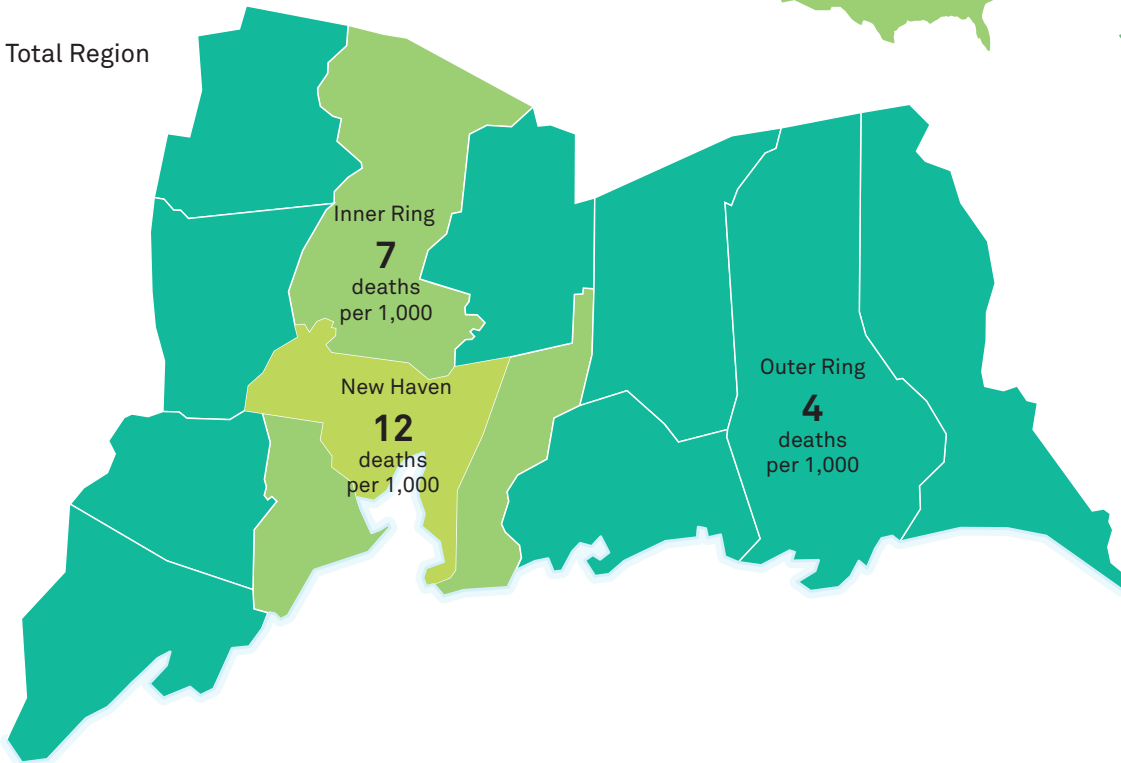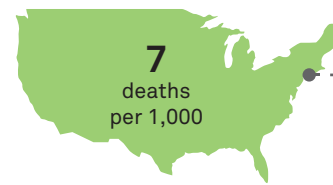Fetal and Infant Deaths per 1,000 births

	Outer Ring	Inner Ring	New Haven	NH - Black	NH - Hispanic	NH - White
	8.4	10.5	18.9	31.5	13.6	10.6

12
Healthy People 2020 National Target

Infant Mortality Rates, 2003-2009 4.23

| < 5 | 6 | 7 | 8-12 | 13+ |

Infant Mortality Rate (per 1,000 Live Births)

United States

7
deaths
per 1,000

Connecticut

6
deaths
per 1,000

Total Region

Inner Ring
7
deaths
per 1,000

New Haven
12
deaths
per 1,000

Outer Ring
4
deaths
per 1,000

Healthy People 2020
National Target

6
deaths
per 1,000

City of New Haven

||| High Income

Middle Income

Low Income

High Income
7
deaths
per 1,000

Low Income
14
deaths
per 1,000

Medium Income
11
deaths
per 1,000
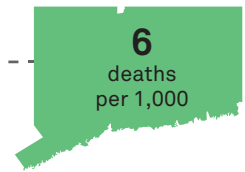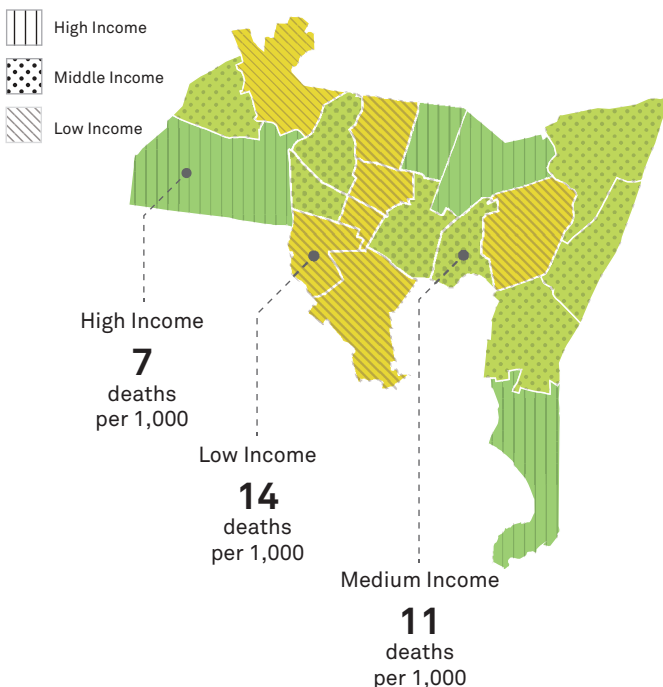
Benchmarking the Region 4.24

Comparison of Infant Mortality Rates, 2003-2009

National Metro Comparison

Comparison Metro Area	Infant Mortality Rate
Santa Cruz, CA	4.0
El Paso, TX	4.5
Bridgeport-Stamford, CT	4.6
Madison, WI	4.6
Boulder, CO	4.9
Boston, MA	5.1
New York, NY	5.3
Springfield. MA	5.8
Ann Arbor, MI	5.8
Hartford, CT	6.2
Providence, RI	6.5
New Haven County	7.3
Durham-Chapel Hill, NC	7.3
Buffalo, NY	7.8
Trenton, NJ	8.1

Smoking

We know that smoking greatly increases the risk of certain types of cancers, cardiovascular disease, and respiratory diseases. 78 Rates of smoking within the Inner Ring and the City of New Haven are higher than they are in the state as a whole. The majority of current smokers have attempted to quit smoking for at least 24 hours in the last year. This demonstrates the importance of intervention strategies that help people in their efforts to quit in addition to those that focus on educating people on the dangers of smoking.

Current Smokers

More people smoke in New Haven than in the Inner Ring or Outer Ring: 23 percent of New Haven residents are current smokers, compared to 17 percent of Inner Ring residents and 13 percent of Outer Ring residents. Within the city of New Haven, rates of current smoking range from 7 percent of adults within high income neighborhoods to 25 percent of adults within low income neighborhoods. 79

Attempts to Quit Smoking

The majority of smokers throughout the Greater New Haven region have attempted to quit smoking. Within New Haven's low income neighborhoods, 1 in 2 current smokers stopped smoking for over 24 hours in the last year. 1 in 5 current smokers rated their readiness to quit smoking as 7 out of 10 or higher. 80

Secondhand Smoke

Secondhand smoke can have detrimental health effects on exposed individuals who do not smoke themselves. Currently, 24 percent of New Haven middle-school students report that someone smoked in their home while they were present. 81

Percent of Population That Currently Smokes, Fall 2012 4.25

New Haven Neighborhood Areas

| 12% Healthy People 2020 National Target | US (2010) 17% | Connecticut (2010) 13% | Total Region 17% | Outer Ring 13% | Inner Ring 17% | New Haven 23% | High Income 6% | Medium Income 25% | Low Income 26% |

Attempts to Quit in Greater New Haven, Fall 2012 4.26

Yes
No

Outer Ring 33% / 67%
Inner Ring 42% / 58%
New Haven 36% / 64%
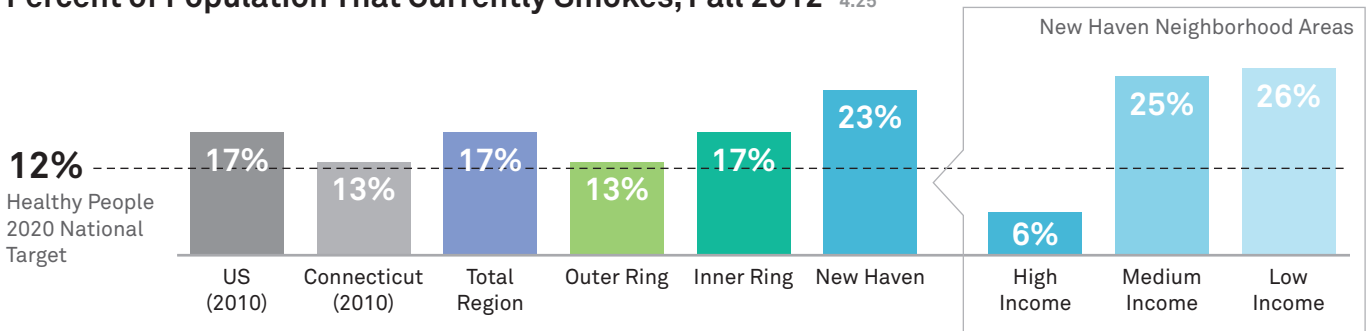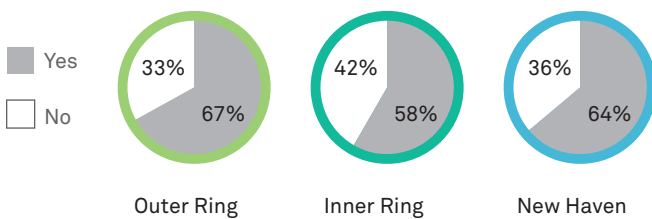
National Metro Comparison, 2005-2011 4.27

Comparison Metro Area	% of Population That Smokes
Santa Cruz, CA	10%
Ann Arbor, MI	12%
Bridgeport-Stamford, CT	12%
Boulder, CO	12%
Trenton, NJ	14%
New York, NY	15%
Hartford, CT	15%
Madison, WI	15%
Durham-Chapel Hill, NC	15%
Boston, MA	16%
El Paso, TX	16%
New Haven County	16%
Springfield, MA	17%
Buffalo, NY	18%
Providence, RI	18%

Hepatitis C and Cirrhosis

A concerning number of people living in Greater New Haven are known to be at risk of cirrhosis because of chronic Hepatitis C virus (HCV) infection. Additional people are infected but don't know it. People with a history of blood- to-blood contact and baby boomers should be tested for HCV. Doctors should screen people who test positive for HCV for chronic liver disease, and discuss HCV treatment options.

Why is Hepatitis C important?

Hepatitis C is a virus that affects the liver and is spread by blood-to-blood contact. About 80% of people who screen positive for HCV may be chronically infected. [82] An estimated 25-30% of those with chronic HCV will develop cirrhosis in 20-30 years. [83] According to the Connecticut Department of Public Health, approximately 2,800 people living in New Haven have tested positive for Hepatitis C. The vast majority of these people are currently over 40 years old. It is likely that most of these people became infected in young adulthood; therefore there are many people in the city at risk of cirrhosis.

Screening for Hepatitis C

There are likely additional people who are infected but do not know it. People with a history of blood-to-blood contact, such as by injecting drug use, should be tested for HCV. In addition, the CDC recommends "Adults born during 1945-1965 (baby boomers) should receive one-time testing for HCV without prior ascertainment of HCV risk." [84] Cirrhosis can be life threatening. It is important to ensure that people at risk for HCV are screened and that people who test positive for HCV are screened for chronic liver disease.

Recent Reports in New Haven

Hepatitis C virus infection is reported more frequently in New Haven than in the surrounding areas. The number of reported cases of Hepatitis C in New Haven from 2007-2011 was more than the number of reported cases in the Inner Ring and Outer Ring combined.

Reported Cases of HCV, 2007-2011 4.28

Total number of cases by geography

Area	Number of Reported Cases
New Haven	715
Inner Ring	326
Outer Ring	376

HCV Age Distribution, 1994-Present 4.29

Total number of cases by age group

| < 20 | 20-29 | 30-39 | 40-49 | 50-59 | 60-69 | 70+ |

Age Ranges
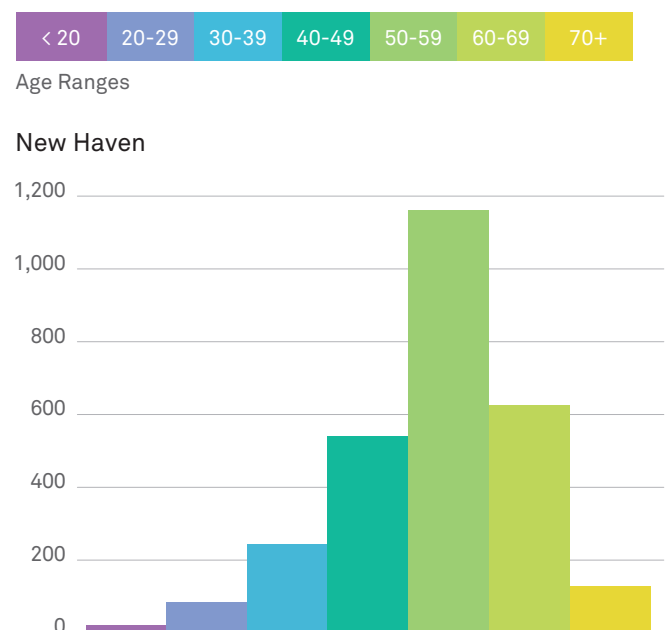
New Haven

Summary

The process of conducting a Community Health Needs Assessment, and leading forward with a strong Community Health Improvement Plan, represents a major opportunity for the Greater New Haven metropolitan area to become a healthier and more prosperous region.

One of the goals of national health reform in recent years has been to shift the model of health improvement away from a sole focus on clinical service delivery and community-based services, and towards a "community problem solving" approach that emphasizes primary prevention activities. The previous model of health improvement emphasized evidence-based medical practices and hospital bed ratios – practices that required the monitoring of clinical outcomes. Today, the nation's health leaders wish to emphasize the elimination of environmental obstacles to behavior change and the need to tackle the root causes of poor health – practices that require an ability to measure aggregate improvement in the quality of life of the population as a whole, and document reduced health care costs overall, through a community indicators-type approach like the one used in this report.

Prior to writing this chapter, DataHaven and the Partnership for a Healthier New Haven reviewed the various national guidelines for conducting a Community Health Needs Assessment, including those of the Public Health Accreditation Board, the Affordable Care Act, and the Kaiser Permanente health improvement model. The health and wellbeing issues prioritized within this chapter, and indeed throughout this entire report, may be seen as unmet health needs. They are of relevance to the community on the basis of their potential to result in high social and economic costs over time.

This report helps provide a first opportunity for community leaders and individuals to engage their local institutions in a dialogue about how they are addressing the health needs of the population. Since a health needs assessment is now mandated of hospitals at least once every three years, this report can serve as a baseline against which the success of various strategies or programs can be evaluated over time, using various health and quality of life benchmarks.

Over time, we believe that this process of evaluating community change through comprehensive assessments like this one will lead to public health investments being targeted to areas of greatest need. Hospitals will continue to partner with government, community, and public health leaders to identify needs, involve the community in planning, and distribute resources to areas of greatest need in an open and transparent way.

For example, hospitals in Greater New Haven currently provide millions of dollars in benefits to their communities each year. Community benefits are unreimbursed resources that help address health needs, particularly of those who are underserved. The majority of these expenditures consist of health access initiatives like financial assistance for patients who have no insurance, linking patients to care facilities, contributions to the advancement of health care careers, health education programs, and donations to community organizations. 85 Because of the nature of funding sources for hospital community benefit programs, at the national level, only about 5 percent of hospital community benefits are targeted specifically to "community health improvements," such as infrastructure change. This represents an area where community coalitions can work together to increase prevention funding and harness outside resources where possible. 86

The information that we present throughout this report suggest that community leaders should look more carefully at health-related expenditures at a regional level, for example by considering the effectiveness and reach of government funding allocated to improving housing, transportation, jobs access, or graduation rates. Additionally, the use of "health impact assessments," a new tool that can document the potential health benefits or costs of public policy changes or urban development proposals, can help communities determine the most effective ways to improve the health of our region.

As DataHaven and partners periodically update this document to help inform action planning efforts in Greater New Haven, our ultimate goal must be to work collaboratively to develop a community health implementation strategy that best meets the community's needs.

Chapter 5

Civic Life and Conclusion

Introduction

Community and individual happiness are influenced by social connectedness perhaps more than any other single factor. Social cohesion includes trust in neighbors, the ability of residents to organize, resiliency in the face of challenges, and the shared sense of hope that is derived from universal access to the basic economic resources that are deemed necessary for living a full life.

In this chapter, we highlight our civic engagement, our rich arts and culture institutions, and the impact of income inequality on access to basic needs like food, shelter, and transportation as well as on perceived quality of life. The chapter concludes by discussing ways in which our region can mobilize itself to address these issues.

Will Ginsberg

President and CEO, The Community Foundation for Greater New Haven

Greater New Haven is a community in the truest and best sense of the word, with a powerful sense of connectedness among the people of our region. For all of the diversity in how we live, where we live, how we came to be here, and what our perspectives and priorities are, we share an unusually deeply-rooted commitment to this place and its future. Our community is also an unusually activist one, and I am consistently inspired by the ways in which so many of us are engaged in meeting the region's challenges and seizing the region's opportunities. In my three decades living and working here, I have seen this sense of community, this diversity, this commitment and this activism translate into enormous progress: a new and deeper level of leadership by major private institutions, a nationally-acclaimed effort to achieve higher levels of student achievement in our urban public schools, a continuous strengthening of our extraordinary cultural assets, the immigrant energy that is renewing our community in many ways, the emergence of New Haven as a magnet for the young and well-educated, and the growth of the biomedical sector as the force that can drive economic growth here in the next generation.

The future of everything that we are committed to as a community will, in my view, ultimately depend on the shape and strength of the regional economy going forward. Our research base, entrepreneurial energy, institutional strength and commitment, and existing and growing base of biotech, health care and pharmaceutical companies point toward a prosperous future for Greater New Haven if we have the wisdom and sense of common purpose to seize this great opportunity.

Scott Jackson

Mayor, Town of Hamden

In Greater New Haven, we enjoy a high quality of life and great opportunities for diverse and vibrant personal lifestyles. In a macro sense, we offer access to New York City and to Boston; to skiing in Vermont, and to the Atlantic beaches. Even locally, the pristine beauty of Sleeping Giant State Park is only a 10-minute trip from downtown New Haven.

Greater New Haven is also a cultural and artistic center, which should be celebrated and promoted. Geography gives us the opportunity to be a "place," but attitudes provide the opportunity to define ourselves in a way that attracts families not for a long weekend, but for the duration.

Civic Engagement

Our citizens are confident in their ability to make Greater New Haven a better place. Most residents volunteer, contribute to local causes, and believe that their neighbors would mobilize to take action when needed. In our Wellbeing Survey, 87 percent of residents with children say it would be likely that their neighbors would organize themselves if a nearby elementary school were proposed to be closed down, and 41 percent say that they had worked with neighbors to fix a problem in the past year. Among all adults, 58 percent say they have volunteered, and 71 percent say they have donated at least $25 to a cause in Greater New Haven.

While citizens are confident in their own abilities, they express concern when evaluating the responsiveness and inclusiveness of their town and city governments. Only 6 percent of residents in our region believe that the responsiveness of their local government is "excellent" – even though they give much higher marks to the quality of specific services. Additionally, 1 in 3 adults in the region say they feel that they have "no influence at all" on their local government. Younger adults are significantly more likely to say that they do not have any influence in their government – perhaps reflecting the fact that about 95 percent of elected officials nationally are over the age of 35. 87

Social Cohesion

The level of social cohesion and trust within all of our communities is a key indicator of our region's inclusivity and its future prosperity. Across the region as a whole, 80 percent of residents say that people in their neighborhood help each other when needed, and an identical share "somewhat" or "strongly" agree that neighbors can be trusted.

Neighborly trust falls sharply within neighborhoods that are impacted by housing instability, foreclosures, and public safety concerns. In Greater New Haven as a whole, and in the City of New Haven's high-income neighborhoods, 42 percent of adults "strongly agree" that neighbors can be trusted. But in New Haven's low-income neighborhoods, only 10 percent of adults do. This four-fold disparity in neighborly trust may sound too high, but when we reviewed the data in discussions with community partners who have lived in New Haven for decades, they expressed that within the large rental buildings that are common to some neighborhoods, the true level of neighborly trust would be even lower than 10 percent. These challenges are common to neighborhoods with higher levels of inequality, youth disconnectedness, and environmental degradation – and an underlying reality that we may have to address before we can make serious progress on other fronts. 88

Importance

Across all demographic groups, there is a strong relationship between social connectedness and subjective wellbeing. A recent cross-national study using data from the Gallup World Poll showed that social connections were one of the strongest predictors of overall happiness and life satisfaction. 89 One of the factors that most negatively impacts happiness is not having enough money for food or "food insecurity," a condition that impacts a large number of households in Greater New Haven (see chart within the income inequality section of this chapter). An analysis of data from our Wellbeing Survey shows many similar associations between social isolation, hardship, and wellbeing.

Selected Determinants of Life Satisfaction, Gallup World Poll, 2009–2010 5.1

Correlation with life satisfaction (scale from -100 to 100)

| Selected Determinant	Adults age 31-64	Youth age 15-30
Have friends to count on	79	99
Volunteer	35	48
Have a high school-level education	29	N/A
Married	29	30
Feel safe to walk alone in neighborhood	18	15
Household income (log)	18	10
Confident in the judicial system	16	30
Have health problems	-46	-32
Unemployed	-65	N/A
Do not have enough money for food	-87	-99

Arts and Culture

A complete analysis of this sector and its impact on community development is beyond the scope of this first edition of the Community Index. One of our partners, The Community Foundation for Greater New Haven is working on a comprehensive system to track the health of the non-profit sector, but a much more comprehensive effort is needed to evaluate the broader impact of all cultural and civic assets at a neighborhood level.

In the process of writing this report and collecting data about our region, we have looked at many ways to measure civic health at the neighborhood level. Two major surveys conducted in the region last year also asked several dozen questions related to civic health – to name a few examples, a question about city optimism is shown in Chapter 1, and question about safety to take walks at night is highlighted in Chapter 4. Beyond the survey data, we reviewed neighborhood measures ranging from housing instability to crime reports to voting to participation in SeeClickFix. 90 Due to space limitations, we plan to detail more of these measures in future editions of the Community Index.

One way to measure the wellbeing of a community is to evaluate the strength of its cultural assets, including organizations, schools, libraries, theaters, and parks. The presence of "pro-social places" leads to greater participation in community activities, which can impact neighborhood outcomes such as public safety, community empowerment, physical health, and pride in one's community. 91

Library Services

In 2010, Connecticut had the third-highest per capita rate of library visitation in the United States. 92 Library visits and circulation per capita in Greater New Haven have increased modestly between 2000 and 2012, with most of this increase driven by dramatically higher circulation at and visits to the New Haven Free Public Library. Additionally, library program attendance in the region has doubled. In New Haven, total library visits increased from 395,579 in 2001 to 584,729 in 2012, despite a 45% cut in the total number of paid library positions during that time period. 93 Although library use is increasing in the city, circulation per capita in New Haven continues to lag behind suburban libraries, perhaps due to more limited funding for new acquisitions. At a time of rapid technological and demographic change, data on growing use indicate that libraries continue to provide value to communities as information hubs and as neighborhood amenities.
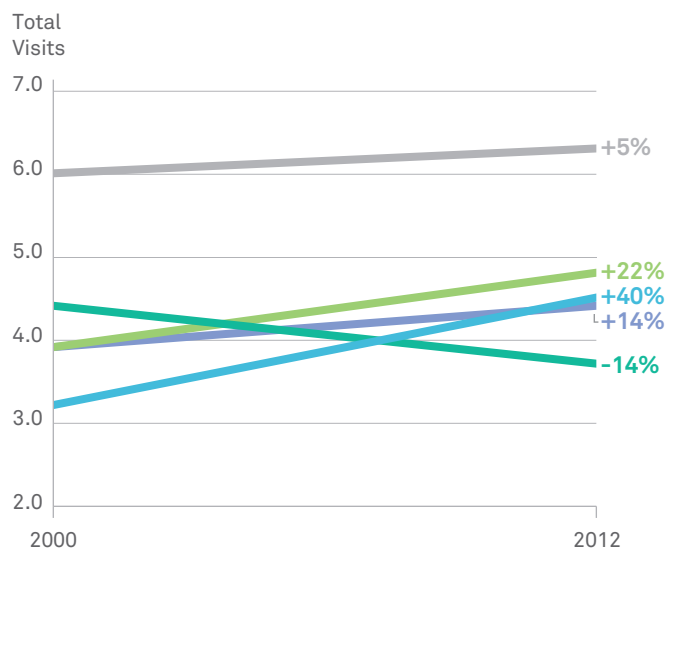
Library Circulation, 2000–2012 5.2
Total circulation per capita

Total Circulation

- Connecticut
- Total Region
- Outer Ring
- Inner Ring
- New Haven
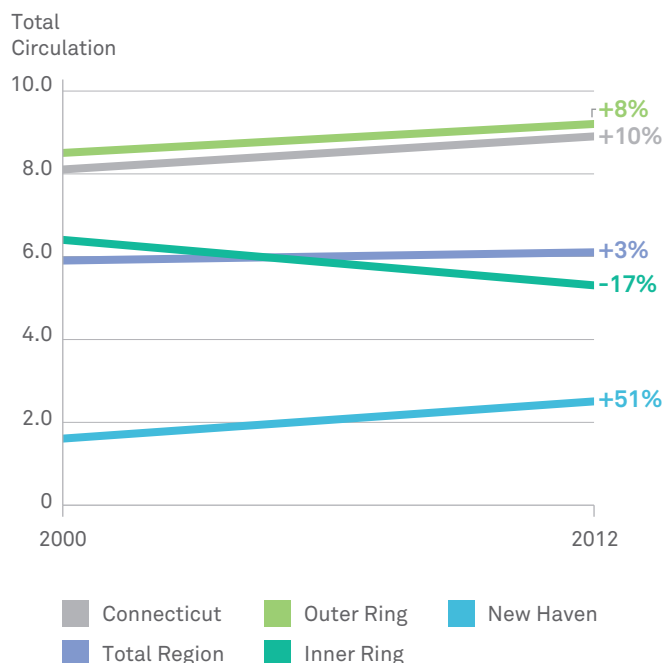
Library Visits, 2000–2012 5.3
Total visits per capita

Total Visits

Access to Arts and Culture

In the DataHaven Wellbeing Survey, 42 percent of all Greater New Haven residents said that they use arts and culture resources at least somewhat often. Additionally, when asked about various aspects of life in Greater New Haven, residents give high marks to the availability of entertainment and cultural events, with 68 percent of adults saying that this aspect of life is "excellent" or "good." Results shown in the Income Inequality section of this report suggest that lower-income families face barriers to participating in our region's cultural opportunities.

Organizations

Overall, the number of total nonprofit organizations per capita both in Greater New Haven and in Connecticut is similar to the national average. 94 The City of New Haven has a much higher per capita concentration of organizations, but this type of distribution of nonprofits across a region is not unusual – hospitals, universities, and cultural assets tend to be disproportionately located in "core city" areas or downtown areas, rather than in more recently-developed suburbs.

Likewise, within the region and Connecticut, the City of New Haven benefits from a uniquely strong presence of arts and humanities organizations, both as measured by revenue to non-profit organizations in this sector, as well as by the presence of large university-related arts resources and museums, which typically are not included in revenue totals. In terms of revenue, Greater New Haven is similar to other mid-sized metropolitan areas in the Northeast, including Bridgeport-Stamford, Hartford, and Providence, and similar to the national average. In New Haven, the concentration of these resources within a compact downtown area creates an interplay of cultural institutions that is unique to Connecticut, and one that most likely supports between 1,000 and 2,000 jobs, a figure based on detailed audience intercept surveys. 95

The largest independent arts and humanities organizations in Greater New Haven include the Long Wharf Theatre, Shubert Theater, Neighborhood Music School, International Festival of Arts and Ideas, and New Haven Symphony. But the region as a whole has nearly 80 active charitable organizations in this sector, with a typical one having a budget of just over $100,000.

Arts Participation, Fall 2012 5.4

How often do you utilize arts and culture resources within Greater New Haven, such as arts activities or performances?

Rate the availability of entertainment including movies, concerts and cultural events [in Greater New Haven].

| Very often | Somewhat often |
| Not often | Never |

| Excellent | Good |
| Fair | Poor |
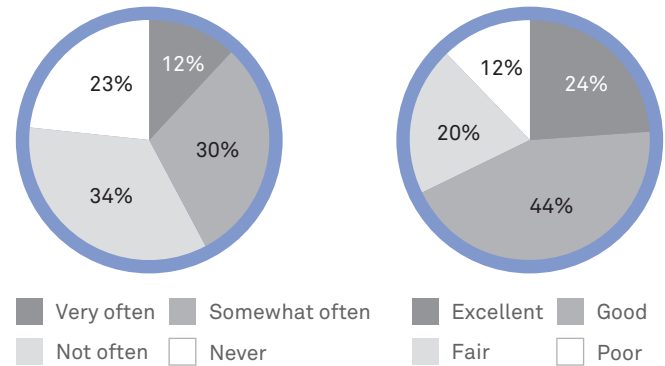
Arts and Humanities Organizations* 5.5

	Arts Nonprofits	Annual Revenue	Revenue / Resident
United States	N/A	34,107,422,012	110
Connecticut	573	419,949,247	117
Hartford Metro	185	199,817,669	165
Bridgeport Metro	173	5,785,003	104
Total Region	78	41,801,241	90
Outer Ring	21	2,714,733	14
Inner Ring	13	4,166,663	29
New Haven	44	34,919,845	269

Major Arts and Humanities Organizations in Greater New Haven by Annual Revenue 5.6

Over $5 million	
Long Wharf Theatre	Shubert Theater (CAPA)

$2 to $5 million	
Neighborhood Music School	Intl Festival of Arts & Ideas
Knights of Columbus Museum	New Haven Symphony

$1 to $2 million	
Young Audiences of CT	CT Trust for Historic Pres.
Creative Arts Workshop	Eli Whitney Museum

*Does not include university-based arts programs. Hartford area data includes several large statewide organizations, such as CPBN.

Income Inequality

The impact of economic inequality – such as the fact that 50 percent of Greater New Haven's families making $50,000 or less say they did not have enough money to buy food in the past year – is of major concern to our region. Income is only one of many important determinants of individual wellbeing. However, income-based comparisons reveal vast differences in the level of access to resources that many consider to be universal human rights. The following pages illustrate disparities in the level of opportunity among families in the region – across domains including housing security, Internet access, safety, civic engagement, and the perception of our region as a place to live.

Inequality is a concern because it is growing, and is at unprecedented levels. In 2012, more than 50 percent of total U.S. income went to the top 10 percent of households – a level higher than any other year since 1917, including the peak of the "Roaring 20s" in 1928. These data also suggest that the bottom 99 percent of households have seen essentially zero income recovery since the 2007-2009 recession. 96 The responses to these changes are widely debated at all levels of public society.

Income inequality drives income-based segregation, which can polarize cities and towns in detrimental ways. Income segregation is closely related to the school segregation issues we discuss in Chapter 2. From 1970 to 2009, Greater New Haven like other U.S. metro areas saw a rapid decline in the number of its "middle-class" neighborhoods. 97 In other words, the proportions of "poor" and "rich" neighborhoods both increased dramatically. If we had preserved the region's mixed-income, middle-class neighborhoods during this time period, far fewer of our children today would be growing up in disadvantaged neighborhoods.

Benchmarking the Region: 80th and 20th Percentile Income Levels, 2011 5.7
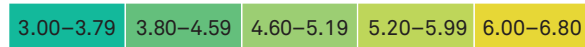
Overall Comparison

United States
$104,624
$21,865

Connecticut
$134,117
$27,914

80th Percentile Income
20th Percentile Income
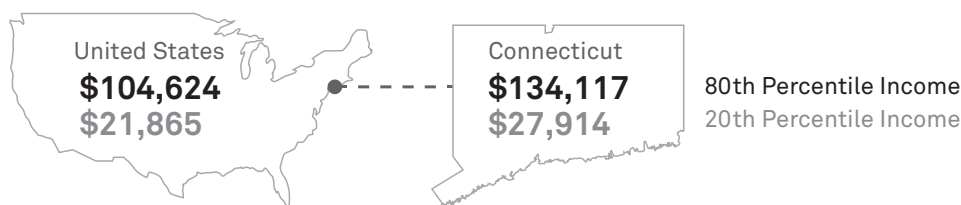
National Metro Comparison

National Rank (of 366)	20th Percentile Income	80th Percentile Income	80:20 Ratio
64 Madison, WI	$27,023	$109,695	4.06
254 Hartford, CT	$27,313	$127,492	4.67
289 Buffalo, NY	$19,480	$95,212	4.89
301 Greater New Haven*	$24,483	$121,700	4.97
303 El Paso, TX	$15,808	$78,616	4.97
304 Santa Cruz, CA	$26,380	$131,664	4.99
317 Trenton, NJ	$29,083	$146,960	5.05
321 Boston, MA	$27,339	$138,722	5.07
322 Durham-Chapel Hill, NC	$21,012	$106,719	5.08
327 Ann Arbor, MI	$23,589	$120,534	5.11
331 Providence, RI	$21,379	$109,929	5.14
333 Boulder, CO	$26,327	$135,570	5.15
339 Springfield, MA	$19,301	$100,927	5.23
352 Bridgeport-Stamford, CT	$31,967	$177,225	5.54
354 New York, NY	$24,307	$135,543	5.58

*New Haven County

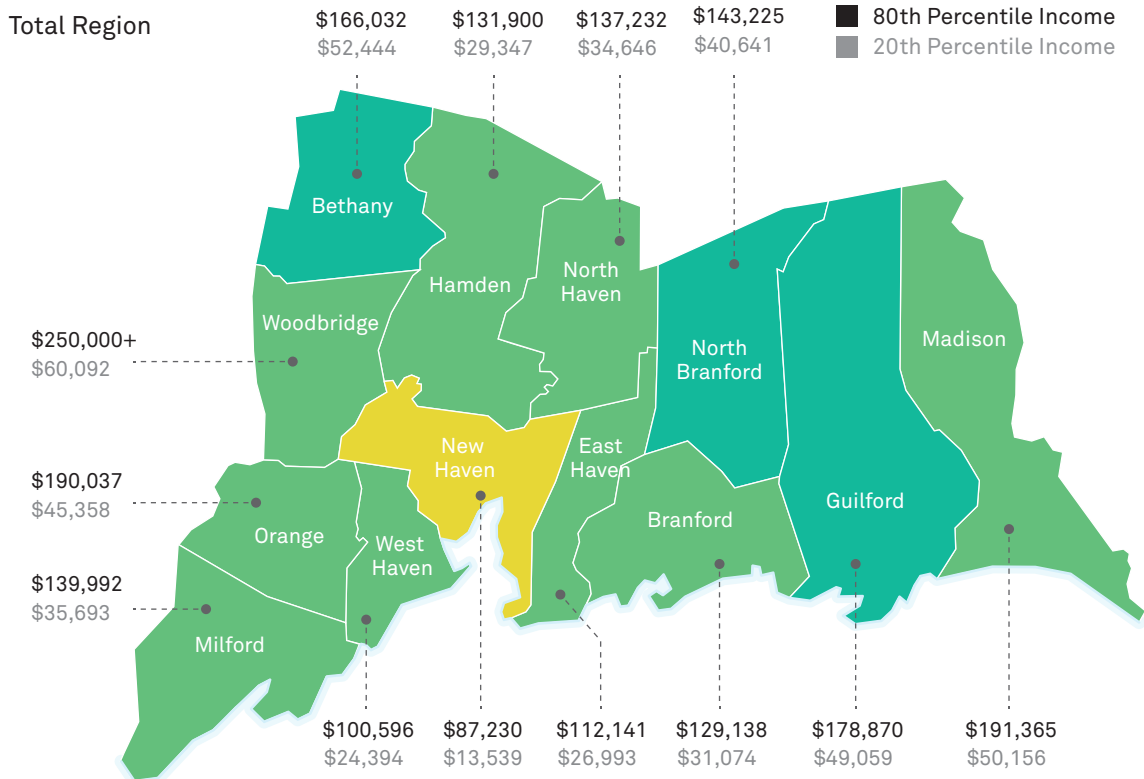**DataHaven** Greater New Haven Community Index 2013

Household Income Inequality (80:20 Ratio), 2011 5.8

What is it? Ratio of household income of 80th percentile ("top 20%") to that of the 20th percentile (lowest 20%), a common measure of inequality.
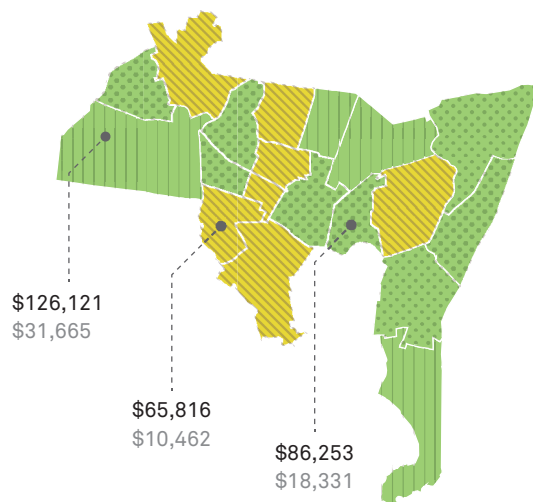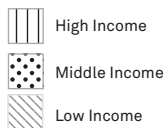
Why is it important? Income inequality is at unprecedented levels. It can polarize neighborhoods and schools, and highlights differences in the level of access to basic resources that many consider to be universal human rights.

| 3.00–3.79 | 3.80–4.59 | 4.60–5.19 | 5.20–5.99 | 6.00–6.80 |

Inequality Ratios (lower to higher)

Total Region

■ 80th Percentile Income
■ 20th Percentile Income

$166,032
$52,444

$131,900
$29,347

$137,232
$34,646

$143,225
$40,641

$250,000+
$60,092

$190,037
$45,358

$139,992
$35,693

Bethany

Woodbridge

Hamden

North Haven

North Branford

Madison

New Haven

East Haven

Orange

West Haven

Branford

Guilford

Milford

$100,596
$24,394

$87,230
$13,539

$112,141
$26,993

$129,138
$31,074

$178,870
$49,059

$191,365
$50,156

City of New Haven

▥ High Income
▦ Middle Income
▨ Low Income

$126,121
$31,665

$65,816
$10,462

$86,253
$18,331

DataHaven Greater New Haven Community Index 2013

Regional Opportunity, Fall 2012 5.9

What is it? Results from DataHaven's Fall 2012 Greater New Haven Wellbeing Survey.

Why is it important? This chart shows data collected from families with children, and compares low-income families to those with incomes of $50,000 or more. Major differences exist across most indicators.

Key

| Greater New Haven | Income < $50,000 | Income > $50,000 |

Families with Children

| Indicator | 0% | 100% |

Food Security
Always had enough money for food in the past year
76% · 50% · 90%

Housing Security
Always had enough money for shelter in the past year
94% · 85% · 98%

Vehicle Access
Often have access to a car when needed
91% · 77% · 98%

Health Care Access
Did not put off medical or dental care due to cost in the past year
78% · 67% · 82%

Internet Access
Have computer with high-speed internet at home
91% · 78% · 98%

Arts and Culture Access
Often utilize arts and culture resources in Greater New Haven
42% · 34% · 50%

City Satisfaction
Satisfied with city or area as a place to live
79% · 71% · 82%

Child-Friendliness
Feel Greater New Haven is an "excellent" or "good" place to raise children
63% · 41% · 73%

Parks
Feel parks and recreation facilities in area are "excellent" or "good"
61% · 47% · 68%

Schools
Feel public schools in area are "excellent" or "good"
61% · 56% · 63%

Employment
Feel ability of residents to obtain suitable jobs is "excellent" or "good"
29% · 15% · 38%

Services for Low-Income Residents
Feel the availability of programs for low-income residents are "excellent" or "good"
41% · 40% · 44%

Safety
Agree that neighborhood is safe to walk in at night
64% · 42% · 72%

Neighborly Trust
Agree that people in neighborhood can be trusted
78% · 61% · 87%

Volunteerism
Volunteered in past year
68% · 59% · 74%

Voter Participation
Registered for November 2012 election
79% · 65% · 84%

Mobilizing the Region

Competitive Advantages and Challenges

Greater New Haven occupies a section of the East Coast that has long been one of the world's wealthiest and most dynamic population centers. The so-called "Northeast Corridor" from Washington to Boston is home to at least 20 percent of the United States economy, but comprises just 2 percent of the nation's land area. New Haven is within a two to three hour drive of both Boston and New York City, a radius that is home to approximately 1 out of every 5 adults with graduate degrees in the United States and an area of great opportunity for tens of millions of people.

As shown throughout this report, by national standards Greater New Haven scores well on many of the most commonly-used measures of quality of life and social progress. In addition to its location near the heart of the Northeast Corridor, we believe that Greater New Haven is distinguished by its exceptional people, diverse and growing population, relative accessibility, and cultural and civic resources. Based on these types of competitive advantages, one local movement seeks to re-brand New Haven as "the greatest small city in America."

Like other metropolitan areas throughout the United States, Greater New Haven faces significant challenges to its future aspirations. These challenges include student achievement levels that are too low, a lack of affordable housing, rising transportation costs, significant public health concerns, and relatively high social and economic inequality that is likely to undermine the progress and the prosperity that we desire.

A Community Indicators Approach

One of the most effective approaches to improving communities is to build collaborative groups of citizens who seek to build consensus using a "community indicators" program. These programs can monitor progress and provide objective information about community challenges on a continuous basis.

Successful community indicator programs include some of the 50 cities that comprise the Urban Institute's National Neighborhood Indicators Partnership (NNIP), of which DataHaven is a member. They are distinguished by the following:

- Tracking data more closely so as to allow real analysis of disparities and opportunities, not just statistical averages.

- Using data to engage leaders across different issue sectors, and facilitating the growth of relationships between these people and organizations.

- Taking a comprehensive approach to policy issues that impact populations at a neighborhood-level, and identifying shared ways to measure progress. Advocates within and outside of government often find it difficult to "break down the silos" that separate the traditional issue sectors when each sector is using different measures to evaluate their success.

- Connection to policymakers and communities that use data to set and re-set policies in ways that reflect rapidly-changing conditions on the ground. NNIP partners provide diverse communities with objective, non-partisan analysis and information.

- Sustaining organizational resources (staff time) that can provide the backbone support needed for day-to-day coordination of what is essentially a regional community engagement program and series of "action plans."

Existing data-driven approaches in Greater New Haven described within this report include the Comprehensive Economic Development Strategy and Community Health Improvement Plan. Sustaining these efforts with strong data infrastructure, and establishing an overarching effort to track community change, will require ongoing support as well as the engagement of local leaders, residents, and funders. If you are interested in helping DataHaven establish a stronger regional network of community indicator efforts, please contact us.

We hope that you will layer the information in this report with your own stories, and use it to take action in your community. If the information is insufficient, we hope you will request more specific data, or suggest complementary ways that Greater New Haven can monitor its forward progress. This first edition of the Community Index is just a start. Through an ongoing dialogue with each other, we can target opportunities for action and become a more competitive and sustainable place to live.

Evidence-Based Policy Practices in Similar Metropolitan Areas

While DataHaven does not advocate for specific policies, part of our mission is to provide information to partners who are actively working toward public policy change. As a public service, DataHaven collects various reports from regional advocacy groups, such as Connecticut Voices for Children, the Connecticut Coalition to End Homelessness, and the Greater New Haven NAACP, many of which contain specific recommendations.

In the process of writing this report, DataHaven has developed an inventory of community development practices that metropolitan areas similar to Greater New Haven are using to fulfill the hopes of current and future residents:

Broad Approaches to Governance

• Ensure representation and diversity of people, regardless of their age or background, within all levels of community governance.

• Modify a portion of existing place-based State and Federal funding streams to incentivize regional cooperation on key policy issues. 98

• Build a robust and engaging "community indicators" program to allow local and regional leaders to monitor progress on key opportunities and challenges on a continuous basis (see previous page).

Improving Human Capability

• Redesign education, health, and social service systems so that they focus on the wellbeing of families and communities, not just the individuals within their care.

• Prioritize "early learning" policies so that all students regardless of background are ready to learn by kindergarten, and are reading at or above grade level by third grade. Address chronic absenteeism and summer reading loss.

• Ensure that youth voices are represented in policy and planning. 99

• Remove persistent barriers that prevent students from graduating from high school and college.

• Promote "universal design" principles so that people have access to facilities and infrastructure regardless of age or physical ability.

Creating Economic Opportunity

• Create a vibrant city core that residents throughout the region can take pride in. Strong downtowns have been shown to create jobs and promote innovation throughout an entire region.

• Enact policies that help ensure a steady supply of new housing that is affordable for households of different income levels, including younger workers beginning their careers, as well as families and retirees. Facilitate access to land and funding for Community Land Trusts and similar community institutions that can create permanent affordable housing units near transit lines and job centers. 100

• Create "opportunity corridors," that connect housing, transportation, and jobs along main streets that are geographically accessible to a wide range of families and workers. Ensure that residents of lower-income neighborhoods have high-quality public transit access to the areas with the most jobs.

• Promote the viability of walking, cycling, and transit by incentivizing good urban design, mixed-use construction, denser development near transit lines, and equitable parking and road use regulations.

Community Health Improvement

- Eliminate race- and place-based health inequities (barriers to achievement of one's full health potential). These barriers include the historical disinvestment within low-income communities of color, particularly African-American neighborhoods, and the concentration of pollution and toxic infrastructure in areas that are already disadvantaged. 101

- Require health impact assessments for new policies and city plans. For example, San Francisco's Healthy Development Measurement Tool contains a comprehensive set of planning tools and evaluation measures to help local communities consider the impact of urban developments on public health.

- Adopt a "wellbeing in all policies" approach by identifying staff to coordinate disease prevention policies across all levels of government, evaluate the impact of public decisions on neighborhood wellbeing, and support evidence-based innovation in existing government services. While health care institutions have an important role to play, various levels of government and public society ultimately control exposure to chronic disease risk factors across the entire population. 102

- Identify and address "hot spots" of poor health, target investments to our least healthy neighborhoods, and directly engage these communities in health planning and resource allocation. Use neighborhood revitalization strategies to target and address concentrations of blighted, vacant, or poorly-designed properties that are associated with increased criminal activity.

Building Civic Life and Fairness

- Make local and regional government services more responsive, engaging, and transparent. Design services in ways that begin to address the fact that rates of civic participation differ widely based on affluence, education level, race, ethnicity, and immigration status.

- Promote volunteerism, voting, civic engagement, arts and culture. Ensure that the information needs of communities are met, including through access to library services.

- Provide a network of attractive public spaces and gathering places, such as town main streets, sidewalks, plazas, and parks, in all neighborhoods and towns.

- Guarantee that all people have access to nutritious foods, adequate shelter, quality health care, safe streets, places that are conducive to physical activity, broadband Internet access, clean air and water, and an opportunity to become a productive member of society through one's daily work. Some or all of these basic aspects of life are considered universal human rights in many nations, but the information in this report shows that access to them is still far from complete. A lack of access to these basic needs often results in high social costs.

Appendix 1: Community Health Glossary

Age Adjusted Death Rate For most diseases, age is the strongest predictor of who will get the disease. For example populations which are older tend to have more people who develop most cancers. Age adjusted mortality rates (or age adjusted hospitalization rates) allow us to compare the burden of disease in different populations assuming they had the same age structure.

Asthma Triggers An asthma trigger is something that causes an asthma attack. Common triggers include tobacco smoke, dust mites, air pollution, mold, pets, and allergens.

Cirrhosis A condition where scar tissue builds up on the liver as a result of long term damage from chronic liver disease. This is a serious, sometimes fatal, condition where the liver no longer functions normally, leading to high blood pressure, difficulty fighting infections, high levels of toxins in the blood and many other health problems. Once cirrhosis has reached an advanced stage, the only treatment is a liver transplant.

Crude Death Rate A measure of the total number of deaths in a population per year divided by the size of the population. Crude death rates do not account for the age distribution of the population, unlike age adjusted death rates.

Fetal Death (Mortality) Rate The proportion of fetuses that died any time during pregnancy out of the total number of births (both live births and fetal deaths) during the year.

Health Disparities A term used to describe the unequal distribution of disease and associated risk factors among certain groups of the population based on factors such as income, race, ethnicity and / or gender.

Healthy People 2020 Target Objectives of how the health of the nation should be improved over the course of ten years. These targets were created with the goal of increasing life expectancy and quality of life, preventing disease or injury, and promoting good health. See http://www.healthypeople.gov/2020/default.aspx.

Hepatitis C Virus A virus that causes hepatitis C, which is an infectious disease that is transmitted through blood-to-blood contact, now mainly through intravenous drug use. Most people exposed to HCV will become chronically infected, which puts them at risk for liver disease and cirrhosis. There is currently no vaccine to prevent HCV infection.

Infant Death (Mortality) Rate The proportion of children who died at less than 1 year of age out of the total number of live births during the year.

Low Birth Weight Infants are classified as low birth weight if they are born weighing less than 2,500 grams (or 5.5 pounds). Low birth weight can be caused by preterm births or if the infant is small for the gestational age.

Obesity For adults, obesity is defined as having a BMI of 30 or higher. For children, obesity is defined as having a BMI that is at or above the 95th percentile for those of the same age and gender.

Overweight For adults, overweight is defined as having a BMI of 25 to 29.9. For children, overweight is defined as having a BMI within the 85th to 95th percentile for those of the same age and gender.

Potential Years of Life Lost The difference between the age at which a person died prematurely and a reference age (may be age 65 or 75). This is summed for all deaths or all cause specific deaths within the population for one year.

Social Determinants of Health Factors related to the social or economic environment that a person is exposed to, such as access to affordable, healthy food.

Sudden Infant Death Syndrome The leading cause of death in infants from 1-12 months old, where there is a sudden death that is not readily explainable during an investigation.

Unhealthy Body Weight Having a body weight that is considered to be too high given a person's height. This is often calculated using the body mass index (BMI), and can be classified as obese or overweight.

Violent Crime Rates The number of violent crimes committed in a location divided by the population size. Violent crimes include aggravated assault, rape, robbery, and murder.

Appendix 2: Table of Figures and Indicator Data Sources

Important notes on all figures: Please see Chapter 1, Introduction section, for an overview of the data sources and geographies in this report and how they were selected. Unless otherwise noted, all data reported for "Total Region" or "Greater New Haven" in the figures represent the 13-town Greater New Haven Region as defined in this report. All data reported by geographic area (Outer Ring, Inner Ring, City of New Haven) and by New Haven neighborhood areas (Low Income, Medium Income, High Income) were analyzed according to the towns and neighborhoods that are illustrated in the map on Page 4 (Figure 1.1). Data at the Census Tract level were used to create all estimates for the three "groups" of neighborhoods within New Haven (neighborhood areas), except in the case of household survey data from the 2012 Wellbeing Survey and CARE Health Survey where data collected using neighborhood definitions may vary somewhat. In some cases, more precise neighborhood data estimates are available from DataHaven at http://www.ctdatahaven.org/neighborhoodprofiles.php. For "Benchmarking the Region" and similar figures that compare Greater New Haven to other U.S. metropolitan areas, data were gathered for each of the 366 largest metropolitan statistical areas within the 50 U.S.

states, not including Puerto Rico, as well as for the United States as a whole and Connecticut. In the benchmarking charts, the 14 comparison metropolitan areas were selected either based on their proximity to Greater New Haven (Bridgeport-Stamford, Hartford, Boston, Trenton, Providence, New York, and Springfield) or because they were of a similar size to Greater New Haven and shared some of the employment and workforce characteristics of our region (Madison, Boulder, Santa Cruz, Buffalo, Ann Arbor, Durham-Chapel Hill, and El Paso). For data only available for Connecticut (e.g., student test scores), comparisons were only made to the Bridgeport-Stamford (Fairfield County) and the Hartford metro areas. City comparisons are very difficult to make but we hope that these tables provide a useful point of reference for Greater New Haven and our town/neighborhood data, as well as a sense of how Greater New Haven and Connecticut are sometimes characterized relative to the rest of the United States, particularly in relation to Figure 1.3, the Composite Index of Wellbeing. Because all information requires context and further analysis of related issues, we acknowledge that the data presented by any single figure will often create more questions than answers.

Preface

i.1.   **State Rankings.** Table is compiled from recently-published rankings of the fifty U.S. states. Documents cited in the table are available online from the websites of the organizations cited, or from DataHaven. Page ii.

Chapter 1. Introduction

1.1.   **Geography of Greater New Haven.** Graphic by DataHaven (2013). Page 4.

1.2.   **Satisfaction and City Optimism.** DataHaven Greater New Haven Community Wellbeing Survey (2012). http://www.ctdatahaven.org/wellbeingsurvey. Confidence intervals for all survey estimates can be found within the reports on this page. Page 5.

1.3.   **Composite Index of Wellbeing.** DataHaven analysis (2013). This table ranks the 130 largest U.S. metropolitan areas – those with 400,000 or more people – based on a "Composite Index" score that DataHaven developed using neighborhood, regional, and national demographic data, primarily originating from the U.S. Census Bureau 2011 5-year American Community Survey and 2010 Census. Geographical areas within Greater New Haven (such as New Haven High Income Neighborhood Areas and the Outer Ring Suburbs) are also inserted into the chart to show relative strength, but not to be indicative of a direct comparison to other metropolitan areas given the differences in population and geographic scale. The Composite Index score represents the average value of the indices developed for each of the 15 "key indicators" shown in Figure 1.4, Index of Wellbeing by Indicator (note: while 16 indicators are shown in Figure 1.4, the two School Segregation indicators are combined into one score for the purposes of creating the Composite Index). In the Composite Index, the index scores for all 15 indicators were equally weighted to arrive at a single Composite Index value for each geography: For example, the value for Madison, Wisconsin is 0.849 on a scale from 0 to 1. See below for additional information on how a score was assigned to each indicator. Page 6.

1.4.   **Index of Wellbeing by Indicator.** DataHaven analysis (2013). To develop the index for each indicator, we first gathered data for each of the 180 largest U.S. metropolitan areas – those with about 250,000 or more people – and then determined which metropolitan areas had the 95th percentile lowest and 95th percentile highest scores. To assign an index score to each geographic area, we took the data value for that geographic area and compared it to the data values for the 95th lowest and 95th percentile metropolitan areas, giving it a score based on a continuous scale from 0 (representing the value for the metropolitan area that had the 95th percentile lowest data value) to 1 (representing the value for the metropolitan area that had the 95th percentile highest data value). This was done to reduce the impact of unusual data points or "outliers" on the index. For example, if two hypothetical metropolitan areas had an unemployment rate of 30%, but all other metropolitan areas in the United States had unemployment rates that fell between 5% and 20%, the two "outliers" of 30% would have fallen outside the 95th percentile and therefore would not have been considered as a basis for the index. An Index Value of 1.00 for a given indicator is very good, and means that the geographical area falls at or above the 95th percentile of metropolitan areas (in other words, in the "top 5%") when ranked on that indicator from lowest to highest. An Index Value of 0.0 would mean that the geographical area shown has an actual data value that would be comparable to the data values found in the bottom 5% of metropolitan areas when ranked on that indicator. The actual data value for the Greater New Haven area is shown in the right-hand column. For example, the Unemployment Rate for Greater New Haven is 9.1%. The index score of 0.53 for this indicator means that Greater New Haven's unemployment rate is about halfway between the 95th percentile worst (highest unemployment) and 95th percentile best (lowest unemployment) rates found among the

180 largest U.S. metropolitan areas. As in Figure 1.3, geographical areas within Greater New Haven are identified to show relative strength, but not to indicate that a direct comparison would be helpful given the vast differences in scale between a group of towns or neighborhoods and a metropolitan area. For the School Segregation and Income Inequality indicators, only the value for New Haven County is shown. For these, a single data value for New Haven County was used to develop the index score, which was then assigned to all geographies in the region. We felt this was most appropriate since the consequences of segregation and inequality are most likely to be felt across a region, and can not necessarily be measured at a neighborhood level in the same way as the other key indicators. More information on the specific data sources for each of these indicators can be found by reviewing the page numbers that are cited on the left-hand side of the chart. Page 7.

Chapter 2. People

2.1.   **Population Growth, 1990-2020.** DataHaven analysis (2013). 1990, 2000, and 2010 population figures by age are from the U.S. Census Bureau Decennial Census, available at http://www.census.gov. 2020 projections are from the Connecticut State Data Center at the University of Connecticut Libraries Map and Geographic Information Center (2012), 2015-2025 Population Projections for Connecticut at State, County, Regional Planning Organization, and Town levels, November 1, 2012 edition. Accessed July 25 at http://ctsdc.uconn.edu/projections.html. Page 12.

2.2.   **Benchmarking the Region (Density).** 2010 data are from the U.S. Census Bureau 2010 Census, available at http://www.census.gov. 2010 population-weighted density profiles by distance from the city hall of the largest city in the region (in Greater New Haven's case, New Haven City Hall) are available at http://www.census.gov/population/metro/data/pop_pro.html. Page 12.

2.3.   **Population Change by Age Group, 1990-2010.** DataHaven analysis (2013). 1990, 2000, and 2010 population figures by age are from the U.S. Census Bureau Decennial Census, available at http://www.census.gov. 2020 projections are from the Connecticut State Data Center at the University of Connecticut Libraries Map and Geographic Information Center (2012), 2015-2025 Population Projections for Connecticut at State, County, Regional Planning Organization, and Town levels - November 1, 2012 edition. Accessed July 25 at http://ctsdc.uconn.edu/projections.html. "Percent Change" shows the increase or decrease within each Age Group from 2000 to 2010. Page 13.

2.4.   **Block-Level Demographic Change in Greater New Haven, 2000-2010.** DataHaven, CUNY Center for Urban Research, and Kristen Grady analysis (2013). Map illustrates the change in population by Census Block and by race and ethnicity (Total, Not Hispanic Black, Hispanic of any race, and Not Hispanic White) between the 2000 Census and 2010 Census. Changes of less than 10 people are not shown. The original base map was produced by Kristen Grady of the CUNY Center for Urban Research and edited for publication by DataHaven. Data are from the CUNY Center for Urban Research and the U.S. Census Bureau Decennial Census. Census data are available at http://www.census.gov. Additional information about the maps and data developed by the CUNY Center for Urban Research to compare block-by-block change is available at http://www.urbanresearchmaps.org/plurality/blockmaps.htm. Page 15.

2.5.   **Benchmarking the Region: School Segregation.** Harvard School of Public Health DiversityData Program. (2013). Segregation of Public Primary School Students, Dissimilarity by Race/Ethnicity (data tool). Accessed July 25 at http://diversitydata.sph.harvard.edu/Data/Rankings/Show.aspx?ind=37&ch=13&ch=72&tf=43&sortby=Name&sort=LowToHigh&notes=True&rt=MetroArea&rgn=ShowAll#definition. Data for the 2010-2011 school year are used for the metropolitan area comparison. Data for the 1999-2000 and 2010-2011 school years are used to calculate the trend from 2000 to 2011. Page 16.

2.6. **Foreign-Born Population and Linguistic Isolation.** DataHaven analysis (2013). U.S. Census Bureau 2011 5-year American Community Survey data are from the U.S. Census Bureau American Community Survey Office, and were released in December 2012. Accessed July 25 at http://factfinder2.census.gov. 2000 data (used to calculate percentage increase since 2000) are from the U.S. Census Bureau Decennial Census, available from the same source. Page 17.

2.7. **Single Households, 1990-2010.** DataHaven analysis (2013). 1990, 2000, and 2010 figures for household structure are from the U.S. Census Bureau Decennial Census, available at http://www.census.gov. Page 18.

2.8. **Single Parent Families, 1990-2010.** DataHaven analysis (2013). 1990, 2000, and 2010 figures for family structure are from the U.S. Census Bureau Decennial Census, available at http://www.census.gov. Page 18.

2.9. **Working Parents, 1990-2011.** DataHaven analysis (2013). 1990 and 2000 figures for family structure are from the U.S. Census Bureau Decennial Census, available at http://www.census.gov. U.S. Census Bureau 2011 5-year American Community Survey data are from the U.S. Census Bureau American Community Survey Office, and were released in December 2012. Accessed July 25 at http://factfinder2.census.gov. Page 19.

2.10. **Children in Low-Income Families, 2011.** DataHaven analysis (2013). U.S. Census Bureau 2011 5-year American Community Survey data on children age 0-5 living at or below twice the Federal Poverty Level (200% FPL) are from the U.S. Census Bureau American Community Survey Office, and were released in December 2012. Additional explanation on poverty levels is found in Chapter 3, Income and Poverty section. Accessed July 25 at http://factfinder2.census.gov. Page 20.

2.11. **Benchmarking the Region: Children under 5 in low-income households.** See Figure 2.10 notes. Data are from 2011 5-year American Community Survey. Page 20.

2.12. **Preschool and Kindergarten.** DataHaven analysis (2011 and 2013). Percent of Children Age 3-4 Enrolled in Preschool is from 2011 5-year American Community Survey estimates on school enrollment by age, from the U.S. Census Bureau American Community Survey Office, and released in December 2012. Accessed July 25 at http://factfinder2.census.gov. 2010 Kindergarten Entrance Inventory data are reported by the Connecticut State Department of Education, published by the William Caspar Graustein Memorial Fund Discovery initiative, Source: WCGMF Discovery Database, accessed in 2011 (website no longer active) and analyzed by DataHaven in 2011. The Fall Kindergarten Entrance Inventory is administered annually each fall to provide a statewide snapshot of the skills kindergarten students demonstrate, based on teachers' observations, at the beginning of the kindergarten year. These skills and behaviors are defined by specific indicators in six domains; namely, Language skills, Literacy skills, Numeracy skills, Physical/Motor skills, Creative/Aesthetic skills and Personal/Social skills. In the case of this analysis, the performance level ratings for each student were combined to provide an unweighted score ranging from 6-18. The ratings were then divided into four groups. The four groups correspond roughly to quartiles, that each, each group contains approximately one-quarter of the children assessed. The group assessed as being least ready for kindergarten had scores of 6-10. The next group had scores of 11-13. The third group had scores of 14-16. The group assessed as most ready had scores of 17 and 18. In the case of the Kindergarten Entrance Inventory data, the estimates for the Outer Ring do not include Milford or Orange, due to concerns about data accuracy. Page 21.

2.13. **Benchmarking the Region: Preschool enrollment.** See Figure 2.12 notes. Data are from 2011 5-year American Community Survey. Page 21.

2.14. **Third Grade Reading Levels, 2008-2013 6-year Average.** DataHaven analysis (2013). Data for Greater New Haven, Outer Ring, Inner Ring, and New Haven are from a six-year average of Connecticut State Department of Education Connecticut Mastery Test (CMT) third grade reading data for all students tested during the 2007-2008, 2008-2009, 2009-2010, 2010-2011, 2011-2012, and 2012-2013 school years. Reported percentage is the percentage of all students tested who tested at either goal level or advanced level on the test. Data for neighborhood areas within New Haven are from a similar analysis by CARE at the Yale School of Public Health of 2007-2010 data by Census Tract of student residence collected by the New Haven Public Schools. Because of limitations in this data set, these neighborhood area data should be considered estimates. Error bars are used to indicate the potential range of values within each neighborhood area (for example, values in High Income neighborhoods may range from about 45% to 80%, but are most likely 58%). These estimates by neighborhood of student residence were reviewed with the New Haven Public Schools prior to publication. The Connecticut State Department of Education publishes data by district by student lunch eligibility and by race/ethnicity, which are also shown in this figure. Page 22.

2.15. **Third Grade Reading Levels Over Time.** See Figure 2.14 notes. Free/Reduced Price lunch eligibility is considered to be the indicator of "school poverty," because more detailed information on student income levels is not collected. As also shown in Figure 2.20 on graduation rates, large disparities generally exist in student achievement between students who are eligible for free/reduced price lunch and those who are not. Page 23.

2.16. **Chronic Absence, Grades K-3, 2012.** DataHaven analysis (2013). Data are collected by the Connecticut State Department of Education for the 2011-2012 school year on the number of students in each grade who are chronically absent. It is published by town (based on school district) by the Connecticut Data Collaborative (http://www.ctdata.org). This value includes all students from kindergarten through third grade, which is the most common indicator used to evaluate chronic absenteeism. Data for other Connecticut metro areas are consistent to the standard U.S. metropolitan statistical area definitions used throughout this report and were derived by creating a weighted average value of student chronic absence for all districts within those areas. Note on importance: According to a 2011 brief from Attendance Works and the Child & Family Policy Center, "Chronic absenteeism—or missing 10 percent or more of school days for any reason—is a proven early warning sign of academic risk and school dropout. Too often, though, this problem is overlooked, especially among elementary students, because of the way attendance data are tracked. This study confirms the premise that districts and schools may fail to detect high levels of chronic absence because the problem is easily masked by average daily attendance (ADA), one of the most commonly calculated attendance measures. While many educators assume a 95 percent ADA rate is an indicator of good attendance, our research found that is often not the case. We found that schools with average daily attendance rates higher than 97 percent rarely have a problem with chronic absence, but that schools with ADA rates between 93 and 97 percent need to analyze their data to determine whether chronic absence is a significant problem. Moreover, schools with ADA rates of 93 percent or below are almost certainly dealing with high concentrations of absenteeism. Local, state and federal governments can take steps to ensure districts and schools use existing data to monitor and identify chronic absence starting in kindergarten." Accessed September 11 at http://www.attendanceworks.org/wordpress/wp-content/uploads/2010/04/ChronicAbsence.pdf. Page 23.

2.17. **Disconnected Youth, 2011.** DataHaven analysis (2013). Data are from 2011 5-year American Community Survey estimates, published by the U.S. Census Bureau American Community Survey Office and released in December 2012. Accessed July 25 at http://factfinder2.census.gov. Page 24.

2.18. **Benchmarking the Region: Disconnected Youth.** See Figure 2.17 notes. Data are from 2011 5-year American Community Survey. Page 24.

2.19. **Youth Opportunity Questions from DataHaven Wellbeing Survey, Fall 2012.** DataHaven Greater New Haven Community Wellbeing Survey (2012). http://www.ctdatahaven.org/wellbeingsurvey. Page 25.

2.20. **High School Cohort Graduation Rates: Class of 2012 and 2010-2012 Change.** DataHaven analysis (2013). Data for Greater New Haven, Outer Ring, Inner Ring, and New Haven are from Connecticut State Department of Education data on Cohort Graduation Rate for the class of 2012. Change 2010-2012 shows the percentage point change between the graduation rate for the class of 2010 and the graduation rate for the class of 2012. State Department of Education publishes data by district by student lunch eligibility (i.e., student poverty) and by race/ethnicity, among other student characteristics. Cohort graduation rates by student lunch eligibility are shown in the figure for Connecticut, and rates by race/ethnicity are shown for the New Haven Public Schools. Note on importance: According to Connecticut State Department of Education, graduation rates are now calculated statewide according to the Adjusted Cohort Graduation Rate method, which was developed by the National Governors Association and is considered to be the most precise method. These rates represent the percentage of students who graduated with a regular high school diploma in four years or less. It is based on individual student level data, excludes 9th grade repeaters, late graduates, and accounts for transfers in and out of the graduating class over the four-year period. Prior to 2010, other methods were used. The Cohort Graduation Rate method was created when Connecticut and 49 other states signed an agreement with the National Governors' Association to develop a uniform system for tracking students. For additional explanation, see State Department of Education press release about the release of cohort graduation rate data for the class of 2012, August 14, 2013, at http://www.sde.ct.gov/sde/lib/sde/pdf/pressroom/2013_graduation_rates.pdf.

2.21. **College Preparedness, Class of 2010.** DataHaven analysis (2013) of data from Connecticut Community Colleges & Connecticut State Universities (2011) published by the Connecticut State Department of Education. To estimate the percentage of total high school graduates in the class of 2010 who enrolled in CT Community Colleges and CT State Universities (CC/CSU) and also placed into remedial courses, the percentage of high school graduates who enrolled in CC/CSU was multiplied by the percent of those graduates who enrolled within a remedial or developmental course. According to the State Department of Education, "for Connecticut Community Colleges, these data show the number of students who were recommended for developmental coursework. The recommendation for developmental coursework is determined primarily by the students' scores on the Accuplacer Placement Exam. For Connecticut State Universities, these data show the number of students who were enrolled in any remedial or developmental math or English course in their first fall of enrollment. The University of Connecticut does not offer remedial or developmental courses but may address skill deficiencies in other ways, and therefore is not represented [in this data set]. At Connecticut Community Colleges, "developmental" is used to describe courses that carry no college credit and are designed to improve students' basic skills so that they can be successful in courses that carry college credit. In Connecticut State Universities (CSU), "remedial" courses carry no college credit and are designed to improve students' basic skills. "Developmental" courses carry college

credit only as elective courses; they do not count toward general education in any major and serve as prerequisites that students must complete prior to starting general education requirements in math or English. CSU students in remedial courses have a higher degree of need for skill improvement than do students in developmental courses."Data for other Connecticut metro areas are consistent to the metropolitan area definitions used throughout the remainder of this report and were derived by creating a weighted average value of student course enrollment patterns for the Class of 2010 from all districts within those areas. Page 27.

2.22. **College Completion, Class of 2004.** DataHaven analysis (2013) of data from Hosch, B. and Kiehne, J. (2011). Postsecondary enrollment and completion patterns of students from Connecticut public high schools: An analysis of data from the National Student Clearinghouse. Hartford: Connecticut Board of Regents for Higher Education. Available at http://www.ctdatahaven.org/know/index.php/File:CT_Board_Regents_Postsecondary_Completion_NSC_2011.pdf. Completion rate represents the percentage of students who graduated in the High School Class of 2004 who completed a postsecondary degree or certificate (of any kind) somewhere in the United States by 2010. It does not include students who dropped out of high school before graduating, or those who may have left the country after graduating, but is considered to be a reliable indicator of success in higher education. Data for other Connecticut metro areas are consistent to the metropolitan area definitions used throughout the remainder of this report and were derived by creating a weighted average value of student college completion for the Class of 2004 from all districts within those areas. Page 27.

2.23. **Benchmarking the Region: Educational Attainment, 2011 (Age 25-34).** DataHaven analysis (2013). Data are from 2011 5-year American Community Survey estimates, published by the U.S. Census Bureau American Community Survey Office and released in December 2012. Accessed July 25 at http://factfinder2.census.gov. Page 28.

2.24. **Educational Attainment of Young Adults (Age 25-34).** See notes for Figure 2.23. Data are from 2011 5-year American Community Survey. Page 29.

2.25. **Benchmarking the Region: Brain Gain, 2011.** DataHaven analysis (2013). Data are from 2011 5-year American Community Survey estimates, published by the U.S. Census Bureau American Community Survey Office and released in December 2012. Accessed July 25 at http://factfinder2.census.gov. Data shows percentage of adults moving into each area within the past year from out of state or abroad (or all interstate and international migrants, in the case of the United States) who possessed a graduate or professional degree at the time of or within one year of their move. Page 29.

Chapter 3. Economic Opportunity

3.1. **Jobs and Wages by Location, 2002-2012.** DataHaven analysis (2013). Data are from Connecticut Department of Labor, QCEW program, published in July 2013. Average wage was adjusted for inflation using the annual average consumer price index (CPI), available at http://www.bls.gov/cpi/tables.htm. Page 33.

3.2. **Jobs by Industry, New Haven County, 2011.** DataHaven analysis (2013). Pie chart shows the percentage of total jobs within each industry sector in New Haven County. Shading shows the percent change from 2001 to 2011. Data are for New Haven County and available from U.S. Department of Commerce Bureau of Economic Analysis, table CA25N Total full-time and part-time employment by NAICS industry (2001 and 2011), accessed September 11 at http://www.bea.gov/index.htm. Page 33.

3.3. **Benchmarking the Region: Job Access by Core City Residents.** DataHaven analysis (2013). Data are from the Local Employment Dynamics Partnership, U.S. Census Bureau, for All Jobs in 2011. A "living wage" job is defined here as one that pays more than $3,333 per month or approximately $40,000 per year. The more than $3,333 per month income category was established by the Census Bureau for reporting purposes. We use the term "living wage" loosely to describe jobs above this level of earnings because individuals who earn this amount of income from their job are significantly less likely to be living in or near poverty than individuals who do not. Local Employment Dynamics is a new feature of the Census Bureau, involving collaboration with the State of Connecticut. The data have several limitations, which are documented on the Census Bureau website at http://lehd.ces. census.gov/. Our analyses have shown that they can be compared with caution to more widely-used data sources on employment and wages like those shown in Figure 3.1 – the relatively small discrepancies between this data source and others like it are primarily due to differences in how workforce characteristics are analyzed. Page 34.

3.4. **Where workers are employed.** See notes for Figure 3.3. This figure shows the physical location of jobs – for example, New Haven was the physical home of 82,658 jobs in 2011. Of these 82,658 jobs, 57% were considered "living wage" jobs. Jobs located within New Haven were much more likely to pay a "living wage" than jobs located in the Outer Ring or Inner Ring suburbs. Page 35.

3.5. **Residents Who Work the 47,452 Living Wage Jobs Located in the City of New Haven.** See notes for Figure 3.3. This figure represents the physical location of jobs (the fact that New Haven was the physical home of 47,452 "living wage" jobs in 2011) as well as the place of residence of the individuals who held those jobs. For example, only 4% of the "living wage" jobs physically located within the City of New Haven in 2011 were held by workers who resided within one of the city's Low Income neighborhood areas. 38% of the 47,452 "living wage" jobs in the City of New Haven were held by commuters who lived outside of the Greater New Haven region altogether, 23% were held by residents of the Outer Ring, and 20% were held by residents of the Inner Ring. Page 35.

3.6. **Where workers live.** See notes for Figure 3.3. This figure represents the number of workers by place of residence. For example, of the 43,823 workers who live in New Haven, 39% held a job that was considered "living wage." However, this proportion varied considerably by neighborhood area – from 56% in high income neighborhood areas to 28% in low income neighborhood areas (see inset box). Page 35.

3.7. **Where New Haven Residents Work.** See notes for Figure 3.3. This figure represents the physical place where jobs held by New Haven residents are located. For example, of the 43,823 residents of New Haven who work, 19,279 work at a job that is physically located within New Haven, while 24,544 work at a job that is physically located somewhere outside of the city. Of jobs held by New Haven residents that are located outside of the city, 32% are considered to be "living wage" jobs. Page 35.

3.8. **Monthly Unemployment Data, January 2008 - July 2013.** DataHaven analysis (2013). Monthly data from Connecticut Department of Labor, Local Area Unemployment Statistics program. Accessed September 11 at http://www1.ctdol.state. ct.us/lmi/laus/default.asp. Page 36.

3.9. **Employment Status by Race and Age in Connecticut, 2012 Annual Average.** 2012 annual average data from Bureau of Labor Statistics, Local Area Unemployment Statistics program. Tables by state accessed September 11 at http://www.bls.gov/lau/. Page 36.

3.10. **Benchmarking the Region (Unemployment Rate, 2011 5Y ACS).** DataHaven analysis (2013). Data are from 2011 5-year American Community Survey estimates, published by the U.S. Census Bureau American Community Survey Office and released in December 2012. Accessed July 25 at http://factfinder2.census.gov. Page 37.

3.11. **Unemployment and Underemployment.** DataHaven analysis (2013). Data for unemployment rates are from 2011 5-year American Community Survey estimates, published by the U.S. Census Bureau American Community Survey Office and released in December 2012. Accessed July 25 at http://factfinder2.census. gov. Data for underemployment rates are from DataHaven Greater New Haven Community Wellbeing Survey (2012). http://www. ctdatahaven.org/wellbeingsurvey. Page 37.

3.12. **Poverty Rates over Time, 1990-2011.** DataHaven analysis (2013). 1990 and 2000 figures for the number of individuals living in poverty (defined on Page 39) are from the U.S. Census Bureau Decennial Census, available at http://www.census.gov. U.S. Census Bureau 2011 5-year American Community Survey data are from the U.S. Census Bureau American Community Survey Office, and were released in December 2012. Accessed July 25 at http:// factfinder2.census.gov. Page 38.

3.13. **Benchmarking the Region: Poverty.** See Figure 3.12 notes. Data are from 2011 5-year American Community Survey. Page 38.

3.14. **Total Number of Individuals in Poverty.** See Figure 3.12 notes. Bar charts show the total number of individuals living in poverty, color-coded by geography or neighborhood area. Data are from 2011 5-year American Community Survey. Page 39.

3.15. **Percent of Population by Ratio to Federal Poverty Level (FPL).** See figure 3.12 notes. Data are from 2011 5-year American Community Survey, Ratio of Income to Poverty for individuals. Individuals with incomes below the Federal Poverty Level (100% FPL) are considered to be living in poverty, and those within incomes that are twice the poverty level (200% FPL, or just above $46,000 per year for a family of four in 2011 dollars) are considered to be low-income or "near poverty" and in many cases are eligible for certain assistance programs geared toward low-income families. Individuals with incomes that are three times the poverty level (300% FPL) or above are considered "middle class" or "self sufficient" by most standards, although many analysts now recommend using the threshold of 400% FPL or above for this designation, particularly in areas with higher cost of living. The top quartile of households by income in Greater New Haven have income levels of roughly $100,000 or above, which for families of four, is equivalent to about five times the poverty level. Page 39.

3.16. **Trend: Commute Time, 1990-2011.** DataHaven analysis (2013). 1990 and 2000 figures for the proportion of commuters who spend more than 30 minutes getting to work are from the U.S. Census Bureau Decennial Census, available at http://www.census.gov. U.S. Census Bureau 2011 5-year American Community Survey data are from the U.S. Census Bureau American Community Survey Office, and were released in December 2012. Accessed July 25 at http:// factfinder2.census.gov. These data measure the commute times of employed workers who commute outside the home, so trips taken to school or college, errands and child care, and other types of travel, including trips by unemployed residents and retired individuals, are not included in these figures. Page 40.

3.17. **Benchmarking the Region: Commute Time.** See Figure 3.16 notes. Data are from 2011 5-year American Community Survey. Page 40.

3.18. **Daily Means of Transport to Work, 2011.** DataHaven analysis (2013). U.S. Census Bureau 2011 5-year American Community Survey data are from the U.S. Census Bureau American Community Survey Office, and were released in December 2012. These data measure daily commutes of employed workers, so trips taken to school or college, errands and child care, and other types of travel, including trips by unemployed residents and retired individuals and occasional use of different travel modes (e.g., taking a bus to work twice per week and working at home on all other days) are not included in these figures. "Public Transit" category includes buses and commuter rail, and "Other" category includes taxicabs and motorcycles. Accessed July 25 at http:// factfinder2.census.gov. Page 41.

3.19. **Benchmarking the Region: Driving Alone.** See Figure 3.18 notes. Data are from 2011 5-year American Community Survey. Page 41.

3.20. **Cost-Burdened Households, 1990-2011.** DataHaven analysis (2013). 1990 and 2000 figures for housing cost as a percentage of household income (defined on Page 43) are from the U.S. Census Bureau Decennial Census, available at http://www.census.gov. U.S. Census Bureau 2011 5-year American Community Survey data are from the U.S. Census Bureau American Community Survey Office, and were released in December 2012. Accessed July 25 at http://factfinder2.census.gov. Renters or homeowners who spend 30% or more of income toward housing costs are considered "cost-burdened," whereas those that spend 50% or more of their income toward housing are considered "severely cost-burdened." Page 42.

3.21. **Housing Affordability.** See Figure 3.20 notes. Data are from 2011 5-year American Community Survey. Pie charts show the breakdown among all households within each geography or New Haven neighborhood area. For example, in the City of New Haven, 29% of all households are considered to be "severely cost-burdened" and pay 50% or more of their income toward housing costs. Page 43.

3.22. **Benchmarking the Region (Severely Cost-Burdened Households).** See Figure 3.20 notes. Data are from 2011 5-year American Community Survey. Page 43.

Chapter 4. Community Health Needs

4.1. **Comparisons of Healthy People 2020 Indicators.** New Haven Health Department analysis (2013). The Federal Government's Healthy People 2020 (HP2020) program sets ambitious health targets, which are shown in this table and throughout this Chapter (as well as in Chapter 2, in the case of cohort high school graduation rates). The program is explained on page 48 and in detail at the Healthy People website, at http://www.healthypeople.gov/2020/default.aspx, where additional data can be accessed. Data for this table is derived from multiple data sources, described briefly below; please contact DataHaven or the Health Department for more detail. New Haven County is used because estimates for the 13-town Greater New Haven region were not readily available in the case of many indicators. Mortality rate for New Haven estimates are underestimates to the extent that a small proportion of addresses at the time of death can not be mapped. Page 49.

4.1.1. For self-rated health data on "Percent health reported as excellent," data source is 2012 CDC BRFSS program for US, CT, and New Haven County, and DataHaven Wellbeing Survey, 2012, for City of New Haven and New Haven neighborhood areas. The two sources should be compared with caution even though the methodology between the BRFSS and Wellbeing surveys were highly comparable.

4.1.2. Premature Deaths per 100,000 is an indicator of age-adjusted, annualized potential years of life lost to age 75. Data source is Community Commons (chna.org), 2008-2010 for US, CT, and New Haven County, CT Department of Public Health, 2006-2010, for New Haven, and CT Death Master Files, 2006-2010, for New Haven neighborhood areas. Additional detail on the methodology for calculating Premature Deaths per 100,000 can be found below.

4.1.3. Age-Adjusted Mortality Rates per 100,000 are an indicator of the burden of disease within a population, controlling for the impact of different age structures. Data source is CDC Wonder or Community Commons (chna.org), 2006-2010, for US, CT, and New Haven County; CT Department of Public Health, 2005-2009 for New Haven; and CT Death Master Files, 2006-2010, for New Haven neighborhood areas except for prostate cancer where 2005-2010 data were used. Additional detail on the methodology for calculating Age-Adjusted Mortality Rates per 100,000 can be found below.

4.1.4. Cancer Incidence Rates per 100,000 measure the number of new cases of cancer per 100,000 population each year. Data are from Community Commons (chna.org), 2006-2010 data, for US, CT, and New Haven County and are not currently available below this level.

4.1.5. Prevalence measures how widespread a disease is, that is, the total number of cases across the entire population. Prevalence is generally used to report chronic diseases such as asthma. Data are derived from Community Commons (chna.org), 2006-2010 BRFSS survey, for US, CT, and New Haven County. Prevalence for New Haven and neighborhood areas within New Haven are from the 2012 DataHaven Wellbeing Survey, except in the case of the obesity rate for adults over age 20 in low income New Haven neighborhood areas, which is calculated from the 2012 New Haven Health Survey conducted by CARE at the Yale School of Public Health. The surveys used to derive obesity, asthma, diabetes, and heart disease prevalence at the national and local levels used a similar interview format, so we feel that these estimates may be directly compared across the city, region, and United States.

4.1.6. Data on infant deaths and low birth weight are from Community Commons (chna.org), 2003-2009, for US, CT, and New Haven County, CT Department of Public Health, 2003-2009, for City of New Haven, and New Haven Health Department/CT Vital records and CT Death Master File, 2003-2009, for New Haven neighborhood areas.

4.1.7. Data on Infectious Disease incidence and prevalence are from Community Commons (chna.org), for US, CT, and New Haven County, and CT Department of Public Health STD statistics, 2006-2009, for City of New Haven chlamydia and gonorrhea incidence and 2011 for City of New Haven HIV prevalence.

4.2. **Self-Rated Health Status, Fall 2012.** See Figure 4.1 notes. Data are from 2012 DataHaven Wellbeing Survey. Page 50.

4.3. **Benchmarking the Region: Self-Rated Health Status.** See Figure 4.1 notes. Data are from Community Commons (chna.org). Page 50.

4.4. **Obesity Rates over Time, 2002-2010.** Data are from the BRFSS survey, http://www.cdc.gov/brfss/, 2002-2010. Page 51.

4.5. **Benchmarking the Region: Healthy Weight, 2006-2010.** Data are from Community Commons (chna.org). Percent of population at a healthy weight includes individuals who are not overweight or obese. Page 51.

4.6. **Relationship of Fitness to School Poverty, 2011.** Data are from CT Education Data and Research, 2010-2011 school year. Accessed at http://sdeportal.ct.gov/Cedar/WEB/ct_report/CedarHome.aspx. Page 52.

4.7. **Overweight and Obesity by Location, Fall 2012.** See Figure 4.1 notes. Data for the 13-town Greater New Haven area and neighborhood areas within New Haven are from the 2012 DataHaven Wellbeing Survey, except in the case of the obesity rate for adults in low income New Haven neighborhood areas, which is calculated from the 2012 New Haven Health Survey conducted by CARE at the Yale School of Public Health within the New Haven Low Income neighborhoods discussed in this report. Page 52.

4.8. **Food Access, Fall 2012.** Data are from the 2012 New Haven Health Survey conducted by CARE at the Yale School of Public Health within the New Haven Low Income neighborhoods discussed in this report. Page 53.

4.9. **Perceived Safety, Fall 2012.** Data from the 2012 DataHaven Wellbeing Survey. Page 53.

4.10. **Benchmarking the Region: Physical Activity.** Data are from Community Commons (chna.org). Page 53.

4.11. **Heart Disease Prevalence by Age, Fall 2012.** See Figure 4.1 notes. Data are from 2012 DataHaven Wellbeing Survey. Page 54.

4.12. **Heart Disease AAMR by New Haven Neighborhood Area, 2006-2010.** See Figure 4.1 notes. Page 54.

4.13. **Asthma ER visits per 10,000 people, annual average, 2010-2012.** Data are from Emergency Department data from all hospitals in CT, 2010-2012. Page 54.

4.14. **Diabetes Age Adjusted Mortality Rates.** See Figure 4.1 notes. Page 55.

4.15. **Health Insurance Among Adults Age 18+, Fall 2012.** Data for population 18 and over for Greater New Haven, and areas within it, are from the DataHaven Community Wellbeing Survey, 2012. Within low income neighborhoods sampled by CARE New Haven Health Survey 2012, health insurance data were statistically identical to Wellbeing Survey estimate. Page 56.

4.16. **Health Insurance Coverage Status, 2012.** Data are from U.S. Census Bureau American Community Survey, 2012 one-year estimates available at http://factfinder2.census.gov/, Table S2701 with estimates by age group and other characteristics, released by the U.S. Census Bureau in September 2013. Note that the national rate of individuals who are not covered by health insurance was slightly lower in 2012 than it was during the three previous years (data in Figure 4.17). Page 57.

4.17. **Benchmarking the Region: Health Insurance, 2009-2011.** Data are from US Census Bureau American Community Survey, 2011 3-year estimates available at http://factfinder2.census.gov/, Table S2701 with estimates by age group and other characteristics. Three year estimates are used in order to provide a more precise comparison between regions than the one year estimate. Page 57.

4.18. **Deaths from Assault: Age Adjusted Mortality Rates.** See Figure 4.1 notes. Page 58.

4.19. **Deaths from Firearms in New Haven, 2000-2010.** New Haven Health Department analysis (2013) of death records. Page 59.

4.20. **Years of Potential Life Lost (YPLL) to Age 65, 2006-2010.** New Haven Health Department analysis (2013) of death records by cause of death. This table compares the relative magnitude of various causes of death, in terms of the number of potential years of life lost because of an early death (prior to age 65). Additional explanation is found in the chapter text. Page 59.

4.21. **Benchmarking the Region: Low birth weight.** See Figure 4.1 notes. Page 60.

4.22. **Fetal and Infant Mortality by Location and Race/Ethnicity, 2006-2010.** See Figure 4.1 notes. Page 60.

4.23. **Infant Mortality Rates, 2003-2009.** See Figure 4.1 notes. Page 61.

4.24. **Benchmarking the Region: Infant Mortality.** See Figure 4.1 notes. Page 61.

4.25. **Percent of Population That Currently Smokes, Fall 2012.** Data for the 13-town Greater New Haven area and neighborhood areas within New Haven are from the 2012 DataHaven Wellbeing Survey. Data for US and Connecticut are from BRFSS survey, which asked the same sequence of questions as the DataHaven survey. Page 62.

4.26. **Attempts to Quit in Greater New Haven, Fall 2012.** Data are from 2012 DataHaven Wellbeing Survey. Page 62.

4.27. **Smoking: National Metro Comparison, 2005-2011.** Data from Community Commons (chna.org). Page 62.

4.28. **Reported Cases of HCV, 2007-2011.** New Haven Health Department analysis (2013). Data are from Maven (Connecticut Electronic Disease Surveillance Suite). Page 63.

4.29. **HCV Age Distribution, 1994-Present.** See Figure 4.28 notes. Page 63.

Chapter 5. Civic Life and Conclusion.

5.1. **Selected Determinants of Life Satisfaction, Gallup World Poll, 2009-2010.** Derived from Boarini, R. et al. (2012). "What Makes for a Better Life?: The Determinants of Subjective Well-Being in OECD Countries: Evidence from the Gallup World Poll", OECD Statistics Working Papers, 2012/03, OECD Publishing. Available at http://dx.doi.org/10.1787/5k9b9ltjm937-en. Page 67.

5.2. **Library Circulation, 2000-2012.** DataHaven analysis (2013) of data collected by the Connecticut State Library on each library in Connecticut. Data was confirmed against local sources in some cases in order to confirm its accuracy. Page 68.

5.3. **Library Visits, 2000-2012.** See Figure 5.2 notes. Page 68.

5.4. **Arts Participation.** Data from DataHaven Wellbeing Survey (2012), representing the opinions of all adults in Greater New Haven. Page 69.

5.5. **Arts and Humanities Organizations.** DataHaven analysis (2013). Data is derived from IRS data on nonprofit organizations, from National Center for Charitable Statistics, and published by Connecticut Data Collaborative. 2010 Census population figures were used to calculate the revenue per resident. Organizations with no revenue were excluded from the analysis. Data was confirmed against local sources in order to confirm its accuracy. Page 69.

5.6. **Arts and Humanities Organizations in Greater New Haven by Annual Revenue.** See Figure 5.5 notes. Please interpret these categories with caution, as in many cases, an organization may move from one to the next in any given year (e.g., have $900,000 in revenue one year and $1,100,000 in another year). This table is simply intended to highlight some of the larger organizations in the region, and is not intended to be a precise ranking. Page 69.

5.7. **Benchmarking the Region: Income Inequality.** DataHaven analysis (2013). U.S. Census Bureau 2011 5-year American Community Survey data are from the U.S. Census Bureau American Community Survey Office, and were released in December 2012. These data measure the 80th and 20th percentile household incomes within each metropolitan area, as explained on page 71, and the ratio between the two. Accessed July 25 at http://factfinder2.census.gov. Page 70.

5.8. **Household Income Inequality (80:20 Ratio), 2011.** See Figure 5.7 notes. Data are from 2011 5-year American Community Survey. Page 71.

5.9. **Regional Opportunity, Fall 2012.** Figure shows survey results from some of the questions in the 2012 DataHaven Wellbeing Survey. Percentages are weighted estimates of survey results for all households with children in the Greater New Haven region as a whole, for all families as well as a comparison of the results by family income level. For example, the chart shows that 98% of families earning $50,000 or more were "housing secure," but only 85% of families earning less than $50,000 were. These data can be disaggregated in many other ways, as shown on the Wellbeing Survey website, http://www.ctdatahaven.org/wellbeingsurvey. The disparities by family income show that children growing up in the Greater New Haven area may have very different opportunities to flourish, given that the resources available to their family may impact the place where they live, the hardships faced by their family each day, and other social or environmental factors. Page 72.

Additional detail on Chapter 4 methodology: For age-adjusted mortality analyses, data were taken from the CT Master Death Files for 2006 to 2010. Population estimates were taken from the 2010 Decennial Census, and age standardization used the US 2000 Standard Population weights for consistency to national estimates. Data were analyzed using SAS and addresses geocoded using ArcGIS. To calculate age-adjusted mortality rates for low income, medium income and high income New Haven neighborhoods, the following method was used:

1. Identify deaths due to a specific cause. Deaths of New Haven residents due to a specific cause were identified based on the ICD10 coded underlying cause of death. For example a death was attributed to chronic lower respiratory disease if the underlying cause of death was coded as J40-J47. The only exception to this rule was that deaths were attributed to diabetes if any of the ICD10 codes causes of death was coded as E10-E14.

2. Determine whether the decedent lived in a low income, mixed income or high income neighborhood. The residential addresses of people who died due to a specific cause were located on a map of New Haven by geocoding. The geocoded points were merged with a map of the neighborhoods in New Haven so that addresses of the deceased could be classified as in low income, mixed income and high income neighborhoods.

3. Calculate age-specific mortality (death) rates for each neighborhood. Deaths were stratified into groups based on age (less than 4, 1-4, 5-14, 15-24, 25-34, 35-44, 45-54, 55-64, 65-74, 75+) and neighborhoods. Cause specific mortality rate were calculated by dividing the number of deaths in a given neighborhood and age group by the number of people in that neighborhood and age group.

4. Create mortality rate estimates for each neighborhood that take into account the differing age structures of New Haven neighborhoods. For each age group, the age specific mortality rate was multiplied by the number of people in that age group in the standard population. This resulted in an estimate of the number of deaths that would have

occurred if the mortality rate for that age group was applied to that age group in the standard population. An estimate of the number of deaths that would have occurred in the neighborhood overall was determined by adding the estimated number of deaths across the age groups. This total number of deaths was divided by the number of people in the standard population and then multiplied by 100,000 to get the age-standardized mortality rate per 100,000 for a given cause of death and neighborhood.

To calculate Premature Mortality, or potential years of life lost per 100,000 residents, for low income, mixed income and high income neighborhoods, the following method was used.

1. Identify the number of years of potential life lost for each premature death. Deaths before 75 year of age were considered premature. Premature deaths were identified. For each such death the potential years of life lost was calculated by subtracting the age at death from 75.

2. Determine whether the premature decedent lived in a low income, mixed income or high income neighborhood. The addresses of those who died prematurely were classified as in low income, mixed income and high income neighborhoods using the methods described above.

3. Calculate age-specific potential years of life lost rates for each neighborhood. Age and neighborhood specific years of potential life lost rates (specific to each age group and a neighborhood) were calculated by dividing the number of years of potential life lost in a given neighborhood and age group by the number of people in that neighborhood and age group. The age groups were as defined above.

4. Create years of potential life lost rate estimates for each neighborhood that allow comparisons across neighborhoods with differing age structures. A similar method as described above was used to calculate neighborhood-specific age–standardized potential years of life lost per 100,000 people substituting the years of potential life lost rate for the mortality rate. The US Standard Population weights that were used excluded the population 75 and over.

Appendix 3: Endnotes

1   Statement adapted from Ryan, D., et al. (1995). New Haven Maps '95. New Haven, CT: DataHaven.

2   Rothstein, R. (2010). How to fix our schools. Washington, D.C.: Economic Policy Institute. In this analysis, peer groups are considered an in-school factor, even though they are often determined by neighborhood, because of the geographic boundaries of school districts.

3   For example, see Abraham, M. (2011). "New Haven crime real, danger ranking is not." New Haven Register, Sunday, June 5, 2011. Available at http://www.ctdatahaven.org/blog/2011/06/public_safety_new_haven/.

4   State of Connecticut, Office of Policy and Management. (2013). COMMON CROSS-AGENCY POPULATION RESULTS WORK GROUP. Accessed July 25 at http://www.ct.gov/opm/cwp/view.asp?A=2998&Q=491150.

5   DataHaven. (2012). Community Wellbeing Survey. Accessed August 25 at http://www.ctdatahaven.org/wellbeingsurvey.

6   Kingsley, T and Pettit, K. (2011). Quality of Life at a Finer Grain: The National Neighborhood Indicators Partnership. Chapter 4 in M.J. Sirgy et al. (eds.), Community Quality-of-Life Indicators: Best Cases V. New York: Springer.

7   Please refer to Chapters 3 and 5 for data on income levels by neighborhood area.

8   OECD. (2013). OECD Guidelines on Measuring Well-being. OECD Publishing. Available from: http://dx.doi.org/10.1787/9789264191655-en.

9   Gallup Poll. (2013). Accessed July 25 at http://www.gallup.com/poll/wellbeing.aspx.

10   DataHaven. (2012). Greater New Haven Community Wellbeing Survey. Accessed August 25 at http://www.ctdatahaven.org/wellbeingsurvey.

11   To illustrate, consider the finding that a one percentage point increase in the percentage of adults with a Bachelor's degree within a region is associated with a $856 increase in annual per capita income. CEOs for Cities. (2013). City Dividends. Accessed August 25 at http://www.ceosforcities.org/city-dividends/talent/.

12   Of the 169 towns and cities in Connecticut, New Haven was the only one to see a net gain of 25-44 year olds between 2000 and 2010, with the exception of Norwich, CT, which experienced a much smaller net gain.

13   For more reading, see Institute of Medicine Committee on Assessing Interactions Among Social, Behavioral, and Genetic Factors in Health. (2006). Hernandez LM, Blazer DG, editors. Genes, Behavior, and the Social Environment: Moving Beyond the Nature/Nurture Debate. Washington (DC): National Academies Press. Available from: http://www.ncbi.nlm.nih.gov/books/NBK19934/.

14   In this report, unless otherwise noted, "White" is used to describe the demographic characteristics of persons who classify themselves as being of White race and not of a Hispanic or Latino ethnicity. Systems vary by government agency, but in Census data this often is reported as "Not Hispanic, White." As discussed in the text above, government systems that are used to collect race and ethnicity classifications are imperfect, and have limitations that must be considered when collecting or interpreting data about people.

15   Glaeser, E and Vigdor, J. (2012). The End of the Segregated Century: Racial Separation in America's Neighborhoods, 1890-2010. New York: Manhattan Institute for Policy Research. Accessed July 25 at http://www.manhattan-institute.org/pdf/cr_66.pdf.

16   DataHaven analysis of 2010 Decennial Census data by neighborhood. When Census data are collected, parents or guardians typically answer questions about the race and ethnicity of each child.

17   Rawlings, J. (2013). Urban Apartheid. New Haven: Greater New Haven NAACP. Accessed July 25 at http://www.naacpnewhaven.org/wp-content/uploads/NAACP_UrbanApartheid_print_final.pdf.

18   DataHaven analysis of 2011 Connecticut State Department of Education data on individual school enrollment by race from http://sdeportal.ct.gov/Cedar/WEB/ct_report/CedarHome.aspx?. School poverty rate is determined by the percentage of students with free or reduced price lunch eligibility.

19   Harvard School of Public Health DiversityData Program. (2013). Segregation of Public Primary School Students, Dissimilarity by Race/Ethnicity (data tool). Accessed July 25 at http://diversitydata.sph.harvard.edu/Data/Rankings/Show.aspx?ind=37&ch=13&ch=72&tf=43&sortby=Name&sort=LowToHigh&notes=True&rt=MetroArea&rgn=ShowAll#definition.

20   Building Resilient Regions. (2013). "Why Feds, Suburbs Should Look to Metros for Models of Immigrant Integration." Accessed July 25 at http://brr.berkeley.edu/2013/06/why-feds-suburbs-should-look-to-metros-for-models-of-immigrant-integration/.

21   U.S. Census Bureau. (2013). More Families with an Unemployed Parent, Census Bureau Reports. August 27 news release. Accessed August 27 at http://www.census.gov/newsroom/releases/archives/families_households/cb13-149.html.

22   Gallagher, L. (2013). The End of the Suburbs: Where the American Dream is Moving. New York: Penguin.

23   Chetty, R., et al. (2013). The Equality of Opportunity Project. Cambridge: Harvard University. Accessed September 11 at http://www.equality-of-opportunity.org/.

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25   U.S. Census Bureau. (2013). More Families with an Unemployed Parent, Census Bureau Reports. August 27 news release. Accessed August 27 at http://www.census.gov/newsroom/releases/archives/families_households/cb13-149.html.

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27   National Scientific Council on the Developing Child. (2004). Young Children Develop in an Environment of Relationships: Working Paper No. 1. Retrieved in 2011 from www.developingchild.harvard.edu.

28   Campbell, F. A., Helms, R., Sparling, J. J., & Ramey, C. T. (1998). Early-childhood programs and success in school: The Abecedarian study. In W. S. Barnett (Ed.), Early care and education for children in poverty: Promises, programs, and long-term results. (Vol. SUNY series, youth social services, schooling, and public policy / SUNY series, early childhood education: Inquiries and insights., pp. 145-166). Albany, NY: University of New York Press. See also, Campbell, F. A., Pungello, E. P., Miller-Johnson, S., Burchinal, M., & Ramey, C. T. (2001). The development of cognitive and academic abilities: Growth curves from an early childhood educational experiment. Developmental Psychology, 37(2), 231-242, and Campbell, F. A., Ramey, C. T., Pungello, E., Sparling, J., & Miller-Johnson, S. (2002). Early childhood education: Young adult outcomes from the Abecedarian Project. Applied Developmental Science, 6(1), 42-57.

29   United Way Barometer. (2012). Accessed July 25 at http://www.ctunitedway.org/Media/Barometer/June2012.pdf.

30   Esty, S. and Oppenheimer, C. (2011). Connecticut Early Care and Education Progress Report, 2011. New Haven: Connecticut Voices for Children. Accessed August 25 at http://www.ctvoices.org/sites/default/files/ecereportcard2011.pdf.

31   Hernandez, D. (2012). Double Jeopardy: How Third-Grade Reading Skills and Poverty Influence High School Graduation. Baltimore: Casey Foundation. Available at http://www.aecf.org/KnowledgeCenter/Education.aspx.

32   Zill, N. and West, J. (2000). Entering Kindergarten: Findings from the Condition of Education. National Center for Education Statistics, U.S. Department of Education, March 2001.

33   See http://care.yale.edu/ for more information, including a 2010 report on student health and academic achievement in New Haven. The report is also published at http://www.ctdatahaven.org/know/images/0/0c/CARE_Health_%26_Academic_Achievement_2011.pdf.

34   United Way of Greater New Haven. (2003). Community Compass Household Survey. New Haven, CT: United Way of Greater New Haven. Accessed July 25 at http://ctdatahaven.org/know/index.php/File:Compass_Household_Survey_2003.pdf.

35   Wodtke, G. et al. (2011). Neighborhood Effects in Temporal Perspective: The Impact of Long-Term Exposure to Concentrated Disadvantage on High School Graduation. American Sociological Review, 76(5): 713-736.

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43   Rosenthal, L. et al. (2012). The importance of full-time work for urban adults' mental and physical health. Soc. Sci. Med. 2012 November. Available at http://www.ncbi.nlm.nih.gov/pubmed/22858166.

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50   Transportation for America. (2011). Aging in Place, Stuck without Options: Fixing the Mobility Crisis Threatening the Baby Boom Generation. Washington, DC: Transportation for America. Accessed July 25 at http://t4america.org/docs/SeniorsMobilityCrisis.pdf.

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52   American Automobile Association. (2013). Your Driving Costs 2013.

53   DataHaven analysis of 2011 5-year American Community Survey.

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About DataHaven

Founded in 1992, DataHaven is a non-profit 501(c)3 organization dedicated to improving
the Greater New Haven and Valley Region by compiling, interpreting, and sharing high-
quality public information for effective decision making.

DataHaven is a partner of the National Neighborhood Indicators Partnership, a
collaborative national effort by the Urban Institute of Washington, DC, and
approximately 40 local partners to further the development and use of neighborhood
information systems in local policymaking and community building. We are also a
partner of the Connecticut Data Collaborative, a statewide initiative to further the use
of high-quality data in state and local policymaking. DataHaven does not advocate
specific policy. Our goal is to provide data for community action and engage residents in
thinking about the future of our region.