

DataHaven

In partnership with **Fairfield County's Community Foundation** and a **Community Health Needs Assessment** for the towns served by Bridgeport Hospital, Danbury Hospital, Greenwich Hospital, Norwalk Hospital, St. Vincent's Medical Center, and Stamford Hospital















#### Fairfield County Community Wellbeing Index 2016

Indicators of social progress, economic opportunity, and population well-being in Fairfield County neighborhoods

#### **Major Funders**

**DataHaven** 















#### 2015 DataHaven Community Wellbeing Survey Funders

The Fairfield County Community Wellbeing Index makes extensive use of the DataHaven Community Wellbeing Survey, which completed in-depth interviews with 16,219 randomly-selected adults in Connecticut last year. In addition to the major funders listed above, supporters of the surveys interviews with 4,962 adults in Fairfield County included the Greater Bridgeport Primary Care Action Group, United Way of Coastal Fairfield County, City of Norwalk Health Department, Connecticut Health Foundation, Connecticut Housing Finance Authority, and Valley Community Foundation, among others. Please see ctdatahaven.org for a complete list of statewide partners and funders.

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C	ont	en	ts
	• • • •		

1	Introduction	2					
	INDICATORS IN THIS REPORT	2					
	ABOUT THE DOCUMENT	4					
	MEASURING HOW COMMUNITIES SHAPE WELL-BEING	5					
	STATE RANKINGS	8					
2	A Changing Region	9					
	THE FAIRFIELD COUNTY POPULATION	g					
	HOUSEHOLDS AND INCOME IN FAIRFIELD COUNTY	17					
3	A Healthy Region	22					
	HEALTH OUTCOMES						
	SUBSTANCE ABUSE AND MENTAL HEALTH						
	ACCESS TO HEALTH CARE	39					
4	A Region of Opportunity	41					
	EDUCATIONAL OPPORTUNITIES FOR CHILDREN AND YOUTH	44					
	ECONOMIC OPPORTUNITY IN FAIRFIELD COUNTY	53					
	COMMUNITY LIFE, LOCAL GOVERNMENT, & CIVIC ENGAGEMENT	60					
5	Conclusion & Endnotes	67					
	CONCLUSION	67					
	A COMMUNITY INDICATORS APPROACH	68					
	ENDNOTES	68					

#### **Indicators in this Report**



## RANKINGS IN FAIRFIELD COUNTY

- 1.1 Personal Wellbeing Index and Community Index
- 1.2 Community Index Components
  Data Values
- 1.3 State Rankings



## THE FAIRFIELD COUNTY POPULATION

- 2.1 Population and Growth in Fairfield County
- 2.2 The Changing Age Structure of Fairfield County
- 2.3 Race and Ethnicity in Fairfield County
- 2.4 Fairfield County's Foreign-Born Population
- 2.5 Characteristics of Immigrants in Fairfield County



# HOUSEHOLDS & INCOME IN FAIRFIELD COUNTY

- 2.6 The Changing Household Structure of Fairfield County
- 2.7 Income and Income Inequality in Fairfield County
- 2.8 Growing Neighborhood Income Inequality in Fairfield County
- 2.9 The Low-Income Population in Fairfield County
- 2.10 Housing Cost Burden in Fairfield County
- 2.11 Characteristics of Fairfield County Households



#### HEALTH OUTCOMES

- 3.1 Fairfield County Trends
- 3.2 Well-Being and Chronic Disease Risk Factors
- 3.3 Infant Health Indicators
- 3.4 Leading Causes of Death
- 3.5 Causes of Premature Death
- 3.6 Heart Disease, Hospital Inpatient Encounters
- 3.7 Heart Disease & Lung Cancer Inpatient Encounters by Age
- 3.8 Nutrition, Obesity, and Diabetes
- 3.9 Diabetes, All Hospital Encounters
- 3.10 Injury Mortality by Type
- 3.11 Homicide and Purposeful Injury, All Hospital Encounters
- 3.12 Childhood Asthma, All Hospital Encounters
- 3.13 Selected Infectious Diseases



# SUBSTANCE ABUSE & MENTAL HEALTH

- 3.14 Chronic Obstructive Pulmonary Disease (COPD)
- 3.15 Substance Abuse, All Hospital Encounters



# ACCESS TO HEALTH CARE

- 3.16 Preventable Dental Conditions, Hospital ED Encounters
- 3.17 Health Care Access



# EARLY CARE & EDUCATION

- 4.1 Working Parents, 2000-2014
- 4.2 Availability of Childcare and Education in Fairfield County, 2014
- 4.3 Affordability of Childcare for Families
- 4.4 Availability of Childcare and Education Subsidies in Fairfield County, 2014
- 4.5 Preschool Enrollment in Fairfield County, 2014



# EDUCATIONAL OPPORTUNITIES FOR CHILDREN & YOUTH

- 4.6 Race and Ethnicity of Fairfield County Students, 2014–15
- 4.7 High-Needs Students
- 4.8 Academic Achievement in Fairfield County Schools
- 4.9 The Opportunity Gap Impacts
  Achievement at Fairfield
  County Schools
- 4.10 Higher Education of Fairfield County Students
- 4.11 Opportunity Youth in Fairfield County, 2014
- 4.12 Opportunities for Young People in Fairfield County



# ECONOMIC OPPORTUNITY

- 4.13 Movement of Low-Income Workers (Salary < \$40,000)
- 4.14 Movement of High-Income Workers (Salary > \$40,000)
- 4.15 Financial Security and Underemployment
- 4.16 Jobs and Wage Trends by Sector, 2000–14
- 4.17 Changing Industry Footprints
- 4.18 Educational Attainment



# COMMUNITY LIFE, LOCAL GOVERNMENT, & CIVIC ENGAGEMENT

- 4.19 Municipal Financial Capacity in Fairfield County
- 4.20 Perceived Access and Use of Community Resources
- 4.21 Perceived Community Cohesion
- 4.22 Voter Turnout in Fairfield County
- 4.23 Civic Engagement and Government

#### **CHAPTER 1**

# Introduction

What does it mean to have a healthy economy? How do we know if people are doing better than they were ten years ago? How do we measure growth meaningfully—in terms of not only dollars and cents, but also the quality of people's lives?

Good data and thoughtful measurements can capture our attention, highlight areas for direct action, and focus efforts to create change. The gross domestic product (GDP), which measures the value of all goods and services a country produces, has become a primary gauge of the health of our economy. Its measure guides major decisions for policymakers, journalists, and residents alike. The raw numbers of the value of economic activity, however, do not capture how well people are doing in a common-sense, day-to-day way — how much they experience prosperity when (and if) it comes, and how much it hurts when the economy slows down. In recent decades, alternative indicators have been proposed as a way to capture the experiences and situations of individuals, neighborhoods, and regions. These more sensitive and nuanced measures of well-being include how people are doing on a daily basis, how they function in the world, and how they generally perceive their lives and their communities.

Alongside standard economic indicators, these measures of experienced and evaluative well-being can offer further insight to inform policy. Attention to well-being is particularly useful when analyzing

and prioritizing qualitative aspects of a community, such as perceptions of safety, certain environmental factors, access to community resources, and general optimism about the future.

At DataHaven, we believe that good data can propel community action. We look for numbers that can inform policy and stay relevant to the general public. More public data are available now than ever before, and in this report, our goal is to distill those figures and put them in context to provide a first-order approximation of how Fairfield County is doing. We've included a broad range of information, with input from our gracious partners in local hospitals, foundations, and city agencies. Their assistance throughout the process has helped us hone in on the multi-dimensional well-being of the diverse communities in Fairfield County. No indicator is perfect, and ours are no exception. We expect that feedback from community members will challenge our choices and help strengthen future reports. But we hope that the research here — much of it published for the first time — enables us, as a community, to see things that we might not otherwise see, so that we solve problems that might otherwise go unrecognized.

To return to our original claim, measurements have power — but only when people care. We hope you dig into the analyses and find trends that speak to you, share your stories with neighbors, start a dialogue about how our communities can be improved, and take action for the common good. We invite you to engage.

Mark Abraham, Executive Director, DataHaven

#### **About the Document**

We do not claim that this first edition of the Fairfield County Community Wellbeing Index is comprehensive; it is a work in progress that we intend to add to over time based on input from readers and regional partners. While some of the topics here have been the subject of other studies, we believe that there has never been a program that attempted to synthesize all of them into a single report on the interrelationship of quality of life, health, and economic competitiveness of Fairfield County and its individual towns and neighborhoods. Modeled after our Greater New Haven Community Index 2013, we believe that this single-source approach is effective because it creates an inclusive, approachable product and allows readers and partners to see how the work they do across different sectors contributes to a broader whole.

We developed this report based on an extensive

Chapter 1 Introduction 5

analysis of information gathered directly from local residents in 2015 and 2016. Data collection included in-depth, live cell phone and landline interviews with randomly-selected adults (4,962 living in Fairfield County and 16,219 living statewide) during the landmark DataHaven Community Wellbeing Survey, supplemented by focus groups and interviews. The Index also draws upon secondary data produced by dozens of agencies and organizations, including the U.S. Census Bureau, Connecticut state agencies, and the Connecticut Hospital Association. Care was taken to ensure that all persons living in Fairfield County, regardless of age, gender, race, ethnicity, national origin, or other demographic characteristics, would be represented within these sources of information. All data sources are documented in Chapter 5.

This report is designed to meet Greenwich Hospital's, Stamford Hospital's, Norwalk Hospital's, Danbury Hospital's, St. Vincent's Medical Center's, and Bridgeport Hospital's individual IRS requirements in Form 990 Schedule H and Notice 2011-52 that discuss the creation of a Community Health Needs Assessment (CHNA), as well as to meet the similar needs of local health departments as part of a national accreditation process. This report's health chapter (Chapter 3) is intended to document key health needs in the communities served by all of the hospitals, while using a unified approach to reach the broadest possible audience. Additional CHNA chapters (see below) have been created separately based on the work of the multi-agency community-hospital

DOCUMENT	TOWNS INCLUDED
Fairfield County Community Wellbeing Index	All 23 towns in Fairfield County
Additional CHNA Chapters and Hospital Service Area	
Greater Greenwich (Greenwich Hospital)	<b>Greenwich</b> , plus selected adjacent sections of New York State
Greater Stamford (Stamford Hospital)	Darien, Stamford
Greater Norwalk (Norwalk Hospital)	New Canaan, Norwalk, Weston, Westport, Wilton
Greater Danbury (Danbury Hospital)	Bethel, Brookfield, Danbury, New Fairfield, Newtown, Redding, Ridgefield, Sherman, plus selected adjacent sections of Litchfield and New Haven Counties
Greater Bridgeport (Bridgeport Hospital and St. Vincent's Medical Center)	Bridgeport, Easton, Fairfield, Monroe, Trumbull, Stratford
2016 Valley Community Index separately-produced; CHNA for Griffin Hospital	<b>Shelton</b> , plus other towns in the Lower Naugatuck Valley region

coalition that exists within each hospital's primary service area. These additional chapters contain detail on community needs that were identified within each town and selected adjacent areas, and document the process used to conduct the community health needs assessments within each area including the production of the main Fairfield County Community Wellbeing Index. The chapters discuss the Community Health Improvement Plan being developed and updated within each hospital service area. Like the main report, the chapters have benefited from input from dozens of local public health experts. They may be found on the individual hospital or DataHaven websites when they are finalized.

#### Measuring How Communities Shape Well-Being

Using our unprecedented statewide survey plus U.S. Census Bureau data, DataHaven constructed concise indicators to illustrate the connection between communities and individuals. More than 16,000 randomly-selected adults living throughout Connecticut participated in the 2015 DataHaven Community Wellbeing Survey (CWS). The survey's questions on health, happiness, and quality of life help us create an understanding of how people evaluate and experience day-to-day life.

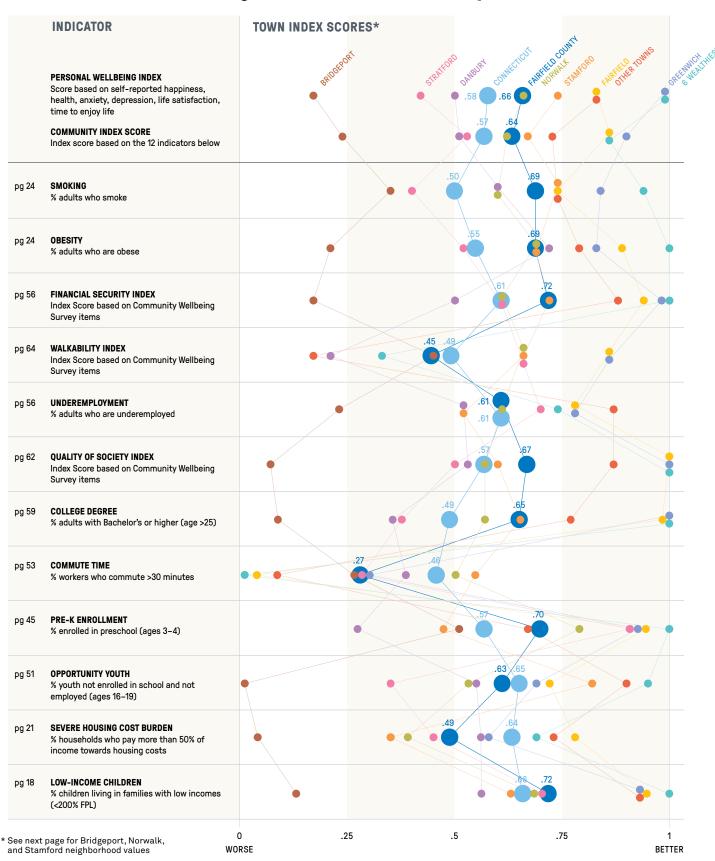
Designed by a panel of local and national experts and drawn from well-known surveys in the United States and United Kingdom, the CWS included a series of questions that are regularly used to evaluate personal well-being and that together make up our personal well-being index:

- · How would you rate your overall health?
- How satisfied are you with your life nowadays?
- How happy did you feel yesterday?
- How anxious did you feel yesterday?
- Overall, to what extent do you have the time you need to do things that you really enjoy?
- During the last month, how often have you been bothered by feeling down, depressed, or hopeless?
- Do you have relatives or friends who you can count on to help you when you need them?

Meanwhile, we developed a broader Community Index that blends Census data and survey participants' perceptions of what life is like in their communities. These indicators seek to capture the physical and social environments that people live in — including measures of community-wide health, infrastructure, education, and economics.

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### Personal Wellbeing Index and Community Index



Chapter 1 Introduction 7

#### **ABOUT THE INDICES**

Community well-being — a neighborhood's shared assets and strengths, and the feeling of trust and cohesiveness between its residents — impacts the personal well-being of residents. We approach well-being from both the individual and community angles. Healthy communities are made up of individuals who feel safe and included, have access to goods and opportunities, and are civically engaged. In return, such communities foster healthier, happier residents, propelling a virtuous cycle. To highlight this relationship, we used residents' evaluations of their own physical and mental health, happiness, personal relationships, and life satisfaction to create a Personal Wellbeing Index. We also identified 12 key indicators of community well-being, which collectively form our Community Index.

The chart gives a visual overview of index scores by indicator. Higher scores are better, and are based on how each geographic area compares to a wide distribution of neighborhoods throughout Connecticut. The table below provides the actual data values for comparison. Page numbers link to additional analysis of each indicator.

Index scores are normalized so that all range from 0 to 1, with 1 representing the preferred (better) outcome. Each town or neighborhood is compared to a large sample of Connecticut zip codes. A town with a score of 1 for an indicator means it performed as well as the top 95th percentile of the zip codes, while a score of 0 indicates the town fits in the bottom 5th percentile for that indicator. Actual values for individual community indicators (described in more detail on the previous page) are shown in the table.

Certain indicators in the community index appear personal but have social components.

Obesity is a prime example. To the extent obesity is under individuals' control, public health research suggests it can spread through a social network.<sup>2,3</sup>

Fairfield County's extensive economic, educational, cultural, and health-related assets could translate into a high quality of life for all residents. Yet, levels of well-being are not evenly distributed across communities or neighborhoods, even within the same town. We often find correlations between community well-being and personal well-being. Studying both these measures together allows us to better understand the interplay between community strength and individual health and happiness.

The aspiration of this report is that data will reveal the assets and challenges of our communities and provide a starting point for action by community leaders and policymakers. The indices shown here preview what follows.



### **Community Index Components Data Values**

	PERSONAL WELL- BEING INDEX	COMM- UNITY INDEX	SMOKING	OBESITY	FINANCIAL SECURITY INDEX	WALKA- BILITY INDEX	UNDER EMPLOY- MENT	QUALITY OF SOCIETY INDEX	COLLEGE DEGREE	COM- MUTE TIME	PRE-K ENROLL- MENT	OPPOR- TUNITY YOUTH	SEVERE HOUSING COST BURDEN	LOW INCOME CHILDREN
Connecticut	0.58	0.57	15%	26%	0.61	0.49	14%	0.57	37%	34%	64%	6%	18%	30%
Fairfield County	0.66	0.64	11%	22%	0.72	0.45	14%	0.67	45%	38%	69%	6%	20%	26%
Bridgeport	0.17	0.24	18%	36%	0.17	0.45	23%	0.07	16%	38%	62%	14%	29%	65%
East End	0.09	0.08	23%	44%	0.06	0.21	26%	0.01	7%	34%	61%	30%	38%	80%
Central	0.17	0.23	19%	35%	0.11	0.49	24%	0.10	18%	37%	56%	10%	27%	67%
<b>Other</b>	0.26	0.33	13%	35%	0.28	0.45	20%	0.13	17%	40%	76%	11%	28%	52%
Danbury	0.50	0.51	13%	21%	0.50	0.21	16%	0.53	30%	35%	53%	7%	19%	36%
Fairfield	0.83	0.86	8%	18%	0.94	0.86	10%	1.00	66%	37%	77%	5%	19%	12%
Greenwich	0.99	0.90	10%	16%	0.99	0.86	10%	1.00	62%	44%	78%	5%	15%	10%
Norwalk	0.66	0.63	13%	22%	0.61	0.66	14%	0.57	41%	32%	72%	7%	22%	28%
Central	0.58	0.55	16%	25%	0.50	0.62	16%	0.57	37%	29%	64%	5%	24%	35%
Other	0.74	0.73	11%	18%	0.77	0.74	11%	0.57	46%	34%	80%	10%	20%	20%
Stamford	0.74	0.67	10%	22%	0.72	0.66	16%	0.60	46%	31%	60%	3%	23%	32%
Central	0.74	0.64	11%	22%	0.55	0.82	18%	0.57	40%	30%	53%	5%	26%	43%
Other	0.74	0.71	8%	22%	0.94	0.41	13%	0.67	57%	31%	77%	1%	18%	10%
Stratford	0.42	0.54	17%	27%	0.61	0.66	12%	0.50	31%	38%	75%	9%	21%	27%
6 Wealthiest	0.99	0.86	6%	10%	1.00	0.33	11%	1.00	76%	48%	83%	2%	17%	7%
Other Towns	0.83	0.73	10%	19%	0.88	0.17	8%	0.87	51%	42%	68%	2%	16%	12%

#### **State Rankings**

Connecticut compares well to other states on wellestablished national rankings of community wellbeing and economic opportunity. When created by respected organizations in a valid way, these types of rankings can help bring context to any discussion of regional issues. However, regional or citywide trends can be misleading, because even as a city improves, conditions within its most disadvantaged neighborhoods may be getting worse. Throughout this report, we have drilled down into the statewide and region-wide data by town, neighborhood, and demographic group to assess the performance of specific communities. DH



#### NEIGHBORING STATE RANKINGS FOR COMPARISON

REPORT (YEAR) PUBLISHER	СТ	MA	RI	NY	NJ
Measure of America (2013–2014) — Social Science Research Council Composite ranking of life expectancy, education and median earnings	1	2	14	8	3
State Equality Index (2015) — Human Rights Campaign Places states in one of four categories based on their LGBT-related legislation and policies (From best to worst: Working Toward Innovative Equality (WTIE), Solidifying Equality (SE), Building Equality (BE), and High Priority to Achieve Basic Equality (HPABE)	1	8	14	8	8
State Integrity Investigation (2015) — The Center for Public Integrity Grading based on the laws and systems states have in place to deter corruption	3	11	5	31	19
Opportunity Index (2015) — Measure of America and Opportunity Nation Composite measure of economic, educational, and civic factors that expand opportunity	3	2	25	15	6
Bloomberg State Innovation Index (2016) — Bloomberg Scored states on R&D intensity, productivity, high-tech density, concentration STEM employment, science and engineering degree holders, and patent activity	5	1	14	17	4
Quality Counts (2016) — Education Week  Ranks states on three indices developed by the Education Week Research Center, including factors such as the role education plays in career outcomes, academic performance, and school finances	5	1	13	9	2
America's Health Rankings (2015) — United Health Foundation Study of health behaviors, environmental and social barriers to health, health care and disease risk	6	3	14	13	11
State Energy Efficiency Scorecard (2015) – ACEEE Assessment of policies and programs that promote energy efficiency	6	1	4	9	21
Kids Count (2015) — Annie E. Casey Foundation Composite index of children's economic security, education and health	6	3	31	28	8
New Economy Index (2014) — Information Tech & Innovation Fdn (ITIF) Index of digital economy, economic dynamism and global integration	8	1	19	12	10
State Technology and Science Index (2014) — Milken Institute Study of economic performance in technology and science	9	1	13	11	16
State Long-Term Services and Supports Scorecard (2014) — AARP Measures systems that help older people and adults with disabilities	12	18	38	25	26
State of American Wellbeing (2015) — Gallup Composite score based on happiness, emotional health, economic wellbeing and other topics	18	30	26	40	32
Volunteer Rate Rankings (2014) — Corporation for National & Community Service Ranking based on average volunteer rates	20	33	38	50	45
Assets & Opportunity Scorecard (2016) — Corporation for Enterprise Development Ranking based on 67 outcome measures to assess the financial security and economic opportunity of U.S. households, including categories such as financial assets and income, business and jobs, housing and homeownership, healthcare, and education	23	14	35	32	25
Average ranking among all 50 U.S. states	8	9	20	21	16

#### CHAPTER 2

# A Changing Region

Residential divisions by race and income are particularly apparent among children. In Fairfield County, 36 percent of African-American children and 30 percent of Latino children live in poor neighborhoods—those where the average family income (AFI) is less than half the state AFI. Just 1 percent of white children live in poor neighborhoods.

From 2005 to 2014, the number of severely cost-burdened renters (those paying more than half of their total income towards housing costs) increased by 51 percent in Fairfield County.



#### Population and Growth

In 2014, Fairfield County had a total population of 934,200. The largest towns in the region are also the most population dense, and are considered to be the county's major cities: Bridgeport, Stamford, Norwalk, and Danbury.<sup>4</sup>

Since 1990, the county population increased by 13 percent, at a rate faster than Connecticut's population overall (up 9 percent). Every town in the region grew in population; Danbury and Stamford grew the most, each adding more than 17,000 people. As a whole, the suburban towns grew faster than the cities from 1990 to 2014.<sup>5</sup>

Recently, however, some cities have experienced rapid growth; Danbury had the largest population increase of any town in Connecticut from 2000 to 2010; Stamford led the state in population growth from 2010 to 2014.6

#### **Age Groups and Aging**

In the county between 1990 and 2014, the number of young adults (ages 18–34) decreased by 15 percent, or 32,900. Meanwhile, the population of middle-aged adults (ages 35–64) grew the fastest, at a rate of 26 percent (+81,100 people). Over the next decade, older adults (ages 65 and over) are projected to be the only group to increase significantly in size. From 2014 to 2025, the older adult population will grow by 37 percent, or 47,700.7

Fewer young people and more aging adults have made the total county population older in general, trends that mirror the statewide changes. The growth in older adults is due to Baby Boomers, who began turning 65 in 2011, and is occurring nationally and internationally.<sup>8</sup>

The wealthiest towns and other suburbs saw dramatic change in age structure, with the number of middle-aged and older adults increasing much more rapidly than in the city centers. In general, these towns lost large numbers of young adults but gained many middle-aged and older adults. The number of children also grew, fastest in the wealthiest towns.<sup>9</sup> (FIG 2.2)

# Population and Growth in Fairfield County

POPULATION IN FAIRFIELD COUNTY AND TOWNS, 1990-2014

	TOTAL POPULATION, 1990	TOTAL POPULATION, 2014	PERCENT CHANGE 1990-2014	DENSITY, 2014 Pop. Per Square Mile	MEDIAN AGE, 2000	MEDIAN AGE, 2014
United States	248,709,873	314,107,084	26%	91	35	37
Connecticut	3,287,116	3,592,053	9%	742	37	40
Fairfield County	827,645	934,215	13%	1,495	37	40
Bethel	17,541	19,078	9%	1,130	37	42
Bridgeport	141,686	146,680	4%	9,185	31	32
Brookfield	14,113	16,774	19%	848	39	45
Danbury	65,585	82,781	26%	1,976	35	37
Darien	18,196	21,190	16%	1,674	38	39
Easton	6,303	7,593	20%	277	40	47
Fairfield	53,418	60,678	14%	2,029	39	41
Greenwich	58,441	62,141	6%	1,305	40	42
Monroe	16,896	19,744	17%	757	38	43
New Canaan	17,864	20,073	12%	905	40	43
New Fairfield	12,911	14,079	9%	689	37	44
Newtown	20,779	27,960	35%	485	38	44
Norwalk	78,331	87,214	11%	3,815	37	41
Redding	7,927	9,267	17%	294	41	49
Ridgefield	20,919	25,025	20%	725	39	43
Shelton	35,418	40,472	14%	1,321	40	46
Sherman	2,809	3,636	29%	166	42	48
Stamford	108,056	125,401	16%	3,332	36	36
Stratford	49,389	52,092	5%	2,980	40	43
Trumbull	32,016	36,444	14%	1,563	40	43
Weston	8,648	10,319	19%	521	40	43
Westport	24,410	27,055	11%	1,355	41	45
Wilton	15,989	18,519	16%	691	40	42

Chapter 2 A Changing Region

# The Changing Age Structure of Fairfield County

POPULATION AND CHANGE BY AGE GROUP, 1990-2025





POPULATION BY RACE/ETHNICITY AND AGE, 2010

46,602

134,493

15,676 58,662

County

**Bridgeport** 

**Danbury** 

Greenwich

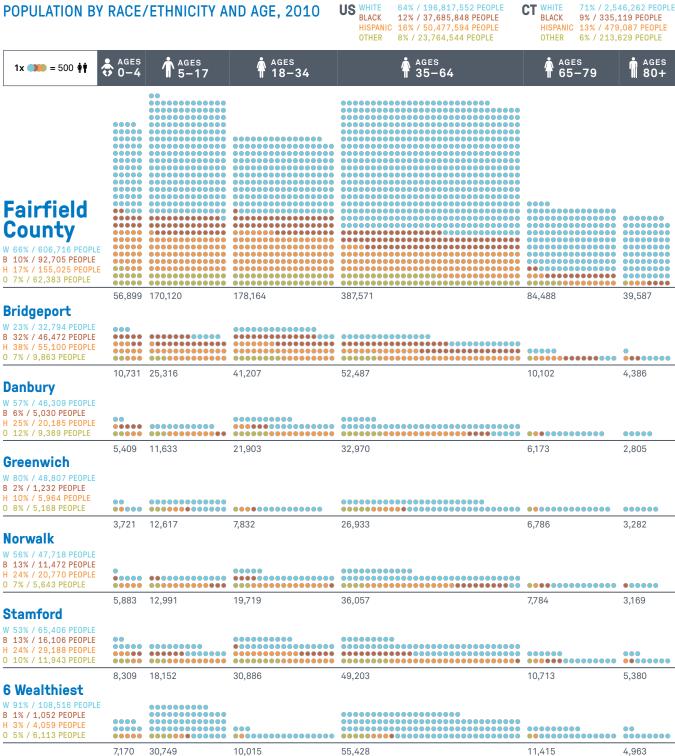
Norwalk

Stamford

Other Towns W 85% / 257.116 PEOPLE B 4% / 11,341 PEOPLE

\* Other towns include

Fairfield and Stratford



31,515

15,602

# Racial/Ethnic Groups and Increasing Diversity

In 2014, 35 percent of Fairfield County residents identified as racial or ethnic minorities (not non-Hispanic white) compared to 20 percent in 1990. Over this period, the minority population doubled, an increase of 162,600 individuals, while the size of the self-identified white population decreased by 55,200 people (-8 percent).<sup>10</sup> Population projections show that continuing over the next 30 years, all of Fairfield County's net population growth will come from people of color, preventing population loss even as the number of white people will continue to decline.<sup>11</sup>

Racial and ethnic diversity is highest among the youngest Fairfield County residents, supporting the prediction that the diversity of the region's population will continue to increase in the future. Similarly, the median age of racial and ethnic groups varies dramatically by racial/ethnic group: it is 45 years among non-Hispanic whites, 35 years among Asians, 34 years among African Americans and 30 years among Hispanic or Latinos. It is important to take age into account when describing differences between groups, particularly when it comes to health outcomes.

In this report, we will refer to racial or ethnic minorities, or people of color, as people who do not identify as non-Hispanic white. This group includes people who do not identify racially as white, as well as all people who identify ethnically as Hispanic, regardless of their race. For a variety of historical reasons, race is closely related to geography, income, and other social factors.

As of 2014, a majority of Fairfield County residents are white non-Hispanic (65 percent); 10 percent identify as Black or African American, 7 percent as some other race but not ethnically Hispanic, and 18 percent as Hispanic. Compared to other counties, the region has the largest Hispanic population in Connecticut and the 59th largest in the U.S.¹⁴ Within Fairfield County, the four largest cities have the most racially and ethnically diverse populations of the region's towns. In Bridgeport, 77 percent of residents are people of color. Approximately 12 percent of the combined populations of the wealthy and suburban towns are people of color.¹⁵

The "majority minority" racial/ethnic composition of the cities' populations, in contrast to the predominantly white suburbs, indicates that racial residential segregation exists in Fairfield County. In other words, regional diversity is not indicative of the community-level; neighborhoods tend to be either mostly people of color or mostly white people. The neighborhood-level racial segregation is linked to high economic segregation as well in the community (see Income Inequality section on page 18).<sup>16</sup>

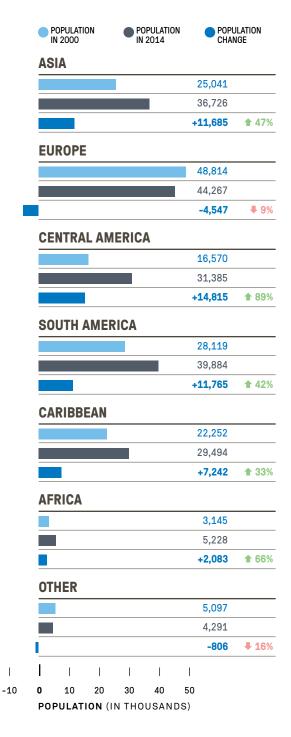
Residential divisions by race and income are particularly apparent among children. Among the population ages 0–17 in Fairfield County, 36 percent of all African-Americans and 30 percent of all Latinos live in "poor" neighborhoods, where the average family income (AFI) is less than half the state AFI. Just 1 percent of white and 4 percent of Asian children live in poor neighborhoods (see page 19 for more information on neighborhood income levels). The average white student in Fairfield County attends a primary school (grades K–8) with a school poverty rate of 18 percent, compared to school poverty rates of 66 percent and 74 percent for the schools attended by the average Hispanic and African-American students, respectively.<sup>17</sup>



## Fairfield County's Foreign-Born Population

#### CHANGES IN IMMIGRANT POPULATION FROM 2000 THROUGH 2014, BY COUNTRY OF BIRTH

Fairfield County attracts immigrants from many countries throughout the world.\* From 2000 to 2014, 100 percent of net population growth in Fairfield County could be attributed to the increase in the foreign-born population. The number of immigrants born in Guatemala, India, Ecuador, or Mexico, but residing in Fairfield County, grew the most. Populations from Guyana, Bangladesh, Guatemala, Venezuela, Honduras, and Dominican Republic grew the fastest, more than doubling in size.



<sup>\*</sup> Countries or regions of origin are only identified in this graphic if the population born there that lives in Fairfield County was estimated to be at least 700 persons.

CENTRAL AMERICA								
		2000	2014	NUMBER CHANGE	PERCENT CHANGE			
1	Guatemala	5,095	11,619	6,524	128%			
2	Mexico	6,270	10,898	4,628	74%			
3	Honduras	1,786	3,670	1,884	105%			
4	El Salvador	1,449	2,876	1,427	98%			
(5)	Costa Rica	1,097	1,300	203	19%			
6	Nicaragua	613	776	163	27%			
	Remainder	260	246	-14	-5%			
_								

#### **CARIBBEAN**

		2000	2014	NUMBER Change	PERCENT CHANGE
1	Jamaica	9,093	10,966	1,873	21%
2	Haiti	6,138	7,993	1,855	30%
4	Dominican Republic	3,671	7,341	3,670	100%
3	Cuba	1,785	1,096	-689	-39%
	Remainder	1,565	2,098	533	34%

#### **SOUTH AMERICA**

		2000	2014	NUMBER Change	PERCENT CHANGE
1	Ecuador	6,091	11,001	4,910	81%
2	Brazil	7,926	10,737	2,811	35%
3	Colombia	7,727	7,911	184	2%
4	Peru	3,170	5,342	2,172	69%
(5)	Argentina	773	1,373	600	78%
6	Venezuela	492	1,054	562	114%
7	Guyana	297	864	567	191%
8	Chile	728	723	-5	-1%
	Remainder	915	879	-36	-4%

#### **ASIA**

		2000	2014	NUMBER Change	PERCENT CHANGE
1	India	5,581	10,651	5,070	91%
2	China	3,696	6,515	2,819	76%
3	Philippines	2,050	2,849	799	39%
4	Vietnam	2,081	2,249	168	8%
(5)	Korea	1,715	2,247	532	31%
6	Pakistan	962	1,772	810	84%
7	Bangladesh	673	1,589	916	136%
8	Japan	2,049	1,530	-519	-25%
9	Cambodia	1,034	1,040	6	1%
	Remainder	5,200	6,284	1,084	21%

#### **EUROPE**

		2000	2014	NUMBER CHANGE	PERCENT CHANGE
<u> </u>	Poland	5,558	6,033	475	9%
2	United Kingdom	6,796	5,894	-902	-13%
3	Italy	7,983	5,700	-2,283	-29%
4	Portugal	5,477	3,974	-1,503	-27%
(5)	Germany	3,853	3,086	-767	-20%
6	Russia	1,947	2,225	278	14%
7	Greece	2,361	2,028	-333	-14%
8	Ireland	1,778	1,925	147	8%
9	Ukraine	887	1,338	451	51%
10	Romania	911	1,262	351	39%
(11)	France	1,365	1,212	-153	-11%
12	Hungary	1,343	997	-346	-26%
13	Netherlands	586	775	189	32%
14)	Spain	489	728	239	49%
	Remainder	7,480	7,090	-390	-5%



		2000	2014	NUMBER Change	PERCENT CHANGE
1	West African countries <sup>†</sup>	1,059	1,586	527	50%
2	North African countries <sup>‡</sup>	688	1,272	584	85%
3	South Africa	574	1,047	473	82%
	Remainder	824	1,323	499	61%

 $<sup>\</sup>boldsymbol{\star}$  Countries listed were the place of birth of at least 700 residents in 2014.

#### **OTHER**

		2000	2014		PERCENT Change
1	Canada	4,284	3,456	-828	-19%
2	Oceania	751	751	0	0%

<sup>†</sup> West Africa includes Benin, Burkina Faso, Cape Verde, Gambia, Ghana, Guinea, Guinea-Bissau, Ivory Coast, Liberia, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone, St Helena, and Togo.

 $<sup>\</sup>ddagger$  North Africa includes Algeria, Egypt, Libya, Morocco, Sudan, Tunisia, and Western Sahara.

#### **Immigration in Fairfield County**

From 1990 to 2014, the number of foreign-born people living in Fairfield County increased by 90,300, or 89 percent, and reflected a recent uptick in immigration nationwide.<sup>18</sup> By 2014, one-fifth of the county-wide population, or 191,300 individuals, were immigrants. Much of the county's immigrant population resides in one of the four major cities, where between one-quarter of the population (in Norwalk) and one-third (in Stamford) are foreign-born people.<sup>19</sup>

Immigrants bring to Fairfield County the cultural perspectives of their more than 130 home countries from every region around the world.<sup>20</sup> In general, they increase the economic resilience of the county: four-fifths of immigrants are of working age, and a majority of working-age immigrants (71 percent statewide) are employed and pay taxes.<sup>21</sup>

In total, 43 percent of immigrants living in Fairfield County are naturalized U.S. citizens. Of the county's 109,300 non-citizen residents, more than half are legal U.S. residents, while an estimated 47,400 are undocumented immigrants.<sup>22</sup> Forty-one percent of foreign-born residents of Fairfield County entered the U.S. recently, at some time since 2000. These immigrants are more likely to be of working age (18-64) and less likely to be naturalized U.S. citizens.<sup>23</sup>

Within Fairfield County, differences exist between groups of immigrants. Twenty-five percent of foreign-born people living in the largest four cities hold at least a bachelor's degree, compared to two-thirds of immigrants living in the wealthiest towns. <sup>24</sup> Urban-dwelling immigrants are more likely to have recently arrived in the U.S. or to be of working age, and less likely to be naturalized citizens — compared to foreign-born residents of suburban towns. <sup>25</sup>

#### **MIGRATION TO FAIRFIELD COUNTY**

In 2014, 12 percent of all Fairfield County residents moved to a new home, including 5 percent of all residents who moved from outside the county. Residential mobility rates are generally higher among city residents. Over 9,100 people, or approximately one-tenth of all people who moved, relocated to Fairfield County from a foreign country.<sup>28</sup>

Analysis of tax records suggest that in 2014, Fairfield County had net out-migration, with more people leaving the county than moving to it from somewhere else. The largest numbers of in-migrating Fairfield County residents lived previously in New York City or Westchester County, New York. Those areas had net "in-migration populations" to Fairfield County — meaning that there were more people who moved from New York City or Westchester to the region, than Fairfield County residents who moved to those locations.<sup>27</sup> Florida and New Haven County were the most popular destinations for former Fairfield County residents who moved away; both areas attracted more residents from Fairfield County than vice versa.



### **Characteristics of Immigrants in Fairfield County**

#### FOREIGN-BORN RESIDENTS OF FAIRFIELD COUNTY. 2014

	TOTAL Population	PERCENT Foreign-Born	TOTAL FOREIGN- BORN POPULATION	NATURALIZED CITIZENS	AGE 18-64	ENTERED US 2000-14	BA OR Higher ed	1990-2014 CHANGE Population Foreign-Born
United States	314,107,084	13%	41,056,885	46%	80%	38%	28%	108%
Connecticut	3,592,053	14%	490,460	48%	79%	40%	33%	76%
Fairfield County	934,215	20%	191,275	43%	81%	41%	33%	89%
Bridgeport	146,680	28%	40,638	34%	86%	46%	15%	96%
Danbury	82,781	32%	26,492	34%	83%	47%	18%	169%
Fairfield	60,678	11%	6,410	57%	74%	30%	49%	52%
Greenwich	62,141	22%	13,636	48%	74%	41%	60%	35%
Norwalk	87,214	24%	21,298	43%	83%	44%	32%	105%
Stamford	125,401	34%	43,126	36%	83%	46%	35%	114%
Stratford	52,092	13%	6,922	57%	79%	26%	26%	128%
6 Wealthiest Towns	122,181	11%	13,510	58%	71%	33%	67%	34%
Other Towns	195,047	10%	19,243	64%	74%	24%	46%	54%

Chapter 2 A Changing Region



# Households and the Homes Where They Live

Of the 333,500 households in Fairfield County, more are single adults living alone, non-related adults living together, or single adults with children, compared to past decades. Meanwhile, from 1990 to 2014 the numbers of "traditional households" — married couples and married couples with children — hardly grew. <sup>28</sup> This restructuring of households is occurring across the nation and is projected to continue. The changes are due to people marrying and having children later in life, higher divorce rates, and more and longer-living older adults (40 percent of adults living alone in Fairfield County are 65 years or older). <sup>29</sup>

A majority of existing houses in the region (65 percent) are single-family homes, while multi-family apartments or condominiums are concentrated in the cities and neighboring suburbs.<sup>30</sup> Multi-family

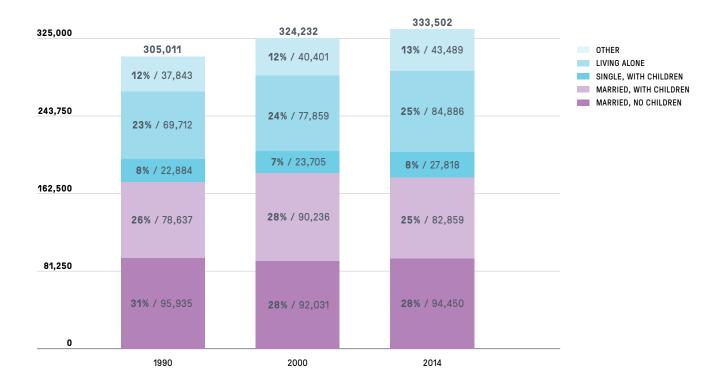
units tend to be rental or affordable, attracting young workers, single adults, or households that otherwise do not want, or cannot afford, to own their home. The increase in "non-traditional" households and those households' preference for smaller units in urban settings have helped to shift regional housing demand towards multi-family units in cities.<sup>31</sup> Fifty-seven percent of homes built in Fairfield County from 2010 to 2014 were multi-family, compared to 25 percent built from 2000–04.<sup>32</sup>

17

County-wide, the homeownership rate is 68 percent: this represents an overall increase in homeownership since 2000, but it is still below the pre-Recession peak of 72 percent in 2007.<sup>33</sup> Homeownership is significantly lower in cities (40–60 percent) compared to suburbs (approximately 80 percent), in part because the urban areas offer more rental or affordable housing options.<sup>34</sup> Refer to page 21 for homeownership rates.

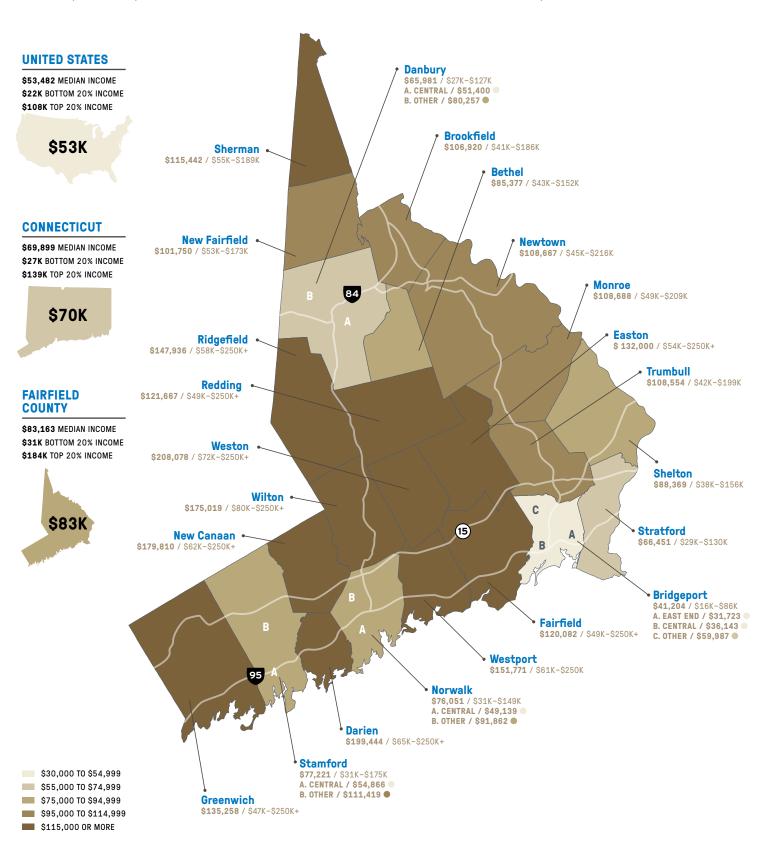
# The Changing Household Structure of Fairfield County

HOUSEHOLDS IN FAIRFIELD COUNTY, 1990-2014



# lncome and Income Inequality in Fairfield County

MEDIAN, BOTTOM, AND TOP HOUSEHOLD INCOMES IN FAIRFIELD COUNTY TOWNS, 2014

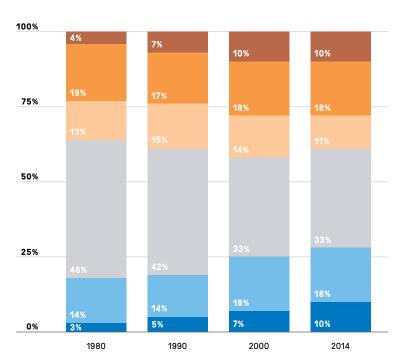


#### **Income Inequality in Fairfield County**

Households in Fairfield County have a median income of \$83,163 — around \$13,000 higher than the state and \$30,000 higher than the nation.<sup>35</sup> However income is not evenly distributed between Fairfield County households. The region's income inequality ranks first of the 100 largest U.S. metro areas when

Growing Neighborhood Income Inequality in Fairfield County

DISTRIBUTION OF POPULATION BY NEIGHBORHOOD INCOME LEVEL, FAIRFIELD COUNTY, 1980-2014



# NEIGHBORHOOD INCOME LEVEL MOST AFFLUENT AFFLUENT HIGH INCOME MIDDLE INCOME LOW INCOME POOR

	DEFINITION BASED ON AVERAGE FAMILY INCOME	1980 Population	2014 POPULATION	1980-2014 Change in Total Population
Most Affluent	> 2.5x State AFI	31,722	95,049	<b>1</b> 200%
Affluent	1.5–2.49x State AFI	154,381	168,144	<b>1</b> 9%
High Income	1.25-1.49x State AFI	108,261	100,158	<b>₽ 7</b> %
Middle Income	0.75-1.24x State AFI	369,057	308,357	<b>♣ 1</b> 6%
Low Income	0.5-0.74x State AFI	116,945	169,401	<b>1</b> 45%
Poor	< 0.5x State AFI	26,778	93,106	<b>1</b> 248%

comparing incomes of top and bottom earners: the richest households (top 5 percent of earners) made \$558,970 per year, nearly 18 times the \$31,330 that poorest (bottom 20 percent) earned.<sup>36</sup>

Neighborhood income segregation occurs when people with extreme incomes — who are very rich or very poor — mostly live in neighborhoods where other residents have similar levels of income. Fairfield County's "most affluent" neighborhoods, home to 95,049 people, have an average family income (AFI) of \$293,900, more than 2.5 times the statewide average. Meanwhile, 93,106 people now live in "poor" neighborhoods, where the AFI is \$46,000, less than half the statewide average. Since 1980, the populations of these neighborhoods have more than tripled.<sup>37</sup>

The county population living in an extreme-income neighborhood has steadily increased, at the expense of "middle-income" neighborhoods — those with AFI between 75 and 125 percent of the statewide average. Thirty-three percent of Fairfield County residents lived in middle-income neighborhoods in 2014, down from 46 percent in 1980. Twenty-nine percent of the county's children lived in these middle-income neighborhoods.<sup>38</sup>

Income segregation results in unequal access to community resources. Through taxes, charitable giving, and other spending, high-earning households help communities support resources such as well-funded schools, parks in good condition, and maintained roads and infrastructure. In general, residents of poor neighborhoods themselves have low incomes and are less able to support their communities financially.<sup>39</sup>

#### Living in Economic Hardship

In 2014, 9 percent of the total Fairfield County population lived in poverty, meaning they were in households with annual incomes below the federal poverty line (or FPL, equivalent to \$15,730 per year for a family of two, \$23,850 for a family of four). Meanwhile, 21 percent of residents were lowincome, living in households with annual incomes of less than two times the FPL (low-income status includes people living in poverty).

The low-income rate in Fairfield County overall is slightly lower than statewide. However, certain towns and neighborhoods have much higher rates than the county or state average. In general, children are also more likely to live in low-income households than the population as a whole; in Fairfield County, the low-income rate is 26 percent among the population ages 0–17 (and it is even

higher, at 29 percent, among the population ages 0-5).<sup>41</sup>(FIG 2.9)

This report uses the low-income threshold to identify individuals and households living in severe economic hardship; however, this definition does

not capture everyone who faces financial stress. On the 2015 DataHaven Community Wellbeing Survey, 31 percent of adults in Fairfield County said they were just getting by financially or finding it difficult to manage.<sup>42</sup>



#### 2.9

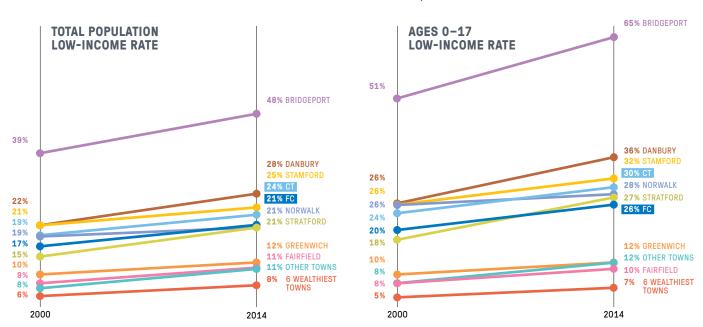
### The Low-Income Population in Fairfield County

#### LOW-INCOME POPULATION BY AGE GROUP, FAIRFIELD COUNTY, 2000-2014

	POPULATION, INCOME STATUS KNOWN*	POPULATION, LOW-INCOME	POPULATION, LOW-INCOME RATE	AGE 0-17, INCOME STATUS KNOWN	AGE 0-17, LOW-INCOME	AGE 0-17, LOW-INCOME RATE	AGE 0-5, INCOME STATUS KNOWN	AGE 0-5, LOW-INCOME	AGE 0-5, LOW-INCOME RATE
United States	306,226,394	105,773,407	35%	72,637,885	32,116,429	44%	23,709,036	11,329,330	48%
Connecticut	3,481,115	823,045	24%	785,691	233,352	30%	232,654	78,316	34%
Fairfield County	916,013	196,548	21%	222,636	57,049	26%	66,282	18,894	29%
Bridgeport	142,212	68,052	48%	36,201	23,526	65%	12,898	8,808	68%
Danbury	79,427	22,322	28%	17,322	6,291	36%	5,922	2,502	42%
Fairfield	55,947	6,408	11%	15,217	1,594	10%	4,442	347	8%
Greenwich	61,612	7,691	<b>12</b> %	16,436	1,913	12%	5,352	623	12%
Norwalk	86,601	18,556	21%	16,552	4,593	28%	5,646	1,290	23%
Stamford	124,235	31,516	25%	26,803	8,481	32%	9,853	3,083	31%
Stratford	51,677	10,932	21%	10,214	2,765	27%	2,874	729	25%
6 Wealthiest	121,459	9,289	■8%	37,957	2,485	7%	8,452	304	4%
Other Towns	192,843	21,782	<b>11</b> %	45,934	5,401	12%	10,843	1,208	11%

<sup>\*</sup>The US Census Bureau can identify poverty status — or if people live above or below the poverty threshold — for people who are not: inmates in institutions; in college dorms; or under age 15 and not related by birth, marriage, or adoption to a reference person. The same definition applies for other "poverty income known" populations.

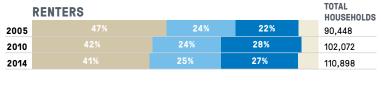
#### THE GROWING LOW-INCOME POPULATION IN FAIRFIELD COUNTY, 2000-2014

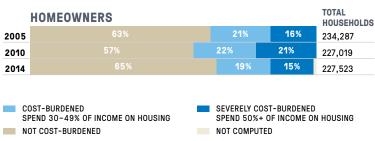


Chapter 2 A Changing Region 21



HOUSEHOLDS PAYING MORE THAN 30 PERCENT OF INCOME ON HOUSING COSTS, 2005-2014\*





\* Percentages do not add up to 100% because households for whom cost-burden is not computed are not included



HOUSEHOLDS BY HOMEOWNERSHIP AND SEVERE COST-BURDEN RATES, 2014

	HOUSEHOLDS	HOMEOWNERS	HOME OWNERSHIP RATE	SEVERELY COST BURDENED OWNER+RENTER	SEVERE COST BURDEN RATE
United States	116,211,092	74,787,460	64%	18,552,117	16%
Connecticut	1,356,206	913,043	67%	239,454	18%
Fairfield County	333,502	228,331	68%	67,978	20%
Bridgeport	50,034	20,574	41%	14,559	29%
Danbury	29,046	17,504	60%	5,557	19%
Fairfield	20,194	16,687	83%	3,007	15%
Greenwich	21,994	15,196	69%	4,130	19%
Norwalk	35,450	22,010	62%	7,928	22%
Stamford	46,418	25,435	55%	10,720	23%
Stratford	20,330	16,384	81%	4,317	21%
6 Wealthiest	40,996	34,948	85%	6,804	17%
Other Towns	69,040	59,593	86%	10,956	16%

For many, the costs of certain basic needs constitute an unaffordable share of their household budget. For example, in Fairfield County in 2012, a typical family of four needed \$64,775 to cover all living costs, according to the United Way. Based on this cost of living estimate, 28 percent of households earned less than what they needed to pay for food, housing, transportation, childcare, healthcare, and other necessary expenses. Inability to pay for these necessities can create harmful outcomes on individual physical and economic well-being, such as food insecurity (see page 30), lack of child care (see page 42), limited access to cars or reliable transportation (see page 53), or housing cost-burden.

#### **Housing Affordability**

Six percent of Fairfield County adults reported not having enough money for housing or shelter, indicating that they faced housing insecurity.44 Many more Fairfield County residents — 42 percent — are housing cost burdened, spending more than the federally-recommended 30 percent of total income on housing costs. Twenty percent were severely cost-burdened, putting more than half of their budget towards mortgage and ownership costs or rent. 45 While housing cost-burden does not always result in housing insecurity, it does limit money available for other basic necessities, leaving households to choose which bills to pay. 46 For example, a national survey found that of the 21 percent of Americans who reported struggling to pay their rent or mortgage this year, 57 percent said they made cuts to their spending on groceries.<sup>47</sup>

The housing cost-burden rate is slightly higher in Fairfield County than statewide, in part due to higher housing costs: at minimum, a single adult pays \$998 per month in housing costs, compared to the \$786 state average. 48 Housing cost-burden is even more prevalent in some towns and neighborhoods: for example, 38 percent of households in the East End of Bridgeport pay more than fifty percent of income on housing. The problem is also more serious among renters compared to homeowners.<sup>49</sup> Further, the rates of housing cost burden have increased over the past decade, as household incomes have grown slower than the average cost to rent or own a home in the county.50 From 2005 to 2014, the number of households that were severely cost-burdened increased by 10 percent — the number of severely cost-burdened renting households increased by 51 percent.51

#### **CHAPTER 3**

# A Healthy Region

Health is fundamental to prosperity and quality of life in Fairfield County. The typical resident reports levels of health and personal well-being that are better than those of the typical US or Connecticut resident. Similarly, death rates—compared either in terms of all-cause mortality rates or by measuring the impact of premature deaths—are lower than national averages.

Social determinants of health, such as access to health insurance, safe neighborhoods, economically-secure families, and school systems with high graduation rates, also shape the lives of Fairfield County residents in generally positive ways. The Federal Government's Healthy People 2020 initiative includes social determinants like these among their "Leading Health Indicators" because of their ability to predict and support the health of children and adults.<sup>52</sup>

The high health status of Fairfield County overall can be traced back to its historical economic advantages, infrastructure investments, and social policies, as well as to the health of the places its people arrived from throughout recent decades. Health may also be a predictor of the region's future success, as healthy communities are more likely to retain productive businesses and individuals.<sup>53</sup>

#### **Differences by Place and Race**

The high health status of the population as a whole hides vast differences across all measures of well-being. Towns and neighborhoods differ by age structure, race, and economic status. These factors greatly affect the burden and types of health conditions that are of concern in each community.

Economically-distressed neighborhoods see the effects of their residents having lower socio-economic status as well as being significantly younger in average age. These two factors result in a more concentrated burden of conditions such as adverse birth outcomes, childhood asthma, lead poisoning, violence, and sexually transmitted diseases. In addition, chronic diseases—especially heart disease and diabetes—begin to impact populations living in distressed neighborhoods at a younger age.

Meanwhile, areas that are older have a greater burden of age-related illnesses, such as cancer. Issues such as dementia will continue to grow as a concern in all towns as the older population grows in both cities and suburban areas (see Chapter 2).

Health inequities are a particular concern within minority communities that have faced longstanding social and legal barriers to achieving a high health status. For communities of color in particular, barriers to achieving a high health status often overlay specific places, and are linked to the differential government policies that have impacted racially-segregated neighborhoods currently and throughout every century of American history.

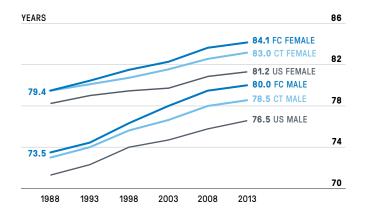
This document focuses on broadly reporting disparities by place, and in doing so, it reveals the differences in health status between zip codes where people of color are currently concentrated and zip codes that are almost-exclusively white.

The Community Health Needs Assessment process (see Chapter 1 and conclusion of this chapter) creates a platform for residents and multisector leaders to provide input on and understand how the distribution of the region's assets can create barriers that prevent some groups from achieving an optimal health status.

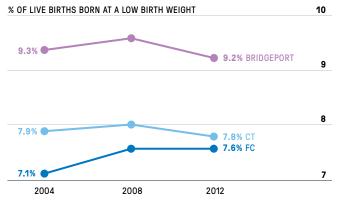
Chapter 3 A Healthy Region 23

# Fairfield County Trends

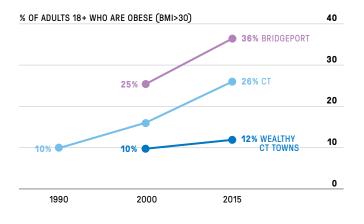
## LIFE EXPECTANCY IN FAIRFIELD COUNTY (FC) EXCEEDS US AND CT AVERAGES



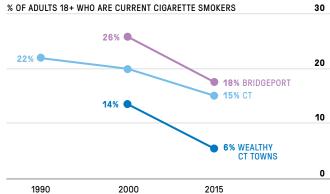
### RATES OF LOW BIRTH WEIGHT HAVE BEEN STABLE



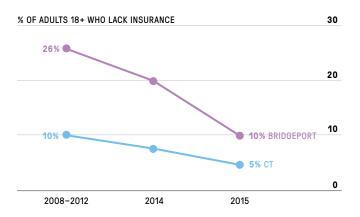
### THE DISPARITY IN ADULT OBESITY RATES IS GROWING



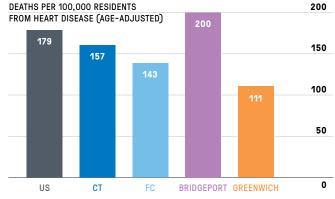
# ADULT SMOKING RATES ARE DECLINING



## HEALTH INSURANCE COVERAGE HAS IMPROVED DRAMATICALLY



## MORTALITY RATES FROM HEART DISEASE ARE MUCH LOWER IN WEALTHY TOWNS





### **Well-Being and Chronic Disease Risk Factors**

#### 2015 COMMUNITY WELLBEING SURVEY, PERCENT OF FAIRFIELD COUNTY ADULTS AGE 18+

	SELF-RATED HEALTH GOOD/EXCELLENT	ANXIETY	DEPRESSION	DIABETES	OBESITY	FOOD Insecurity	SMOKING	ASTHMA	NO HEALTH INSURANCE	DENTIST VISIT IN PAST YEAR
Connecticut	63	11	9	9	26	12	15	13	4.9	77
Fairfield County	67	11	7	7	22	10	12	11	6.1	79
Bridgeport	51	17	12	12	36	25	18	15	9.8	67
Danbury	59	14	8	8	21	11	13	11	7.2	73
Fairfield	72	6	5	7	16	3	10	7	5.0	83
Greenwich	75	7	4	7	19	6	8	8	5.2	83
Norwalk	68	13	6	7	22	10	13	13	9.1	77
Stamford	67	11	6	8	23	10	10	9	9.3	80
Stratford	60	14	9	8	27	16	17	17	4.3	80



#### Self-Rated Health and Well-being

Self-rated health is a uniquely strong predictor of future health outcomes, such as premature mortality and health care costs. <sup>54</sup> Because of this, it is widely used to assess the overall health of an entire population. Self-rated health, as well as anxiety, depression, and personal well-being more broadly, varies widely within the region (see also Personal Well-being Index in Chapter 1). Concerns that tend to lessen self-related health—such as premature chronic diseases—can directly impact how people evaluate their life satisfaction and experience happiness in their day-to-day lives. <sup>55</sup>

#### Infant Health

Because of its relationship to complex issues such as maternal health care access, smoking, nutrition, and stress, infant health and birth outcomes are considered to be key indicators of overall community-wide health. Birth outcome indicators in Fairfield County are consistent with state rates, but large disparities are evident by town. From 2008 to 2013 each year, on average, 7.6 percent of all babies born in the area had a low birth weight (weighing less than 5.5 pounds (2,500 grams)). Over the same period, 1.3 percent of all babies born had very low birth weights (less than 3.3 pounds or 1,500 grams). Low birth weight increases the risk of more serious health concerns, such as fetal and infant mortality



BIRTH OUTCOMES, 2008-2013

	TOTAL BIRTHS ANNUALIZED	FETAL AND INFANT DEATHS ANNUALIZED	IMR (INFANT DEATHS PER 1,000 LIVE BIRTHS)	FIMR (FETAL AND INFANT DEATHS PER 1,000 LIVE BIRTHS)	PERCENT LOW BIRTH WEIGHT	PERCENT VERY LOW BIRTH WEIGHT
Connecticut	38,007	401	5.3	10.5	7.9%	1.5%
Fairfield County	10,549	115	5.5	10.9	7.6%	1.3%
Bridgeport	2,236	38	8.6	17.1	9.3%	1.9%
Danbury	1,143	11	5.0	9.9	7.1%	1.3%
Fairfield	531	3	2.5	5.0	6.6%	1.1%
Greenwich	632	3	2.6	5.3	6.7%	1.1%
Norwalk	1,217	14	5.8	11.5	7.4%	1.3%
Stamford	1,863	18	4.9	9.8	7.9%	1.1%
Stratford	539	6	5.9	11.8	7.6%	1.5%

or long-term health conditions. On average, the rate of infant mortality was 5.5 per 1,000 live births in the County, and the rate of fetal plus infant mortality was 10.9 per 1,000 live births. While these rates of mortality and other health issues involving mothers and infant children have dramatically improved during the past century, geographic disparities remain high and further improvements are a national health goal.

#### **Mortality Rates and Premature Death**

Knowing what people die of is important to understanding the health of a population. Leading causes of death are the causes that result in the greatest number of deaths in a community. The crude mortality rate is the number of deaths adjusted for the population size. (FIG 3.4) But it is also useful to consider the extent to which these causes result in premature death, typically done by measuring the total number of life years lost before age 75 (years of potential life lost to 75, or YPLL). In areas where YPLL is significantly higher, this reflects that the burden of deaths on young people is higher, and that there is a substantial loss of human potential.

The community-wide conditions and health behaviors that are linked to premature death are often considered preventable. For example, it is likely that preventing young people from smoking cigarettes would reduce lung cancer deaths, and policy changes that limited crash severity or reduced the amount of vehicle miles driven annually would have a direct relationship to the number of young adults killed in motor vehicle crashes.

Data on death indicate that chronic diseases are a major concern in towns throughout the region. Cancer and heart disease, and conditions such as stroke and diabetes, are leading causes of death and premature death. Injuries—consisting of

suicides, homicides, and accidents, including drug overdoses—are also major concerns to the region. Many injuries are associated with the availability of drugs and firearms, and often impact much younger residents. This is shown by the higher average number of years lost per death from these conditions. (FIG 3.5)

25

Additionally, fetal and infant deaths result in a great loss of human potential, ranking among the leading causes of years of potential life lost. This loss is felt most acutely by the African-American population in Fairfield County, as it is in the nation overall. <sup>56</sup> Infant mortality has complex roots, and may relate to other burdens of illness in the population such as financial stress, trauma, chronic disease, and environments that lead to low birth weight.

Although people are living longer lives than they were in recent decades, objective measures like premature death and mortality rates provide an incomplete picture of chronic diseases, mental health, infectious diseases, and other issues that relate to day-to-day quality of life. Many adults are living with disabilities, chronic diseases, or mental health concerns that can begin at an early age. Mental health and addiction impact the general well-being of individuals and communities, and may be underlying causes of many of the other health needs identified here.

# Leading Causes of Death

#### AGE-ADJUSTED MORTALITY RATES AND TRENDS, 2008-2012

		TOTAL DEATHS 2008–2012	DEATHS PER YEAR 2008-2012	2008–2012 CRUDE Mortality Rate (Deaths Per 100,000)	AGE-ADJUSTED MORTALITY RATE (AAMR) PER 100,000	TREND FROM 2003-2007 TO 2008-2012	HIGHER OR Lower Rate Than CT?
All Causes	Connecticut	144,577	28,915	809	660	<b>↑</b> Improving	
	Fairfield County	31,904	6,381	696	584	<b>★</b> Improving	Lower
	Bridgeport	4,778	956	662	732	<b>★</b> Improving	Higher
	Danbury	2,472	494	610	610		Lower
	Fairfield	2,457	491	826	565		Lower
	Greenwich	2,173	435	709	482	<b>★</b> Improving	Lower
	Norwalk	2,679	536	625	581	<b>★</b> Improving	Lower
	Stamford	4,014	803	654	554	<b>★</b> Improving	Lower
	Stratford	2,647	529	1,029	672	<b>★</b> Improving	
Heart Disease	Connecticut	35,765	7,153	200	157	<b>★</b> Improving	
	Fairfield County	8,088	1,618	176	143	<b>★</b> Improving	Lower
	Bridgeport	1,293	259	179	200	<b>↑</b> Improving	Higher
	Danbury	641	128	158	156		
	Fairfield	665	133	224	139		Lower
	Greenwich	534	107	174	111	<b>★</b> Improving	Lower
	Norwalk	634	127	148	136	<b>★</b> Improving	Lower
	Stamford	933	187	152	124	<b>★</b> Improving	Lower
	Stratford	713	143	277	168	<b>★</b> Improving	Likely Higher
Cancer	Connecticut	33,775	6,755	189	160	<b>★</b> Improving	
	Fairfield County	7,536	1,507	164	144	<b>★</b> Improving	Lower
	Bridgeport	1,004	201	139	159	<b>★</b> Improving	
	Danbury	578	116	143	147		Lower
	Fairfield	522	104	176	137		Lower
	Greenwich	536	107	175	127		Lower
	Norwalk	674	135	157	148		Lower
	Stamford	986	197	161	143		Lower
	Stratford	606	121	236	163	<b>★</b> Improving	
All Injuries	Connecticut	9,037	1,807	51	<b>4</b> 7	<b>♣</b> Worsening	
	Fairfield County	1,953	391	43	<b>4</b> 0		Lower
	Bridgeport	384	77	53	<b>5</b> 4		Higher
	Danbury	155	31	38	■37		Lower
	Fairfield	116	23	39	■36		Lower
	Greenwich	104	21	34	■29		Lower
	Norwalk	154	31	36	■34		Lower
	Stamford	245	49	40	■37		Lower
	Stratford	148	30	58	<b>4</b> 9		

<sup>\*</sup> Trends or differences in rates are only noted if they are considered to be statistically significant.

Chapter 3 A Healthy Region

NORWALK

STAMFORD

STRATFORD

BRIDGEPORT •

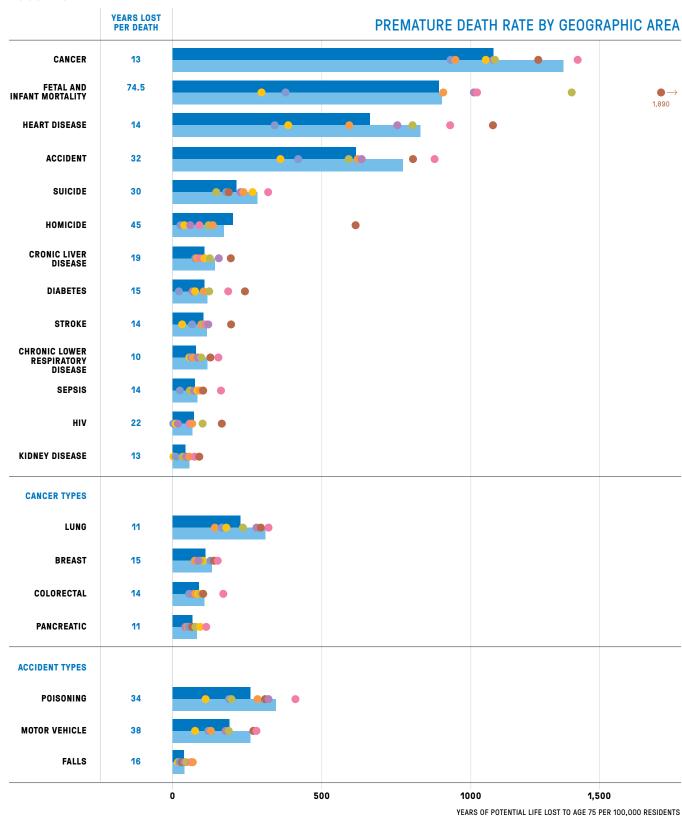
DANBURY

FAIRFIELD

GREENWICH

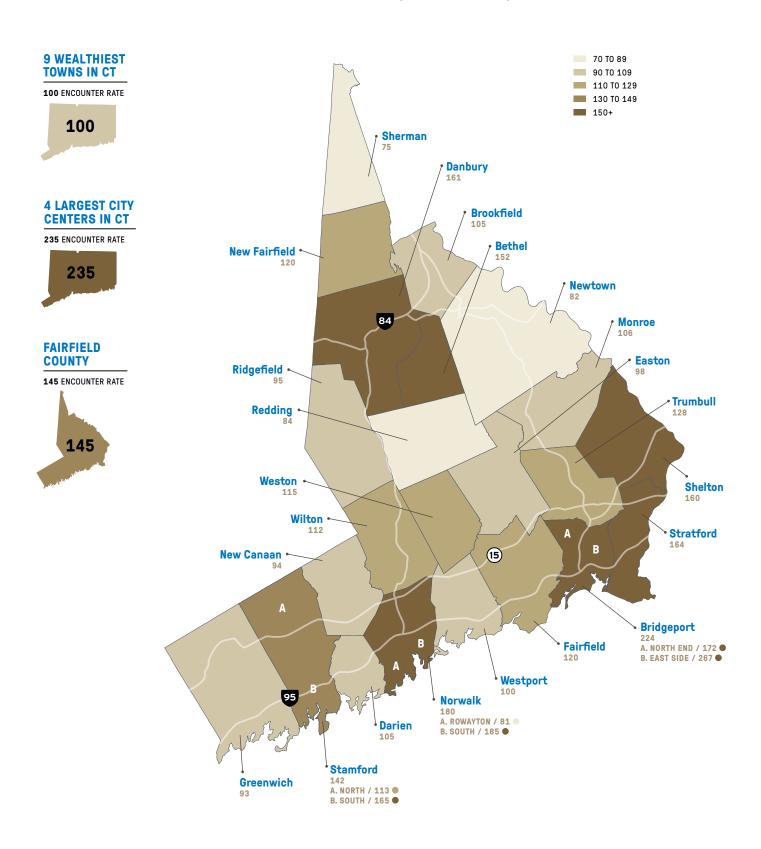
# Causes of Premature Death

YEARS OF POTENTIAL LIFE LOST PRIOR TO AGE 75, 2008-2012



# Heart Disease, Hospital Inpatient Encounters

AGE-ADJUSTED ANNUALIZED ENCOUNTER RATE PER 10,000 RESIDENTS, 2012-2014



29 Chapter 3 A Healthy Region

#### **Early Chronic Diseases**

Preventing the early onset of chronic diseases such as cancer, heart disease, and diabetes, in the areas where it occurs most, could bring major social and economic benefits to the region. In the previous few pages, data on mortality and premature death rates reveal very large disparities in well-being within the region.

Because mortality data only tell us about people who die, they do not allow a complete picture of the true quality of life impacts of common chronic diseases. By allowing public health officials to look at the conditions that people of all ages experience by neighborhood and other characteristics, our analyses of the DataHaven Community Wellbeing Survey combined with hospital records creates a clearer picture. Only a few of our analyses can be included within this document; others are available through our website or will inform further work. Results show that in some parts of the region, adults are much more likely to be hospitalized for severe conditions such as heart disease and lung cancer at an early age. For example, in the nine wealthiest towns in Connecticut, the annual rate of hospitalization for heart disease among middle-age adults age 45-64 was 32 per 10,000 residents from 2012 to 2014, whereas in the state's four largest urban core towns (Bridgeport, New Haven, Hartford, Waterbury), it was 266 per 10,000 residents. Middleage adults in many urban neighborhoods were more likely to be admitted to the hospital for this condition than were seniors age 65-74 in wealthy communities. Adults impacted by early chronic disease often live with a need for special medical treatment or experience lower overall levels of well-being, regardless of whether or not they may be at a particularly higher risk of premature death. Results from the Community Wellbeing Survey also reveal large health disparities by income, wealth, neighborhood, and race/ethnicity in the rates of high blood pressure, smoking, poor nutrition, and poor mental health, which are risk factors for chronic diseases.

The prevention of early chronic disease is an area where cross-sector leaders from public and private sectors can play a larger role. For example, in focus groups, healthy food is deemed more accessible in wealthier towns. Even in these towns, some residents report the need to travel a significant distance to buy healthy food, which may be an issue if they lack access to transportation. Access to unhealthy foods and substances can be restricted through public policies that impact the cost or availability of such items. Addressing other community concerns, such as stress, employment, education, and community safety, may also help people across the lifespan maintain an optimal health status.



# Heart Disease & Lung Cancer Inpatient Encounters by Age

AGE-ADJUSTED ANNUALIZED ENCOUNTER RATE PER 10,000 RESIDENTS, 2012-2014

	HEART DISEASE INPATIENT	ENCOUNTER RA	ATES	LUNG CANCER INPATIENT	ENCOUNTER RA	TES
	ALL AGES, AGE-ADJUSTED*	AGES 45-64	AGES 65-74	ALL AGES, AGE-ADJUSTED	AGES 45-64	AGES 65-74
Fairfield County	145	93	368	<b>1</b> 2	12	56
Bridgeport	224	256	703	<b>1</b> 5	23	62
Danbury	161	109	481	<b>1</b> 5	16	67
Fairfield	136	49	332	<b>1</b> 3	10	68
Greenwich	93	36	234	■8	6	32
Norwalk	180	124	465	<b>1</b> 3	15	59
Stamford	142	92	350	<b>1</b> 1	11	47
Stratford	164	130	424	16	17	79
9 Wealthiest CT Towns	100	32	216	■8	4	36
4 Largest CT Urban Core Towns	235	266	730	16	18	70

<sup>\*</sup> See map on previous page

#### **Nutrition, Obesity, and Diabetes**

The American Medical Association recognizes obesity as a chronic disease. Being obese can contribute to other health conditions such as cancer, depression, diabetes, heart disease, high blood pressure, stroke, and other conditions that can reduce life expectancy and quality of life.

In 2015, the rate of obesity in Fairfield County (22 percent) was below the national and state average (35 percent and 26 percent, respectively), and better than the Federal Government's Healthy People 2020 objective of 30.5 percent. These rates are calculated based on self-reported height and weight. Within the region, substantial differences exist by income group, age, and town of residence.

Across the nation and within Connecticut, obesity rates have increased dramatically. In Connecticut, rates have increased from 16 percent in 2000 to 26 percent in 2015. Precise historical data by town is not available for most of Fairfield County, but all available sources suggest that most towns in Connecticut have been following the same trend. 57 In Fairfield County's wealthiest towns, however, obesity rates are significantly lower than they are elsewhere: only about 1 in 10 adults are obese. These towns also have very low rates of poverty and food insecurity. The fact that obesity rates in the wealthiest neighborhoods appear to have remained fairly stable over the past decade suggests that economic and neighborhood factors are important to obesity prevention.

Obesity, physical inactivity, advanced age, and poor diet are risk factors for Type 2 diabetes, a chronic condition that often leads to other severe long-term health problems. In 2015, the prevalence of diabetes in Fairfield County (7 percent) was below the rates in the state (9 percent) and nation (10 percent). The dramatic geographic disparities in the rates of hospital visits for diabetes-related illnesses, particularly when comparing younger adults across towns, is a proxy for the impact that this disease has on quality of life in communities with lower income levels.

Food insecurity and a lack of physical activity are associated with the risk of overweight and obesity. Psychological stress, 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, are associated with food insecurity.<sup>59</sup> In Fairfield County in 2015, 10 percent of adults said that they did not have enough money to buy food at some point in the last



2015 COMMUNITY WELLBEING SURVEY, PERCENT OF FAIRFIELD COUNTY ADULTS AGE 18+

		% FOOD INSECURE	% OBESE	% WITH DIABETES
Race/	Caucasian/White	6	18	7
Ethnicity	African American/Black	23	37	12
	Hispanic/Latino	22	29	9
Age	18-34	14	17	3
Group	35-64	11	25	7
	65-79	5	23	19
	80-94	2	14	18
Income	Under \$30,000	33	33	15
	\$30,000-\$100,000	10	27	8
	Over \$100,000	2	16	4

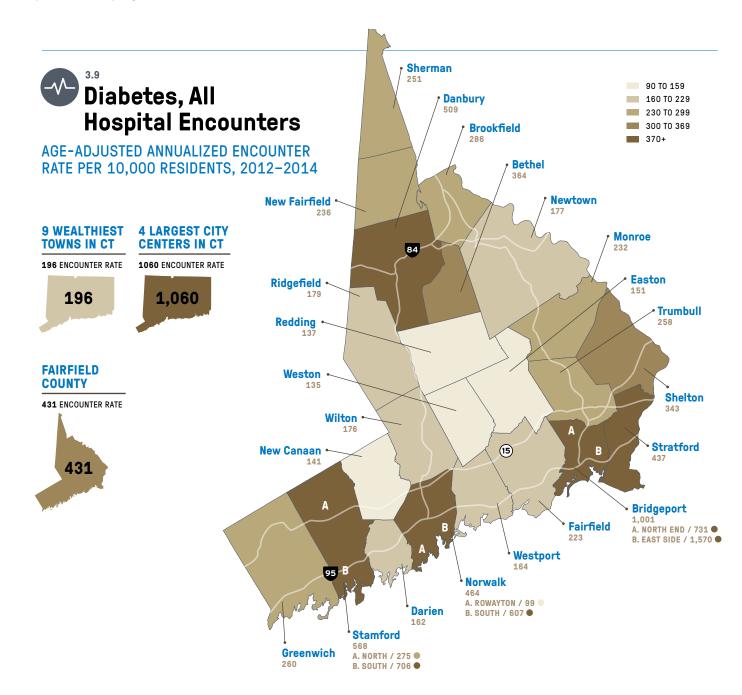
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year. This figure was 6 percent among residents who identified as white, compared to 23 percent among residents who identified as black or Latino. Research shows that people who live in safe and walkable communities are more likely to be active. While many neighborhoods have assets that can increase physical activity, concerns about physical safety, the safety of bicycling in traffic, and the quality of recreational facilities are major concerns in central city neighborhoods in Fairfield County (see Chapter 4 for more information on walkability).

<sup>\*</sup> See page 24 for rates by region and town

Chapter 3 A Healthy Region 31



	, and	ADETEC ALL	HOCDITAL	ENCOUNTE	D DATES D	ED 40 000 DECIDENTS	
	DI	ABETES, ALI	HUSPIIAL	ENCOUNTE	R RATES PI	ER 10,000 RESIDENTS	
	ALL AGES, AGE-ADJUSTED*	AGES 20-44	AGES 45-64	AGES 65-74	AGES 75-84	DIABETES-RELATED AMPUTATION	UNCONTROLLED DIABETES
Fairfield County	431	144	582	1,333	1,695	0.8	10
Bridgeport	1,001	352	1,775	2,798	2,713	1.8	23
Danbury	509	95	667	1,813	2,203	0.7	17
Fairfield	223	44	224	754	1,219	0.7	5
Greenwich	260	68	278	965	1,174	■0.2	■ 2
Norwalk	464	119	622	1,457	2,027	1.0	13
Stamford	568	156	794	1,811	2,232	1.3	11
Stratford	437	163	643	1,288	1,481	1.2	9
9 Wealthiest CT Towns	196	45	172	672	1,070	■0.3	<b>3</b>
4 Largest CT Urban Core Towns	1,060	365	1,859	2,993	2,942	2.5	26

<sup>\*</sup> See map above

#### **Injury and Violence**

Injury is among the leading causes of death, particularly among younger adults. Injuries include both unintentional injuries such as falls, crashes, and accidental drug overdose, as well suicide and homicide.

In most of the region, mortality rates from injury are similar to or in many cases significantly lower than state and national averages. However, several issues are of concern to the region. Rates of death from accidental poisoning or suicide from opioid drug use are rising and are discussed to some degree in the Substance Abuse section of this report. Accidental falls impact many older adults each year, and register as a concern as this population grows quickly; many living environments could be modified to help prevent falls. While most falls are non-fatal, for every death due to falls there are many cases of permanent disability, hospitalization, or missed work. Fatal motor vehicle crash rates. while low by national standards, remain one of the major causes of premature death and a major concern, particularly within communities where several teenage drivers have been killed or where there have been calls to improve access for pedestrians, cyclists, and transit users in recent years.

Community violence, which relates to violent crime and domestic abuse as well as higher rates of premature deaths from homicide in some city center neighborhoods, is an issue that stood out as a concern due to the extent of health disparities seen by town, neighborhood, gender, and age. In addition to its role in injury, safety is an issue that can have large impacts on the physical and mental health of residents as well as their ability to enjoy parks, public spaces, sidewalks, and streets within their neighborhoods. Although reported crime rates in most towns are low and there is a widespread perception people live within safe and supportive communities, residents in some neighborhoods frequently express that safety is the most important issue that impacts their health and quality of life.

Primary data collected in some of the poorest neighborhoods of Fairfield County showed that residents overwhelmingly feel unsafe in their neighborhoods; for example, in many cases, children were not safe playing in their yards, and one participant in a community conversation even had a bullet come through her window. There is a broader lack of recreational access in these areas, since substance abuse and violence are seen to dominate parks and other public spaces. Empowering communities to revamp these public spaces and other assets, through public programs and events, can



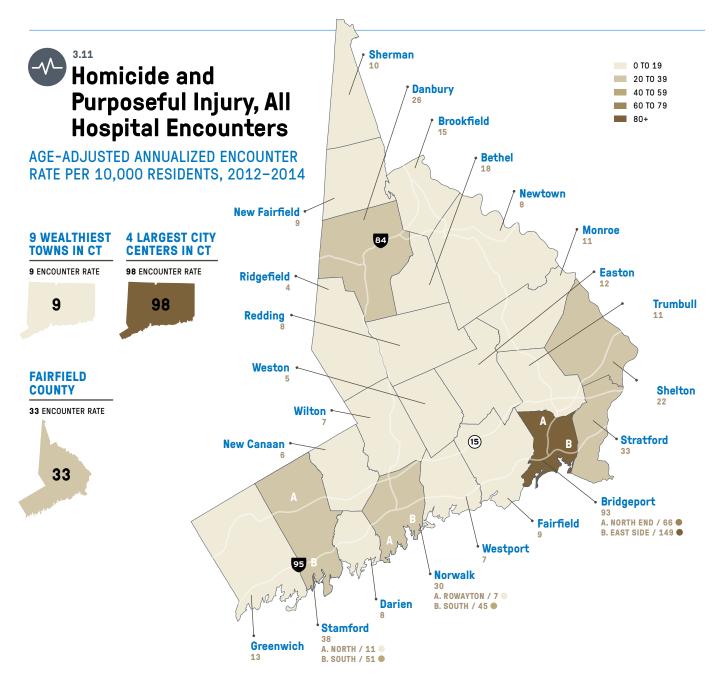
AGE-ADJUSTED MORTALITY RATES (AAMR) PER 100,000 RESIDENTS BY INJURY CAUSE, 2008-2012

	ALL ACCIDENTS	MOTOR VEHICLE CRASHES	ACCIDENTAL POISONING	FALLS	HOMICIDE	SUICIDE
Connecticut	33	7	10	8	4	9
Fairfield County	28	6	7	8	4	7
Bridgeport	36	7	10	10	12	5
Danbury	29	4		9		7
Fairfield	24			6		11
Greenwich	21		6	6		7
Norwalk	24	5	5	5		6
Stamford	26	4	8	6	3	7
Stratford	37	7	12	8	-	10

reinforce their purpose and encourage positive uses.

Our analysis of hospital records on homicide and purposeful injuries (including assaults and attempted homicide), also confirm that there are large disparities in safety within the region. Because of the nuances in how this data should be interpreted across towns, neighborhoods, and city blocks, we have chosen not to present them in great detail here. However, a map and table of hospital encounter rates due to homicide and purposeful injuries illustrates that age-adjusted per capita hospital encounter rates for residents living within the state's four largest urban core towns (Bridgeport, New Haven, Hartford, and Waterbury) were more than 10 times higher than the age-adjusted rates for residents living within the state's 9 wealthiest towns. Within these towns, the disparities are even larger by neighborhood; for example, the age-adjusted rate for a hospital encounter for homicide or purposeful injury in the East Side of Bridgeport is more than twice the rate in the city's North End. Young adults age 20-44 are more likely to visit the hospital for these types of injuries than other age groups. Additionally, men are generally significantly more likely than women to report being the victim of a violent attack or crime or require hospitalization for one, according to hospital encounter records, as well as to self-reported data on victimization collected from the DataHaven Community Wellbeing Survey.

Chapter 3 A Healthy Region 33

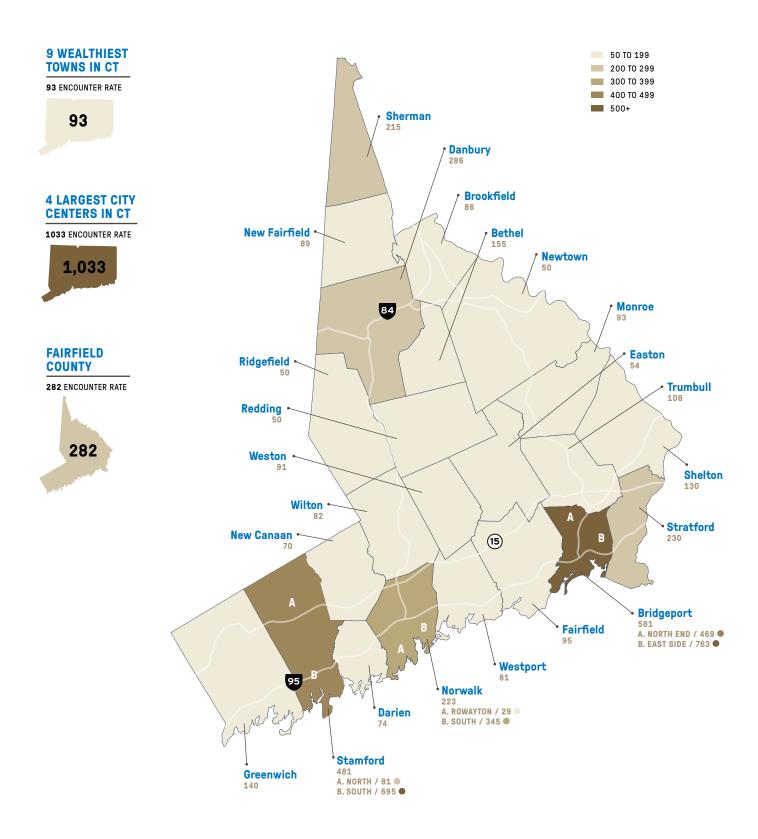


	HOMICIDE AND PURPOSEFUL INJURY, ALL HOSPITAL ENCOUNTER RATES PER 10,000 RESIDENTS						
	ALL AGES, AGE-ADJUSTED*	AGES 0-19	AGES 20-44	AGES 45-64	AGES 20-44 MALE	AGES 20-44 FEMALE	HIGH-SEVERITY CONDITIONS
Fairfield County	33	24	66	21	82	50	2.8
Bridgeport	93	69	166	73	195	137	9.0
Danbury	26	18	46	20	54	38	1.8
Fairfield	■9	6	17	7	26	9	■0.6
Greenwich	<b>1</b> 3	12	25	7	38	14	■0.5
Norwalk	30	22	56	23	72	39	2.6
Stamford	38	34	66	25	86	44	3.1
Stratford	33	23	63	22	82	45	2.7
9 Wealthiest CT Towns	■9	6	19	4	27	12	■0.5
4 Largest CT Urban Core Towns	98	66	172	87	211	135	9.0

<sup>\*</sup> See map above

# Childhood Asthma, All Hospital Encounters

AGE-SPECIFIC ANNUALIZED ENCOUNTER RATE PER 10,000 RESIDENTS AGE 0-4, 2012-2014



Chapter 3 A Healthy Region 35

#### **Asthma**

Asthma can cause a considerable burden on health and quality of life. The prevalence of asthma among all adults in Fairfield County (11 percent) is slightly below that found statewide (13 percent) and nationally (14 percent).

Asthma often develops in early childhood. By limiting a child's ability to play, learn, and sleep, asthma can also have a substantial impact on child development and educational achievement. Proper health care is important as it can reduce these impacts and also prevent dangerous asthma attacks.

From 2012 to 2014, there was a stark difference in the number of visits to an emergency room for asthma within different towns and neighborhoods across Fairfield County, particularly among children age 0-4. The higher number of severe attacks requiring hospital visits in areas such as Bridgeport and parts of Stamford is likely caused by factors such as barriers to primary care, poorer medical management of asthma, and exposure to environmental triggers.

Visits to the emergency room for asthma are considered largely avoidable if the disease is well controlled. Avoiding triggers may be more difficult in urban settings, however, where there is greater exposure to transportation-related emissions and allergens.<sup>60</sup>

# Selected Infectious Diseases

### NUMBER OF CASES (N) AND RATES PER 100,000 RESIDENTS

	HIV: NEW DIAGNOSES 2014		LIVING WITH HIV 2014		HCV (CHRONIC & RESOLVED) 2014		LYME DISEASE (CONFIRMED & PROBABLE) 2015	
	N	RATE	N	RATE	N	RATE	N	RATE
Connecticut	291	8	10,727	299	2,407	67	2,553	71
Fairfield County	102	11	2,888	315	406	44	430	47
Bridgeport	44	31	1,333	924	154	107	23	16
Danbury	8	10	233	288	32	40	36	45
Greenwich	2	3	82	134	12	20	2	3
Norwalk	9	11	333	389	32	37	17	20
Stamford	17	14	524	427	43	35	17	14
Remainder of County	22	5	383	91	133	31	335	79

#### Other Health Issues

Though this chapter focuses on health issues that were most frequently prioritized in community conversations throughout the region, many other issues are of great interest to area communities. These have been documented within the Healthy Connecticut 2020 State Health Assessment and other reports, including the additional CHNA chapters referenced in Chapter 1 of this document. Additionally, many concerns that relate to health, such as a lack of transportation or quality child care, are covered in other chapters of this report.

Among these issues, childhood lead poisoning continues to be a serious pediatric health problem in the region; no amount of lead in the bloodstream is considered safe. The number of children in the city of Bridgeport under age six with elevated blood lead, using a historical standard of 10 micrograms per deciliter (10 µg), dropped from 269 (4.6 percent) to 81 (1.3 percent) between 2004 and 2013—similar to the statewide downward trend, but levels in the city were still far above 2013 levels in suburban areas (generally 0.2 percent or lower). The current, stricter standard of 5 µg, shows that 6.5 percent of children in Bridgeport had elevated blood lead in 2013, about six times higher than rates found in suburban areas. Lead exposure is generally higher in neighborhoods where many homes were built before 1950 and contain lead-based paint.

Additionally, while the reduction and prevention of infectious disease over recent decades remains one of the greatest public health achievements, infectious disease continues to be an important cause of sickness and premature death. The Selected Infectious Diseases table shows the number of cases of certain infectious disease occurring in the region in recent years. Disparities within the region illustrate the importance of reproductive health, monitoring and care for at-risk populations, and early diagnosis and treatment of infections such as Lyme disease, among other issues.<sup>61</sup>



Mental health and physical health are closely connected. Poor mental health can become a disability that has significant impacts on employment, maintenance of physical health, behavioral health, and overall well-being, ultimately imposing major financial costs to individuals and society as a whole. Self-reported health and wellbeing in Fairfield County are similar to statewide averages (see Figure 3.2 as well as Chapter 1), though there are large differences by household income level, education level, previous exposure to trauma, and other factors that we are unable to explore here in detail.

Due to the social and mental health costs that they create, substance abuse and tobacco are of major concern to the region. Tobacco use, in particular, is considered to be of particular importance because of the high costs and premature mortality that it creates, as well the available evidence that interventions (such as delaying the age of first use) can make a difference in reducing these social burdens. Exposure to cigarette smoke is a major risk factor for chronic obstructive pulmonary disease (COPD), heart disease, and lung cancer, which are leading causes of death as well as a source of large disparities in the mortality and hospital encounter rates across Fairfield County, as shown elsewhere in this chapter.

Adults in Fairfield County are less likely to smoke cigarettes (12 percent) than are adults living in Connecticut (15 percent). Smoking rates vary by household income level in Fairfield County; 27 percent of adults earning less than \$15,000 per year are current smokers, compared to 7 percent of those earning \$100,000 or more. The proportion of smokers who say they have attempted to quit in the past year is 56 percent, a rate that is not statistically different from the statewide average.62

In addition, many residents use e-cigarettes, including some who are also current cigarette smokers. Fourteen percent of adults, including 29 percent of young adults, have tried e-cigarettes at some point in their life. About one-third of these adults report using them in the past month. Compared to adults age 35 or over, young adults are more than twice as likely to have tried or to be currently using e-cigarettes.63

The health impact of substance use and other behaviors are sometimes difficult to track at the

population level due to the need for extensive surveying. In 2015, 8 percent of Fairfield County adults, including 14 percent of adults age 18-34, reported that they felt that they needed to cut down on their drinking or drug use at some point in the past year.<sup>64</sup> Additionally, surveys show that about a quarter of Connecticut high school students are offered, sold, or given illegal drugs, particularly marijuana, on school property each year. Data on hospital encounters for substance abuse, which include hospital visits for a variety of reasons not related to tobacco or alcohol, also show that young adults are particularly impacted.

Drug overdose has become a leading cause of premature death, and continues to be a rising concern in the region. In recent years, there has been an increase in the number of deaths attributable to the use of heroin as well as other narcotics such as fentanyl. The total number of drug overdose deaths in Connecticut rose from 357 in 2012 to 723 in 2015. Heroin and other opioid substances are generally encountered in about 90 percent of these drug overdose deaths. All age groups are impacted, and many deaths are linked to the abuse of prescription drugs or use of pain relievers for non-medical purposes. Given the limitations of existing data, further analysis and policy development related to this emerging issue is needed.65



### Chronic Obstructive **Pulmonary Disease (COPD)**

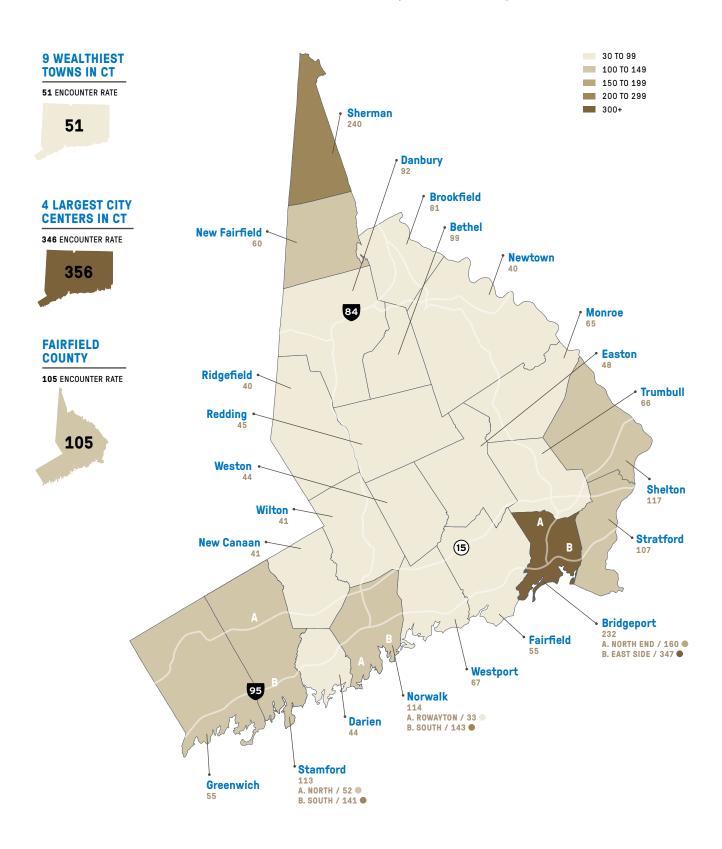
HOSPITAL INPATIENT ENCOUNTER RATES PER 10,000 RESIDENTS PER YEAR, 2012-2014

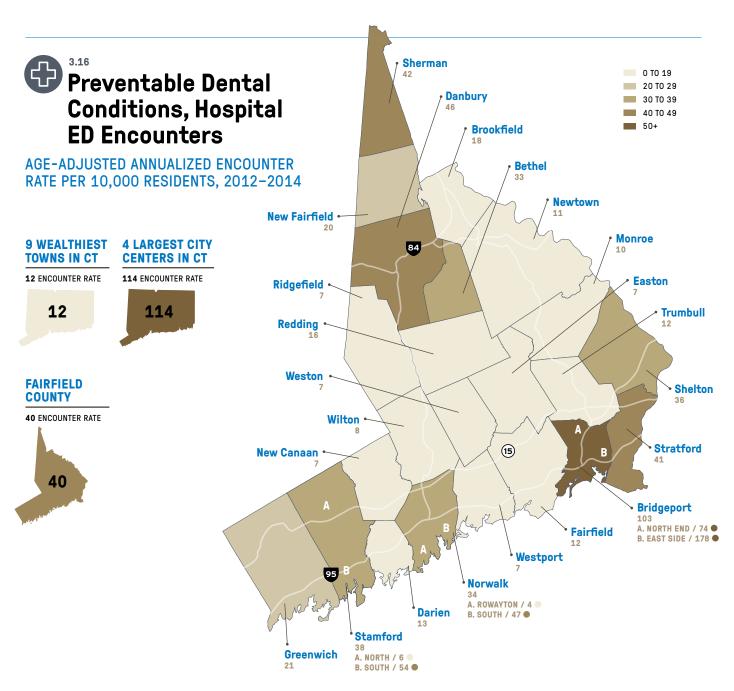
	ALL AGES, AGE-ADJUSTED	AGES 45-64	AGES 65-74	AGES 75-84
Fairfield County	82	60	291	523
Bridgeport	121	156	461	562
Danbury	119	93	466	737
Fairfield	71	33	238	620
Greenwich	53	22	166	389
Norwalk	101	86	354	608
Stamford	66	49	228	450
Stratford	91	81	342	572
9 Wealthiest CT Towns	54	20	167	381
4 Largest CT Urban Core Towns	142	188	508	663

Chapter 3 A Healthy Region 37

# Substance Abuse, All Hospital Encounters

AGE-ADJUSTED ANNUALIZED ENCOUNTER RATE PER 10,000 RESIDENTS, 2012-2014





	PREVENTABLE DENTAL CONDITIONS, HOSPITAL EMERGENCY DEPARTMENT (ED) ENCOUNTER RATES PER 10,000 RESIDENTS							
	ALL AGES, AGE-ADJUSTED*	AGES 0-19	AGES 20-44	AGES 45-64	AGES 65-74	AGES 75-84		
Fairfield County	40	19	78	30	13	12		
Bridgeport	103	46	194	90	34	22		
Danbury	46	36	74	38	15	22		
Fairfield	12	4	20	13	7	3		
Greenwich	21	12	31	21	13	8		
Norwalk	34	20	60	28	17	13		
Stamford	38	26	61	34	14	14		
Stratford	41	16	87	28	12	7		
9 Wealthiest CT Towns	12	6	20	10	8	8		
4 Largest CT Urban Core Towns	114	53	213	105	35	21		

<sup>\*</sup> See map above

Chapter 3 A Healthy Region 39



#### **Access to Care**

In conversations with area residents throughout Fairfield County, the ability to access quality, affordable, and convenient medical care often emerges as a major concern. In 2015, 45 percent of adults in Fairfield County earning \$30,000 or less, and 29 percent earning between \$30,000 and \$100,000 per year, reported that they postponed or did not get the health care they needed in the past year. Additionally, nearly 1 in 10 adults said they could not get prescription medicines they needed in the past year because they could not afford it. The 2015 DataHaven Community Wellbeing Survey identifies some of the reasons why many adults may not be getting the medical care that they thought they needed. Cost is a barrier to obtaining care that impacts residents of nearly all income levels, particularly low-income adults, echoing findings from more detailed recent national studies.66 Whether or not adults are covered by health insurance, there are frequently other barriers to obtaining care, including an inability to find

## Health Care Access

### 2015 COMMUNITY WELLBEING SURVEY, PERCENT OF FAIRFIELD COUNTY ADULTS AGE 18+

		NO HEALTH INSURANCE	DENTIST VISIT IN PAST YEAR	COULD NOT AFFORD PRESCRIPTION MEDICINES DURING PAST YEAR	DID NOT GET OR POSTPONED MEDICAL CARE DURING PAST YEAR
Race/	Caucasian/White	3	83	6	24
Ethnicity	African American/Black	9	69	9	32
	Hispanic/Latino	15	70	10	36
Age	18-34	11	76	5	34
Group	35-64	5	80	8	29
	65-79	3	80	5	15
	80-94	1	75	4	12
Income	Under \$30,000	17	63	16	45
	\$30,000- \$100,000	6	76	7	29
	Over \$100,000	1	87	3	20

<sup>\*</sup> For insurance and dentist visits, see page 24 for rates by region and town.



time to get to the doctor's office (sometimes due to caregiving responsibilities or the need to hold multiple jobs), the fact that their health plan does not cover the cost of a procedure that they believe is needed, a lack of transportation access, or a belief that routine medical care or check-ups are not required.<sup>67</sup>

For a significant number of adults, a lack of health insurance is a major barrier to receiving medical care. In 2015, adults in Fairfield County were as likely as adults in Connecticut not to have health insurance—1 out of every 20 adults ages 18 and over do not have health insurance. The largest differences in health insurance access are observed by age, income level, and immigration status. The proportion of adults with a medical home (a coordinated, ongoing source of primary medical care) varies along similar lines. Additionally, about 1 in 5 residents who didn't get or postponed care in the past year report that the health insurance that they do have was not accepted.

The proportion of adults in Fairfield County who report using the emergency room as a source of medical care is similar to the statewide average. Five percent of adults in Connecticut used the emergency room three or more times in the past year. Adults with low household incomes are substantially more likely than other adults to have used the emergency room on more than one occasion in the past year. Adults may use the emergency room for severe conditions, but also to seek more routine medical treatment if they are unable to access an alternative source of care, such as a primary care provider or clinic.

#### Access to Oral Health

Visiting the dentist is a key factor in maintaining good oral health and is linked to other health outcomes. Connecticut has the highest percentage of any state in the United States of adults who self-report visiting a dental health professional. 68 In 2015, the rate of dental visits among adults in Fairfield County as a whole was slightly better than the statewide rate (see Figure 3.2). The percent of adults who visited a dentist in the past year varies widely by income level and neighborhood. Disparities in the rate of emergency room encounters for dental conditions, among both children and adults, indicate that there are major barriers to accessing preventive dental care in lowincome neighborhoods.

#### Conclusion: Findings from the Community Health Needs Assessment Process in Fairfield County

As one of the healthiest metropolitan areas in the nation, Fairfield County is an excellent place to achieve one's full health potential. Relative to Connecticut, residents have higher incomes and feel more secure in accessing health care, housing, food, and transportation. They report feeling healthier in both mind and body, and they are generally part of strong communities that have the resources to support each resident's well-being.

These overarching trends do not account for the challenges faced by the county's many neighborhoods of highest need. In these areas, many families and children find it difficult to access basic needs, and often do so only while experiencing significant financial and psychological stress. Within these areas, it is no surprise that severe medical conditions begin earlier in life, even at birth, and are more likely to result in emergency hospital visits, resulting in significant long-term economic and social burdens to the region as a whole.

As part of the Community Health Needs Assessment (CHNA) process (see Chapter 1), DataHaven worked with directly leaders from longstanding community-hospital partnerships in the Greater Greenwich, Greater Stamford, Greater Norwalk, Greater Danbury, and Greater Bridgeport areas to develop additional CHNA chapters that complement the material within this report. Collectively, these chapters cover all of the towns in Fairfield County, allowing health needs to be identified in more detail, documenting the process that was used to collect data and conduct the CHNA at a local level in each area, and discussing health improvement planning efforts that are underway by collaborative partners throughout the region. You may find these chapters on the hospital or DataHaven websites when they are published this year. Additionally, health directors from throughout Fairfield County attended meetings that DataHaven convened in February and May 2016, and DataHaven was invited by community-hospital partnerships to give over a dozen presentations on community health and well-being to local public health experts and other audiences in Greenwich, Stamford, Norwalk, Danbury, Bridgeport, Stratford (detailed in the additional chapters) as well as Shelton (as part of a separate, Lower Naugatuck Valley Region needs assessment available through DataHaven).69

At the local level, the assessments reveal that differences in wealth are accompanied by a

different experience in the health care system. For some low-income individuals, accessing quality medical care feels nearly impossible. Insurance, transportation, and related financial costs of health care appointments are the primary barriers. Even when people do go to the doctor, they feel that the quality of care varies depending on their insurance; for example, in one focus group, a woman with one insured and one uninsured child reported that she felt that the uninsured child received inferior care. Doctors are not always in easily accessible locations, and transit systems are unreliable.

In many neighborhoods, primary care medical services are plentiful. The majority of people in wealthy areas have private insurance. However, travel can be required to find specialists, especially those who accept state insurance. The additional travel and stress for individuals are a challenge to those who are trying to be frugal with medical expenses. Questions about the quality and professionalism of care, including incidents of being discriminated against based on ethnicity or medical status, also arose among residents in some areas.

It is important to understand that Fairfield County is a very heterogeneous region. While rising diversity is a key asset to the area's culture and economy, the high degree of income segregation is not, and carries with it significant costs to economic prosperity and health outcomes. Additionally, neighborhood populations vary widely by age, and the aging population will have impacts on access to services in all towns. Each community requires dignified approaches that are tailored to and likely to engage its residents in making improvements.

A positive trend in Fairfield County is the desire to make change. Civic engagement is high, and numerous health-related initiatives have been implemented by the longstanding community-hospital partnerships within each region. The community health needs assessment (CHNA) process is one tool to facilitate the cross-sector conversations about how all policies impact health and help document opportunities for community improvement. As this process is updated and expanded over the coming years, it can track the impact of these initiatives and support advocacy for the system and environmental changes that will help create a healthier region. DH

For further detail about the information in this chapter, as well as additional data specific to individual towns, please see the additional CHNA chapters referenced in Chapter 1.

#### CHAPTER 4

# A Region of Opportunity

The county's 2,070 subsidized infant/toddler slots (including 220 free slots) could serve at most only 22 percent of the 9,450 infants and toddlers living in low-income households in Fairfield County.

Six years after high school graduation, 54 percent of all Fairfield County Class of 2008 students had earned a post-secondary degree — but enrollments and completions varied widely by town, race, gender, and economic status.

Adults who said they were seeking employment and were white have greater access to a car than those who said they were employed and were black or Latino.

Over the past decade, the health care, education, and accommodation and food service industries in Fairfield County have added about 30,000 jobs.

Fairfield County libraries have \$75 on average to spend per person per year, compared to \$53 statewide. Greenwich libraries have per-person operating incomes of \$192 dollars per person per year, while Bridgeport libraries have \$47 per person, and Danbury libraries have \$25.

In Fairfield County, 4 out of 5 adults report trusting neighbors, having neighbors who could work together, and having confidence in police — all measures of community cohesion.



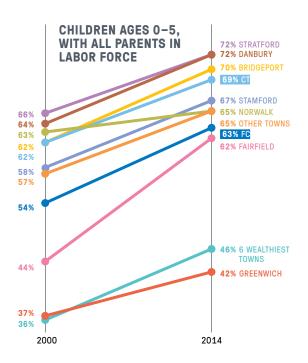
### Why Early Care and Education are Important

Investing in high-quality early care and education benefits young children, their parents, and the communities in which they live. Young children who participate in well-resourced and regulated early care and education programs are less likely to be retained in school or to require special education services, and more likely to graduate from high school. They are also less likely to become involved in the criminal justice or welfare systems and more likely to be productively employed. Parents with access to affordable, reliable child care, are less likely to miss work and more likely to retain steady employment. These parents and their children ultimately are able to contribute more to their communities, and cost them less.

#### **Demographics of Children and Families**

In 2014, there were about 230,000 children (ages 0–17) in Fairfield County, about 55,000 of whom were under the age of 5.71 Twenty-nine percent of young children live in low-income households,





though this share is higher in certain towns. Overall young children are more likely to be from lowincome households than the total population. 72 Lowincome status indicates serious economic hardship living in a household that earns less than \$47,700 for a family of four or 200% of the Federal Poverty Line.73 Despite the fact that the total number of young children in Fairfield County has been decreasing (down 3% since 1990), the past decade witnessed a 22 percent rise in the number of young children living in low-income families county-wide.

The number of single-parent families in Fairfield County grew by 22 percent from 1990 to 2014, four times more than the growth of married couple families with children.74 Single-parent families are more likely to be economicallydisadvantaged: in Fairfield County, single-parent families are 6 times more likely to live in poverty than married couple families living with children.75

In Fairfield County, the share of children ages 0-5 from families where all parents worked or were looking for work grew, from 54 percent in 2000 to 63 percent in 2014.76 This increase may reflect the growing number of single-parent families as well as societal shifts, as more women join the workforce compared to past decades.77 It also marks an increased need for childcare, since most working parents cannot care for their children on the job.

#### Access to Early Care and Education

There are many early care and education options for young children. Parents, family members, friends, or nannies look after some children at home. Centerbased programs are managed by public or private schools, nursery schools, community groups, or municipalities. Family child cares are operated from a child care professional's house.

All family child care and center-based providers are "regulated," which includes licensed and license-exempt programs. Connecticut mandates the vast majority of family child care and centerbased programs to be "licensed," meeting stateestablished minimum health and safety standards; a few center-based programs - such as those in public schools — are license-exempt.78 To receive state subsidies for such programs as School Readiness or Smart Start, child care centers must also be accredited by the National Association for the Education of Young Children, which requires meeting an additional set of quality standards.79 Programs that receive federal dollars, such as Head Start, must meet federal quality standards.

In 2014, there were 26,430 slots at regulated

early care and education programs in Fairfield County.80 About seven percent were in family child care homes; the rest were at centers, public schools, or nursery schools. Of these slots, 21,530 were reserved for preschool-aged children, the remainder for infants and toddlers.

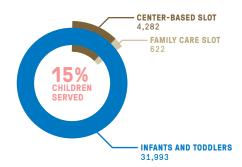
There is a serious shortage of early care and education options for infants and toddlers: there are only enough regulated infant/toddler slots in Fairfield County to serve about 15 percent of children ages 0-2.81 Providers supply sufficient early care and education options for preschool-aged children: there are enough regulated slots for nearly all (93%) of the 3- or 4-year-olds in the county, including 87 percent in centers. (FIG 4.2)

However, the actual enrollment rate of 3and 4-year-olds at center-based preschools is only 69 percent, suggesting that factors other

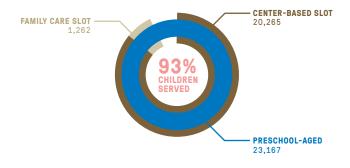


### Availability of Childcare and Education in Fairfield **County, 2014**

REGULATED CARE AND EDUCATION SLOTS FOR INFANTS AND TODDLERS

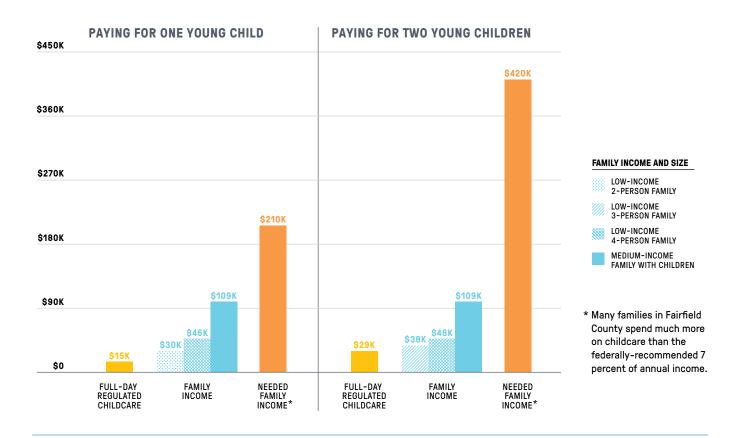


#### REGULATED CARE AND EDUCATION SLOTS FOR PRESCHOOL-AGED CHILDREN



# Affordability of Childcare for Families

#### COSTS OF REGULATED, FULL-DAY CHILDCARE AND FAMILY INCOMES IN FAIRFIELD COUNTY, 2012



than availability—such as cost, location, or schedule—influence enrollment in child care and education as well.<sup>82</sup> For example, parents who work after normal business hours, regulated early care and education options are also limited: fewer than ten home-based providers in the county care for children between 11 p.m. and 6 a.m.<sup>83</sup>

#### **Early Care and Education Cost**

In 2014, costs for full-day, full-year regulated early care and education programs in Fairfield County averaged between \$10,900 and \$14,700 per year per child but were as much as \$8,000 higher in the wealthiest towns. 84 Programs in centers and for infants and toddlers were more expensive than those in family child care homes or for preschoolaged children. Costs for early care and education are rising — the state average increased by 14 percent from 2007 to 2012.85

The federal government recommends that

families spend at most seven percent of income on child care. 86 However in 2012, the average cost of care for one child amounted to between 10 and 14 percent of median incomes of Fairfield County families with children. 87 Some families spend even more of their income on childcare: A low-income, single-parent household (earning less than 200% FPL) would spend nearly half its budget on care for one child. 88 (FIG 4.3)

### Subsidies for Costs of Early Child Care and Education

There are not enough government subsidies to assist all Fairfield County families who cannot afford early care and education. In 2014, the government funded or provided vouchers for a total of 9,290 slots, making them free or partially subsidized for eligible families: 2,070 for infants and toddlers, 7,220 for preschool-aged children. <sup>89</sup> Funding is extremely limited for families with

infants and toddlers: the 2,070 subsidized infant/ toddler slots could serve at most only 22 percent of the 9,450 infants and toddlers living in low-income households in Fairfield County. Of these slots, only 11 percent, or 220 total slots, are free; the rest require a parent contribution.<sup>90</sup>

These 7,220 subsidized slots and vouchers theoretically could serve all of the 6,040 preschoolaged children from low-income households (earning less than 200% FPL) in Fairfield County. A quarter (1,770) of these slots are free; the rest require families to pay some costs. In reality, not all preschool-aged children from low-income families are funded, since families must apply for subsidies first, before receiving them. Further, some children use more than one form of subsidy, and families earning above the low-income threshold can also qualify for some forms of subsidies.

#### **Preschool Enrollment**

Statewide Census data suggest that a family's ability to pay impacts preschool enrollment: in 2014, 3- and 4-year-olds from low-income families (earning less than 200% FPL) were less likely to enroll in center-based preschools (54 percent) when compared to children from higher-income families earning more than twice the federal poverty line (67 percent). 94 In this same year enrollment rates of 3- and 4-year-olds were considerably lower in poorer urban towns (between 55 and 60 percent) than in the suburban and wealthy towns in the county (between 75 and 85 percent). 95 (FIG 4.5)

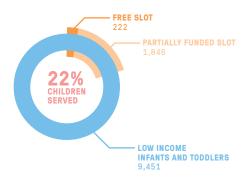


#### Importance of Education

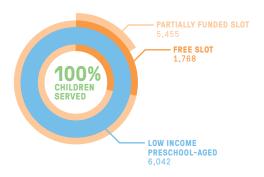
Education is key for determining positive outcomes for individuals and communities. People with high school diplomas or college degrees have more employment options and higher potential earnings, on average, than people who do not finish high school. 96 In turn, individuals with good financial stability support the local economy through tax contributions and consumer purchases. As well, people with more years of education are more likely to be civically engaged and to be in good health. 97

# Availability of Childcare and Education Subsidies in Fairfield County, 2014

SUBSIDIZED SLOTS AND VOUCHERS FOR INFANTS AND TODDLERS



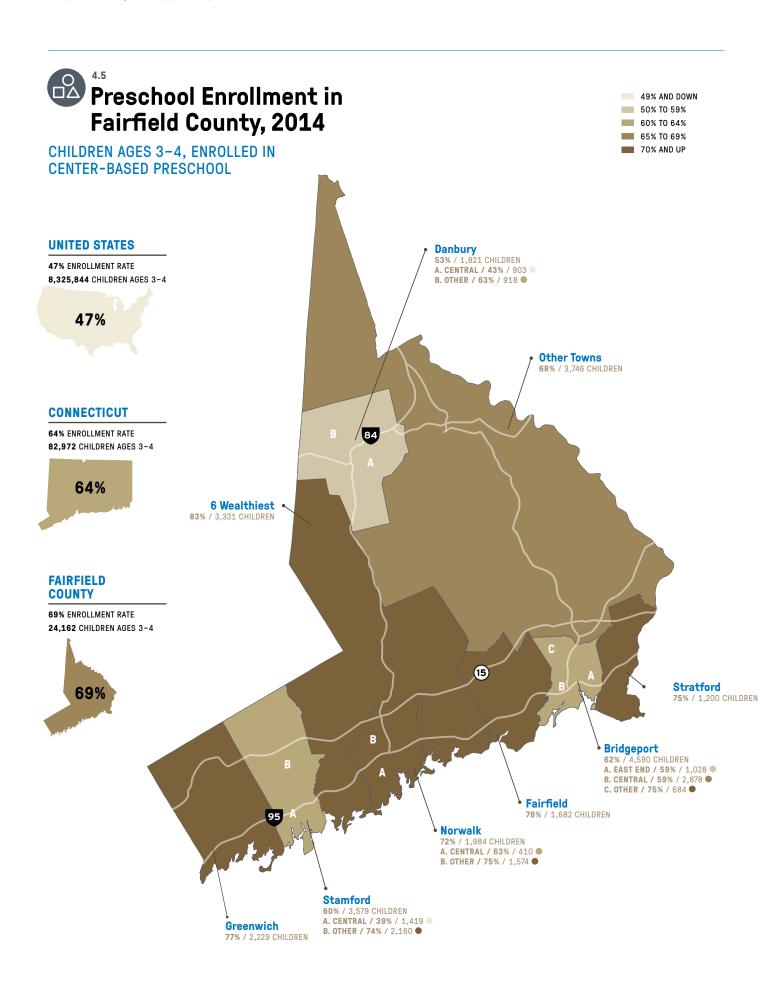
SUBSIDIZED SLOTS AND VOUCHERS FOR PRESCHOOL-AGED CHILDREN



#### THE CHALLENGE OF FUNDING INFANT AND TODDLER CHILDCARE

Early care and education for infants and toddlers receives significantly less funding than do preschool programs. At the same time, the costs of caring for the youngest children are significantly higher, due mainly to a higher mandated staff to children ratio. 98 Between October 2010 and October 2013, the number of infants and toddlers statewide who received some form of subsidy for early care and education fell by 5 percent, while, during that same time period, the number of preschoolers statewide who received some form of subsidy for early care and education rose by 5 percent. 99

The government's increased investment in preschoolers may also have unintended, negative effects on the supply and price of infant-toddler care. Anecdotal evidence suggests that when the government offers free or subsidized preschool in settings that serve only preschoolers, programs that serve a range of ages may lose some preschoolers. Without that revenue stream, they may be unable to afford to offer infant/toddler care, or will only be able to offer it at higher rates.



#### Demographics of K-12 Students

During the 2014–15 school year, there were 136,300 students at 24 public school districts in Fairfield County. De About 14 percent of K–12 aged children attended private schools. De 101

Fifty-six percent of Fairfield County public school students are white, and 44 percent are children of color: 12 percent African-American, 25 percent Latino, and 7 percent some other race. A higher share of young children identify as minorities, compared to older children (see page 12) — indicating that the student body will increase in racial and ethnic diversity as older students age out of the student body. City school districts mostly enroll children of color — such as in Bridgeport, where 89 percent are children of color — compared to students at suburban and wealthy town districts, where 85 percent are white. 102

A student who takes special education classes, who qualifies for free or reduced-price meals (FRPM) at school based on low family income (below 185% the federal poverty line), or who is an English Language Learner (ELL) is considered to be high-needs. <sup>103</sup> Of the 136,600 students in Fairfield County, 12 percent are special education, 35 percent are FRPM-eligible, and 8 percent are ELL; some students have more than one high-needs status. <sup>104</sup>

The magnitude of the high-need student populations varies widely by school district within Fairfield County. In Bridgeport, nearly 100 percent of students have at least one high-needs status, while less than 15 percent of students at the wealthiest

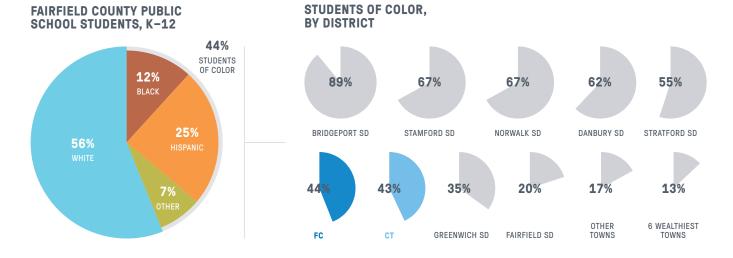
towns' school districts are high-needs.. 105

Students are considered to be transient if they change schools at least once within a school year, but counts of this population at Fairfield County schools are unreliable. Nine percent of all schoolaged children (ages 5–17, attending private or public schools) living in Fairfield County move homes each year (although this overestimates the rate of transiency at public schools, since not all children who move must change schools). This rate ranges from 17 percent in Bridgeport, to five percent in the suburban towns.<sup>106</sup>

#### Skill-Building and Academic Achievement

Early school success is highly linked to later achievement. Reading and math ability in kindergarten are predictors of proficient skills in more advanced subjects.<sup>107</sup> A study by the Annie E. Casey Foundation found that about 16 percent of children who are not reading proficiently by the end of third grade do not graduate from high school on time, a rate four times greater than that for proficient readers. 107 Achievement in middle school is even more highly correlated with high school graduation. One study found a 30 percentage point difference in graduation rates between students who had completed algebra by the 8th grade and those who had not.<sup>109</sup> Math skills in eighth grade also indicate preparedness for technical classes in high school.110

# Race and Ethnicity of Fairfield County Students, 2014–15



# High-Needs Students

#### FAIRFIELD COUNTY PUBLIC SCHOOL STUDENTS BY HIGH-NEEDS STATUS, PREK-12, 2014-15\*

	TOTAL STUDENTS	SPECIAL Education	SPEC ED PERCENTAGE	ENGLISH Language Learner	ELL PERCENTAGE	FREE AND REDUCED-PRICE MEAL ELIGIBLE	FRPM ELIGIBLE PERCENTAGE
Connecticut	546,347	72,773	13%	34,919	6%	205,921	38%
Fairfield County	144,258	16,817	12%	10,920	8%	50,059	35%
Bridgeport SD	21,244	3,114	15%	2,958	14%	21,000	99%
Danbury SD	10,945	1,333	12%	2,423	22%	6,082	56%
Fairfield SD	10,213	1,146	11%	209	2%	957	9%
Greenwich SD	8,813	916	10%	571	6%	1,329	15%
Norwalk SD	11,311	1,356	12%	1,572	14%	4,955	44%
Stamford SD	16,085	1,757	11%	2,084	13%	8,341	52%
Stratford SD	7,060	813	12%	339	5%	3,272	46%
6 Wealthiest Towns	26,780	2,881	11%	216	1%	598	■2%
Other Towns	28,868	3,176	11%	457	2%	2,964	10%

<sup>\*</sup> Some students belong to more than one high-needs group.

According to the Connecticut State Department of Education, Fairfield County public school students perform better overall than students statewide, on standardized tests (the Smarter Balance Assessment Consortium, or SBAC). In 2015, 57 percent of county third graders passed the reading test and 48 percent of fourth graders passed the math test, demonstrating proficient skill in these areas. Fairfield County pass rates were about three percentage points higher than corresponding statewide rates. On the eighth grade math test, the Fairfield County pass rate was 43 percent, six points above the statewide rate. However, achievement differed by school district: for example, the third grade reading pass rate was 82 percent at the wealthiest towns' school districts, four times the pass rate of at Bridgeport schools.111 (FIG 4.9)

#### Attendance and Academic Achievement

In Connecticut, a student is considered "truant" if he has more than four unexcused absences in any one month or more than ten in one school year, while he is considered "chronically absent" if he misses more than 10 percent of school days for any reason. 112 Absenteeism, whether excused or unexcused, has significant effects on academic achievement. Children who are chronically absent in both kindergarten and first grade are much less

likely to read proficiently by the end of third grade. One Baltimore study found that sixth-graders who are chronically absent are two and a half times less likely to graduate from high-school than their non-chronically absent peers.<sup>113</sup>

During the 2013–14 school year, Fairfield County students had lower rates of chronic absence (8 percent of all students) than the state as a whole (11 percent). Among Fairfield County students, high school students are approximately twice as likely to be chronically absent than students in grades K–8 — a pattern that holds true within most school districts. Chronic absence rates range from below five percent for all Fairfield SD students, to more than 20 percent at Bridgeport schools.<sup>114</sup>

Like students who are absent, students who are suspended lose valuable class time. For students who are otherwise attending school and passing their courses, a single suspension in ninth grade is significantly correlated with later chronic absence and academic failure. Being suspended once in ninth grade doubles a student's likelihood of dropping out.

Suspension rates at Fairfield County schools are below the state average. During the 2012-13 school year Fairfield County schools had an overall rate of 47 out-of-school suspensions (OSS) per 1,000 students, compared to 75 per 1,000 students

statewide.<sup>116</sup> However, district and state-level data reveal dramatically higher OSS suspension rates for students at poorer school districts and for non-white students. For example, the OSS suspension rate at Bridgeport schools (207 per 1,000) is four times higher than the county-wide rate.<sup>117</sup> Analysis of statewide data reveals that compared to white students, black students are more than six times more likely to be suspended, and Hispanic students are four times more likely.<sup>118</sup>

#### On-Time High School Graduation

Ultimately, 90 percent of Fairfield County seniors graduated on time — in 4 years — in 2014, higher than the Connecticut-wide rate of 87 percent. Corresponding with district-wide rates of skill-building and absence from school during the K–12 years, graduation rates differ by school district. At the wealthiest towns' districts, the four-year graduation rate was 97 percent, compared to 72 percent in Bridgeport.<sup>119</sup>

#### **Barriers to Academic Achievement**

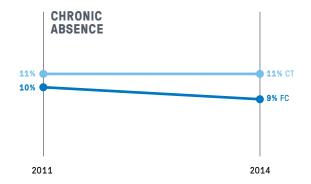
In 2015, high-needs Fairfield County students of any grade (including FRPM-eligible, special education, and ELL students) passed the SBAC reading test at half the rate of non-high needs students.120 Similarly, high-needs students of any grade passed the SBAC math test at about half the rate of nonhigh needs students. Across a majority of academic measures, large disparities in performance rates exist between groups that differ by race/ethnicity, family income, and English language proficiency.121 Chronic absence, suspension, and transience also put students at greater risk for poor academic performance.122 Students from groups who perform below average on earlier measures of achievement ultimately are less likely to graduate from high school on time.123

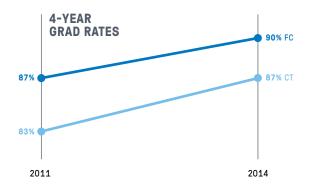
These disparities are evidence of what is commonly referred to as the "achievement gap:" the persistent difference in academic performance between two groups of students, particularly groups defined by race/ethnicity or socioeconomic status.<sup>124</sup> It is linked to an "opportunity gap," related to family income and resulting resources — such as access to books or educational games, nutrition, and social environment — that affect students' performance.<sup>125</sup> The opportunity gap begins during early childhood — by age three, children living in poverty have heard 30 million fewer words than children from high-income families<sup>126</sup> — and it lasts through high school graduation and beyond.<sup>127</sup>



STUDENTS SCORING "PROFICIENT" ON STANDARDIZED TESTS (SBAC), 2015, AND 4-YEAR GRAD RATE, 2014

	3RD GRADE READING	4TH GRADE MATH	8TH GRADE MATH	4-YEAR GRAD RATE
United States		39%	32%	82%
Connecticut	54%	44%	37%	87%
Fairfield County	57%	48%	43%	90%
Bridgeport	21%	7%	8%	72%
Danbury	48%	42%	24%	78%
Fairfield	67%	63%	55%	94%
Greenwich	79%	67%	61%	95%
Norwalk	51%	41%	25%	84%
Stamford	45%	42%	35%	89%
Stratford	41%	22%	22%	92%
6 Wealthiest Towns	82%	72%	68%	97%
Other Towns	73%	62%	51%	95%





#### **Higher Education**

In 2013, 79 percent of Fairfield County high school graduates enrolled in college, and about four-fifths of those students started four-year programs. Between 2007 and 2013, the number of students who enrolled in any two- or four-year program grew by 9 percent. Each year about three-quarters of all former Fairfield County students continued on to a second year of college. Six years after high school graduation, 54 percent of all Fairfield County Class of

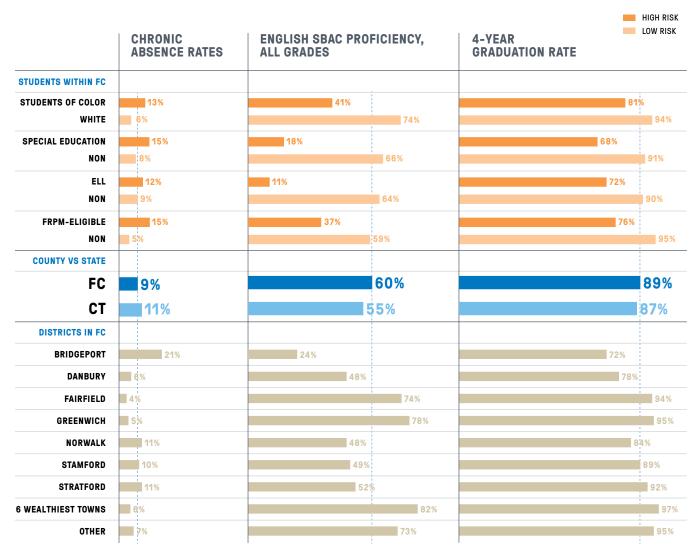
2008 students had earned a post-secondary degree, a majority emerging with four-year degrees.<sup>128</sup>

A quarter of former Fairfield County students enroll at state or community colleges, and of those students, three-quarters are placed in remedial courses to relearn high school material.<sup>129</sup> This signals that they are not prepared for college-level classes and ultimately results in costing them extra time and money to finish their degrees.

Further, college enrollment and completion vary

# The Opportunity Gap Impacts Achievement at Fairfield County Schools

STUDENT PERFORMANCE ON ACADEMIC ACHIEVEMENT MEASURES: 2015 SBAC "PROFICIENCY" RATES, 2014 CHRONIC ABSENCE RATES, 2014 4-YEAR GRADUATION RATES



FC BENCHMARK

widely for graduates of different districts. In 2013, 56 percent of Bridgeport SD graduates continued on to college. Only 20 percent of the Bridgeport Class of 2008 finished a two- or four-year college degree in six years. By comparison, the wealthiest towns' districts had a collective college enrollment rate of 89 percent, and a six-year degree attainment rate of 76 percent.130 (FIG 4.10)

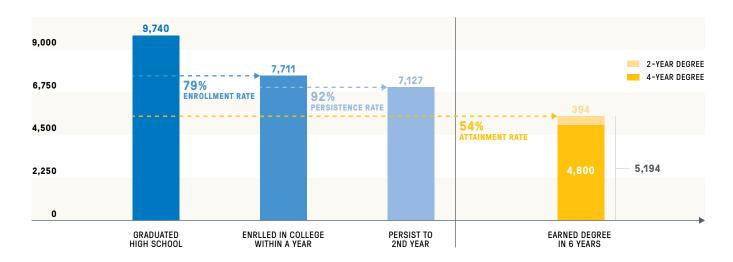
#### **Opportunities for Young People**

Young people need access not only to jobs, but jobs with potential for professional advancement, in order to transition from dependence on parents to self-sufficiency. Young people with stable jobs that offer future opportunity can become long-term economic contributors to the community.131

More than half of all Fairfield County and Connecticut youth report that they have the education and training they need to advance their careers. Compared to young people from

# **Higher Education of Fairfield County Students**

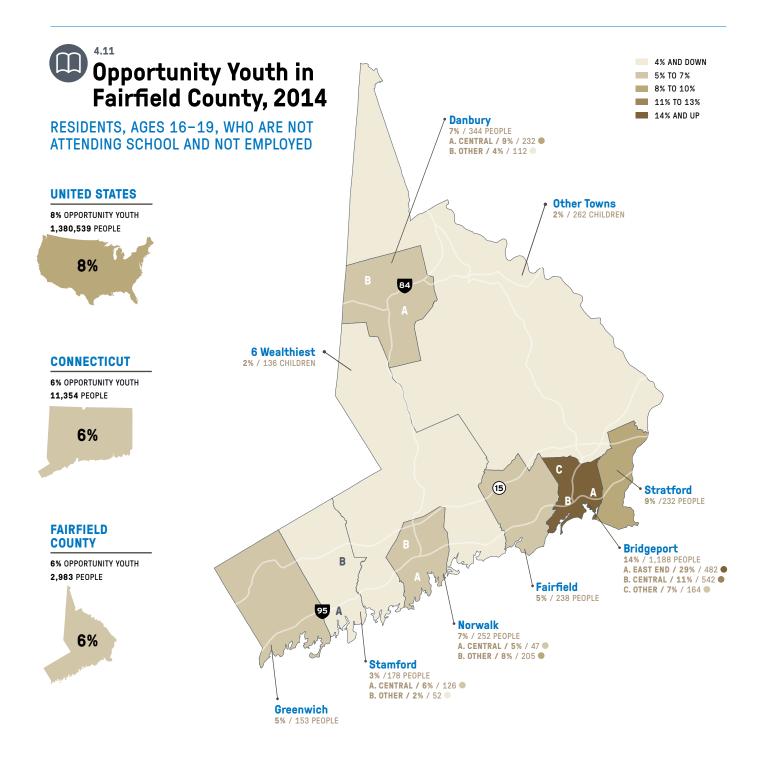
COLLEGE ENROLLMENT, PERSISTENCE\*, AND COMPLETION† OF FAIRFIELD COUNTY PUBLIC SCHOOL **GRADUATES, 2008 AND 2012** 



	GRADUATED High School	ENROLLED IN COLLEGE WITHIN A YEAR	ENROLLMENT RATE	PERSIST TO 2ND YEAR	PERSISTENCE RATE	EARNED DEGREE IN 6 YEARS	ATTAINMENT RATE	WITH 4-YEAR DEGREE	WITH 2-YEAR DEGREE
Connecticut	38,666	27,971	72%	24,826	89%	17,953	47%	15,740	2,213
Fairfield County	9,740	7,711	79%	7,127	92%	5,194	54%	4,800	394
Bridgeport SD	899	503	56%	434	86%	197	20%	153	44
Danbury SD	603	428	71%	370	86%	248	40%	234	14
Fairfield SD	673	570	85%	531	93%	390	64%	372	18
Greenwich SD	620	491	79%	469	96%	407	62%	392	15
Norwalk SD	762	570	75%	503	88%	308	43%	245	63
Stamford SD	1,064	811	76%	729	90%	445	43%	389	56
Stratford SD	511	373	73%	326	87%	238	41%	201	37
6 Wealthiest Towns	1,983	1,764	89%	1,700	96%	1,379	76%	1,351	28
Other Towns	2,625	2,201	84%	2,065	94%	1,582	60%	1,463	119

<sup>\*</sup> Data received from Fairfield County Public School Class of 2012, most recent data available.

<sup>†</sup> Data received from Fairfield County Public School Class of 2008, most recent data available.



Connecticut overall, young people from Fairfield County are more likely to agree that local residents have excellent or good ability to find suitable employment, and a larger share agree that their town has positive role models for children and youth. However, young people from urban areas are less likely to describe local employment opportunities positively, or to agree that there are

role models for young people in the community.<sup>132</sup>

Many young people still struggle to obtain employment. The official unemployment rate is 10 percent for Connecticut residents ages 16 to 24.133 But a quarter of young residents report underemployment — either being unemployed but looking for work, or being employed part-time but preferring full-time work.134

# Opportunities for Young People in Fairfield County

#### RATES AND PERCEPTIONS OF ECONOMIC AND SOCIAL OPPORTUNITIES, PEOPLE UNDER 25

	OPPORTUNITY YOUTH, AGES 16–19	UNEMPLOYMENT RATE, AGES 16-24	UNDER EMPLOYED, AGES 18-24	HAVE ENOUGH EDUCATION IN CAREER, AGES 18–24	BELIEVE JOB OPPORTUNITIES ARE GOOD, AGES 18–24	BELIEVE THERE ARE ROLE MODELS IN COMMUNITY, AGES 18–24
Connecticut	6%	10%	23%	53%	46%	71%
Fairfield County	6%		24%	53%	56%	75%
Bridgeport	14%		41%	48%	30%	50%
Stamford	3%		22%	59%	67%	79%
All Other Towns	4%		19%	53%	62%	82%
Males	7%		24%	47%	55%	73%
Females	5%		24%	59%	58%	79%

Ten percent of this age group is neither employed nor attending school (although the share is lower among 16-19 year olds).135 These people are not connected to the social and economic opportunities that their peers can access through school or places of employment. They are more likely never to complete high school or college and to experience hardships that cost themselves and their communities, such as chronic unemployment, poverty, or involvement in the criminal justice system.<sup>136</sup> However, members of this group can be called "opportunity youth," because they represent great potential for the community and workforce. 137 There are high concentrations of opportunity youth in urban and periphery areas, particularly in Bridgeport and Stratford. (FIG 4.11)

Depending on where they live, young people in Fairfield County have drastically different degrees of opportunity. The high neighborhood income inequality in the county (see page XX) means that many low-income people live in areas of concentrated poverty.<sup>139</sup> Isolated from the overall regional prosperity, youth residing in concentrated poverty areas have extremely limited access to the economic, educational, and social resources that promote upward mobility.140 One Harvard study estimated that a low-income child growing up in Fairfield County would earn eight percent less at the age of 26, compared to a low-income child from an average place in the U.S. (where poverty is less concentrated). Conversely, Fairfield County children from high-income families have similar earnings in adulthood as their average counterparts.141

Opportunities for young people are also stratified based on gender. Overall, young women in

Fairfield County have lower rates of unemployment and are more likely to say that they have enough training and education to advance professionally. More female students complete bachelor's degrees than males at Connecticut universities. These differences build from higher achievement for girls compared to boys during the K–12 education period, including a higher four-year graduation rate.

However, serious disparities in salary and employment opportunities exist for young women. In 2014, about 10 percent of women graduating from four-year Connecticut universities completed STEM majors (Science, Technology, Engineering, and Math), half the share of men (20 percent).145 In 2012, Connecticut women overall were more likely to work in industries paying low or belowaverage wages, such as service, arts, education, and community service. Connecticut women earn 78 cents on the dollar compared to men who held the same positions. Pay gaps are even larger for women of color: black and Hispanic women earn 60 cents and 47 cents, respectively, for every dollar that the average white man makes (the highest by median earnings).146



Health, well-being, and the economy are deeply intertwined. When all other conditions are the same, stronger economic opportunity supports healthier, longer lives. The converse is true as well; healthier lives allow for wealthier lives.

In this section, we examine job trends in Fairfield County, focusing attention on access to jobs that pay a high wage or "living wage"—defined here as over \$3,333 per month, or \$40,000 per year (though some researchers estimate the county's cost of living to be higher than this level).<sup>147</sup> Sixty percent of county residents earn a living wage, more than the 55 percent of earners statewide who are above this threshold.<sup>148</sup> Access to education, transportation, and financial services all factor into securing good jobs. Finally, we look at changes in wages and industries in the economy.

#### **Jobs Access**

Fairfield County supports a truly regional economy where people work and live in different towns, and multiple job hubs vie for workers' labor. No Fairfield town sees a majority of its jobs held by its own inhabitants. Roughly 80 percent of highwage earners, and 75 percent of low-wage earners (people with monthly income below \$3,333), work in a different town from where they live.<sup>149</sup>

The county is closely connected to the broader regional economy as well. Sixteen percent of working residents travel to New York state and another 16 percent work in other Connecticut counties. However, more out of state and out of county workers take jobs in Fairfield County than county residents who leave, such that the county had a net inflow of 18,000 workers in 2014 (equivalent to 5 percent of county jobs). The towns of the southwest generally have more people commuting in from outside towns to work than commuting out. The opposite is true in Bridgeport and north through the lower-density towns of eastern Fairfield County, which have more working residents than they do jobs. 151

County high-wage jobs are most concentrated in the southwest towns—such as Stamford, Greenwich, Westport, and Wilton—and many more high-wage jobs in New York City are accessible to Fairfield County residents. As a result, working residents generally commute to destinations southwest of their homes for work. This flow is more

pronounced among workers earning a living wage. Of the 220,000 high-wage earning residents, 14 percent worked in Stamford and 12 percent commuted to New York City. Further, Stamford residents constitute 9 percent of higher income workers in the county.<sup>152</sup>

Bridgeport is home to the largest population of people working low-wage jobs. Roughly 23,000 leave the city to find work, mainly in neighboring towns. The network for low-wage jobs is more localized than the high-wage jobs network. High-wage earners typically commute farther in major flows that cross the county (e.g. see flows from Stratford to Stamford and from Danbury to Norwalk on the following map); low-wage workers commute to closer towns, generally not crossing more than two town lines. For example, notice how greater Danbury's low-wage workers pinwheel around the core city.<sup>153</sup>

#### **Transportation**

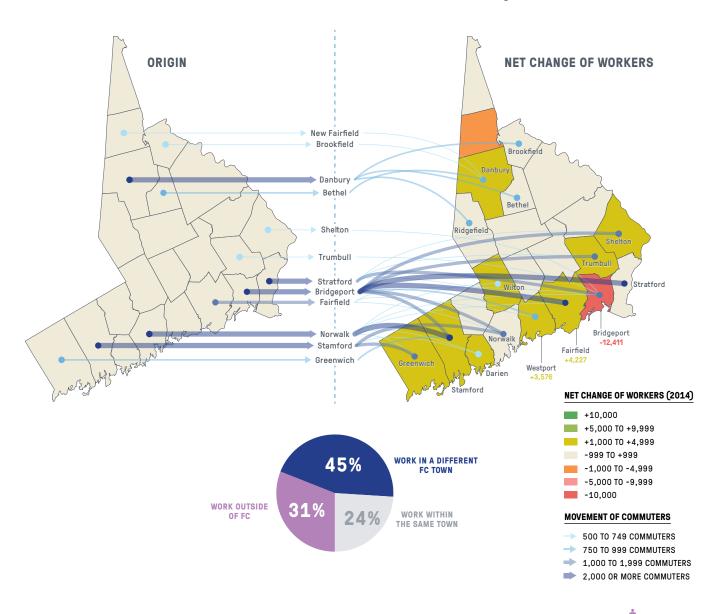
Transportation is a major factor in jobs access. Since the development of the Interstate highway system in the 1950s, sprawling development of suburbs and highways has resulted in jobs being physically located farther from the city centers and suburbs where many workers live. The jobs access maps illustrate this, showing that people often do not live where they work.

The trends indicate a mismatch between housing and job opportunities. For some, this reflects a trade-off between suburban comfort and commutes; for others, housing in job-rich areas is too expensive to afford. Of note, Fairfield County has some of the lowest levels of job sprawl when measured by proportion of jobs within 3 miles from major city centers. 155

Having access to reliable transportation, whether affordable public transit or a personal vehicle, enables people to take jobs throughout the county and beyond. Access to transportation is tied to income and geography, and can perpetuate inequality. For example, coming from a family of higher earners increases access to cars, which in turn increases access to higher income jobs.

Data from the 2015 DataHaven Community Wellbeing Survey (CWS) show that both age and race are linked to car access. Younger adults tend to have less car access than older adults. More strikingly, white populations are more likely to report having access to a car "very often" or "fairly often" than black or Latino populations, even while considering employment status. Respondents who said they

### Movement of Low-Income Workers (Salary < \$40,000)

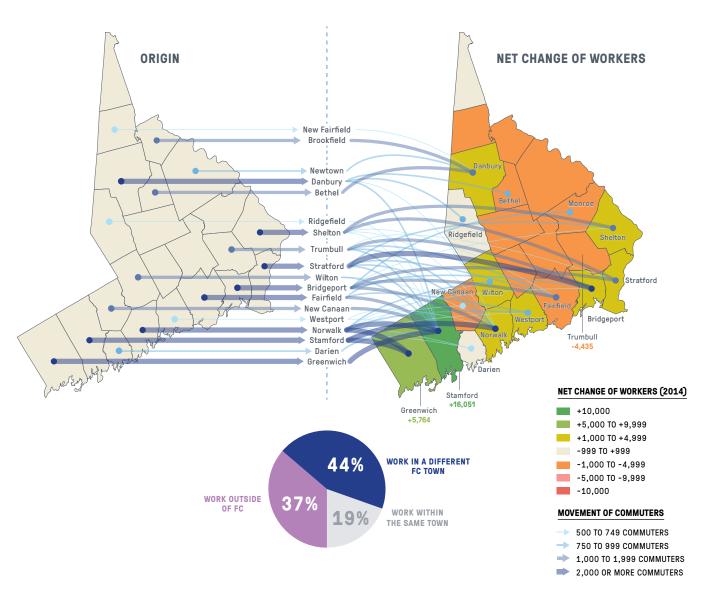


#### DESTINATIONS FOR WORKERS WHO WORK OUTSIDE OF FC

- 1111		
	= 500 PEOPLE	

DESTINATION	TOTAL LOW INCOME COMMUTERS	
New Haven County, CT	*****************************	16,900
New York City (5 Counties)	îîîîîîîîîî	5,000
Westchester County, NY	îîîîîîîîîî	4,800
Litchfield County, CT	††††í	2,200
Other CT	**************************************	9,600
Other NY	îîîîîîîîîî	4,700
Other States	††††††††	4,300

# Movement of High-Income Workers (Salary > \$40,000)



#### DESTINATIONS FOR WORKERS WHO WORK OUTSIDE OF FC

= 500 PEOPLE

DESTINATION	TOTAL HIGH INCOME COMMUTERS	
New Haven County, CT	††††††††††††††††††††††††††††††††††	18,000
New York City (5 Counties)	*****************	26,000
Westchester County, NY	******************	12,500
Litchfield County, CT	††††	1,900
Other CT	**************************************	11,300
Other NY	îîîîîîîîîîîîî	6,600
Other States	††††††††	4,400

were seeking employment and were white had greater car access than respondents who said they were employed and were black or Latino.<sup>156</sup>

This is partially explained by household wealth. Compared to an unemployed person of color in Fairfield County, an unemployed white person is roughly twice as likely to live in a household with a total household income over \$30,000, and three to four times as likely to live in a household with a total household income over \$100,000.<sup>157</sup> Nationally in 2011, the typical white household owned \$16 for every \$1 owned by a Black household, and \$13 for every \$1 owned by a Latino household. White adults were also many times more likely to receive large inheritances or gifts.<sup>158</sup>

Limited access to transportation is compounded by limited access to financial services and other financial stressors. The less often a respondent had access to a car, the less likely they had a checking or savings account. The DataHaven Financial Security Index combines responses to eleven survey questions that include access to transportation and financial services. The index

also considers whether respondents faced specific financial stressors in the previous 12 months, such as lacking money to provide adequate shelter for their families.<sup>159</sup>

Employed Fairfield County respondents scored 81 points on the index, above the state and overall county averages. Underemployed residents scored 68 on the index, equivalent to residents of the bottom 5th percentile of the state's zip codes in financial security. When disaggregated by race, the disparities are exacerbated.<sup>160</sup>

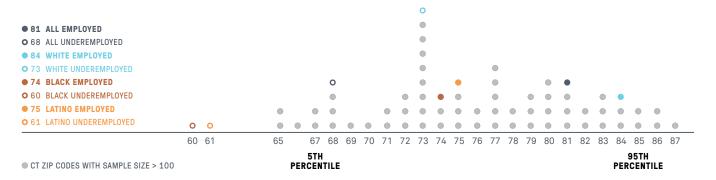
#### **Underemployment**

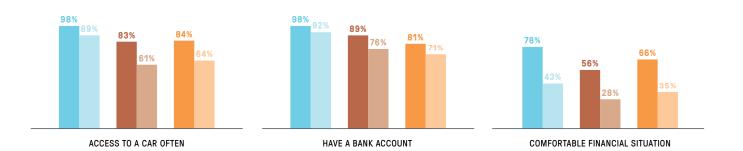
The official unemployment rate measures the proportion of people who are not working but are actively looking for work. This metric excludes people who may feel "discouraged" from looking during the past few weeks, as well as "underemployed" part-time workers who would prefer to work full-time. The DataHaven Community Wellbeing Survey captures the underemployed population as well as the unemployed population of workers. The CWS underemployment rate consists



#### INDEX SCORE COMPARISON

Financial Security Index for workers living within Fairfield County





of the working-age population that is not employed but actively looking for work, plus those who hold a part-time job but would prefer a full-time job. 162

In Fairfield County, underemployment stood at 14 percent in 2015, 163 compared to the official unemployment rate of 5 percent. 164 Underemployment rates in the four Fairfield core cities of Bridgeport, Stamford, Danbury, and Norwalk, were much higher than the rest of the county. Those four cities had rates ranging from 14 to 24 percent, whereas the 19 other Fairfield county towns had a combined rate of 10 percent. 165

Underemployed workers can face some of the same health risks as unemployed individuals; in particular, workers who are employed at a lower wage or hold lower-status jobs experience symptoms of depression, low self-esteem, and low job satisfaction. 166 Underemployment can generally contribute to job-related stress, which can have numerous effects not only on an individual's health, but also on many other areas of their life. 167

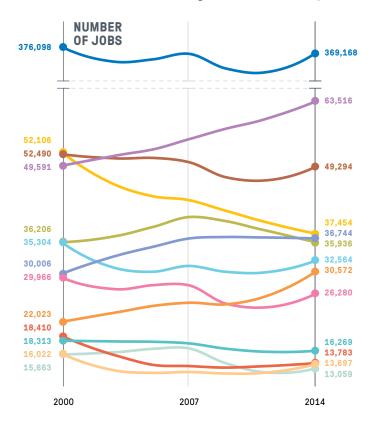
#### A Changing Economy

The total number of jobs in Fairfield County has not returned to its 2000 or 2007 highs. In 2014, job figures were roughly one percent below the season-adjusted peak in 2000 and in 2007, representing a net loss of 6,300 jobs since 2007. This reflects a similar pattern of job decline in Connecticut, which experienced employment peaks in 2000 and 2005. Over the past fifteen years, both economies saw two periods of economic decline and two periods of recovery.<sup>168</sup>

Breaking down job counts by industry sectors helps show the overall shape of the economy. In this section and the next, we will examine growth in job counts and then changes in wages.

The Health Care sector posted the strongest growth from 2000 to 2014, adding 14,000 jobs; this was the only sector that added jobs every year, even during the years of the 2008–2010 Great Recession.<sup>169</sup> The demand for health care work has been tied to an aging population and has seen growth throughout the nation.<sup>170</sup> Education

# Jobs and Wage Trends by Sector, 2000–14



#### 2000-14 CHANGE IN WAGES

	2014 WAGES	PERCENT Change	DOLLAR CHANGE
All Industries	\$86K	<b>4</b> %	-\$3,854
Health Care and Social Assistance	\$54K	<b>1</b> 2%	+\$978
Retail Trade	\$39K	<b>♣ 33</b> %	-\$19,079
Manufacturing	\$100K	<b>1</b> 0%	+\$9,309
Educational Services	\$58K	<b>₽</b> 0%	-\$155
Finance and Insurance	\$258K	<b>18</b> %	+\$38,512
Professional, Scientific, and Technical Services	\$114K	<b>₹</b> 5%	-\$5,803
Accommodation and Food Services	\$24K	<b>↓ 10</b> %	-\$2,529
Administrative Support and Waste Management	\$54K	<b>1</b> 7%	+\$3,524
Wholesale Trade	\$114K	<b>♣</b> 6%	-\$6,677
Management of Companies and Enterprises	\$213K	<b>1</b> 26%	+\$44,181
Information	\$101K	<b>1</b> 4%	+\$4,043
Construction	\$65K	₩ 8%	-\$5,923

DEDCENT

and Accommodation & Food Service also added large numbers of jobs (about 7,000 and 9,000 respectively).<sup>171</sup>

Manufacturing declined dramatically, shedding 28 percent, or 14,500, of its jobs. Despite declines since the 1970s, Manufacturing remains one of the largest sectors. Management saw the next largest contraction decreasing by 25 percent (about 5,000 jobs). Every other sector also saw a decline in jobs relative to 2000, with sectors such as Construction taking the hardest hits during the Great Recession.<sup>172</sup>

While the recession clearly had a major impact on Fairfield County's economy, the major trend—a shift from a manufacturing and goods-centered economy to a service-based economy—started before the recession and has continued since. The dominant shift from Manufacturing to Health Care was not particularly impacted by the recession.

The Connecticut Department of Labor projects some of these trends will continue state-wide through 2022. They forecast Health Care will continue to be the fastest growing sector, followed by Educational Services and Professional Services. They also forecast growth in Manufacturing, bucking the 40-year contraction in that sector's employment.<sup>173</sup>

#### Wages and Payroll

Average wages in each sector help contextualize the changes in job figures. While sector-wide averages mask the wide range of wages among occupations, they provide a useful approximation of the quality of jobs within each industry sector as a whole.<sup>173</sup>

The average wage for jobs located in Fairfield County stood at \$85,700 in 2014; this a high average wage for the US, but roughly \$9,000 below the county's 2007 average, a fifteen year high (all wages are in 2014 dollars). Wages in Fairfield County's three highest-growth sectors were below average in 2014; they were particularly low—about a guarter of the average—in Food Services. More notably, these sectors' wages have hardly grown since 2000: wages in Health Care and Educational services grew slightly from 2000 to 2004 but have since declined; Food Service wages have declined by 10 percent since 2000.175 These job counts do include both partand full-time jobs and could reflect an increase in part-time employment. Similarly, Health Care wages likely reflect an increase in lower paid jobs within the sector such as home care workers. In many shrinking sectors, such as Manufacturing and Management, salaries were above average and have grown.

These trends support the narrative that low-wage jobs are replacing high-wage jobs but also suggest a more nuanced story. Notably, the county's payroll—the total amount in wages paid to all employees working in the county—has not fallen as quickly as one would expect given the changes in job counts. Rising wages in the Finance & Insurance, Management, Professional Services, and Manufacturing sectors help offset a shrinking workforce.<sup>176</sup> Since 2004, economy-wide wage growth in the top-paying sectors offset job loss-driven payroll decline by nearly \$600 million.<sup>177</sup>

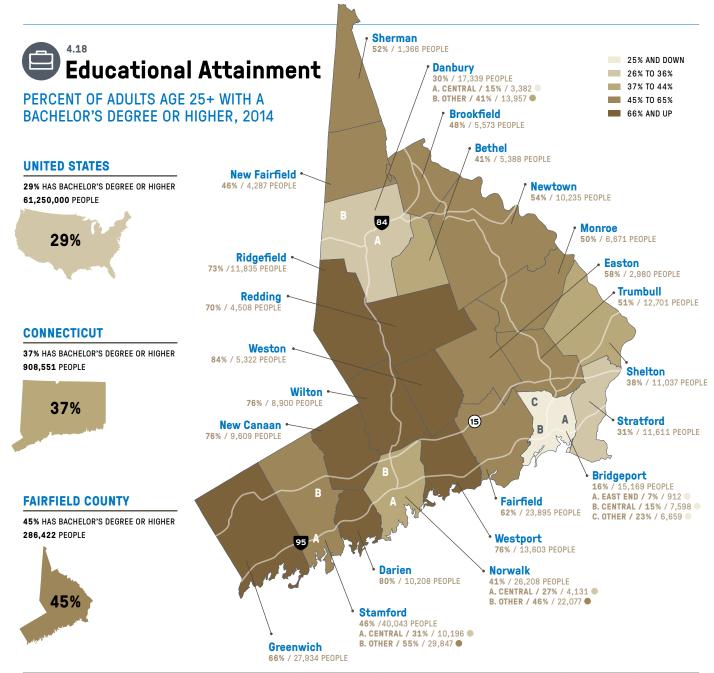
Since 2000, the Finance & Insurance sector has grown faster in terms of share of total payroll than Health Care, despite major employment growth in the latter. The Finance & Insurance sector made up roughly 10 percent of the workforce in both 2000 and 2014, but the industry share of payroll expanded from 21 percent in 2000 to 26 percent in 2014.<sup>178</sup>

By contrast, the quickly growing Health Care industry accounts for 15 percent of jobs, but only 9 percent of 2014 payroll. Because of this, as the



SHARE OF TOTAL INDUSTRY PAYROLL, BY INDUSTRY SECTOR, IN FAIRFIELD COUNTY

	PAYROLL 2014	SHARE OF PAYROLL 2000	SHARE OF Payroll 2014	CHANGE IN SHARE OF TOTAL PAYROLL
Finance and Insurance	\$9,300M	21.4%	25.6%	<b>4.2</b> %
Health Care and Social Assistance	\$3,400M	7.0%	9.4%	<b>1</b> 2.4%
<b>Educational Services</b>	\$2,100M	4.7%	4.7% 5.9%	
Accommodation and Food Services	\$700M	1.6%	2.0%	<b>↑</b> 0.4%
Administrative and Support and Waste Management and Remediation Services	\$1,400M	4.1%	3.9%	♣ 0.1%
Management of Companies and Enterprises	\$2,900M	8.4%	8.1%	♣ 0.3%
Information	\$1,400M	4.2%	3.8%	<b>♣ 0.4</b> %
Construction	\$900M	3.0%	2.4%	<b>♣ 0.6</b> %
Wholesale Trade	\$1,900M	5.9%	5.1%	<b>♣ 0.8</b> %
Professional, Scientific, and Technical Services	\$3,700M	11.3%	10.2%	<b>♣ 1.1</b> %
Manufacturing	\$3,700M	12.7%	10.3%	<b>₽ 2.4</b> %
Retail Trade	\$1,900M	8.2%	5.3%	<b>₽ 2.9</b> %



	HAS LESS THAN HIGH SCHOOL DIPLOMA	PERCENTAGE	HAS BACHELOR'S OR HIGHER	PERCENTAGE	HAS MASTER'S OR HIGHER	PERCENTAGE
United States	28,587,748	14%	61,206,147	29%	23,021,479	11%
Connecticut	257,011	10%	908,551	37%	401,889	16%
Fairfield County	68,186	11%	286,422	45%	125,850	20%
Bridgeport	23,629	26%	15,169	16%	5,732	6%
Danbury	9,962	18%	17,339	30%	7,428	13%
Fairfield	1,688	4%	23,895	62%	10,798	28%
Greenwich	1,888	4%	27,934	66%	13,791	33%
Norwalk	6,850	11%	26,208	41%	10,076	16%
Stamford	11,342	13%	40,043	46%	17,337	20%
Stratford	3,762	10%	11,611	31%	4,328	11%
6 Wealthiest Towns	1,538	2%	59,477	76%	28,525	37%
Other Towns	7,527	6%	64,746	48%	27,835	21%

county economy adds more lower-wage jobs, wage increases for higher-wage employees are expanding income inequality.<sup>179</sup>

Looking to the future, the Connecticut
Department of Labor estimates that two of the
six fastest growing occupational groups will be
low-wage occupations with median wages below
\$25.000.180

#### **Education and the Workforce**

Increasing wage inequality by industry sector highlights the relationship between education and job quality. In 2016, a high-school diploma is required for most non-minimum wage jobs, and a college education is necessary for many of the high-paying occupations in Fairfield County. Compared to county residents with at least bachelor's degrees, residents without high school diplomas are nearly three times more likely to be unemployed and have one-quarter to one-third the average earnings. Approximately 43 percent of all workers without four-year degrees report needing more education or training to advance their careers, compared to 15 percent of workers with at least bachelor's degrees.

From 2000 to 2014, Fairfield County saw the proportion of adults without a high school diploma drop 5 percentage points while the proportion who hold at least a bachelor's degree increased by 6 percentage points, translating into a gain of 48,700 residents with college degrees. This trend seems to be driven by a demographic shift: older residents came of age in an era when high school and college degrees were much less common. 186

Each town within the region experienced shifts towards higher educational attainment. However, significant differences still exist within the region, by race and ethnicity, neighborhood, and income. These disparities are largely due to barriers related to family income and wealth, such as difficulty paying tuition or the K-12 opportunity gap (see the Education chapter). The share of adults over 25 with bachelor's degrees ranges from 16 percent in Bridgeport to 76 percent in the six wealthiest towns. 188



4.19

# Municipal Financial Capacity in Fairfield County

MUNICIPAL TAX CAPACITY AND COST PER CAPITA, 2015, SELECTED TOWNS

	TAX CAPACITY PER CAPITA	MUNICIPAL COST PER CAPITA	MUNICIPAL SURPLUS PER CAPITA
Bridgeport	\$620	\$1,788	₩ \$1,168
Danbury	\$1,130	\$1,328	<b>\$198</b>
Fairfield	\$2,265	\$1,381	<b>\$884</b>
Greenwich	\$6,575	\$1,465	<b>\$</b> 5,110
Norwalk	\$1,850	\$1,532	<b>\$318</b>
Stamford	\$2,229	\$1,585	<b>\$</b> 644
Stratford	\$1,203	\$1,502	♣ \$299



From Greenwich's leafy estates to Bridgeport's urban center, Fairfield County has many different communities, with varying traditions, public resources, and physical spaces—leading to different perceptions of community health among its people.

What constitutes community health? For the people in it, a sense of community grows through relationships with friends and family, volunteering, and trust in others. 189 Civic engagement—the process by which people participate in community life and local affairs—improves the government's ability to solve public problems. A community that makes its members feel safe, included, and active also improves health and social connections, as public spaces and places for recreation encourage people to interact with one another and to exercise. 190

Community resources can even mitigate economic and social inequalities by providing essential services, from schools to transportation to computers in public libraries. On the other hand, access to resources can exacerbate disparities between towns, because wealthier towns generally can support more and higher-quality resources. In Fairfield County, countywide assessments of community well-being can hide striking differences between individuals and towns.

#### **Financial Capacity**

Local government services—including education, public safety, parks, libraries, cultural events, and infrastructure maintenance—are supported by revenue from taxes and fees as well as state and federal government grants. The revenues of local governments in Fairfield County vary significantly because they rely heavily on property tax and have very different tax bases.<sup>191</sup>

For example, the local government in Greenwich, which has by far the most valuable property in the state, can support high-performing schools and other government services with relatively low tax rates. Property there is so valuable that if the property tax rates across Fairfield County were the same, Greenwich would still collect ten times the revenue of Bridgeport.

But tax rates are not the same; towns with less valuable property must tax each property at higher rates to support local budgets. New England Public Policy Center research shows that the per-person cost for basic quality public services is highest in urban areas. This suggests that structural costs come with providing services in cities—which already have limited taxing capacities that disadvantage local administrations regardless of their policies. 192

#### **Public Institutions—Libraries**

Use of traditional library services has decreased in Fairfield County overall over the past decade, mirroring a downward trend statewide. The decrease occurred even though the operating incomes for libraries increased by 16 percent from 2002 to 2015. Annual visits to libraries decreased, for every system in the county except for Norwalk. Countywide, visits dropped by 13 percent, from 8 per person in 2002 to 7 per person in 2015. Similarly, annual circulation per person dropped at the county level, although the libraries in some of the larger towns — Greenwich,

#### A CLOSER LOOK AT WALKABILITY

These scores can be explained by geography. Low-income respondents are more likely to live in the region's urban neighborhoods, which tend to be dense and walkable, while the wealthiest respondents are more likely to live outside of the four largest cities. Residents of the urban core are 20 percentage points more likely to say there are many places to go in easy walking distance than people living in the rest of the county. Yet, even outside of the core cities, low-income populations report better access to sidewalks and are more likely to say there are many easily walkable places in their neighborhood. At the same time, low-income city residents report much lower levels of neighborhood public safety than their wealthy suburban counterparts.

Danbury, Norwalk, and Fairfield — had higher rates of circulation in 2015 than in 2002.

That said, an increasing number of patrons are using libraries for services other than borrowing books. From 2002 to 2015, Fairfield County libraries doubled the number of free programs offered to patrons—classes, lectures, concerts, clubs, and other activities—and saw a 75 percent increase in attendance at such programs.

Libraries receive funding from local taxes as well as private contributions and government grants. Rates of use of library services are strongly and positively correlated with a library's operating budget; libraries in the wealthiest towns have the highest budgets and generally see more use than those in other suburbs, while major city libraries, in Bridgeport and Danbury in particular, have lower budgets and lower levels of use.<sup>193</sup>

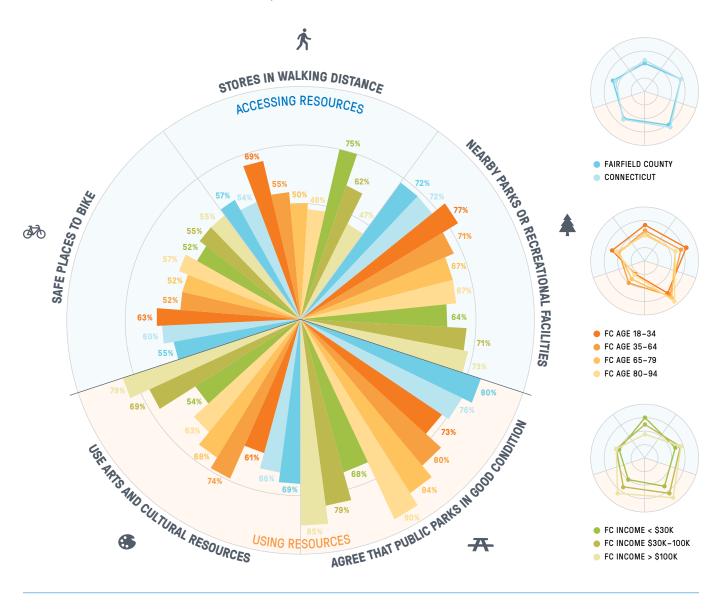
Fairfield County libraries have \$75 on average to spend per person per year, compared to \$53 statewide. Greenwich libraries, however, have per-person operating incomes of \$192 dollars per person per year, while Bridgeport libraries have \$47 per person, and Danbury libraries have \$25. In 2015, libraries statewide lent out (or circulated) an average of 8 items per person, compared to 10 items per person in Fairfield County that year. Greenwich libraries had a circulation rate of 24 borrowed items per resident, four times the number of items circulated per resident at libraries in the county's four major cities and eight times the number in Bridgeport.

### Perceived Access to Community Resources

The 2015 DataHaven Community Wellbeing Survey (CWS) found that overall, the county's residents are satisfied with their community's resources. Eighty percent of adults rated the availability of goods and services that meet their needs as "excellent" or "good." The same percentage of adults reported that public parks and recreational facilities in their towns were in excellent or good condition. Sixtynine percent of residents reported sometimes or often going to concerts, museums, or other cultural events, compared to 66 percent statewide. That three-quarters of Fairfield County residents believe their town is an excellent or good place to raise children—slightly above the percent of residents statewide who feel this way—further indicates overall satisfaction with communities and the resources they provide. Overall, Fairfield County

### Perceived Access and Use of Community Resources

2015 COMMUNITY WELLBEING SURVEY, PERCENT OF ADULTS AGE 18+



residents scored a 67 the Quality of Society Index, which summarizes several of these factors—although results are mixed between towns. For example, residents of Greenwich scored a 78, while Bridgeport residents scored a 49.<sup>194</sup>

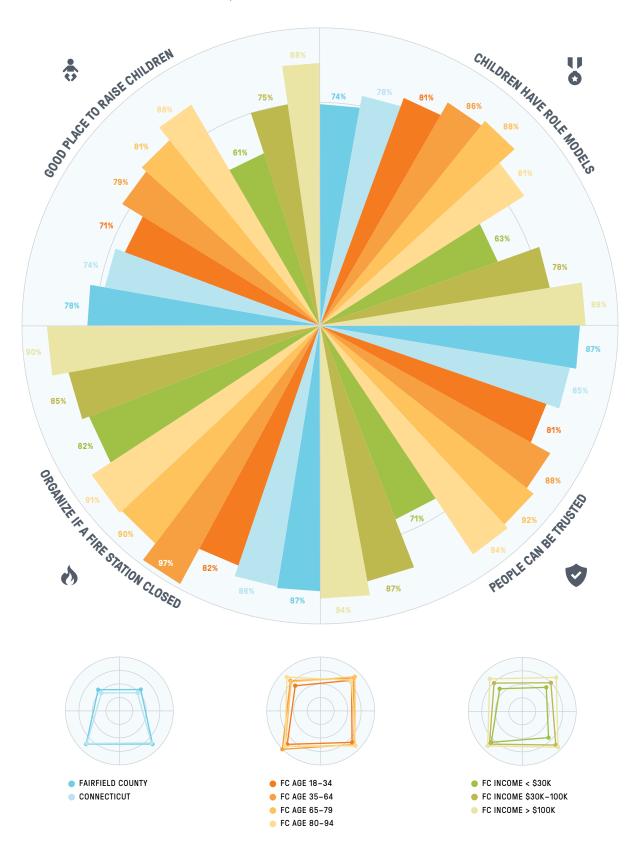
Access to community resources, however, is linked to income, with wealthier people perceiving that they enjoy greater access to goods and services, cultural events, and well-maintained recreational facilities. Fairfield County residents with household incomes over \$100,000 reported enjoying these resources at rates about 15 to 35

percentage points higher than those earning less than \$30,000.

Income based-disparities are less evident when looking at measures such as "walkability." This concept includes dimensions—such as physical proximity to destinations, infrastructure for walking and biking, and perceived public safety—that have been shown to significantly influence how much people walk and exercise. The DataHaven Walkability Index is calculated based on several of these factors. Across all income levels, Fairfield County residents reported similar

## Perceived Community Cohesion

#### 2015 COMMUNITY WELLBEING SURVEY, PERCENT OF ADULTS AGE 18+



levels of walkability in their neighborhoods: adults from households earning less than \$30,000 had an average walkability score of 61, slightly above the score of 58 among respondents earning over \$100,000.

These scores can be explained by geography. Low-income respondents are more likely to live in the region's urban neighborhoods, which tend to be dense and walkable, while the wealthiest respondents are more likely to live outside of the four largest cities. Residents of the urban core are 20 percentage points more likely to say there are many places to go in easy walking distance than people living in the rest of the county. Yet, even outside of the core cities, low-income populations report better access to sidewalks and are more likely to say there are many easily walkable places in their neighborhood. At the same time, lowincome city residents report much lower levels of neighborhood public safety than their wealthy suburban counterparts.

#### **Perceptions of Community Cohesion**

Community cohesion—the degree to which residents feel connected, included, and invested in where they live—is linked to higher individual wellbeing as well as less crime and improved public health. Further, a cohesive community may fare better when facing recessions or other economic hardships.<sup>197</sup>

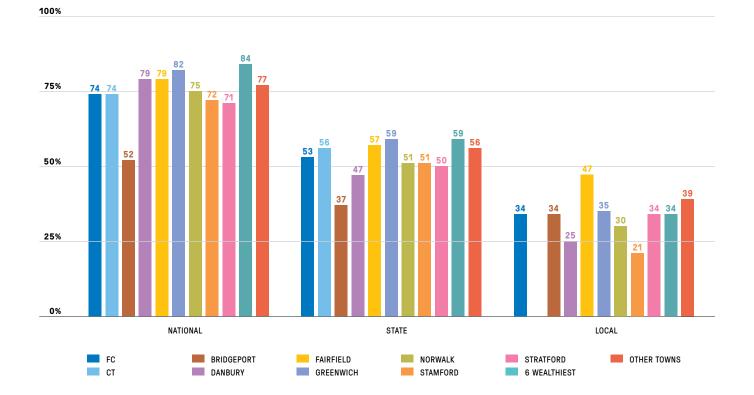
In the 2015 CWS, 94 percent of Fairfield County adults reported having relatives or friends they can count on. This figure is statistically equal across all towns, ages, races, and ethnicities, suggesting that the vast majority of area residents are at least close to one or two others in their community.

Overall, between 80 to 87 percent of adults report trusting neighbors, having neighbors who could work together, and having confidence in police—all measures of community cohesion. However, within the county, people with low household incomes were less likely than wealthier adults to report trust in neighbors and effective local government. There were similar disparities based on age, race and ethnicity, and education



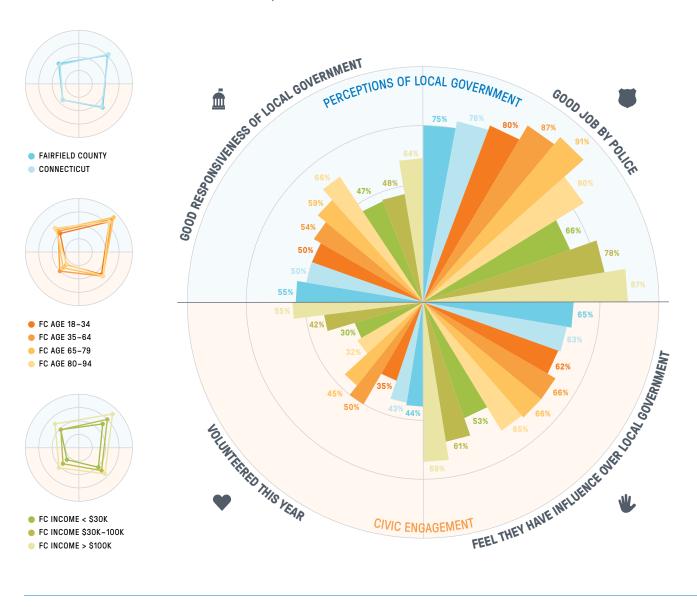
### Voter Turnout in Fairfield County

PERCENT OF REGISTERED VOTERS WHO VOTED IN VARIOUS ELECTIONS, 2012-2015, BY TOWN



### Civic Engagement and Government

#### 2015 COMMUNITY WELLBEING SURVEY, PERCENT OF ADULTS AGE 18+



levels —characteristics linked to income. On the trustworthiness of neighbors, CWS data show a 24 percentage-point gap between respondents with household incomes under \$30,000 and those with over \$100,000. On police efficacy, there was a 21 percent gap between these income groups.

By town, Fairfield County adults expressed different perceptions of cohesion with their neighbors and local government, even after controlling for household income. For example, of people who earned less than \$30,000 and who

lived in one of the four major cities, 66 percent thought their neighbors could be trusted, compared to 81 percent of people in the same income category but living in the other towns in Fairfield County. This finding suggests that characteristics of a neighborhood or town may be stronger determinants of how connected people feel to that community than personal income.

#### **Voting and Volunteering**

Fairfield County residents have similar rates of civic engagement as the state overall, and are slightly more likely to be engaged than national averages. The rate of volunteerism—44 percent of county adults reported volunteering to address needs in their community in the last year—is equal to the state. 199 Also, registered county voters are equally as likely to vote in elections as voters statewide. 200

Following national trends, among registered voters in Fairfield County, voter turnout varies significantly with the type of election: the higher the office to be elected, the higher the voter turnout. According to state voting data, 74 percent of registered county voters voted in the 2012 presidential election while 53 percent voted in the 2014 midterm gubernatorial elections. Turnout declined to 34 percent of registered voters for the most recent local elections in 2015.<sup>201</sup>

Statewide data indicate that civic engagement is correlated with socioeconomic status: as personal income and educational attainment increase, so do rates of volunteering, voter registration, and turnout.202 Town-level voter turnout rates reflect this trend. They are lowest in Bridgeport, at 52 percent for the 2012 election and 37 percent for the 2014 election; they are highest in the six wealthiest towns, at 84 percent for the presidential election and 59 percent for the midterm election. Voter turnout in the 2015 local elections however, rebukes this pattern, as Bridgeport and the six wealthiest towns overall had the same turnout rates as the county average. 203 Younger adults, in addition to adults with low household incomes, were less likely to report registering to vote or volunteering, 204 which is consistent with a national pattern that younger adults are less likely to be civically engaged.205

#### **Government Effectiveness and Inclusion**

In Fairfield County, perceptions of government effectiveness are stratified based on age and socioeconomic status, showing the same disparities as in voting and volunteering rates.<sup>206</sup>

According to the CWS, 55 percent of residents overall described the local government's responsiveness to residents' needs as excellent or good. Younger adults and poorer adults reported lower levels on these metrics.<sup>207</sup>

Sixty-five percent of Fairfield County residents reported having at least a little influence over local government decision-making, but fewer adults with incomes below \$30,000 (53 percent). Further, 59

percent of people of color responded that they had influence over local government, compared to 67 percent of white respondents.

Having elected officials whose demographics mirror the population as a whole is necessary for truly representative policies and government decision-making.<sup>208</sup> If people or groups have below-average perceptions of government inclusiveness and efficacy, it may reflect that they are underrepresented in government and public office. For example, 95 percent of elected officials nationally are over the age of 35.<sup>209</sup> In Connecticut, Hispanics are underrepresented on state boards and commissions, holding less than 4 percent of positions despite making up 13 percent of the population overall.<sup>2010</sup>

Women in Fairfield County are as likely as men to positively describe government effectiveness and their ability to influence government decisions. However, they are also underrepresented in local government: only 17 percent of top local officials in Fairfield County are women (even lower than 22 percent statewide). Statewide, one third of full-time government officials or administrators in local and state government are women.<sup>211</sup>

#### CHAPTER 5

# Conclusion & Endnotes

#### Conclusion

Fairfield County performs above average on many national and state measures of quality of life and economic opportunity. Public school students have better on-time graduation and college attendance rates. Workers employed in the region have higher average wages than workers elsewhere in the country. Across all towns, residents feel connected to others in their community. As the previous chapters show, Fairfield County residents are healthy compared to other Connecticut residents or the nation as a whole, with significantly higher life expectancies and lower rates of smoking, early-onset chronic disease, and death from conditions such as heart disease and cancer.

Despite its overall affluence, Fairfield County is among the nation's most unequal metropolitan areas. Inequities in well-being appear when evidence is stratified by income, age, race, gender, and zip code. These differences are often most apparent after considering data that were collected specifically for the age groups and neighborhoods that are most impacted. The median household income in Weston is seven times higher than that of the East Side of Bridgeport. In recent years, the percentage of young children who live in lowincome families has risen and wage inequality has continued to rise. Many residents of distressed neighborhoods experience risk factors, chronic diseases, and rates of premature mortality that far exceed those of the surrounding area. These differences may be viewed as opportunities to improve quality of life throughout the region as a whole.

Certain issues demand our immediate and collective attention. Neighborhood distress, poor health, and financial insecurity documented in parts of Fairfield County are disconcerting in their own right. Yet they also impact the ability of young children to grow up as healthy, happy, and productive adults, impacting the region's long-term outlook. During the first three years of life, the human brain reaches 80 percent of its full size and forms connections whose strength and number, which depend heavily on the child's environment, ultimately impact the child's learning and other cognitive abilities.x For example, speech sounds activate language-related parts of the brain; the more caretakers talk to or read with a child, the stronger and more numerous will be the connections formed in that child's brain. Infants and toddlers need nurturing, language-rich, and social settings, whether inside or outside their homes. For working parents, meeting these needs often requires high-quality child care and preschool programs. Such programs continue to foster children's brain development that starts at birth by developing the social-emotional skills and executive functioning necessary for success in school and in life. They also expand children's language and literacy, math, and fine-motor skills. Access to high-quality early care and education is particularly important for children exposed to adverse experiences. Young children who experience neglect or abuse, the absence of a loved one, unsafe or polluted surroundings, or exposure to "toxic neighborhoods" may not only suffer emotional instability or physical distress, but also disrupted brain development.\* Access to high-quality early care and education settings can help children avoid these negative long-term outcomes by promoting healthy brain development.

At the other end of the age distribution, Fairfield County's large and growing population of senior citizens will present new opportunities and challenges for the region's families and communities in the coming years. With many adults living substantially longer than they are able to drive on their own, this population will need social support, civic engagement, medical care, transportation, and housing options that are tailored to their needs.

Improving the quality of transportation networks, employment prospects, civic and educational infrastructure, and fair and affordable housing choices can enhance well-being among children and adults of all ages and abilities.

### 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 collective challenges on a continuous basis. Community indicator projects have been on the rise in the past three decades; more than ever, neighborhoods are using data to inform local policies and bring about community change.

The work of DataHaven and its multisector partners around the Fairfield County Community Wellbeing Index is one effort to create collaborations with local partners to allow the development of appropriate measurements for our evolving communities. Our organization also provides a platform and technical assistance resource that neighborhoods may use to decide which indicators best represent them. We hope that you will layer the information in this report with your own stories, and use it to take action in your community.

#### **NOTES ON FIGURES**

### CHAPTER 1. INTRODUCTION

1.1. Personal Wellbeing Index and Community Index. Data Haven analysis (2016). The Personal Wellbeing Index and Community Index were both developed by DataHaven based on the 2015 DataHaven Community Wellbeing Survey (CWS) and U.S. Census Bureau American Community Survey 2014 5-Year estimate data for the individual towns of Bridgeport, Stratford, Danbury, Norwalk, Stamford, and Fairfield, plus aggregate groupings of towns that are also used elsewhere in this report: "6 Wealthiest" includes the six towns in Fairfield County with the highest median household incomes, which are Darien, New Canaan, Ridgefield, Weston, Westport, and Wilton; throughout the report, "Other Towns" include all other towns in Fairfield County that are not already listed individually. The Other Towns all share the characteristics of being relatively wealthy suburban communities such as Bethel, Monroe, New Fairfield, Newtown, Redding, Shelton, and Trumbull. Additionally, we have defined neighborhood groupings or statistical areas within the towns of Bridgeport, Norwalk, and Stamford based on the median income, density, and poverty rates of each city's Census Tracts. Within these areas, Census Tract-level Census data was used to define physical boundaries of each area and to calculate all Census-derived indicators for each aggregate statistical area. For Community Wellbeing Survey derived estimates, neighborhood areas were developed based on the large number of responses from adults living within each town, broken down by zip code of residence that most closely matched the corresponding Census Tract boundaries. These groupings were Bridgeport East End (Tracts 735, 736, 738-744; zip codes 06607 and 06608 for CWS data), Central (Tracts 702-722, 730-734, and 2572; zip codes 06604, 06605, 06610, 06650 for CWS data), and Other (701, 723-729; zip code 06606 for CWS data); Norwalk Central (Tracts

434 437 440 441 444 445 zin codes 06850 and 06854 for CWS data) and Other (Tracts 425-433, 435, 436, 438, 439, 442, 443; zip codes 06851, 06853, and 06855 for CWS data); and Stamford Central (Tracts 201, 214, 215, 217, 218.02, 221-223, zip codes 06901, 06902, 06906, 06910 for CWS data) and Other (Tracts 202-213, 216, 218.01, 219, 220, 224; zip codes 06903, 06905, 06907 for CWS data). For Danbury, a Central and Other grouping of neighborhoods was also developed using the same method based on Census Tracts, and appears in some of the maps within this report that display Census data. However, the Danbury Central (Tracts 2101-2103, 2106, 2107.01, 2107.02) and Other (Tracts 2104, 2105, 2108-2114) areas were not scored in the Personal Wellbeing Index or Community Index because the town has only two major zip codes and the number of responses from Community Wellbeing Survey interviews of randomly-selected adults living there was relatively smaller (400 completed interviews in Danbury, versus 600 to 1,010 completed interviews in each of the three other cities shown). Due to the complexity of neighborhood data, Index scores and raw data for these neighborhood groupings are best treated as rough estimates, even though they clearly illustrate that the differences by neighborhood within a town are often greater than differences between one town and any other town. The Personal Wellbeing Index is calculated based on several survey questions regarding self-rated health, life satisfaction, mood, free time, and connection to others (see previous page of report). Similarly, the Community Index is based on 12 key indicators from survey responses and Census data, as listed in the figure. Note that several indicators of the Community Index are indices themselves the Financial Security Index, Walkability Index, and Quality of Society Index are each calculated to summarize multiple indicators for ease of comparison. Each of these indices are normalized from 0 to 1, where 1 represents an ideal outcome. Additional detail on data and methods for the 2015 DataHaven Community Wellbeing Survey are posted at DataHaven (http://www.ctdatahaven.org/reports/datahaven-communitywellbeing-survey) and data and methods for the U.S. Census American Community Survey are posted at census.gov.

- 1.2. Community Index Components Data Value. Data Haven analysis (2016). See note for Figure 1.1 for definitions of each geographic area in the table. As described in the above note and in the report text, the raw percentages presented for college degree attainment, commute times, Pre-K enrollment, opportunity youth, severe housing cost burden, and low-income children are calculated by DataHaven directly from the U.S. Census Bureau American Community Survey 2014 5-Year estimates, whereas raw percentages presented for smoking, obesity, under-employment are directly from the 2015 DataHaven Community Wellbeing Survey's population-weighted estimates. For example, the table shows that the smoking rate among all adults in Connecticut was 15 percent in 2015. The personal well-being, financial security, walkability, and quality of society indices are derived from a larger set of responses to the Community Wellbeing Survey within each area and in this table are normalized from 0 to 1, with scores of 1 representing an ideal outcome. Further details on each of these indicators is given over the course of this report (refer to pages shown for each indicator in Figure 1.1) or are available from DataHaven upon request.
- 1.3. State Rankings. Table is compiled from the most recently-published rankings of the fifty U.S. states as of May 2016. These sources were chosen by DataHaven based on a comprehensive review of available national rankings and the author's assessment of the validity of each published source. Documents cited in the table are available online from the websites of the organizations cited, or from DataHaven.

### CHAPTER 2. A CHANGING REGION

- 2.1. Population and Growth in Fairfield County. DataHaven analysis (2016). 1990 figures are from the U.S. Census Bureau Decennial Census, Table P1, Total Population. 2014 population figures are from U.S. Census Bureau American Community Survey 2014 5-year estimate, Table B01001, Sex by Age. Tables available at <a href="http://factfinder2.census.gov/">http://factfinder2.census.gov/</a>. 2000 median age from Decennial Census. 2014 median age from U.S. Census Bureau American Community Survey 2014 5-year estimate, Table B01002, Median Age by Sex.
- 2.2. The Changing Age Structure of Fairfield County. DataHaven analysis (2016). 1990 and 2000 figures are from the U.S. Census Bureau Decennial Census, Table P012, Sex by Age. 2014 figures are from U.S.

- Census Bureau American Community Survey 2014 5-year estimate, Table B01001, Sex by Age. Tables available at <a href="http://factfinder2.census.gov/">http://factfinder2.census.gov/</a>. 2025 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. Retrieved from <a href="http://ctsdc.uconn.edu/2015\_2025\_projections/">http://ctsdc.uconn.edu/2015\_2025\_projections/</a>.
- 2.3. Race and Ethnicity in Fairfield County. DataHaven analysis (2016). 2010 U.S. Census Bureau Decennial Census, Table P2, Hispanic or Latino, and Not Hispanic or Latino by Race, available at <a href="http://factfinder2.census.gov/">http://factfinder2.census.gov/</a>. Geographies are defined in the note for Figure 1.1; please note that in this chart, Other Towns includes the towns of Fairfield and Stratford as well as all other towns not included in the other geographies shown. Please note that while the majority of the population-related data and text presented in this report is derived from 2014 U.S Census Bureau American Community Survey data, this chart uses 2010 Decennial Census data because of the need to present more detailed data by age and race/ethnicity.
- 2.4. Fairfield County's Foreign-Born Population. DataHaven analysis (2016). 2000 figures are from U.S. Census Bureau Decennial Census, Table PCT019, Place of Birth for the Foreign-Born Population. 2014 figures are from the U.S. Census Bureau American Community Survey 2014 5-year estimate, Table B05006, Place of Birth for the Foreign-Born Population in the United States, available at <a href="https://factfinder2.census.gov/">https://factfinder2.census.gov/</a>. Please note that the concept for this graphic was initially developed as part of a 2015 report also written by the authors of this report, and published by The Community Foundation for Greater New Haven and DataHaven, entitled Understanding the Impact of Immigration in Greater New Haven (<a href="https://www.ctdatahaven.org/reports/understanding-impact-immigration-greater-new-haven">https://www.ctdatahaven.org/reports/understanding-impact-immigration-greater-new-haven</a>).
- 2.5. Characteristics of Immigrants in Fairfield County. DataHaven analysis (2016). 1990 population figures from U.S. Census Bureau Decennial Census, Table P021, Place of Birth by Citizenship Status. U.S. Census Bureau American Community Survey 2014 5-year estimate, Table B05007, Place of Birth by Year of Entry by Citizenship Status for the Foreign-Born Population; Table B06009, Place of Birth by Educational Attainment in the United States; Table B05013, Sex by Age for the Foreign-Born Population; Table B05006, Place of Birth for the Foreign-Born Population in the United States. Tables available at <a href="http://factfinder2.census.gov/">http://factfinder2.census.gov/</a>.
- 2.6. The Changing Household Structure of Fairfield County. DataHaven analysis (2016). 1990 and 2000 figures from U.S. Census Bureau Decennial Census, Table P015, Family Type by Presence of Own Children Under 18 Years of Age by Age of Own Children or equivalent SF1 dataset. 2014 figures from U.S. Census Bureau American Community Survey 2014 5-year estimate, Table B11003, Family Type by Presence and Age of Own Children Under 18 Years. Tables available at <a href="http://factfinder2.census.gov/">http://factfinder2.census.gov/</a>.
- 2.7. Income and Income Inequality in Fairfield County. DataHaven analysis (2016). U.S. Census Bureau American Community Survey 2014 5-year estimate, Table B19080, Household Income Quintile Upper Limits and Table B19013, Median Household Income in the Past 12 Months (in 2014 Inflation-Adjusted Dollars), available at <a href="http://factfinder2.census.gov/">http://factfinder2.census.gov/</a>. Differences shown are the 20th and 80th percentiles of household income for each town. For privacy, the Census suppresses data for very high incomes at the town level; as such, some towns' top incomes are only available as "\$250,000+."
- 2.8. Growing Neighborhood Income Inequality in Fairfield County. DataHaven analysis (2016) of household income and population data by Census Tract, Due to changes in Census Tract boundaries over time. in order to allow comparability to current Census Tract data, the 1980, 1990, and 2000 figures from U.S. Census Bureau Decennial Census are provided by Neighborhood Change Database (NCDB) created by GeoLytics and the Urban Institute with support from the Rockefeller Foundation (2012), a dataset that is designed to hold neighborhoodlevel geographic boundaries constant over time. 2014 figures from U.S. Census Bureau American Community Survey 2014 5-year estimate, Tables B01003 Total Population, B17001 Poverty Status in Past 12 Months by Age, B11012 Household Type by Tenure, B19127 Aggregate Income in Past 12 Months for Families (in 2014 Inflation-Adjusted Dollars), available at <a href="http://factfinder2.census.gov/">http://factfinder2.census.gov/</a>. Neighborhood income categories determined by comparing average family income by census tract to the state average family income, using ratios described in table. The percent of total population living in each neighborhood

- income category is compared across decades to illustrate change in neighborhood inequality.
- 2.9. The Low-Income Population in Fairfield County. Data Haven analysis (2016). 2000 figures are from U.S. Census Bureau, Ratio of Income in 1999 to Poverty Level. 2014 figures are from U.S. Census Bureau American Community Survey 2014 5-year estimate, Table B17024, Age by Ratio of Income to Poverty Level in the Past 12 Months. Tables available at <a href="http://factfinder2.census.gov/">http://factfinder2.census.gov/</a>. As described in the report text, "low-income" is defined here as individuals having an annual household income less than two times (200 percent of) the federal poverty level.
- 2.10. Housing Cost Burden in Fairfield County. DataHaven analysis (2016) of data from U.S. Census Bureau American Community Survey 1-year estimates. Table B25070, Gross Rent as a Percentage of Household Income in the Past 12 Months; Table B25091, Mortgage Status by Selected Monthly Owner Costs as a Percentage of Household Income in the Past 12 Months, available at <a href="https://factfinder2.census.gov/">https://factfinder2.census.gov/</a>. Households are considered cost-burdened when their monthly housing costs exceed 30 percent of their total income, and severely cost-burdened when this cost exceeds 50 percent of their total income.
- 2.11. Characteristics of Fairfield County Households. DataHaven analysis (2016). 2014 figures from U.S. Census Bureau American Community Survey 2014 5-year estimates. Table B25070, Gross Rent as a Percentage of Household Income in the Past 12 Months; Table B25091, Mortgage Status by Selected Monthly Owner Costs as a Percentage of Household Income in the Past 12 Months, available at <a href="https://factfinder2.census.gov/">https://factfinder2.census.gov/</a>. Households are considered severely cost-burdened when their monthly housing costs exceed 50 percent of their total income.

### CHAPTER 3. A HEALTHY REGION

- 3.1. Fairfield County Trends. DataHaven analysis (2016) of a variety of sources. For life expectancy data, online data from Institute for Health Metrics and Evaluation at the University of Washington (2015), Released April 2015 and accessed June 1, 2016 at http://vizhub.healthdata.org/ us-health-map/ for Fairfield County, Connecticut, and United States. For low birth weight, Connecticut Department of Public Health Vital Statistics records from 2003 to 2013, with a 3 year centered moving average developed for each point in time shown (see note for Figure 3.3); data are presented for the city of Bridgeport, Connecticut, and Fairfield County. For obesity and smoking, DataHaven analysis (2016) of data compiled from 2015 DataHaven Community Wellbeing Survey (available at http://www.ctdatahaven.org/reports/datahaven-community-wellbeingsurvey), 2007 Connecticut Health Foundation Health Data Scan (available at https://www.cthealth.org/wp-content/uploads/2011/04/health-data-scanreport.pdf), and 2011 American Lung Association Trends in Tobacco Use report (available at <a href="http://www.lung.org/assets/documents/research/">http://www.lung.org/assets/documents/research/</a> tobacco-trend-report.pdf); data are presented for the city of Bridgeport, Connecticut, and for a grouping of the state's wealthiest towns. For insurance coverage rates, U.S. Census Bureau American Community Survey 2012 5-year estimates (2008-2012) and 2014 1-year estimates, Table S2701, civilian non-institutionalized population 18 years and older; and 2015 DataHaven Community Wellbeing Survey data for adults age 18 and older. Data presented for city of Bridgeport and Connecticut. For age-adjusted mortality rates from heart disease. Connecticut Department of Public Health Mortality Tables, available at http://www. ct.gov/dph/cwp/view.asp?a=3132&q=521462.
- 3.2. Well-Being and Chronic Disease Risk Factors. DataHaven analysis (2016) of questions from 2015 DataHaven Community Wellbeing Survey. Using a standard list of questions designed by a panel of local, statewide, and national experts based on major national surveys, randomly-selected adult participants were asked to rate their overall health; report recent levels of depression and anxiety; and report whether they had even been told by a doctor or medical professional that they had diabetes or asthma. Participants reported their height and weight, from which their body mass index (BMI) was calculated; obesity in adults is defined as a BMI of 30 or higher. For food insecurity, participants were asked whether there had been times in the past 12 months that they did not have enough money to provide food for their families. Smoking rates were calculated based on the number of participants who estimated having smoked at least 100 cigarettes in their entire lives; those who said they had were then asked whether they smoked every day, some days, or not at all. Smoking prevalence

for the entire population was then extrapolated from these two figures. Participants were asked to self-report whether they currently have health insurance, and whether they had seen a dentist in the past 12 months. All reported estimates from the survey are weighted in order to accurately represent the underlying adult population within each state, region, town, or neighborhood. More information on this landmark, statewide, regional, and neighborhood-level survey is available elsewhere in the report or at <a href="http://www.ctdatahaven.org/reports/datahaven.community-wellbeing-survey">http://www.ctdatahaven.org/reports/datahaven.community-wellbeing-survey</a>.

- 3.3. Infant Health Indicators. DataHaven analysis (2016) of data from Connecticut Department of Public Health Vital Statistics, available at <a href="http://www.ct.gov/dph/cwp/view.asp?a=3132&q=394598">http://www.ct.gov/dph/cwp/view.asp?a=3132&q=394598</a>. Low and very low birth weights are defined as 2,500 grams (5.5 pounds) and 1,500 grams (3.3 pounds), respectively. Fetal mortality is defined as babies that were stillborn or otherwise not viable after 20 weeks gestation. Infant mortality is defined as children who died at less than 1 year of age. All figures are averaged over the period from 2008 to 2013 and reported as an annualized 6-year average.
- 3.4. Leading Causes of Death. Data from Connecticut Department of Public Health, available at http://www.ct.gov/dph/cwp/view. asp?a=3132&q=521462. Crude mortality rates give the number of deaths divided by the number of residents, without accounting for effects of age. Number of deaths, crude mortality rate (CMR), age-adjusted mortality rate (AAMR) and statistical significance between time periods by cause of death were created using the 2008-2012 and 2003-2007 mortality data reported for each CT town, county and the state. The 2008-2012 AAMR for each cause by town was compared to the CT statewide AAMR to identify statistically significant differences using the Standard Error of the AAMR for each town provided in the tables along with the town, county or state population from the 2010 Decennial Census (http://www.ct.gov/dph/cwp/view.asp?a=3132&q=488832) to calculate the standard deviation. For each reference area, z scores were calculated using the standard deviation, 2010 total population, and the difference between the town AAMR and reference AAMR. p values were calculated from these z scores. Statistical differences shown as "likely higher/lower" are calculated at a 90% confidence level, and those shown as "higher/lower" are calculated at a 95% confidence level. When neither difference is indicated, figures are not significantly different from those of the state. According to Mortality Technical Notes at the Connecticut Department of Public Health (http://www.ct.gov/dph/ cwp/view.asp?a=3132&q=397434), "age-adjusted mortality rates are rates where the effect of differing age distributions between the groups has been removed. They are used to compare the relative mortality risk across two or more population groups at the same point in time or to compare one population at two or more points in time. Since the effect of age has been removed, these rates are called "age-adjusted" rates. This is a key difference between crude and age-adjusted rates. More specifically, the adjusted rate estimates "what the crude rate would have been in the study population if that population had the same distribution as the standard population with respect to the variable(s) for which the adjustment or standardization was carried out" (Last, 1988). Age-adjusted rates are computed by the direct method by applying age-specific rates in a population of interest to a standardized age distribution, in order to eliminate differences in observed rates that result from age differences in population composition. Age-adjusted rates presented in the CT DPH Mortality tables are consistent with the methods used by the National Center for Health Statistics/Centers for Disease Control in their tabulation of U.S. rates." AAMRs are calculated for towns and counties, but were not available for groupings of towns or neighborhoods.
- 3.5. Causes of Premature Death. Data from Connecticut Department of Public Health, available at <a href="http://www.ct.gov/dph/cwp/view.asp?a=3132&q=521462">http://www.ct.gov/dph/cwp/view.asp?a=3132&q=521462</a>. For Years of Potential Life Lost (YPLL), we created annualized YPLL rates (or "Premature Death Rates") by cause using the 2008-2012 dataset at the individual town level; geographies presented here include the state, county, and selected individual towns. Data represent annualized averages over that five year period of time. We calculated the YPLL rate as the sum of the YPLL divided by (the total population under 75 years old\*5)\*100,000. The average YPLL under 75 years of age, or "Years Lost Per Death," was calculated by taking the sum of the YPLL divided by the number of deaths under 75 years of age. For YPLL due to fetal/infant deaths (summed fetal deaths plus infant deaths), we used annualized CTDPH data for 2008-2013 (see note for Figure 3.3) and used an average age at death of 0.5 years, hence the

average YPLL of 74.5 years per death computed for these deaths as the basis of the comparison to standard causes of death.

3.6. Heart Disease, Hospital Inpatient Encounters, and General Notes on Analysis of Hospital Data (CHIME data). DataHaven analysis (2016) of 2012–2014 CHIME data provided by Connecticut Hospital Association upon request from and special study agreement with partner hospitals and DataHaven. The CHIME hospital encounter data extraction included de-identified information for each of 3,069,680 Connecticut hospital encounters incurred by any residents of 47 towns in CT and 15 towns in NY encompassing the service areas of several Connecticut hospitals (Bridgeport Hospital, Danbury Hospital, Greenwich Hospital, Milford Hospital, Norwalk Hospital, St. Vincent's Medical Center, Stamford Hospital, and Yale New Haven Hospital) as well as the towns of Waterbury and Hartford for use as comparisons. Any encounter incurred by any resident of these towns at any Connecticut hospital would be included in this dataset, regardless of where they received treatment. In order to develop statewide geographic benchmark comparisons within the CHIME data that could be used to provide context to any of the figures in the report that relied on CHIME data. the nine wealthiest towns in Connecticut based on household income (Darien, Easton, Greenwich, New Canaan, Ridgefield, Weston, Westport, Wilton, Woodbridge) were grouped together into a "9 Wealthiest CT Towns" figure and compared to the four largest urban centers (Bridgeport, New Haven, Hartford, Waterbury) grouped together into a "4 Largest City Centers" or "4 Largest CT Urban Core Towns" figure. In all CHIME data-based maps, a single zip code was selected to represent the neighborhood that would most closely approximate those defined by Census Tract in the other maps within this document (except for Danbury; see note for Figure 1.1). In all CHIME data-based maps (Figures 3.6, 3.9, 3.11, 3.12, 3.15, 3.16), Bridgeport "North End" is 06606, Bridgeport "East Side" is 06608, Stamford "North" is 06903, Stamford "South" is 06902, Norwalk "Rowayton" is 06853, Norwalk "South" is 06854. Each encounter observation had a unique encounter ID and was populated with one or more "indicator flags" representing a variety of conditions. Each encounter could include multiple indicator flags, Because CHIME is Connecticut-based, only hospital encounters occurring in CT were captured; therefore, encounters for individuals residing in CT towns bordering other states are more likely undercounted in some cases. Annualized encounter rates were calculated as described below for the indicator flags assigned within the dataset including Asthma, COPD, Substance Abuse, and many other conditions. Most analyses in this document describe data on "all hospital encounters" including inpatient, emergency department (ED), and observation encounters, but as noted, some look only at inpatient encounters or emergency department encounters in order to describe conditions that are considered to be of higher severity (in the case of inpatient hospitalization) or special concern (in the case of ED use for preventable conditions). Annualized encounter rates per 10,000 persons were calculated for the 3-year period 2012-2014 by zip code, town, area, region, and in aggregate by merging CHIME data with 2010 Decennial Census data by zip code, town, race, and age. For each town, our analysis included an annualized encounter rate for white non-Hispanic, total black, and total Hispanic populations in each of six age strata (0-19, 20-44, 45-64, 65-74, 75-84, and 85+ years), as well as a single age and race adjusted annualized encounter rate for each region. Additionally, an overall age-adjusted encounter rate by cause was calculated by zip code, town, area/region and aggregate. Analyses were adjusted for age by using 2010 Census population for all towns that were represented in the CHIME data, in order to remove the effect of age from the reported rates (see note for Figure 3.4 for additional rationale for using age-adjusted rates). To explore neighborhood differences in hospital encounter rates, CHIME data were merged with 2010 census data by zip code, and annualized encounter rates per 10,000 persons were calculated for each indicator flag by sex within age strata for each zip code. In addition, a single age-adjusted annualized encounter rate per 10,000 was calculated for each zip code. To enable comparison, rolled up regional encounter rates were calculated by sex within each age stratum for regions and sub-regions. Several limitations regarding this analysis deserve mention. First, it is important to note that there is no way to discern the unique number of individuals in a zip, town, area or region who experienced hospital encounters during the period under examination or the number of encounters that represented repeat encounters by the same individual for the same or different conditions. Second, the CHIME encounter dataset provides 3 diagnosis codes for each encounter. However, the indicator flags clearly use

more than 3 diagnosis fields. For example, of all asthma encounters (defined using the indicator flag for Asthma), only 25% have a primary diagnosis of asthma and only 60% have an asthma diagnosis in any of the 3 diagnostic fields provided for analysis. Consequently, there may be discrepancies when comparing the annualized CHIME encounter rates to rates calculated from DPH surveillance data, which use only the primary diagnosis field to identify an asthma hospitalization. Third, hospital encounter data may misclassify those who are ethnically Hispanic, as race is captured based on patient observation and race and ethnicity were not separately reported. Each encounter was assigned a single Race/ethnicity category with White, Black, Hispanic captured as follows: White, Black/African American, Hispanic/Latino/ Spanish Origin. Consequently, an ethnically Hispanic individual may be categorized as white or black. Conversely, the 2010 census data captures race and ethnicity separately. In attempt to create appropriate denominators for the race stratified analyses, we extracted Census data on white non-Hispanic, all black, and all Hispanic populations. Because of differences in the ways race/ethnicity were captured in the CHIME data versus the 2010 census data, the race adjusted annualized encounter rates should be interpreted with significant caution, and for that reason we generally do not report them within this document even though they are important considerations in our broader view of regional health disparities. Last, encounter rate by zip code analysis includes only zip codes for which corresponding census data existed for zip code tabulation area (ZCTAs); zip codes representing P.O. boxes were not reported; zip code-based data are subject to other limitations due to the manner in which zip codes and ZCTAs are defined. To better examine encounter rates for asthma, the age-strata used to calculate asthma encounter rates differed from age groupings used for the other disease encounter types (0-4, 5-19, 20-44, 45-64, 65-74, and 75+ years), Please contact DataHaven or CHIME data for detail on diagnosis codes used to develop indicator flags, if not provided in the figure note. Data in this particular map (Figure 3.6) include age-adjusted rates only for inpatient hospital encounters for heart disease (Circulatory Diseases); inpatient encounters for this diagnosis are generally considered to be for severe conditions, and do not include emergency department or other hospital encounters.

- 3.7. Heart Disease & Lung Cancer Inpatient Encounters by Age.

  DataHaven analysis (2016) of 2012-2014 CHIME data provided by Connecticut Hospital Association upon request from and special study agreement with partner hospitals and DataHaven; see note for Figure 3.6 for description of the analyses shown here. Data in this particular table include age-adjusted and age-specific rates only for inpatient hospital encounters for heart disease (Circulatory Diseases) and lung cancer, which are generally considered to be severe conditions, not emergency department or other hospital encounters.
- 3.8. Nutrition, Obesity, and Diabetes. DataHaven analysis (2016) of questions from 2015 DataHaven Community Wellbeing Survey. Participants were asked to report whether they had even been told by a doctor or medical professional that they had diabetes. Participants reported their height and weight, from which their body mass index (BMI) was calculated; obesity in adults is defined as a BMI of 30 or higher. For food insecurity, participants were asked whether there had been times in the past 12 months that they did not have enough money to provide food for their families. Data are disaggregated by self-reported race and ethnicity (white non-Hispanic, black non-Hispanic, and Hispanic of any race), age group, and household income. See note for Figure 3.2 for additional detail.
- 3.9. Diabetes, All Hospital Encounters. DataHaven analysis (2016) of 2012-2014 CHIME data provided by Connecticut Hospital Association upon request from and special study agreement with partner hospitals and DataHaven; see note for Figure 3.6 for detailed description of the analyses shown here. Data in this particular table include age-adjusted and age-specific rates for any hospital encounters with Type 2 diabetes as an indicator flag (Principal or Secondary ICD-9 Diagnosis Codes 25000, 25002, 25010, 25012, 25020, 25022, 25030, 25032, 25040, 25042, 25050, 25052, 25060, 25062, 25070, 25072, 25080, 25082, 25090, 25092). Table also presents hospital encounters for conditions that are often considered to be of higher severity: diabetes-related amputation (lower-extremity amputation due to diabetes among patients with diabetes indicator, or PQI 16; please contact DataHaven or CHIME data for additional detail on this more complex diagnosis), and uncontrolled diabetes (Principal or Secondary ICD-9 Diagnosis Codes 25002, 25003).

- 3.10. Injury Mortality by Type. Data from Connecticut Department of Public Health, available at <a href="http://www.ct.gov/dph/cwp/view.asp?a=3132&q=521462">http://www.ct.gov/dph/cwp/view.asp?a=3132&q=521462</a>. See note for Figure 3.4 for additional detail on age-adjusted mortality rates (AAMR).
- 3.11. Homicide/Purposeful Injury, All Hospital Encounters. DataHaven analysis (2016) of 2012-2014 CHIME data provided by Connecticut Hospital Association upon request from and special study agreement with partner hospitals and DataHaven; see note for Figure 3.6 for detailed description of the analyses shown here. Data in this particular table include age-adjusted and age-specific rates for any hospital encounters with "Accident/Injury-Homicide and Purposely Inflicted" as an indicator flag (Principal or Secondary ICD-9 Diagnosis Codes E9600, E9601, E961, E9620, E9621, E9622, E9629, E963, E964, E9650, E9651, E9652, E9653, E9654, E9655, E9656, E9657, E9658, E9659, E966, E9670, E9671, E9672, E9673, E9674, E9675, E9676, E9677, E9678, E9679, E9680, E9681, E9682, E9683, E9684, E9685, E9686, E9687, E9688, E9689, E969), which generally includes intentional assaults or other instances of community or domestic violence. "Suicide and Self-Inflicted" is a completely separate indicator flag in the database and does not overlap at all with this indicator. Table also presents inpatient encounters for "high severity conditions," which in this case are defined simply as inpatient encounters because of our view that assaults that require a hospitalization are more likely to involve issues such as firearminflicted or life-threatening injuries. In general, the majority of all encounters for this indicator are emergency department encounters; any hospital encounters due to intentional injury and assault, even those resulting in relatively minor injuries, could be considered a potential indicator of safety and is worth exploring in greater detail in future iterations of this report.
- 3.12. Childhood Asthma, All Hospital Encounters. DataHaven analysis (2016) of 2012-2014 CHIME data provided by Connecticut Hospital Association upon request from and special study agreement with partner hospitals and DataHaven; see note for Figure 3.6 for detailed description of the analyses shown here. Data in this particular map include age-specific rates among residents age 0-4 for any hospital encounters with "Asthma" as an indicator flag (Principal or Secondary ICD-9 Diagnosis Codes 49300, 49301, 49310, 49311, 49312, 49320, 49321, 49322, 49381, 49382, 49390, 49391, 49392).
- 3.13. **Selected Infectious Diseases**. DataHaven analysis (2016) of data obtained directly from Connecticut Department of Public Health in April 2016, including the HIV and Hepatitis Surveillance and Epidemiology and Emerging Infections Lyme Disease Surveillance programs.
- 3.14. Chronic Obstructive Pulmonary Disease (COPD). DataHaven analysis (2016) of 2012-2014 CHIME data provided by Connecticut Hospital Association upon request from and special study agreement with partner hospitals and DataHaven; see note for Figure 3.6 for detailed description of the analyses shown here. Data in this particular table include age-adjusted and age-specific rates for inpatient hospital encounters with "Chronic Obstructive Pulmonary Disease" (COPD) as an indicator flag (Principal or Secondary ICD-9 Diagnosis Codes 4910, 4911, 4912, 49120, 49121, 4918, 4919, 4920, 4928, 494, 4940, 4941, 496). Although COPD is a health outcome rather than a mental health or substance abuse issue, it is included within this section of the report because of its relationship to smoking.
- 3.15. Substance Abuse, All Hospital Encounters. DataHaven analysis (2016) of 2012-2014 CHIME data provided by Connecticut Hospital Association upon request from and special study agreement with partner hospitals and DataHaven; see note for Figure 3.6 for detailed description of the analyses shown here. Data in this particular table include age-adjusted rates for all hospital encounters with "Substance-Related Disorders" as an indicator flag (Principal or Secondary ICD-9 Diagnosis Codes 2920, 29211, 29212, 2922, 29281, 29282, 29283, 29284, 29289, 2929, 30400, 30401, 30402, 30403, 30410, 30411, 30412, 30413, 30420, 30421, 30422, 30423, 30430, 30431, 30432, 30433, 30440, 30441, 30442, 30443, 30450, 30451, 30452, 30453, 30460, 30461, 30462, 30463, 30470, 30471, 30472, 30473, 30480, 30481, 30482, 30483, 30490, 30491,30492, 30493, 30510, 30511, 30512, 30513, 30520, 30521, 30522, 30523, 30530, 30531, 30532, 30533, 30540, 30541, 30542, 30543, 30550, 30551, 30552, 30553, 30560, 30561, 30562, 30563, 30570, 30571, 30572, 30573, 30580, 30581, 30582, 30583, 30590, 30591, 30592, 30593, 64830, 64831, 64832, 64833, 64834, 65550, 65551, 65553, 76072, 76073, 76075, 7795,96500, 96501, 96502, 96509, V6542). These codes generally relate only to drug use and abuse, not alcohol use. In many cases, encounters flagged

for substance abuse are also flagged for various mental health-related disorders.

- 3.16. Preventable Dental Conditions, Hospital ED Encounters.
  DataHaven analysis (2016) of 2012-2014 CHIME data provided by
  Connecticut Hospital Association upon request from and special study
  agreement with partner hospitals and DataHaven; see note for Figure
  3.6 for detailed description of the analyses shown here. Data in this
  particular map and table include age-adjusted and age-specific rates
  for emergency department hospital encounters with "Preventable
  Dental Conditions" as an indicator flag (Principal or Secondary ICD-9
  Diagnosis Codes 521xx, 522xx, 523xx, 525xx, 528xx). Data are an
  indication that many residents, particularly younger or lower-income
  adults, may seek dental care at hospital emergency rooms for various
  reasons or may lack access to the preventive dental care that could
  allow them to avoid going to the hospital emergency room.
- 3.17. Health Care Access. DataHaven analysis (2016) of questions from 2015 DataHaven Community Wellbeing Survey. Participants were asked to report whether they had health insurance, had had a dental visit during the past 12 months, and could not afford prescription medicine during the past 12 months. Additionally, participants were asked two questions about whether they postponed or did not get the medical care that they thought they needed at any point during the past 12 months; the indicator shown here indicates the population-weighted percentage of adults in the region who answered yes to either question were also asked a series of follow-up questions that are discussed in the text. Data are disaggregated by self-reported race and ethnicity (white non-Hispanic, black non-Hispanic, and Hispanic of any race), age group, and household income. See note for Figure 3.2 for additional detail.

# CHAPTER 4. A REGION OF OPPORTUNITY

- 4.1. Working Parents, 2000–2014. DataHaven analysis (2016). 2000 figures from U.S. Census Bureau Decennial Census, Table P046, Age of Own Children Under 18 Years in Families and Subfamilies by Living Arrangements by Employment Status of Parents. 2014 figures from U.S. Census Bureau American Community Survey 2014 5-year estimate, Table B23008, Age of Own Children Under 18 Years in Families and Subfamilies by Living Arrangements by Employment Status of Parents. Both available at <a href="http://factfinder2.census.gov/">http://factfinder2.census.gov/</a>. See note for Figure 1.1 for additional detail on geographical areas included.
- 4.2. Availability of Childcare and Education in Fairfield County, 2014.

  DataHaven analysis (2016) of data from 2-1-1 Annual Child Care
  Capacity, Availability, and Enrollment Survey 2014, report by Connecticut
  2-1-1 Childcare, available at <a href="http://www.211childcare.org/reports/">http://www.211childcare.org/reports/</a> and U.S.
  Census Bureau American Community Survey 2014 5-Year estimate,
  Table B01001, Sex by Age available at <a href="http://factfinder2.census.gov/">http://factfinder2.census.gov/</a>. Note that childcare provider slot capacity is calculated as enrolled slots plus
- 4.3. Affordability of Childcare for Families. DataHaven analysis (2016) of 2012 data from 2-1-1 Childcare Availability Affordability 2013 report, by Connecticut 2-1-1 Childcare, available at <a href="http://www.211childcare.org/reports/">http://www.211childcare.org/reports/</a>. Note that average child care costs are calculated using average family income from the U.S. Census Bureau American Community Survey 2012 5-year estimate, Table B19113, Median Family Income in the past 12 months (in 2012 inflation-adjusted dollars), available at <a href="http://factfinder2.census.gov">http://factfinder2.census.gov</a>
- 4.4. Availability of Childcare and Education Subsidies in Fairfield County, 2014. DataHaven analysis (2016) of data from 2-1-1 Annual Child Care Capacity, Availability, and Enrollment Survey 2014, report by Connecticut 2-1-1 Childcare, available at <a href="http://www.211childcare.org/reports/">http://www.211childcare.org/reports/</a>; Department of Education data on subsidized childcare and education programs, provided to DataHaven for the purposes of this report; and U.S. Census Bureau American Community Survey 2014 5-Year estimate, Table B01001, Sex by Age, and Table B17024, Age by Ratio of Income to Poverty Over Past 12 Months, available at <a href="http://factfinder2.census.gov/">http://factfinder2.census.gov/</a>. Note that childcare provider slot capacity is calculated as enrolled slots plus vacant slots, and that the population of children ages 0-4 from low-income households is estimated at 83 percent of the population of children ages 0-5 from low-income households.

- 4.5. Preschool Enrollment in Fairfield County, 2014. DataHaven analysis (2016). U.S. Census Bureau American Community Survey 2014 5-year estimate, Table B14003, Sex by School Enrollment by Type of School by Age for the Population 3 Years and Over, available at <a href="http://factfinder2.census.gov/">http://factfinder2.census.gov/</a>. See note for Figure 1.1 for additional detail on geographical areas included including neighborhood statistical areas listed in map within Bridgeport, Danbury, Norwalk, and Stamford.
- 4.6. Race and Ethnicity of Fairfield County Students, 2014–2015.

  DataHaven analysis (2016) of 2014-15 school year data from the

  Connecticut State Department of Education. See note for Figure 1.1 for
  additional detail on geographical areas included.
- 4.7. **High-Needs Students.** DataHaven analysis (2016) of 2014-15 school year data from the Connecticut State Department of Education. See note for Figure 1.1 for additional detail on geographical areas included.
- 4.8. Academic Achievement in Fairfield County Schools. DataHaven analysis (2016) of data from Connecticut State Department of Education. The Smarter Balance Assessment Consortium (SBAC) standardized test is the Common Core-aligned test first taken by Connecticut students in 2015. Passing scores on English/language arts (ELA) and math are those rated proficient or advanced in that subject, and students scoring at these levels are considered on track for college and career readiness. Previous standardized testing used different rubrics to determine passing; therefore, SBAC scores should not be compared with previous testing years. Graduation rates presented are four-year cohort graduation rates, giving the percentage of students who earn a high school diploma alongside the cohort with which they started 9th grade. This rate is adjusted to account for transfers in and out of each district. Chronic absenteeism is defined as a student missing at least 10 percent of the days for which they are enrolled in a year for any reason. See note for Figure 1.1 for additional detail on geographical areas included.
- 4.9. The Opportunity Gap Impacts Achievement at Fairfield County Schools. DataHaven analysis (2016) of data from Connecticut State Department of Education. The Smarter Balance Assessment Consortium (SBAC) standardized test is the Common Core-aligned test first taken by Connecticut students in 2015. Passing scores on English/language arts (ELA) and math are those rated proficient or advanced in that subject, and students scoring at these levels are considered on track for college and career readiness. Previous standardized testing used different rubrics to determine passing; therefore, SBAC scores should not be compared with previous testing years. Graduation rates presented are four-year cohort graduation rates, giving the percentage of students who earn a high school diploma alongside the cohort with which they started 9th grade. This rate is adjusted to account for transfers in and out of each district. Chronic absenteeism is defined as a student missing at least 10 percent of the days for which they are enrolled in a year for any reason. See note for Figure 1.1 for additional detail on geographical areas included.
- 4.10. Higher Education of Fairfield County Students. Data Haven analysis (2016) of data from Connecticut State Department of Education. Enrollment rates are defined as the percentage of students from a given graduating class who enroll in college within 1 year of graduation. Persistence rates are defined as the percentage of students who, after enrolling in college within 1 year of high school, continue into a second, consecutive year of college. Attainment rates are the percentage of students who earn a two- or four-year degree within 6 years of graduating high school, out of the entire high school graduating class. See note for Figure 1.1 for additional detail on geographical areas included.
- 4.11. Opportunity Youth in Fairfield County, 2014. DataHaven analysis (2016). U.S. Census Bureau American Community Survey 2014 5-year estimate, Table B14005, Sex by School Enrollment by Educational Attainment by Employment Status for the Population 16 to 19 Years, available at <a href="http://factfinder2.census.gov/">http://factfinder2.census.gov/</a>. Opportunity youth (sometimes referred to as "disconnected youth") are youth ages 16 to 19 who are neither working nor currently enrolled in school. See note for Figure 1.1 for additional detail on geographical areas included including neighborhood statistical areas listed in map within Bridgeport, Danbury, Norwalk, and Stamford.
- 4.12. Opportunities for Young People in Fairfield County. DataHaven analysis (2016). U.S. Census Bureau American Community Survey 2014 5-year estimate, Table B14005, Sex by School Enrollment by Educational Attainment by Employment Status for the Population 16 to 19 Years,

available at <a href="http://factfinder2.census.gov/">http://factfinder2.census.gov/</a>. Opportunity youth (sometimes referred to as "disconnected youth") are youth ages 16 to 19 who are neither working nor currently enrolled in school. Unemployment ages 16-24 data from the Bureau of Labor Statistics, available at <a href="http://www.bls.gov/web/empsit/cpseea10.htm">http://www.bls.gov/web/empsit/cpseea10.htm</a>. Other data are population-weighted estimates that come from the 2015 DataHaven Community Wellbeing Survey's in-depth interviews of randomly-selected adults age 18-24 in the region. Underemployment is defined as people who are unemployed, plus those who are working part-time but want to be working full-time.

- 4.13. Movement of Low-Income Workers (Salary < \$40,000). DataHaven analysis (2016) to calculate the numbers of workers moving between pairs of towns in Fairfield County. U.S. Census Bureau Longitudinal Employer-Household Dynamics Origin-Destination Employment Statistics, available at <a href="https://lehd.ces.census.gov/data/">https://lehd.ces.census.gov/data/</a>.
- 4.14. Movement of High-Income Workers (Salary > \$40,000). DataHaven analysis (2016) to calculate the numbers of workers moving between pairs of towns in Fairfield County. U.S. Census Bureau Longitudinal Employer-Household Dynamics Origin-Destination Employment Statistics, available at <a href="http://lehd.ces.census.gov/data/">http://lehd.ces.census.gov/data/</a>.
- 4.15. Financial Security and Underemployment. DataHaven analysis (2016) of 2015 DataHaven Community Wellbeing Survey. The Financial Security Index was developed by DataHaven to summarize responses to several survey questions for the sake of comparison. These questions included access to transportation, health insurance and access to health care, inability to obtain basic needs like food and shelter, and overall assessment of participants' financial situations. After calculating the index for a large sample of zip codes from around the state, scores were ranked. Several demographic groups, shown on the left, were ranked as though they were their own zip codes. As can be seen, if white working Fairfield County residents were their own zip code, their Financial Security Index would rank near the 95th percentile. while scores of Black and Latino working residents rank just above that of underemployed white residents. Underemployed Black and Latino residents lag far behind. Responses by race/ethnicity and employment status for three specific questions related to financial security are also shown: these represent the percent of all adults age 18+ within each category who answered affirmatively to the selected question.
- 4.16. Jobs and Wage Trends by Sector, 2000–2014. DataHaven analysis (2016) of U.S. Census Bureau Quarterly Workforce Indicators, available at <a href="http://qwiexplorer.ces.census.gov/">http://qwiexplorer.ces.census.gov/</a>, and U.S. Census Bureau Longitudinal Employer-Household Dynamics Origin-Destination Employment Statistics, available at <a href="http://lehd.ces.census.gov/data/">http://lehd.ces.census.gov/data/</a>. Average wages are given, and are calculated here as means of total annual wages over annual average employment by sector. 2000 wages are adjusted for inflation in order to accurately calculate changes in average wages over time. The chart shows that average wages in Finance grew very rapidly, while average wages in retail trade dropped precipitously. Industries are categorized based on the North American Industry Classification System; those shown are sectors in which there were at least 10,000 workers in 2014. Curves for job trends are adjusted to smooth out fluctuations over time. Data shown is for Fairfield County.
- 4.17. Changing Industry Footprints. DataHaven analysis (2016) of U.S. Census Bureau Quarterly Workforce Indicators, available at <a href="http://gwiexplorer.ces.census.gov/">http://gwiexplorer.ces.census.gov/</a>. Each share is given as that sector's payroll within Fairfield County divided by the county's total payroll across all sectors. This includes the seven sectors with fewer than 10,000 workers that were eliminated for Figure 4.15.
- 4.18. Educational Attainment. DataHaven analysis (2016) of U.S. Census Bureau American Community Survey 2014 5-year estimate, Table B06009, Place of Birth by Educational Attainment in the United States, available at <a href="http://factfinder2.census.gov/">http://factfinder2.census.gov/</a>. On the map, the percent of all adults age 25+ with a Bachelor's Degree or higher, as well as the raw number of such adults with degrees, are given for regions as well as neighborhood areas and towns. See note for Figure 1.1 for additional detail on geographical areas included including neighborhood statistical areas listed in map within Bridgeport, Danbury, Norwalk, and Stamford.
- 4.19. Municipal Financial Capacity in Fairfield County. DataHaven analysis (2016) of data available from the New England Public Policy Center, available at <a href="https://www.bostonfed.org/publications/new-england-public-policy-center-research-report/2015/measuring-municipal-fiscal-disparities-in-connecticut.aspx">https://www.bostonfed.org/publications/new-england-public-policy-center-research-report/2015/measuring-municipal-fiscal-disparities-in-connecticut.aspx</a>. Municipal capacity refers to the amount of money from tax revenue available to a municipality. The first column shows tax capacity per capita, or the amount of revenue available per resident

for each town. The second column shows the amount of money per person needed to cover that town's estimated public expenses. The third column shows the amount of surplus available per person, or the money needed subtracted from the money available. Figures are shown in green for a surplus and red for a deficit.

- 4.20. Perceived Access and Use of Community Resources. DataHaven analysis (2016) of questions from the 2015 DataHaven Community Wellbeing Survey. The indicators shown here indicate the percentage of adults in each area who answered affirmatively to the questions shown; survey respondents are weighted to be representative of the population within each area. Data are disaggregated by geographic area, self-reported age group, and household income. See note for Figure 3.2 for additional detail.
- 4.21. Perceived Community Cohesion. DataHaven analysis (2016) of questions from the 2015 DataHaven Community Wellbeing Survey. The indicators shown here indicate the percentage of adults in each area who answered affirmatively to the questions shown; survey respondents are weighted to be representative of the population within each area. Data are disaggregated by geographic area, self-reported age group, and household income. See note for Figure 3.2 for additional detail.
- 4.22. Voter Turnout in Fairfield County. DataHaven analysis (2016) of voter turnout data from the Connecticut Secretary of the State, available at <a href="http://www.ct.gov/sots/cvp/view.asp?q=401492">http://www.ct.gov/sots/cvp/view.asp?q=401492</a>. Voter turnout is defined as the percentage of officially registered voters who are checked as having voted. This includes overseas ballots but does not include absentee voters. Note that the years in which presidential, midterm, and local elections are held differ. Participants in the 2015 DataHaven Community Wellbeing Survey also answered a question regarding their registration to vote.
- 4.23. Civic Engagement and Government. DataHaven analysis (2016) of questions from the 2015 DataHaven Community Wellbeing Survey. The indicators shown here indicate the percentage of adults in each area who answered affirmatively to the questions shown; survey respondents are weighted to be representative of the population within each area. Data are disaggregated by geographic area, self-reported age group, and household income. See note for Figure 3.2 for additional detail.

### **ENDNOTES**

### **CHAPTER 1**

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### Fairfield County s Community Foundation

383 Main Avenue Norwalk, CT 06851 1543 203.750.3200 info@fccfoundation.org fccfoundation.org

Since 1992, Fairfield County's Community
Foundation has been dedicated to creating
lasting change in our region and maximizing
impact by combining fiscal stewardship
with extensive community knowledge. As a
trusted nonprofit partner and thought leader,
we bring together philanthropists, nonprofits
and expert resources with the goal of creating
a vital and inclusive community, where every
individual has the opportunity to thrive.

### DataHaven

129 Church Street, Suite 605 New Haven, CT 06510 203.500.7059 info@ctdatahaven.org ctdatahaven.org

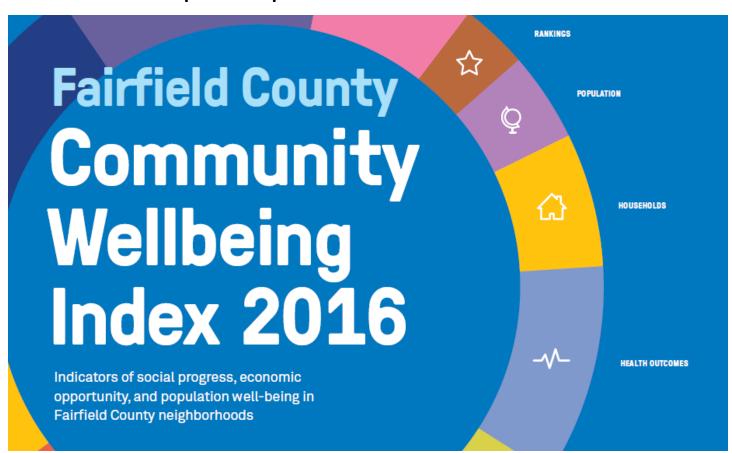
DataHaven is a non-profit organization with a 25-year history of public service to Greater New Haven and Connecticut. Its mission is to improve quality of life by collecting, sharing, and interpreting public data for effective decision making. DataHaven is a formal partner of the National Neighborhood Indicators Partnership of the Urban Institute in Washington, DC.

Additional information related to this report is posted on our websites.

# 2016 Greater Greenwich Region Greenwich Hospital Collaborative Community Health Assessment and Implementation Strategies

By the
Greenwich Community Health
Improvement Partnership &
Council of Community Services

## This document is a special chapter of the



A core program of DataHaven, in partnership with Fairfield County's Community Foundation and a Community Health Needs Assessment for the towns served by all Fairfield County hospitals including **Greenwich Hospital** 





### **ABOUT THIS REPORT**

This document is a special chapter of the **2016** Fairfield County Community Wellbeing Index, a comprehensive report about Fairfield County and the towns within it. The Community Wellbeing Index was produced by DataHaven in partnership with Fairfield County's Community Foundation and many other regional partners, including the Greenwich Community Health Improvement Partnership and the Council of Community Services, coalitions both serving towns in the Greater Greenwich Region. The Community Wellbeing Index serves as a Community Health Needs Assessment for Fairfield County and the towns within it, including nine towns in the Greater Greenwich Region served by Greenwich Hospital (Greenwich, CT and Armonk, Bedford, Larchmont, Mamaroneck, Port Chester, Pound Ridge, Rye and Rye Brook, NY). Topics covered in the Index include demographic change, housing, early childhood education, K-12 education, economic opportunity, leading public health indicators, and civic and community life.

This chapter provides additional local detail of relevance to the Greater Greenwich Region, including data points on the nine towns that in some cases would not fit within the main Community Wellbeing Index. It also documents the process that the Coalitions including Greenwich Hospital used to conduct the regional health assessment and health improvement activities. You may find the full Index attached to this chapter, or posted on the DataHaven, Fairfield County's Community Foundation, Greenwich Hospital, or any of the local health department websites. The Community Health Needs Assessment and Community Health Improvement Plan were approved by the Greenwich Hospital Board of Trustees in June 2016.



### **TABLE OF CONTENTS**



- I. EXECUTIVE SUMMARY
- II. INTRODUCTION
  - A. OVERVIEW
  - B. ADVISORY STRUCTURE AND PROCESS
  - C. PURPOSE AND COMMUNITY SERVED
- III. METHODS
  - A. SOCIAL DETERMINANTS OF HEALTH FRAMEWORK
  - B. DATA COLLECTION METHODS COMMUNITY INPUT
    - i. QUANTITATIVE DATA
      - 1. REVIEWING EXISTING SECONDARY DATA
      - 2. 2015 DATAHAVEN COMMUNITY WELLBEING SURVEY
    - ii. QUALITATIVE DATA
      - 1. FOCUS GROUPS
      - 2. KEY INFORMANT SURVEYS
    - iii. ANALYSES
    - iv. LIMITATIONS
- IV. FINDINGS
  - A. DEMOGRAPHICS
  - B. SOCIAL AND PHYSICAL ENVIRONMENT
  - C. 2015 DATAHAVEN COMMUNITY WELLBEING SURVEY: HEALTH OUTCOMES
  - D. REGIONAL FOCUS GROUPS
  - E. KEY INFORMANT SURVEYS
- V. COMMUNITY ENGAGEMENT
- VI. PRIORITIZATION OF HEALTH ISSUES
  - A. 2013 COMMUNITY HEALTH IMPROVEMENT PLAN PROGRESS-TO-DATE
  - B. 2016 PRIORITIZATION OF HEALTH ISSUES
- VII. COMMUNITY HEALTH IMPROVEMENT PLAN
  - A. OVERVIEW OF THE COMMUNITY HEALTH IMPROVEMENT PROCESS.
  - B. DEVELOPMENT OF THE 2016 COMMUNITY HEALTH IMPROVEMENT STRATEGIC COMPONENTS
  - C. PLANNING FOR ACTION AND MONITORING PROGRESS
  - D. COMMUNITY HEALTH IMPROVEMENT PLAN
- VIII. APPENDIX A: GREENWICH COMMUNITY HEALTH IMPROVEMENT PARTNERSHIP AND COUNCIL OF COMMUNITY SERVICES MEMBERS





### I. EXECUTIVE SUMMARY

### **INTRODUCTION**

Understanding the current health status of the community is important in order to identify priorities for future planning and funding, the existing strengths and assets on which to build, and areas for further collaboration and coordination across organizations, institutions, and community groups. To this end, the Greenwich Community Health Improvement Partnership (GCHIP) and the Council of Community Services (CCS) – two local coalitions ('the Coalitions') comprised of Greenwich Hospital, local departments of public health, federally qualified health centers, and numerous community and non-profit organizations serving the Greater Greenwich Region as fully set forth in Appendix A – are leading a comprehensive regional Community Health Needs Assessment (CHNA) effort. This effort is comprised of two main elements:

- Assessment identifies the health-related needs in the Greater Greenwich area using primary and secondary data.
- Implementation Plan— determines and prioritizes the significant health needs of the community identified through the CHNA, overarching goals, and specific strategies to implement across the service area resulting in a Community Health Improvement Plan (CHIP).

This report details the findings of the CHNA conducted from March 2015 – May 2016. During this process, the following goals were achieved: Examined the current health status of the Greater Greenwich region and compared rates to state indicators and goals; explored current health priorities among residents and key stakeholders; and, identified community strengths, resources, and gaps in order to assist the Coalitions and community partners in establishing implementation strategies, programming, and top health priorities.

### **METHODS**

The Coalitions adopted the Association for Community Health Improvement's (ACHI) Community Health Assessment Framework to guide the CHNA and to ensure that it meets the needs of the hospitals Internal Revenue Service requirements and those of the local health departments pursuing voluntary accreditation through the Public Health Accreditation Board. Specifically, the CHNA defines health in the broadest sense and recognizes that numerous factors at multiple levels impact a community's health – from lifestyle behaviors to clinical care to social and economic factors to the physical environment. These larger social determinants of health framework guided the overarching process.

### **Data Collection Methods**

Quantitative and qualitative data were collected and reviewed throughout the CHNA process. Secondary data sources included, but were not limited to, the U.S. Census, U.S. Bureau of Labor Statistics, Centers for Disease Control and Prevention, state public health departments, Connecticut Health Information Management Exchange (CHIME), as well as local organizations and agencies. Types of data included vital statistics based on birth and death records. In addition, the Coalitions partnered with DataHaven and, in part sponsored the 2015 DataHaven Community Wellbeing Survey (CWS), hired Chanana Consulting to conduct focus groups in the Greater Greenwich Region and worked with a student practicum team from the Yale School of Public Health with technical assistance from DataHaven to conduct and later analyze Key Informant Surveys.





### **KEY FINDINGS**

The following section provides a brief overview of the key findings from the community health needs assessment for the Greater Greenwich Region. This includes overall demographics, social and physical environment, health outcomes and findings as they relate to the top three health priorities that were selected for action planning at a regional level: Healthy Lifestyles; Access to Care; and Mental Health and Substance Abuse. Complete findings from the DataHaven Community Wellbeing Survey are covered in the 2016 Fairfield County Community Wellbeing Index and detailed data by town are available in the survey crosstabs on the DataHaven website.

### **Demographics**

Numerous factors are associated with the health of a community including what resources and services are available as well as who lives in the community. While individual characteristics such as age, gender, race and ethnicity have an impact on people's health, the distribution of these characteristics across a community is also critically important and can effect the number and type of services and resources available.

- **Population**. The Greater Greenwich Region has a population of 173,202.
- **Age Distribution.** The median age for both the population of Greenwich and all New York State areas are higher than the state as a whole; by contrast, Port Chester Village has a median age of 35.9 which is lower than the state average of 40.3.
- Racial and Ethnic Diversity. The towns in the region vary dramatically in terms of their racial and ethnic composition. Greenwich and the New York State areas (excluding Port Chester Village) are close to 80% White and 10% Hispanic. By contrast, Port Chester Village is 30% White and 61% Hispanic.

### **Social and Physical Environment**

Income and poverty are closely connected to health outcomes. A higher income makes it easier to live in a safe neighborhood with good schools and many recreational opportunities. Higher wage earners are better able to buy medical insurance and medical care, purchase nutritious foods and obtain quality child care than those earning lower wages. Lower income communities have higher rates of asthma, diabetes and heart disease. Those with lower incomes also generally experience lower life expectancies.

- Income and Poverty. There are wide gaps in Medium Household income rates for the Greater Greenwich Region (\$125,567), Fairfield County (\$83,163), and Connecticut (\$69,899). The widest gap is found between Greenwich (\$135,528) and Port Chester Village (\$60,141).
- Educational Attainment. The proportion of residents in the Greater Greenwich Region with a college degree or higher (60%) is greater than that of the state overall (37%) and Fairfield County (45%). Only 21% of Port Chester Village adults have a college degree or higher, compared to 66% of Greenwich adults.

### **Health Outcomes**

Health outcomes and risk factors related to chronic disease, mental health and substance abuse, mortality and morbidity are covered in significant detail in the 2016 Fairfield County Community Wellbeing Index. These include:

- Self-Reported Health Status. Self-reported health status, which is a powerful predictor of future disability, hospitalization, and mortality, was higher in the Greater Greenwich Region (69%) than in Connecticut overall (62%). Income and education levels are highly correlated to self-reported health status.
- **Neighborhood Environments.** Perceived quality of society, which relates to neighborhood trust, safety, child-friendliness, perceptions of government services and many other factors, are studied in-depth in the survey. Once again, responses from Greenwich area residents were more positive than responses statewide; however, responses appeared to be stratified by income with higher income households being more positive about quality of society than lower income households.





• **Financial Stress.** The 2015 DataHaven Community Wellbeing Survey contains many markers of financial stress, many of which are directly related to income levels. Across the board, positive levels of markers of financial stability — food security, housing security, transportation access and financial comfort — are significantly higher in wealthier areas.

### Health Priorities

- Healthy Lifestyles (prevention and management of chronic disease). Obesity rates are rising in Connecticut with more than one out of four adults classified as obese. Port Chester residents have the same overall rate as Connecticut (26%), while the Greater Greenwich Region is lower at 19%.
   Additionally, smoking prevalence rates in Connecticut have decreased since 2000 and were at 15% in 2015. Rates in the Greater Greenwich Region are lower than the state at 10%. Survey data also indicates that a majority of current smokers in Port Chester and Greenwich have stopped smoking cigarettes for 24 or more hours because they were trying to quit.
- Access to Care. Financial stress and lower socioeconomic status may also cause challenges related to access to medical care. Approximately 18% of adult respondents in the Greater Greenwich Region indicated that they had postponed or delayed getting the medical care they thought they needed for various reasons including physicians or other providers not accepting insurance or not being able to get to a physician's office when it was open. Although the majority of residents in the Greater Greenwich region have health insurance (92%), it was discussed in focus groups that the type of insurance a person had was tied to issues around access to care and quality of care. Specifically, access to care was impacted by limited providers and long wait times for appointments. Access to dental care was also part of most focus group discussions, specifically, the high cost of dental care and the limited number of providers for those on Medicaid and Medicare.
- Mental Health and Substance Abuse. The focus group findings, analysis of key informant surveys, and also secondary data obtained from various sources including the Connecticut Health Information Management Exchange, a data repository for all hospital encounters, support the inclusion of this focus area. There is a significant need in the community for mental health services, as nationally twenty percent of people in a given year will need some type of mental health support, and there is a gap of available local services. Data from the DataHaven Community Wellbeing Survey find that a person's reported level of happiness and anxiety are directly correlated to income and education; adults who reported being satisfied with their life ranged from a low of 67% in Port Chester to a high of 82% in Greenwich.





### II. INTRODUCTION

### A. OVERVIEW

Improving the health of a community is critical to ensuring the quality of life of its residents and fostering sustainability and future prosperity. Health is intertwined with multiple facets of our lives, and where we work, live, learn, and play all have an impact on our health. Understanding the current health status of a community – and the multitude of factors that influence health – is important in order to identify priorities for future planning and funding, the existing strengths and assets on which to build, and areas for further collaboration and coordination across organizations, institutions, and community groups.

To this end, the Greenwich Community Health Improvement Partnership (GCHIP) and the Council of Community Services (CCS) – two local coalitions ('the Coalitions') comprised of Greenwich Hospital, local departments of public health, federally qualified health centers, and numerous community and non-profit organizations serving the Greater Greenwich Region – are leading a comprehensive regional Community Health Needs Assessment (CHNA) effort. This effort is comprised of two main elements:

- Assessment identifies the health-related needs in the Greater Greenwich area using primary and secondary data.
- Implementation Plan determines and prioritizes the significant health needs of the community identified through the CHNA, overarching goals, and specific strategies to implement across the service area resulting in a Community Health Improvement Plan (CHIP).

This report details the findings of the CHNA conducted from March 2015 – May 2016. The Coalitions adopted the Association for Community Health Improvement's (ACHI) Community Health Assessment Framework (Figure 1) to guide the CHNA and to ensure that it meets the needs of the hospitals' Internal Revenue Service requirements and those of the local health departments pursuing voluntary accreditation through the Public Health Accreditation Board.

Figure 1: Association for Community Health Improvement Six Step Community Health Assessment Process







### **B. ADVISORY STRUCTURE AND PROCESS**

The CHNA was spearheaded, funded, and managed by GCHIP and CCS. GCHIP members include Greenwich Hospital, Greenwich Department of Health, and Optimus Healthcare; CCS partners include Greenwich Hospital, Open Door Family Medical Center, and the Westchester Department of Health (see Appendix A for a full list of organizational members). GCHIP was developed in 2003 following a local community health needs assessment. The coalition envisions an accessible and seamless health care system that nurtures health improvement and wellness for all in the Greater Greenwich Region. The mission of GCHIP is to create a common ground that fosters and facilitates health improvement activities in and for the Greater Greenwich Region. CCS has been bringing together community leaders to assess and meet the vital needs of the community since 1974. Their mission is accomplished by identifying and working towards solutions through mobilization, advocacy, and networking. In order to develop a shared vision and plan for the community and help sustain lasting change, both of these coalition's assessment and planning processes aim to engage agencies, organizations, and residents in the area through participatory and collaborative approaches.

The Coalitions have been reaching out to the larger community through communications and meetings to discuss the importance of this planning process. Additionally, the community has been engaged in key informant surveys, the Community Wellbeing Survey and focus groups during the comprehensive data collection effort of the community health needs assessment. Public awareness and dissemination of the CHNA findings and subsequent CHIP priorities and strategies will continue to be conducted via media and public events.

### C. PURPOSE AND COMMUNITY SERVED

The Greater Greenwich Community Health Needs Assessment was conducted to meet several overarching goals:

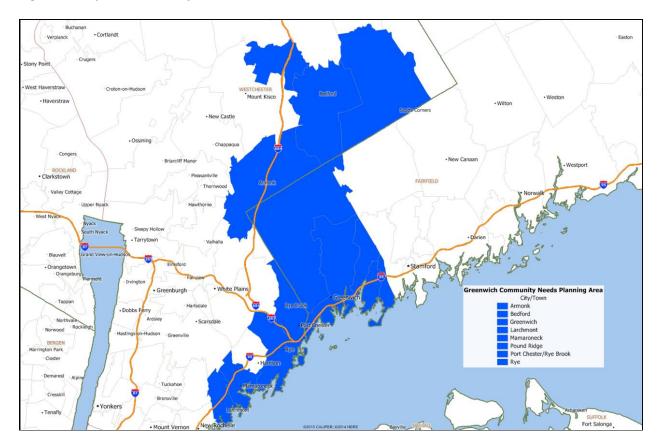
- 1. To examine the current health status of the Greater Greenwich area; and
- 2. To explore current health priorities as well as emerging health concerns among residents within the social context of their communities; and
- 3. To meet the legal requirement of Greenwich Hospital to conduct a community health needs assessment at least once every three (3) years and to adopt a written implementation strategy to meet the community health needs identified through the community health needs assessment; and
- 4. To meet voluntary health department Public Health Accreditation Board requirements.

To define community for CHNA purposes this Greater Greenwich Community Health Needs Assessment uses a geographical approach focusing on eight contingent towns within Connecticut and New York: Greenwich, CT and Armonk, Bedford, Larchmont, Mamaroneck, Port Chester, Pound Ridge, Rye Brook and Rye, NY (Figure 2). These communities are served by Greenwich Hospital and do not overlap with CHNA areas identified by other acute care hospitals and/or collaborations. Upon defining the geographic area and population served in Greater Greenwich, the Coalitions were diligent to ensure that no groups, especially minority, low-income or medically under-served, were excluded.





Figure 2: Map of Community Served - Greater Greenwich Area, Connecticut and New York







The following section describes the process and methods used to conduct the CHNA including the qualitative and quantitative data that was compiled and how it was analyzed, as well as a description of the broader lens used to guide the process. Specifically, the CHNA defines health in the broadest sense and recognizes that numerous factors at multiple levels impact a community's health – from lifestyle behaviors to clinical care to social and economic factors to the physical environment. The beginning discussion of this section discusses the larger social determinants of health framework which helped guide this overarching process.

### A. SOCIAL DETERMINANTS OF HEALTH FRAMEWORK

It is important to recognize that multiple factors have an impact on health and that there is a dynamic relationship between real people and their lived environments. Where we are born, grow, live, work, and age – from the environment in the womb to our community environment later in life – and the interconnections among these factors are critical to consider. That is to say, health outcomes are influenced by more than just an individual's genetic code and in fact zip code is more predictive as influenced by lifestyle behaviors and upstream factors such as income, education, employment and quality of housing stock. The social determinants framework addresses the distribution of wellness and illness among a population.

The following diagram (Figure 3) provides a visual representation of this relationship, demonstrating how individual lifestyle factors, which are closest to health outcomes, are influenced by more upstream factors such as education and literacy and physical environments. This report as well as the 2016 Fairfield County Community Wellbeing Index provides information on many of these factors, as well as reviews key health outcomes.

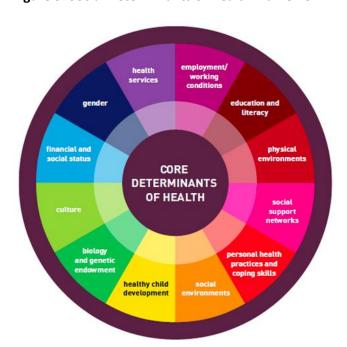


Figure 3: Social Determinants of Health Framework





### **B. DATA COLLECTION METHODS – COMMUNITY INPUT**

### i. Quantitative Data

### 1. Reviewing Existing Secondary Data

The Greater Greenwich CHNA builds off of previous efforts in the Greater Greenwich Region such as the 2013 CHNA and resulting CHIP that have been guiding the direction of the Coalitions work over the past three years. In addition, the CHNA utilized sources of secondary data including, but not limited to, the U.S. Census, U.S. Bureau of Labor Statistics, Centers for Disease Control and Prevention, state public health departments, Connecticut Health Information Management Exchange (CHIME), as well as local organizations and agencies. Types of data included vital statistics based on birth and death records.

### 2. 2015 DataHaven Community Wellbeing Survey

The Coalitions partnered with DataHaven, whose mission is to improve quality of life by collecting, interpreting and sharing public data for effective decision-making, on the 2015 DataHaven Community Wellbeing Survey (CWS). The CWS assisted the Coalitions to gather quantitative or primary data that were not provided by secondary sources and to understand public perceptions around health, social determinants, and other issues. The CWS was conducted from April to October 2015 by the Siena College Research Institute. It was administered by randomly-selected land and cell phones and completed in-depth interviews with nearly 17,000 adults in all 169 towns in Connecticut and seven zip codes in New York. Over 1,000 surveys were completed in Greenwich, Port Chester, and the other New York towns. The survey was designed by DataHaven and the Siena College Research Institute, in consultation with local, state, and national experts including members from the Coalitions. Interviews were weighted to be statistically representative of adults in each subregion. Surveys were administered in both English and Spanish and zip codes were targeted to supplement samples of hard-to-reach populations.

The survey contains information that was previously unavailable at a local level from any other source and cross sector analysis provides information on neighborhood quality, happiness, housing, transportation, health, economic security, workforce development, and other topics. Findings from the DataHaven Community Wellbeing Survey are primarily covered within the 2016 Fairfield County Community Wellbeing Index. Detailed data by town are available in the survey crosstabs on the DataHaven website.

### ii. Qualitative Data

### 1. Focus Groups

In December 2015 and January 2016, six focus groups engaging a total of 71 individuals were conducted by Chanana Consulting in the Greater Greenwich Region. The goals of the focus groups were to determine perceptions of health strengths and needs in the Greater Greenwich region; to identify gaps, challenges and opportunities for addressing community needs more effectively; and to explore how these issues can be addressed in the future. Working with the Coalitions, groups having a disproportionate burden of health issues were identified (i.e. lower income adults, people with limited English proficiency or Latino adults) as a priority to include in the focus groups. Coalition members identified specific groups and/organizations that fulfilled these criteria and the consultant facilitated the following groups: parents from an after school program; seniors from a senior center; parents from an elementary school Parent Leadership program; members of a community church; clients from a day program for people with mental health issues; and case workers from a mental health agency.





In addition, the consultant maintained efforts to include a geographical sample of residents from the towns that make up the Greater Greenwich CHNA region.

### 2. Key Informant Surveys

The CHNA was initiated in 2015 with the online key informant survey administered and analyzed by a student practicum team at Yale School of Public Health with technical assistance provided by DataHaven. The online survey was administered to community leaders and service providers in the Greater Greenwich area using Qualtrics, an online survey tool. Members of the Coalitions identified 282 key informants and 82 responses were completed in total. The Health and Human Services group included hospital administrators, state and local health departments, physicians, nurses, social service agency leaders and providers, community planning organizations, family centers and youth services, elderly services, supportive housing providers, primary care centers and recreation facilities. The Government and Community Leaders group included state and local elected officials, police and fire departments, library directors, clergy, other government agency heads, school principals, after school program providers, arts organizations, journalists, community advocacy organizations, neighborhood association leaders, chambers of commerce and community service organizations. Surveys were designed to better understand the health needs of the Greater Greenwich region and included questions on demographics, community health initiatives, health related problems, barriers to good health, health services, and current outlooks.

### iii. Analyses

The secondary data and qualitative or primary data from the DataHaven Community Wellbeing Survey, focus groups, and key informant surveys were synthesized and integrated into this report.

### iv. Limitations

As with all research efforts, there are several limitations related to the assessment's research methods that should be acknowledged. Data based on self-reports should be interpreted with some caution. In some instances, respondents may over or underreport behaviors and illnesses based on fear of social stigma or misunderstanding the question being asked. In addition, respondents may be prone to recall bias – that is, they may attempt to answer accurately but remember incorrectly. In some surveys recalling and recall bias may differ according to a risk factor or health outcome of interest. Despite these limitations, most of the self-report surveys particularly those using random sampling methods, benefit from large sample sizes and repeated administrations, enabling comparison over time.

While focus groups and key informant surveys conducted for this assessment provide valuable insights, results are not statistically representative of a larger population due to non-random recruiting techniques and a small sample size. It is also important to note that data were collected at one point in time, so findings, while directional and descriptive, should not be interpreted as definitive.





### **IV. FINDINGS**

### A. DEMOGRAPHICS

This section provides a brief overview of the population of the Greater Greenwich Region. For a more detailed review of regional demographics please refer to the 2016 Fairfield County Community Wellbeing Index. Numerous factors are associated with the health of a community including what resources and services are available as well as who lives in the community. While individual characteristics such as age, gender, race, and the ethnicity have an impact on people's health, the distribution of these characteristics across a community is also critically important and can affect the number and type of services and resources available.

Table 1: Population and Demographic Composition, 2010-2014 American Community Survey

	Population	Median Age	White Not-Hispanic	Black Not-Hispanic	Hispanic	Other Not-
						Hispanic
Connecticut	3,592,053	40.3	70%	10%	14%	6%
Fairfield County	934,215	39.6	65%	10%	18%	7%
Greater Greenwich Region*	173,202	41.2	72%	3%	19%	7%
Greenwich (Town)	62,141	42.1	78%	2%	11%	9%
All New York State Areas	111,061	40.7	68%	3%	23%	6%
Port Chester Zip Code	38,656	37.7	43%	5%	49%	3%
Port Chester (Village)	29,275	35.9	30%	6%	61%	3%
Other New York State Areas	81,786	42.4	82%	2%	9%	7%

<sup>\*</sup>Includes Town of Greenwich and all 8 New York State Areas

Source: DataHaven analysis of 2010-2014 American Community Survey, via census.gov and Census API





### **B. SOCIAL AND PHYSICAL ENVIRONMENT**

Income and poverty are closely connected to health outcomes. A higher income makes it easier to live in a safe neighborhood with good schools and many recreational opportunities. Higher wage earners are better able to buy medical insurance and medical care, purchase nutritious foods and obtain quality child care than those earning lower wages. Lower income communities have higher rates of asthma, diabetes and heart disease. Those with lower incomes also generally experience lower life expectancies.

Table 2: Key Social Determinants, 2010-2014 American Community Survey

	Bachelor's degree or above (age >25)	Commute time >30 min	Age 3 and 4 preschool enrollment rate	Disconnected Youth, age 16-19	Severely Cost- Burdened Households	Median Household income	Children age 0-17 living in low- income families
Connecticut	37%	34%	64%	6%	18%	\$69,899	30%
Fairfield County	45%	38%	69%	6%	20%	\$83,163	26%
Greater Greenwich Region*	60%	44%	78%	5%	21%	\$125,567	16%
Greenwich (Town)	66%	37%	77%	5%	19%	\$135,258	12%
All New York State Areas	56%	48%	79%	4%	22%	\$120,038	18%
Port Chester Zip Code	32%	33%	59%	7%	28%	\$70,532	42%
Port Chester (Village)	21%	29%	50%	7%	31%	\$60,141	53%
Other New York State Areas	69%	57%	87%	4%	19%	\$138,951	9%

<sup>\*</sup> Includes Town of Greenwich and all 8 New York State Areas

Source: DataHaven analysis of 2010-2014 American Community Survey, via census.gov and Census API





### C. 2015 DATAHAVEN COMMUNITY WELLBEING SURVEY: HEALTH OUTCOMES

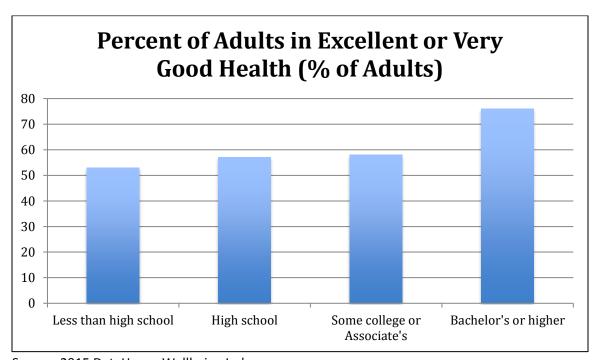
Detailed data on health outcomes, including mortality rates, premature mortality, and various other conditions, are presented in detail in the 2016 Fairfield County Community Wellbeing Index. The following is a summary of additional findings of high relevance to the Coalitions.

### **Self-Reported Health Status**

Self-reported health status is a powerful predictor of future disability, hospitalization, and mortality. Overall, self-reported health status for individuals in the Greater Greenwich Region (69%) was higher than responses from Connecticut residents (62%). The 2015 DataHaven Wellbeing Survey question reads as follows: How would you rate your overall health, would you say your health is excellent, very good, good, fair or poor? In the Greater Greenwich region, 69% of adult respondents indicated that they were in "excellent" or "very good" health, in Port Chester 66%, and in Greenwich 74%.

However, wider gaps emerge when results are analyzed by education level or by income (Figures 4 and 5). Generally, higher education levels and higher income were associated with better self-reported health; 85% of individuals with incomes over \$200,000 reported good health versus 51% of individuals earning less than \$15,000 per year.

Figure 4: Greater Greenwich Region Self-Reported Health Status by Education Level

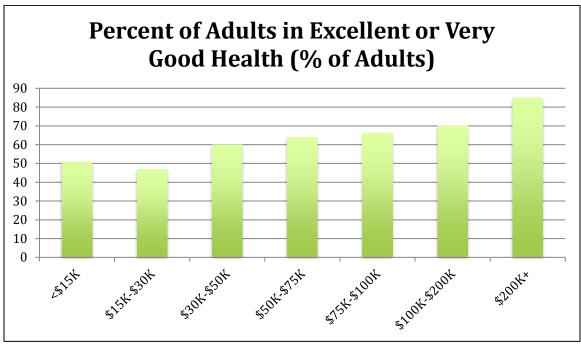


Source: 2015 DataHaven Wellbeing Index





Figure 5: Greater Greenwich Region Self-Reported Health Status by Income



Source: 2015 DataHaven Wellbeing Index

It is important to keep in mind that there are many socioeconomic subdivisions within the broader categories outlined here. With regards to financial security, for example, a household with an income below \$30,000 that experiences food insecurity almost every day generally has a very different experience of health and well-being than one with a similar income level that never experiences food insecurity.

### **Neighborhood Environments**

Perceived quality of society, which relates to neighborhood trust, safety, child-friendliness, perceptions of government services and many other factors, are studied in-depth by the survey. Once again, responses from Greenwich area residents were more positive than responses statewide. However, responses appeared to be stratified by income. On a question about safety, for example, responses from individuals in the town of Greenwich with incomes below \$75,000 resembled statewide responses (24% not feeling safe to walk at night) while individuals with higher incomes did not (11% not feeling safe to walk at night). These trends in perceptions of neighborhoods, which are mirrored in New York State, likely stem from the geographic separation between lower-income individuals and higher-income individuals in the region.





### **Financial Stress**

The 2015 DataHaven Community Wellbeing Survey contains many markers of financial stress (Figure 6), many of which are directly related to income levels. Forty-two percent of residents of the Greenwich region said they were "living comfortably," but income-level differences remained: only 18% of those making less than \$75,000 reported that they were "living comfortably."

Across the board, positive levels of markers of food security, housing security, transportation access, and financial comfort are significantly higher in wealthier areas. When asked how long they could maintain their lifestyles if they lost all sources of income, 28% of respondents in the Greenwich region predicted being able to last over two years. However, zooming in on Port Chester Village, a plurality (24%) predicted less than one month. The geographic differences in responses — stemming from underlying demographic differences — may relate to accumulated wealth, savings, educational debt and homeownership opportunities, which are impacted by age, accumulated opportunities to access education, and longstanding racial disparities.

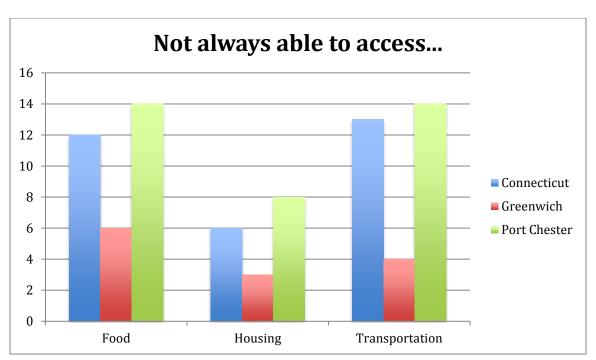


Figure 6: 2015 DataHaven Wellbeing Survey, Financial Stress (% of Adults)

Source: 2015 DataHaven Wellbeing Index

### **Related Health Behaviors and Outcomes**

Detailed data on health behaviors and outcomes, including mortality rates, premature mortality and various other conditions, are presented in detail in the 2016 Fairfield County Community Index. However, to put indicators including self-reported overall health status, neighborhood trust, safety and financial stress in context some key health related areas are also covered here.



0%

1990

2000



Obesity Prevalence (Figure 7) was measured using self-reported height and weight to calculate the body mass index (BMI) for adult respondents of the DataHaven Wellbeing Survey. The findings indicate that the prevalence of obesity in Greater Greenwich (19%) is lower when compared to the State of Connecticut (26%) and Port Chester (26%). Overall, obesity rates in the state are rising.

26% CT
25%
26%
26%
26%
30%
19%
19%
19%
Greenwich
19%
16%
Port Chester

\*\*Other NYS

Figure 7: Obesity Prevalence, Trends in Adults 18+

Source: 2015 DataHaven Community Wellbeing Survey; 2007 CT Health Data Scan and other sources. Historical data may be directly compared to 2015 data. Obese is defined as BMI > 30.

2012

Smoking prevalence trends (Figure 8), which were calculated using the responses to two questions on the DataHaven Wellbeing Index – "Have you smoked at least 100 cigarettes in your entire life?" and "Do you currently smoke cigarettes every day, some days or not at all?" – indicate that smoking of cigarettes has decreased in the State of Connecticut. Rates in the Greater Greenwich Region are lower than the state at 10%. Survey data also indicates that 81% of current smokers in Port Chester and 57% in Greenwich have stopped smoking cigarettes for 24 or more hours because they were trying to quit. This is good news for public health when considering the Stages of Change (transtheoretical model), which assesses an individual's readiness to act on a new healthier behavior, meaning that with support the prevalence of smoking may be driven down even further across the Greater Greenwich region. That said, the prevalence of ecigarettes has increased (Figure 9). However that may start to stabilize due to the US Food and Drug Administration (FDA) finalizing a rule in 2016 extending regulatory authority to cover all tobacco products including vaporizers, vape pens, hookah pens, electronic cigarettes, etc.

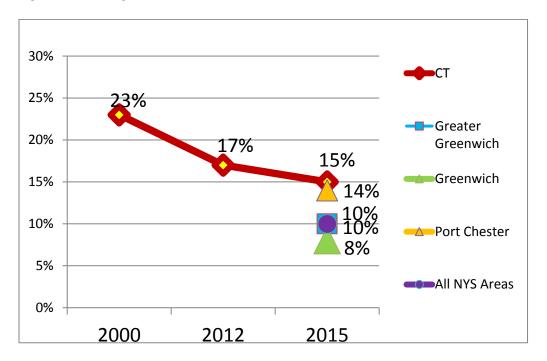
2015

areas





Figure 8: Smoking Prevalence, Trends in Adults 18+

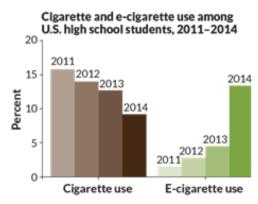


Source: 2015 DataHaven Wellbeing Index; 2007 CT Health Data Scan and other sources. Historical data may be directly compared to 2015 data.

Figure 9: Use of E-Cigarettes

# Use of E-Cigarettes

- Rates in region are lower than in CT; but huge increase since 2012
- →12% of adults in Greenwich region have tried e-cigs
- Current use: 4%, but higher (7%) in Port Chester



- → Current use is 8% among age 18-34; 1% among age 65+
- → Many users use e-cigarettes every day; many also report smoking regular cigarettes

Source of chart: Science News (2013), available at https://www.sciencenews.org/article/e-cigarettes-proving-be-danger-teens





A direct outcome of health behaviors such as lack of exercise, lack of access to healthy food and tobacco use are related medical conditions and complications from obesity including high blood pressure, high cholesterol, diabetes, heart disease or heart attack, and to some extent asthma. Table 3 demonstrates adults who responded that they had been told by a doctor or health professional that they have a particular medical condition. Though the rates are similar across the region, there is higher incidence of asthma in Port Chester and the other NYS areas. In addition, 20 to 25% of the Port Chester and other NYS area population has high blood pressure and/or high cholesterol.

**Table 3: Greater Greenwich Medical Conditions (% of Adults)** 

Response = Yes	СТ	Greater Greenwich Region	Greenwich	Port Chester	Other NYS Areas
High blood pressure/ hypertension	28%	23%	24%	26%	26%
High cholesterol	23%	22%	22%	22%	22%
Diabetes	9%	6%	6%	9%	5%
Heart disease/ heart attack	5%	4%	5%	2%	5%
Asthma	13%	9%	7%	12%	10%

Source: 2015 DataHaven Wellbeing Survey

### **Access to Care**

Individuals with financial stress and lower socioeconomic status may also have challenges related to access to medical care for various reasons including physicians or other providers not accepting insurance, unable to get an appointment soon enough and not being able to get to the doctor's office or clinic when it was open. Approximately 21% of Connecticut respondents indicated that they had postponed or delayed getting the medical care they thought they needed; rates among residents in the Greater Greenwich region are lower than the state at 18% and higher among Port Chester residents at 22%.

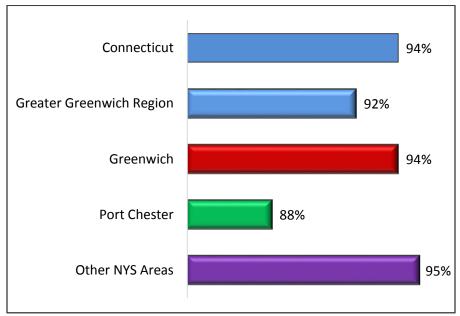
The majority of residents in the Greater Greenwich Region have health insurance (Figure 10). In Connecticut and the Greater Greenwich Region, over 90% of residents have health insurance; rates are slightly lower in Port Chester where 88% of adults report having health insurance. In focus group discussions it was determined that the type of insurance a person had was tied to issues around access to care and quality of care. Specifically, access to care was impacted by limited providers and long wait times for appointments.

Access to dental care was also part of most focus group discussions, specifically, the high cost of dental care and the limited number of providers for those on Medicaid and Medicare. Figure 11 illustrates that between 74% to 82% of adults in the Greater Greenwich area have been to a dentist in the past year, although survey data shows that almost 20% of Port Chester residents have not seen in dentist in more than 2 years (or never).



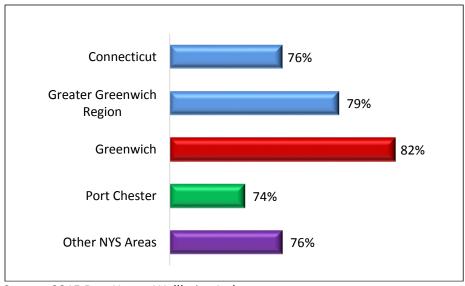


Figure 10: Percent of Adults with Health Insurance



Source: 2015 DataHaven Wellbeing Index

Figure 11: Percent of Adults Seen by a Dentist in the Past Year



Source: 2015 DataHaven Wellbeing Index

### **Mental Health**

As illustrated in Table 3, a majority of adult respondents in Greater Greenwich are satisfied with their life and have friends or relatives they can help them when needed. More residents in Port Chester are reporting anxiety and depression, and fewer reported satisfaction with life in comparison to Connecticut and the Greater Greenwich region.





**Table 4: Mental Health** 

	Connecticut	Greater Greenwich Region	Greenwich	Port Chester	Other NYS Areas
I am satisfied with my life	72%	78%	82%	67%	79%
Was anxious yesterday (completely/mostly)	11%	9%	8%	14%	10%
In the last month, how often were you down or depressed (often/fairly often)	9%	6%	4%	11%	8%
Have relatives/friends to count on when needed	93%	95%	95%	96%	95%

### D. REGIONAL FOCUS GROUPS

In December 2015 and January 2016, six focus groups engaging a total of 71 individuals were conducted by Chanana Consulting in the Greater Greenwich Region. The goals of the focus groups were to determine perceptions of health strengths and needs in the Greater Greenwich region; to identify gaps, challenges and opportunities for addressing community needs more effectively; and to explore how these issues can be addressed in the future. Working with the Coalitions, groups having a disproportionate burden of health issues were identified (i.e. lower income adults, people with limited English proficiency or Latino adults) as a priority to include in the focus groups. Coalition members identified specific groups and/organizations that fulfilled these criteria and the consultant facilitated the following groups: parents from an after school program; seniors from a senior center; parents from an elementary school Parent Leadership program; members of a community church; clients from a day program for people with mental health issues; and case workers from a mental health agency. In addition, the consultant maintained efforts to include a geographical sample of residents from the towns that make up the Greater Greenwich CHNA region.

Focus group participants contributed to discussions and completed a short survey tool at the end of the session. On the survey, participants were asked to rate access to health care services and access to community services. Specialty care and dental care were identified as the most challenging to access followed by access to transportation to and from facilities for health care appointments. Access to open spaces and parks, medical insurance, sports facilities and community centers, and affordable healthy food was rated the best; more challenging was access to help with housing, help with employment/job training, and sports programs. Surveys also included a self-reported ranking of the top health care issues in the community and the greatest challenges/barriers perceived to have a negative impact on the health of community residents. In both instances, access to healthcare issues had the greatest prevalence.

Focus group discussions around the positive and negative aspects of health care services in the community centered around access to care (language barriers, insurance related issues, transportation challenges, wait times, dental care and mental health services), coordination of care, and quality of care. When probing on the health and well-being of the community, discussions led to access and affordability of health food, safety issues, recreation, transportation, education, housing and discrimination.





During the discussions, participants were asked to identify the top health concerns and issues in the community. Following is a list of the areas that were identified in the Greater Greenwich region:

- Continuity of care (Better coordination and continuity of care for patients (especially mental health patients) needed)
- Cost of care (Dental care is expensive; health care needs to be more affordable)
- Dental care (Patients report a lack of dental care options with state insurance)
- Healthy food (Healthy food is available but not affordable)
- Housing (The rents are too high, and quality of the housing stock is substandard)
- Insurance (Those with state insurance have limited providers)
- Limited number of health care facilities (Lack of providers causes long waits for appointments)
- Mental and behavioral health care providers (More psychiatrists are needed; more in-patient psychiatric care is needed at the hospital)
- Local Clinics (The number of inexperienced doctors that work at the local clinic impacts care)
- Technology and connectivity (As society becomes more reliant on technology to relay information, seniors can have challenges with connectivity and utilizing technology)
- Transportation (There is a need for more public transportation in suburban areas, as it can be difficult for those who
  do not live near Route 1; better signage at bus stops is needed, as the signs are difficult to read and it is often hard
  to tell when buses are going to come; transportation to appointments outside of Greenwich can be difficult for
  patients without their own transportation)

The detailed health concerns and issues outlined by the focus group participants also confirmed that the priority areas from 2013 (Access to Care, Healthy Lifestyles, and Mental Health and Substance Abuse) were still consistent with current findings.

### **E. KEY INFORMANT SURVEYS**

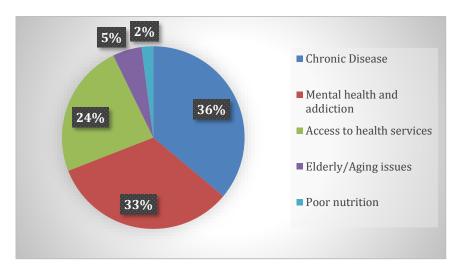
Efforts related to the CHNA were initiated with a combination of primary data components including the online key informant survey administered and analyzed by a student practicum team at Yale School of Public Health with assistance from Mark Abraham, Executive Director of DataHaven. The online survey was administered to community leaders and service providers in the Greater Greenwich Region using Qualtrics, an online survey tool. Members of the Coalitions identified 282 key informants and 82 responses were completed in total. The Health and Human Services group included hospital administrators, state and local health departments, physicians, nurses, social service agency leaders and providers, community planning organizations, family centers and youth services, elderly services, supportive housing providers, primary care centers and recreation facilities. The Government and Community Leaders group included state and local elected officials, police and fire departments, library directors, clergy, other government agency heads, school principals, after school program providers, arts organizations, journalists, community advocacy organizations, neighborhood association leaders, chambers of commerce and community service organizations. Surveys were designed to better understand the health needs of the Greater Greenwich region and included questions on demographics, community health initiatives, health related problems, barriers to good health, health services, and current outlooks.

The key informant online surveys found recurring themes in responses that identified the top five health issues respondents believe are present in the community as: chronic disease; mental health and addiction; access to and use of health services; aging issues; and poor nutrition (Figure 12). The top health issues identified by the key informants align with the health priorities confirmed in 2013 (Access to Care, Healthy Lifestyles, and Mental Health and Substance Abuse).





Figure 12: Key Informant Survey Top Five Health Issues



Nearly all respondents believed that access to medical insurance was the most important barrier that should be addressed. Nearly half of respondents thought that access to quality care had improved over the past three years. Some of the reasons attributed to this improvement were greater advocacy and awareness, increased collaboration between local not-for-profits, expansion of the Affordable Care Act, expansion of clinic hours, and an increase in medical facilities. However, informants felt that transportation to health facilities and appointments could be improved in the future.

Key informants identified leadership activities that are working well in the community as well as emerging issues. These issues included drug and alcohol abuse (especially among young adults), the aging population, mental health issues (affordable services), access to specialists, resources to protect vulnerable populations, accessible health care facilities, and health education. Final recommendations to address health concerns included:

### Infrastructure

- Improve infrastructure of the community to be more elder-friendly
- Construct low-income senior housing

### Services

- Promote evidence-based prevention programs
- Promote educational programs about drugs for teenagers and young adults
- Provide more health education for youth
- Continue to address health care accessibility by expanding insurance to undocumented residents
- Provide affordable health care

### Community Collaboration

- Continue encouraging stakeholder collaboration
- Continue to build more collective partnerships





## V. COMMUNITY ENGAGEMENT

In March 2016, an overview of the CHNA process and specific findings were disseminated at two Community Health Improvement Planning Sessions held in Greenwich, CT and Rye Brook, NY. On March 16, 2016, 22 individuals representing 12 organizations were in attendance. On March 18<sup>th</sup>, 30 community members attended the forum with representation from 21 unique organizations. At both sessions the groups received an overview of the community health needs assessment including a review of the purpose and scope, the 2013 progress to date, the 2016 primary and secondary data findings, and the 2016 focus area goals and strategies within each of the three priority areas (Access to Care, Healthy Lifestyles, and Mental Health and Substance Abuse). Participants were given an opportunity to confirm 2016 priorities, draft implementation strategies, and identify additional partners.

The 2016 Fairfield County Community Wellbeing Index, prepared by DataHaven, serves as the CHNA document for Greenwich Hospital as well as the Greenwich Department of Health, Westchester Department of Health and members of the GCHIP and CCS. The Index will be made widely available through individual members' websites.





#### VI. PRIORITIZATION OF HEALTH ISSUES

#### A. 2013 COMMUNITY HEALTH IMPROVEMENT PLAN PROGRESS-TO-DATE

In 2013, members from both Coalitions and their community partners (including Greenwich Hospital, local health departments, community agencies, faith-based organizations, community health centers, universities and school boards, town and city agencies and residents) and others with a specific knowledge or expertise in public health completed a CHNA and prioritization process to identify priority health issues.

From this work, four areas of focus were selected including: Access to Care, Cancer, Healthy Lifestyles, and Mental and Behavioral Health. Since that time, significant progress has been made in the Greater Greenwich region including:

#### Access to Care

- Conducted programs Nurse Is in, Community Nurse, free mammograms
- Collaborated and partnered with multiple community organizations
- Updated hospital website to promote easier access to information included Financial Aid policies and information available in Spanish

#### Cancer

- Provided screenings and exams PSA, Mammograms, Skin/sun damage
- Facilitated and conducted programs Prostate Cancer Support Group, Cancer Wellness Series, I Can Cope, Relay for Life, Great American Smoke Out
- Conducted lectures Cancer Awareness and Prevention, Ban the Burn/Sun Safety education
- Updated Greenwich Hospital website to promote easier access to information and made My Chart available to patients

#### Healthy Lifestyles

- Facilitated support groups Chronic Pain, Better Breather's, Parkinson's, Multiple Sclerosis, Heart Education, Stroke, Congestive Heart Failure, Diabetes, Parents Exchange Support Group
- Conducted and facilitated health and wellness programs Take Off the Pounds, Know Your Numbers, Smoking Stoppers, Great American Smoke Out, Dietary Approaches to Stop Hypertension (DASH), Nurse Is In, Diabetes Self-Management, CPR, Scout Medical Explorers, Healthy Habits, Family Night Out, Kids in the Kitchen, Healthy Parents Together
- Participated in Health Fairs throughout the community
- Conducted screenings Body Mass Index, Blood Pressure, Cholesterol, Prostrate, Smoking Stoppers
- Provided information Life's Simple 7, Get Healthy CT, My Plate

#### Mental and Behavioral Health

- Facilitated programs Parish Nurse program, Drug program by the Addiction and Recovery Center
- Participated in community Health Fairs
- Sponsored presentations and community showings Sensory Modulation Technique, Heroin Is Here, Anonymous People, HAZE: A Documentary About Alcohol Abuse
- Conducted trainings Mental Health First Aid, CPR
- Promoted Guardian Ad Litem Services to connect people in need with community resources and services
- Promoted Melissa's Project a collaboration with Probate Court and DMHAS on planning for efficient delivery of services to mentally ill persons
- Promoted Tips for Talking to Children and Teens About Mental Illness
- Brought in guess speakers on a variety of topics including LGBTQ and Domestic Violence





Advertised Prescription Drop Box at Greenwich Police Station

#### **B. 2016 PRIORITIZATION OF HEALTH ISSUES**

In March 2016, Coalition members, local health departments, and community partners (including those with knowledge, information, or expertise relevant to the health needs of the community or medically underserved, low-income, and minority populations) reviewed the primary and secondary CHNA data and determined, by group consensus, that the 2013 priorities would be maintained moving forward for the 2016 CHNA. Participants determined that the cancer focus area would be included with strategies and action steps outlines in the Healthy Lifestyles priority area in 2016. The Coalitions, Greenwich Hospital and the health departments confirmed that there was a need to continue working in the 2013 focus areas as these were still the top health priority areas in the region. All primary and secondary data that was collected, analyzed and reviewed supported the continuation of 2013 priority areas: Healthy Lifestyles, Access to Care and Mental and Behavioral Health (Figure 13).

Figure 13: 2016 Priority Health Areas







## VII. COMMUNITY HEALTH IMPROVEMENT PLAN

In addition to guiding future services, programs and policies for the Coalition members and the overall area, the Community Health Needs Assessment and Community Health Improvement Plan are also prerequisites for health departments to earn voluntary accreditation, and for hospitals to maintain tax-exempt status.

The 2016 Community Health Improvement Plan was developed over the period of January through May 2016, using the key findings from the Community Health Assessment, which included qualitative or primary data from the 2015 DataHaven Community Wellbeing Survey, focus groups, and key informant surveys that were conducted locally, as well as quantitative data from local, state and national indicators to inform discussions and determine health priority areas.

As was the case in 2013, the Coalitions were responsible for overseeing the Community Health Needs Assessment, identifying the health priorities, and overseeing the development of the Community Health Improvement Plan. A core coordinating committee was responsible for the overall management of the process, and Community Health Improvement Plan Workgroups, which represented broad and diverse sectors of the community, were continued in each health priority area. The CHIP Workgroups developed goals, objectives, strategies, and action steps for their respective components of the Health Improvement Plan.

#### A. OVERVIEW OF THE COMMUNITY HEALTH IMPROVEMENT PROCESS

#### What is a Community Health Improvement Plan?

A Community Health Improvement Plan or CHIP is an action-oriented strategic plan that outlines the priority health issues for a defined community, and how these issues will be addressed, including strategies and indicators for measurement, to ultimately improve the health of the community. CHIPs are created through a community-wide, collaborative planning process that engages partners and organizations to develop, support, and implement the plan. A CHIP is intended to serve as a vision for the health of the community and a framework for organizations to use in leveraging resources, engaging partners, and identifying their own priorities and strategies for community health improvement.

## How to use a CHIP

A CHIP is designed to be a broad strategic framework for community health and should be modified and adjusted as conditions, resources, and external environmental factors change. It is developed and written in a way that engages multiple perspectives so that all community groups and sectors – private and nonprofit organizations, government agencies, academic institutions, community – and faith-based organizations can participate in the effort and unite to improve the health and quality of life for all people who live, work, and play in the Greater Greenwich Region.

#### Methods

Building upon the key findings identified in the Community Health Needs Assessment, the CHIP aims to:

- Identify priority issues for action to improve community health
- Develop and implement an improvement plan with performance measures for evaluation
- Guide future community decision-making related to community health improvement





In addition to guiding future services, programs, and policies for participating agencies and the area overall, the Community Health Improvement Plan fulfills the prerequisites for a hospital to submit to the IRS as proof of its community benefit and for a health department to earn voluntary accreditation, which indicates that the agency is meeting national standards.

To develop the Community Health Needs Assessment and the Community Health Improvement Plan, the Coalitions (which includes representatives from local public health entities) was the convening organization that brought together community residents and the area's influential leaders in healthcare, community organizations, and other key sectors, including mental health, local government, and social services. Using the guidelines of the Association for Community Health Improvement (ACHI) the six-step health assessment and improvement process was designed:

- 1) Identification of a team and resources,
- 2) Clearly defining the purpose and scope of the project,
- 3) Collecting and analyzing data,
- 4) Selecting priorities and developing a health improvement plan,
- 5) Documenting and communicating results, and
- 6) Planning for action and monitoring progress.





#### B. DEVELOPMENT OF THE 2016 COMMUNITY HEALTH IMPROVEMENT PLAN STRATEGIC COMPONENTS

Coalition members convened regularly from March to May 2016 and actively used the assessment findings to review goals, objectives, and strategies to pursue for the next three-year cycle. From these meetings, groups developed a 2016 Community Health Improvement Plan document that is organized by the three priority areas and includes specific goals, measurable indicators (short and long-term), strategies, action steps, and partners. Information from the State of CT Healthy CT 2020 action agendas and the NY State Prevention Agenda 2013 to 2017 was also included to ensure continuity of efforts between state and local conditions. These meetings were facilitated by Chanana Consulting, Yale New Haven Health's Community Benefits Manager and the Community Health Improvement Coordinator.

#### C. PLANNING FOR ACTION AND MONITORING PROGRESS

Progress will be monitored at routine monthly Coalition meetings using a monitoring tool developed to track the specific goals, objectives, and strategies identified in each area. If gaps in resources are identified, the Coalitions will extend collaborative efforts to other organizations and programs that are currently providing those services as a means to foster relationships and efficiently meet the needs of the community members.

The 2016 Fairfield County Community Wellbeing Index, hospital data and other resources identified in the CHIP provide common measurement indicators to monitor and evaluate progress on the implementation strategies.

#### D. COMMUNITY HEALTH IMPROVEMENT PLAN

Real, lasting community change stems from critical assessment of current conditions, an aspirational framing of where the Coalition would like to be, and clear evaluation of whether the collaborative efforts are making a difference. The following pages outline the goals, strategies, action steps, and indicators for the three health priority areas outlined in the Community Health Improvement Plan.





# **Priority Area 1: Healthy Lifestyles**

# Goal 1: Reduce risk factors that contribute to chronic disease and improve management of chronic disease for diagnosed patients

Indicator 1: % of adults who report being told by a doctor or health professional that they have a chronic condition; measured every 3 years through the CHNA [2015 Baseline DataHaven Community Wellbeing Survey (DCWS): 6% diabetes, 4% heart disease]

Indicator 2: % of adults who rate their overall health as very good or excellent; measured every 3 years through the CHNA [2015 Baseline DCWS: 69%] Indicator 3: % adult respondents obese and overweight; measured every 3 years through CHNA [2015 Baseline DCWS 53%]

Strategies	Action Steps	Partners	Short-term Indicators
Provide education and awareness about risk factors for chronic disease	<ul> <li>a. Conduct Health and Wellness Programs (Know Your Numbers, healthy shopping, meal preparation, nutrition, exercise, cancer prevention)</li> <li>b. Conduct hospital-sponsored community programs (Heart and Diabetes Fairs, Teddy Bear clinic)</li> <li>c. Utilize speakers to educate and inform community on risk factors for chronic disease</li> </ul>	Senior service providers & centers, faith-based organizations, youth service providers & organizations (YWCA, YMCA, Boys and Girls Club), Domestic Abuse Services @ YWCA, schools, libraries, Rotary clubs, Greenwich & NY Department of Health, Department of Social Services, Department of Parks and Recreation, Get Healthy CT, 211,	# of participants at community and hospital presentations regarding risk factors for chronic disease # of health and wellness program collaborations
Provide screenings for chronic diseases	<ul> <li>a. Conduct health screenings (Glucose, blood pressure, BMI, cholesterol)</li> <li>b. Collaborate with area organizations to promote health screenings</li> </ul>	United Way, CT Hospital Association, Greenwich Hospital Nutrition Center, Town Hall, Chamber of Commerce, FQHCs, Silver Hill, The Osborn,	# of screenings held # participants screened # participants referred for follow-up care
Promote existing chronic disease management community resources and services	<ul> <li>a. Develop an inventory of existing community-based chronic disease management resources</li> <li>b. Utilize and promote CD management tools from leading organizations</li> <li>c. Disseminate information throughout communities</li> </ul>	Nathaniel Witherall, MHS providers and organizations	Inventory developed and disseminated # of CD management tools promoted throughout the community





Priority Area 1: Healthy Lifestyles, Continued			
Strategies	Action Steps	Partners	Short-term Indicators
Promote healthy eating	<ul> <li>a. Identify existing programs and resources to support healthy eating and update regional online directory of resources on GHCT Website</li> <li>b. Provide education about healthy eating using evidence based programs/materials such as Healthy Plate, AHA Life's Simple Seven</li> <li>c. Utilize Get Healthy CT website, newsletter and Facebook page to disseminate information and share events</li> <li>d. Promote area food pantries and support healthy donations</li> <li>e. Develop and distribute listings of local farmer's markets</li> <li>f. Utilize speakers to educate and inform community of components of healthy eating</li> <li>g. Promote and support a culture of healthy eating in community and corporate settings</li> </ul>	Senior service providers & centers, faith-based organizations, youth service providers & organizations (YWCA, YMCA, Boys and Girls Club), Domestic Abuse Services @ YWCA, schools, libraries, Rotary clubs, Greenwich & NY Department of Health, Department of Social Services, Department of Parks and Recreation, Get Healthy CT, 211, United Way, CT Hospital Association, Greenwich Hospital Nutrition Center, Town Hall, Chamber of Commerce, FQHCs, Silver Hill, The Osborn, Nathaniel Witherall, MHS providers and organizations	Increase # of visits to Get Healthy CT website Increase # of local people/groups that receive Get Healthy CT newsletter and utilize / access the information # of outreach events (speakers, health fairs) # of local organizations engaged
Promote physical activity	<ul> <li>a. Identify existing programs and resources to support physical activity and update regional online directory of resources on GHCT Website</li> <li>b. Educate the community about physical activity using existing programs/materials such as ADA programs 10,000/day or 5-2-1-0</li> <li>c. Utilize Get Healthy CT website, newsletter and Facebook page to disseminate information and share events</li> <li>d. Utilize speakers to provide education and information of the benefits of physical exercise and tips on how to exercise in the home, at work and in everyday life</li> </ul>		





Priority Area 1: Healthy Lifestyles, Continued			
Strategies	Action Steps	Partners	Short-term Indicators
	<ul><li>e. Identify and promote areas to walk and walking loops.</li><li>f. Promote downloading a physical exercise/activity App; promote new technology</li></ul>		





# **Priority Area 2: Access to Care**

Goal 2: Improve access to quality health care for all individuals living in the Greater Greenwich region

Indicator 1: % of adults who report they have a personal doctor or primary care provider; measured every 3 years through the CHNA [2015 Baseline DCWS: 82%]

Indicator 2: # of health and social service agencies that have adopted CLAS [2016 baseline data to be collected]

Indicator 3: % of adults who were seen by a dentist in the past year; measured every 3 years through the CHNA [2015 Baseline DCWS: 79%]

Strategies	Action Steps	Partners	Short-term Indicator
Enhance care coordination among providers	<ul> <li>a. Facilitate community and provider discussions to learn more about Patient Centered Medical Home (PCMH) model</li> <li>b. Provide education and assist eligible individuals to enroll in appropriate programs and promote the importance/value of having a medical home.</li> <li>c. Collaborate with community partners to promote communication to expand /enhance a coordinated care model among individuals and providers</li> </ul>	Optimus, Northeast Medical Group, Open Door, Retail Clinics, EMS, Family Centers, School Based Health Centers, Greenwich Hospital, Stamford Health Integrated Practices (SHIP), Greenwich, New York State and regional Health Departments, Social Services, Healthcare Agencies, The Osborn, representatives from case management / discharge planning, specialists offices, FQHC, physician offices, EMR	# of provider listings distributed # of providers at facilitated forum
Increase number of adults who have, at a minimum, annual dental checkup	<ul> <li>a. Provide education and awareness on how dental and oral health is connected to wellness</li> <li>b. Advocate on the need for increased insurance coverage for oral health</li> <li>c. Explore potential "Myth Busters" program based on the State of Decay Report connecting oral health and disease</li> </ul>	Greenwich Department of Health, Optimus, Open Door, private physician offices, Wilbur Peck (Family Centers), Dental Hygienists' Association,	# of insurers with expanded oral health coverage # of community education programs conducted on oral health





Priority Area 2: Access to Care, Continued			
Strategies	Action Steps	Partners	Short-term Indicator
Encourage health and social service agencies to adopt or take documented steps to implement National Culturally and Linguistically Appropriate Services (CLAS) standards	<ul> <li>a. Determine number of health and social service agencies who have adopted or taken steps to implement CLAS</li> <li>b. Communicate awareness and benefits of CLAS</li> <li>c. Provide support to health and social service agencies to implement National Culturally and Linguistically Appropriate Services (CLAS)</li> <li>d. Increase number of health and social service agencies with websites translatable to other languages</li> <li>l. Determine current number of health and social service agencies with translatable websites</li> <li>II. Identify low or no cost solutions</li> <li>e. Expand curriculum to include a medical component for ESL classes and for local translators from English to Spanish and also Spanish to English</li> </ul>	CT DPH Office of Health Equity, United Way of Greenwich, local community agency leadership TBD, Greenwich Hospital, Greenwich Department of Health, English as a Second Language providers, CT Hospital Association, GCHIP	# of agencies attending education sessions # of agencies with translatable websites





# **Priority Area 3: Mental and Behavioral Health**

**Goal 3:** Improve overall health through the lifespan, through access to quality mental and behavioral health services including screening, early intervention, prevention and treatment

Indicator 1: # of psychiatric MDs and APRNs who accept Medicaid AND accept patients under 18 years old in Greater Greenwich region [2016 baseline data to be collected]

Indicator 2: % of mental health emergency room visits at GH [2016 baseline data to be collected]

Indicator 3: % of adults who overdose from opioids [2016 baseline data to be collected]

Strategies	Action Steps	Partners	Short-term Indicator
Increase the number of	a. Develop and disseminate a list of all mental	Local and State legislators, professional	# of resource guides distributed
and access to mental and	health providers to the community and providers	organizations, school programs, MSW	(print and electronic)
behavioral health	b. Develop plan on how to keep updated as	programs, GCHIP, DPH, DMHAS	# of collaborative partners
providers in the Greater	information changes frequently	Greenwich Hospital Community	working together on advocacy
Greenwich region	c. Conduct presentations at diverse sites ( plan	Advisory Council, Southwest Regional	efforts
(including APRNs and	accordingly as calendar is set up to a year in	Mental Health Board, CT Hospital	
social workers)	advance, clinics, health centers, hospitals)	Association, community health centers,	
	d. Advocate for an increase in the amount of	primary care centers, School-based	
	mental and behavioral health service providers	Health Centers, Federally Qualified	
	and programs (including APRNs and social	Health Centers, Beacon Health,	
	workers)	Communities 4 Action, Silver Hill,	
		Domestic Abuse Services @ YWCA, Yale	
		University, Yale New Haven Health	
		Community & Government Relations	





Priority Area 3: Mental and Behavioral Health			
Strategies	Action Steps	Partners	Short-term Indicator
Provide mental and behavioral health supports to youth	<ul> <li>a. Collaborate with youth service providers to deliver education to students and staff</li> <li>b. Promote and organize guest speakers to reach youth and their families around current mental and behavioral health trends/issues</li> <li>c. Help collect baseline data by working collaboratively with partners to conduct Youth Risk Behavior Surveillance System (YRBSS) at local high schools</li> </ul>	YWCA, YMCA, Domestic Abuse Services @ YWCA, , Kids in Crisis, Liberation Program, SWRMHB, Communities 4 Action, local schools, other youth-serving organizations, Greenwich Department of Health, Communities 4 Action, Silver Hill, Youth Services Council, Child Guidance Center, Family Centers, Boys & Girls Clubs	# of youth reached at schools by outside providers # of educational sessions held
Increase support and outreach to adults and youth around substance abuse prevention (especially opioid use)	<ul> <li>a. Provide education and awareness to youth and adults on harm and consequences of opioid and alcohol use</li> <li>b. Develop and distribute list of available prevention and treatment programs</li> <li>c. Continue alcohol support programs and education</li> </ul>	Communities 4 Action, DMHAS, CT Prevention Network, Department of Health, Greenwich Health Department, Liberation Programs, Silver Hill, Commission on Aging and other senior service organizations, Center for Hope, NAMI	Communication plan implemented # of directories distributed



# VIII. APPENDIX A: GREENWICH COMMUNITY HEALTH IMPROVEMENT PARTNERSHIP & COUNCIL OF COMMUNITY SERVICES MEMBERS

## **Greenwich Community Health Improvement Partnership**

#### **Providers**

Beacon Health

**Greenwich Hospital** 

**Greenwich Hospital Nutrition Center** 

Greenwich Hospital Outpatient Behavioral Health Department

Greenwich Mental Health Counseling

Northeast Medical Group

**Optimus Healthcare** 

SNAP Eligibility & Outreach

Parent Connection and Riverside Pediatrics

Silver Hill Hospital

Southwest Regional Mental Health Board

#### **Businesses**

Global Health Systems Consultants, LLC

## **Health Departments**

**Greenwich Department of Health** 

## **Housing**

The Housing Authority of Greenwich

#### **Schools**

Greenwich High School Southfield Center for Development Greenwich Board of Education

#### **Advocacy Groups**

Abilis

Child Guidance Center

ChildFirst

Communities 4 Action

**Family Centers** 

Get Healthy CT

Laurel House, Inc.

League of Women Voters of Greenwich

**Liberation Programs** 

Neighbor to Neighbor

**Pathways** 



## **State Agencies**

Commission on Aging, Greenwich F.S. DuBois Center, DMHAS

#### **Social Services**

Community Answers
Boys and Girls Club of Greenwich
Greenwich Department of Parks and Recreation
Greenwich Department of Social Services
Greenwich Emergency Management Operations
Kids in Crisis
The Nathaniel Witherell Rehabilitation and Nursing Center
NAMI Stamford/Greenwich
United Way Greenwich
YMCA of Greenwich
YWCA of Greenwich

# **Council of Community Services (NY) Partners**

## **Providers**

Greenwich Hospital Hudson Valley Health Open Door Family Medical Center Port Chester-Rye-Rye Brook EMS Forever Families through Adoption

# **Health Departments**

Westchester Department of Health

## **Housing**

Port Chester Housing Authority

# **Faith Based**

All Souls Parish KTI Synagogue St. Paul's St. Peter's



## **Schools**

Blind Brook School Mamaroneck Public Schools Port Chester Public Schools Port Chester School District Purchase College Association Rye Schools

## Community

Port Chester/Rye Brook Rotary Club Port Chester-Rye-Rye Brook Police Department Port Chester Village Board Rye Rotary Club

# **Advocacy Groups**

Family Services of Westchester Forever Families through Adoption NAACP Port Chester Carver Center

## **State Agencies**

Westchester County Board of Legislators

## **Social Services**

Don Bosco Community Center Hispanic Resource Center Human Development Services of Westchester Port Chester Cares Rye YMCA

# **Senior Services**

Anthony J. Posillipo Senior Community Center The Osborn Rye Brook Seniors Staying Put in /Rye and Environs (SPRYE) Port Chester Seniors Rye Seniors