

New Haven Economic Development Official Statement



July 2017

Toni N. Harp
Mayor

Matthew Nemerson
Economic Development Administrator

TABLE OF CONTENTS

Introduction to New Haven	3
Regional Context.....	5
Demographics	6
Economic Snapshot.....	7
Major Initiatives & Projects	8
Attracting and Retaining Quality Investment	16
Developing Local Jobs and Businesses	22
Workforce Development	22
Business Development	25
Revitalizing New Haven’s Neighborhoods	29
Neighborhood Commercial Revitalization.....	29
Leveraging Public Financing.....	30
Neighborhood-Specific Initiatives	31
Improving New Haven’s Regional Competitiveness	35
Arts & Culture	35
Healthcare Industry.....	40
Transportation Infrastructure.....	41
Education & Innovation.....	44

INTRODUCTION TO NEW HAVEN

New Haven is a city on the rise. Under the guidance of Mayor Toni N. Harp and her Safety, Education, and Employment (SEE) vision, violent crime has fallen to new lows; high school graduation rates have climbed; and total jobs in New Haven have expanded to a level unseen since 1991. Given New Haven's ongoing and accelerating progress against these and other measures, it is no surprise that people are choosing to work, live, and raise families in New Haven in greater numbers. Since 2000, the city has attracted more than 6,900 new residents, making its population growth rate of 5.5% the fastest in Connecticut. At the same time, it has continued to distinguish itself as a place where people gravitate who want to make great ideas happen, with an increase in its already-high college degree attainment placing it 6th highest in the nation.

New Haven's recent success is due in no small part to its reputation as a city of makers, filled to the brim with innovation, ingenuity, invention, and initiative. Historically, New Haven has always been a place where creative and talented individuals go to make something happen or to test out new ideas: in the late 18th century, Eli Whitney commercialized the concept of interchangeable machinery parts and, in doing so, solidified New Haven as an early hub of innovation.

Over the next century and a half, world-renowned companies such as the Winchester Arms Company exported carriages, clocks, firearms, and pianos of the highest quality across the U.S. and around the world. For decades, manufacturing served as a path to the middle class, and tens of thousands flocked to New Haven from around the country and abroad to meet the demand for skilled factory labor and, in the process, created many vibrant new communities.

Like many other Northern mid-sized cities, New Haven suffered from the effects of deindustrialization and suburbanization. In the late 20th century, factories left in search of cheaper labor, and the fortunate fled to the suburbs. New Haven saw its population and its tax base decline substantially. At the same time, "urban renewal," a now discredited mid-century urban planning consensus, called for urban planners to clear low income neighborhoods and build highways and parking lots to facilitate suburban commuting. As a result, thousands were displaced just as jobs disappeared and underinvestment led to blight, failing schools, and rising crime.

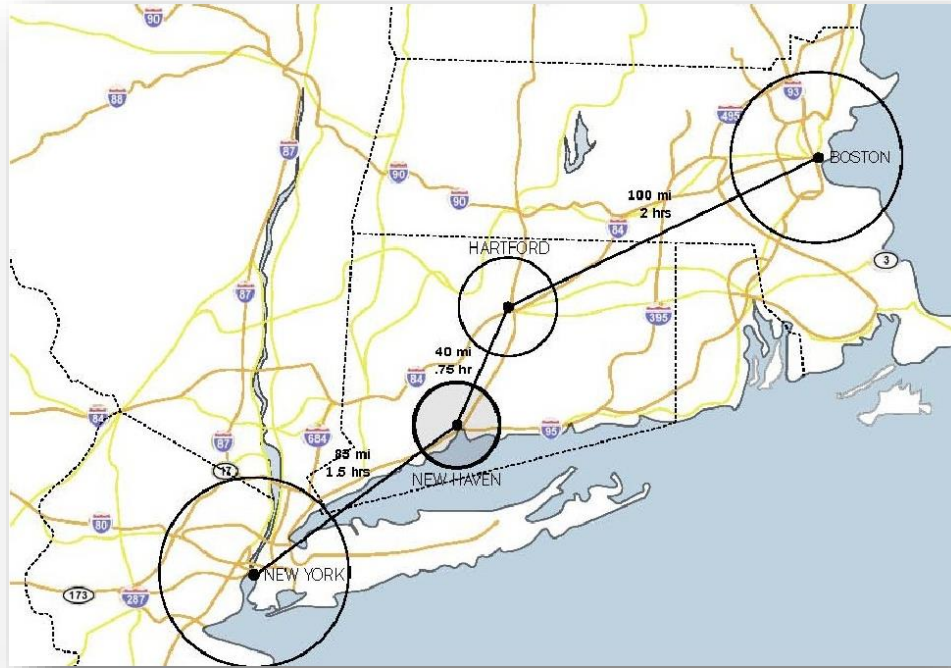
While some in the public may still view New Haven this way, it no longer reflects current reality. Today, New Haven is once again a city of makers, with innovation abounding, especially in the thriving bioscience, tech, and food industries. For example, New Haven has the second-largest bioscience cluster in New England. With Yale University and Yale New Haven Hospital as major anchor institutions, New Haven institutions receive \$421 million in NIH research grants each year, making it the 14th greatest recipient in the nation, and its residents have filed over 6,000 bioscience patents since 2000. In tech, in April 2017 Verizon named New Haven the top U.S. city in which to launch a tech startup. In food, New Haven consistently has been named a foodie capital of the state, region, and nation, and its food service companies contribute \$284 million to New Haven's economy.

In addition, New Haven is a growing, increasingly diverse, and international city. New Haven continues to attract and welcome visitors, scholars, and immigrants from across the U.S. and around the world looking for urban living, abundant cultural amenities, and a more affordable cost of living. In fact, a 2016 DataHaven survey determined that one in six city residents (15.8%) is foreign-born, and recent immigrants, of which close to half (43%) have at least a college degree, have nearly doubled their numbers since 1990. New Haven's population is set to grow by at least 7% through 2025, adding another 10,000 to 15,000 people to the city. This demand to live and work in New Haven has spurred extensive real estate investment in commercial developments, including office and lab space, and residential developments, including 863 recently completed units and another 2,250 already in the development pipeline.

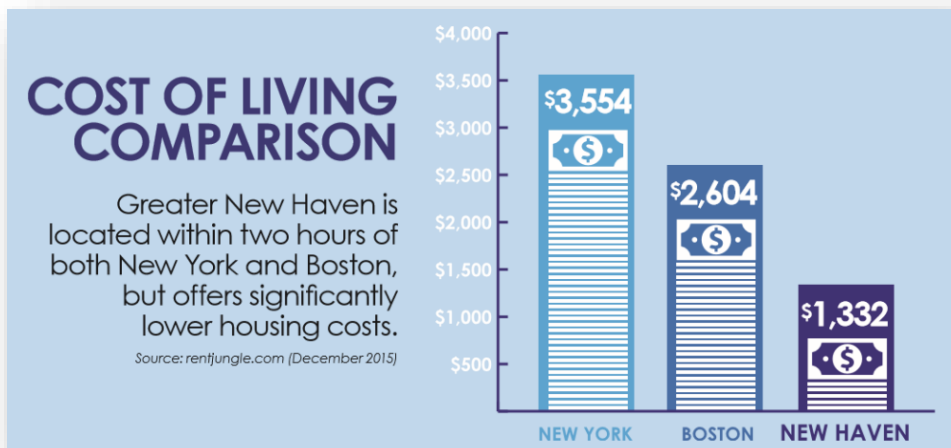
The City's Office of Economic Development (part of its Economic Development Administration), along with its various departmental and quasi-public partners, actively assembles city resources, private investment, and nonprofit support to pursue the Mayor's vision for New Haven: a thriving, mixed-use urban core; vibrant, interconnected neighborhoods, with ample access to opportunities for work and leisure; and inclusive growth from the knowledge-based "maker economy" that benefits all residents. Economic Development supports this vision by 1) facilitating major initiatives and projects, 2) attracting and retaining quality investment, 3) developing local jobs and businesses, 4) revitalizing the city's neighborhoods, and 5) improving New Haven's overall competitiveness.

REGIONAL CONTEXT

New Haven offers quick and easy access to New York City and Boston, the two largest cities in the Northeast. With several major highways passing through it, and frequent rail service via Amtrak, Metro North, and Shoreline East, New Haven is among the most convenient destinations in the Northeast.



New Haven is located on Long Island Sound between New York City (75 miles), Boston (140 miles), and Hartford (40 miles), and is directly connected to these cities by Interstates 95, 91, and the northeast rail corridor.



DEMOGRAPHICS

New Haven is the central city of the New Haven - Milford Metropolitan Statistical Area (MSA), and is part of the larger New York - Newark, NY, NJ, CT, PA Combined Statistical Area (population 23,723,696). It is the social and economic center of south-central Connecticut, as well as the state's youngest, most diverse, and fastest-growing city.

POPULATION

	New Haven City	New Haven MSA	Connecticut
Total Population	130,553	861,277	3,592,053

AGE

	New Haven City	New Haven MSA	Connecticut
Population below age 18	22%	21%	22%
Population between ages 18 & 64	68%	63%	63%
Population 65 and older	10%	16%	15%

RACE & ETHNICITY

	New Haven City	New Haven MSA	Connecticut
White	32%	75%	70%
Black	34%	13%	10%
Hispanic	26%	17%	14%
Asian	5%	4%	4%
Other	3%	6%	2%

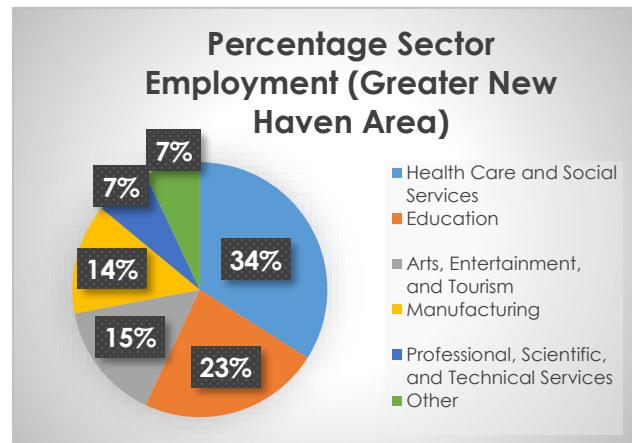
Source: DataHaven 2014 New Haven Neighborhood Estimates; ProximityOne U.S.-State-Metro Demographic-Economic Interactive Tables, 2014.



Economic Snapshot

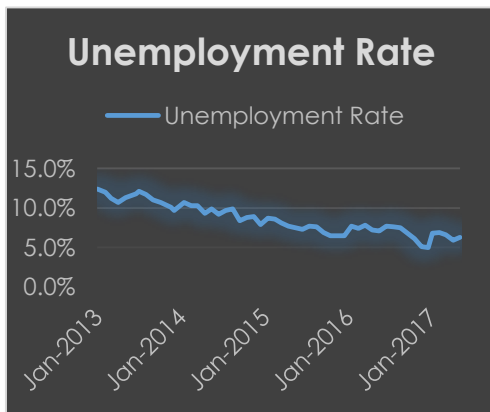
New Haven is a city with . . .

- 1 **A diverse economic base**
 - **2nd largest** bioscience cluster in New England.
 - 34 of Connecticut's 64 biotech firms reside in New Haven.
 - **300 new business accounts** opened in the past year.



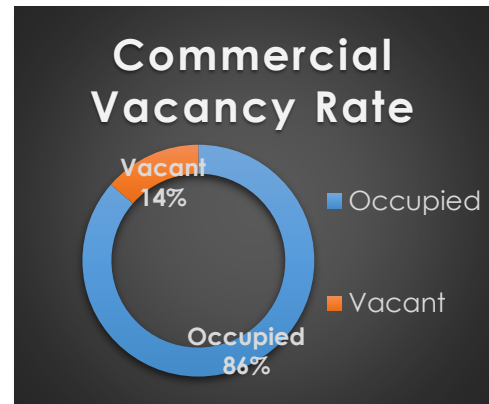
REX Development, 2017 Southern Connecticut Comprehensive Economic Development

- 2 **A declining unemployment rate**
 - Since January 2013, unemployment has dropped from 12.4% to 6.3%.



Connecticut Department of Labor May 2017

- 3 **A low commercial vacancy rate**
 - Due to high demand, city-wide commercial vacancy sits at 14%.



Colliers Intl. Q1 New Haven Office Market Report

- 4 **Strong anchor institutions**
 - Yale University employs 14,000 people, 4,000 of which reside in New Haven. The university has committed to **hiring 1,000 more NH residents by April 2019.**
 - Yale University's \$1 billion expansion will result in 800 new students attending the university and living in New Haven.
 - Yale-New Haven Hospital is the 9th largest hospital by bed-count in the country.

Education's Impact:
 With over **37,000** students and **31,000** employees, colleges in the New Haven area create **1.5 billion** in local economic impact.

REX Development, Key Industries, Higher Education, 2017

MAJOR INITIATIVES & PROJECTS

New Haven is a growing and in-demand city with room to expand. Economic Development's major initiatives and projects help to direct expansion into targeted zones and to continually improve upon the factors that draw people to New Haven—its thriving economic ecosystem and its quality of life. Economic Development currently has five major initiatives and projects: 1) **Downtown Crossing** bolsters New Haven's connectedness and walkability, 2) **Hill-to-Downtown** provides room for the expanding biotech industry and creates a whole new neighborhood, 3) **Biotechnology Expansion Space** highlights the biotech firms that have recently expanded, 4) **Facilitating Innovation** builds upon New Haven's culture of innovation and entrepreneurship, and 5) **Real Estate Development** ensures a healthy pipeline of residential units to accommodate the influx of people wanting to live and work in New Haven.



The City finished Downtown Crossing Phase I in 2016, paving the way for the relocation of Alexion Pharmaceuticals' world headquarters and a new chapter in New Haven's growth in a competitive 21st century economy (Photos courtesy of the New Haven Register and New Haven Independent)

Downtown Crossing

This project is the City of New Haven's ambitious effort to replace Route 34, a 0.8 mile limited-access highway that cuts through Downtown—disconnecting neighborhoods, creating a high-speed transit corridor that proved inhospitable to business, and consuming prime downtown real estate. In its place, the City has planned two urban boulevards and new or rebuilt crossings. Downtown Crossing is taking back approximately 10.5 acres of land formerly used as a highway and is putting them to good use generating jobs and growing our tax base. In addition, the project will improve New Haven's connectivity, increase its walkability, and create more vibrant street life—three highly in demand urban qualities. In 2017, the City continues work on project close-out, traffic safety and community benefits monitoring, and the expanding biotechnology sector.

- **Phase I Downtown Crossing and 100 College Street (College Street)**

The US DOT awarded the City a \$16 million TIGER grant in October 2010 and Phase I construction began in February 2013. This phase included the removal of the existing College Street Bridge and replacing it with a fill structure and then the conversion of North and South Frontage Roads to urban boulevards with various road, streetscape, bicycle and pedestrian enhancements between York Street and Union Avenue. All elements were designed to city-wide Complete Streets standards and supported the economic development of Connecticut's growing life sciences industry. Phase I construction activities concluded in 2015, enabling the completion of the 100 College Street development, the new home of Alexion Pharmaceuticals and the first development in the former highway corridor.

- **Phase II Downtown Crossing and Coliseum Site (Orange Street)**

In 2013, the City signed an agreement with LiveWorkLearnPlay (LWLP) to redevelop the former Coliseum site into a mixed-use, mixed-income neighborhood with residential, retail, office, and hotel components. This \$400 million project will essentially create a new neighborhood and is the linchpin of Downtown Crossing Phase 2, which will reconnect Orange Street across Route 34 by creating an at-grade street for pedestrians, cyclists and cars. The project will create job opportunities for local residents by requiring the construction workforce to be 25 percent New Haven residents, 25 percent minorities, and 6.9 percent women, and 25 percent of construction sub-contracts to be with New Haven area minority- or women-owned businesses. Developments in 2017 regarding Phase II included being awarded the state Assistance Agreement for a \$21.5 million infrastructure matching grant, which leverages the City's \$12 million investment in road, utility, and infrastructure improvements in and around the former Coliseum site.



LiveWorkLearnPlay, developer of the former Coliseum site, is currently finishing its design of a 1,000,000 square-foot mixed-use development with a hotel, residential rental units, retail, and recreation and leisure.

- **Phase III Downtown Crossing (Temple Street)**

The final phase of Downtown Crossing involves reconnecting Temple Street from MLK Boulevard to South Frontage Road. The project, now in design, will open up new development parcels to the east and west of the new Temple Street crossing. In June 2016, New Haven received a \$20 million TIGER grant to open up two new development sites, bringing the total in TIGER grants received for the project to \$36 million. Receiving two TIGER grants for one project is unusual, but the merits of Downtown Crossing merited it. This was New Haven's third TIGER grant altogether. In 2017, the city continued with advanced planning and design for Phase III. Economic Development also initiated site development work and outreach to potential development partners.

Hill-to-Downtown Project

As a growing city with room to expand, New Haven can accommodate the projected future expansion of its growing biotech industry. On the border of Yale-New Haven Hospital and the Yale School of Medicine, Hill-to-Downtown is perfectly positioned to absorb future expansions of either institution as well as the demands of the many spin-off biotech firms looking for lab and office space in New Haven. Much of the district's property remains underused and neglected, occupied by outmoded buildings or large surface parking lots.

Altogether, the Hill-to-Downtown Project envisions remaking the district into a vibrant, walkable, and mixed-use neighborhood that centers around a newly-created public green space, Union Square, by expanding the existing medical district, promoting infrastructure investments, and improving the street network. Over the next ten years, the project will result in 1,400 new housing units, of which 300 are low-to-moderate-income units, up to one million additional square feet of lab/research space, up to forty thousand square feet of retail, 2,500 new permanent jobs, 10,000 temporary construction jobs, and \$165 million in annual tax receipts. The project will better connect New Haven's train station, the Yale medical facilities, the Hill neighborhood, and downtown.

- **Phase I**

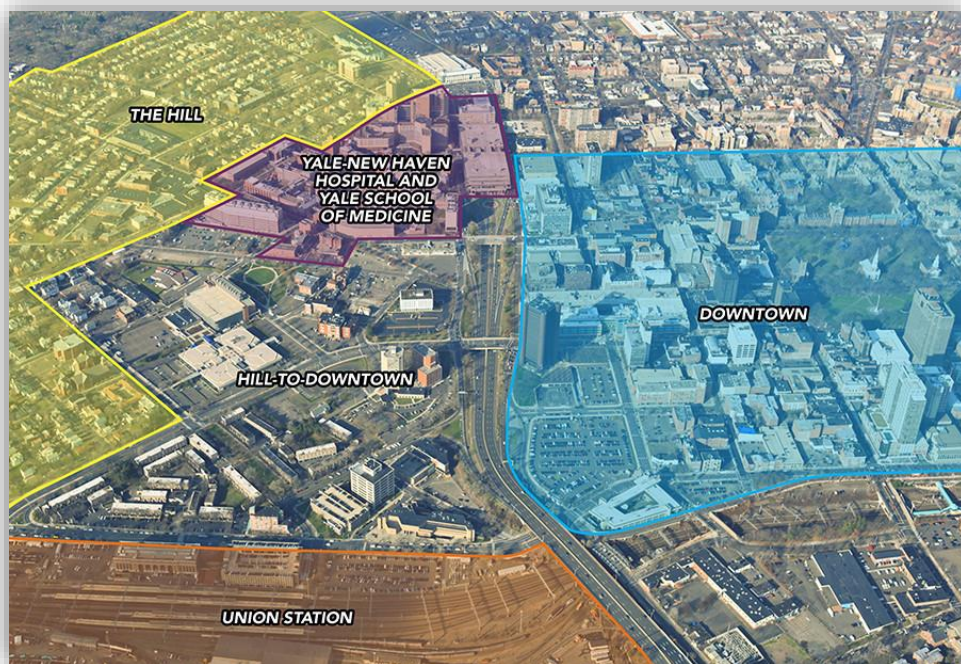
RMS Companies of Stamford recently concluded successful negotiations with the City and its stakeholder partners to spend \$100-150 million to construct 150 apartments, 7,000 square feet of retail, 120,000 square feet of research space and 50,000 square feet of offices on 20 acres of mostly-vacant lots with a significant affordable housing component. Phase I of the project will break ground in the Fall of 2017.

- **Phase II Church Street South**

The next priority of the Hill-to-Downtown project is the redevelopment of the largely dilapidated 300-unit public housing complex. The City is working with property owner Northland Investment Corporation to create 750 new units, made up primarily of mid-rise apartments with approximately 150 affordable units and ground-level retail. This would transform the area into a hub of community activity.

- **Phase III Municipal Land**

The City commissioned a \$160 thousand study to explore the feasibility of relocating municipal public service departments (police, health, and education) from their current outdated spaces in the Hill-to-Downtown area. In their place, the City plans for a general repurposing of the land and buildings in the block generally bounded by Meadow, Union, and Lafayette Streets. Due to the irregular parcel size, age of structures, and proximity to the train station, the City believes a higher and better use of these properties is foreseeable and will be explored in further detail over the course of the year.



City of New Haven Economic Development, Official Statement

Biotechnology Expansion Space

The biotech industry is flourishing in New Haven, and Economic Development works with companies founded in, moving to, and expanding in New Haven to locate office and lab space. Recent examples include the move of Alexion Pharmaceuticals back to New Haven and the constant investment in, and expansion of, Science Park, the formerly dilapidated industrial factories now re-designated for scientific research. Altogether, these projects create jobs for New Haveners, expand the city's tax base, and repurpose industrial factories and unneeded parking lots to bring economic activity to underinvested neighborhoods.

- **Alexion Pharmaceuticals**

Founded in New Haven in 1992, Alexion has become the world's leading pharmaceutical company focused on the discovery and commercialization of "orphan drugs" for rare, life-threatening diseases. Alexion Pharmaceuticals has made 100 College Street, built in the former Route 34 highway right-of-way near Yale-New Haven Hospital and the Yale School of Medicine, its world headquarters.

- Medical / Lab Space: 495,000 square-feet
- Construction Jobs: 2,000
- Permanent Jobs: 1,200
- Project Cost: \$140 million

- **Science Park-Winchester Garage/Retail Facility**

In 2010 Winstanley Enterprises constructed a new 1,186-space parking garage with ground-level retail on Winchester Avenue to support the parking needs of 25 Science Park and 344 Winchester Avenue. The project also resulted in significant streetscape improvements including a raised median, planters, street trees, and pedestrian lighting. BL Companies, the developing firm, won the American Institute of Architects Connecticut 2010 People's Choice Award for their plan and design for this building.

- Retail Space: 15,000 square-feet
- Parking Spaces: 1,186
- Project Cost: \$30 million

- **350 George Street**

In November 2015, Yale University bought the former Frontier Communications switching-station site from Winstanley Enterprises, developer of 300 George and 100 College Streets, for \$16.5 million. The 116,000 square-foot building will be converted to biotech use and provide new laboratory space for Yale Medical School researchers. Yale began moving administrative staff into the building in 2017.

- **SCSU Academic Science and Laboratory Building**

In 2015, SCSU completed its Academic Science and Laboratory Building, a 103,608 square-foot, four-level academic and laboratory science facility with a construction cost of \$49 million. Embracing innovative sustainable design, it houses teaching and research training laboratories for nanotechnology, physics and optics, the earth sciences, the environmental sciences, cancer research, astronomy, molecular biology and chemistry.



SCSU's new Academic Science and Laboratory Building enhances its capacity to educate more students in the STEM disciplines – science, technology, engineering and mathematics.

- **Medtronic Innovation Lab**

After purchasing Covidien in 2015, Medtronic is now expanding in New Haven and has plans to open an innovation lab that partners with Yale University in the creation of biomedical devices.

Facilitating Innovation

New Haven is a hotbed for innovation. Many innovative startups spin out of Yale University, its School of Management, School of Medicine, and Yale New Haven Hospital. These ventures are supported by the Yale Office of Cooperative Research, the Yale Center for Engineering Innovation and Design, and the Yale Entrepreneurial Institute, all of which provide technical assistance and funding opportunities. Economic Development helps these startups grow into thriving businesses, while also supporting New Haven's greater innovation ecosystem, which includes co-working spaces, maker spaces, and an innovation district. These efforts not only make New Haven a top destination for innovative entrepreneurs to move, but also make innovation accessible to all New Haven residents.

- **Innovation Places**

Pursuant to legislation enacted in 2016, the state of Connecticut announced a competitive multimillion-dollar grant program to provide communities with funding for initiatives that will make them even more creative places to live, work, and start a business. To secure a planning grant Economic Development, in concert with staff from EDC and the Mayor's Office, assembled a broad coalition of partners from the entrepreneurial community, higher education stakeholders, venture capital partners, and corporate and civic institutions to collaborate on this comprehensive, cross-sector initiative. In June 2017, the state awarded New Haven \$2 million to implement the plan.

- **DISTRICT NHV**

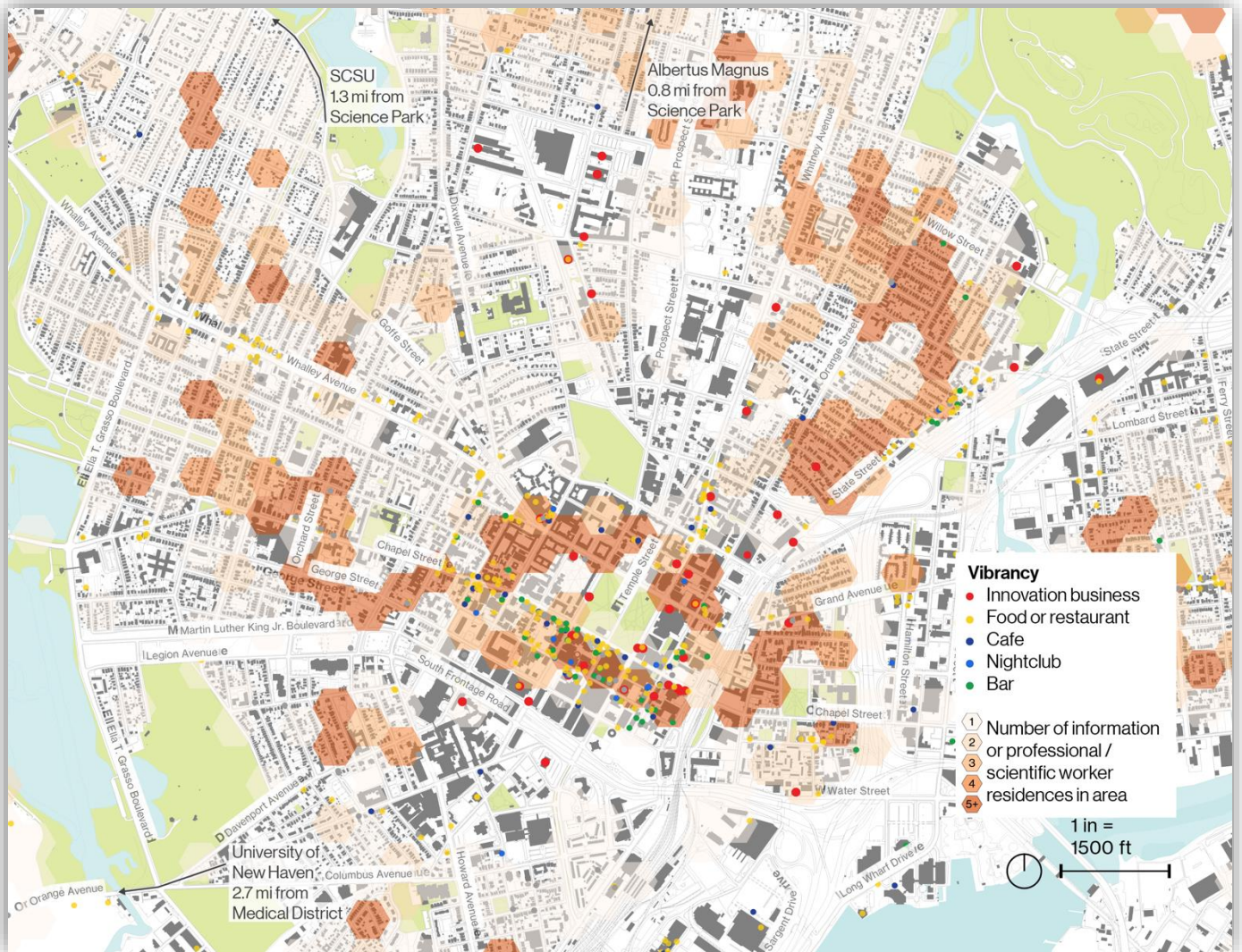
This project will establish a 10,000-sq. ft. tech campus that will foster innovation through the creation of startup incubator space, Class A office space, a performing arts amphitheater, and a boat and kayak launch to the Mill River. This site, located next to I-91 at the intersection of State and James Streets on the border of East Rock and Fair Haven, was formerly the Connecticut Transit garage and is now one of the city's most valuable unused properties. Two local information technology companies are leading the redevelopment, Digital Surgeons and Urbane NewHaven.

In 2016, the Board of Alders approved a Development and Land Disposition Agreement for the redevelopment of the site. The redevelopment involves remediation of brownfield issues using a State DECD cleanup grant, construction of a Mill River Trail, kayak launch, and an outdoor amphitheater and will keep more than 100 jobs in New Haven and create additional 200-300 new, permanent jobs. It will also utilize both Façade and Assessment Deferral Programs to assist with development. Currently, the City is assisting the development team in recruiting businesses to its new development.



Ceremonial groundbreaking for the DISTRICT NHV tech hub took place in June 2016. This \$22.5 million partnership between the State, the City and a homegrown private development team is currently under construction.

City of New Haven Economic Development, Official Statement



Thousands of science and innovation workers live in New Haven with the ability to walk or bike to work, restaurants, and nightlife and cultural attractions.

Real Estate Development

Due to its rapid economic growth and the city's 2 percent residential vacancy rate (one of the lowest in the country), New Haven's rental market is undeniably hot. Private developers are continually interested and active in New Haven, and over the past 10 years, New Haven has seen a significant increase in private real estate investment. The diverse influx of long-time residents, new employees, and students supports a strong rental and homeownership market. Smaller local and regional development interests have invested more than \$35 million into the city's smaller multi-family (3-20 unit) housing stock. These investments, in concert with the larger development activities by private developers and the New Haven Housing Authority (Elm City Communities), have helped keep the city's vacancy rate very low while increasing the overall quality of housing stock.

Recently Completed Projects

- **The Novella**

The Novella is a new mixed-use development on the site of a former parking lot at the corner of Chapel and Howe Streets. This six-story, modern-style building contains 136 residential units and approximately 4,500 square-feet of ground-floor retail space. The developer invested \$35 million without any public subsidy and also preserved three historic buildings. The Novella opened in late summer 2015.

- **Winchester Lofts**

Leading Ohio development company, Forest City, transformed an abandoned rifle factory that was once the economic engine of Newhallville into 21st century apartments, while keeping the historic 20th century art style. The \$54 million historic rehab project resulted in 158 apartments, 20 percent of which will be affordable, government subsidized housing. The project opened to tenants in the summer of 2015.

- **College & Crown: A CenterPlace**

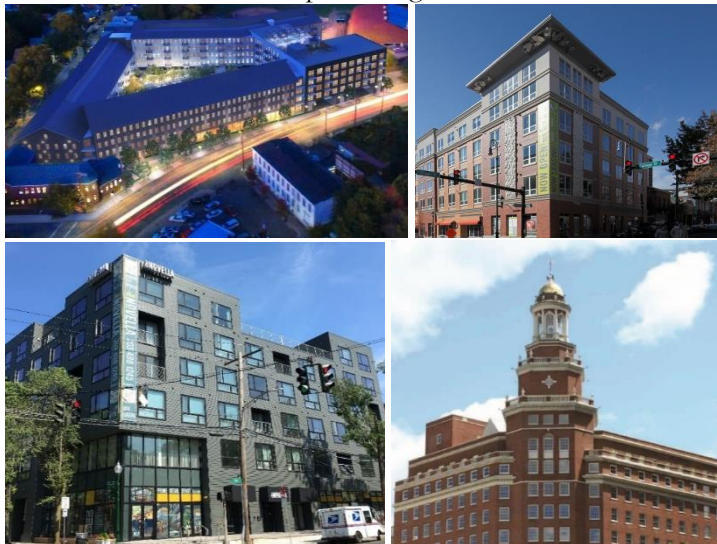
CenterPlan College Square LLC invested \$55 million to open its downtown, six-story, mixed-use building, complete with 160 market-rate apartments and 20,000 square-feet of ground-level retail space, in late summer 2015. The building serves as the new home for the iconic J. Press men's clothing store.

- **Corsair Apartments**

Completed in the fall of 2016, Corsair Apartments is a new and renovated mixed-use development at the corner of Mechanic and State Streets. The former factory building served as a fighter aircraft assembly plant for F4U Corsairs during World War II. Post Road Residential, a distinguished regional developer, invested \$30 million to construct 235 studio, one-bedroom, and two-bedroom units.

- **Metro 260**

In April 2015, the City Plan commission approved a dozen studio apartments on the second floor of the 260 Crown Street building that also houses the popular BAR restaurant. Metro Star Capital, the developer, plans to market the apartments to workers coming to Alexion, as well as workers at Yale-New Haven Hospital and graduate students in New Haven. Metro 260 began leasing in early 2016.



Clockwise from top left: Corsair Apartments, CenterPlace, The Union, The Novella.

- **The Union**

What is now known as simply The Union was once home to The Union & New Haven Trust Company. Constructed in 1927, this elegant building was the tallest in the city at the time. In 2013, Cooper Church LLC, a New York-based developer, purchased the 184,480 square-foot building for \$13.5 million. Construction to convert the former office building to 138 market-rate rental apartments with first-class amenities began in April 2014. The Union opened in the summer of 2016.

- **Metro 280**

Opened in early 2017, Metro Star Capital converted the parking garage at 280 Crown Street into a 24-unit apartment complex. The restoration and adaptive re-use of the Crown Street Garage, located on the corner of Crown and High Streets just steps from Yale University, is a boutique residential building with modern architecture and outdoor decks.

Project Pipeline

As of June 2017, approximately 950 residential units have received approval or are under construction in New Haven, and another 1,300 are in the planning stage, including the previously discussed redevelopments of the former New Haven Coliseum site and Hill-to-Downtown Project.

- **Metro 301**

A multi-building 38,000 square-foot development encompassing much of the block of George Street between High and College Streets and part of Crown Street, this is the largest of three Metro Star projects in the area. It will consist of four new mixed-use buildings with 80 market-rate apartments and a renovated historic chapel building. The project will transform and reactivate this underutilized section of Downtown. This project broke ground in 2016 and is currently under construction.

- **Lofts at Wooster Square**

Spinnaker Real Estate Partners received approvals in 2015 to develop the former Comcast property at 630-673 Chapel Street in Wooster Square into more than 220 units of market-rate housing with ground-floor retail. The \$35 million transit-oriented development (TOD) project will start in late 2017.

- **Torrington Plumbing Supply Site**

Petra Construction and David Adam Realty intend to replace a series of warehouses and a plumbing supply store with six wood-framed stories of market-rate apartments, townhouses, and ground-floor retail. The already-approved TOD project at 87 Union Street will activate dormant Union and Fair Streets, while a potential extension would reconnect Olive and Union Streets. The total project will consist of approximately 325 market rate units, and construction is slated to start in late 2017.

- **Audubon Square**

In February 2016, Spinnaker Real Estate Partners contracted with Frontier Communications to buy one of the last prime pieces of land in downtown New Haven, at 335 and 367 Orange Street. The development of the 3.3-acre property, currently a surface parking lot for Frontier employees, will add hundreds of residential units to Downtown and create a new community that will help grow the existing Audubon-Whitney neighborhood and spur development along Orange and State Streets. The project received final regulatory approvals in the winter of 2016, and will break ground in 2017.

- **Former New Haven Clock Factory**

In July 2015, Reed Realty proposed creating more than 100 artist live/work spaces in a large historic former industrial building at 133 Hamilton Street in the Mill River District. In 2016, a state DECD grant of \$100,000 was secured to determine the best way to develop a mixed-use site that fits with existing Mill River District planning. The project also received state funding to be used for environmental assessment and redevelopment planning of the historic complex. A Phase III Environmental Site Assessment was completed, and a DECD loan application was submitted to offset future cleanup costs.

- **George and High Streets**

RMS Companies is also building 108 furnished apartments at the former Budget Rental Car site at 323 George Street. This innovative style of housing will cater to everyone from short-term students and professors at Yale to extended-stay employees of local biotech firms. The building will also have 2,000 square-feet of retail space. RMS will also renovate an adjacent historic home at 15 High Street for additional guest rooms. The project will complement the Metro 301 development by completing the revitalization of the block of George between High and College Streets.

- **Former Harold's Formal Wear and the John English Building**

In May 2016, MOD Equities, led by brothers Jacob and Josef Feldman, received City approval for two separate Downtown projects: four new stories on top of the one-story former Harold's Formal Wear building at 19 Elm Street, creating 46 new apartments and a restaurant space on the first floor, and 18 new residential units on the third and fourth floors of the existing John English Building at 418 State Street. The two conversions will help bridge the area across the train tracks to the Wooster Square neighborhood by intensifying the use of existing buildings and increasing foot traffic near State Street.

ATTRACTING AND RETAINING QUALITY INVESTMENT

New Haven’s economy reflects its history and reputation as a city of makers. New Haven residents and companies usher in the latest advances in medicine, develop innovative applications for cutting edge software and technology, and produce delicious products for local, regional, and global food markets. The bioscience, information technology, and food industries are all major drivers of economic growth in New Haven.

In addition, with its large foreign-born population, New Haven is increasingly used as an entry point for foreign companies entering the U.S. market and is increasingly exporting its products abroad. Economic Development diligently works to unleash the growth potential of the city’s main industry clusters by providing technical assistance, promoting their products, and creating jobs pipelines—all of which expand the city’s tax base.

Made in New Haven

In 2016, Economic Development created the “Made in New Haven” program to promote New Haven as a place where artists, creators, and innovators make great products, offer unique and valuable services, and build new and successful businesses. “Made in New Haven” communicates what is unique about us, celebrates New Haven products and makers, and enhances a sense of pride in our city and our people.

Eligible businesses for the Made in New Haven brand include: (1) manufacturers and makers that produce goods in or in honor of New Haven; (2) retail establishments that sell such goods; and (3) production companies and web-based businesses that actively promote New Haven as an attractive place to live, learn, work, and play.

In 2017, Made in New Haven:

- Expanded its Made in New Haven enrollment to more than 85 manufacturers, makers, and artisans
- Distributed branded merchandise at regional economic development events
- Accepted historic invitation from Town Green Proprietors to sell on the New Haven Green
- Prepared gift baskets and art exhibitions featuring New Haven makers
- Prepared .pdf directory with live website links to participating businesses
- Sponsored several Made in New Haven companies to show at the “Made in Connecticut” exposition
- Received approval from the U.S. Patent and Trademark Office for the Made in New Haven logo



Biotechnology Industry in New Haven

Many small biotechnology firms thrive in New Haven and play an increasingly important role in the regional economy, driving housing and economic growth throughout the entire southern Connecticut area. The biomedical sector accounts for approximately 12,000 jobs in the New Haven region, and New Haven placed #13 in the FierceBiotech Top 15 cities for biotech venture funding in 2014.

- **Science Park**

Science Park is an urban reuse project and New Haven's premier Innovation District. It is located at the former site of the Winchester Repeating Arms Company and is owned and managed by a not-for-profit. Several of the buildings on the 80-acre campus have been successfully redeveloped. It is now home to many emerging biotech corporations and innovative not-for-profits, including:

- Clinical Data Inc.
- Vion Pharmaceuticals Inc.
- Ikonisys, Inc.
- Arvinas
- PhytoCeutica Inc.
- Carestream Health Inc.
- Pepsi Research Lab
- Yale University
- Blackboard/Higher One
- Connecticut Center for Arts and Technology (CONNCAT)



Science Park is one of New Haven's centers for innovation and economic growth, particularly in scientific research and financial services.

- **Achillion**

Achillion discovers, develops, and commercializes anti-infective drug therapies. In May 2015, it announced a worldwide license and collaboration arrangement with Janssen Pharma (a division of Johnson & Johnson), which included a \$225 million investment in Achillion. In June 2016 they expanded its footprint at 300 George Street to more than 40,000 square-feet and announced that staff had grown by 20 percent in the last year to 84 full-time employees.

- **Arvinas**

Launched in 2013 with \$15 million in capital (including \$1 million from DECD and Connecticut Innovations), Arvinas is commercializing Dr. Craig Crews's research into degradation of proteins to treat cancer and certain autoimmune diseases. In April 2015 it announced an R&D collaboration with Merck which could be worth up to \$434 million if all milestones are achieved.

- **Kolltan Pharmaceuticals**

A privately held clinical-stage company focused on the discovery and development of novel antibody-based drugs, the company now has two clinical stage development programs in oncology, and is advancing a research pipeline focused on TAM receptors for potential use in oncology, inflammation and autoimmunity.

- **Melinta Therapeutics**

An antibiotics company, it is engaged in the discovery, development, and commercialization of antibiotics to overcome drug-resistant, life-threatening infections.

RECENT VENTURE INVESTMENTS
Kolltan Pharmaceuticals - \$60M Oncology
Melinta Therapeutics - \$67M Antibiotics
Arvinas - \$40M Cancer, pro-inflammatory, autoimmune

Source: EDC New Haven / REX

Information Technology in New Haven

Information technology is thriving in New Haven. Locations such as the Grove, a co-working space, and MakeHaven, a maker space, are providing citizens with the ability to expand their businesses or build upon their innovative ideas. Additionally, Verizon named New Haven the best city in America to start a tech business, which indicates New Haven is providing the necessary resources to entrepreneurs and innovators to succeed.

- **Digital Surgeons**

Digital Surgeons, a New Haven-based digital marketing firm focused on brand and product development, achieved national recognition through its Webby Award-winning "GaGa's Workshop" microsite for Barney's New York. Other major clients include Lego, the U.S. Open tennis tournament, and Camelbak. Digital Surgeons currently employs 40 people and its owners are redeveloping, with the assistance of the State and City, a contaminated industrial site into New Haven's first tech park (see DISTRICT NHV) that will allow them to expand and attract other tech and new media companies. The \$17 million project is slated to open in 2018.



- **Grey Wall Software**

Founded in New Haven in 2011, Grey Wall Software created Veoci, a web and mobile-based emergency management system. A tool for communication across organizations with geo-locational specificity, the product is targeted at institutions such as municipalities, universities, and airports. Currently the company is testing new products and collaborating with the City to launch test runs of its software products. It has grown to 40 employees in the last year.

- **Technolutions**

Founded in New Haven in 1994, Technolutions has served the education industry for more than two decades. In 2000, Technolutions introduced Slate, its flagship information management system, at Yale University. Slate is the leading software product for college and university admissions offices. It facilitates all communications and document management between admission offices and prospective students. Over the past decade, Slate has been adopted by hundreds of colleges and universities and continues to grow quickly. It currently employs 60 people.

- **Continuity**

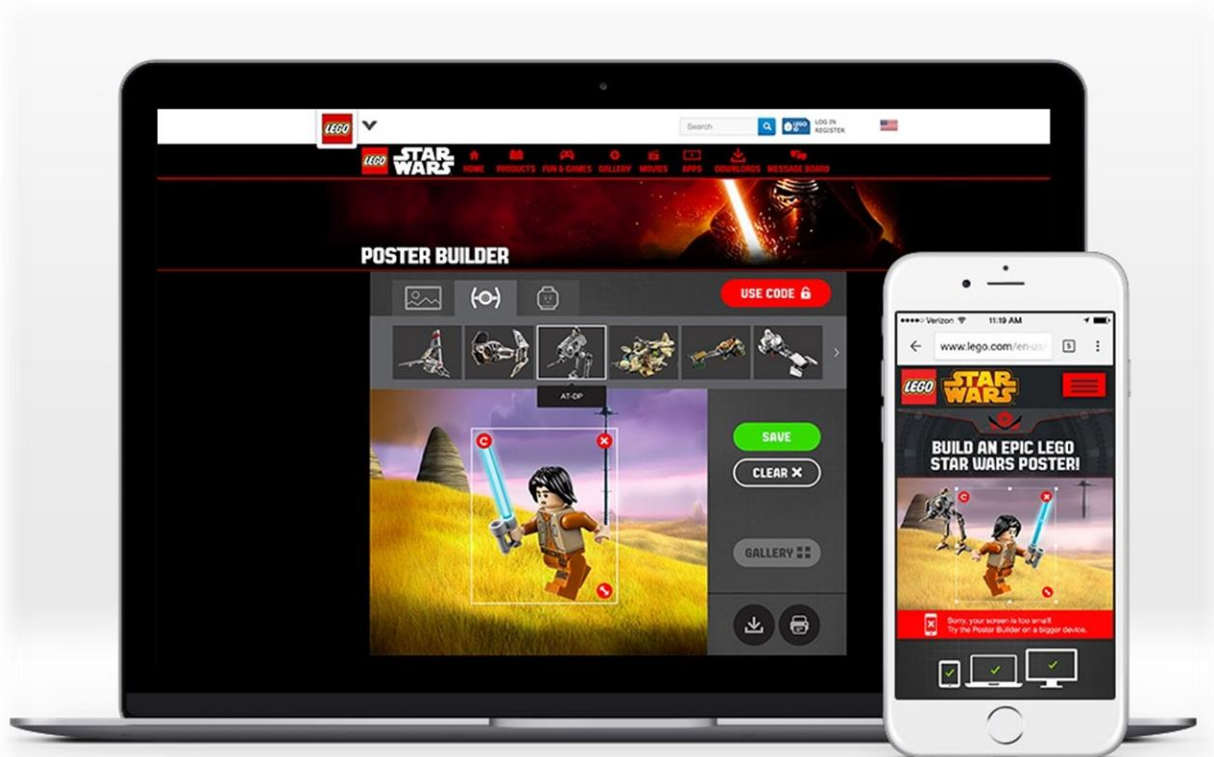
Continuity is the recognized regulation technology leader, providing compliance management software solutions for more than 200 financial institutions throughout the country. The company raised \$10 million in 2014, and opened a signature new office space in New Haven in June 2015. Continuity was named to the Inc. 5000 list of fastest growing companies in America for 2015. The company serves hundreds of institutions across 40 states.

- **SeeClickFix**

A New Haven "civic tech" start-up that is growing exponentially, SeeClickFix allows citizens to virtually report issues in their community and facilitates communication between citizens and government officials to address them. Cities all over the world have adopted the online platform including Detroit, Houston, Minneapolis, and Oakland. SeeClickFix's headcount is currently at 35 and the company plans to remain at that level.

- **Square 9 Softworks**

Square 9 is a New Haven-based, industry-leading developer of award-winning, business-centric software solutions. Dedicated to making content management available to organizations of all sizes, Square 9 designs highly-scalable solutions built on open architecture and cutting-edge technologies that drive efficiency and productivity across multiple vertical and horizontal business applications.



DISTRICT NHV developer David Salinas also co-founded New Haven digital marketing firm, Digital Surgeons. Its clients include many major companies like Lego, for whom it created an online interactive-marketing solution to serve its top performing franchise, Lego Star Wars

Food Industry in New Haven

New Haven's food culture defines what the city is today. From award-winning international cuisine to simple, savory delights, New Haven delivers a diverse and creative menu of options to satisfy any appetite and budget. Additionally, New Haven pizza establishments such as Frank Pepe Pizzeria Napoletana, Modern Apizza, and Sally's Apizza consistently rank as some of, if not the best, pizza restaurants in the country.

- **Onofrio's Ultimate Foods**

Onofrio's Ultimate Foods has a long history as a leader in the preparation and distribution of fine food products. Onofrio's provides their clients with expert advice, high quality private label food packing, co-packing, food bottling, sauce and marinade bottling, and food manufacturing.

- **Palmieri Food Products**

Becoming a full-scale operation by 1935, Palmieri Food Products has been manufacturing high-quality pasta sauces for over 80 years. As the company grew, they began to produce horseradish, cocktail sauce, and even began to privately label for several companies throughout the country. Palmieri Food Products is considered a "New Haven Original."

- **FreshBev Craft Juicery**

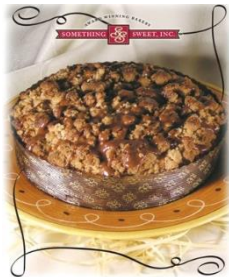
In pursuit of all fresh, all natural ingredients free from corn syrup, artificial flavors and preservatives, FreshBev developed a proprietary juicing process that retains the color, flavor, and nutrients of the fruit. Only four years after its founding, FreshBev was named the "Best Juice or Juice-Based Beverage" by BevNET, a beverage-oriented media company. FreshBev currently sells its juices across most of the United States in Whole Foods, H.E.B., and Stop & Shop, among other smaller retailers.

- **Long Wharf Food Terminal**

Since the 1960s, Long Wharf has been home to the New Haven Food Terminal, which houses successful restaurants and venerable food service companies including Carbonella and DeSarbo, Lamberti's Sausage and Carl's Boned Chicken. Directly adjacent to the Terminal is a mix of iconic New Haven food brands like Hummel Brothers, along with popular newer additions like Something Sweet and Gelato Giuliana. Further cementing Long Wharf as a food hub are the many food trucks that congregate on nearby Long Wharf Drive, drawing more activity to the area. In 2017, the city designated Long Wharf as a special vending district, allowing 29 food trucks to vend at the location.

- **East Rock Brewery Co.**

New Haven's first commercial brewery since Elm City Brewing Co. closed in 1998, East Rock Brewery Co. is set to open in fall 2017 after refurbishing a portion of the former Rockbestos factory. It will initially produce 4,500 barrels of beer per year to serve its own tasting room as well as the local market, but it has plans to eventually expand their operation to more than 45,000 barrels per year.



Businesses located on Long Wharf include: Something Sweet, Lamberti's Sausage, Gelato Giuliana, and Hummel Brothers.

Professional Services

Professional and government services are also important to the local economy. With proximity to a large number of federal and state administrative agencies as well as federal and state courts, New Haven has a large concentration of attorneys and legal service companies. There are 110 law firms in the city, representing approximately 10 percent of the state total. In addition, there are 75 architecture firms employing more than 500 professionals and support staff. The government sector includes major federal facilities, primarily at the Giaimo Federal Services Building in Downtown. The Federal Bureau of Investigation, Naval Reserve Center and United States Coast Guard also have stand-alone regional centers in the city. New Haven is also home to two notable financial service firms, Knights of Columbus and Higher One.

- **Knights of Columbus**

Knights of Columbus, the world's largest Catholic fraternal service organization, was founded in 1882 and is headquartered in New Haven. A Fortune 1000 insurance company, it employs 850 people, with more than \$100 billion in life insurance, annuities, disability insurance, and long-term care insurance in force, and \$22 billion in assets.

- **Blackboard/Higher One**

Founded by Yale alumni in 2000, Higher One provides students with customized financial services through college business offices. The company provides services to five million students at more than 700 colleges and universities. It is consistently rated one of the top places to work in Connecticut and is part of Deloitte's "Fast 100." In August 2016, the international education technology company, Blackboard, acquired Higher One, an acquisition that will allow for collaboration with software such as CASHNet, which provides secure online payment for tuition and education fees.

International Business

As a diverse and international city, New Haven continues to build strong international business connections based upon bringing foreign companies to New Haven and exporting "Made in New Haven" goods to other countries.

- **Advanced Manufacturing**

Despite significant deindustrialization, manufacturing and food services remain important components of New Haven's overall economy, but with fewer employees, far greater specialization, and more advanced fabrication methods. New Haven is home to several specialty manufacturers, such as Assa Abloy, a Swedish manufacturer and global leader in lock production. Assa Abloy has actually been named on Forbes's list of 100 most innovative companies multiple times, most recently in 2016. Other examples of New Haven advanced manufacturing firms include Uretek, a high-tech fabric manufacturer; Radiall, a global manufacturer of connectors for use in electronic applications; and Space Craft Manufacturing, a precision parts manufacturer for jet engines.

- **Hub55**

In April 2017, New Haven welcomed Hub55, a Brazilian business incubator, to the city. The partnership between Brazilian consulting firm Paseli Consulting and New Haven City Hall aims to bring Brazilian businesses in information technology, medical equipment and aerospace to New Haven. The hub seeks to attract companies of varying levels of maturity and will provide guidance in addition to office and co-working space.

- **Bridge Innovations**

Bridge Innovations is an accelerator focused on medical device startups that are developing surgical robots, minimally-invasive procedures and therapeutic devices, and digital connectivity technologies. In partnership with Israel's Technological Incubators Program (TIP), Bridge Innovations facilitates the incubation of ventures in Israel and their acceleration in New Haven to benefit from its quickly expanding medical device ecosystem.

DEVELOPING LOCAL JOBS AND BUSINESSES

To grow New Haven's economy and prepare residents for the jobs of tomorrow, Economic Development works with the City's Board of Education, Gateway Community College, Southern Connecticut State University, and other stakeholders to develop a highly trained workforce for the city's emerging employment growth sectors, including bioscience, information technology, and food processing.

Economic Development's work is integral for ensuring inclusive growth in these fields—economic growth that benefits all of New Haven's residents. Many cities across the U.S. are struggling to manage the recent influx of the mostly young and educated workers in knowledge economies who prefer urban living. Without intentional intervention or management, the situation has too often exacerbated preexisting inequalities along the lines of wealth, education, and race. At best, certain populations fail to share in the economic gains, and, at worst, the prices of housing and services rise so much that long-term residents are displaced from their neighborhoods.

Instead, New Haven is taking advantage of this great opportunity and using the influx of capital, talent, and ideas to break down historic inequalities. Shared growth not only ensures greater social cohesion, but also helps build a thriving ecosystem of connected parts. An economy in which all parts of a city take part in and benefit from has the potential to sustainably raise substantially more tax revenues compared to just a successful business, industry, or downtown. In the Office of Economic Development, encouraging inclusive growth means both developing local jobs and businesses and revitalizing New Haven's neighborhoods. In terms of developing local jobs and businesses, Economic Development 1) creates job pipelines that train New Haveners in the skills needed by New Haven's growth sectors, 2) expands access to innovation and entrepreneurship, and 3) provides extensive resources and technical support.

Workforce Development

Jobs Pipeline

Jobs pipelines exist in order to boost local hiring in growth sectors. The city creates and backs programs that train New Haven students and adults in skills in demand in our major growth sectors. In fact, the Brookings Institute finds that half of all STEM occupations are available to workers without a four-year college degree. In addition, knowledge economies create jobs in auxiliary sectors, including housing, construction, medical, tech, services, and retail. Economic Development works to ensure New Haveners are qualified applicants when applying to these jobs. Local hiring is a key factor in achieving inclusive growth. Economic Development has helped create a general pipeline, New Haven Works, and two specific pipelines in bioscience and tech.

New Haven Works

In January 2012, the City created the Jobs Pipeline Working Group, which in turn developed a proposal for a new organization called New Haven Works. New Haven Works launched on December 5, 2012. Economic Development staff participated in the working group, researched best practices, conducted field visits to the workforce development boards in Bridgeport and New Haven, and helped draft the final set of recommendations. EDA staff continue to assist New Haven Works with its work plan and outreach efforts to local employers.

Since New Haven Works opened in 2015, it has placed over 1000 residents into employment and established relationships with 60 local and regional employers. Over half of New Haven Work's placements benefited residents of the most underserved neighborhoods in New Haven.



New Haven resident utilizing New Haven Works computer lab and receiving assistance with job applications.

City of New Haven Economic Development, Official Statement

Bioscience Career Ladder

New Haven is home to the largest concentration of life science companies in Connecticut, and is widely recognized as the #2 bioscience cluster in New England. While much smaller than the Boston cluster, this industry has the potential to grow, mainly due to the high quality and volume of research at the Yale School of Medicine. To that end, Economic Development has worked to bring together workforce development partners to more fully understand job typologies, education and training requirements.

Three initiatives are underway:

1. A partnership with CURE to assist New Haven-based companies with key capital purchases that will support their base of operations in New Haven.
2. Internship programs, administered through the Workforce Alliance or CURE.
3. New academic pathways leveraging the new science building at SCSU. In 2016, Economic Development continued to work with the EDC and Southern Connecticut State University on the Bioscience Career Ladder. The City signed a memorandum of agreement with SCSU to advance the career ladder through four new academic pathways: BS/Biotechnology; BS/Chemistry (with biotechnology concentration); BS/STEM (with biotechnology concentration); and 4 Graduate level certificate programs.

To further support SCSU in this effort, the City made available an initial start-up grant and provided support to a new industry advisory committee. To date, the Connecticut Board of Regents approved the new BS/Biotechnology degree, interns have been placed at two biotech companies and SCSU has convened an advisory committee to further work on curriculum, articulation agreements, and fund-raising activities.

Tech Career Ladder

Given the growth of the IT/Tech sector in Downtown New Haven, the Office of Economic Development worked with Gateway Community College to launch a new “Learn to Code” certificate course, with tuition scholarships available for five New Haven residents. The course launched in February, 2016 with the goal of its first graduates entering the workforce later in the year. All of the graduates of the program found work in the New Haven area and are utilizing the tools learned in the course. The “Web Development Certificate” program, as it’s now called, is in its second year. Through the success of this course and guidance from Gateway’s Advisory Committee, Gateway is also offering, new for fall 2017, Certificates in Business Analyst as well as Web Design.

As part of this pilot project, Gateway also convened the previously mentioned advisory committee to peer review the curriculum and monitor the project in future years. The ladder is one of a number of important initiatives related to tech jobs: the Grove continues to work on the A-100 coding project; and GWCC has brought together industry partners, the Workforce Alliance, and the City to apply for a federal “Tech Hire” grant.

Innovation and Entrepreneurship

Over the past few years, New Haven has continued to make progress in its efforts to develop an innovation ecosystem. The consortium that the City assembled in 2013, under the banner of "The Grid New Haven" and led by the EDC, continues to operate under a series of grants from the State of Connecticut. Over the three-year period ending in 2015, The Grid provided assistance to 109 companies, which included technical assistance around ideation, creating and refining business plans, business forecasting, and customer validation processes. The Grove also provides connections with mentors, capital sources, space providers, and talent.

As for co-working space in the city, The Grove, which as of the end of 2014 counted nearly 160 members, moved into its present space at 760 Chapel Street at the end of 2013, and in early 2015 expanded into an additional 4,000 square-feet in the building next door.

During 2014, Economic Development pivoted to focus more on supporting "Stage 2" companies, namely, companies that have sales and more than 10 employees. Since then a cohort of these companies, including Continuity, SeeClickFix, and Square 9, have secured significant funding and expanded office spaces and workforces substantially. Economic Development has worked with Continuity and SeeClickFix on talent development efforts and securing new office space.

Regional Workforce Development Board

Since 2013, a staff member from the Economic Development Agency has sat on the Regional Workforce Development Board (RWDB). The RWDB, also known as the Workforce Alliance, serves as the federal- and state-funded hub for workforce programs, provides policy and strategic direction, oversees the use of workforce development funds and convenes key players in workforce/economic development, education and other appropriate systems. A key element of the Workforce Alliance is the One Stop Center which provides employment and counseling services, along with avenues for training and skill development.

In 2015, the Workforce Alliance transformed itself as a result of the Workforce Innovation and Opportunity Act (WIOA), which was signed into law in 2014. With that new law's emphasis on improving service to, and placing into employment, young adults between the ages of 18 and 24, the Workforce Alliance reduced the size of its board of directors and added key industry/academic partners, including representatives from Alexion and SCSU.

Working Cities Challenge

In early 2017, Economic Development applied for and secured a Working Cities Challenge planning grant. The Working Cities Challenge, sponsored by the Federal Reserve Bank of Boston, is designed to support innovative problem-solving partnerships that address complex economic, community, and workforce development issues in Connecticut's cities. The Fed is looking for communities that can develop collaborative solutions to improve the lives of low-income residents that use evidence-based outcome measurement.

Given these parameters, the City's application focused on improving New Haven's public transportation network to better connect low-income residents without cars to jobs. During the summer and fall of 2017, the team will engage in community outreach and participation efforts to draft and submit a full implementation grant application to the Fed.



Recent meeting with key stakeholders for the Working Cities Challenge.

Business Development

The Office of Economic Development's initiatives in regards to business development include supporting food-based businesses, assisting small- and minority-owned contractors, encouraging entrepreneurship, and providing technical assistance.

Food Business Development

Food Incubator

Economic Development proposes to create New Haven's first food-based business incubator and co-working program to foster early-stage catering, retail and wholesale food businesses. By covering the capital cost of shared kitchen facilities, which are made available to members on a timeslot basis, the incubator enables a business to develop to the stage where it can invest in its own facilities - by assisting its tenants with business planning, access to capital, mentoring and other business facilities.

The continued popularity of Long Wharf as a food production and food service destination has inspired the City to establish a food-based business incubator. Entrepreneurs have expressed great interest in the creation of a place where early-stage food-related businesses could share production space. The incubator would help both small restaurants and other specialized food service companies take root and grow in the New Haven-area, strengthening an already-bustling gastronomy industry.

Moreover, the incubator is intended to be a supportive community, creating a sense of shared values and a commitment to success. It will provide subsidized use of space and training to cultivate the development and growth of small businesses and address food accessibility, neighborhood revitalization, and small business development, thereby creating jobs and employment opportunities for New Haven residents.

Mobile Vending

In 2017, Economic Development, secured Board of Alders approval of a comprehensive rewrite of the mobile vending ordinances that regulate food trucks in New Haven. These new ordinances increase oversight, bolster systemic fairness and transparency, and improve public safety through stricter enforcement. The ordinances also expand opportunity for food entrepreneurs by creating four managed special vending districts, with significant additional spots for food trucks and carts in New Haven.

To celebrate the city's growing mobile food vending culture, and to provide local businesses and vendors with exposure to the broader regional community, the City sponsored the third annual Food Truck Festival on Long Wharf on June 3, 2017. The free, all-day event featured more than 30 New Haven-area food trucks and craft vendors, beer gardens, a Dragon Boat Race, bike exhibitions, and musical entertainment, and attracted thousands of people.



Small Contractor Development Program

Healthy local businesses are a basic component of strong, sustainable communities. They create job opportunities for residents and keep money circulating in the local economy. To that end, the City adopted Section 12 1/4 of the New Haven Code of Ordinances in 2001, which created the Small Contractor Development Program (SCD). Through this ordinance, the City provides opportunities to small and minority contractors to establish parity in New Haven construction contract procurement and provide them with opportunities to grow, compete and succeed. The SCD program uses a two-pronged strategy to achieve an increase in Minority Business Enterprise (MBE) and Women's Business Enterprise (WBE) contractor participation for public projects that are funded, in whole or part, by City funds or by a developer that has received any type of subsidy from the City.



Small Contractor Development Program

At the start of the program in 2001, 4.7 percent of City contracts were awarded to women and minority business enterprises. In 2015, 25.7 percent of the \$13.6 million in City construction contracts were awarded to women and minority businesses, coming out to \$3.5 million in contracts. In 2016, \$4 million in contracts were awarded to New Haven resident construction businesses, and \$2.1 million in contracts were awarded to women and minority businesses. There are currently 125 contractors registered in the program. During 2016, Economic Development provided assistance to 828 small-, women-, and minority-owned contractors with contract issues, bid documents, payments, credit, contractor conflicts, and registration.

Developing Entrepreneurship

Project Storefronts

Negotiating with property owners for access to empty locations, Project Storefronts provides these spaces to budding entrepreneurs via a competitive application process. By gaining access to these spaces, these entrepreneurs then learn how to become successful businesspeople, even as they test the viability of new innovative business and retail ideas. The community as a whole also benefits, by bringing community-oriented, cutting-edge arts-related businesses to life in formerly-vacant retail spaces.

In 2016, Project Storefronts:

- Provided 80 small business owners with access to free expertise and/or microloan
- Launched two new, thriving storefront businesses in New Haven
- Celebrated 2-year and 1-year anniversaries for graduated businesses
- Attracted more than 4,500 people to promotional events
- Received coverage in the CT Mirror, New Haven Register and other publications

Start Up Weekends

Part of Start Up America, this weekend is held to foster entrepreneurial spirit and innovation as it includes events for entrepreneurs to pitch ideas, build teams, network, learn skills and find mentors. It is an intense 46-hour event which focuses on conceptualizing a business model that can range from a web or mobile application to a physical device, which could form the basis of a credible business. In 2016, the University of New Haven partnered with The Grove, New Haven's co-working epicenter, to hold the event. Students from six Connecticut universities gathered in New Haven to brainstorm ideas for products and services, test marketing ideas with potential customers, and receive professional mentoring from 22 entrepreneurs within the region. The event was recognized at the Connecticut Entrepreneur Awards Ceremony where it received a first-place award in the community-favorite education category.

Technical Assistance and Business Services

Business Services

Economic Development staff work to attract new businesses to New Haven and to retain existing New Haven businesses. Economic Development staff routinely provide advice, counseling, and technical assistance to a variety of walk-in clients. In 2016, 216 small business owners and would-be entrepreneurs received services in areas such as:

- How to start and register a business
- How to secure necessary state and local licenses and permits
- How to apply for local, state, and federal business/tax incentives
- How to secure and evaluate different financing options

Historically, approximately 10 percent of all those who make inquiries go on to establish businesses within the city, typically home-based businesses with one or two employees.

Small Business Technical Assistance & Outreach

Economic Development partners with local organizations such as the Greater New Haven Business & Professional Association (GNHBPA), Spanish American Merchants Association (SAMA), Service Corps of Retired Executives (SCORE) and the Connecticut Small Business Development Center (CSBDC) to provide technical assistance and mentorship to New Haven small businesses in marketing, bookkeeping, and insurance. Economic Development staff strive to enhance the City's tax base and support business, community, and resident employment by using public resources to leverage private sector investment. To this end, staff provide businesses and developers with help finding space to relocate or expand, as well as assistance in navigating local state and federal incentive programs such as:

- The City of New Haven Property Tax Assessment Deferral Program;
- The State Enterprise Zone & Urban Jobs Tax Abatement Program;
- State Urban Site Tax Credits Program;
- State Research & Development Tax Credits;
- State Small Business Express Program;
- State Job Creation Tax Credit Program; and
- Programs and Incentives related to the State's Public Utilities, including C-PACE and the Connecticut Green Bank.

Small Business Resource Center

Opened in May 2014, the Small Business Resource Center (SBRC) has assisted more than 300 small businesses in the Greater New Haven area. The mission of the SBRC is to assist in the development and growth of small businesses and entrepreneurs, by providing them with technical assistance and access to capital. The core initiatives of the SBRC are business development, business retention and attraction, neighborhood business revitalization, and business advocacy. Research supports that effective and comprehensive small business programming leads to new entrepreneurs becoming successful business owners.

The SBRC plays a lead role in encouraging the development of entrepreneurship and microenterprises by providing capital-building initiatives that assist in small business growth and job creation. Implementation of this strategy will lead to future economic growth and prosperity for the city and the region. In the fall of 2016, the SBRC partnered with the U.S. Small Business Administration (SBA) to provide the "Ready, Set, Go" entrepreneurial training program to more than 30 participants. The SBRC tracked each participant, offering them post-training, one-on-one assistance with business plan development, financing, and other technical assistance as required. Also in the fall of 2016, the SBRC partnered with Liberty Bank to offer 20 existing businesses training in topics such as time management, tax planning, and other pertinent topics required to run a successful business.

The SBRC is working to bring services to neighborhoods throughout the City, and continues to create a formal "One Stop Shop" where new entrepreneurs and current business owners alike can obtain resources and services that will support business start-ups and growth. The SBRC recognizes that start-ups foster job creation and yield personal, community, and economic development; implementation of this strategy will continue to serve as an important catalyst for economic growth in the City of New Haven.



In partnership with the EDC, New Haven supports the growth and development of new businesses in many ways. These efforts span many industries, and range from educational programs to networking support.

REVITALIZING NEW HAVEN'S NEIGHBORHOODS

To revitalize its neighborhoods, New Haven takes a three-pronged approach: 1) targeted economic development through a “Main Streets” approach, 2) leveraging public financing as a catalyst for private investment, and 3) neighborhood-specific development initiatives that preserve historic buildings, integrate resilience planning, and facilitate place-based investments.

Neighborhood Commercial Revitalization

In 2016, Economic Development continued identifying, designing, and implementing “Main Streets” improvements and activities in the Whalley, Grand, and Dixwell Avenue districts. For instance, each corridor received a street-level sidewalk “inventory,” which the City then used to repair specific sections of sidewalk in Fall 2016 and Spring 2017. In addition, Economic Development worked to increase green spaces and beautification by planting new trees along the main streets. In addition, staff pursued the following avenue-specific initiatives:

- Whalley Avenue: Worked with the Main Streets stakeholder team to plan and deliver “Wheels on Whalley,” an annual New Haven Bike Month neighborhood event in May
- Grand Avenue: Repainted crosswalks, worked with the Grand Avenue Special Services District (GASSD) to improve street cleaning and trash pickup, updated the GASSD website, and nearing completion on a revamped “Business Map & Guide” for Grand Avenue businesses
- Dixwell Avenue: Made plans to improve the Broadway “gateway,” moved forward with the Q-House project, and developed revitalization plans for Dixwell Plaza



From left: Wheels on Whalley participants, The historic Grand Ave Bridge (Chris Randall Photography).

In 2017, Economic Development will increase its efforts to recruit desired businesses to those corridors, will work with Transportation, Traffic & Parking to relight all of the decorative streetlamps on Whalley and Grand Avenues, and reinstate, in collaboration with Parks, Recreation & Trees, a planter/flower program for each corridor.

The City and EDC also work with several commercial district organizations to promote local businesses and provide additional services in these neighborhoods:

- Town Green Special Services District
- Grand Avenue Special Services District
- Whalley Avenue Special Services District
- Chapel West Special Services District

Leveraging Public Financing

Municipal Development Incentives

The City rarely grants full tax abatements; instead, it looks for ways to bring in low or no-cost financing to a project by aggressively targeting State and Federal assistance. The City further encourages development by phasing in property tax assessments through two as-of-right assessment deferral programs, which provide five-year or seven-year tax deferrals on the increased assessment attributable to the improvements.

Façade Improvement Program

The Façade Improvement Program is one of the tools Economic Development uses to fight blight in New Haven neighborhoods, to stimulate economic growth, promote the welfare of its citizens, and strengthen local communities through a combination of redevelopment and rehabilitation. In 2016, the Program supported 19 Façade projects, with eligible grants totaling in excess of \$700,000, leveraging nearly \$15 million in private investment. Each dollar of public financing brings in over \$21 in private investment.

FY 2016-2017 Highlights:

- **35-39 Church Street, LLC, (Downtown):**
Located at the corner of Church and Crown Streets, the Washington Building was built by Mayor Edward M. Clark in 1890. Designed with large, sweeping windows, fluted columns, an ornate cornice and decorative stonework, the site has been the home to a variety of retailers and restaurants over the years, while upper stories contained offices and studios. The current owners, the Hurley Group have embarked on a \$5+ million restoration of the façade, while completely renovating the interior of upper stories into 18 residential units. The project is expected to be complete in the summer of 2017.
- **Bender Plumbing and supplies, Inc., 335 East Street (Mill River):**
Bender has maintained their New Haven showroom at this site for a number of years and, as part of their 2015 decision to remain in New Haven and expand in Mill River, embarked on a \$5 million upgrade of the building, expanding the Showroom to the second floor. A façade grant at this site was the last part of the City's financial support of this company's New Haven expansion. The project added 12 new positions in 2016 and will add another 12 jobs once the showroom is completed.
- **Caffe Bravo, 794 Orange Street (East Rock):**
Caffe Bravo was formed by John DiPaola, who immigrated to the U.S. from his hometown of Amorosi, Italy, and John's wife, Mary Lou, in 1994. John brought the traditional Italian cooking passed down from generation to generation to the quaint East Rock neighborhood of New Haven. From a neighborhood market, Caffe Bravo has grown into one of New Haven County's best-known eating establishments.

FY 2017-2018 Initiatives:

- **“Main Street” Corridors**
One of the focuses of the Façade Improvement Program over the next year is to coordinate the implementation of a pilot program in “Main Street” corridors (Whalley Avenue, Dixwell Avenue and Grand Avenue). This program will provide a portion of the façade grant to the grantee at the start of the project, with a Leasehold Improvement Program for Small Businesses, a new program from Livable Cities Initiative (LCI). The goal of these new pilot programs is to help stimulate small business development in these neighborhoods.



A before and after picture of Bender Plumbing Supply Company's new facility which was part of the Façade Improvement Program.

City of New Haven Economic Development, Official Statement

Livable City Initiative

The City created the Livable City Initiative (LCI) as a main platform for growth. LCI is a neighborhood focused agency whose primary mission is to enhance the experience of the individuals who live and work in the City of New Haven. LCI achieves this mission through enforcing the city's housing code and public space requirements; implementing housing programs to support high quality, affordable, and energy efficient housing; educating and increasing awareness on solution for neighborhood concerns; and designing and implementing public improvements and programs to facilitate safer, healthier, and more attractive communities.

During Fiscal Year 2015-2016 alone, LCI attended 235 community meetings, addressed 15,134 cases of blight, monitored 601 vacant homes, removed 240 tons of trash, and maintained 215 properties. In addition, LCI had 24 housing preservation and development projects with 356 units in development, of which 60 were homeownership units.

Neighborhood-Specific Initiatives

Mill River District Planning Study

In 2014, New Haven completed an economic development study of the Mill River Industrial District. The district is home to a municipal development plan area, which has been instrumental in stabilizing the district and addressing deteriorating and vacant properties along the river to take advantage of emerging growth opportunities in advanced manufacturing, food processing and home improvement product sales. The study will help guide development in Mill River to preserve existing jobs and create new ones, while enhancing the district's physical appearance through public and private investment.

Current efforts include the research of waterfront protection methodologies, development of an infrastructure investment strategy, the Farnam Courts Redevelopment, and redeveloping the CT Transit garage at 470 James Street (DISTRICT NHV). In 2016, work was completed on a previously awarded CDBG-DR grant (\$192,000) to plan coastal resiliency improvements within the district.

Middletown Avenue Streetscape Study

Economic Development is studying corridor improvements to the important Middletown Avenue gateway into New Haven, from I-91 Exit 8 to Ferry Street. The goal is to improve aesthetics, increase safety, and encourage property development in the area. The introduction of Complete Streets principles to this corridor, a primary access point into the Fair Haven neighborhoods, will help to place a greater focus on this important route, encourage redevelopment of underutilized parcels in the area, and improve safety for all modes of transportation.

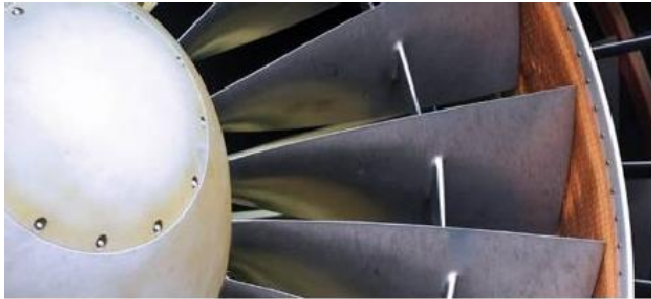
Wooster Square

- **Wooster Street Neighborhood Improvement Association**

In 2016, Economic Development collaborated with merchants and the Alder to create the Wooster Street Neighborhood Improvement Association (WSNIA). The WSNIA collects dues from business and property owners to in turn provide street maintenance (via Downtown Ambassadors), infrastructure improvements, and public events which market Wooster Street, such as "An Old Fashioned Christmas on Wooster Street."

- **Wooster Square Planning Grant**

Economic Development obtained a \$125,000 grant to develop, design and provide development guidance for the Wooster Square neighborhood and southern portion of Downtown along State Street. The project has featured significant community involvement in the form of two well-attended community meetings, four stakeholder advisory meetings and opportunities for public comment at the City Plan Commission. In addition, the grant funded a transportation demand management roundtable with major employers in the Downtown Crossing area with the intent of developing shared "best practices" to reduce single-occupant trips to the area.



The City of New Haven developed a comprehensive economic development plan for the Mill River Industrial District. The plan intends to preserve the 3,000 existing jobs and help bring new businesses to the district while revitalizing underutilized spaces like the Powerhouse Building at 458 Grand Avenue. It is already home to many manufacturers, including Reclamation Lumber, Space Craft, Radiall and more.

River Street Municipal Development Plan

The City created the River Street Municipal Development Plan (MDP) in 2002 to ensure the responsible development of the 53-acre industrial district in Fair Haven bordered by James, Ferry, and Chapel Streets, and the Quinnipiac River. To date, the City has approved over \$20 million worth of investment from City, State, and Federal funds to generate jobs, preserve historic buildings, explore the creation of entertainment, sports, and "maker" space, and enhance access to the waterfront. There are also expanding businesses like New Haven Awning and Fair Haven Furniture. Successes to date include:

- New businesses attracted: Capasso Restoration, New Haven Awning, EHR Design and Luckey Playgrounds.
- Approximately 100 new jobs.
- Lloyd Street Reconstruction and boat launch using \$1.6 million in EDA and EPA grants.
- 46 River Street remediation by DuPont.
- 56 River Street remediation complete using EPA funds.
- 100 River Street remediation by Hess Oil.
- 34 Lloyd Street for Capasso Restoration using Department of Economic and Community Development (DECD) and City funds.
- 198 River Street (Bigelow Boiler) partial building demolition, stabilization and abatement.
- 142 River Street partial demolition.
- Reconstruction of River Street and blocks of Blatchley Avenue, Lloyd and Poplar Streets, using DECD, EDA and EPA funds.
- New sidewalks on Chapel Street.
- Property and building improvements at 34 Lloyd Street, 90 River Street, 168-196 Chapel Street, 24 River Street and 76 Blatchley Avenue.

In 2016, progress was made in remediating redevelopment parcels, improving infrastructure, and preserving the historic buildings in the 53-acre project area. Several milestones were achieved in 2016 as well as Phase III of an Environmental Site Assessment was completed which lead to the application of initial cleanup funds for 198 River Street. Additionally, the Board of Alders approved a lease with Capasso Restoration to renovate the historic Bigelow Boiler buildings at 198 River Street. Lastly, a shoreline stabilization study including plans and specifications to protect the River Street shoreline was completed as well.

St. Luke's Development Corp.

In 2016, a Phase III Environmental Site Assessment and Hazardous Building Materials Survey of several properties was completed using a \$200,000 grant from the state DECD to support a mixed-use development at Dickerman Street, Sperry Street, and Whalley Avenue.

Upper State Street Business District

Economic Development collaborated with retail businesses and restaurant owners in 2016 to reinvigorate merchant association and assisted Transportation, Traffic & Parking with addressing parking conditions and regulations.

Long Wharf

- **TOD Grant**

New Haven won \$1 million in state funds for responsible growth projects that create jobs in the Long Wharf area. The City will use \$500,000 for infrastructure improvements to Long Wharf Drive including a two-way cycle track on the water side of the street and a more organized area for food trucks. This is part of a larger Long Wharf makeover that will transform the area with a new Boathouse, sidewalk improvements, the Farmington Canal Line and Vision Trail as well FEMA-funded repairs to areas damaged by recent storms. Improving New Haven's water front results in significant returns in quality of life and desirability of living in New Haven.

- **Boathouse at Canal Dock**

The City is constructing a new \$40 million boathouse, education and waterfront recreation center. It will restore the public's access to the waterfront and be available to host a variety of water-related activities including crew, kayaking, canoeing and sailing as well as serve as the new home for parts of UNH's Marine Biology Program. The project is funded by ConnDOT as part of the I-95 mitigation program, a project backed by the Federal Highway Administration (FHWA). The boathouse platform is complete, and construction for the final phase of the project began in early 2017.



A photo of New Haven's picturesque harbor. Completion of the Boathouse and other waterfront improvements will access to use and the use of New Haven's waterfront.

IMPROVING NEW HAVEN'S REGIONAL COMPETITIVENESS

New Haven is not only attracting investment and business, but also people. Compared to a state growth rate of 4.9%, New Haven's population grew 5.5% since 2000, making it the fastest growing major New England city. Over the 2000s, it also achieved the 6th highest increase in college degree attainment in the nation. And, by 2025, New Haven is set to add an additional 10,000 to 15,000 people to the city. People are attracted to New Haven's extensive cultural amenities and high quality of life. For example, 17% of New Haven is dedicated to parks and open space, a ratio on par with famously park-friendly cities such as San Francisco. In addition, New Haven contains 40 miles of bike lanes, forming the most extensive network in Southern New England. New Haven's competitiveness relates to four factors: 1) arts and culture, 2) high quality health care, 3) extensive transportation networks, and 4) impressive education and innovation.

Arts & Culture

New Haven is home to world-class shopping featuring more than 50 specialty boutiques in four distinct shopping districts - Broadway, Chapel, Audubon and Ninth Square - all of which are easily navigable on foot. Located in the heart of the Yale campus, the Broadway District features the largest Barnes & Noble Bookstore between Boston and New York City, Connecticut's third Apple Store, J. Crew, and the state's first Urban Outfitters. The Chapel Street Historic District, home to the newly-refurbished Yale Center for British Art and Yale University Art Gallery, also features several high-end shops as well as one-of-a-kind boutiques. The Audubon Arts & Retail District features multiple art galleries and learning centers as well as a unique home furnishing store. Ninth Square, a revitalized area between the heart of Downtown and Union Station, is home to several Project Storefronts businesses including the Grove and Artspace, as well as some of the city's best wine bars, restaurants, and coffee shops.

New Haven is a regional culinary destination, drawing visitors from around the state and southern New England. Options range from world-famous "New Haven-Style Pizza" to Louis' Lunch, the site of the first hamburger, to international cuisines including Ethiopian, Spanish, French, Greek, Latin, Mexican, Italian, Thai, Chinese, Japanese, Vietnamese, Korean, Indian, Jamaican, Cuban, Peruvian, Syrian/Lebanese, and Turkish. This wide selection of options at a variety of price points has made New Haven the culinary heart of Connecticut, and has attracted investment from major regional and national restaurateurs and companies. Recent additions include Tarry Lodge by Mario Batali, Five Guys Burgers and Fries, and Shake Shack.



Clockwise from top left: Arethusa Farm Dairy on Chapel Street, the Apple Store New Haven and Barbour on Broadway, ShakeShack on Chapel Street and J. Crew on Broadway.



The Yale Center for British Art holds the largest and most comprehensive collection of British art outside the United Kingdom, presenting the development of British art and culture from the Elizabethan period to the present day. (Photo courtesy of Great Buildings).

Art Galleries, Museums & Theaters

New Haven has a strong collection of museums, art galleries and theaters that attract approximately 800,000 visitors to the city each year:

- **The Yale Art Gallery** possesses a remarkable collection of masters and modernist works that elevates it to the level of major public art museums in cities like New York and Washington, D.C. The Gallery was built by modernist architect Louis Kahn. The Gallery underwent a \$15 million expansion in 2012 (part of a larger fourteen-year renovation effort totaling \$135 million), earning the American Institute of Architects' Honor Award for the preservation and restoration efforts. An estimated 150,000 visitors attend the Yale Art Gallery each year.
- **Yale Center for British Art** contains the largest, most comprehensive collection of British art outside of the United Kingdom. It reopened to the public in May 2016 after a 16-month closure that included a \$33 million "conservation" effort to restore the Louis Kahn-designed treasure to the architect's original vision. The British Art Gallery attracts an estimated 110,000 visitors per year.
- **The Peabody Museum of Natural History** has an incredible collection of artifacts and exhibitions spanning four billion years of history. It is ranked among the top 12 natural history museums in the nation, and benefits from frequent exhibitions coordinated with Yale professors and their work. This is the most-visited museum in New Haven, with 160,000 visitors annually.
- **The Knights of Columbus Museum** hosts special religious art exhibits and information about the organization's history and roots in New Haven. Approximately 26,000 visitors come to this museum every year.
- **The Museum of New Haven** provides a thorough history of the Elm City from its founding in 1638 to date. Whitney Library and other special exhibitions offer its 15,000 annual visitors many opportunities to engage with the rich history of the city.
- **The Connecticut Children's Museum** houses day care programs, education for care providers, and an interactive museum. It is an exceptional, cutting-edge facility with roughly 16,500 visitors annually.
- **The Shubert Theater** welcomes approximately 100,000 patrons annually to see the latest Broadway shows, from *Book of Mormon* to *Les Miserables*. It celebrated its centennial in 2015 and has recently completed Phase I of its planned renovations.
- **The Long Wharf Theatre** attracts more than 100,000 patrons annually to view imaginative revivals of classics and new works by world-renowned playwrights. Past productions have earned Pulitzer Prizes, Tony Awards, and the New York Drama Critics' Award.
- **The Yale Repertory Theatre** is a New Haven theater institution that partners with the premier Yale Drama School to produce new works that have garnered Tony Awards and Pulitzer Prizes. With five or six new works each season, the Yale Rep draws thousands to New Haven regularly.
- **The New Haven Symphony Orchestra** is the fourth-oldest symphony orchestra in America. It is housed at Woolsey Hall at Yale while also touring internationally. The well-attended Symphony draws 120,000 spectators annually.
- **College Street Music Hall** opened at 238 College Street, on the site of the old Palace and Roger Sherman Theatres, in May of 2015. The 2,000-seat fully-renovated venue is located in the heart of downtown New Haven's arts and entertainment district. It joins the scene as the hub for live music performance in New Haven and all of southern New England with an average of five events per month.

Long Wharf Visitors Center

In 2015, the City of New Haven issued an RFP and selected Long Wharf mainstay Brazi's Restaurant to renovate and enhance the Long Wharf Visitors Center as a food service, resource, and information center. Brazi's is restoring and augmenting the facility's amenities for visitors and travelers by creating an affordable take-out restaurant that will complement the Visitors Center's role as a gateway to the city. Throughout 2016, the City worked with Brazi's to prepare updated design renderings for the building, finalize operational parameters, and assist in site plan review and approval processes. The Long Wharf Snack Shack will be completed and open for business in July 2017.



The Visitors Center will be renovated and then operated as both a visitor information center and small café where pre-packaged and prepared foods will be available.

Special Events

- **The International Festival of Arts & Ideas**, held annually in mid-June, draws performers, thinkers and artists from around the world. The events take place throughout the city, on the New Haven Green and Yale campus as well as in New Haven's neighborhoods.
- **Music on the Green** is a free series of late July concerts in that bring the community together several times each season to enjoy popular music by world-renowned acts that can draw up to 15,000 per performance.
- **The New Haven Jazz Festival**, consisting of one landmark week-long August event and multiple smaller, pop-up jazz-themed events, draws up several thousand attendees.
- **The Connecticut Open** at Yale, held annually in mid-August, is a major stop for players on the international Women's Tennis Association (WTA) tour. Just one week before the nearby US Open, this event draws 50,000 spectators and boasts twenty hours of on-air coverage on CBS and ESPN2.
- **The New Haven Grand Prix**, co-sponsored each September by the City and the Connecticut Cycling Advancement Program, is a multi-event celebration of bicycling in New Haven. This event annually brings several thousand spectators downtown to enjoy activities that promote youth bicycling programs in New Haven's schools, encourage a more bicycling and pedestrian-friendly community, and highlight the New Haven's cultural vibrancy.
- **On 9** is a year-round series on the first Friday of every month that brings together businesses from the Ninth Square and Downtown to hold a themed set of events and activities and bring significant traffic to the area. An On 9 event typically includes engaging opportunities for consumers to meet business owners. Examples include restaurant samples, previews, performances, special sales, art and fashion shows along with raffles and community competitions.



The Festival of Arts and Ideas has attracted more than one million visitors since its founding in 1996.

Healthcare Industry

Healthcare, biotechnology and life sciences are central to New Haven's economy and have been the primary drivers of recent employment and tax base growth. These industries leverage the enduring strength of two core institutions: Yale-New Haven Hospital and Yale University's School of Medicine, both of which are world leaders in healthcare, research, and education that attract patients, doctors, and students from across the world, region, and state. The biomedical sector accounts for approximately 34% of jobs in the New Haven region and New Haven placed #13 in the FierceBiotech Top 15 cities for biotech venture funding in 2014.

Yale-New Haven Hospital

Yale-New Haven Hospital is the sixth-largest hospital in the country, with 1,552 beds and 12,152 employees, and serves as the primary teaching hospital for Yale School of Medicine. Ranked as the number one hospital in Connecticut, it provides comprehensive and multidisciplinary care in more than 100 medical specialty areas, and includes Smilow Cancer Hospital, Yale-New Haven Children's Hospital and Yale-New Haven Psychiatric Hospital. Yale-New Haven is also widely considered one of the best hospitals in the United States, and is nationally ranked in 19 out of 26 specialties by *U.S. News & World Report*, and ranks in the Top 10 nationally in two specialties, geriatrics (#10) and psychiatry (#10).

Yale-New Haven has been expanding significantly over the past few years. In September 2012, it acquired Saint Raphael's Hospital, also located in New Haven, to become the fourth-largest hospital in the country by bed count. Yale-New Haven recently received approval to merge with Lawrence and Memorial Hospital in Norwich, CT.

Smilow Cancer Hospital

Part of Yale-New Haven Hospital, Smilow Cancer Hospital provides individualized cancer treatment regimens in twelve oncology disciplines, and integrates treatment and research with the Yale Cancer Center, a recognized leader in cancer care. The facility is one of just 48 comprehensive cancer centers recognized by the National Cancer Institute, and is transforming the city and its medical district into a destination for researchers, medical professionals and patients from around the world. Smilow has 168 hospital beds and has 500 permanent employees.

Yale School of Medicine

Founded in 1810, Yale School of Medicine is the sixth-oldest medical school in the country and is a leading institution for bio-medical research, healthcare and education with 5,108 faculty & staff and 1,280 students. The school is consistently ranked as a top-10 school for medical research by *U.S. News & World Report*, and is one of the leading recipients of research funding from the National Institutes of Health. In 2016, it received \$407.2 million in awards from the NIH, the 10th highest total amount in the nation. There have been 61 Yale-founded biotech companies to date.



Source: EDC New Haven / REX

Transportation Infrastructure

New Haven, often considered the gateway to New England, is an important transportation hub situated between New York and Boston. Maintaining and further developing the transportation infrastructure is therefore a critical component of economic development. The City works closely with federal and state partners on plans to go beyond state-of-good repair improvements to make forward-thinking and job-creating investments.

Union Station Transit-Oriented Development

Union Station is an important asset for New Haven, not only as a transportation hub, but also as a welcome center and economic catalyst, hosting more than 642,000 Amtrak passengers annually. In addition to Amtrak, Union Station also serves as a hub for the heavily-used Grand Central Terminal and New Haven MetroNorth Line, which posted record ridership figures in 2016. With that in mind, the City and State are pursuing policies to address the station's commuter parking crunch as part of a comprehensive transit-oriented development program consisting of mixed-use commercial and residential developments within a half-mile of the station, including portions of the station site itself. The City leases the Union Station Transportation Center from the CT DOT and Park New Haven operates the station on behalf of the City.

In 2016, Economic Development worked with ConnDOT on major issues related to the design of the second garage at Union Station, including intermodal transit; retail and overall design. An agreement was also reached with the State on a five-year operating lease extension for Park New Haven.

Amtrak/NEC Future:

In 2016, Economic Development participated in extensive discussions with the Federal Railroad Administration concerning the future of the Northeast Corridor and prepared the City's official testimony on the NEC Future Environmental Impact Statement, advocating for continued service through New Haven as opposed to "bypass routes." Advocacy with other shoreline municipalities and stakeholders was also continued in 2016.

New Haven-Hartford-Springfield Commuter Railroad (CTrail Hartford Line)

This joint venture between Connecticut and Massachusetts will establish new commuter rail service between New Haven and Springfield, with New Haven as the southern terminus of the line. The project is expected to allow speeds of up to 110 miles per hour, and is anticipated to draw more than 600,000 passengers annually once completed. CT DOT expects it to commence operation in January 2018.



*Main concourse of Union Station
City of New Haven Economic Development, Official Statement*

Public Transportation Infrastructure

The City, State and Federal governments are also investing heavily in New Haven's public transportation infrastructure. New Haven is the hub of all passenger rail service in Connecticut with historic Union Station the eastern terminus of Metro-North Railroad's New Haven Line, the western terminus of Shoreline East, and the intersection for Amtrak service into northern New England. Union Station serves more than 3,500 passengers daily, the fifth-busiest station on the New Haven Line. It is also the 16th busiest station in the national Amtrak system in terms of ridership numbers, with over 642,000 passengers in 2016.

State Street Station

In 2000, as part of the I-95 project, CT DOT constructed a new station on State Street in Downtown New Haven. State Street Station provides easy access to and from Downtown for commuters and travelers using Shoreline East and Metro North, and has also attracted new development to the area. For example, the adjacent 360 State Street development is the largest private construction project Downtown in more than 30 years. In support of the new Hartford Line commuter rail service, the CT DOT likewise was awarded a US DOT TIGER grant to develop a second platform. The Hartford Line is expected to attract more than 600,000 annual passengers once completed. State Street, as a southerly hub for the service, will provide direct access to the central business district for commuters from as far away as Springfield, MA.

Port of New Haven

The Port of New Haven is the largest deep-water commercial port in Connecticut and a leading port of call on the Atlantic Seaboard. The port is ranked #52 in the nation for domestic trade (7.1 million short tons) and #52 in the nation for foreign trade (2.7 million short tons) based on 2015 volume. The Port of New Haven moves 75 percent of the annual tonnage entering through Connecticut ports. The federal navigation channel at New Haven Harbor is periodically dredged to maintain its 35 feet depth. To maintain its global competitiveness in the 21st century, New Haven is conducting a study with the Army Corps of Engineers on the feasibility of deepening the channel from 35 feet to 40+ feet. The study is being carried out in tandem with the environmental impact study and is expected to take three years to complete.

Tweed-New Haven Regional Airport

Economic Development is increasing its efforts to support Tweed-New Haven Regional Airport. Tweed is an FAA-certified Class-I airport, providing both scheduled commercial (American) and general aviation services (Robinson Aviation). With the merger of American and US Airways, there are more than 330 destinations to which you can fly through the American hub in Philadelphia. In 2016, there were 27,771 enplanements out of Tweed, down slightly from 31,031 in 2015. Capital improvements in 2015 include purchase of the new airfield snow sweeper, the first phase of the noise attenuation program, and painting and crack sealing of main runway 2-20, together with upgrades to security, communications and tide gate/drainage systems. In 2016, an assessment of air service development programs nationwide was completed to further support Tweed's efforts to secure new commercial air service to key business markets.

While the Tweed Airport Authority continues its aggressive air service development program, it is increasingly clear that the airport will need to enhance its financial incentive packages and extend runway 2-20 to attract new service. The Federal Aviation Administration has approved Tweed's Capital Improvement Plan to expand its runway from 5,600 feet, to 7,200 feet. Tweed is currently awaiting approval from the state to go ahead with the plan. As of May 2017, Tweed is accepting bids from contractors to establish sound insulation programs to benefit homes within the surrounding community as part of their efforts to provide benefits to the community.

Farmington Canal Greenway

Once a railroad, the Farmington Canal Heritage Greenway covers 84 miles from New Haven, CT to Northampton, MA. Currently more than half has been developed as a paved trail with the remainder in progress. The City is helping to reconstruct the portion between Temple Street and the New Haven waterfront at Long Wharf. Upon completion, this will give people in nearly all of New Haven the ability to bike, walk or run to Downtown easily. The construction documents are 90 percent complete and City Plan is expecting to go to bid in the fall of 2017.

Complete Streets Manual

To promote and facilitate street safety, the City has adopted a multi-faceted approach. In 2008 the Board of Alders created a Complete Streets Steering Committee to design an educational campaign and the Complete

City of New Haven Economic Development, Official Statement

Streets Manual, to help guide both activity and design of New Haven streets making them as safe as possible. The Manual provides technical guidance on the building, rebuilding, repair and rehabilitation of city streets with the intent of balancing the needs of all users. It is guided by a set of principles appropriate for an evolving understanding of the importance of streets to the social and economic fabric of community. Also, the Manual is intended to provide the citizens of New Haven with the tools and information needed to engage in constructive conversations about solving local traffic problems with City staff. Since the adoption of the Complete Streets Manual in September 2010, there have been dozens of projects completed.

goNewHavengo

In an effort to further reduce vehicle trips in New Haven, the Transportation, Traffic and Parking (TTP) Department launched goNewHavengo, with the goal of making the city more people-friendly, increasing the transportation affordability, educating communities about transit alternatives, providing convenient options for public transportation, helping reduce environmental contamination, and improving the health of the population. This comprehensive transportation demand management effort works with employers, residents and commuters to identify transit and bike/pedestrian alternatives across the community. goNewHavengo runs different programs and events all year-round such as the New Haven Bike Share, the Clean Air Run, PARK[ing] Day, and Transportation on Tap.

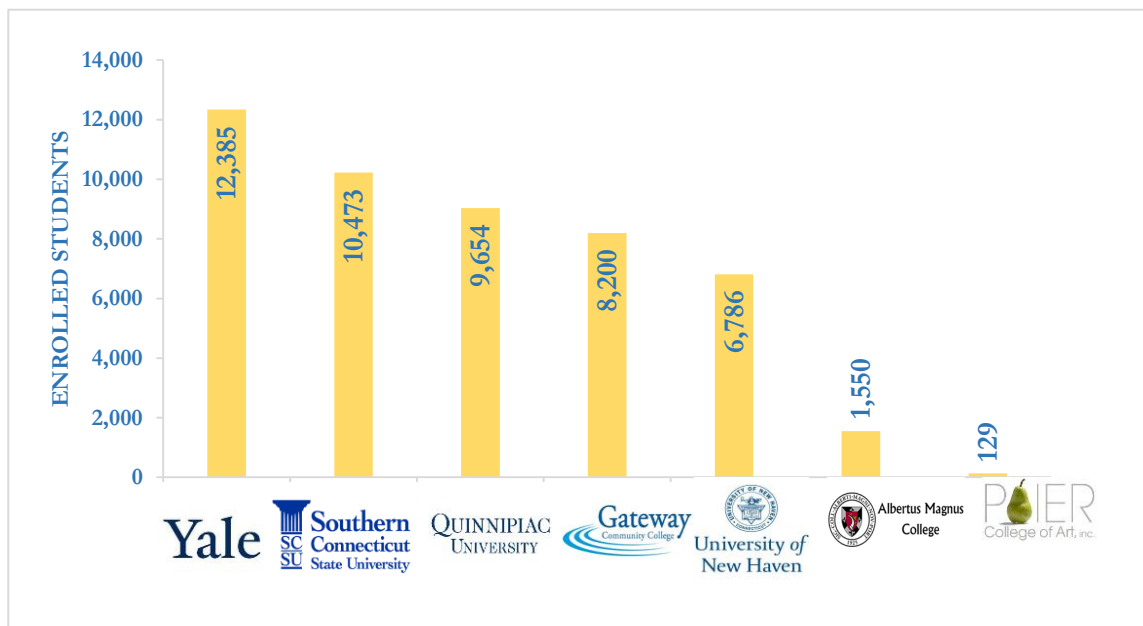


Top row: City workers installing bike lanes on Clinton Avenue; Bottom row: cyclists using new bike lanes on Elm Street.

Education & Innovation

Yale University, Southern Connecticut State University, Albertus Magnus, University of New Haven, Quinnipiac University and Gateway Community College all call the New Haven region home and are major drivers for the local and regional economy. In the New Haven region, educational services employ 24,000 people while the schools continue to expand. Yale opened its new state-of-the-art School of Management building in 2014, adding 200 students. In addition, Yale is currently building two new residential colleges, slated to open in fall 2017. This project will cost \$600 million to construct, and will add 800 additional students, faculty and staff. It is Yale’s first major expansion in over 40 years. GWCC completed its new Downtown campus in 2012 which brings 11,000 students and faculty to the city each day. SCSU recently opened a nanotechnology program with a four-course graduate certificate program open to the entire Connecticut State University System (CSCU). A regional leader in science and technology, its Master’s program in Computer Science was recently redesigned to culminate in a signature capstone project.

Institution	Faculty	Enrolled Students
Yale University	4,420 Full-time	12,385
Southern Connecticut State University	439 Full-time & 566 Part-time	10,473
Quinnipiac University	371 Full-time	9,654
Gateway Community College	107 Full-time & 462 Part-time	8,200
University of New Haven	262 Full-time & 379 Part-time	6,786
Albertus Magnus College	44 Full-time & 230 Part-time	1,550
Paier College of Art	8 Full-time & 26 Part-time	129
Total	8,404	58,285



Source: EDC New Haven/Rex

New Haven's universities provide a platform from which the city can compete in the global arena. For example, Yale has \$264 million in federal R&D obligations, which ranks 11th nationwide, and its Cooperative Research Technology Transfer program has been instrumental in attracting new biotechnology companies to the region. As mentioned previously, Yale has produced some 61 new start-up companies in Greater New Haven. These companies have attracted over \$3.6 billion in private capital.

Yale, in particular, has a truly global reach and includes 2,239 international scholars and 2,135 international students, all of whom contribute to the local economy. As a basic industry, Yale's ability to form partnerships across the globe creates significant academic and economic opportunities. Yale provides financial assistance to every undergraduate seeking the opportunity to intern or study abroad. President Peter Salovey has positioned the university to form longstanding partnerships in China, with more than 60 faculty members participating in Yale-China programs, and by establishing Yale-NUS College—the first liberal arts college in Singapore.

New Haven Public Schools

New Haven Public Schools are dedicated to preparing students for the 21st century workforce. They educate approximately 21,500 students in grades Pre-K through 12. Over 3,000 suburban students now attend New Haven's magnet programs and other cooperative schools forming the largest inter-district magnet program in the area. Cooperative High school earned a silver medal in the 2017 *U.S. News & World Report's* America's Best High Schools list.

The City of New Haven is nearing the end of a \$1.5 billion program to renovate or rebuild every school in the New Haven school system. Since 1995, the City has rebuilt 38 schools through its School Construction Program.

In 2010, New Haven launched a School Change Initiative that is being watched around the country as a model for school reform. New Haven School Change is already seeing real progress toward its goals of eliminating the achievement gap with the state, cutting the dropout rate in half and ensuring all students have the tools and knowledge to go to college. Student achievement on standardized tests is growing at twice the rate of the state. In 2016, the district's graduation rate climbed to 83 percent, a 21 percent increase since 2010.

The School Change Initiative is founded upon four principles: increased accountability of education professionals and Students; differentiated approaches to provide schools with resources that are tailored to them, not a district-wide approach; a focus on recruiting top quality teachers; and committing to financially supporting every qualified student to go to college through New Haven Promise. Two achievements have already begun the process of elevating workforce quality in the public school system: the first is the collaborative contract between the New Haven Board of Education and the union representation of New Haven teachers, and the second is a \$53 million grant from the U.S. Dept. of Education to fund the New Haven Professional Educator Program that develops, supports, and retains great teachers and administrators.

Strong 21st Century Communications Magnet & SCSU Lab School

Strong 21st Century Communications Magnet and SCSU Lab School strives to develop an understanding of the history and impact of communications and how it has changed the world. With a rigorous STEM-infused curriculum and a project-based learning approach, it will prepare students to utilize digital media, global technologies, and other languages to communicate effectively in an evolving world. Students also have multiple language offerings including American Sign Language and Chinese or French. Finally, through its unique partnership with SCSU as a Lab School, students receive support from future educators in a dynamic learning environment and make a difference by inspiring and developing the next generation of teachers. This project has a total cost of \$45 million.

The Engineering and Science University Magnet School (ESUMS)

ESUMS was established in 2008, with a very special purpose: to educate and train the next generation of engineers, scientists, and leaders. The partnership between UNH and ESUMS is aimed at leveraging the strengths of UNH in STEM fields towards ESUMS students. The engineering curriculum currently used at ESUMS is based on Project Lead the Way (PLTW), a national program that forms partnerships among public schools, higher education institutions and the private sector to increase the quantity and quality of engineers and engineering technologist graduates in the US. ESUMS is co-funded by both State and City, and the project totals \$85 million. ESUMS opened a new building on the University of New Haven's campus in early 2017. The 122,000-square-foot building is the most technologically advanced of New-Haven's 41 school construction projects and is equipped to handle 21st century challenges.



NHPS' Engineering and Science University Magnet School (ESUMS), a college preparatory middle and high school, challenges students to imagine, investigate and invent while preparing them for demanding STEM programs at the collegiate level.

New Haven Promise

In November 2010, the City in partnership with Yale University announced funding for the New Haven Promise scholarship. New Haven Promise is a scaled scholarship and support program to cultivate an aspiration for a college education in New Haven public school students, build community and parental engagement, and foster economic development in the City of New Haven. New Haven is only the third community in the nation to have such a scholarship program for its residents.

The scholarship covers full tuition to in-state public colleges and universities or up to \$2,500 annually to in-state private non-profit colleges and universities to resident students of New Haven Public Schools and approved city public charter schools that meet program requirements. In 2016, the program supported 307 scholars.



*New Haven Promise makes a college education possible for every New Haven student who meets its academic qualifications.
City of New Haven Economic Development, Official Statement*

Continuing Education and Certifications

Both GWCC and SCSU have made strides to help provide students in New Haven with the opportunity to learn skills necessary to join the emerging markets in the city. The proximity of GWCC to the Medical District has made it a primary funnel for employees, and a clear step on the career ladder. SCSU has just launched a Nanotechnology Center and a 14-credit program to certify students in nanotechnology, just one of many fields growing rapidly in New Haven. Other academies have also developed to help meet such needs. For example, ConnCAT has become a regional leader training jobless African-American adults in skills needed in the workplace. In addition, the State of Connecticut has made programs available to employers which encourage on-the-job training. These programs include the technical skills training program which helps employers to fill high tech positions by offering a 50 to 75 percent salary reimbursement during the on-the-job training.



The mission of ConnCAT is to inspire, motivate and prepare youth and adults for educational and career advancement, through after-school arts and job training programming.