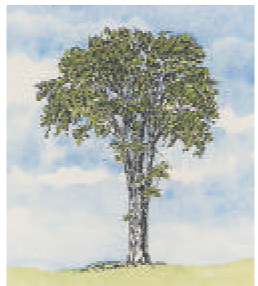
ECONOMIC DEVELOPMENT



City of New Haven
John DeStefano, Jr., Mayor

THE NEW HAVEN ECONOMY

New Haven is home to the largest concentration of economic activity in south central Connecticut. In recent years, the business community has evolved from a traditional industrial city to a broad and diverse economic center. This change is in response to dramatic, global shifts in production. Many of the products historically made in New Haven, particularly textiles, are now made in other countries.

Today's economy is more diverse and, consequently, less dependent on the success of a few large manufacturing firms. Rather, the new economy is broadly focused on advanced manufacturing, health care and education. These three sectors form a well-structured triangular economic base.

Figure 5.1: Adaptive reuse of the former Marlin Firearms, Willow Street

EMPLOYMENT

In the latter half of the 20th century, the New Haven employment base has changed dramatically, with shifts in aggregate numbers, in types of industries and in the location of major job centers. In the city proper, employment reached 92,000 jobs in 1990 at the tail end of a long-term economic expansion. The recession of the early 1990s heavily impacted the city's employment base, with total employment at a decade-low 72,000 in

1997. Since then, employment has rebounded significantly. The 2000 employment base of 77,890 represents an 8% increase from 1997.

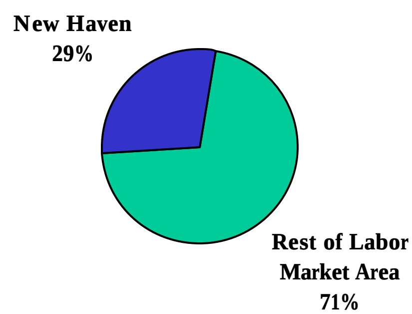
Employment by Sector

In keeping with the larger industrial cities of the Northeast, New Haven's mid-century economy was characterized by a diverse set of goods-producing industries, including heavier industries (metal works, armaments, etc.) and non-durable goods (textiles, food products, etc.). Likewise, deregulation has had a profound impact on some of the city's largest employers, including SNET and United Illuminating as well as the banking sector. Over time, the economy has further diversified and spread geographically across the region.

Manufacturing continues to be an important component to the city's employment base, but with far greater specialization, fewer employees and advanced technology manufacturing processes. Meanwhile, service industries (in particular health services and education services) have led a rebound in total employment.

As a percent of the total 17-town Labor Market Area, New Haven remains the central employment destination. Approximately 30% of the LMA's 265,000 jobs are in New Haven, including 44% of all jobs in transportation, communications and utilities (TCPU) and services. By comparison, the next largest employment bases are in Meriden (26,710), Wallingford (24,380) and North Haven (21,490).

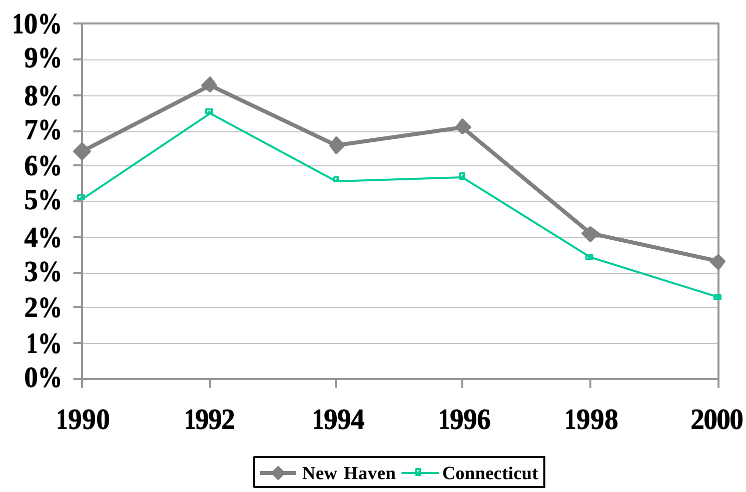
Figure 5.2: Location of Employment in the New Haven Labor Market Area, 2000



Unemployment

Recent unemployment figures further illustrate a more stable economic picture in New Haven. In 1990, in spite of a high number of jobs in the city (91,870), the unemployment rate among city residents was 6.4%. This compared to a statewide unemployment rate in 1990 of 5.1%. Since then, the "spread" between the statewide unemployment rate and the city's unemployment rate has narrowed. With the exception of 1996-1997, the city's unemployment rate has been at or above one percentage point of the state average.

Figure 5.3: Unemployment Rate in New Haven and Connecticut 1990 – 2000



ECONOMIC BASE

The regional economy is based on those industrial sectors which, by their size, export goods and services beyond South Central Connecticut. Accordingly, the region's export industries (measured by location quotient) are its economic foundation and are, therefore, "basic" elements to sustainability. Basic industries within the New Haven region are identified based on proportional employment modeling. Although this approach fails to account for some high value, low employment industries, it does provide a time-tested overview of the region's economic strengths.

Since 1990, the basic employment base has expanded 7.2%, well ahead of overall employment growth. This shift suggests an increase in basic economic activity, which is evident in the large percent gains in printing and publishing (+37.9%), health services (+33.7%), primary metals (+24.2%), and chemicals and allied products (+22.6%).

Figure 5.4: Estimated Basic Industrial Employment in the New Haven Region, 2000

Top 5 Sectors	U.S.	New Haven Region		
	Total	Total	Location Quotient	Estimated Basic Employment
Educational services	3,100,000	17,179	4.295	13,180
Chemicals and allied products	1,055,700	5,372	3.944	4,010
Communications, electric, gas & sanitary services	1,760,700	6,842	3.012	4,570
Instruments and related products	845,900	3,055	2.799	1,964
Primary metal industries	707,500	2,402	2.632	1,489

Overall, the basic economy is organized into three broad sectors: (a) education; (b) advanced manufacturing; and (c) health care.

Education. With the largest overall basic employment (13,180) and location quotient (4.295), educational services is a core element to the region's economy. The strength of this industry includes the higher education cluster – Yale University, Southern Connecticut State University, Gateway Community College, etc. Aside from its core educational functions, this sector is increasingly active in local economic initiatives.

In particular, Yale University's technology transfer activities have been instrumental in the siting of new biotechnology companies in the region.

Advanced Manufacturing. Although many of the city's traditional manufacturing companies have moved operations overseas, others have opened or modified to meet the needs of the global marketplace. A good example of the shift is the former Acme Chemical on Chapel Street. The company is now a division of Von Roll Isola, producing world-class insulating materials.

Similar examples are found at Science Park, a compilation of former Winchester Company buildings, now operating as a multi-tenant business and industrial park. A number of biotechnology and high technology manufacturing companies have sited at Science Park. For example, Jet Process Corporation, at 24 Science Park, produces advanced film coatings. Cyclone Microsystems, Inc., at 25 Science Park, designs and manufactures intelligent communications controllers.

Chemical and Allied Products. Chemicals and allied products, which includes the biotechnology sector, has the second highest location quotient in the region (3.944). As evidence of this emerging cluster, 4,010 of the 5,372 jobs in chemical and allied products are basic jobs. Within New Haven, the largest chemical and allied product concerns include Curagen, Genaissance Pharmaceuticals and Achillion Pharmaceuticals.

Figure 5.5: Biotechnology in New Haven

Health Care. Given the shear size of health care across the country, the health services sector is highest in total employment (23,370) and second highest in basic employment (10,543) but just 12th highest in location quotient (1.711). The medical services industry is concentrated around the region's two major hospitals: Yale-New Haven Hospital and St. Raphael's Hospital.

LAND USE

Land use patterns have traditionally dictated the development of commercial and industrial activities in the city. These patterns trace their roots to both sources of power (mill / water power) as well as transportation systems (canal, rail, etc.). The largest concentrations of economic activity are located Downtown, in the medical services areas of the Hill, Dwight and West River and in the industrial sectors east of the central business district. In addition, the city's main arterials and neighborhood commercial districts anchor a diverse retail and commercial services sector. Industrial and Commercial class properties are illustrated in Figure 5.6.

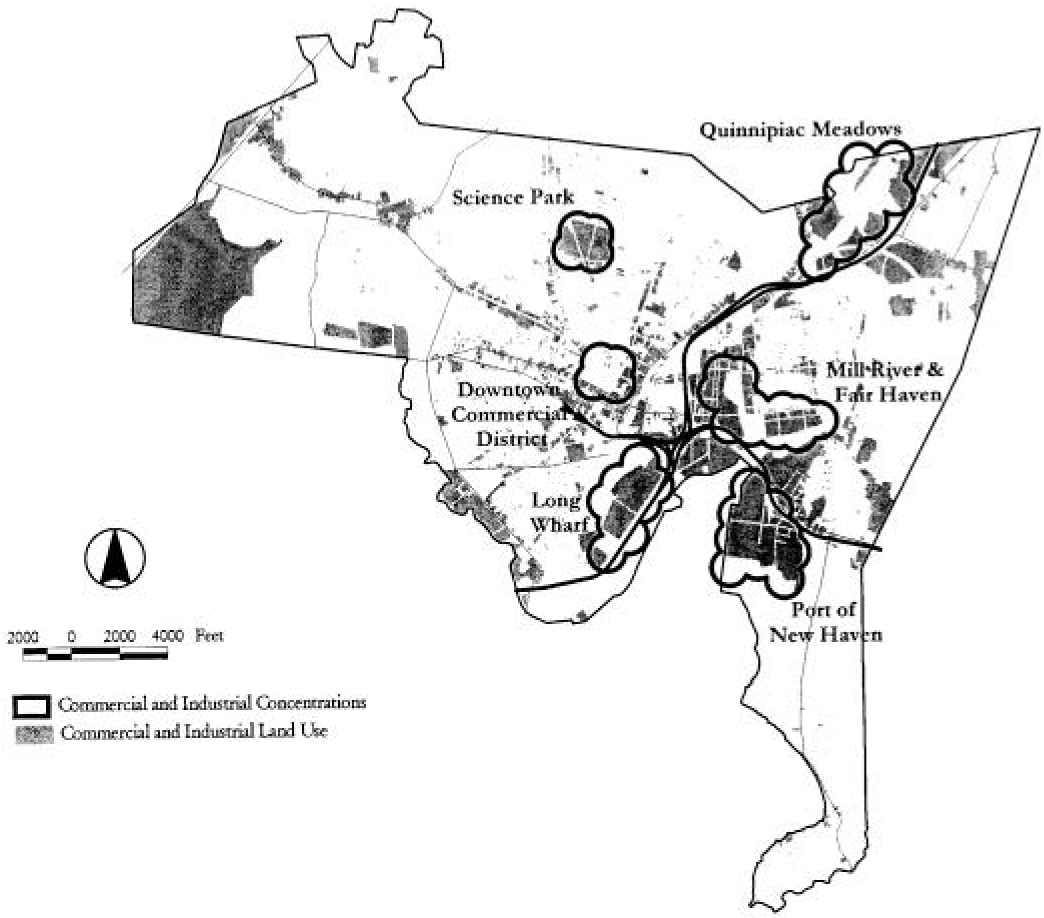
Industrial Sector

The transition to a global economy had a profound effect on industrial land use in the city. Only a handful of the city's former industrial sites were converted to new manufacturing uses. Some were adaptively reused for business services and offices (eg. One Long Wharf) and for residential (eg. Brewery Square). More often, however, the city's industrial buildings and sites have been demolished, underused or recycled for lower intensity uses, such as warehouses, transportation and waste processing facilities.

Of the 9,843 acres in New Haven, just 804 (8%) are classed industrial. Approximately 85% of all industrial space is located in just six neighborhoods, all located east of Downtown. A significant subset to the industrial sector is the Port of New Haven. Port-related uses account for over 25% of all industrial-class property. In general, port uses are transportation-driven, with employment up to ¾ lower on a per acre basis than other industrial uses in the city.

Of note, there are no ready-to-build industrial sites of reasonable size in New Haven. The industrial sector is largely built out or reused for lower-intensity development. Among the more underused and / or brownfield sites in the city are: (a) The Clock Factory – Hamilton Street; (b) Bigelow Boilers – River Street; and (c) various buildings at Science Park. Each of these sites is characterized by multi-story buildings, likely environmental contamination, floor loading issues and shipping and handling constraints. In the Hill, Westville and Mill River similar patterns of industrial down-cycling have occurred. Figure 5.7 lists the noteworthy vacancies in the industrial sector.

Figure 5.6: Commercial and Industrial Class Property in New Haven



With increased growth in suburban areas, the economic base has regionalized. New office and industrial parks, coupled with retail power centers and shopping malls, have expanded and diversified the economy across the region. In the past five years, employment in the region has expanded 10.3%, while employment in the central city has expanded 2.3%. This shift has eased the demand for urban space and, consequently, impaired efforts to rehabilitate and reuse certain sites for more significant economic activity.

Figure 5.7 Significant Vacant and/or Underused Industrial Space in New Haven

Site	Building Area (s.f.)	Land Area (acres)
Auto Haven Site, Middletown Avenue	3,720	5.8
English Station Complex, Grand Avenue	181,810	8.5
Etherington Complex, River Street	149,112	8.0
Flea Market Site, Ella Grasso Boulevard	-	11.4
Hess Oil Terminal, River Street	-	8.7
Meyer Warehouse, River Street	80,647	3.9
New Haven Manufacturing, Blake Street	39,896	8.6
Pallet Site, Ella Grasso Boulevard	54,455	4.5
St. Gobain Plastics Site, East Street	106,861	7.8
Science Park, Newhallville	n/a	n/a
The Clock Factory, Hamilton Street	51,456	1.9

Commercial Sector

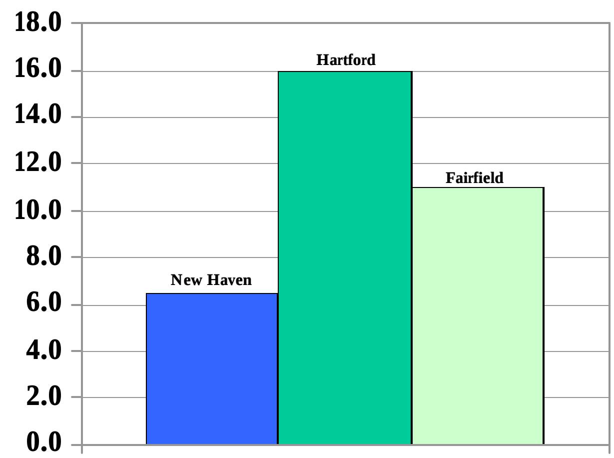
Commercial class property, including office space in Downtown and throughout the city, represents 15% of all assessed land in New Haven. The demand for office space correlates with the trends in economic activity and in employment. As the city's employment base has shifted away from traditional manufacturing, commercial land use has increased to accommodate spatial needs. An example is the conversion of the former Seamco Rubber factory in Long Wharf to 340,000 s.f. of commercial office space.

In comparison to the state's other large office markets, New Haven is remarkably stable. In the second quarter of 2002, the vacancy rate (Class A and Class B space) in the greater New Haven office market was 11.2%, considerably lower than the vacancy rates in Hartford and Fairfield County.

The low vacancy rate is due, in part, to the even pace of development in New Haven. There are just a handful of office towers in the city and few proposals for large-scale, market changing initiatives. Rather, development activity tends to be smaller and more focused on rehabilitation.

Noteworthy commercial space projects in the city include the proposed renovations to 900 Chapel Street as part of the Chapel Square Mall project; the second phase of Granite Square (65,000 s.f.) at State and Audubon Streets; and the lease up of 370 James Street, the former Starter Sportswear building.

Figure 5.8: Office Vacancy Rates in the Cities of New Haven and Hartford and in Fairfield County - 3rd Quarter, 2001



There are two significant commercial buildings which are entirely vacant.: 227 Church Street and 500 Sargent Drive. Both are architecturally significant structures and past headquarters spaces for Southern New England Telephone and Pirelli Tire, respectfully. At 227 Church Street, plans are approved for conversion to residential apartments. Pirelli is included as part of a new proposed retail development.

Yale University and other non-profit uses play a significant role in the commercial office market. In the Church Street / Whitney Avenue / Grove Street area, Yale recently purchased two office towers and accessory retail and parking spaces. Private commercial tenants remain, but there is the potential for long-term conversion to non-profit and non-market based use of these buildings.

Retail Sector

New Haven's retail sector has eroded considerably as new suburban malls and strip centers have cornered the marketplace. There are no large department stores in the central business district and the large commercial stores, a staple of the retail landscape, are found only along certain sections of Whalley Avenue and Foxon Boulevard.

From 1992 to 1997, the number of establishments in New Haven engaged in retail trade decreased from 719 to 622. There are noticeable declines in food stores, apparel shops and furniture shops. These trends are consistent in many ways with national trends away from smaller, locally-owned establishments and toward larger, multi-store establishments. Some recent gains in the retail base are consistent with the trend, including the new Dwight Plaza and the emerging commercial strip on Foxon Boulevard.

While the overall number of establishments has declined, aggregate sales volume has increased. Over the same period (1992 – 1997), certain retail sales volume rose 4%. By comparison, retail sales for New Haven County as a whole rose 20% during the same period.

Given the lack of suitable, large sites in New Haven, the development of new retail destinations is limited. In certain cases, there is an opportunity for contextual infill development of new retail centers. These opportunities enhance neighborhood livability and the potential for local ownership. This is particularly the case along lower Dixwell Avenue and Whalley Avenue. In other areas, more specialized, neighborhood-oriented retail is appropriate. Retail opportunities Downtown are addressed in Section VI.

At Long Wharf, the proposed IKEA store at the Pirelli site is an ideal complement to the local retail base as the furniture store does not compete with most downtown and neighborhood-based retailers. At the same, there is a real risk of land use conversion as larger retailers seek to capture spin-off traffic along Sargent Drive. Radical conversion of land use on Sargent Drive could destabilize the area and potentially lower the number of living wage employment opportunities in the area.

NEIGHBORHOOD COMMERCIAL DISTRICTS

As a city built around the fabric of its neighborhoods, the city's smaller commercial districts are an integral component to the quality of life in New Haven. In general, the small number of large retail and so-called power centers has helped to preserve the identity of the smaller commercial districts. Although the business mix continues to evolve, much of the original architectural character and the district layouts has been retained. These pedestrian-oriented storefronts and commercial buildings are located in most neighborhoods. Smaller markets, non-durable goods and other convenience stores are often within walking distance of a residential population.

In recent planning studies of State Street, Grand Avenue, Whalley Avenue and Westville Center, there is compelling evidence regarding the economic strength of the neighborhood districts. In Westville Center, for example, just 8 of the 66 storefronts are vacant. The low vacancy rate is due in part to the considerably high neighborhood spending power and to the long-standing commitment of owner-occupied uses.

Still, the neighborhood commercial districts are among the most at-risk sections of the city. There are price pressures from larger chain stores and suburban strips as well as internal pressure within the district. The internal pressures relate to the intrusion of nuisance uses; the lack of off-street parking; lack of common hours; and incompatible urban design (particularly signage).

Certain uses, if not properly operated can have a deleterious effect on the district and the surrounding neighborhood. These include convenience stores, package stores, automotive-related uses, taverns and adult uses. Although most of these uses require special review by the City Plan Commission or the Board of Zoning Appeals, enforcement of conditions remains a priority concern. Of note, grandfathered uses do not typically require periodic review, often leading to lower levels of property stewardship.

Over time, the success of the neighborhood business districts depends on the mix of uses – properly operated – in order to generate sufficient customer traffic.

Built prior to the automotive age, the commercial districts often have insufficient or poorly sited parking to meet customer demand. Moreover, there is continuing interest in single-user parking facilities that fail to promote pedestrian activity and compromise a district's overall appearance. Shared parking initiatives will be essential to meet the parking demand.

Figure 5.9: State Street Commercial District

Urban design issues relate to the compatibility of new construction and renovations to the existing and prevailing building form. New buildings are too often pre-designed structures more suitable to suburban locations. Similarly, renovated facades often fail to respect the inherent architectural qualities of the building – mainly through inappropriate signage. Likewise, site planning must account for the urban environment, including provisions for shared parking. Over time, the encroachment of incompatible urban design weakens the overall viability of the district.

PLANNING CONSIDERATIONS

- The expansion of the economic base across diverse sectors provides a solid foundation for business development. Basic industries, including advanced manufacturing, education and health care, will attract compatible businesses and institutions to the city. Clustering activities are consistent with recent city policy and are well-suited to the business climate in New Haven.

- The lack of absorbable property will impair new business development and tend to push economic activity to suburban areas. Brownfields, parking / access issues, underused / incompatible development and deterioration all complicate economic development efforts.

- Similarly, the inappropriate conversion of industrial property to lower intensity or non-economic use will have a long-term, deleterious effect on the city's economic base. Areas most at-risk for conversions include the Long Wharf food terminal, Mill River, the upper State Street area, and the lands in and around the port terminals.

- Maintaining and enhancing an adequate amount of absorbable space is the lynchpin to increasing living-wage employment opportunities, realizing significant tax rateables and retaining existing, growing companies in the city. Near term opportunities include three sites which may become available: CT Transit on James Street, the Pallet site, Gateway Community College on Sargent Drive and Williams Terminal at Water Street.

- Transportation and access remain central issues for New Haven. Various highway projects, if not adequately managed, staged and phased, will encourage businesses to seek suburban and even exurban locations.

- In doing so, the ring of urban development will continue to expand away from the central city, thereby absorbing the region's agricultural and rural landscape. By drawing residential and retail growth to areas least equipped to accommodate urban development, the sprawl effect is among the single greatest threats to the city and to the region.

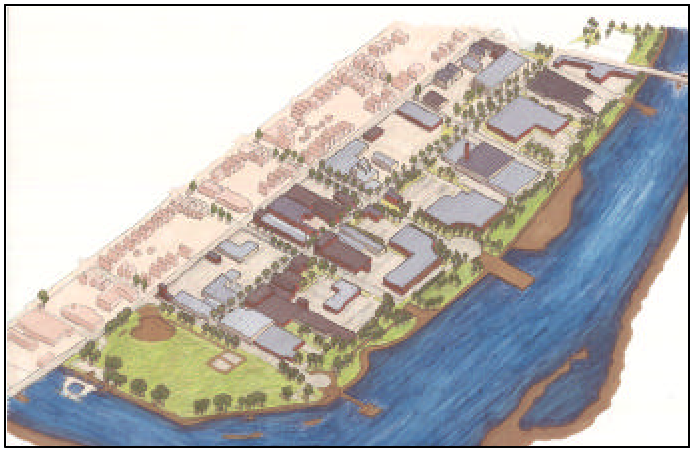


Figure 5.10: The River Street MDP is an example of high quality urban infill development.

- The Port of New Haven is an integral component to the regional economy, providing access to energy, raw materials and international markets. The port's direct economic impact, however, is limited. Therefore, the spatial needs of the port must be accommodated in an efficient manner without adsorbing additional land which may be suitable for more intense (basic industries, jobs, taxes, etc.) economic development.

- At the same time, port traffic can spur indirect economic development through value-added manufacturing and warehouse functions. The siting of these job-intensive facilities may be suitable both in the city and in the immediate suburbs.

- Although the demand for retail services is significant, there is limited land available for suburban-oriented developments. However, contextual infill retail opportunities do exist. In particular, redevelopment of the Dixwell Plaza and certain sections of Whalley are top candidates for additional retail activity within and urban setting. Care should be taken to limit uncontrolled retail expansion at Long Wharf.

- The city's neighborhood commercial districts, including Grand Avenue, Westville Center and State Street, are unique assets that must be stewarded from incompatible suburban-oriented redevelopment. Design review and targeted business development are prime issues for these districts.

RECOMMENDATIONS

New Haven is home to the largest concentration of economic activity in south central Connecticut. In recent years, the business community has evolved from a traditional industrial base to a broad and diverse economic center.

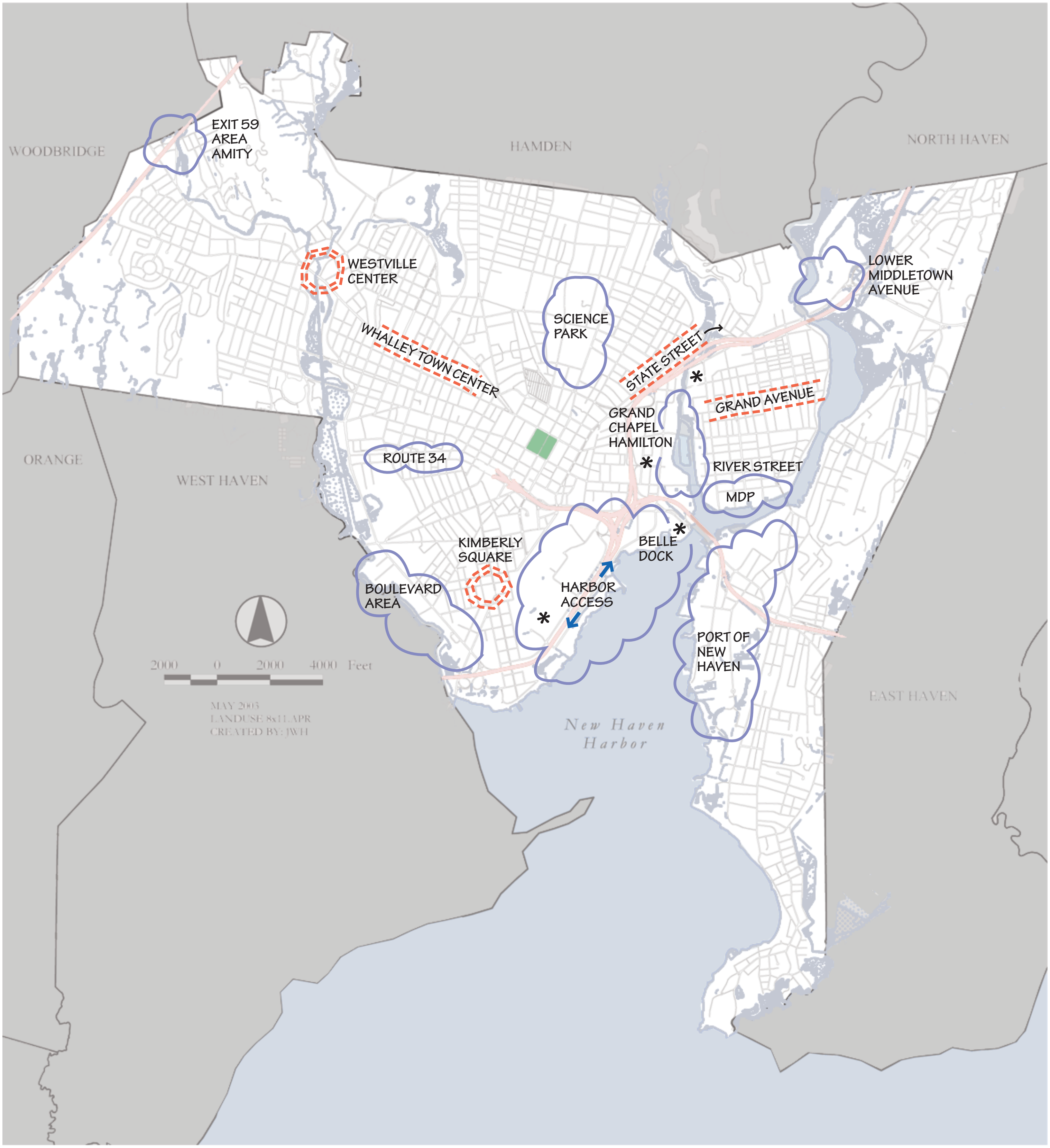
Today's economy is more diverse and, consequently, less dependent on the success of a few large firms. Rather, the new economy is broadly focused on advanced manufacturing, health care and education. All three sectors are knowledge-based, benefiting from technology transfer and academic support from Yale University and other colleges and universities. To enhance the local and regional economy, the plan recommends the following:

Land Use Policy. The city's Zoning Ordinance should reflect the commitment to sustainable economic development by elevating land use standards. This can be accomplished by implementing four interrelated strategies:

Use and Development Regulations. Amend the Zoning Ordinance to further restrict the siting of potential nuisances and high intensity / low job facilities. Such uses include, but are not limited to, junk and scrap processing facilities; motor vehicle junk yards; storage facilities with limited product turnover; construction staging yards; etc. The Commission encourages siting Port-related uses only in the core port area, generally coinciding with the district of the New Haven Port Authority.

Site Development Standards. Elevate site development standards by reducing the amount of on-site impervious surface, increasing landscaped areas, lowering the maximum allowable FAR and reducing allowable signage.

Environmental Compliance. Establish a systematic policy of compliance with environmental regulations as administered by the city, the Connecticut Department of Environmental Protection and the United States Environmental Protection Agency. Compliance should be included as a condition of a city land use approval (eg. special exceptions, special permits, site plan review, etc.).



ECONOMIC DEVELOPMENT OPPORTUNITIES

* Site Specific Opportunities

Neighborhood Commercial Districts

Development Areas

City Plan Commission

Comprehensive Plan of Development

Site Preparation. In order to enhance the supply of available commercial / industrial space, the city and economic development agencies must continue to prepare suitable business locations. This can be achieved by aggressively completing existing initiatives at Science Park and at River Street and through new initiatives, as follows:

Site Specific Redevelopment:

CT Transit, James Street
Clock Factory, Hamilton Street
Gateway Community College, Sargent Drive
Wyatt / Williams Energy

Municipal Development Plans:

Chapel / Grand / Hamilton
Exit 59 Area / Amity
Lower Middletown Avenue
Boulevard Area
Whalley Avenue Area

Environmental Design. Without the benefit of large tracks of industrial "Class A" park space, economic development in the city is dependent on the quality of surrounding environments to support high-end business development. To achieve this, attention must be paid to environmental design, pollution control, aesthetics, transportation / access and the public infrastructure within and around the city's business districts.

Industrial Ecology. The Commission recommends that attention be paid to industrial ecology and the compatibility of industries to share waste streams and minimize adverse environmental impacts. Attention to industrial ecology helps build economies of scale through resource sharing and contributes to a healthier environment. For example, reuse of certain properties in and around the Mill River could benefit from the waste streams generated by Simkins Industries and others.

Green Design. Similar attention must be paid to green building design by encouraging the development of environmentally sustainable buildings that meet or exceed energy targets (eg. Energy Star, LEED certification); provide for daylighting; minimize transportation movements; and recycle and/or control waste streams.

Targeted Recruiting and Retention. The city's economic position and overall stability affords a certain degree of selective recruiting. Appropriate efforts must be made to attract basic industries that enhance the city's established business clusters. With that in mind, the Commission encourages economic development professionals, commercial brokers and leaders in the community to engage in local workforce skill development, high-end target recruiting and retention efforts. If successful, the city will build a deeper economic base and attract / retain a quality workforce in the region.

Neighborhood Commercial Districts. Smaller, neighborhood-oriented commercial districts are essential to the quality of life in the city's neighborhoods. In many cases, the districts are in need of enhanced target marketing, improved land use and design standards and coordinating efforts. The Commission recommends that more specific attention be given to the following areas: Grand Avenue, Westville Village, Whalley Town Center, Kimberly Square, and State Street, including Cedar Hill.