New Bedford, Massachusetts

Market & Economic Analysis

HR&A Analyze. Advise. Act.

PREPARED BY HR&A ADVISORS, INC.

for

MassDevelopment
and
The City of New Bedford

New Bedford, Massachusetts

MARKET & ECONOMIC ANALYSIS

Table of Contents

INTRODUCTION 2
EXECUTIVE SUMMARY: A MARKET AND ECONOMIC ASSESSMENT 3
NEW BEDFORD OVERVIEW 13
BASIC DEMOGRAPHICS 16
EDUCATIONAL DATA 18
WORK FORCE DATA 22
CRIME DATA 26
HOUSING DATA 31
DOWNTOWN NEW BEDFORD: *COMMERCIAL OFFICE AND RETAIL DATA* 33
INDUSTRY ANALYSIS 40
PART I: INDUSTRY ANALYSIS: TOP CONTRIBUTORS 42
- IMPORTED COMMODITIES ANALYSIS 44
- EXPORTED COMMODITIES ANALYSIS 62

PART II: INDUSTRY ANALYSIS –INDUSTRIES OF INTEREST 78
- FINANCIAL SERVICES 79
- RENEWABLE ENERGY/SUSTAINABLE TECHNOLOGY 83
- MARINE SCIENCE AND TECHNOLOGY 87
- CREATIVE ECONOMY 91

Introduction

HR&A Advisors, Inc., an economic and real estate advisory firm, working collaboratively with Mass Development and the New Bedford Economic Development Council, has conducted a broad ranging assessment of the City of New Bedford. This assessment is intended to provide the city with the fact base from which to build a strategic plan for economic development. HR&A has consulted with public and private stakeholders from the community, and other industry experts, and has gathered data from a wide range of sources.

The report begins with a discussion of the people who live in New Bedford today, and, in particular, the strengths and weaknesses of the workforce. The workforce assessment is closely related to the quality and availability of educational resources in the city; an assessment of the educational system in New Bedford immediately follows the work force assessment. Following the discussion of the people who live in New Bedford is an analysis of the existing strengths and weaknesses of the downtown. New Bedford's downtown is a unique and underutilized resource that has the potential to act as a catalyst for an economic and cultural renaissance in the city. The review of the downtown includes not just a discussion of the physical characteristics and conditions of the buildings, but also the current use of the buildings. A retail gap analysis reveals opportunities for business development in the downtown.

The second section of the report is an analysis of the New Bedford economy. This analysis focuses on the industries in New Bedford that are currently driving the economy. To identify these industries, HR&A used IMPLAN to determine which five industries generated the highest dollar value of imports and exports. HR&A also looked at four industries that Mass Development and the New Bedford EDC had indicated where of particular interest. These industries are: Financial Services, Renewable Energy, Marine Science, and Creative Economy. HR&A collected and analyzed data on these industries that will allow the City to begin to formulate a strategic economic development plan that builds upon New Bedford's strengths—providing jobs for its existing workforce and capitalizing on the opportunities to support and grow industries that the City has identified, after careful assessment of specific data regarding each industry, as solid building blocks for New Bedford's economic future.

Executive Summary: A Market and Economic Assessment

Strengths and Opportunities

HR&A's market and economic assessment indicates that the City has the opportunity to build upon the substantial and successful investment in the core historic downtown area, the strengths of its industry clusters, its waterfront, affordable and quality housing, and significant crime reduction in 2007. Specifically, the Commonwealth and City should lead a process to craft a clear and compelling vision document for future economic growth in the city, informed by this market analysis that engages the business, civic and community leadership, and leverages the unique attributes of the city.

New Bedford has many positive attributes that it can build upon to develop its economy. Existing strengths can, and should, be capitalized on to create new economic opportunities.

Location

New Bedford is situated in the heart of Massachusetts' historic South Coast. The city is an hour from Boston and forty minutes from Providence. New Bedford also serves as a gateway to Martha's Vineyard, with more than 100,000 passengers taking the New Bedford to Martha's Vineyard ferry each year. The city's proximity to Boston and Providence allows businesses based in New Bedford to have strong businesses ties to these nearby cities. It is interesting to note that 75% of New Bedford's residents have a commute time less than 30 minutes. This emphasizes the amount of employment opportunities in and around New Bedford. The fact that so many residents live within a short commute is also a strength that speaks to the quality of life for people living in New Bedford. New Bedford's relative distance from Boston is also a benefit because the New Bedford enjoys much lower housing costs than Boston and can use that asset to attract new business. New Bedford's cost of living remains affordable; housing costs are substantially lower than surrounding areas and fifty percent lower than the Greater Boston area. The labor costs are similarly low, ranging between fifteen and thirty percent less than the Greater Boston area and forty percent less than New York. There is a ready pool of workers in the area, including 75,000 undergraduate and graduate students attending nearby

Map of New Bedford

colleges and universities. New Bedford's connection to Boston will be further strengthened by the proposed extension of the commuter rail, a massive state sponsored infrastructure project that is in its preliminary stages.

New Bedford's location on the waterfront is also a significant strength. New Bedford has a long history as a maritime center, and today is home to the highest value fishing port in the United States. The waterfront is an asset that could be leveraged not only to attract additional fishing activity, but also as a resource for short sea shipping, recreational boating, and certain marine science and renewable energy projects. The harbor already hosts a multitude of uses including a fishing fleet of 500, eight marinas, three barge operations and the fast ferry. The Harbor Development Commission owns 100 acres of waterfront property that could be utilized to further the economic development possibilities of the harbor.

Ports must continually upgrade their infrastructure and periodically recalibrate how best to utilize their sea/land connections. Older industrial waterfronts around the world are also taking advantage of the economic stimulus of increased non-industrial, public waterfront uses. Yet, diversifying the uses of waterfront property, and increasing public access will be a complex process. The city has rightly noted that opportunities exist to strengthen the port economy specifically by attracting new complementary job generating uses to the harbor. Much of the land along the water is privately owned. The City may wish to purchase certain parcels for public use, or to forge agreements with owners and developers that would allow for some measure of public access. The City's current plan to build a new public waterfront centered around a new public boathouse at the Upper Harbor "gateway" to the city is a good first step towards increased public access to the harbor, and expanded opportunities for recreational use of the harbor.

Tourism

New Bedford Whaling Museum

The South Coast has long been established as a vacation community, but recently the amount of tourism in the area has seen a substantial increase. Due to the crowding and traffic on Cape Cod and the islands, increasing numbers of tourists and vacationers are focusing on recreational and leisure opportunities that do not involve crossing the Cape Cod Canal or getting on a ferry to the islands. Towns like Marion and Padanaram, which have served as summer retreats for sailing enthusiasts for generations, are

seeing increased tourism. New Bedford is an easy drive from any of these seaside towns and is already considered a cultural hub for the region. New Bedford's location on the South Coast is a strength for the city, and the increase in tourism represents an opportunity for economic growth. New Bedford has a number of successful tourist destinations—the Whaling Museum, the Zeiterion Theater, the New Bedford National Historical Park, Buttonwood Park Zoo, and a collection of art museums and galleries including the New Bedford Art Museum/Artworks, the College of Visual and Performing Arts Gallery and Gallery X—and is engaged in building its creative economy, which will also attract additional visitors.

Building upon these tourist destinations, New Bedford has an opportunity to establish itself as SouthCoast's metropolitan center. With the recent announcement of its first hotel project, the City can further maximize the potential for increased tourism by focusing on the connection between downtown and the waterfront, creating public gathering places, and working to enhance and diversify downtown retail.

Creative Economy

New Bedford's burgeoning creative economy also represents both a strength and opportunity. New Bedford's creative economy, which HR&A assessed both by using parameters developed by the consultants to the New England Council and the New England Foundation for the Arts and by conducting IMPLAN analysis, represents approximately 3% of employment in the city with an annual payroll of $26.75 million. The creative economy is critically important to the vitality of the downtown, which benefits not just from the money generated by cultural events, but also from the influx of visitors, and residents, into the downtown, who will bolster chances to revive the retail core. Recent residential development in the downtown has highlighted the active creative economy as one of the most compelling reasons to settle in the downtown. The Zeiterion Theater is credited with bringing 100,000 patrons to the downtown each year. The Whaling Museum has an additional 100,000 visitors. The creative economy is likely to be the driving force behind revitalizing the downtown and influencing decisions of prospective new city residents. Currently, the Zeiterion Theater, AHA!, the Star Store UMass Dartmouth satellite campus and the Whaling Museum are the main attractions in the downtown. The city has already identified that the creative economy is an opportunity for growth and has created a task force to develop a strategy for growing this sector in the future. Findings of that task force demonstrate that expansion of this sector, and

Brazil's Gilberto Gil at The Zeiterion

effectively marketing its offerings, will be a critical component of the City's effort to re-brand itself as a community of choice for working, living and playing.

Marine Science

The Marine Science sector is an area of great interest in the region. New Bedford sits at the center of a marine science cluster consisting of 500 firms. Sixty percent of these firms are within an hour's drive of New Bedford. New Bedford's location is a great strength that can be built upon to further develop the marine science sector in New Bedford. The maritime tradition of New Bedford and the strong fishing industry in particular, are also strengths—there are natural synergies between these sectors and New Bedford has the opportunity to grow a marine science cluster that can potentially enhance the fishing industry by targeting marine science technologies that are translatable to commercial fishing operations. Marine science is a relatively young industry in New Bedford itself, with just a few firms located in the city with less than two dozen jobs. Firms engaged in Marine Science tend to have very low employment numbers, sometimes as low as 2 or 3 employees. While marine science has tremendous potential, in the South Coast marine science is not yet a major employer, with less than 2,000 people employed. The City should cultivate its affiliation with Wood's Hole Oceanographic Institute and market the City's inexpensive housing to Wood's Hole employees. Currently 1,000 Wood's Hole employees live in Falmouth, a town with far more expensive housing. The new ferry service between New Bedford and Wood's Hole facilitates this connection. Marine science represents an exciting opportunity for growth in the future, but given lean staffing of new enterprises in this sector, it will likely take a fairly long time to develop into a major employer in the city.

Fishing and Seafood Processing

Fishing and Seafood Processing are steady sectors in the New Bedford economy. Employment in fishing has increased steadily for the past six years to approximately 1,000 employees a week (because of the seasonal nature of fishing employment numbers vary from month to month). Seafood processing employs an additional 1,000 people. There is an opportunity to expand this industry and further establish New Bedford as the key fishing port on the East Coast. Other fishing ports along the East Coast are becoming less competitive and there is room in the New Bedford harbor to expand the fishing industry by attracting fishing companies from other fishing ports that are declining. The City will continue to support the fishing industry and fight excess regulations that threaten it. Efforts to grow fishing and seafood processing, and to update the maritime infrastructure in New Bedford Harbor, should be paired with other complementary economic initiatives that could also benefit from greater presence on the waterfront, in particular the creative economy and tourism. Tourism opportunities that celebrate and reinforce a sustainable port economy are strongly encouraged.

New Bedford Fleet

Renewable Energy

New Bedford EDC has been active in recruiting renewable energy firms. Representatives from these firms stated that they were happy with their decision to locate in New Bedford, citing the location of the city as a major strength. These representatives had some creative ideas about how the city could work to foster the renewable energy cluster. Their recommendations focused on the City setting municipal renewable energy goals—clearly identifying itself as a city committed to green—thereby driving demand for renewable energy services. This strategy has been highly successful in cities as diverse as Chicago, Illinois and Tucson, Arizona.

Renewable Energy is a very new sector in New Bedford, indeed it has been established so recently that it is not possible to assess census data for the sector. Industry analysis of the sector in Massachusetts generally demonstrates it is an emerging industry employing 14,400 workers in Massachusetts and growing twenty percent annually. There is significant private and public funding in this sector. In 2006, $250 million in venture capital was invested in renewable energy ventures in Massachusetts. The state and federal governments offer a wide range of tax incentives and grants to individuals, businesses and municipalities that engage in renewable energy projects. There are also interesting opportunities to apply renewable energy applications to the fishing industry, for example with the promotion of biodiesel fuel. The City can actively promote this sector by mandating green goals are met by all city owned and operated facilities, as well as new development in the city.

Nursing and Residential Care Facilities

Nursing and residential care is a major growth industry in New Bedford. In the past two years, three of the top ten employers in this sector have grown by 2000%, creating about 600 jobs in New Bedford. These jobs are relatively low wage jobs, with an average salary of $34,438 (including benefits), but should be a priority industry to expand given the regional and local demographic profile that indicates growing market demand. In 2006 the Cape Cod Commission estimated that 23% of the population on the Cape is over 65. The population along the SouthCoast is similarly skewed. Increasing numbers of senior citizens are moving to the area, or settling into their summer residences year round after retirement.

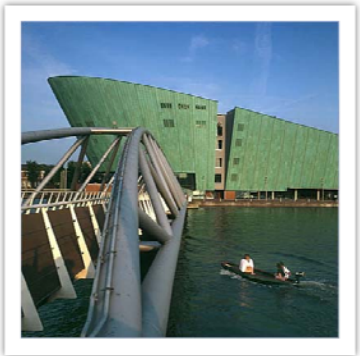
Focus Areas for Targeted Investments:

A number of sites in New Bedford provide interesting opportunities for economic growth:

- The Central Waterfront: Union Street will remain the retail spine linking the waterfront to the vibrant historic city center. Creating more of a visual link between the downtown and the water along the Union Street corridor should be considered. Some portion of the central waterfront, proximate to Union Street and the proposed new Fairfield hotel, should be planned to capture discretionary retail, food, and beverage spending by visitors to the Downtown Waterfront, whether they arrive by ferry, cruise ship, recreational boats or car.

- The State Pier is located at the heart of the harbor, and is immediately adjacent to the historic district. The pier is currently underutilized and is being considered as a facility to accommodate additional fishing and goods movement activity and its support marine infrastructure. The pier is sufficiently large and its location so central that complementary visitor and recreational uses might also be accommodated. We note that while New Bedford is the industry leader in fresh fish export, there is no place in the downtown for retail customers (local area residents, visitors) to buy fresh seafood. Seasonal, or perhaps permanent, offerings of the local catch is an opportunity to burnish the City's image as a source of high quality and local food, and that local element would reinforce the City's sustainability principles, where communities are finding new ways to "grow and eat local." Some aspect of a reconfigured State Pier might also accommodate performance art, public art, festivals and other public assembly elements that reinforce the growth in activities that constitute the creative economy in New Bedford, and again reinforce the City's identity as a thriving port city.

- As New Bedford seeks opportunities to create unique and memorable experiences for its visitors, to enhance the sense of pride of place by its residents and workers, there may be a place-making built form, perhaps a museum or a bridge or public art, that redefines the postcard image of a forward-looking urban place that the City can project to the world, one that helps solidify its economic position in the cultural and / or tourism sector. The current planning for a state of the art, architecturally forward-looking and environmentally sensitive boathouse and new public upland park in the Upper Harbor should be a critical piece of this redefined cityscape and should be complemented by other visually exciting additions to the increasingly public waterfront that will help to rebrand the city and provide visual cues to visitors about the uniqueness of the city and the interesting things happening there.



NEMO, AMSTERDAM HARBOR

- New Bedford Industrial Park: The industrial park has been highly successful and the potential of this park should be maximized. The growth of the park can be coordinated with other economic initiatives, such as the renewable energy and marine science sectors. The Commonwealth's regulatory agencies should work cooperatively with the City to provide reasonable expansion opportunities for the Park so business attraction opportunities can be readily captured. The park should seek to achieve the highest performance standards of LEED, sustainability and land conservation. Creating best-in-class new light industrial and commercial development adjacent to but supportive of environmentally sensitive land would be widely noted and enhance New Bedford's green

identity. The city should contrive to strengthen business attraction and retention strategies by identifying the critical decision points of business owners.

- Custom House Square: The Square currently plays host to a variety of creative economy events. These events would support downtown retail and could be used to boost New Bedford's profile in the region as a tourist destination. A planning and economic feasibility study should be prepared to weigh the cost and benefits of 1) Continuing special event and seasonal programming, and 2) Pursuing high quality regional food market and café facilities in the Square.

- Downtown vacant space: The significant amount of vacant commercial and retail space in New Bedford represents an opportunity to make a major impact on the downtown. Although the spaces are owned by a variety of owners, the New Bedford EDC should craft an area-wide merchandizing and development plan and consider hiring a full-time retail marketing and business support director to address the challenges and opportunities in the city. The highest priority should be to facilitate the development of a sizable, high quality food market in the central downtown, one that involves successful local food businesses such as Sid Wainer, seafood suppliers and area farms and vineyards. This would be a tremendous amenity for existing and proposed residential communities in the City, and could become a destination Heritage Coast food and wine showcase for the region. An initiative with a partner such as Johnson & Wales University's College of Culinary Arts might help establish low-cost venues for talented young chefs who might spur a wave of fresh, new interest in downtown. Vacant commercial space could be utilized to create an arts and design cluster, perhaps even a home furnishings cluster, that reinforces a cultural district near The Z and UMass Dartmouth's arts program presence in the downtown. The focus should be on cultural arts, regional food, heritage tourism and maritime/waterfront uses.

Weaknesses & Threats

Despite its strong assets, New Bedford has struggled for several decades. The city's population has declined from 99,922 in 1990 to approximately 93,000 today. A range of industries has also declined during the same time period. Various factors have contributed to the city's struggles, and must be confronted by any strategy for revitalization.

Educational Attainment/Workforce Characteristics

Educational attainment is low in the city, less than 8% of residents have a bachelor's degree. Not coincidentally, the city's unemployment rate is twice the state average (approximately 10% versus 5%). The workforce in New Bedford is suffering as growth industries increasingly require higher levels of educational attainment. Improving the school system and increasing the educational attainment of New Bedford's workforce are two challenges the City must strategize to overcome. Significant economic development, particularly in marine science and renewable energy sectors, relies on the development of a workforce qualified to work in these sectors.

Crime

New Bedford's successful revitalization is threatened by the perception that the city has a crime problem. New Bedford's overall crime statistics actually compare favorably to other cities in the region. A public relations campaign may be successful in changing New Bedford's reputation compared to other cities, but, of course, would need to be supported by the City's continuing commitment to reduce crime. New Bedford's crime problem is not entirely limited to a perception issue. Analysis of crime data over the past two decades reveals that, while crime in New Bedford has dropped by approximately 32% in the past twenty five years, violent crime in New Bedford has increased significantly. This trend is clearly a threat to the City's plans for the future. The New Bedford Police Department had significant success in reducing some types of violent crime from 2006 to 2007; these efforts must be continued and expanded.

Loss of Manufacturing Base

Like many old industrial cities in the Northeast, New Bedford continues to lose manufacturing jobs to lower cost locations in the South and overseas. Revere Cooper and Multilayer Coating both announced closures this year. The loss of these businesses further emphasizes the need to look to new industries that are sustainable in the New Bedford of the 21st Century. The City should develop an aggressive business attraction plan for clean tech or green collar companies in the energy-efficiency and sustainability sector, as well as firms seeking a unique quality of life location

and historic mill building inventory. The City is already working towards this goal by attempting to attract renewable energy companies to the Industrial Park. The city may also want to think creatively about how new tech and other manufacturing opportunities could induce some of these older economic mainstays (Revere Copper had a facility in New Bedford for over one hundred years) to stay in New Bedford.

Need for Coordination between Public and Private Interests

The City and Commonwealth have identified the importance of developing a comprehensive economic and physical plan for the City, which does not currently exist. Such efforts are always complex, requiring that public agencies and business alliances balance and align public benefit interests and objectives with private business investment opportunities and risks.

Such a process requires leadership, broad outreach and transparency. Cities that formulate development frameworks for future public investment in infrastructure and the public realm, and delineate and facilitate a range of private mixed-use development opportunities, experience a positive response from investors, developers, retailers, institutions and other interested parties. Providing a roadmap for the City's growth, for the public sector's policy and for planning and funding priorities, provides a higher degree of predictability and an indication of mitigated risk to the business community. For example, completing the Route 18 redesign and connecting the downtown and the waterfront, is essential to creating a vibrant downtown and demonstrating the effectiveness of the City's planning efforts. The City and Commonwealth should pair this vision plan with a robust set of incentives (available public property, zoning, tax abatement, low cost financing, loans and grants) to attract and retain businesses, increase downtown residential and retail activity, and support the expansion of the cultural arts and academic uses at locations that build from existing strengths.

New Bedford Overview

New Bedford has been through challenging times in recent decades. Today New Bedford is focused on developing strategies for renewal and sustained prosperity. Like many older industrial cities, New Bedford has significant assets that can be used as catalysts for new growth. The once prosperous city remains a cultural arts hub in the region and boasts an inspired setting overlooking its protected harbor and Buzzard's Bay. The historic restoration of its core downtown area has become a destination for heritage tourism. The city is proximate to Boston and Providence. New Bedford is located in the center of the South Coastal area of Massachusetts, an area currently being redefined as the Heritage Coast, and is attracting increasing interest as a leisure destination alternative to the Cape, Nantucket and Martha's Vineyard. Today, in the first decade of the 21st century, the city and its leadership are eager to reinvigorate New Bedford, remaining committed to supporting the rich maritime industry that built the city, but also looking for new economic opportunities that leverage the historical significance of the city and the natural resources that surround it.

Economic developments in the past year affirm that defining strategies to attract new industries is important to improving the city's economy. Although the economic base of the city is still grounded in manufacturing, this sector is shrinking, and will need to be replaced by other industries in coming decades.

Manufacturing companies are leaving the city for a variety of reasons. Both Multilayer Coating and Revere Copper closed their New Bedford operations this year. Revere Copper cited business costs, in particular high taxes and high energy prices in Massachusetts, as forcing its closure. Revere Copper's plant in Rome, New York will remain open. Multilayer Coating, in contrast, has been driven out of business by changes in the industry (the company manufactured film, which has largely become obsolete with the proliferation and domination of digital cameras). The decline of manufacturing in New Bedford is not an isolated trend. In the region, manufacturing jobs declined from 23.7 of employment in 2000 to 15.7 percent in 2005. These recent losses highlight the importance of building on existing industries that are sustainable, while looking for opportunities to introduce new industry.

Despite the loss of these long standing businesses, there are some positive indicators that suggest New Bedford is in a good position to attract new industry. Crime has seen a reduction of 32% in the past 25 years. 500,000 square feet of commercial space has been rehabilitated in the downtown since 2000. The industrial park has been attracting new tenants and generating new jobs for the City. UMass Dartmouth is building new facilities on its SMAST campus. The City is focused on nurturing its creative economy, building on the success of existing cultural institutions like the Zeiterion Theater and The Whaling Museum.

HR&A is working intensively with Mass Development, the City of New Bedford, the New Bedford Economic Development Council and other stakeholders in New Bedford to develop an in-depth understanding of the demographic and economic forces that are shaping the city. This report is intended to provide an overview of the city, building a fact base that will help the City objectively identify strengths, constraints and opportunities. In order to better understand the economy of the City, HR&A has conducted detailed analysis of the top five import and export industries in New Bedford today. This analysis is intended to facilitate the City's assessment of the benefits, as well as costs, of sustaining and building these sectors. HR&A has also analyzed four sectors that the city would like to develop or expand. HR&A is assisting MassDevelopment and the City in assessing New Bedford's relative position in the regional economy, and identifying New Bedford's strengths and weaknesses relative to other similar cities with the goal of identifying opportunities for sustainable economic growth and increased prosperity. This market assessment is intended to inform the preparation of a citywide development framework that will guide future economic reinvestment by private and public sectors.

Methodology

In order to create this report, HR&A reviewed existing studies, including the 2000 and 2007 FXM New Bedford reports, UMass Dartmouth's Capital Plan Update, Hicks-Logan-Sawyer Urban Renewal Plan, MassGateway, the Harbor Plan, SouthCoast Signals, AHA! Open Studios 2006 Program Evaluation and Economic Impact, The Marine Science and Technology Industry in New England and many other reports, news articles and other materials. HR&A also conducted original data analysis, collecting data from IMPLAN, U.S. Census, Claritas, Dunn & Bradstreet, County Business Data and industry interviews. HR&A met with and interviewed employees of New Bedford's City agencies and members of the business, arts and academic communities.

New Bedford at a Glance

- Population (census 2000): 93,786
- Land Area: 20 square miles
- Waterfront: Approximately 10.3 miles of linear footage
- Population density: 4,938/sq mi
- Conservation Land: 217 acres
- Recreation Area: 921 acres
- Retail Sales: $1,040,282,666.00*
- Total number of businesses: 5374 (U.S. Census, 2000)
- Housing Units: 41,511 (U.S. Census, 2000)
- Median Family Income: $38,684
- School Age Children in Low Income Households: 65.7% (2006, Mass Dpt. of Ed.)
- High School Graduation Rate: 67.4% (2004, Mass Dept. of Ed.)
- Overall crime has declined 32% in the past 25 years
- Prospective Growth Industries in New Bedford:
    - Marine Science Employment: 35.4% increase (2000 to 2005) (UMass Dartmouth)
    - Tourism: 67 % increase in SouthCoast region (2000-2004) (Mass. Div. Employ. And Training)

**Retail sales are total sales reported by retailers, including commercial sales and sales to customers who do not live in New Bedford.*

Basic Demographics

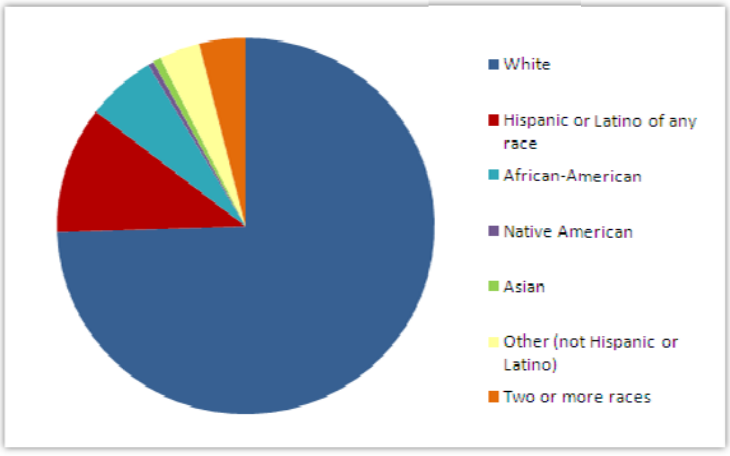
In recent years, New Bedford has seen a significant shift in demographics. Between 1985 and 2001, employment in many of the leading sectors of New Bedford decreased by almost 44%. The employment in the Agriculture, Forestry, and Fishing sector decreased by 47%, from 1,592 employed down to 839, manufacturing employment decreased 59%, from 20,528 to 8,398, and finance, insurance, and real estate employment decreased 30%, from 1,886 down to 1,313.

Consistent with trends seen in old industrial cities throughout the U.S., many companies have shifted manufacturing operations to the South or overseas. As job opportunities have become scarce, New Bedford has experienced a decrease in its residential population, with nearly 18 percent fewer residents ages 18-34 in 2000 than in 1990. This demographic change is evidenced by an abundance of inexpensive housing throughout the city. The supply exceeds current demand and market prices are thus below those of the more suburban surrounding South Coast communities.

Ancestry	1990	2000
English	9.9%	7.3%
French	18.4%	15.0%
Irish	8.5%	7.9%
Italian	2.4%	2.9%
Polish	4.1%	3.3%
Portuguese	45.1%	38.6%
Other	11.6%	25.0%
Total Population	*99,922*	*93,786*
Hispanic or Latino of Any Race	6.7%	10.2%

New Bedford Ancestry

The proportion of New Bedford residents living below the poverty threshold has grown as employment opportunities have declined and young workers have left the city. A fifth of all New Bedford residents fall below poverty thresholds and poverty rates are particularly high for minority residents[1]. According to the 2000 census, over a third of New Bedford's African-American and almost half of all Latino residents were living below the poverty line in 1999.



New Bedford Racial Demographics

Overall, New Bedford's socioeconomic status is lower than that of the Commonwealth of Massachusetts. The per capita income is 60% of the state's median and the median household income is 58% of the state's median. Specifically, in 2000, the per capita income for the city was $15,602 and the median household income was $27,569. The unemployment rate

[1] Official website of the City of New Bedford. http://www.ci.new-bedford.ma.us/

hovers around 10%, which is nearly double the unemployment rate in the Commonwealth.

New Bedford continues to be a city of immigrants. One out of five New Bedford residents is born abroad. However, the traditional ethnic and racial demographics of New Bedford are changing. While the single largest segment of the population is of Portuguese descent, primarily immigrating from The Azores, mainland Portugal, and Cape Verde, this percentage is declining. In recent years, Brazilians have become the fastest growing population in New Bedford, and in Massachusetts. In the period ranging from 2000 to 2003, one in five immigrants to the state was Brazilian. A third of these new immigrants have limited English-speaking skills; in New Bedford they utilize the service programs created during the periods of high Portuguese immigration. The Latino and African American populations in New Bedford are also growing rapidly, doubling in the past fifteen years.

An overview of New Bedford's basic demographics demonstrates that the city is facing the challenge of retaining the younger members of its workforce. New economic development, and the accompanying employment opportunities, will be needed to maintain the existing workforce, and draw in new workers. New Bedford's immigrant workers are a critical source of new energy for the local economy; a focus on integrating these workers into the workforce is necessary. Maintaining bilingual employment centers and sponsoring English for the Workplace classes are good first steps in broadening the economic opportunities for these workers. A two pronged approach for economic development will focus on retaining and attracting new workers, particularly those with higher education, and looking for opportunities to maximize the opportunities for newly arriving immigrant workers.

Educational Data

One of New Bedford's most critical challenges is to improve the school system, a challenge requiring the intense commitment of public and private stakeholders. There is significant opportunity for positive change at this time. Currently a search for a new Superintendent of Schools is underway. The interest and excitement surrounding this search process can provide the momentum and focus needed for change. Yet, as seen across urban America, the challenges of the educational system in New Bedford are daunting.

Challenges

The New Bedford workforce has low educational attainment compared to the region and the Commonwealth. Education has historically been a challenge for New Bedford and only becomes a more serious issue as regional and national economic forces increase the demand for highly educated workers, with ever fewer opportunities for less educated workforce. There are several causes of the education deficit in New Bedford.

Historically the city's industry has focused on jobs that do not require high levels of education, and incentivized early entry into the workforce. Manufacturing and fishing industry jobs reward youthful strength and energy, and advanced education is not traditionally required. In the fishing industry it has historically been the norm for young people to seek employment on boats while they are still teenagers. For textile manufacturing jobs the majority of employment options do not require advanced education or English language-speaking capabilities. Recently the health care sector has become the largest employer in New Bedford. The health care industry now provides more than 14 percent of the jobs in the SouthCoast, up from 10 percent in 2000. The growth of this industry may help shift the city towards an economy based on jobs that require greater levels of educational attainment. It is important to note that this industry also employs many on workers with low levels education. Assisted living facilities employ kitchen staff, nursing aids, janitors and other employees who have no medical training.

The city is in the process of improving it school system. New Bedford is engaged in major school upgrades and consolidations, having rebuilt several of its schools in recent years. As of the 2006-7 academic year the New Bedford school district is one of several in Massachusetts labeled as "underperforming" under the state's Massachusetts Comprehensive Assessment System (MCAS) guidelines.

The public school district is made up of twenty-eight schools serving more than 13,000 students. Of the 28 public schools in New Bedford, only one school, Winslow Elementary School, is in line with state educational attainment averages. Collectively, the public schools' test scores are approximately 50% below state averages. The schools' proficiency levels range from 0% in the

worst case (West Side Jr. – Sr. High School) to 63.98% in the best case (Winslow Elementary School) with the median proficiency level of 35.65% (Lincoln Elementary). The state proficiency levels range from 32% to 75% with the median proficiency level of 55.43%.

The New Bedford high school graduation rate is 57.4%, as compared to 79.9% for the Commonwealth overall. The dropout rate, for students who neither graduate nor take the GED, is 24.8%.

The private school options in New Bedford are limited at the elementary school level and non-existent at the high school level. Many students who attend one of the five private religious elementary schools go on to attend Bishop Stang High School in neighboring Dartmouth.

One relatively successful educational project is the Global Learning Charter School, founded in 2002. The proficiency levels for this charter school are only 12.7% below the state average of 54.08%, as compared to the New Bedford average of 50% below the state average. The school's curriculum focuses on technology, which is integrated into all subject areas. Recently one of the teachers there was named 2007 Teacher of the Year by the Community Foundation of Southeastern Massachusetts. The charter school credits their small nurturing environment (less than 400 students for grades 5 – 12) for their relative success. This charter school is offers a new model for education in New Bedford that may be worth replicating.

Several factors significantly impact the testing rates of public schools in New Bedford. Close analysis revealed that there are significant negative correlations between testing scores and (1) the proportion of students in the school who do not speak English as a first language, (2) live in a low income household and (3) have special education needs. New Bedford's testing scores are clearly impacted by at least two of these three factors. New Bedford can look to the success of other diverse urban schools for models for change.

Nearly 40% of New Bedford residents speak a language other than English at home and 20% of residents live below the poverty threshold. In contrast only 18% of residents in Massachusetts as a whole speak a language other than English at home and only 9% of Massachusetts residents live below the poverty threshold. There is a strong negative correlation between the percentage of low income students and school performance and the percentage of English as a Second Language students and school performance. Given New Bedford's unusually high numbers of students in both categories, Bedford must overcome greater hurdles to realize improvement in the schools.

The educational success of younger generations is an important step that will help to break the cycle of poverty in the city. The success of the New Bedford school system not only impacts the children in the schools, but also directly affects the New Bedford's economic viability in two ways. Creating and maintain good quality schools is a crucial step towards attracting new companies and residents as well as retaining and growing current industries. The availability of good quality

public schools is one of the most important factors that people consider when deciding where to live.

The extent to which cities are judge by the quality of their schools was highlighted by the annual survey in Money Magazine of the Best Places to Live in the USA. When asked to rank small cities (with populations of approximately 100,000), good quality public schools was one of the key determinants that was named as a critical asset for 9 of the 10 cities selected. Clearly in order to be competitive and attract new industry, as well as more, and better educated workers, New Bedford has to improve its school system. An economic development specialist at UMass Dartmouth noted that several prospective businesses have recently decided not to locate in New Bedford because of concerns about the school system.

Education	New Bedford	Best Places Average	% Difference
Colleges, universities and professional schools	2	6	-75.00%
Junior colleges and technical institutes	0	0	0%
Test scores reading (% +/- state average)	-54%	13%	-57%
Test scores math (% +/- state average)	-47%	17%	-54%
% students attending public/private schools	90.8/9.20	88.4/11.59	2.4/-2.4%

NEW BEDFORD TEST SCORES AGAINST STATE AVERAGES AND BEST PLACES AVERAGE
SOURCE: MONEY MAGAZINE 2006

To become increasingly competitive, New Bedford needs a good quality school system that can produce well-educated and skilled workforce that can be employed by new businesses that the city hopes to attract. New Bedford needs to cultivate a skilled workforce in order to ensure its economic viability over the long term and improving the education system will be an important part of the economic growth strategy.

Opportunities

New Bedford is fortunate to have key players in both public and private sectors keenly interested in improving the public schools. UMass Dartmouth has sought for many years to be a productive partner to the school system. An Assistant Chancellor for Economic Development at UMass Dartmouth estimated that UMass Dartmouth provides $850,000 a year in teaching and training services to the city's school system. Tom Davis, the founder of the New Bedford Industrial Park, has founded a charter school and is investigating the possibility of founding a charter high school.

In the past assistance from the private sector has not been always well-received. For example, a previous effort to use an independent panel to identify candidates for the school superintendent position was thwarted when the school committee promoted an internal candidate without consulting the independent panel. At the moment various private parties have rallied at the opportunity to identify a new Superintendent for the New Bedford school system.

Strategies for Success

The school systems in Sacramento, California, Houston, Texas and Charlotte-Mecklenburg, North Carolina all provide successful strategies for change. While these school districts are quite diverse, a study by MDCR for the Council for Great City Schools revealed that all three schools focused on certain consistent elements in pursuing positive change. The schools focused on student achievement and meeting specific achievement goals and the goals were tied to a schedule with defined consequence for missing goals. Accountability systems were created to assess the performance of district leadership. Special efforts were focused on the worst performing schools. Uniform curricula were established for the district. Decisions were driven by data that was provided to administrators and teaching staff. Initial reform efforts were focused on the elementary level with an intense emphasis on reading and math.

In Massachusetts the efforts of the Literacy Collaborative, run out of Lesley College, have proven very effective in several grammar schools, including the Franklin Avenue Elementary School in Westfield, Massachusetts. MCAS scores for participating schools have risen dramatically. This is another model worth assessing for application to New Bedford's schools.

Work Force Data

Workforce Overview

The New Bedford workforce population has characteristics that are consistent with the educational challenges that the city faces. The workers have low levels of educational attainment compared to the Commonwealth. In New Bedford only 13% of residents 25 and older have a Bachelor's Degree, or higher, as compared with 37% of Massachusetts residents 25 and older.

Lack of education appears to have a strong correlation with employment prospects. In 2006, unemployment insurance claimants of New Bedford had the lowest educational attainment levels in the Commonwealth of Massachusetts. Unemployment data reveals almost 90% of the unemployed workforce does not hold bachelor degrees.

While there is strong demand for educated workers in the region, census data analysis suggests that younger, more educated residents have been leaving New Bedford. It is unclear where these workers are moving to. It is possible they are moving to neighboring towns. If this is the case, the population shift should have less of an impact on New Bedford's economy (younger workers are still available in the area). If workers are moving

Educational Attainment	Males	Females	Total	% of Total
No schooling	1,226	1,551	2,777	4.5%
Nursery to 4th grade	1,450	1,756	3,206	5.2%
5th and 6th grade	1,290	1,701	2,991	4.8%
7th and 8th grade	2,630	3,396	6,026	9.8%
9th grade	1,673	1,735	3,408	5.5%
10th grade	1,395	1,735	3,130	5.1%
11th grade	830	1,063	1,893	3.1%
12 grade, no diploma	1,474	1,244	2,718	4.4%
High school graduate (or equivalency)	7,740	9,341	17,081	27.7%
Less than 1 year of college	1,386	1,850	3,236	5.2%
Some college - more than 1 year, no degree	2,362	2,982	5,344	8.7%
Associate degree	1,323	1,963	3,286	5.3%
Bachelor's degree	1,967	2,654	4,621	7.5%
Master's degree	737	738	1,475	2.4%
Professional school degree	205	173	378	.6%
Doctorate degree	104	35	139	.2%
Totals	27,792	33,917	61,709	100%

SOURCE: CENSUS 2005 EDUCATIONAL ATTAINMENT IN NEW BEDFORD: ADULTS 25 AND OLDER

further afield, for example to the Boston area, then the shift represents more of a significant drain on the city's young workforce.

More of the city's residents are seeking employment outside of New Bedford. As of 2000, fifty percent of the city's workforce is employed outside of New Bedford. This represents a 42% increase from 1990.

The Commonwealth and City must continue to address the disconnect between the workforce characteristics of New Bedford residents and the growth sectors of the regional economy. The area's fastest growing occupations require higher levels of education than residents of New Bedford typically achieve. The two fastest growing sectors are: Professional, Technical and Business Services (+19.3%) and Health and Education Services (+16.2%). Among the 30 fastest growing occupations, 22 require at least an Associate's Degree.

The employment prospects for New Bedford residents are inextricably linked with the educational attainment of the population. Roughly 11%, or approximately 6,600 workers, in New Bedford are qualified (BA or above) for the jobs that in the regional growth sectors. In stark contrast, 15,000, or 24% of workers, have less than a 9th grade education.

High Growth Occupations in Southeastern Massachusetts

Short Term on the Job Training	Bill and Account Collectors Customer Service Reps. Home Health Aides Personal and Home Care Aides	$12.23/hour $14.62/hour $9.46/hour $9.10/hour
Moderate Term on the Job Training	Physical and Corrective Therapy Assistants Human Services Workers Medical Assistants	$14.11/hour $10.62/hour $11.68/hour
Associate's Degree	Medical Records Technicians Dental Hygienists Radiologic Technologists and Technicians Respiratory Therapists Paralegals Technical Writers	$10.23/hour $22.21/hour $18.28/hour $18.02/hour
Bachelor's Degree	Computer Engineers Database Admin, Computer Specialists Engineering and Computer Science Managers Occupational Therapists Physical Therapists Physician Assistants Systems Analysts	$31.67/hour $22.91/hour $31.67/hour $22.95/hour $26.45/hour $22.58/hour $25.01/hour
Master's Degree	Social Workers, Medical and Psychiatric	$21.59/hour

Source: Mass Division of Employment and Training

Fishing and manufacturing continue to be two of the largest business sectors in the city, and the healthcare industry has become a major employer. The three largest private employers based in New Bedford are SouthCoast Hospitals Group, one of the top ten employers in Massachusetts (healthcare), Acushnet Manufacturing, and Joseph Abboud (apparel manufacturing).

New Bedford's labor force is increasingly working outside of New Bedford. In 1990, 35% of New Bedford residents worked outside of the city of New Bedford (15% in greater New Bedford, 19% outside greater New Bedford). In 2000, half of the city's residents worked in another area. Census data shows that most residents are commuting to areas beyond greater New Bedford. (19% greater New Bedford, 31% outside greater New Bedford).

Source: Dunn & Bradstreet, NAICS.com

Top Employers New Bedford	
Company	# of Employees
Southcoast Hospital Group	3,853
Acushnet Company	2,300
City of New Bedford	2,100
Joseph Abboud Manufacturing	580
Polaroid Corporation	500
Lifestream Inc	335
AFC Cable Systems	300
Tremblay's Bus Co. LLC	300
Depuy Orthopaedics Inc	300

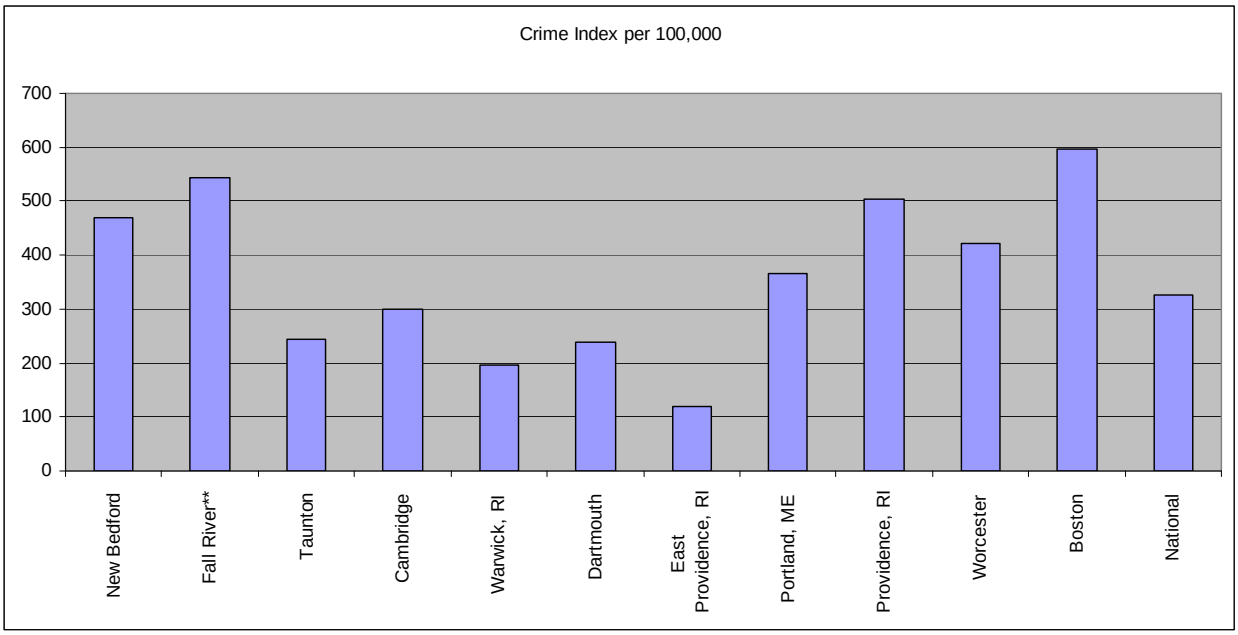
Crime Data

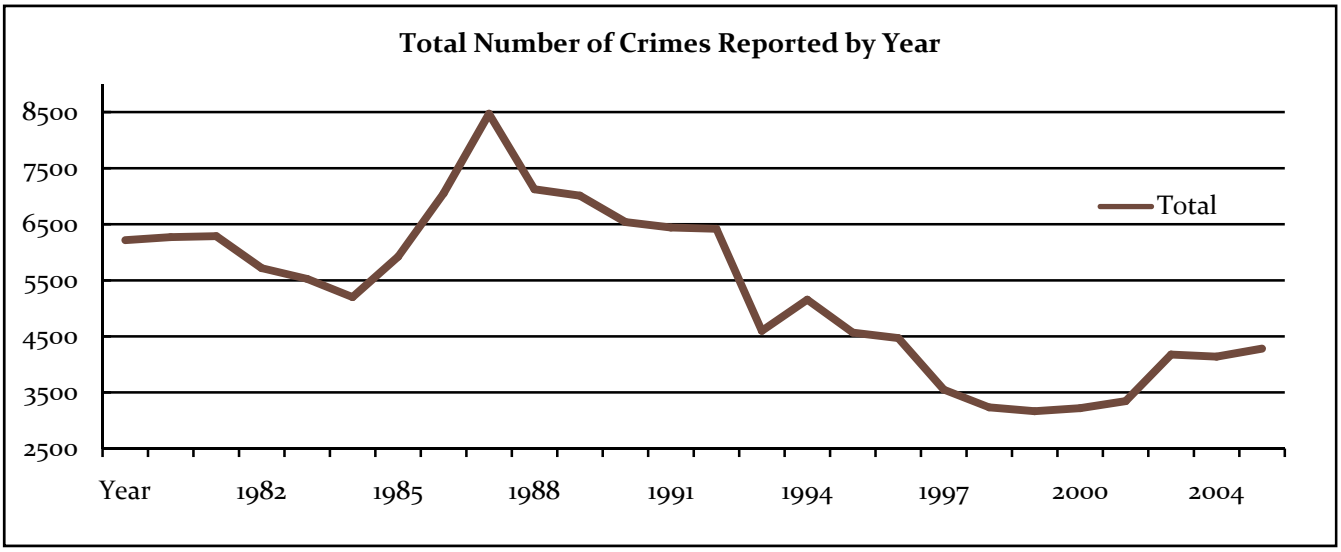
New Bedford has taken important steps to emulate national trends in urban crime reduction. There has been measurable success in the past year, with crime figures falling significantly from 2006. The New Bedford Police Department attributes this success to District Attorney C. Samuel Sutter's enthusiastic utilization of the dangerousness statute since the beginning of 2007. In the year 2007, confirmed shots fired decreased by 39.7%, victims injured by gun shots decreased by 65.8%, and murders decreased by 71.4%.

	Confirmed Shots Fired	Guns Ceased	Wounded by Gun Shots	Murders
2006	73	57	38	7
2007	44	32	13	2
% Change	39.7%	43.9%	65.8%	71.4%

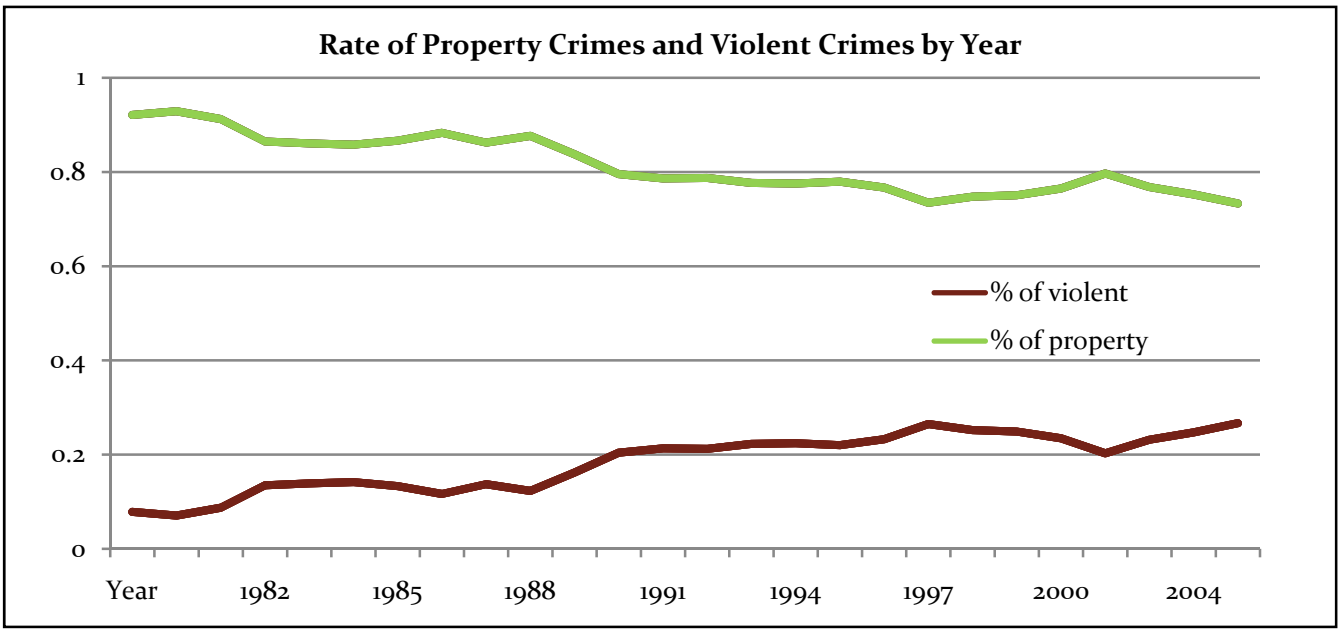
Despite these recent positive trends, New Bedford is often perceived as a crime-ridden city. Analysis of crime data reveals, however, that New Bedford's crime rates are similar to, or less than, those of cities that are perceived as being much safer. Boston and Providence, for example, have significantly higher crime rates per capita. This data suggests that New Bedford may suffer less from crime and more from a public perception problem. This perception is, most likely, fueled in part by negative media coverage, the city's rugged industrial waterfront and lingering vacant storefronts and mill buildings throughout the City. The recent opening of a police station downtown has been hailed as one recent, strategic initiative that will make the city feel safer.

CRIME INDEX IN NEW BEDFORD FOR ALL CRIME TYPES

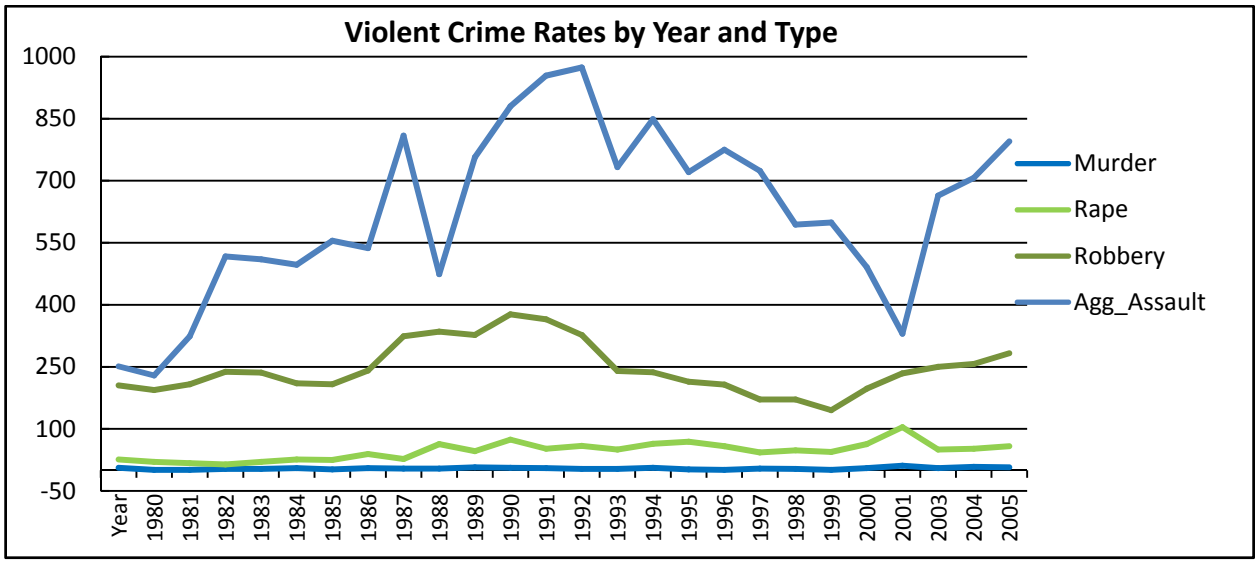




CRIMES REPORTED IN NEW BEDFORD



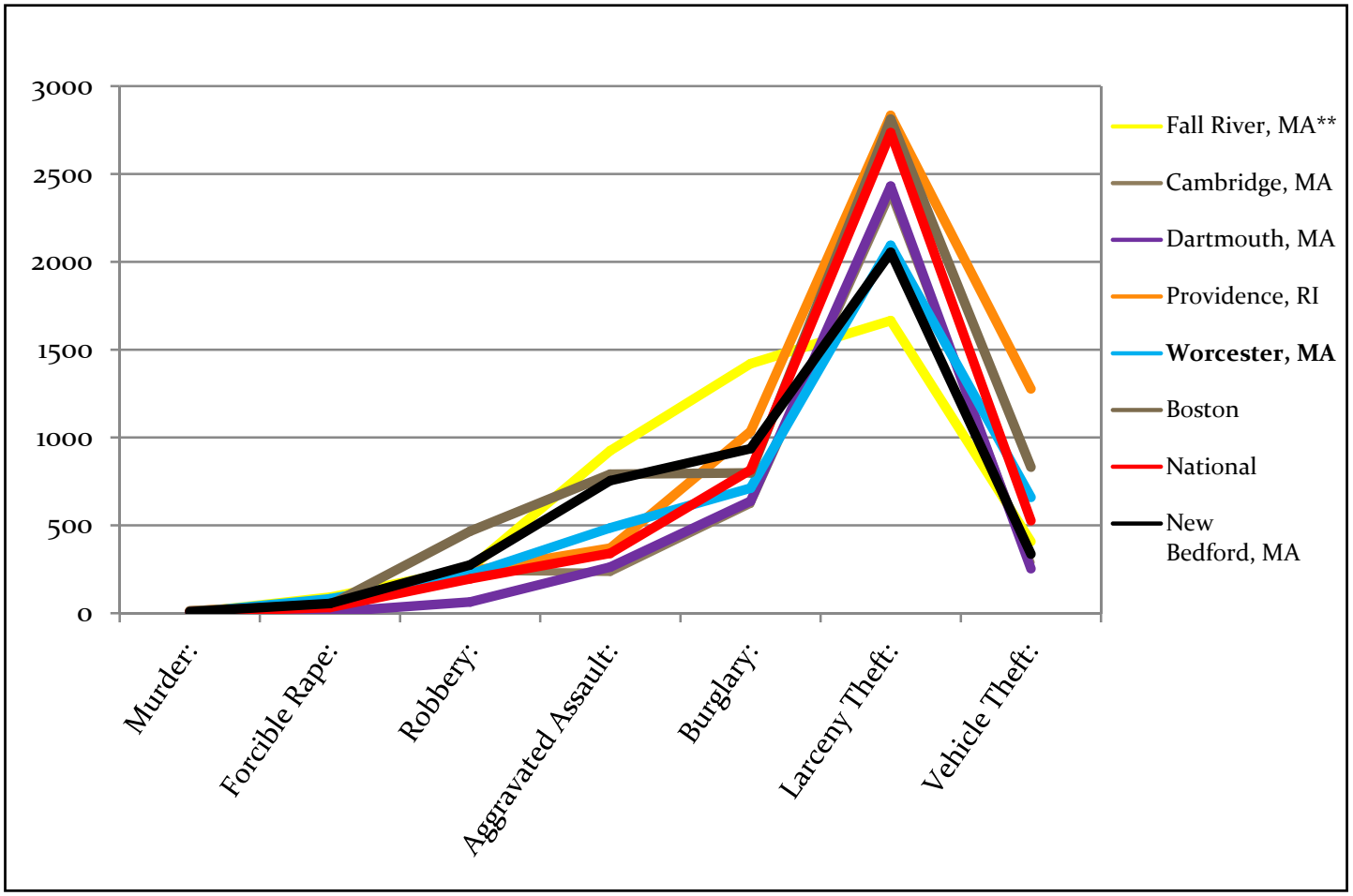
CRIMES REPORTED IN NEW BEDFORD



VIOLENT CRIME RATES IN NEW BEDFORD

Among the challenges that law enforcement faces include: 1) the proliferation of drug use, in particular heroin, which is now cheap and readily available throughout the US; and 2) recent increases in violent crime in the City. Recent data indicates that violent crimes are an increasingly large proportion of crime overall. Indeed, while the number of all crimes fell from 1980 to 2000, and then began to increase again in 2000, the number of violent crimes increased between 1980 and 1992, declined from 1993 to 2003, and then began to rise again. The number of violent crimes in 2006 was 1143; almost double the number of violent crimes in 2003 and nearly three times the number of violent crimes recorded in 1980. The City is focused on reducing violent crime and has seen some types of violent crimes decrease significantly over the past year.

Total Number of Crimes Reported in New Bedford compared with Other Cities in the North East (2005 – FBI Uniform Crime Report)



Total Number of Crimes Reported New Bedford (1980-2006)

Year	Total	Violent	% Violent	Murder	Rape	Robbery	Agg_Assault
1980	6217	488	7.8%	6	26	205	251
1981	6270	444	7.1%	1	20	194	229
1982	6286	550	8.7%	1	17	208	324
1983	5717	772	13.5%	3	14	238	517
1984	5525	769	13.9%	3	20	236	510
1985	5200	738	14.2%	5	26	210	497
1986	5921	790	13.3%	2	25	208	555
1987	7049	822	11.7%	5	39	241	537
1988	8470	1164	13.7%	4	27	324	809
1989	7123	876	12.3%	4	63	335	474
1990	7008	1137	16.2%	7	46	327	757
1991	6539	1337	20.4%	6	74	377	880
1992	6441	1376	21.4%	5	52	365	954
1993	6418	1363	21.2%	3	59	327	974
1994	4599	1026	22.3%	3	50	240	733
1995	5155	1156	22.4%	6	64	237	849
1996	4567	1006	22.0%	2	69	214	721
1997	4471	1041	23.3%	1	58	207	775
1998	3552	942	26.5%	4	43	171	724
1999	3234	816	25.2%	3	48	171	594
2000	3166	789	24.9%	1	44	145	599
2001	3220	756	23.5%	5	63	197	491
2003	3345	679	20.3%	11	104	234	330
2004	4176	969	23.2%	5	50	250	664
2005	4140	1024	24.7%	8	52	257	707
2006	4283	1143	26.7%	7	58	283	795

Housing Data

New Bedford House

New Bedford has a large quantity of older housing stock. Forty nine percent of the housing stock was built before 1939, an additional twenty three percent was built between 1940 and 1959. Thirty percent of the housing is single family; nineteen percent is two-family and approximately twenty nine percent is 3-4 units, classic triple decker immigrant housing from the late 19th and early 20th century. The vacancy rate for rental units is seven percent. Downtown residential is nine percent.

Housing prices and rents are significantly lower than for the state as a whole. The median sales price for a unit in New Bedford was 34% lower than the median sales prices in the state. The median monthly rental rate was 33% lower than in the state median.

Companies may be attracted to the city because the city's housing is exceptionally affordable, whether to buy or rent, and there is ample housing available. In addition, many of the residential buildings are historically and architecturally significant (although in need of renovation).

Currently the inexpensive housing has attracted a workforce that cannot afford to live elsewhere. These renters still struggle to pay rent; 39% of renters spend over 30% of their income on housing, 20% of renters in New Bedford spend more than half of their salary on rent. The City also has a disproportionate number of renters compared to the state. According to 2000 census data, fifty six percent of New Bedford residents rent their homes, as compared with thirty six percent of residents in the state overall.

New Bedford vs. Massachusetts: Basic Housing Statistics

New Bedford	Massachusetts
Owned homes, condos Average household size – 2.63 Median year structure was built – 1942 Median value of occupied units - $113,500 Median price asked for vacant units - $108,400	Owned homes, condos Average household size – 2.74 Median year structure was built – 1958 Median value of occupied units - $185,700 Median price asked for vacant units - $160,800
Rented homes, apartments Average household size – 2.23 Median year structure built – 1940 Median monthly rent asked for vacant units - $392	Rented homes, apartments Average household size – 2.13 Median year structure built – 1951 Median monthly rent asked for vacant units - $578
Owners finance status Second mortgage and equity loan – .1% Second mortgage – 7.6% Home equity loan – 7.1 % Simple mortgage – 48.6% Debt free – 36.6%	Owners finance status Second mortgage and equity loan – .1% Second mortgage – 5.7% Home equity loan – 10.6 % Simple mortgage – 55% Debt free – 28.4%
Median part of monthly household income dedicated to covering home ownership costs – 19.7%	Median part of monthly household income dedicated to covering home ownership costs – 19.5%
New Bedford estimated mean house/condo value in 2005: $239,577	Massachusetts estimated mean house/condo value in 2005: $361,500

Downtown New Bedford: *Commercial Office and Retail Data*

Overview

One of New Bedford's single greatest assets is its historic harborfront downtown. New Bedford has a downtown that was developed to serve thriving 19th and 20th century port economies; any strategy to reinvigorate the city of New Bedford as a whole must focus on utilizing the exceptional assets of this urban waterfront. The city[2] is fortunate to boast large and attractive public and private buildings which form a historic district. One important indicator of the health of the city is the vacancy rate for commercial, office and retail spaces. Currently New Bedford's downtown commercial and retail space is more than 25% vacant, despite recent renovations to many existing buildings. During the past ten years, public and private partners in New Bedford have invested $55 million in renovating downtown buildings resulting in a supply of new attractive commercial space. These renovations provide New Bedford with an opportunity to cultivate the growth of retail and entertainment in the areas surrounding these buildings. The key to creating energy in the downtown is to provide restaurant and retail tenants, businesses that generate pedestrian traffic and "life" on the street, for these spaces. Given recent downtown revitalization efforts, and untapped retail demand, New Bedford is well-positioned to realize an enhanced retail and commercial district in the downtown.

New Bedford Shop

During the past 10 years a large portion of the office buildings in the downtown were renovated. According to FXM's 2007 report on downtown New Bedford, more than 500,000 square feet of

[2] Commercial space is defined as space occupied by banks, schools, museums, medical clinics, restaurants, bars, night clubs, theaters, gas stations, funeral homes, publishers and other businesses.

space has been renovated since 2000 (one third of downtown space), the majority of which is located on Union Street (approximately 314,000 square feet). Union Street is one of the critical streets in the downtown running through the center of downtown and terminating at State Pier. Downtown's retail is focused on Union Street, with cafes like The Green Bean coffee bar serving as hubs of activity. The Star Store Campus, a satellite campus for UMass Dartmouth, sits at the intersection of Union and Purchase Streets and has been a new source of energy in the city for students and artists.

The effort and money that has been invested in renovating downtown buildings has improved the appearance of the downtown, but has not yet generated the creation of new successful retail and commercial ventures. Vacancy data collected by Jeff Pontiff in November 2007 reveals that approximately 24% of downtown commercial space is vacant. Retail space is particularly underutilized, with a 38% vacancy rate. Office space usage is higher, with only a 15% vacancy rate. In fact, the data suggests that either existing businesses simply shifted between spaces or that any gains of new businesses were offset by departures of existing businesses. High office vacancy rates can be attributed to the limited amount of Class A office space, and relatively high rental rates, between $8-20 per square foot. The current mix of uses is also not ideal for creating a lively urban center. Currently the most dominant retail or office use is law offices, followed by restaurants and banks. Building a critical mass of interesting retail will enliven downtown's office and residential markets.

Opportunities

Recently residential developments focused in the downtown area or along the waterfront have enjoyed some success. The new developments emphasize the attractions of living in a walkable, historic downtown with many cultural amenities, as well as easy access to the highway. New Bedford is uniquely positioned within the region to market to people interested in living in an affordable, truly urban environment that can offer cultural amenities and has easy access to the beaches and recreational waterfront. The New Bedford Whaling Museum, UMass College of Visual and Performing Arts, Bristol Community College, the Zeiterion Theatre and the bimonthly AHA events are selling points for these developments and emphasize the tight connection between the success of residential development and the success of the creative economy. The Bristol Building, the Union Street Lofts, "Ropeworks", the Wamsutta Mills project, the Bristol Building and Whaler's Place are recent developments that have exceeded expectations. Some of these sale prices have set new highs for the New Bedford market. A unit in the Bristol Building sold for as high as $300 per square foot. Some brokers believe there is additional opportunity to develop residential space in the upper floors of buildings in the downtown, although others feel that, without other catalytic interventions Downtown, the New Bedford residential market may be overexposed. Successful residential development in the downtown would help support efforts

to increase the amount of retail in the downtown. The success of these two types of development is interdependent, and therefore efforts in both areas should be coordinated.

Challenges

The data suggests that the new supply of renovated space is actually creating a surplus of available commercial and retail space.

Retail Analysis of Downtown New Bedford

A walk through New Bedford's downtown today is perplexing. Despite the extensive investment in the downtown over the past ten years, much of the retail space remains vacant. Interestingly the lack of retail does not correlate to a lack of demand. Analysis of Claritas data reveals that there are significant retail opportunities in New Bedford. HR&A's retail analysis reveals a gap of over $175 million that the city should focus on recapturing. There is significant demand for supermarkets, garden supply stores, and a car dealership. There also is demand for bookstores, clothing stores, full-service restaurants and department stores. Locating some of these businesses in the downtown could help to reinvigorate the downtown, providing uses for some of the vacant commercial space, and providing useful tax revenues to the city.

Unmet Retail Demand in New Bedford

Car Dealerships:	$93,061,106
Department Store:	$87,015,164
Clothing Stores:	$31,356,352
Garden Equip/Building Materials:	$15,390,132
Supermarket:	$9,914,311
Book Store:	$3,000,084

The existing retail opportunity in New Bedford needs to be more effectively promoted. At the moment local entrepreneurs are the main force behind new businesses in New Bedford. The local faith in the potential of New Bedford's downtown needs to be supplemented by generating interest from national credit retailers and other anchor tenants that can help rebuild and sustain the retail district. The combination of local and national investors is essential to building and maintaining a healthy downtown retail. The city should be selective in the businesses they attempt to attract. The downtown area will benefit from having many active storefronts, cafes and extended hour businesses, less so from largely inactive storefront banks or chain drug stores. As others have noted, retail in downtown New Bedford should focus on specialized retail and not attempt to compete with the malls located principally in Dartmouth.

Both our retail analysis and interviews with stakeholders confirms the unmet demand for perhaps the most important retail amenity that the City could add: a high quality, though not necessarily high end, food market in the central downtown. A market could become a downtown destination for residents, workers and visitors, and presents an opportunity to promote the abundance of quality seafood from the City's port, produce from local area farms and other local food purveyors. An emphasis on local aqua- and agri- culture would fit with the explosive trends nationally that is supporting successful food markets, or market halls, in city centers. New Bedford can begin to grow this concept by inducing local businesses, like Sid Wainer, to open locations in the downtown.

The following retail gap analysis outlines, by retail segment, the scale of unmet retail demand in the City. Locational criteria for each of these retail uses will inform viable siting options. For example, car dealerships with their expansive vehicle surface parking lots, are not suitable retail uses in most compact, walkable downtowns, but could be well suited to an arterial location. Department stores require very large floorplates and seek locations with excellent drive by visibility.

NEW BEDFORD EXPENDITURES

Expenditures:	1,215,601,073
Retail Sales:	$1,040,282,666
Gap/Surplus:	**$175, 318,407**

Prospective retailers will need assistance in making appropriate choices for the type of retail they plan to develop and the location where it would be most successful. The NBEDC should create a detailed retail merchandising and development plan for the downtown, outlining a hierarchy of retail that would lead to the clustering of stores of the appropriate size and type. For example, stores that are focused on meeting local needs, i.e. a supermarket, should be conveniently located for people working or living downtown, but not necessarily along key visitor retail corridors. Stores catering to tourists should be located near existing and planned tourist attractions like the Whaling Museum, and an increasingly accessible waterfront. A cluster of shops focusing on the art and design might contribute to a cultural district anchored by the Zeiterion Theater. A bookstore would be a natural retail venture for that area as well. Creating coherent retail zones will bolster the success of the stores as shoppers are encouraged to move from shop to shop as they move down the street. This is particularly true for tourists who are unfamiliar with the area and will be inclined to focus on clearly defined shopping avenues. A good example of this is Fore Street in Portland, Maine.

LYDIA'S BAKERY - NEW BEDFORD

In order to facilitate the opening of new retail the NBEDC should hire a director of retail development who would provide both unique sector expertise and a single point of contact for prospective businesses. That person would maintain an up to date database of the available space downtown, including the size of the floorplates, assemblages in single ownership and/ or management, and the desired rental rate. Inexperienced, yet enthusiastic, entrepreneurs would benefit from guidance provided by the NBEDC regarding how to successfully run their business. This guidance would begin with the identification of appropriate space, but could also include information on the appropriate fit-out of retail space, signage and marketing. For example, a new bar and lounge was recently opened just down the street from City Hall. Although the owner has invested considerable money and time into renovating the space, he made the mistake of making the

windows opaque. This choice makes the space intimidating as people on the street cannot tell what it is like inside, and understand that should they enter, no one on the street can see them either. Recently, local colleges and universities have begun to lease 1st floor spaces in the downtown for classroom usage. While this helps to marginally increase traffic in the area, it is another example of an "impenetrable" use of ground level space. While increased leasing is positive, it is important that ground level retail spaces are filled with the highest and best uses and NBEDC can exert influence through the creation of a downtown retail plan and director of retail marketing and business services.

New Bedford Shops

In the immediate future NBEDC should focus efforts on that will enliven the downtown. Establishing a center for food and the arts is a good strategy for building up retail in general for the area. Attracting a specialty grocery store could provide a key anchor for a new type of food-centered retail in the downtown. Another retail opportunity is to expand the activity of pop-up retail in the Custom House Square parking lot for a variety of retailers. This space is ideally located and should be used increasingly for temporary booths for holiday shopping or for food festivals focusing on fresh local produce. It would be beneficial to emphasize the connection between downtown retail and restaurants and the waterfront. Both the new food market and the special event retail at the Square should offer local foods, including fresh fish, to help to brand the downtown in a way that will resonate with tourists. A success farmers' market will offer top-quality, unique, regional fare. A successful farmers' market could draw shoppers from the city, neighboring towns, and even Boston and Providence. Vacant retail frontage should be filled with temporary art exhibits that make the streets interesting and inviting. This retail program would be complemented by developing several fresh seafood restaurants on the waterfront. New retail ventures should be tied to a coherent retail plan for the downtown that directly relates to a larger vision for rebranding New Bedford as a center for local fresh food, cutting edge arts and culture and a long-standing, still vital, maritime tradition.

Physical planning will be required to make a retail plan for the downtown a sustainable success. Retail planning for downtown should emphasize connections to the waterfront. In particular, the potential for a new plan for the State Pier and the development of a hotel near the State Pier are two waterfront projects that should be coordinated with retail revitalization efforts. The working waterfront could be a major tourist attraction, and retail driver, if the waterfront was made more accessible, literally and figuratively, to visitors. Education programs for visitors could pique

tourists' interest in visiting the waterfront. Associated retail, like a seafood market, would add interest and economic activity to the area.

In order for a retail program to succeed, pedestrian circulation throughout this area must be enhanced and user friendly signage must be introduced throughout the area to guide visitors around the city. The large numbers of visitors who pass through New Bedford are spending very little time in the city. Currently, thousands of visitors travel through New Bedford to use the Martha's Vineyard Ferry and are not encouraged to visit the downtown to shop or eat. Similarly, cruise ships dock at the State Pier throughout the summer but visitors are not provided with information about New Bedford's attractions and find limited food and beverage options at the foot of Union Street. The Route 18 project, when it is completed, will resolve some of these issues, but signage and outreach to visitors should complement that infrastructure project.

Industry Analysis

HR&A looked at the top industries (Part I) and five industries that the NBEDC identified as prime economic development opportunities (Part II). The data, which was purchased from IMPLAN and is drawn from several different government sources[3], was analyzed using the IMPLAN model. IMPLAN (Impact Analysis for PLANning) Input-Output Model, was developed at the University of Minnesota with the U.S. Forest Service's Land Management Planning Unit. This widely-recognized modeling tool generates estimates of direct economic output as well as indirect employment and output based on a series of inputs. IMPLAN traces the pattern of commodity purchases and sales between industries that are associated with each dollar's worth of a product or service sold to a customer, analyzing interactions among 528 industrial sectors for each region, individual counties or groups of counties, and each state in the nation. IMPLAN is used for the preparation of economic impact analyses by many public and private entities throughout the U.S. In order to assess the strength of these various industries as a percentage of New Bedford's total output, we first pulled descriptive data on the local economy as a whole.

How New Bedford EDC should use this Data:

HR&A's understanding of NBEDC's goals in conducting this study is the desire to develop an economic strategy for growth that is grounded in the reality of the existing workforce, but is also forward-looking and focused on industries that could be major driving forces in the region in the future. That said, the following data should be assessed by the EDC in order to make decisions about which industries the City wants to nurture, and which industries it believes are, or should be, of declining importance to the City.

The IMPLAN data denotes the earnings and output per worker for the corresponding industries. The values can be used together to produce an earnings/output ratio. A high earnings/output ratio implies that the industry creates labor intensive jobs which will employ more workers at lower wages while a low earnings/output ratio implies that the industry creates capital intensive jobs that may employ less people but will have greater fiscal contributions per worker to the overall economy. NBEDC should focus on cultivating industry growth for those industries that support New Bedford's overall economic growth strategy.

NBEDC should use the absorption coefficient to determine which other commodities are used to produce the specified commodity. It is important to determine whether these supplier commodities are readily available, which industries are producing the supplier commodities, and finally whether these industries are growth industries.

[3] IMPLAN data is drawn from several different government sources including US Bureau of Economic Analysis, US Bureau of Labor Statistics, US Census Bureau, US Department of Agriculture Crop and Livestock Statistics and US Geological Survey

The regional purchase coefficient should be used as a key factor when analyzing imported commodities. The regional purchase coefficient represents the proportion of local demand purchased from local producers. For example, a RPC of .3 for a given commodity indicates that for each $1 of local demand, 30% will be purchased from a local producer. A low regional purchase coefficient signifies an opportunity for industry expansion. Given an opportunity for expansion, New Bedford should establish whether growth in that industry would support New Bedford's economic growth strategy.

Summary of New Bedford Economic Factors

Total industry output for New Bedford (2006):	$6.68 Billion
Employment:	41,571
Employee compensation:	$1.84 Billion
Proprietor income:	$188.596
Other property income:	$1,061.135
Indirect business tax:	$274.357
Total value added:	$3.36 Billion

Part I: Industry Analysis: Top Contributors

In order to determine the top contributors New Bedford's local economy, HR&A sorted the relevant industries by industry output, employee compensation, and then employment. It is important to note that "Seafood product preparation and packaging" does not include the act of fishing. This is due to the way that the data is collected by the government and the disparity of the descriptive elements for those particular industries. More specifically, the earnings and output for "Seafood product preparation and packaging" and "Fishing" differ greatly. For those reasons, combining the data would result in result in an inaccurate representation of both industries.

Top 5 industries based on Industry Output

	Industry	Industry Output*	Employment	Employee Compensation*	Proprietor Income*	Other Property Income *	Indirect Business Tax*	Total Value Added*
1.	Copper wire- except mechanical-drawing	$684.206	795	$59.381	$0.000	$57.261	$5.806	$122.448
2.	Sporting and athletic goods manufacturing	$518.652	2,065	$170.869	$0.000	$28.852	$7.704	$207.426
3.	Wholesale trade	$334.895	1,982	$124.156	$2.082	$49.187	$49.150	$224.575
4.	Seafood product preparation and packaging	$304.698	1,083	$43.541	$0.000	($0.400)	$1.106	$44.246
5.	Hospitals	$181.991	1,627	$86.606	$0.256	$7.604	$1.201	$95.668

* In Millions

To fully understanding the multifaceted nature of New Bedford's top industries, we looked at the top five imported commodities and the top five exported commodities in New Bedford. We used this information to help us identify clustered industries that are using and producing these commodities. The identified clusters consist of a primary industry and multiple secondary industries that have the potential to benefit indirectly from growth in the primary industry. Based on our analysis, we found the following primary imported and exported commodities to be most relevant to our study:

Top 5 Import and Export Industries

Imported Commodities	Exported Commodities
1. Copper rolling, drawing and extruding	1. Copper rolling, drawing and extruding
2. Real Estate	2. Sporting and athletic goods manufacturing
3. Wholesale trade	3. Seafood product preparation and packaging
4. Insurance Carriers	4. Noncellulosic organic fiber manufacturing
5. Fishing	5. Nursing and Residential Care Facilities

Imported Commodities Analysis

These top imported commodities represent a leakage of opportunities. New Bedford should determine whether these commodities could be supplied locally within the region and then whether these industries represent areas where New Bedford would like to cultivate growth. There are several important factors to consider when answering these questions:

- New Bedford should consider the industry that is producing the commodity and determine whether it is a growth industry or an industry facing an overall decline.

- The Absorption coefficient of the production function tells us how many other commodities are used to produce the specified commodity. It is important to determine whether these supplier commodities are readily available, which industries are producing the supplier commodities, and finally whether these industries are growth industries.

- The regional purchase coefficient is also a key component of imported commodity analysis. The regional purchase coefficient represents the proportion of local demand purchased from local producers. For example, a RPC of .3 for a given commodity indicates that for each $1 of local demand, 30% will be purchased from a local producer. A low regional purchase coefficient signifies an opportunity for industry expansion.

- Lastly, New Bedford should determine the types of jobs that are created by these industries. A low output per worker implies that the industry creates labor intensive jobs. Labor intensive jobs will employ more workers at lower wages while capital intensive jobs might employ less people but will have greater fiscal contributions per worker to the overall economy.

Our analysis incorporates ES-202 employment and wages data along with IMPLAN data. Because of the different sources of information and the separate, uncorrelated industry classifications used by IMPLAN and NAICS, IMPLAN data may at times conflict with ES-202 Data. IMPLAN's industry classification codes tend to be broader and more inclusive than NAICS codes. As a result, IMPLAN data tends to state higher employment numbers for specified industries. For our analysis, we've used the IMPLAN data and included the ES-202 employment numbers for reference.

1. Copper Rolling, Drawing and Extruding

Total Imports	Total Commodity Produced in NB
$268.2 M	$639.2 M

Output Per Worker	*Earnings Per Worker
$860,719	$74,701

* Includes salary plus benefits paid by employer

The copper rolling, drawing and extruding industry in New Bedford consists of two companies, Revere Copper Products, inc. and AFC Cable Systems Inc. Revere Copper announced earlier this year that it would be closing its operations in New Bedford after operating for nearly two hundred years. The company cited energy costs and overseas competition as the primary factors leading to the closing of the New Bedford operation. The closing of Revere Copper will result in the loss 15% of the industry output for this sector, which currently produces $639.2 million each year.

Copper rolling has a low earnings/output ratio, .11, which means that the industry's contribution to New Bedford's economic output is high, equaling 9.6% of all commodities produced, but for each dollar added as investment, fewer jobs will be created. The jobs that are created have higher than average salaries.

The absorption coefficient for this industry is also high, .82. What this means is that it requires a substantial amount of other commodities to produce this commodity. If New Bedford decides to try to expand this industry, they need to ensure that the supplier commodities are readily available. For each dollar added in the form of additional investment, $.82 will be used to purchase supplier commodities.

This industry is clearly in the midst of a decline, with Revere Copper closing and AFC's employment numbers reduced by a third in recent years. Given the substantial impact this industry currently has on the local economy, New Bedford may want to consider how to work with AFC to encourage the company to maintain, and grow, or transition and evolve its operations in New Bedford.

Copper Rolling, Drawing and Extruding Industry: Representative Companies

Revere Copper Products, Inc.

Parent company Revere Copper Products, Inc. located in Rome, NY

www.reverecopper.com

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
24 N. Front St., NB	Unavailable	100	CLOSED	500
Description	**Sales**	**Ownership**	**Location Type**	**Plant/Facility Size**
Copper rolling & drawing; manufactures nonferrous die-cast products; copper foundry	$450 M	Private	Branch	67,100 sq ft

AFC Cable Systems Inc.

A.K.A. Monogram Metals

Parent company AFC Cable Systems Inc. located in New Bedford, MA

AFC is a division of Tyco Flow Control (www.tycoflowcontrol.com)

www.afcweb.com

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
55 Samuel Barnet Blvd., NB	Unavailable	100	-33% (3 years)	238,200
Description	**Sales**	**Ownership**	**Location Type**	**Plant/Facility Size**
Nonferrous wiredrawing & insulating; manufactures wire & wire products; manufactures steel wire & related products	$41 B	Private	Branch	38,400 sq ft

Top Suppliers to Copper Rolling, Drawing and Extruding

Commodities	Absorption
Primary smelting and refining of copper	.33
Copper rolling- drawing and extruding	.176
Wholesale trade	.084
Primary non-ferrous metal- except copper	.028
Truck transportation	.0274
All other miscellaneous professional and tech	.013
Management of companies and enterprises	.012
Power Generation and Supply	.0170
Rail Transportation	.009

Note: The largest supplier commodity, "Primary smelting and refining of copper", makes up 33% of the primary commodity, "Copper rolling, drawing and extruding". In New Bedford, the commodity "Primary smelting and refining of copper" is produced solely by the "Copper rolling drawing and extruding" industry. According to IMPLAN data, ES-202 data, and company data, Revere Copper was the only producer of the "Primary smelting and refining of copper" commodity in New Bedford. This is significant because industry expansion would not be possible without the additional production or supplementary import of the necessary commodity. On the other hand, Revere Copper was not producing a substantial amount of the commodity, so it's possible that the additional imports would be inconsequential.

2. Real Estate

Total Imports	Total Commodity Produced in NB
$107.82M	$132.06M

Output Per Worker	*Earnings Per Worker
$202,656	$33,578

* Includes salary plus benefits paid by employer

Real Estate imports represent real estate that is owned by non-residents of New Bedford or real estate services supplied by providers who are located outside of New Bedford. For example, if a New Bedford resident employs a non-local broker to help with the purchase of a new home in New Bedford; this would count as a real estate import. If a person or company owns a property located in New Bedford but is located outside of New Bedford, this would also count as a real estate import. According to ES202 Data for New Bedford, there are 61 real estate establishments employing approximately 250 people in New Bedford. Two representative companies for this industry are Hughes & Carey Realty Corp. and Century 21, which are both located in New Bedford. Currently 56.2% of local demand is fulfilled by local producers. There is opportunity for growth in this industry; however, it is worth noting that the median salary, including benefits, is only $33,578, which is relatively low compared to other jobs in New Bedford.

Real Estate Industry: Representative Companies

Neves & Cashman Realty
www.neves-cashmanrealty.com

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
355 Union St., NB	Unavailable	50	No change	50
Description	Sales	Ownership	Location Type	Plant/Facility Size
Real Estate Agents &Managers	$1.7 M	Private	Single Location	4,300 sq ft

G & K Systems Inc
A.K.A. Century 21

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
1214 Kempton St., NB	1974	20	No change	20
Description	Sales	Ownership	Location Type	Plant/Facility Size
Real Estate Agents - Residential	$4.2 M	Private	Single Location	5,000 sq ft

Roger A. Pelletier Real Estate
www.pelletierrealty.com

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
696 Ashley Blvd., NB	1970	20	No change	20
Description	Sales	Ownership	Location Type	Plant/Facility Size
Real Estate Agents & Managers	$0.9 M	Private	Single Location	1,000 sq ft

Edward J. Wiley
A.K.A. Tennacle Realty Services

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
431 Brownell Ave., NB	2004	19	No change	19
Description	Sales	Ownership	Location Type	Plant/Facility Size
Real Estate Agents & Managers	$0.9 M	Private	Single Location	3,300 sq ft

Amaral Resendes Realty Inc
www.amresrealty.com

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
2777 Acushnet Ave., NB	1996	11	No change	11
Description	Sales	Ownership	Location Type	Plant/Facility Size
Real Estate Agents & Managers	$0.6 M	Private	Single Location	2,900 sq ft

Remax Wellingport Inc
A.K.A. Medeiros & Associates
www.gomedeiros.com

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
1702 Acushnet Ave., NB	1986	11	No change	11
Description	Sales	Ownership	Location Type	Plant/Facility Size
Real Estate Agents & Managers	$0.57 M	Private	Single Location	2,900 sq ft

Real Estate Book
A.K.A. Spectrum Publications

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
651 Orchard St, Ste 311, NB	1990	10	No change	10
Description	Sales	Ownership	Location Type	Plant/Facility Size
Real Estate Agents & Managers	$0.6 M	Private	Single Location	2,400 sq ft

South Coast Realty

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
651 Orchard St, Ste 204, NB	1997	9	No change	9
Description	Sales	Ownership	Location Type	Plant/Facility Size
Real Estate Agents & Managers	$0.5 M	Private	Single Location	2,700 sq ft

Buyers Agent
www.mybuyeragent.com

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
378 County St, Ste 204, NB	Unavailable	8	No change	8
Description	Sales	Ownership	Location Type	Plant/Facility Size
Real Estate Agents & Managers	$0.4 M	Private	Single Location	2,400 sq ft

Franklin W. Simon
A.K.A. Harbor View Towers
Parent company Franklin W. Simon located in Braintree, MA

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
280 Acushnet Ave., NB	Unavailable	6	No change	100
Description	Sales	Ownership	Location Type	Plant/Facility Size
Apartment Building Operator	$4.4 M	Private	Branch	3,100 sq ft

Top suppliers to Real Estate

Commodities	Absorption
Real estate	0.08388
Services to buildings and dwellings	0.02352
Power generation and supply	0.0165
Insurance carriers	0.01441
Office administrative services	0.01292
Architectural and engineering services	0.01252
Maintenance and repair of nonresidential buildings	0.0113
Employment services	0.01009
Legal services	0.00774
Waste management and remediation services	0.00747
Telecommunications	0.00672
Monetary authorities and depository credit	0.00644
Nondepository credit intermediation and related	0.00581
Management consulting services	0.00573
Hotels and motels- including casino hotels	0.00431
Natural gas distribution	0.0040

3. Wholesale Trade

Total Imports	Total Commodity Produced in NB
$98.56M	$334.9 M

Output Per Worker	*Earnings Per Worker
$169,006	$63,706

* Includes salary plus benefits paid by employer

Wholesale Trade represents commodities in New Bedford that are produced wholesale for retailers. New Bedford is home to several different types of wholesale trade firms, including seafood, rubber products, textiles and electric equipment. According to ES-202 data, there are 115 wholesale trade establishments located in New Bedford with a total average employment of 1,746. Some of the companies producing wholesale trade commodities are: Friendly Fruit (aka Sid Wainer & Son), Michael Bianco, Pier Fish Co., and Northern Palegic Group, LLC.

Wholesale trade is one of the top import industries in the city, representing 5% of commodities produced in New Bedford. Given the broad nature of this industry category, however, this data may not accurately reflect the health of the individual micro-industries included in the overall industry. IMPLAN data does not, for example, capture any information relating to undocumented workers. As discussed earlier in this report, it is believed that there are significant numbers of undocumented workers in New Bedford working in a variety of wholesale trade businesses.

The earnings/output ratio for wholesale trade is .37, which is neither particularly high or low. A low earnings/output ratio generally translates into the creation of fewer jobs with higher salaries whereas a high ratio generally translates into larger quantities of lower paid jobs . The absorption coefficient is $.33 which is quite low. This means that for each additional dollar of commodity that is produced, $.33 is spent on supplier commodities and $.67 of value is created. Thus the wholesale industry is taking a commodity and modifying it to create additional value. Currently 76% of local demand is fulfilled by local producers. There is some opportunity to expand local supply.

Wholesale Trade Industry: Top 10 Companies

(ranked by employment)

Friendly Fruit, Inc
A.K.A. Sid Wainer & Son Specialty Produce
www.sidwainer.com

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
2301 Purchase Street, NB	1944	250	No change	250
Description	**Sales**	**Ownership**	**Location Type**	**Plant/Facility Size**
Fresh Fruits & Vegetable Wholesale	$46.5 M	Private	Single Location	60,000 sq ft

Natco Corporation

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
214 Samuel Barnet Blvd, NB	1907	125	Not available	125
Description	**Sales**	**Ownership**	**Location Type**	**Plant/Facility Size**
Groceries, General Line Wholesale	$45.4 M	Private	Single Location	70,000 sq ft

Pier Fish Company

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
68 Conway Street, NB	1907	100	+33% (last 3 years)	100
Description	**Sales**	**Ownership**	**Location Type**	**Plant/Facility Size**
Fish & Seafood Wholesale	$15.6 M	Private	Single Location	50,000 sq ft

Eastern Fisheries
www.easternfisheries.com

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
14 Hervey Tichon Ave, NB	1978	100	-50% (last 3 years)	100
Description	**Sales**	**Ownership**	**Location Type**	**Plant/Facility Size**
Fish & Seafood Wholesale	$19.8 M	Private	Single Location	40,000 sq ft

Fleet Fisheries
www.easternfisheries.com

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
20 Blackmer St., NB	1993	70	No change	70
Description	Sales	Ownership	Location Type	Plant/Facility Size
Fish & Seafood Wholesale	$15.1 M	Private	Single Location	30,000 sq ft

Northern Wind, Inc
www.northernwind.com

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
16 Hassey St., NB	1987	65	-18.75% (2 years)	80
Description	Sales	Ownership	Location Type	Plant/Facility Size
Fish & Seafood Wholesale	$17.1 M	Private	Headquarters	12,500 sq ft

Bergie's Seafood, Inc.

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
8 Hassey St., NB	1984	65	No change	65
Description	Sales	Ownership	Location Type	Plant/Facility Size
Fish & Seafood Wholesale	$11.7 M	Private	Single Location	15,000 sq ft

Luzo Food Service Corporation

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
376 Nash St., NB	1986	65	No change	65
Description	Sales	Ownership	Location Type	Plant/Facility Size
Groceries, General Line Wholesale	$21.3 M	Private	Single Location	15,000 sq ft

Michael Bianco, Inc.
www.michael –bianco.com

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
89 Rodney French Blvd., NB	1985	62	-11.4 (2 years)	62
Description	Sales	Ownership	Location Type	Plant/Facility Size
Nondurable Goods, NEC Wholesale – leather goods	$22.1 M	Private	Single Location	50,000 sq ft

Darn It, Inc.
www.darn-it.com

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
92 Harbor St., NB	1996	54	No change	54
Description	Sales	Ownership	Location Type	Plant/Facility Size
Merchandise & Apparel Services	$11.2 M	Private	Headquarters	200,000 sq ft

Top Suppliers to Wholesale Trade

Commodities	Absorption
Real estate	0.02865
Management of companies and enterprises	0.02670
Wholesale trade	0.02638
Advertising and related services	0.01974
Management consulting services	0.01543
Telecommunications	0.01152
Nondepository credit intermediation and related	0.01130
Couriers and messengers	0.00997
Petroleum refineries	0.0091
Semiconductors and related device manufacturing	0.00863
Employment services	0.00754
Other support services	0.00696
Monetary authorities and depository credit	0.00661
Services to buildings and dwellings	0.00648
Business support services	0.00605

4. Insurance Carriers

Total Imports	Total Commodity Produced in NB
$97.55M	$1.3 M

Output Per Worker	*Earnings Per Worker
$239,106	$61,206

* Includes salary plus benefits paid by employer

There are approximately 46 different insurance related establishments employing approximately 240 people in New Bedford. However, it is important to note that these companies are not insurance carriers. The insurance carriers commodity represents the companies that actually carry the insurance and is completely separate from the insurance agencies and brokerage firms who offer the insurance. This distinction explains why the regional purchase coefficient is less than 1%, i.e. virtually none of local demand is met by local suppliers. According to the ES-202 data, there are no insurance carrier companies located in New Bedford. While it would certainly be advantageous to capture local share of this market, given New Bedford's small size, it is not surprising that New Bedford does not have a carrier within the city. The absorption coefficient is relatively high, .62, so it is worthwhile to look at the commodities needed to support this industry and determine whether there are expansion opportunities relating to those supporting commodities. For example, nearly $.40 of every dollar needed to create this commodity can be sourced locally through insurance brokerages. The employment numbers for this industry are very low, with only 26 employees reported in New Bedford by the top employers.

Insurance Carrier Industry: Representative Companies

(ranked by employment)

American General Finance, Inc.

Parent company: American General Finance located in Evansville, IN

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
929 Kempton St., NB	Unavailable	13	Unavailable	106,000
Description	Sales	Ownership	Location Type	Plant/Facility Size
Life Insurance Carrier	$113.2 B	Public	Branch	5,200 sq ft

Smithwick & Clarke Insurance
A.K.A. Mariners Insurance Agency
Parent company Smithwick & Clarke Insurance located in Portland, ME

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
77 N. Water St., NB	Unavailable	6	Unavailable	12
Description	Sales	Ownership	Location Type	Plant/Facility Size
Fire, Marine & Casualty Insurance	$2.2 M	Private	Branch	3,700 sq ft

Pioneer Valley Insurance Center

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
1544 Acushnet Ave., NB	1996	2	Unavailable	7
Description	Sales	Ownership	Location Type	Plant/Facility Size
Fire, Marine & Casualty Insurance	$1.9 M	Private	Headquarters	2,700 sq ft

Portuguese Continental Union

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
135 Hemlock St., NB	1925	2	Unavailable	2
Description	Sales	Ownership	Location Type	Plant/Facility Size
Life Insurance Carriers	$0.16 M	Private	Single Location	2,100 sq ft

Raymond E. Gramlich, III

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
127 Chestnut St., NB	1925	2	Unavailable	2
Description	Sales	Ownership	Location Type	Plant/Facility Size
Insurance Carriers, NEC	$0.4 M	Private	Single Location	2,100 sq ft

Webster Insurance, Inc.
Parent Company Webster Insurance, Inc. located in Swansea, MA

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
975 Ashley Blvd., NB	Not available	1	Unavailable	3,637
Description	Sales	Ownership	Location Type	Plant/Facility Size
Comprehensive Insurance Company for Auto Home Life Accident and Health Insurance	$1.2 B	Public	Branch	1,200 sq ft

Top Suppliers to Insurance Carriers

Commodities	Absorption
Insurance agencies- brokerages- and related	0.39315
Insurance carriers	0.11822
Real estate	0.02007
Securities- commodity contracts- investments	0.01880
Telecommunications	0.01079
Funds- trusts- and other financial vehicles	0.00987
Semiconductors and related device manufacturing	0.00863
Advertising and related services	0.00713
Monetary authorities and depository credit	0.00551
Management of companies and enterprises	0.00544
Nondepository credit intermediation and related	0.00452
Legal services	0.00351
Warehousing and storage	0.00259
Automotive equipment rental and leasing	0.00241
Commercial machinery repair and maintenance	0.00173
Machinery and equipment rental and leasing	0.00151
Management consulting services	0.00142
Business support services	0.00126
Air transportation	0.00115

5. Fishing

Total Imports	Total Commodity Produced in NB
$85.11M	$21.9 M

Output Per Worker	*Earnings Per Worker
$58,480	$46,988

* Includes salary plus benefits paid by employer

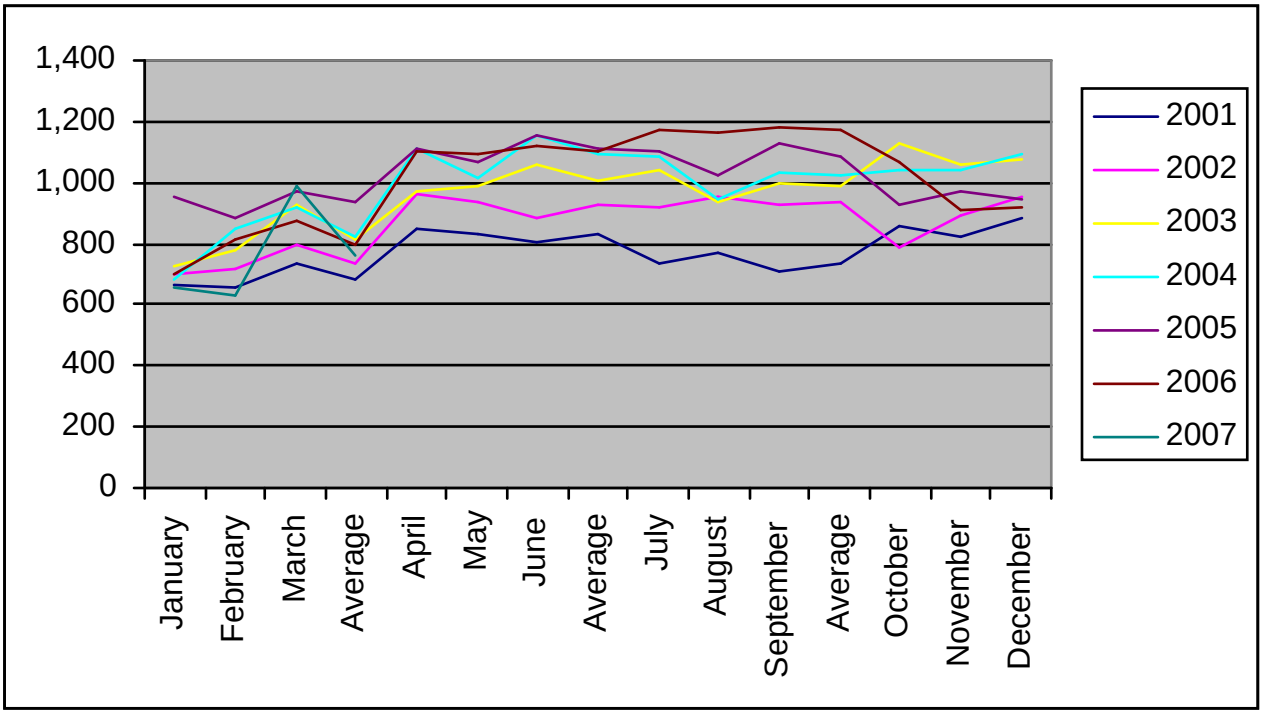
The fishing industry is central to New Bedford's identity as a maritime center. New Bedford is the highest value fishing port in the United States, with 169.9 million pounds of fish and shellfish moving through the port each year. Technically the fishing industry is defined as those establishments primarily engaged in the commercial catching or taking of finfish, shellfish, or miscellaneous marine products from a natural habitat. According to ES-202 data, there are 161 fishing establishments with approximately 900 employees located in New Bedford. Currently, 195.3% of the current local demand is met by local establishments. What is interesting about this data is that it reveals that, although fishing is typified as a "local" industry, approximately 805% of the fishing product brought into New Bedford actually comes from outside the region.

During the past six years, on average, fishing has employed less than 3 percent of the total workforce. The industry seems to be relatively stable; employment has grown during the past six years and average wages grew between 2001 and 2003, but have fallen in the past three years.

NEW BEDFORD – EMPLOYMENT AND WAGES IN THE FISHING INDUSTRY BY MONTH AND YEAR.

Fishing - 1141	2001	2002	2003	2004	2005	2006	2007
# of establishments	131	144	152	145	149	159	161
January	664	698	726	682	957	704	656
February	655	721	782	852	888	812	629
March	735	796	930	922	974	877	988
Average 1st quarter	*685*	*738*	*813*	*819*	*940*	*798*	*758*
April	845	964	970	1,108	1,114	1,102	
May	835	937	993	1,017	1,068	1,091	
June	805	880	1,062	1,155	1,158	1,118	
Average 2nd quarter	*828*	*927*	*1,008*	*1,093*	*1,113*	*1,104*	
July	736	917	1,042	1,084	1,106	1,173	
August	771	952	932	947	1,026	1,161	
September	707	928	995	1,035	1,133	1,178	
Average 3rd quarter	*738*	*932*	*990*	*1,022*	*1,088*	*1,171*	
October	861	785	1,133	1,043	931	1,071	
November	822	893	1,055	1,043	968	914	
December	885	950	1,077	1,098	942	922	
Average 4th quarter	*856*	*876*	*1,088*	*1,061*	*947*	*969*	
Total Wages	*$44,610,748*	*$48,373,510*	*$53,106,479*	*$63,039,183*	*$81,601,265*	*$70,813,006*	*$11,376,840*
Average Monthly Employment	777	868	975	999	1,022	1,010	758
Average Weekly Wages	$1,155	$1,348	$1,535	$1,214	$1,048	$1,071	$1,104

New Bedford Fishing Industry Employment By Year



The fishing industry is labor intensive. The increment between average worker earnings and output is just $12,000. This type of labor-intensive industry results in relatively low paying jobs and does not generate much additional money in the local economy. In contrast, an industry with a higher output per worker, perhaps $50,000, would arguably do more to stimulate the larger economy while the education and skill level required for the fishing industry is consistent with New Bedford's workforce, the incremental difference between earnings and output per worker indicates a relatively small supplement to New Bedford's economy.

Adding to the complexity, the fishermen of today are working within comprehensive fishing conservation regulations imposed by the federal government to help rebuild fish stocks to sustainable yields. These rules include limits on how many days they are allowed to fish as well as certain fishing ground closures and gear restrictions.

Fortunately, some experts predict that the fishing industry will experience significant revitalization once government restrictions are lifted. The use of scientific research that more accurately assesses the impact of fishing on different species of fish and shellfish will be very important as it can be used to refine fishing restrictions and make them less burdensome on the fishing industry. If restrictions are revised and minimized, the fishing industry has the potential to be an area of employment in New Bedford.

Fishing Industry: Representative Companies

(ranked by employment)

Felcal Fishing Corporation

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
114 Macarthur Dr., NB	1984	8	Unavailable	8
Description	Sales	Ownership	Location Type	Plant/Facility Size
Finfish Fishing-Commercial Fishing Vessel	$0.46 M	Private	Single Location	3,200 sq ft

Boat Mary Anne, Inc.

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
114 Macarthur Dr., NB	1979	7	Unavailable	7
Description	Sales	Ownership	Location Type	Plant/Facility Size
Finfish Fishing	$0.4 M	Private	Single Location	3,300 sq ft

C & V Fishing Corporation

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
84 Front St., NB	1991	5	Unavailable	5
Description	Sales	Ownership	Location Type	Plant/Facility Size
Fishing Company	$1.0 M	Private	Single Location	2,400 sq ft

Great Northern Fish Company, Inc.
A.K.A. Norfisk

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
888 Purchase St., NB	1995	5	Unavailable	5
Description	Sales	Ownership	Location Type	Plant/Facility Size
Finfish Fishing	$0.3 M	Private	Single Location	1,000 sq ft

Lane Fisheries, Inc.
A.K.A. Norfisk

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
113 Macarthur Dr., NB	1986	5	Unavailable	5
Description	Sales	Ownership	Location Type	Plant/Facility Size
Finfish Fishing	$0.9 M	Private	Single Location	2,400 sq ft

Top Suppliers to Fishing

Commodities	Absorption
Petroleum refineries	0.0851
Maintenance and repair of nonresidential buildings	0.0822
Scenic and sightseeing transportation and support	0.04994
Wholesale trade	.04455
Soft drink and ice manufacturing	0.0293
Petroleum lubricating oil and grease manufacturing	0.0268
Other amusement- gambling- and recreation	0.02225
Insurance carriers	0.00985
Water transportation	0.00963
Machinery and equipment rental and leasing	0.00701
Rail transportation	.00688
Other miscellaneous textile product mills	0.0062
Truck transportation	0.00616
Monetary authorities and depository credit	0.00488
Securities- commodity contracts- investments	0.00231
Fishing	0.0021
Environmental and other technical consulting	0.00193

Exported Commodities Analysis

Based on the assumption that exported commodities fulfill only a portion of the corresponding export demand, top exported commodities offer opportunities for expansion of supplier industries. It is important to analyze the production functions for these commodities to determine whether the supplier commodities are produced by industries that are suitable for expansion. There are several important factors to consider within the imported commodity analysis:

The Absorption coefficient of the production function tells us how many supplier commodities are used to produce the specified commodity. It is important to determine whether these supplier commodities are produced by growing industries and if not, what it would take to cultivate growth within these industries.

New Bedford should determine the types of jobs that are created by these industries. A low output per worker implies that the industry creates labor intensive jobs. Labor intensive jobs will employ more workers at lower wages while capital intensive jobs might employ less people but will have greater fiscal contributions per worker to the overall economy.

For exported commodity analysis, it is important to take a closer look at the supplier commodities and the industries that produce them. The industries that produce the supplier commodities would actually be the subject of expansion consideration. In our analysis, we've included the primary industry's output and earnings per workers, as well as the relevant supplier industry's output and earnings per worker.

Our analysis incorporates ES-202 employment and wages data along with IMPLAN data. Because of the different sources of information and the separate, uncorrelated industry classifications used by IMPLAN and NAICS, IMPLAN data may at times conflict with ES-202 Data. IMPLAN's industry classification codes tend to be broader and more inclusive than NAICS codes. As a result, IMPLAN data tends to state higher employment numbers for specified industries. For our analysis, we've used the IMPLAN data and included the ES-202 employment numbers for reference.

1. Copper Rolling, Drawing and Extruding

Total Exports (% Foreign)	Total Commodity Produced in NB
$565.1 M (3.5%)	$639.2 M

Output Per Worker	*Earnings Per Worker
$860,719	$74,701

* Includes salary plus benefits paid by employer

The copper rolling, drawing and extruding industry represents 9.6% of all commodities produced in New Bedford and consists of two companies, Revere Copper Products, inc. and AFC Cable Systems Inc. Revere Copper announced earlier this year that it would be closing its operations in New Bedford after operating for nearly two hundred years. The company cited energy costs and overseas competition as the primary factors leading to the closing of the New Bedford operation. The closing of Revere Copper will result in the loss of 12% of the industry output for this sector, which currently produces $639.2 million each year.

This industry is clearly in the midst of a decline, with Revere Copper closing and AFC's employment numbers reduced by a third in recent years. The Revere Copper plant closure will likely have a significant impact on the industry; however, copper rolling, drawing and extruding will continue to be the largest exported commodity from New Bedford since 88% of the commodity is produced by AFC Cable Systems. With the closure of the Revere Copper plant, there is an opportunity for AFC Cable Systems to expand production thereby capturing the additional market share. Given the substantial impact this industry currently has on the local economy, New Bedford may want to consider how to work with AFC to encourage the company to maintain, and grow, its operations in New Bedford.

An increase in production by AFC Cable Systems would be optimal, as it would create additional jobs with both high earnings and high output per worker. Additionally, the produced commodity has an absorption coefficient of .82, meaning that it utilizes a substantial amount of other commodities to produce this commodity. For each dollar added in the form of additional investment, $.82 will be used to purchase supplier commodities. If AFC Cable Systems were to increase their production, the benefit to the New Bedford economy would be widespread if a majority of the supplier commodities are readily available and produced within the region of New Bedford.

Copper Rolling, Drawing and Extruding Industry: Representative Companies

(ranked by employment)

Revere Copper Products, Inc.
Parent company Revere Copper Products, Inc. located in Rome, NY
www.reverecopper.com

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
24 N. Front St., NB	Unavailable	100	CLOSED	500
Description	**Sales**	**Ownership**	**Location Type**	**Plant/Facility Size**
Copper rolling & drawing; manufactures nonferrous die-cast	$450 M	Private	Branch	67,100 sq ft

AFC Cable Systems Inc.
A.K.A. Monogram Metals
Parent company AFC Cable Systems Inc. located in New Bedford, MA
AFC is a division of Tyco Flow Control (www.tycoflowcontrol.com)
www.afcweb.com

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
55 Samuel Barnet Blvd., NB	Unavailable	100	-33% (3 years)	238,200
Description	**Sales**	**Ownership**	**Location Type**	**Plant/Facility Size**
Nonferrous wiredrawing & insulating; manufactures wire &	$41 B	Private	Branch	38,400 sq ft

Top Suppliers to Copper Rolling, Drawing and Extruding

Commodities	Absorption
Primary smelting and refining of copper	.33
Copper rolling- drawing and extruding	.176
Wholesale trade	.084
Primary non-ferrous metal- except copper	.028
Truck transportation	.0274
All other miscellaneous professional and tech	.013
Management of companies and enterprises	.012
Power Generation and Supply	.01070
Rail Transportation	.009

2. Sporting and Athletic Goods Manufacturing

Total Exports (% Foreign)	Total Commodity Produced in NB
$498.4 M (16.9%)	$511.8 M

Output Per Worker	*Earnings Per Worker
$251,187	$82,753

* Includes salary plus benefits paid by employer

The sporting and athletic goods manufacturing industry comprises establishments engaged primarily in manufacturing sporting and athletic goods (except apparel and footwear). In New Bedford, this industry includes companies like Titleist and B Five Co. Combining the ES-202 data with the IMPLAN data, we found that there are just over 2,300 employees in this industry. As one of the top exported commodities, sporting and athletic goods manufacturing contributes significantly to New Bedford's economy. The earnings per worker and output per worker are relatively high. Additionally, the absorption coefficient of .6 indicates that the production of sporting and athletic goods supports a number of supplier industries.

While expansion of the sporting and athletic goods manufacturing industry is desirable, it is entirely dependent on external factors. 97% of the commodity is exported which means that decisions made about levels of production are based on external demand and cannot be increased by New Bedford's efforts alone. Further analysis is necessary to determine whether the level of demand greatly exceeds current production.

Sporting and Athletic Goods Manufacturing: Representative Companies

(ranked by employment)

Acushnet Company (Custom Operations)
Parent Company Acushnet Co. located in Fairhaven, MA
www.titleist.com

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
700 Belleville Ave., NB	Unavailable	2300	No change	36,250
Description	Sales	Ownership	Location Type	Plant/Facility Size
Golf Equipment	$8.7 B*	Public	Branch	229,500 sq ft

Acushnet Company
A.K.A. Titleist
www.titleist.com

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
256 Samuel Barnet Blvd., NB	Unavailable	40	-89% (past 3 years)	16,500
Description	Sales	Ownership	Location Type	Plant/Facility Size
Manufactures baseball, football, basketball & other sports balls; athletic shoes	$8.7 B*	Public	Branch	2,400 sq ft

B Five Co, Inc

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
89 Rodney French Blvd., NB	1999	30	No change	30
Description	Sales	Ownership	Location Type	Plant/Facility Size
Sporting & Athletic Goods	$2.5 M	Private	Single Location	15,000 sq ft

Top Suppliers to Copper Rolling, Drawing and Extruding

Commodities	Absorption
Wholesale trade	0.074
Sporting and athletic goods manufacturing	0.036
Advertising and related services	0.025
Plastics material and resin manufacturing	0.024
Iron and steel mills	0.020
Synthetic rubber manufacturing	0.020
maintenance & repair of non-residential bldg	0.019
Telecommunications	0.017
Aluminum foundries	0.017
Management of companies and enterprises	0.015
Plastic plumbing fixtures and all other plastics	0.015

3. Seafood Product Preparation and Packaging

Total Exports (% Foreign)	Total Commodity Produced in NB
$281.3 M (6.2%)	$300.5 M

Output Per Worker	*Earnings Per Worker
$281,219	$40,186

* Includes salary plus benefits paid by employer

Seafood product preparation and packaging includes companies that are engaged in canning seafood and marine fats or oils and/or smoking, salting, drying seafood. This industry also includes establishments known as "floating factory ships" that are engaged in the gathering and processing of seafood into canned seafood products. Some examples of these types of companies are American Seafoods International LLC and Sea Watch International LTD. According to the ES-202 and IMPLAN data, there are approximately 20 seafood product preparation and packaging companies located in New Bedford. Together, these companies employ just over 1,000 people.

The seafood product preparation and packaging commodity has an absorption rate of .85 which means that for every dollar of the commodity produced, $0.85 was used on supplier commodities. This industry is mainly fueled by fishing ($0.33) and wholesale trade ($0.14) but it also utilizes commodities produced by many other industries.

An increase in seafood product preparation and packaging would create additional jobs. New Bedford is well-positioned to expand this industry, given the low labor and land costs in the city compared to the seafood processing facilities in Boston. However, these jobs are low paying and may not represent the types of progressive jobs that New Bedford wishes to create. If the industry is grown, it may be worthwhile for the City to think about ways to consolidate seafood processing operations, and move some of these facilities away from the waterfront, providing space for other type of development in that area.

Seafood Product Preparation and Packaging Industry: Top 10 Companies

(ranked by employment)

Kyler Seafood, Inc.

Parent company: A&A Seafood located in Fairhaven, MA

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
2 Washburn St., NB	1984	100	No change	100
Description	Sales	Ownership	Location Type	Plant/Facility Size
Manufactures prepared frozen	$11.5 M	Private	Single Location	35,000 sq ft

Sea Watch International LTD

Parent company: Sea Watch International LTD location in Easton, MD

www.seaclam.com

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
15 Antonio Costa Ave.	Unavailable	70	-30% (3 years)	450
Description	Sales	Ownership	Location Type	Plant/Facility Size
Fresh/Frozen fish and seafood	$45.6 M	Private	Branch	12,400

Northcoast Seafood

Parent company: North Coast Sea-Foods Corp located in Boston, MA

www.northcoastseafood.com

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
43 Blackmer St., NB	1979	50	-16.67% (3 years)	200
Description	Sales	Ownership	Location Type	Plant/Facility Size
Manufactures prepared fresh seafood	$26.6 M	Private	Branch	13,100 sq ft

MF Foley Inc. – New Bedford

Parent company: MF Foley Co. located in Boston, MA

www.foleyfish.com

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
77 Wright St., NB	1981	40	No change	65
Description	Sales	Ownership	Location Type	Plant/Facility Size
Manufactures prepared fresh fish	$13.2 M	Private	Branch	28,100 sq ft

Northern Pelagic Group LLC
Parent company: MF Foley Co. located in Boston, MA
www.foleyfish.com

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
4 Fish Is., NB	1981	20	No change	20
Description	Sales	Ownership	Location Type	Plant/Facility Size
Fresh or frozen fish & seafood	$2.6 M	Private	Single Location	25,000 sq ft

A&A Seafood Inc.
Parent company: A&A Seafood, Inc. located in Fairhaven, MA

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
7 Conway St., NB	1981	10	No change	12
Description	Sales	Ownership	Location Type	Plant/Facility Size
Processes monk fish livers	$2.2 M	Private	Branch	5,900 sq ft

Seatrade International Co. Inc.
Parent company: Seatrade International Co Inc. located in Portsmouth, NH
www.seatrade-international.com

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
360 Front St., NB	1981	10	No change	35
Description	Sales	Ownership	Location Type	Plant/Facility Size
Manufactures fresh and frozen packaged fish	$82.6 M	Private	Branch	5,900 sq ft

Big G Seafood Inc.

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
57 Hassey St., NB	1990	7	+250% (1 year)	7
Description	Sales	Ownership	Location Type	Plant/Facility Size
Cook and process conchs	$0.49 M	Private	Single Location	1,200 sq ft

Tichon Seafood Corp.

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
7 Conway St., NB	1941	7	No change	7
Description	Sales	Ownership	Location Type	Plant/Facility Size
Packages fresh fish	$1.2 M	Private	Single Location	60,000 sq ft

Zeus Packaging Inc.

Parent company: Zeus Packaging Inc. located in Gloucester, MA

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
7 Conway St., NB	Unavailable	3	No change	25
Description	**Sales**	**Ownership**	**Location Type**	**Plant/Facility Size**
Manufacturing fresh and frozen packaged fish	$6.5 M	Private	Branch	3,500 sq ft

Cold Atlantic Seafood

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
72 N. Water St. ,Fl 3, NB	1991	3	No change	3
Description	**Sales**	**Ownership**	**Location Type**	**Plant/Facility Size**
Fresh and frozen seafood	$0.73 M	Private	Single Location	5,400 sq ft

Top Suppliers to Seafood Product Preparation and Packaging

Commodities	Absorption
Fishing	0.320
Wholesale trade	0.143
Management of companies and enterprises	0.068
Seafood product preparation and packaging	0.062
Animal Production-except cattle and poultry	0.054
Paperboard container manufacturing	0.017
All other misc professional and tech	0.015
Air transportation	0.010
Natural gas distribution	0.009
Metal can box and other container manufacturing	0.009
Scientific research and development services	0.008
Monetary authorities and depository credit	0.008
Power generation and supply	0.008
Real Estate	0.007
Warehousing and storage	0.007
Maintenance and repair of non-residential buildings	0.006
Plastics packaging material - film and sheet	0.006
Nondepository credit intermediation and related	0.004
Truck transportation	0.004
Plastic plumbing fixtures and all other plastic	0.004
Petroleum refineries	0.004

4. Noncellulosic organic fiber manufacturing

Total Exports (% Foreign)	Total Commodity Produced in NB
$113 M (13.6%)	$113 M

Output Per Worker	*Earnings Per Worker
$610,866	$96,522

* Includes salary plus benefits paid by employer

The noncellulosic organic fiber manufacturing industry represents establishments primarily engaged in the manufacturing of noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow, or the manufacturing and texturizing noncellulosic fibers and filaments. Because of the opacity of the collected government data, it is difficult to determine with accuracy which companies are operating within this industry. Our best estimate, using the ES-202 and IMPLAN data, is that there are between 5 and 8 companies associated with noncellulosic organic fiber manufacturing which collectively employ approximately 225 people.

The noncellulosic organic fiber industry appears to be ideal for expansion. The levels of output per worker, earnings per worker are highly desirable, while the absorption rate of .73 indicates a sufficiency of supplier commodities. Most notably, the skill level attributed to this type of position is consistent with the work force in New Bedford. That said, it is important to note that 100% of the commodity is exported, meaning that any industry expansion is contingent upon external demand. Therefore, further analysis of the industry is necessary to determine whether demand is sufficient to allow for an increase in production.

5. Nursing and Residential Care Facilities

Total Exports (% Foreign)	Total Commodity Produced in NB
$82.6 M (0%)	$119.9 M

Output Per Worker	*Earnings Per Worker
$53,444	$34,438

* Includes salary plus benefits paid by employer

Establishments represented by the Nursing and Residential Care Facilities industry provide residential care combined with either nursing, supervisory, or other types of care as required by the residents. In this industry, the facilities are a significant part of the production process and the care provided is a mix of health and social services with the health services being largely some level of nursing services. A number of these types of establishments are located in New Bedford including: Sacred Heart Nursing Home, New Bedford Jewish Convalescent Home, New Bedford Health Care Center, Mariner Health- Southeastern Mass, and Hathaway Manor Extended Care. According to ES-202 data, New Bedford has 59 nursing and residential care facilities that collectively employ over 2,100 people.

The nursing and residential care facilities industry does not appear to be ideal for expansion. The earnings per worker and output per worker, at $34,438 and $53,444 respectively, are both low while the ratio of the two numbers is high. Workers in the nursing and residential care facilities industry are creating relatively low supplemental value when compared with other industries. However, there is a substantial aging population in the region, so demand for these services is likely to grow. The benefit of growing this industry is that many of the jobs do not require higher levels of education, and thus the existing work force can readily be employed in this sector.

While this industry may not be suitable for induced expansion, it is still an important industry to the city of New Bedford and should continue to grow to keep up with demand.

Nursing and Residential Care Facilities Industry: Top 10 Companies

(ranked by employment)

Lifestream Inc

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
444 Myrtle St., NB	1976	335	+2000% (2 years)	400
Description	Sales	Ownership	Location Type	Plant/Facility Size
Residential Care Services/Job Training – mentally handicapped home	$15.4 M	Private	Headquarters	6,500 sq ft

New Bedford Management Systems

A.K.A. Hathaway Manor Extended Care

Parent company CES Management Systems, Inc. located in Pittsfield, MA

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
863 Hathaway Road	1988	160	No change	526
Description	Sales	Ownership	Location Type	Plant/Facility Size
Skilled nursing care facility	$148.5 M	Private	Headquarters	45,000 sq ft

St. John's Nursing Home, Inc.

A.K.A. Brandon Woods of New Bedford

Parent company Essex Group, Inc. located in Rowley, MA

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
51 Summer St., NB	1960	160	No change	702
Description	Sales	Ownership	Location Type	Plant/Facility Size
Skilled Nursing Home	$15.5 M	Private	Single Location	200,000 sq ft

Saint Luke's Nursing Home Inc.

A.K.A. Oaks

Parent company SouthCoast Hospital Group located in Fall River, MA

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
4525 Acushnet Ave., NB	1987	160	+2000% (2 years)	3853
Description	Sales	Ownership	Location Type	Plant/Facility Size
Skilled nursing care facility	$181 M	Private	Single Location	56,000 sq ft

Mariner Health Care
Parent company Mariner Health Care Inc located in Atlanta, GA
www.marinerhealth.com

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
4586 Acushnet Ave., NB	1973	130	+2000% (2 years)	35,000
Description	Sales	Ownership	Location Type	Plant/Facility Size
Skilled Nursing Home	$3.1 B	Private	Single Location	12,000 sq ft

New Bedford Jewish

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
200 Hawthorn St., NB	1961	120	No change	120
Description	Sales	Ownership	Location Type	Plant/Facility Size
Nursing, personal care skilled nursing care facility	$5.3 M	Private	Single Location	25,100 sq ft

Kindred Healthcare, Inc
A.K.A. Facility 513
Parent company: Kindred Healthcare, Inc. located in Louisville, KY
www.kindredhealthcare.com

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
1123 Rockdale Ave., NB	Unavailable	100	No change	55,000
Description	Sales	Ownership	Location Type	Plant/Facility Size
Skilled Nursing Care Facility Specialty Hospital	$4.3 B	Public	Branch	19,400 sq ft

Bedford Village Nursing Home

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
9 Pope St., NB	1985	80	No change	80
Description	Sales	Ownership	Location Type	Plant/Facility Size
Skilled nursing home	$1.7 M	Private	Single Location	10,000 sq ft

Beverly Enterprises-MA
Parent company Beverly located in Fort Smith, AR
www.beverlynet.com

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
19 Taber St., NB	Unavailable	60	No change	Unavailable
Description	Sales	Ownership	Location Type	Plant/Facility Size
Convalescent home with	$2.3 M	Private	Branch	13,800 sq ft

Oak Management Corporation
A.K.A. Savoy Nursing Center

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
670 County St., NB	1967	40	No change	40
Description	Sales	Ownership	Location Type	Plant/Facility Size
Skilled Nursing Care Facility	$0.73 M	Private	Single Location	5,000 sq ft

Top Suppliers to

Nursing and Residential Care Facilities

Commodities	Absorption
Real Estate	0.0636
Food services and drinking places	0.0303
Employment Services	0.0158
Sanitary Paper Manufacturing	0.0120
Wholesale trade	0.0113
Office Adminstrative Services	0.0103
Power generation and supply	0.0085
Pharmaceutical and medicine manufacturing	0.0076
Services to buildings and dwellings	0.0075
Legal services	0.0068
Maintenance & repair of non-residential bldg	0.0057

Part II: Industry Analysis –Industries of Interest

Priority industries represent industries that the City of New Bedford has a particular interest in maintaining and growing. HR&A assessed the growth potential for the following industries: Financial Services, Creative Economy, Marine Sciences and Renewable Energy. Where appropriate, we aggregated data to create datasets that were representative of the corresponding industries. Our analysis incorporates ES-202 employment and wages data along with IMPLAN data. Because of the different sources of information and the separate, uncorrelated industry classifications used by IMPLAN and NAICS, IMPLAN data may at times conflict with ES-202 Data. IMPLAN's industry classification codes tend to be broader and more inclusive than NAICS codes. As a result, IMPLAN data tends to state higher employment numbers for specified industries. For our analysis, we've used the IMPLAN data and included the ES-202 employment numbers for reference. Because most of the analysis is derived, many of the data that was available in previous sections is not available in this section.

Financial Services

Output Per Worker	*Earnings Per Worker
$167,791	$54,490

* Includes salary plus benefits paid by employer

The Finance and Insurance sector comprises establishments primarily engaged in transactions involving the creation, liquidation, or change in ownership of financial assets and/or in facilitating financial transactions. Three principal types of activities are identified:

1. Raising funds by taking deposits and/or issuing securities and, in the process, incurring liabilities. Establishments engaged in this activity use raised funds to acquire financial assets by making loans and/or purchasing securities. Putting themselves at risk, they channel funds from lenders to borrowers and transform or repackage the funds with respect to maturity, scale, and risk. This activity is known as financial intermediation.

2. Pooling of risk by underwriting insurance and annuities. Establishments engaged in this activity collect fees, insurance premiums, or annuity considerations; build up reserves; invest those reserves; and make contractual payments. Fees are based on the expected incidence of the insured risk and the expected return on investment.

3. Providing specialized services facilitating or supporting financial intermediation, insurance, and employee benefit programs.

In order to obtain data that would be representative of the financial industry in New Bedford, we aggregated existing data from several different industries. The analysis is based on a dataset comprised of the following industries:

- Nondepository credit intermediation and related
- Securities, commodity contracts, investments
- Insurance Carriers
- Insurance agencies, brokerages, and related
- Funds, trusts, and other financial vehicles
- Monetary authorities and depository credit

According to the aggregated data, the financial services industry represents 2.81% of the total industry and employs over 1,100 people. Financial services account for $51,081,000 in employee compensation in New Bedford and contribute $ 187,380,000 to the New Bedford economy overall. The industry appears to be growing modestly, with increased employment reported by 3 of the

top 10 employers in the sector. The employment is dispersed between a relatively large number of small institutions, with the largest employers employing only 36 employees.

The City has expressed an interest in expanding its financial services sector. Currently financial services appear to be limited to bank branches. Unfortunately New Bedford is not well positioned to attract either boutique financial services, like hedge funds and private equity groups, or back office financial services. Cities like Providence have had some success in attracting boutique financial firms, but Providence has the advantage of a easily accessible airport and is a relatively quick Amtrak ride away from either Boston or New York. New Bedford currently does not have a commercial airport or a train station, and therefore is not a viable location for this type of enterprise. Back office bank facilities have been locating in more remote locations than New Bedford, like Northeastern Pennsylvania or upstate New York. Banks are interested in locations with abundant, cheap electricity and low cost labor and minimal terror/natural disaster risks. Unfortunately New Bedford's energy costs make the city uncompetitive in this market, and, ironically, the City is probably too proximate to Boston to be considered a secure back office location.

Financial Services Industry: Representative Companies

(Ranked by employment)

Southern Mass Credit Union
www.southernmass.com

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
123 Alden St., NB	1922	36	+9% (2 years)	36
Description	Sales	Ownership	Location Type	Plant/Facility Size
State Credit Union	$6.5 M	Private	Single Location	9,400 sq ft

JJ Best & Co Inc
www.jjbest.com

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
85 Coggeshall St., NB	1995	25	No change	25
Description	Sales	Ownership	Location Type	Plant/Facility Size
Misc Business Credit Institutions	$6.1 M	Private	Single Location	2,000 sq ft

New Bedford Credit Union
www.newbedfordcreditunion.com

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
1150 Purchase St., NB	1932	24	+14%	30
Description	Sales	Ownership	Location Type	Plant/Facility Size
State Credit Union Loan Broker	$4.8 M	Private	Headquarters	5,600 sq ft

Luzo Community Bank
www.luzobank.com

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
160 County St., NB	1919	23	+14%	23
Description	Sales	Ownership	Location Type	Plant/Facility Size
State Chartered Bank	$3.9 M	Private	Headquarters	2,800 sq ft

Sovereign Bank
Parent company Sovereign Bank located in Reading, PA
www.sovereignbank.com

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
1 Sovereign Pl. & 2136 Acushnet	Unavailable	35	No change	12,513
Description	Sales	Ownership	Location Type	Plant/Facility Size
Federal Savings Bank	$4.6 B	Public	Branch	6,300 sq ft

Paul & Dixon Insurance Agency

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
388 County St., NB	1852	16	No change	12,513
Description	Sales	Ownership	Location Type	Plant/Facility Size
Insurance Agency	$2.2 M	Private	Branch	3,000 sq ft

Bank of America
Parent company Bank of America located in Charlotte, NC
www.bankofamerica.com

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
545 Pleasant St., NB	1852	15	No change	203,425
Description	Sales	Ownership	Location Type	Plant/Facility Size
National Bank	$117 B	Public	Branch	5,500 sq ft

Citizens Bank of Massachusetts
A.K.A. Citizens Bank
Parent company Citizens Bank of Massachusetts located in Boston, MA

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
550 Tarkiln Hill Rd., NB	1967	14	No change	141,800
Description	Sales	Ownership	Location Type	Plant/Facility Size
State Commercial Bank	$4 M	Private	Branch	5,000 sq ft

American General Finance
Parent company American General Finance, Inc. located in Evansville, IN

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
929 Kempton St., NB	1967	13	No change	106,000
Description	Sales	Ownership	Location Type	Plant/Facility Size
Direct Life Insurance Carriers	$113 B	Public	Branch	5,200 sq ft

First Citizens Federal Credit
A.K.A. First Citizens Federal Credit Union
Parent company First Citizens Federal Credit located in Fairhaven, MA

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
200 Mill Rd., Unit 100., NB	1967	12	No change	126
Description	Sales	Ownership	Location Type	Plant/Facility Size
Federal Credit Union	$20 M	Private	Branch	3,700 sq ft

Renewable Energy/Sustainable Technology

Renewable or Sustainable Energy is a steadily growing sector in the economy nationally and regionally. Massachusetts is home to 556 companies specializing in energy efficiency, renewable energy or clean energy consulting. The so-called clean energy technology cluster in Massachusetts is responsible for 14,400 jobs and is projected to soon become the 10th largest industry in the state, with a growth rate of 20% annually. Massachusetts has been the beneficiary of ample venture capital investment in the industry, $250 million in 2006; California is the only state to receive more venture funding.

The industry is supported both by private investors and government commitment. At the inaugural meeting of the state's Clean Energy Roundtable in June 2007, Gov. Patrick told two dozen executives about his strategy to make Massachusetts a "world center of clean energy technology." Patrick proposed a streamlined permitting process for sites, financial incentives to attract companies and a reformed regulatory environment that supports clean energy. In June 2007 Massachusetts solidified its standing as a sustainable energy center when the U.S. Department of Energy chose Charlestown to host a $20 million wind-turbine blade-testing facility. The state's commitment to sustainable energy is further supported by the Massachusetts Technology Collaborative Renewable Energy Trust which assistance to individual entrepreneurs as well as non-profits and communities. The Mass Clean Energy Council is also a resource for renewable energy development efforts.

New Bedford is well-positioned to capitalize on the expansion of the renewable energy sector and, in particular, Massachusetts' efforts to become a clean energy center. New Bedford is ideally situated for renewable energy companies interested in harvesting the clean energy provided by wind and water. The existing cluster of renewable energy businesses in New Bedford is quite small, indeed it is not possible to measure using NAICS codes or census data as it has really developed in the past few years. Although the cluster is just beginning to grow, the potential for growth is significant for a number of reasons.

The renewable energy entrepreneurs that have already located in New Bedford are very positive about their location and have strong ideas about how to strengthen New Bedford's renewable energy cluster. Roger Bason of Natural Currents, LLC, a tenant in the New Bedford EDC's Quest Center, said his company was attracted to New Bedford because it is a good location for both tidal energy development and wind and solar energy. He also likes New Bedford because it is close to Woods Hole and Cambridge, two think-tank centers for this work. In addition he noted that New Bedford's maritime traditions are an advantage for businesses focusing on renewable energy that involves utilizes the power of the ocean. New Bedford has a workforce that is familiar with machining and fabricating for the marine environment. He thinks it is a big benefit that NB has a working maritime waterfront. Vectrix has been designing and testing high-performance electric

scooters for the past nine years in the old Berkshire Hathaway mill complex in the South End. The company has 21 employees.

Peter Hughes, vice president of technology for Vectrix, says New Bedford was chosen for the pilot testing facility due to its cheap rent, access to good engineering talent, and proximity to Providence, Boston and Cape Cod. Those same features should continue to draw alternative energy companies to the area, Mr. Hughes said.

Jim Sweeney of Sustainable New Energy, also known as CCI Energy, is an energy consultant and project developer. He opened the New Bedford branch of his Plymouth-based company at the Quest Center on Purchase Street in January 2007, hoping to gain a foothold in SouthCoast's emerging renewable energy sector. So far, he is involved with wind turbine projects in Fairhaven and Dartmouth, and has proposed an additional project to power the New Bedford wastewater treatment plant with three wind turbines.

Mr. Sweeney, who was recently appointed to the Mayor's Sustainability Task Force, is optimistic that alternative energy could bring economic rewards to New Bedford, but to attract more companies the city needs to improve its green image.

"New Bedford has got to be the leader in environmental issues to make people want to set up shop here," he said.

He suggests the city install "lots of renewable energy" and push the use of biodiesel as an alternative fuel for the fishing fleet. Commercial fishing fleets contribute to global warming by burning fossils such as marine diesel. The world's fisheries account for about 1.2 percent of global oil consumption and emit 130 million tons of carbon dioxide into the atmosphere each year, according to a 2005 study published by the Royal Swedish Academy of Sciences. If ranked as a country, fisheries would share the Netherlands' position as the 18th most oil consuming nation in the world.

Other items on Mr. Sweeney's "green wish list" for the city include new building codes that promote energy efficiency as well as bylaws for zoning areas for wind turbines.

Bill Davis, founder of Ze-Gen, was similarly positive about New Bedford. He has eight employees in New Bedford, although none of them actually live in the city. David noted that New Bedford may lack the space to accommodate large scale manufacturing of sustainable energy parts when currently nascent companies reach that level of production.

Davis suggested that New Bedford promote itself as a renewable energy cluster by launching a state of the art public education program that would link the local schools' curriculum with the city's policy commitment to renewable energy. In other words, teach children and teenagers about renewable energy so they know about its benefits, and also are building their knowledge in

preparation for working in that industry. A public education campaign would also build support for the industry, and mitigate any backlash. Davis also thought the city should demonstrate its commitment to renewable energy by using renewable energy technologies—Davis suggested creating a test facility where solar and wind energy could be harnessed to offset the city's energy load.

Davis's comments on promoting sustainability were remarkably astute and, in fact, are strategies that other cities have employed to enhance their sustainable energy sectors. Below are a list of best practices that New Bedford should focus on implementing to nurture its renewable energy cluster.

Best Practices

Sustainability Strategies:

- Create a steering committee of key stakeholders
- Define "sustainable business"
- Provide sustainable business awards and annual ceremony
- Establish green procurement goals for the city
- Amend zoning rules
- Partner with foundation(s) to advance program initiatives (possible partners include Kresge Foundation, Knight Foundation)

Steering Committee of Key Stakeholders:

New Bedford's EDC is already active in the renewable energy area. The EDC can maximize the potential of the Quest Center by creating a steering committee that will include Quest tenants, as well as other sustainable businesses in the city, to foster cooperation between the businesses.

Define "Sustainable Business":

New Bedford should decide how broadly it would like to define "sustainable business." New Bedford could decide to define sustainable business more narrowly, including only business specifically involved in developing and manufacturing renewable energy technology. The definition could also include companies who utilize sustainable practices. For example, New Bedford may wish to include companies that make a significant commitment to sustainable practices, such as utilizing renewable energy to power operations or making a commitment to substantially reduce waste.

Sustainable Business Awards

Providing awards for businesses that are working in the renewable energy field, or are committed to sustainable business practices, will create energy and excitement around the cluster and further the public awareness of this activity.

Green Procurement Goals

The city of New Bedford can be a major force behind renewable energy and sustainable business practices. The city should adopt green building policies for city projects and buy green products. Even modest spending by the city could provide the necessary momentum to get a sustainable sector up and running. This approach has been successfully utilized by other cities.

The city of Chicago has been a major leader in promoting green by acting green. To kick off the city's green initiative, the city installed a green roof on the city hall in 2001. One of the primary goals for City Hall's green roof was to inspire more green building. So far the roof has proven inspirational—by 2004 there were 70 green roofs within Chicago's city limits, either complete or in the works, and 51 of them were private. In 2007 there were 2 million square feet of green rooftops in Chicago, more than all other U.S. cities combined. Chicago also has committed to obtaining 20% of the electrical power the city uses from alternative sources. Chicago attracted Spire Solar[4] to Chicago by offering an $8 million purchasing contract and discounted rental space. Chicago also offers expedited permitting for developers who commit to building green[5]. Mayor Daley credits his green initiative with transforming the city, both physically (in addition to the green roofs, Chicago has 500,000 new trees) and economically (many businesses have been built to serve this green initiative).

The city of Tucson has focused more intensively on promoting solar energy. In 1999 Tuscon installed solar equipment for all city facilities. The city also standardized practices for solar energy inspections and created permitting incentives for solar energy projects.

[4] http://www.grist.org/news/maindish/2007/07/19/cities/
[5] http://www.cityprojectca.org/blog/archives/283

Marine Science and Technology

Total Exports	Total Imports	Total Commodity Produced in the Region
$0 M	$10.1 M	$213 M

Total Output Per Worker	*Earnings Per Worker
$137,000	$90,311 M

* Includes salary plus benefits paid by employer

Marine science is a long established industry in the region. There are over 500 marine technology firms located in Massachusetts, Rhode Island, Connecticut, New Hampshire and Maine. These companies employ over 55,000 people and total $7.7 billion in annual sales. Approximately 60% of these companies are located within an hour's drive of New Bedford. This cluster is likely to continue to have its most intense growth in Massachusetts.

There is significant excitement surrounding this sector in the south coast region. Recently in Fall River, a Marine Science and Technology Business Opportunities Forum, hosted by UMass Dartmouth and other partners, was funded by the John Adams Innovation Institute ("JAII") as part of their larger effort to grow this sector in Massachusetts. JAII has committed over $10.2 million in funding for the sector in the past two years.

Currently Maine and Connecticut have higher levels of employment in these areas, but these states have been focusing on large ship building operations. The ship building industry is vulnerable as it relies heavily on the U.S. Navy for work; there is likely to be a decline in funding for this industry in the coming decade as the military scales back on the purchase of submarines and warships. In contrast, Massachusetts has a much broader base of firms—Massachusetts boasts 298 Marine Science and Technology firms compared with Maine's 19, Rhode Island's 74 and Connecticut's 61. Massachusetts' marine technology firms are focused on technical expertise, rather than more traditional manufacturing models. On average these firms employ approximately 60 people, as compared with Maine's 575 employees per firm or Connecticut's 177 per firm.

The smaller size of the Massachusetts firms has both positive and negative attributes. On the one hand, the failure of a single firm does not have as severe an impact on the economy as a whole, but, on the other hand, the benefit of individual firms is less. In addition, many of these smaller firms are quite experimental and may either fail to grow, or will continue to maintain a very small size as they work in highly specialized, research oriented areas. As a professor at SMAST noted, it may be overly optimistic to rely too heavily on the ability of small firms to navigate the transition

from a start up/think tank operation to a company engaged in the large scale manufacturing of a particular product.

New Bedford is well positioned to be a part of this developing cluster. There are more than 100 Marine Science and Technology firms located in Southeastern Massachusetts and on the Cape and Islands. This is an exciting number of firms, capturing a third of the Massachusetts cluster overall. It is important, however, to recognize the unique characteristics of this sub-cluster, and its small size.

The marine science cluster in the area surrounding New Bedford employs just under 2,000 people and generates sales of $213 million, less than 14% of the sales for the overall sector in Massachusetts. These numbers reveal that the firms surrounding New Bedford are smaller than average. This may be because the firms have been founded more recently, or have a more narrow focus.

While the development of these firms is exciting, it is important to note that, even within the context of Massachusetts' already small scale firms, those in the New Bedford area are uniquely small. One industry specialist noted that the success rate of these small start ups in transitioning from the small scale inventive process to large scale production is only 10%, by comparison nanotechnologies translate more easily into saleable inventions In November 2007 UMass Dartmouth held a conference focusing on growing a marine technology sector, Marine Science and Technology Business Opportunities: A Forum for Partnering, Much of the focus of the conference was on how best to get through what was termed the "Valley of Death," the journey from the laboratory to a working, profitable business. Hopefully as this industry grows start ups will become more adept at crossing this critical divide.

Research for the region also suggests that growth will be modest. Clyde Barrow of UMass Dartmouth conducted a survey of 481 Marine Science firms in Massachusetts in 2004 which suggested that the growth of the industry may be fairly modest in coming years. Availability of skilled labor and the cost of doing business are two major concerns for marine technology firms. In Massachusetts overall, firms are concerned about the cost of housing. New Bedford may have an advantage in this regard as its housing is significantly less expensive than housing in the region.

HR&A collected data regarding the specific economic impact of marine science on New Bedford. We used the NAICS code for Research and Development in the Physical, Engineering, and Life Sciences – 541710. This industry comprises establishments primarily engaged in conducting research and experimental development in the physical, engineering, and life sciences, such as agriculture, electronics, environmental, biology, botany, biotechnology, computers, chemistry,

food, fisheries, forests, geology, health, mathematics, medicine, oceanography, pharmacy, physics, veterinary, and other allied subjects. This code corresponds to IMPLAN code: 446 Scientific research and development services. Clearly this code may capture jobs that are not related to Marine Science, so these numbers should be considered to be somewhat inflated. That said, the code represents the best proxy available and provides some interesting insights into the characteristics of the marine science and technology sector.

The sector provides jobs with salaries that are significantly higher than the norm. The average earnings per worker is $ 90,311. The industry output for this code is $ 11,694,000, with employment of 85. To test the accuracy of these data we also looked at county employment data for 2005, by zip code, using the NAICS code 541710 which should be pull more specific information than the IMPLAN code 446.

New Bedford Zip Codes	Establishments	Employees
02740	2	1-4
02744	0	0
02745	0	0
02746	0	0

Clearly the numbers associated with these two data collection methods are dramatically different, but in either case the employment numbers are very small in the larger context of New Bedford's workforce of more than 40,000 people.

New Bedford's biggest opportunity in this area is to use the existing maritime base as a support for growth. New Bedford already has an enduring relationship with the waterfront. There is significant infrastructure in the harbor, which could potentially be used for marine science applications, not just fishing. Marine science and technology firms have the opportunity to build products that can support and grow the existing fishing industry. For example, SMAST is currently developing a low cost underwater vehicle that could be used by fishing fleets that are trying to locate schools of fish. Manufacture of a product like this could be useful to New Bedford's fishing industry and could be a source of employment in the city. There are multiple opportunities to strengthen the connections between the fishing and marine science and technology sectors.

To begin with, the city could form a group that will organize meetings and coordinate the circulation of information among the various potential partners to foster cooperation and collaboration. This group should have a regional outlook, coordinating efforts with organizations

in Fall River and other nearby cities and towns. The city should identify space that is available for fledgling start ups and more established companies that are ready to start product manufacturing on a larger scale. Creating a model for the growth of these companies will assist in recruiting new business. Working to facilitate the cooperation between the marine science and fishing industry will emphasize New Bedford's unique position as a home to both of these sectors.

Creative Economy

Range of Total Imports	Range of Total Exports
$100 M to $180 M	$50 M to $120 M

Output Per Worker	*Earnings Per Worker
$55,224	$38,166

* Includes salary plus benefits paid by employer

New Bedford currently is very focused on building its creative economy. New Bedford has recently enjoyed the successful revitalization of its Zeiterion Theater, which has greatly expanded its offerings under new management. The Whaling Museum continues to be a major attraction in the region, with over 300,000 people visiting the New Bedford Whaling National Historical Park. The creative life of the city is also energized by UMass Dartmouth' s College of Visual and Performing Arts, which opened in the old Star Store in the heart of New Bedford in 2001. New Bedford's arts scene is also enlivened by various reoccurring arts events. AHA organizes free monthly cultural events focusing on art, history and architecture. 2007 was the third year for the annual arts open house, Open Studios. The two day event features over 90 artists, who exhibit their art in the work spaces—which include 10 historic buildings including mills, a former church, and other vintage buildings throughout New Bedford. UMass Dartmouth Center for Policy Analysis assessed the economic impact of this two day event and discovered that this two day event alone generated $65,507 in 2005 and $56,257 in 2006. This dense collection of successful creative enterprises is a solid foundation for the growth of a larger creative economy.

The city has already begun to take the appropriate steps towards expanding the creative economy. Recently the mayor appointed a new Tourism Director and created the position of Creative Economy Coordinator. The Community Foundation has for the last year facilitated a discussion about building the financial foundations of creative institutions. Most recently the NBEDC has established a Creative Economy Task Force that will be chaired by an Executive Committee. The two meetings in September and October 2007 focused on creating a strategy for development that includes conducting an inventory of the creative economy assets and reviewing the strategies other peer cities have pursued in developing their creative economies.

To determine the status of the creative economy today, a necessary first step towards thinking strategically about building the sector, HR&A conducted quantitative analysis. Using the methodology set forth by the Center for the Urban Future, which worked in partnership with Mount Auburn Associates, HR&A looked at the creative economy in New Bedford. Analysis of the creative economy by definition required building a data set from information not intended to provide information for this specific industry. While a standard has developed for conducting analysis of the creative economy, subjective determinations must be made. NAICS codes do not perfectly represent the creative industries that we wish to consider, but they are the most fine-

grained tool available for pulling data collected by the federal and state government. Because New Bedford is a relatively small city, some data was not released in order to protect the confidential information of some firms. Putting these qualifications aside, this analysis offers a

quantitative picture of the creative economy in New Bedford, demonstrating that the creative economy is not an incidental contributor to the city, but a significant generator for economic growth.

According to 2002 Census data New Bedford's Creative Economy consisted of 69 establishments employing more than 872 people with a payroll of $26.75 million. The mean salary for employees was $30,000.00 a year, as compared with an annual mean salary of $26,032 for seafood processing or $30,350 for textile mills.

CREATIVE ECONOMY COMPARISONS

% of Creative Economy by State
Massachusetts: 2.58%
Vermont 2.56%
Connecticut: 2.39%
Rhode Island 1.73%
Maine 1.47%
New Bedford: 2.9%
Portland, ME: 6%

HR&A also performed analysis using the IMPLAN model which casts a broader net, given the variation in the definitions. The employment is significantly higher- 1,380 workers, with employee compensation of $48,715,000 with earnings per worker of $38,166. The total value of the Creative Economy to New Bedford using this analysis is $ 76,209,000.

New Bedford has a relatively high proportion of workers employed in the creative economy. Nearly three percent of New Bedford workers are employed in the creative economy. This is a high percentage compared to the national percentage, 1.62% and the New England workforce, 2.26%. This percentage is even higher than Massachusetts' proportion overall, 2.58%, which is the highest percentage for all the states in the region.

Portland, Maine is a good city for New Bedford to look to for examples of how to grow the creative economy. Portland has long been a center for the arts, but in 2004 the city began to focus on the need to strengthen and preserve the creative economy in the city. Professor Richard Barringer of the Muskie School of Public Policy at the University of Southern Maine, among many others, has been a strong leader for the creative economy, establishing ten building blocks that the creative economy needs to grow: (1) creative people, (2) centers of education, (3) cultural and natural amenities, (4) business engagement, (5) infrastructure, (6) networks, (7) strategies, (8) leadership, (9) money and (10) time.

Portland's commitment to the creative economy has been embraced statewide and resulted in the passage of two laws in 2006 intended to promote the creative economy. The Maine Attraction Plan- provides tax incentives for all forms of media production. An Act to Extend Civil Rights Protections to all People Regardless of Sexual Orientation is intended to encourage diversity within Maine's cities, particularly Portland.

Providence, Rhode Island serves as a good model for New Bedford as it seeks to build upon the temporary arts events, sponsored by AHA and others, and develop a permanent creative economy. Providence has successfully grown its creative economy from temporary events, and seen a larger urban renaissance as a result. One of Providence's great successes in this regard is Water Fire.

In 1994 Providence artist Barnaby Evans created the Water Fire exhibit to commemorate the 10th anniversary of First night in Providence. The installation was a great success and a permanent Water Fire installation was created in Providence in 1997, drawing over 350,000 visitors during 13 lightings. In the past ten years the Water Fire exhibit is credited with attracting 10 million visitors to downtown Providence.

Portland, ME and Providence, RI can both offer lessons to New Bedford as it embarks on its own creative economy initiative. New Bedford should analyze the efforts of these two cites carefully to prioritize the pursuit of strategize that translate most readily to New Bedford's circumstances. An installation like Water Fire, that physically draws people to the downtown and focuses them on the beauty and history of the downtown, could work well in New Bedford.

Challenges:

The success of the creative economy will support residential development efforts. However, the growth and maintenance of a creative economy is sensitive to trends in the residential market. Cities like Providence have been successful in nurturing a creative economy by using cheap housing to attract artists. Residential redevelopment then followed the creative economy boom, revitalizing the city. As the residential market gained interest, artists in Providence began to struggle to afford housing in the downtown. For a period of time it seemed that the artists who rejuvenated the downtown would be priced out. The market has, in fact, lost momentum in recent years, eliminating that concern. Nonetheless the concern about pricing out artists who successfully revitalize a neighborhood remains.

Creative Economy Industry: Representative Companies

New Bedford Symphony Orchestra

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
684 Purchase St., Fl 3, NB	1958	65	No change	65
Description	Sales	Ownership	Location Type	Plant/Facility Size
Symphony Orchestra	$1.9 M	Private	Single Location	4,200

Walt Reynolds-De Printing Inc

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
186 Duchaine Blvd., Fl 3, NB	1922	44	-12% (3 years)	65
Description	Sales	Ownership	Location Type	Plant/Facility Size
Commercial Printing	$10.5 M	Private	Single Location	30,000

Your Theatre Inc

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
136 Rivet St., Fl 3, NB	1946	25	-12% (3 years)	65
Description	Sales	Ownership	Location Type	Plant/Facility Size
Theatrical Producers/Services	$0.04 M	Private	Single Location	8,000

Command Print Solutions Inc

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
259 Samuel Barnet Blvd, A, NB	1946	23	No change	65
Description	Sales	Ownership	Location Type	Plant/Facility Size
Commercial Printing	$1.9 M	Private	Single Location	22,500

Art Swiss Corporation

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
1357 E. Rodney French Blvd, NB	1971	15	No change	15
Description	Sales	Ownership	Location Type	Plant/Facility Size
Commercial Printing	$0.8 M	Private	Single Location	10,000

Whaling City Graphics

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
117 King St., NB	2001	10	No change	10
Description	Sales	Ownership	Location Type	Plant/Facility Size
Commercial Screen Printing	$0.6 M	Private	Single Location	5,000

Zeiterion Theatre, Inc

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
684 Purchase St., NB	1982	8	No change	8
Description	Sales	Ownership	Location Type	Plant/Facility Size
Performing Arts Center	$0.47 M	Private	Single Location	5,000

Hiller Printing Inc

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
11 William St., NB	1934	7	No change	7
Description	Sales	Ownership	Location Type	Plant/Facility Size
Commercial Printing	$0.45 M	Private	Single Location	20,000

Oversoul Theatre Collective

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
387 Park St., NB	1995	7	No change	7
Description	Sales	Ownership	Location Type	Plant/Facility Size
Theatrical Companies & Dinner	$0.01 M	Private	Single Location	5,000

Upcountry Enterprises
A.K.A. AlphaGraphics

Address	Year Estab.	Employment	Employment Trend	Employ. All Sites
827 Rockdale Ave., NB	1986	7	No change	7
Description	Sales	Ownership	Location Type	Plant/Facility Size
Commercial Printing	$0.45 M	Private	Single Location	5,000

Creative Economy Total Industry Employment according to NAICS codes *2002*

Industry	NAICS code	Number of Establishments	Number of Employees	Annual Payroll
Newspaper, periodical and book publishers	5111	4	311	$8,463,000
Architectural, engineering & related services	5413	23	103	$10,667,000
Arts and Entertainment Non-Profits	71	12	294	$5,723,000
Arts and Entertainment subject to federal income tax	71	16	164	$1,897,000
Museums, historical sites (tax exempt)	7121	4	NA	NA
Museums	712110	3	NA	NA
Amusement & recreational services excluding fitness, sports	7139 (excluding 71394, 713940,	7	NA	NA

Massachusetts Renewable Energy Tax Incentives

The commonwealth of Massachusetts offers a number of tax incentives that are designed to promote the development and use of renewable energy resources. This is a brief summary of those incentives.

a. State Income Tax Credit

Massachusetts provides an income tax credit for individuals who install renewable energy systems (solar or wind-powered) in their residences. The credit is 15% of the net expenditure (including installation) for the system, or $1,000, whichever is less.

b. State Sales Tax Exemption

State law exempts from the state sales tax, the sale of equipment directly relating to any solar, wind, or heat pump system to be used as a primary or auxiliary power system for heating or otherwise supplying the energy needs of a person's principal residence in the state.

c. Local Property Tax Exemption

A taxpayer who installs a solar or wind-powered system for heating or otherwise supplying the energy needs of his/her residence or business is eligible for an exemption from local property tax. The exemption is good for twenty years from the date of installation.

d. Corporate Income Tax Deduction

A business which purchases a qualifying solar or wind-powered "climatic control unit" or "water heating unit" is allowed to deduct from its net income, for state tax purposes, any costs incurred from installing the unit, provided the installation is located in Massachusetts and is used exclusively in the trade or business of the corporation.

e. Alternative Energy and Energy Conservation Patent Deduction (Personal and Corporate)

Any Massachusetts resident who has applied for, or holds a patent for an alternative energy or energy conservation system or device, may petition the Commissioner of Energy Resources for determination that such patent is "....of economic value, practicable, and necessary for the convenience and welfare of the Commonwealth." If the Commissioner approves such a patent, any income received from the sale, lease or other transfer of such patent, including royalty income, and any sale, lease or other transfer of property or materials manufactured in the Commonwealth subject to such patent, shall be deducted from state personal income tax or corporate excise tax. Said deduction shall extend for a period no longer than five years from the

date of issuance of the U.S. patent or the date of approval by the Commissioner of Energy Resources, whichever expires first.

f. Hydropower-Property Tax Exemption

Hydropower facilities are exempt from local property tax for a period of twenty years from the date of completion of the construction of such facility, if construction of the facility commences after January 1, 1979. To qualify for this exemption, the owner of the plant must agree to pay the host community at least 5% of the plants gross income for the preceding calendar year in lieu of taxes.

The exemption applies to all real property (land and buildings) and tangible property (turbines and other equipment) necessary for the production of hydropower.

Federal Financial and Tax Incentives for Homeowners

As of December 2001, there were no federal income tax incentives for homeowners who purchase renewable energy equipment. However, rebates from electric utilities for residential solar systems are exempt from federal taxation. Also, special mortgage provisions may be secured from federal HUD, Freddie Mac, and Fannie Mae for solar water heating and photovoltaic systems.

Federal Financial and Tax Incentives for Businesses, Municipal Entities, and Not-for-Profit Entities

At the federal level, numerous tax incentives, deductions, and credits are available to businesses, municipalities and not-for-profit entities. Special financing arrangements and mortgages are offered by some federal agencies to help finance the cost of renewable energy systems. Owners or lessees of renewable energy property may be also be entitled to special depreciation rates as well as special treatment of taxes on bonds and leases.

a. Production Tax Credit

Recently extended through 2004, residential and business generators of renewable power may be entitled to a credit of 1.5 cents per kWh of energy produced by qualified sources, including new wind, closed-loop biomass, and poultry waste facilities. See 26 USC Section 45.

b. Modified Accelerated Cost Recovery System

Section 168 (e)(3)(b) of the Internal Revenue Code provides a specific depreciation deduction for solar, wind, and geothermal property.

c. Business Investment Tax Credit

26 U.S.C.A. 48 (a) allows deduction of up to 10% of cost for investing in, purchasing, or constructing qualifying energy property for business use.

d. Tax Exemptions for Grants and Subsidies

Funds awarded for projects as part of federal programs may be exempt from taxation.

e. Federal Funding Sources

The U.S. Department of Energy (DOE) and other federal agencies will from time to time, issue Requests for Proposals (RFPs) in the Commerce Business Daily and will award funds for specific projects when funds are available.

f. Renewable Energy Production Incentive

Local governmental entities and State entities may apply for an incentive payment from the Department of Energy for electricity produced and sold by new qualifying renewable energy generation facilities. Not-for-profit electric cooperatives which began or begin operations between October 1, 1993 and September 30, 2003 are also eligible. Annual incentive payments may total 1.5 cents per kilowatt-hour.

Massachusetts Technology Collaborative, Renewable Energy Trust

The Trust provides financial assistance to individuals and businesses for solar panels and wind turbines at their homes and facilities, works with communities to incorporate green design into schools, helps emerging clean energy businesses flourish in the Commonwealth, and much more.

MTC's Large Onsite Renewables Initiative (LORI)

The Massachusetts Technology Collaborative (MTC), as administrator of the Renewable Energy Trust Fund (the Trust), seeks applications for the Large Onsite Renewables Initiative (LORI) to expand the production and use of distributed renewable energy technologies in Massachusetts. MTC seeks to develop a diverse portfolio of renewable energy projects across a variety or locations, technologies, and building types.

Round Five will open January. This could be a good opportunity for New Bedford to seek funding for building a sustainable building as part of an overall positioning strategy intended to raise New Bedford's profile as an emerging renewable energy cluster.

MTC's Green Schools Initiative

MTC's Renewable Energy Trust is offering $15 million in grants to fund solar electric panels, wind turbines, and other clean energy technologies, as well as green building design and planning assistance, at schools that meet new guidelines for energy efficiency. The $15 million will be available through the Green Schools Initiative as design and construction grants to those school districts approved for MSBA construction assistance. In addition to the MTC grants, MSBA will award qualifying communities up to an additional 2% of the approved, eligible project costs for certified high-performance "green" schools.