# Dropout Prevention *in the* SouthCoast

## *Choosing a New Path to Economic Prosperity*

PREPARED BY:

UMass Dartmouth
THE URBAN INITIATIVE

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# Our Mission

The University of Massachusetts Dartmouth stands at the forefront of many of the major public policy issues that currently confront the regional communities we serve and the entire Commonwealth. With its thumb on the pulse of a wide range of issues including environmental and sustainability concerns, increasing regional educational achievement, and innovative approaches to energy conservation, the University has a history of uniting its educational, research, scientific, and technological resources toward positive efforts that contribute to the progress of our state.

Recognizing higher education's further potential to pursue and promote constructive statewide growth, the University's Chancellor, Dr. Jean F. MacCormack, commissioned the establishment of the Urban Initiative in November 2007, specifically to act on behalf of the many older urban communities throughout the Commonwealth that continue to struggle with the transition from manufacturing to today's knowledge-based economy. Since then, the urban revitalization movement throughout the state has garnered significant momentum and has earned the Urban Initiative a prominent role in its progression.

Considering that the University serves a region that contains several such cities, including Fall River, New Bedford, Brockton, and Taunton, the existence of the Urban Initiative makes not only regional, but also statewide sense. The presence of various policy challenges that have hindered progress in these urban areas represents an opportunity recognized by Chancellor MacCormack to further embed the University in these and other communities in order to promote and affect the necessary policy changes that can lead to their revitalization and an improved quality of life for their residents.

The Urban Initiative's affiliation with the Center for Policy Analysis, a well-established research unit of UMass Dartmouth, is in keeping with the Center's long-held desire to bring a greater focus on urban issues to their own policy work.

Among other elements, the Urban Initiative's mission encompasses a fusion of research, project development and implementation, technical assistance, and policy analysis that supports the work of municipalities, state and local agencies, private and non-profit entities, and other organizations. Specifically, the Initiative seeks to accomplish these goals by engaging our elected leaders, issuing research reports, hosting events and conferences, offering technical assistance and training to policy leaders, encouraging civic participation, and linking the University's resources to the region and beyond.

# Fields of Focus

- Economic Development
- Workforce Development
- Municipal Organization and Finance
- Leadership
- Urban Education
- Urban Policy
- Civic Engagement

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April 2009

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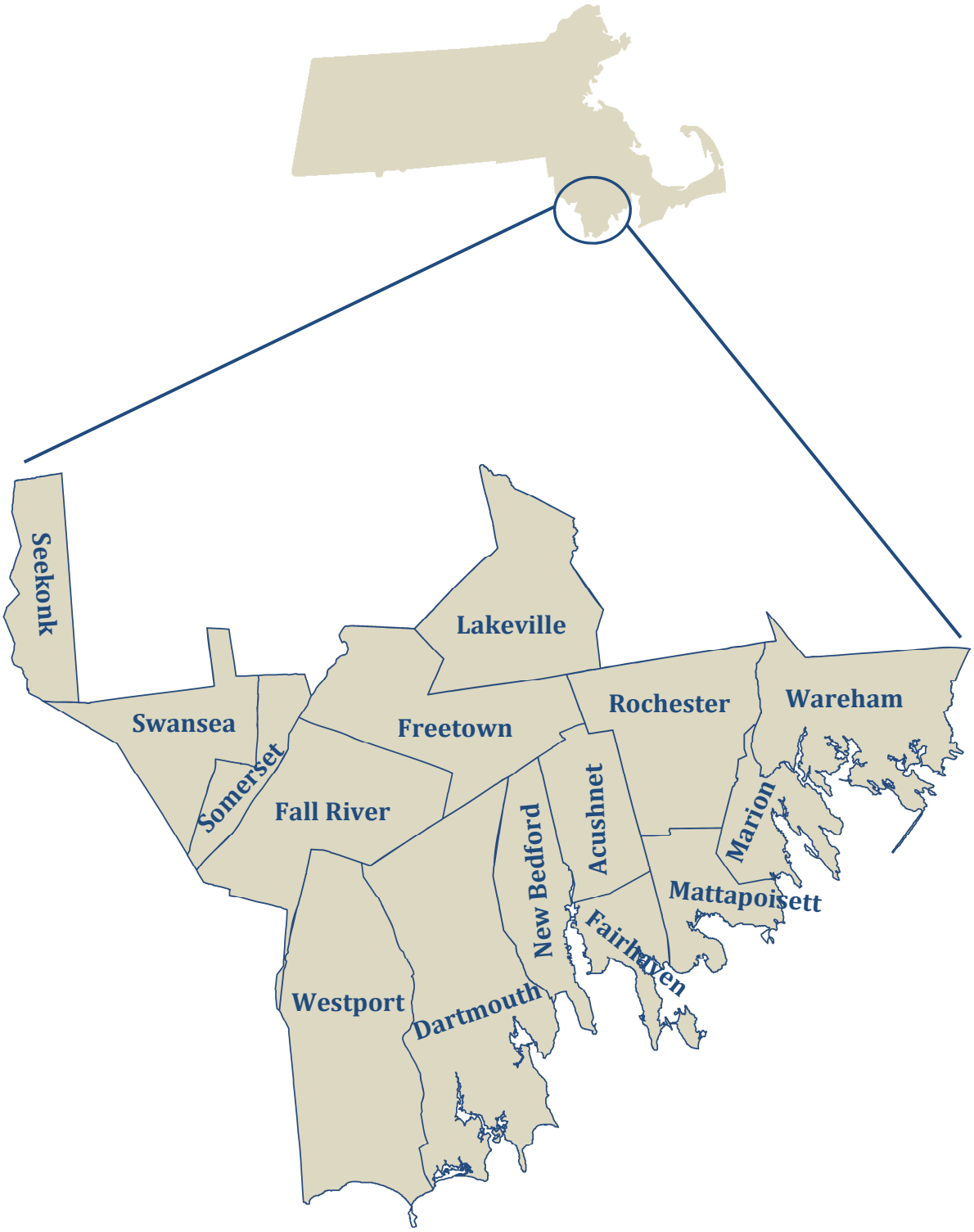


# Executive Summary

## Dropping Out in the SouthCoast

The choice a student makes to leave school before graduation can have important, negative consequences for the individual. A region's collective inability to graduate its students through high school has devastating, long-term consequences for everyone in that region

The quality of life sought by people everywhere includes having an economy which allows families to earn money to comfortably support themselves. In today's knowledge-based economy, the economic success of a region depends upon a more highly skilled and educated workforce than has been needed at any other time in history. As such, the lack of educational achievement by any segment of our population has consequences for the entire region.

The responsibility for preventing incidences of dropout cannot be left to individual students, their families, or the school systems that serve our students. Rather, as we all have a stake in an educated workforce, we all share the burden of correcting this troublesome situation.

## The Economic Context and Purpose of This Study

In this new global economic age, only those regions and communities with a workforce that has the education and skills that meet the demands of today's knowledge-based industries will be able to compete for new development and succeed in providing a high quality of life for their residents. In the SouthCoast region of Massachusetts, we find ourselves seriously unprepared for this economic transition, despite having a workforce with a strong work ethic.

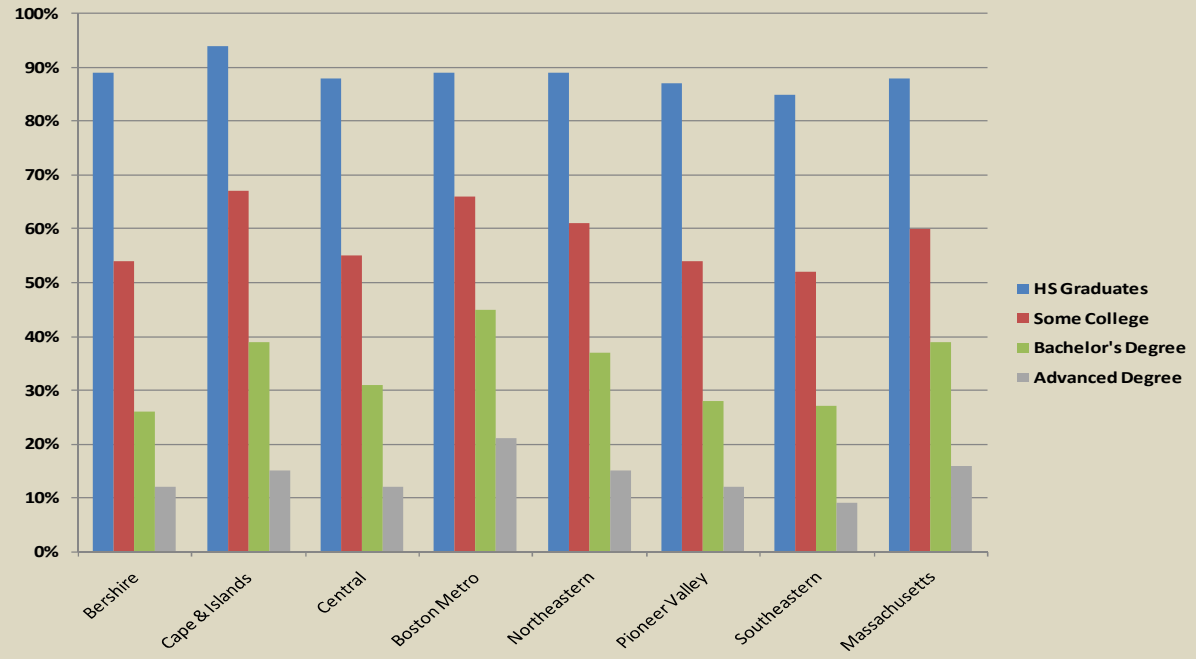
The fifteen cities and towns of the SouthCoast, as a region, have an illustrious economic history. Most notable are the cities of Fall River and New Bedford, which once had the distinction of being two of the wealthiest cities in the world. From the early whaling industry in New Bedford to the sustained manufacturing success that was centered in both communities and spread throughout the region, these global economic engines attracted immigrants and their families from all over the world looking for the opportunity to support themselves and achieve the American Dream.

For much of our history, possessing specialized skills and a strong work ethic were an acceptable alternative to a formal education, and these conditions allowed workers to earn reasonable wages without a high school diploma. Unfortunately, changes to the global and national economies have resulted in a shift away from manufacturing and a gradual erosion of the region's economic base. And yet, even though the region has realized the need to increase its educational attainment levels in order to compete economically, the limited progress we have made thus far is insufficient to overcome the depth of the challenge that exists and the fierce competition that comes from other areas of our state and the nation. In fact, if we place the SouthCoast within the larger context of Southeastern Massachusetts, our part of the state ranks last on three of four educational attainment indicators in comparison to the rest of the state (see Figure A).

It is within this context that the SouthCoast Development Partnership (SCDP) commissioned this report by the UMass Dartmouth Urban Initiative. The SCDP is a group of business and civic leaders whose mission includes providing regional leadership and collaboration in developing new business, industry, and regional economic development projects for the SouthCoast and its residents. The SCDP has become increasingly aware and concerned about the decision-making process of businesses as it relates to location and expansion. They have determined, through contact with business leaders and other anecdotal evidence, that low educational attainment levels in the region, particularly in its two cities have a negative effect on the desire of companies and industries to expand or locate here.

While it is recognized that raising the population's educational attainment will require a cooperative and unprecedented effort at a range of levels, including the involvement of higher education and workforce development systems, it was determined that this initial effort on the part of the SCDP should be focused on

**Figure A:** Educational Attainment of Persons 25 & Older (2006)




(Source: Executive Office of Housing & Economic Development, Commonwealth of Massachusetts, *A Framework for Action. The State Regional Economic Development Strategy, State and Regional Profiles*, January 2009, p. 52, http://www.mass.gov/Ehed/docs/EOHED/Economic_Framework/Framework_State_&_Regional.pdf)

dropout prevention as the best strategy for implementing long-term change. Such an approach not only recognizes that attempting to break the cycle of low educational attainment is best done at the earliest stages, but also, that a high school diploma is the gateway to the higher education that is increasingly required in the 21st century knowledge-economy.

The Urban Initiative was given the following charge:

- ✧ Research, review, and analyze economic and educational attainment data and trends to inform strategies and shape "the call to action."
- ✧ Develop a process to determine the four to six best or most effective strategies relative to dropout prevention for implementation in the SouthCoast region.
- ✧ Integrate the data and the selected strategies into an overall regional plan for implementation that calls for stakeholder participation, leadership, support for and accountability from our schools, and benchmarking and evaluation to measure progress.

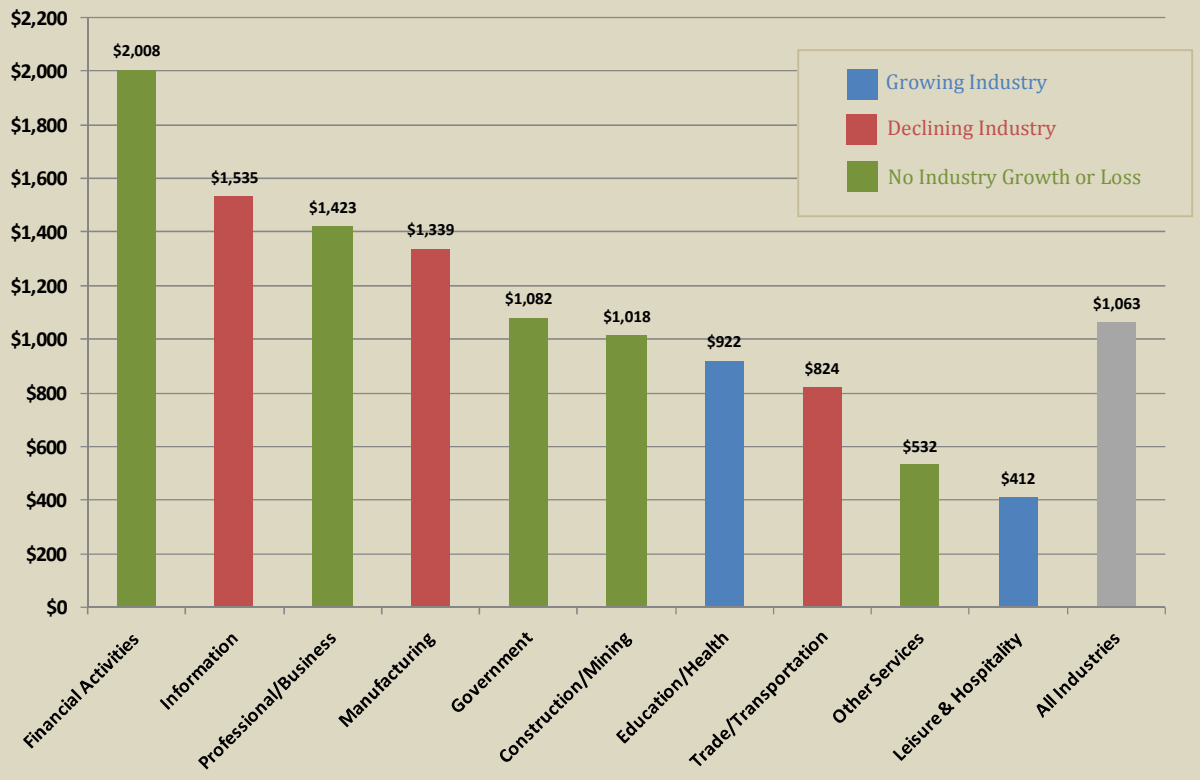
The complexity of the dropout problem does not allow for an examination of its every facet within a single study. This report is intended to serve as a call to action for the region and to set out some preliminary strategies and actions to be taken and benchmarks to be set in order to build accountability.

## *From Chronic Problem to Acute Crisis*

Low educational attainment rates have limited the region's economic progress for some time. As the knowledge economy in Massachusetts has centered itself in the Greater Boston area, there has been a widening in the per-capita income gap between the Greater Boston area and the state's outlying regions, such as the SouthCoast.

More recently, the manufacturing base that has continued to offer higher than average wages to workers with limited educational attainment has eroded at a rate that exceeds state and national declines (see Figures B through E). As a result of its creativity and its tremendous work ethic, our region has been able to hold onto its manufacturing base longer than other regions. Our ability to do so may have led to a delay of serious efforts to address the educational and

**Figure B:** *Average Weekly Wage by Industry Sector (Massachusetts, 2007)*




Source: Massachusetts Budget and Policy Center, *The State of Working Massachusetts 2008*, January 2009

dropout issues that have persisted. Unfortunately, such a delay is no longer acceptable. For too long, the region has focused on economic *survival* instead of economic *success*. Therefore, both the region's survival and its success are now in jeopardy and this situation requires immediate action in order to change educational and economic outcomes.

A good deal of statistical evidence exists that demonstrates the challenges ahead. As a region, the SouthCoast has nearly twice the number of adults without a high school diploma when compared to the rest of the state (see Figure F). Meanwhile, the cities of Fall River and New Bedford continue to fall further behind.

Being that the SouthCoast is such a diverse region, there is a great deal of variability among each community's data with regards to educational attainment. In addition, community-by-community disparities in family income levels appear to be a factor, as is generally the case, influencing rates of drop out. Especially troubling are the number of adults in the region, and particularly in the two cities, that possess less than a ninth grade education. In fact, nearly one in four adults in these cities has less than a ninth grade education. Moreover, this speaks to the magnitude of the challenge we face in preparing the workforce and enhancing the education of the region's adults so that they may become active participants in their child's learning and serve as a standard for education achievement that our children can aspire to.

These numbers suggest that, as a region, the SouthCoast is seriously underprepared to participate in the emerging knowledge-based economy. Using the *2008-2009 Occupational Outlook Handbook* published by the U.S. Bureau of Labor Statistics, we identified thirty-eight careers in the fields of science, financial services, healthcare, information technology/computer information systems and media that can be part of what is considered today's knowledge-based economy. In the aggregate, 34 of these 38 careers required at least a high school diploma for entry, with 32 of them requiring some form of post-graduate study.

Our research also determined that educational attainment levels are considered very important when a

**Figure C**: Manufacturing Jobs in the United States (2001-2007)
(Source: Massachusetts Budget and Policy Center, *The State of Working Massachusetts, January 2009)*

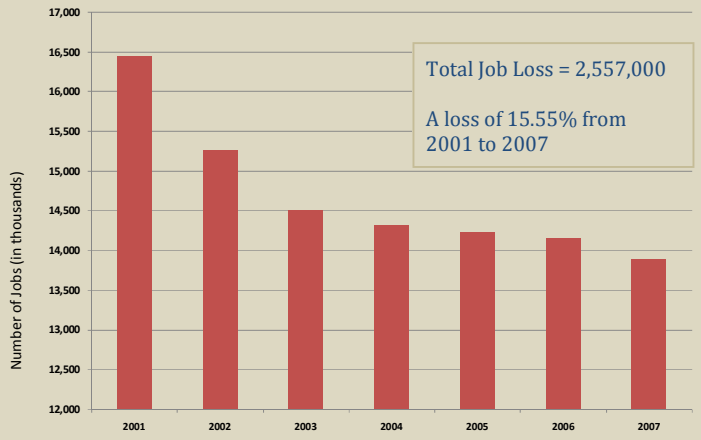
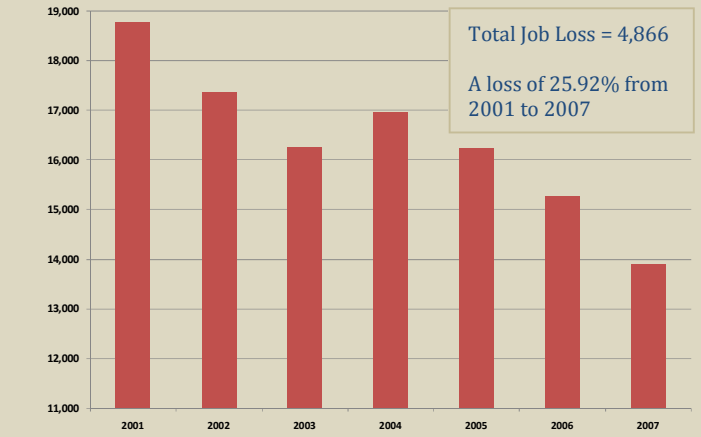



**Figure D**: Manufacturing Jobs in Massachusetts (2001-2007)
(Source: Bureau of Labor Statistics, State & Metro Area Employment, Hours, & Earnings - National Database, 2008*)*


**Figure E**: Manufacturing Jobs in Fall River & New Bedford (2001-2007)
(Source: Massachusetts Labor & Workforce Development, Employment & Wages ES-202 database*)*




business is making its decisions on location and expansion. In particular, evidence exists that reviews of educational data by businesses is done on a regional basis (not on a community-by-community basis), leading us to further suggest that the problem and its solution must be addressed on a regional level.

## *Impact on the Region and its Residents*

While the effects of dropping out of school have many implications for the individuals, we have attempted to measure its collective effect on the region. The SouthCoast continues to experience rates of poverty and unemployment higher than the rest of Massachusetts, a problem that likely has its roots in the region's low educational attainment levels. Applying national models to regional data, we have found that:

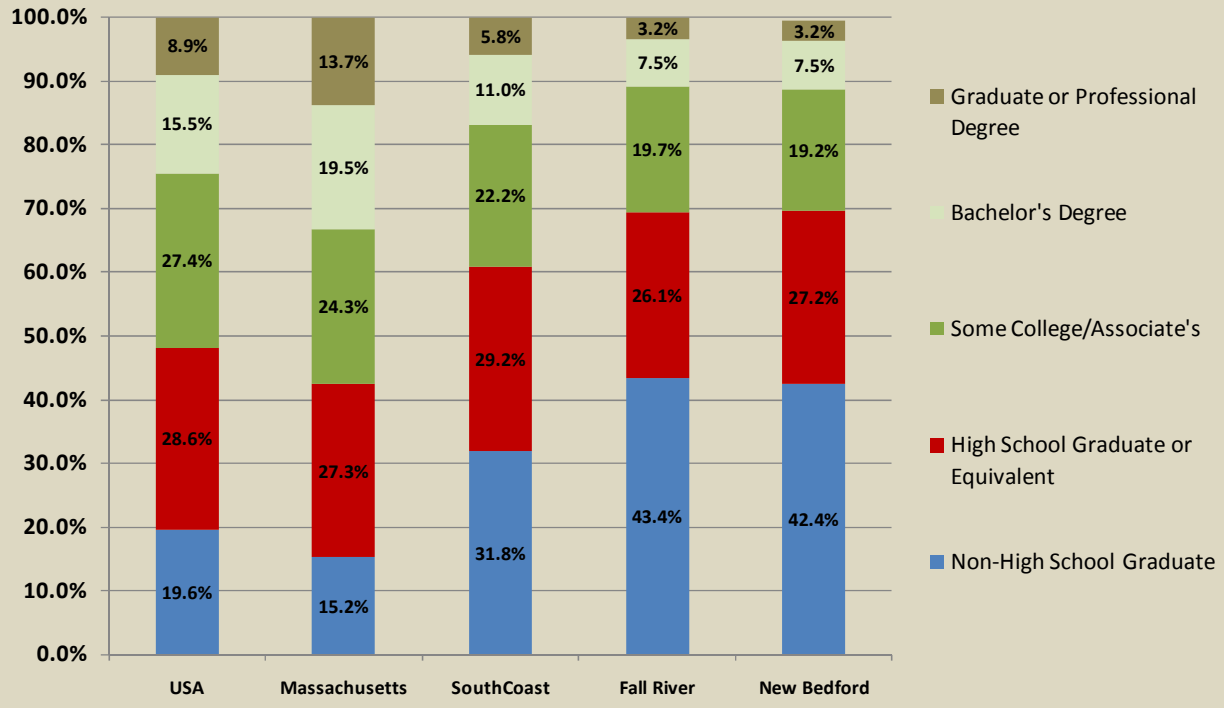
Low educational attainment in the SouthCoast region results in $232,260,888 in lost payroll.

Low educational attainment accounts for approximately 20 to 25 percent of the disparity between the region's unemployment rates and those of the rest of the state

Non-high school graduates have a total negative net fiscal impact of -$254,983,000.

The social costs of dropouts in a region, the loss of payroll that could be circulated throughout the regional economy, the greater likelihood of crime, the effect of additional foreclosures in neighborhoods on surrounding property values, and the loss of property tax revenue in communities who lose businesses or are unable to attract businesses all have an impact that reverberates across municipal boundaries and transcends racial, ethnic, and socioeconomic lines in ways that affect everyone throughout the region.

**Figure F**: A Comparative Analysis of Educational Attainment Levels (2000)




Source: U.S. Census Bureau, 2000 Census Data, Social Characteristics.

Therefore, the responsibility for solving the problem must also be shared by everyone across the region, and cannot be left to school district administrators alone.

## Dropout Data and Risk Levels

In order to effectively assess the best strategies for dropout prevention as part of a regional dropout prevention plan, an analysis of existing dropout rates and regional trends was conducted.

Dropout data must be assessed cautiously due to numerous changes in collection methodology and reporting techniques used by the state and local school districts over the course of the last twenty years (see Figures G, H, and I). A review of dropout rates in the SouthCoast over the last eight years paints a troubling picture for the region and its residents.

Overall, the SouthCoast lost ground in comparison to the rest of Massachusetts with regard to its annual dropout rates since 1999. During that eight-year period, while the state dropout rate increased approximately six percent, the rate in the SouthCoast increased almost five times, an increase of 30 percent.

According to the most recent reports from the Massachusetts Department of Education, the SouthCoast region currently has a collective four-year cohort dropout rate that is nearly twice the state average (17.5 percent for the region versus 9.9 percent for the state). Most notably, Fall River and New Bedford produced four-year cohort dropout rates of 31.8 percent and 26.8 percent, respectively, for the class of 2008. In fact, an estimated 75 percent of the entire SouthCoast's students who drop out of school before graduating come from these two cities.

Fall River's annual dropout rate increased dramatically over the last eight years by over 50 percent, while New Bedford's increase over the same time period was approximately 20 percent. While this number is closer to the regional increase, it is still well above the state's increase of approximately six percent.

A comparison of the rates in our region's two cities to those of other outlying, older urban areas in Massachusetts, known as the Gateway Cities, shows some additional, disturbing trends. It is not surprising

**Figure G:** Annual Dropout Rates in SouthCoast School Districts (1999-2007)

| District | 1999-00 | 2000-01 | 2001-02 | 2002-03 | 2003-04 | 2004-05 | 2005-06 | 2006-07 | Average Dropout Rate |
|---|---|---|---|---|---|---|---|---|---|
| Dartmouth | 3.1% | 2.8% | 1.4% | 0.8% | 1.8% | 3.4% | 1.4% | 2.3% | 2.1% |
| Fairhaven* | 3.1% | 4.9% | 2.6% | 2.8% | 4.7% | 5.4% | 2.7% | 3.6% | 3.7% |
| Fall River | 6.8% | 6.9% | 7.9% | 10.6% | 10.2% | 11.9% | 11.4% | 9.8% | 9.4% |
| Freetown-Lakeville | 3.2% | 3.1% | 1.7% | 3.0% | 2.2% | 3.7% | 2.6% | 2.0% | 2.7% |
| Old Rochester** | 1.2% | 1.1% | 1.0% | 2.3% | 2.3% | 1.3% | 1.8% | 2.4% | 1.7% |
| New Bedford | 8.6% | 7.0% | 6.9% | 9.3% | 9.7% | 10.4% | 7.4% | 8.3% | 8.5% |
| Seekonk | 1.7% | 0.7% | 1.3% | 1.8% | 1.3% | 1.4% | 1.5% | 2.1% | 1.5% |
| Somerset | 2.7% | 2.6% | 2.7% | 5.1% | 5.2% | 3.8% | 1.9% | 1.1% | 3.1% |
| Swansea | 0.7% | 2.6% | 2.8% | 1.9% | 2.5% | 4.0% | 4.1% | 2.3% | 2.6% |
| Wareham | 1.7% | 0.5% | 3.5% | 3.5% | 4.1% | 2.6% | 4.3% | 3.6% | 2.9% |
| Westport | 0.8% | 4.6% | 6.5% | 4.7% | 7.5% | 7.2% | 4.2% | 4.4% | 5.0% |
| **SouthCoast** | **4.8%** | **4.6%** | **4.7%** | **6.1%** | **6.4%** | **7.0%** | **5.6%** | **5.4%** | **5.6%** |
| **Massachusetts** | **3.5%** | **3.5%** | **3.1%** | **3.3%** | **3.7%** | **3.8%** | **3.3%** | **3.8%** | **3.5%** |

* Acushnet students can choose to attend public high school in either Fairhaven or New Bedford.

** Marion, Mattapoisett, and Rochester students attending public high school all attend Old Rochester Regional.

Source: Massachusetts Department of Education

that, among this group of cities, the five with the lowest per-capita incomes, including Fall River and New Bedford, also have the highest dropout rates. However, when compared to two other cities with similar demographics (Lowell and Brockton), the SouthCoast's two cities have dropout rates almost twice as high. The variable that did separate these two pairs of cities, besides their dropout rates, was the educational attainment levels of each community's adult population – rates that were much higher in Brockton and Lowell than in Fall River and New Bedford.

Dropout rates in a selection of the SouthCoast's towns also require mentioning and necessitate further monitoring. While the volatility in Westport's numbers may be explained by low student population counts and annual fluctuations, Wareham's data appears to be trending toward elevated rates of dropout. Seekonk, Dartmouth, and Old Rochester (which serves students from Marion, Mattapoisett, and Rochester) have performed particularly well by most dropout standards. Somerset was recently recognized by a state-wide educational policy center for its recent dropout prevention progress. The area's vocational schools have also performed very well on measures of dropout.

In analyzing a variety of data sets for each community, the research team isolated eight variables in the creation of an index that can be useful in determining each school district's level of risk. This assessment was performed for each of the districts that are host to their own high schools. The criteria used in this index included rates of low-income among student populations, rates of in-school and out-of-school suspensions, attendance rates, retention rates, and MCAS scores for English Language Arts, Math, and Science. Using these indicators, each community was scored based upon their position relative to the state average for each variable. In performing this assessment, the cities and towns of the SouthCoast have been classified as low-, medium-, and high-risk.

## Figure H: 4-Year Cohort Dropout Rates (2008)

| District | Number in Cohort | Number of Dropouts | 4-Year Drop-out Rate |
|---|---|---|---|
| Dartmouth | 350 | 22 | 6.3% |
| Fairhaven* | 174 | 21 | 12.1% |
| Fall River | 836 | 266 | 31.8% |
| Freetown-Lakeville | 210 | 13 | 6.2% |
| New Bedford | 888 | 238 | 26.8% |
| Old Rochester** | 212 | 11 | 5.2% |
| Seekonk | 197 | 13 | 6.6% |
| Somerset | 257 | 7 | 2.7% |
| Swansea | 158 | 6 | 3.8% |
| Wareham | 298 | 37 | 12.4% |
| Westport | 122 | 14 | 11.5% |
| **SouthCoast** | **3,702** | **648** | **17.5%** |
| **Massachusetts** | **77,383** | **7,661** | **9.9%** |

* Acushnet students can choose to attend public high school in either Fairhaven or New Bedford.

** Marion, Mattapoisett, and Rochester students attending public high school all attend Old Rochester Regional.

Source: Massachusetts Department of Education

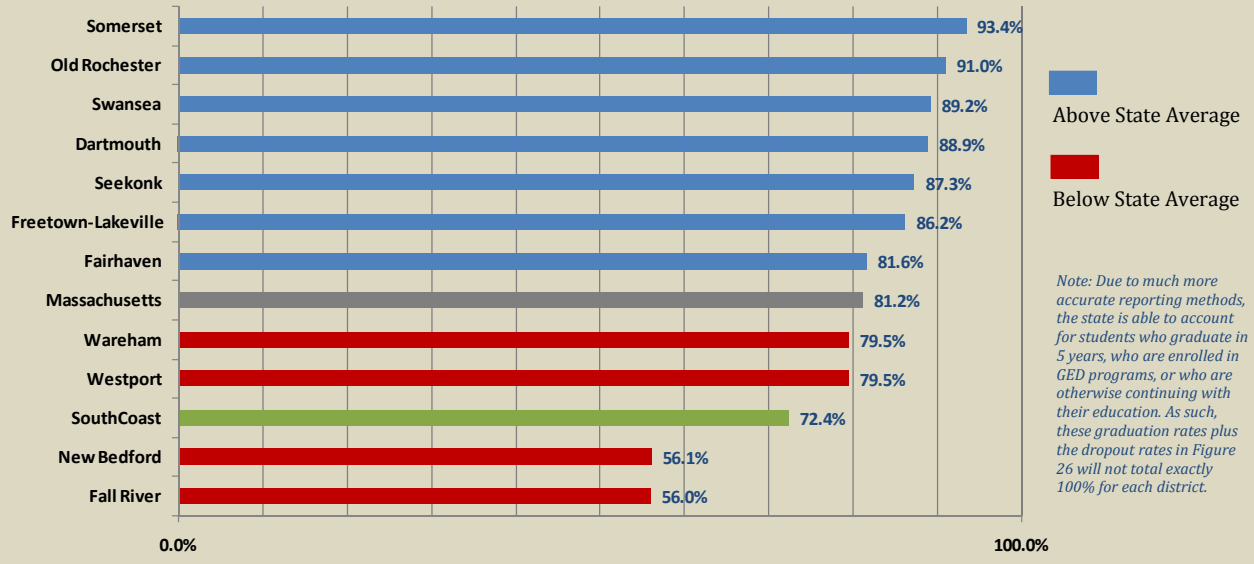
The low-risk districts include Freetown-Lakeville, Old Rochester, and Seekonk. The medium-risk category is comprised of Dartmouth, Swansea, Westport, Somerset, and Fairhaven. Wareham, New Bedford, and Fall River were classified as high-risk (see Figure J).

## *Choosing the Best Strategies for the SouthCoast*

In working to devise a system for measuring those dropout prevention strategies that would be most effective as part of a regional plan to reduce dropout rates, we conducted research that included stakeholder surveys and interviews with key officials in each of the SouthCoast school districts. We also looked at national models and research, and were led repeatedly to a group of strategies devised by the National Dropout Prevention Center at Clemson University. As such, we decided to utilize their recommended "Fifteen Research-Based Strategies" as the basis for analyzing and recommending a course of action in the SouthCoast.

We assessed the universe of strategies on five different scales. Two scales are based on external, generic factors related to general effectiveness and success at reducing dropout rates, while the other three scales are internal measurements related to their implementation potential by the SCDP within the SouthCoast region.

## Figure I: 4-Year Cohort Graduation Rates (2008)




Source: Massachusetts Department of Education

**Figure J:** SouthCoast School District Risk

| School District | Total Score | Risk Level |
|---|---|---|
| Freetown-Lakeville | 11 | Low Risk |
| Old Rochester | 12 | Low Risk |
| Seekonk | 12 | Low Risk |
| Dartmouth | 14 | Medium Risk |
| Swansea | 14 | Medium Risk |
| Westport | 15 | Medium Risk |
| Somerset | 17 | Medium Risk |
| Fairhaven | 18 | Medium Risk |
| Wareham | 20 | High Risk |
| Fall River | 23 | High Risk |
| New Bedford | 24 | High Risk |

*External Scales*

Efficacy: this scale assesses strategies based upon their level of effectiveness as determined by existing national research.

Flexibility: this scale ranks each strategy based upon its frequency of use among nationally-recognized dropout prevention programs.

*Internal Scales*

Applicability: this scale selects strategies by their ability to have the greatest impact on the SouthCoast students based upon each district's demographic profile and corresponding risk level.

Expandability: this scale selects strategies based upon their frequency of use among existing dropout prevention programs in the SouthCoast region.

Utility: this scale measures strategies that are aligned with the strengths of the SouthCoast Development Partnership and its capacity to foster program implementation.

*The Selected Strategies*

As a result of our evaluation on the above scales, the following strategies were selected and they form the basis of the region's overall dropout prevention plan:

- ✧ Mentoring/Tutoring: provides a one-on-one caring supportive relationship between a mentor/tutor and a mentee/student that is based on trust. This strategy is a tremendous, low-cost, short-term strategy with immediate effects on achievement and attendance - two significant risk factors for dropping out.

- ✧ Early Childhood Education: provides birth-to-five interventions and additional enrichment that can enhance brain development. This is a great long-term "equalizer" for students from low-income families.

- ✧ Family Engagement: research consistently finds that family engagement has a direct, positive effect on children's achievement and is one of the most accurate predictors of a student's success in school. We differentiate here that our call for greater family engagement is of the type that actively engages a family in their child's learning, rather than simply involving parents in school organizational activities.

- ✧ Career and Technical Education: These school-to-work type programs recognize that youth need specific skills to prepare them to meet the increased demands of today's workplace. Clearly established career pathways in the region's high schools, similar to what exists in the vocational schools, will help make education much more relevant for a great number of students.

- ✧ School-Community Collaborations: challenges all groups in a community to provide collective support to the school resulting in a strong infrastructure that sustains a caring environment where youth can thrive and achieve. To have maximum effect, these partnerships need to extend beyond traditional fund-raising concepts.

Each of these strategies are currently utilized to some extent in the SouthCoast, some with better, clearer results than others. For example, Mentoring/Tutoring has proven very successful and should be expanded and supported in order for it to be sustained in the region. Other strategies have only been partially implemented or misapplied in certain circumstances and should be expanded or altered to produce improved results that can be measured.

The Urban Initiative recommends these strategies as part of a comprehensive, targeted, and collaborative plan with clear goals and benchmarking, continuous evaluation, and a commitment to systemic change that will signal a new era of accountability for the region with regards to its dropout and graduation rates.

## Conclusions and Recommendations

The factors that cause a student to drop out are diverse and complex. As such, there is no "silver bullet," no single program or project that will resolve this chronic problem. It will take an unprecedented commitment on the part of many groups and stakeholders, working together, to bring about a change significant enough to alter current trends and produce results that can attract the knowledge-based industries upon which the economic future of the region must be based. Inaction threatens the future of this region, along with our way and quality of life.

Based on the research and analysis conducted as a part of this study, any successful dropout prevention effort will require the leadership of a regional entity capable of recruiting, organizing, and directing stakeholders toward the common goal of implementing the recommended strategies. While focusing on a handful of dropout prevention strategies might provide a roadmap with which the SouthCoast can begin to set a new path, these strategies alone will not solve the problem. We strongly believe that the journey will not be successful if certain concerns are not addressed as the region works toward implementing the selected strategies. We also believe that, at least initially, the region is in need of a strong voice to articulate the problem and provide the leadership necessary to bring about tangible, lasting results.

- ✧ The message must be clearly delivered and understood that current dropout rates in the SouthCoast are significantly harming the region, both economically and socially, and that immediate action is required.
- ✧ Reducing dropout rates is not a problem to be solved solely by the region's school districts but rather, a crisis that we must all take ownership of and resolve.
- ✧ A regional approach to dropout reduction is appropriate and necessary as the most effective way of educating the region about the problem and maximizing the limited resources available to solve the problem at hand.
- ✧ The methodology for reducing regional dropout rates should focus on an urban strategy targeting our high-risk communities, while still possessing a broad enough scope to provide services to several medium-risk communities.
- ✧ There must be a considerable effort at raising the educational attainment levels of adults throughout the region.
- ✧ The region and its stakeholders must work collaboratively on the creation of a series of benchmarks to measure progress.
- ✧ Improvements must be made throughout the region in the identification of at-risk students.
- ✧ Data systems must be improved in order to provide better tracking of at-risk students and dropouts.
- ✧ A financial commitment must be made to create and expand programming consistent with the recommendations for reducing regional dropout rates.
- ✧ Every school system in the region must commit to systemic renewal as a dropout prevention strategy.
- ✧ Partnerships must be established to facilitate collaboration and avoid duplication efforts.
- ✧ The regional collaborative must advocate for funding, programming, and systemic change and renewal while remaining attentive to future opportunities to enhance the regional dropout prevention effort.

It is within the establishment of this framework that the following specific and targeted dropout prevention strategies should be implemented:

### *Primary Strategies*

- ✧ Significant Expansion of Mentoring/Tutoring Opportunities for At-Risk Students
- ✧ Significant Expansion of Quality Early Childhood Programming to Service At-Risk Families
- ✧ Greater Family Engagement
- ✧ Greater Focus on Career and Technology Education
- ✧ More Meaningful School-Community Partnerships

### *Ancillary Strategies*

- ✧ Extended Day Opportunities
- ✧ After-School Opportunities
- ✧ Continued Support For and Expansion of the Region's Alternative/Evening Schools

In commissioning this work the SouthCoast Development Partnership has indicated its willingness

to take the lead on this issue of vital importance to the region and its future. We believe that with the right level of commitment, they are well-suited for the task. Our recommendations to them, in implementing the multiple facets of an overall regional plan as presented herein, call for them to take immediate action on their own and in concert with others; to be advocates for the level of programming needed in our schools and elsewhere to ensure progress; and to take the lead in calling the region, our schools, and themselves as civic leaders, to become accountable for setting a new path for dropout prevention and educational attainment in the SouthCoast.

# Introduction

> "In the 21st century, the education and skills of the workforce [will] end up being the dominant competitive weapon."
>
> - Lester C. Thurow

The choice to leave school before graduation can have important, negative consequences on an individual. A region's collective inability to graduate a considerable portion of its students through high school has devastating, long-term consequences for everyone.

Increasingly, a strong economy, both regionally and nationally, requires a workforce more highly skilled and educated than has been needed at any other time in the history. As a result, the pervasiveness of low educational attainment by any segment of our population has consequences for the entire region and requires an understanding that responsibility for dropout prevention cannot be left solely to the individual, his or her family, or the school systems they attend. Ultimately, we all have a stake in fostering an educated workforce.

## Project Impetus

It is within this context that the SouthCoast Development Partnership (SCDP) has endeavored to take a more active role in the educational attainment of the future workforce of the SouthCoast region of Massachusetts. In an effort to fully maximize its mission of promoting regional economic development, the SCDP has determined, both through internal discussions and from feedback garnered by economic development officials in the SouthCoast region, that low educational attainment levels in the SouthCoast have been a significant impediment in convincing businesses to locate or expand in this region. As such, economic conditions here have been adversely affected.

While it is possible to apply nationally recognized models for assessing the impact of the dropout "problem" on individuals, as this report will do, it is more difficult to assess the number of missed economic development opportunities for a region, due to the internal nature of a company's expansion and location decision-making. Many economic development officials concur that they never even hear from those companies whose review of the region's educational attainment levels lead them to invest elsewhere. Studies of decision-making on location and expansion by businesses show a significant weight placed by companies on the availability of appropriate labor in a *region*.

A survey conducted by Northeastern University in conjunction with the Massachusetts Municipal Association (MMA) ranked the labor force issue third out of forty factors affecting decision-making. Such studies, conducted in the midst of the shift to a knowledge-based economy, clearly indicate that educational attainment and the skill level of the workforce, specifically when viewed at a regional level, play a significant role.[1] Due to unemployment rates that continue to surpass the state average and the lack of private sector investment and expansion in the SouthCoast as the economy shifts away from manufacturing toward knowledge-based industries that require higher levels of education, it is reasonable to assume that many potential employers view the region's workforce as unprepared.

## Project Scope

The Urban Initiative, a research-based policy center of the University of Massachusetts Dartmouth, was

engaged by the SCDP to research and analyze dropout rates in the region and assess the state of dropout prevention programs currently in place. Additionally, the Urban Initiative was asked to determine which dropout prevention strategies would be most effective if implemented in the SouthCoast region, to determine to what extent they are currently being practiced in the region, and if so, to what general effectiveness. The analysis to be provided includes why the selected strategies might lack presence in the region, and if that is the case, recommendations on how to potentially overcome obstacles to their implementation. The goal of this report is to assist in developing a strategic plan that will allow the SCDP to take a leading role in driving a new effort to raise educational attainment throughout the region in pursuit of enhanced economic development and improving the quality of life for the region's residents. The analysis will review financing issues, recommend benchmarks, and identify potential participants for various aspects of implementation.

## Research Parameters & Limitations

Primary research for this report was limited to stakeholder surveys and surveys of regional school systems. (To view copies of the survey questions, see Appendix A.) The research team attempted to conduct surveys with each district's superintendent or with the individual in charge of dropout prevention programs.[2] In many instances this individual was located within the high schools' guidance department. The purpose of these surveys was to determine what each school district's response has been to the challenge of dropout rates.

The research team has also worked closely with representatives of the SCDP, particularly it subcommittee focused on the regional dropout issue and chaired by Mr. Jim Mathes, to develop a coordinated message and strategy in relation to the work asked of the Urban Initiative in the Project Scope (See Figure 1).

## Mission of the SouthCoast Development Partnership

The SouthCoast Development Partnership is a regional, business-led collaborative whose focus is the economic development of the SouthCoast region.

The Partnership was founded in 1999 as a regional collaborative for the SouthCoast aimed at providing assistance for businesses looking to expand in or relocate to the region as well as coordinating regional resources through public and private leadership. A core part of its mission is to raise awareness of the region and its extraordinary quality of life, workforce, state of the art facilities and technology-based incubators, industrial parks, and incentive programs.

The Partnership has taken the lead in developing a technology-based strategy and creating a favorable development environment that supports the expansion and retention of industries in the life sciences, medical device manufacturing, biotechnology, marine science and technology, high tech manufacturing, clean and renewable energies, tourism, and distribution and back office operations. In addition, the Partnership has expanded strategic alliances with the Massachusetts Medical Device Industry Council (MassMEDIC) and the Massachusetts Biotechnology Council (MBC) to attract additional life science and medical device industries to the SouthCoast.

The membership of the SouthCoast Development Partnership is comprised of chief executive officers, municipalities, chambers of commerce, local economic development agencies, institutions of higher education, elected officials and community leaders from across the region. The University of Massachusetts Dartmouth provides the organizational framework, facilities, and support staff on an in-kind basis for the Partnership.

The members of the Partnership strongly support a regional approach to economic development, tourism, and programs and activities that stimulate and build sustainable economic development. Research has shown that SouthCoast communities and institutions are more successful in gaining the attention of major businesses in Massachusetts, New England, and other nearby states when they band together. In fact, the SouthCoast's successes are the result of communities working to attract businesses as a whole, rather than competing against each other for new business opportunities. The Partnership has demonstrated that the concept of regionalism works, both as a marketing approach and as an economic strategy to build the business base of the SouthCoast's major cities and neighboring communities.

Sources: SouthCoast Development Partnership website: (http://www.umassd.edu/southcoast/development)

New Bedford Area Chamber of Commerce website: (http://www.newbedfordchamber.com/whatwedo/economic-development/sc-developmentpartnership.htm)

The analysis contained in this report is grounded on extensive secondary research of national trends, models, and practices in the fields of education and dropout prevention. As such, the data and research presented relies significantly on the following sources: the U.S. Census Bureau, the Bureau of Labor Statistics, the Massachusetts Department of Education, the U.S. Department of Education, and the National Dropout Prevention Center/Network at Clemson University.

While we do endeavor to explore workforce development deficiencies through an analysis of educational achievement rates, this analysis is limited in that it does not directly address the resolution of this issue for the region, particularly the large number of incumbent workers without high school diplomas that are in danger of being left behind as the economy changes. While this is a valid focal point for future study and action, it is beyond the scope of the work requested here. As such, an effective strategy for promoting regional economic development should help to mitigate the educational attainment challenges that currently exist among SouthCoast residents while concurrently addressing the issue of high school dropout rates.

The complexity of the dropout problem does not allow for an examination of its every facet within a single study. As such, further work in understanding what is happening in our cities and towns and uncovering the root causes of the dropout problem in the SouthCoast should include first-person surveys with students who have dropped out. Such an initiative could provide invaluable information and data in the refinement of a regional dropout prevention strategy. Additionally, further analysis should be conducted in the area of program assessment of current and future dropout prevention initiatives. Greater analysis of the number of students in various at-risk categories, as well as dropout data in general, would also be warranted.

**Figure 1:** *The SouthCoast Development Partnership Takes Action*

Recognizing the obstacle that low educational attainment presents to further regional economic growth, the SouthCoast Development Partnership commissioned this study in September of 2008 to assess the regional impact of school dropout rates and evaluate and recommend the best strategies for implementing a regional dropout prevention plan.

The project scope includes:

- ✧ Research, review and analysis of economic and educational attainment data and trends to inform strategies and shape the "call to action"
- ✧ Research and review of the national best practices related to school dropout prevention
- ✧ Development of a process to determine the top four to six best/most effective practices
- ✧ Analysis of each of the selected practices' relevance and applicability to the SouthCoast, both collectively and individually
- ✧ Conducting of interviews with key stakeholders, including, but not limited to members of the SouthCoast Development Partnership
- ✧ Determining whether the identified top best practices are being implemented in the SouthCoast's school systems and assess their level of effectiveness
- ✧ Analysis as to why the top best practices are not being implemented and potential barriers to implementation
- ✧ Recommendations for improving, if needed, current implementation of top best practices in the SouthCoast
- ✧ Recommendations for implementing the top best practices where they are currently not occurring and determine where they can be effective
- ✧ Recommendations that include which parties could be responsible for implementation and approximate cost
- ✧ Recommendations that include benchmarks for measuring success of current and proposed programs

# From Chronic Problem to Acute Crisis

## A Proud History Threatened by a Changing Economy

The SouthCoast has a long history of very successful and profitable commercial and industrial activity anchored by its two port cities of Fall River and New Bedford. From the end of the 19th century and well into the 20th century, Fall River and New Bedford were two of the world's wealthiest cities. In both cities, manufacturing and textile production, as well as whaling in New Bedford, allowed this region to be a vital global economic engine. At the turn of the century, each city ranked among the top five throughout the world in terms of the number of spindles and looms in operation, with Fall River's mills alone housing approximately 4 million spindles. By 1940, nearly 20 percent of Fall River's workers were employed in the garment industry and by 1953, it ranked fourth in the world for textile production. New Bedford was one of the world's most active whaling parts until whale oil was replaced by petroleum. In addition, its 32 cotton manufacturing plants employed over 30,000 people by 1910, while its hold on tool and dye manufacturing helped sustain its economy until the 1970s.

Despite this long history of economic success, the SouthCoast region, namely its two cities, are gradually being left behind as the state and the nation transition to a knowledge-based economy. The disparity between the state's outlying regions, where the effects of deindustrialization have posed significant challenges, and the Greater Boston area, where the state's knowledge- and technology-based economy is centered, has become wider and more troubling and has led to a sharp imbalance in the state's economic prosperity. For example, between 1980 and 2000, the gap in per-capita income between Greater Boston and the rest of the state increased from 18 percent to 28 percent.[3]

Manufacturing jobs, long the provider of decent wages to those with limited educational achievement, have disappeared in substantial numbers. This trend has left many workers unemployed, underemployed, or needing to work more than one lower-level service job in an attempt to match the wage-rates once offered by major manufacturing companies. According to the Massachusetts Budget and Policy Center in its 2009 report entitled *The State of Working Massachusetts 2008*, the average weekly wage for workers in the manufacturing sector in 2007 ranked among the top five industry sectors in the state. Yet despite offering good wages, as a sector it was experiencing steady decline (see Figure 2).[4]

Since 1990, the United States has experienced a 21.54 percent reduction in manufacturing jobs.[5] Over the past decade, while the country has shed 15.55 percent of its manufacturing jobs (see Figure 3), Massachusetts has been harder hit, losing nearly a quarter (24.01 percent) of its manufacturing base (see Figure 4). In the SouthCoast, manufacturing job losses have been just as devastating considering the historical reliance the region has had on manufacturing for employment. Over the same time

### The SouthCoast has a Long History of Manufacturing & Economic Success

#### Fall River

- At the end of the 19th century, Fall River dominated the textile industry. It was among the top 25 manufacturing cities globally, and was one of the wealthiest cities in the world.
- Between 1905 and 1920, the city had more than 100 operating mills, housing 4 million spindles, with 30,000 employees and a weekly payroll over $1 million.
- On the eve of the Great Depression, the city was ranked 4th in the nation for payroll (1929).
- In 1953, the city ranked 4th in the nation for textile production.
- By 1940, nearly 20 percent of Fall River's workers were employed in the garment industry.

#### New Bedford

- New Bedford became one of the world's wealthiest cities through a combination of manufacturing and whaling.
- By the end of the 19th century, the city stood 3rd in the nation with regard to the number of spindles in operation and 4th for the number of looms in operation.
- By 1910, the city had 32 cotton manufacturing plants employing over 30,000 people.
- Tool and dye manufacturing was a staple of the city's economic base until the 1970s.

Ultimately, both cities faced a long, steady decline as petroleum replaced whale oil and textile manufacturing moved first to the South and then overseas.

period from 2001 to 2007, total job losses in the SouthCoast's manufacturing sector equaled 4,866 - or 25.92 percent of the manufacturing job base (see Figure 5). Most of that impact has been felt in the older, industrial cities of New Bedford and Fall River.

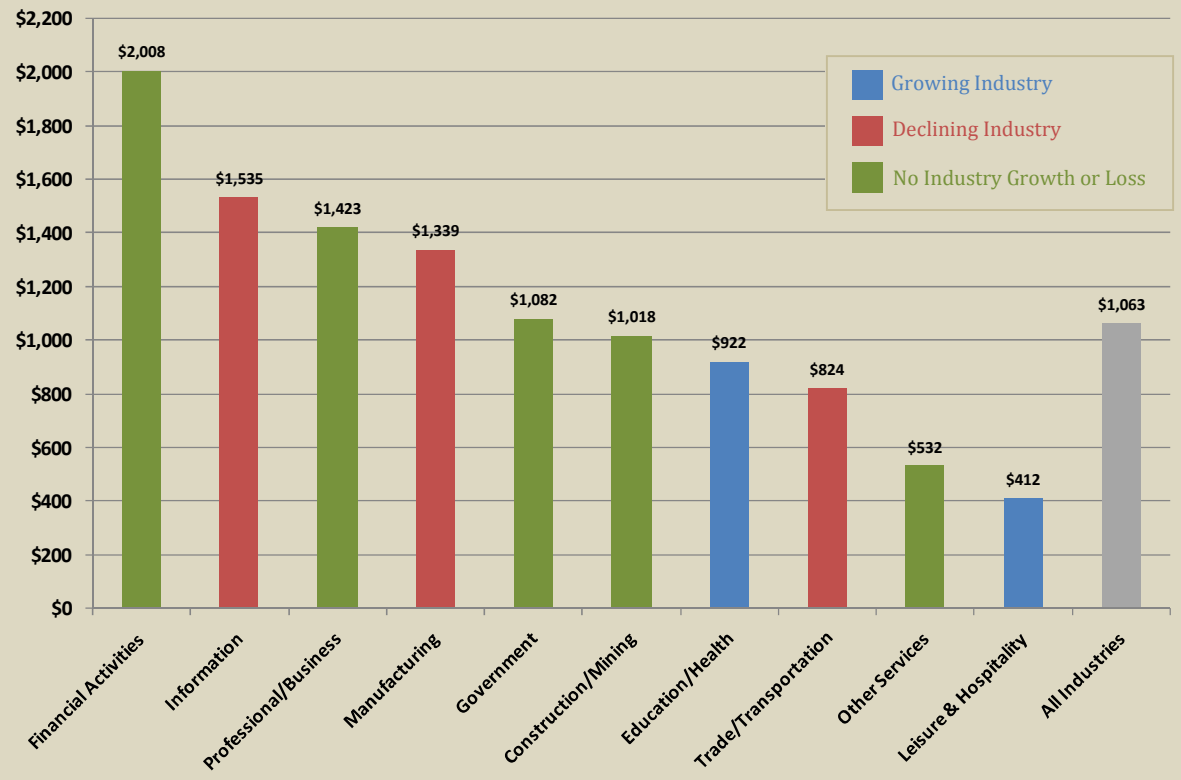
In March of 2009, the Institute for Supply Management (ISM), a non-profit organization that conducts industry research to benefit the purchasing and supply management profession, released its February 2009 Purchasing Managers Index (PMI) manufacturing data, which shows that the manufacturing sector in the United States continues to contract.

The monthly PMI measures economic activity in the manufacturing sector and is calculated from a survey of supply managers in 18 manufacturing industries based upon conditions within their own organizations. Some of these industries include metal and wood products, electrical equipment, appliances, plastics and rubber products, chemicals, transportation equipment, computer products, petroleum and coal products, textiles, apparel, and food, beverage, and tobacco products. According to the ISM, none of the 18 industries reported growth.

Over the past year, the PMI for manufacturing has fluctuated from a high of 49.5 in June and July of 2008 to a low of 32.9 in December of 2008. In January of 2009, the PMI rose to 35.6 and increased slightly to 35.8 in February of 2009. But despite this, it is important to keep in mind that a reading below 50 indicates contraction, while a reading above 50 indicates that the sector is generally expanding.

Norbert J. Ore, chair of the ISM Manufacturing Business Survey Committee, commented that "Manufacturing continued to decline at a rapid rate in February. While production has slowed its rate of decline, employment continues to fall precipitously. Prices continue to decline, but price advantages are not sufficient to overcome manufacturers' apparent loss of demand. Survey respondents appear generally

**Figure 2:** *Average Weekly Wage by Industry Sector (Massachusetts, 2007)*




Source: Massachusetts Budget and Policy Center, *The State of Working Massachusetts 2008*, January 2009

**Figure 3**: Manufacturing Jobs in the United States (2001-2007)
(Source: Massachusetts Budget and Policy Center, *The State of Working Massachusetts, January 2009)*

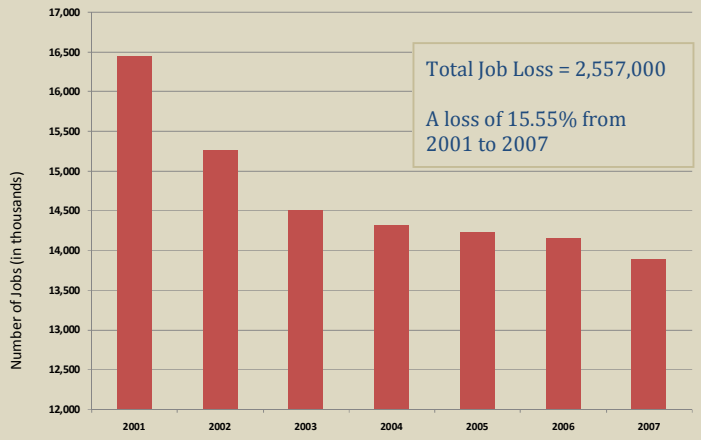
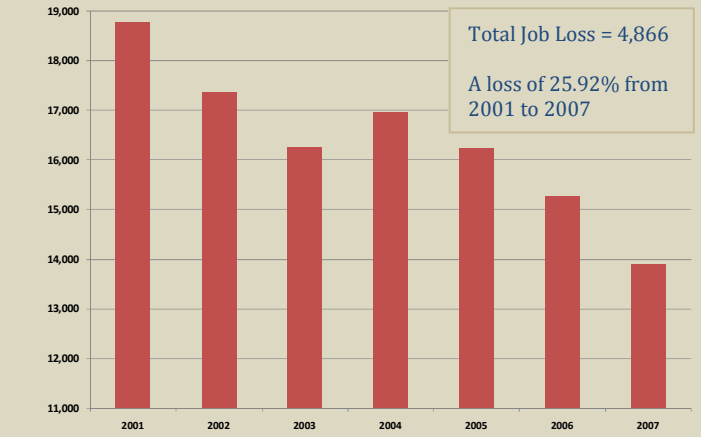



**Figure 4**: Manufacturing Jobs in Massachusetts (2001-2007)
(Source: Bureau of Labor Statistics, State & Metro Area Employment, Hours, & Earnings - National Database, 2008*)*


**Figure 5**: Manufacturing Jobs in Fall River & New Bedford (2001-2007)
(Source: Massachusetts Labor & Workforce Development, Employment & Wages ES-202 database*)*




pessimistic about recovery in 2009."[6] For a look at PMI readings over the past year, see Figure 6.

As the economy changes, the jobs that are expected to replace those that have disappeared require higher levels of educational attainment. In spite of its renowned work ethic, the workforce of the SouthCoast does not does not possess the educational attainment levels required by many knowledge-based employers.

## *Regional Progress Steady but Slow*

The SouthCoast region has been plagued by low levels of educational attainment for decades. Raising educational attainment levels while ensuring and promoting access to higher education has

**Figure 6**: Monthly Purchasing Managers Index (PMI)
(March 2008 - February 2009)

| Month | PMI |
|---|---|
| March 2008 | 49.0 |
| April 2008 | 48.6 |
| May 2008 | 49.3 |
| June 2008 | 49.5 |
| July 2008 | 49.5 |
| August 2008 | 49.3 |
| September 2008 | 43.4 |
| October 2008 | 38.7 |
| November 2008 | 36.6 |
| December 2008 | 32.9 |
| January 2009 | 35.6 |
| February 2009 | 35.8 |
| **12-month Average** | **43.2** |

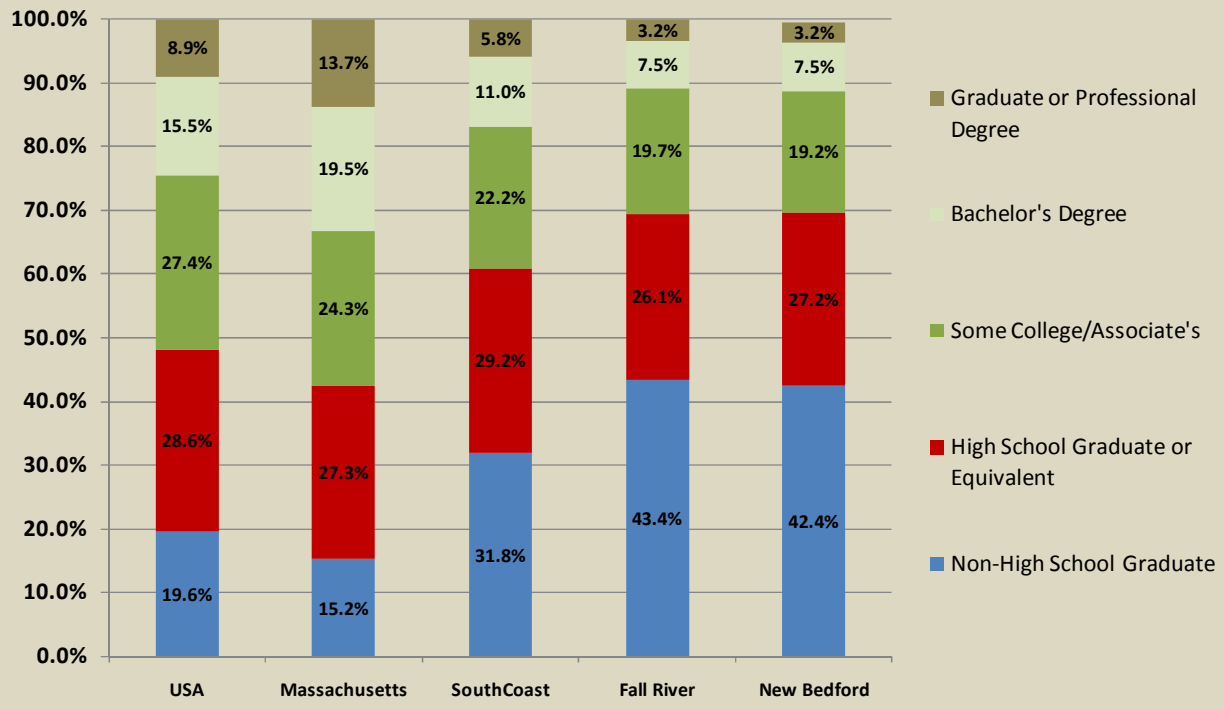
Source: Institute for Supply Management, February 2009 Manufacturing ISM Report, March 2009. (http://www.ism.ws/ISMReport/MfgROB.cfm)

been a significant challenge in this diverse, working-class region. As the success of the industrial economy in the region depended on an abundance of low-cost skilled labor, workers from countries all over the world settled here and worked long hours to support their families. With a history not unlike other parts of the country, which at one time perceived child labor as acceptable and a heritage of constant struggle to survive difficult financial times, education was not a high priority for individuals, families, and communities at large.

Despite this, the region has always possessed a fundamental understanding of the importance of achieving a formal education through its support of building schools, creatively embracing strong programming that merges academics with technical skills, and encouraging successive generations to achieve higher levels of education. Yet, for much of the region's history, the ability to gain employment at decent wages without significant educational attainment, combined with the practical realities of the challenges facing working-class families, has led to unacceptable educational attainment levels, that according to today's standards, threaten the future of the region and its people.

According to 2000 Census data, while the state of Massachusetts outperforms the nation in producing more high school graduates, the SouthCoast region performs worse in comparison to both. In the SouthCoast, nearly one-third (31.8 percent) of the population age 25 and over has no high school diploma. In the region's two cities, the outlook is much bleaker, with 43.4 percent of Fall River's residents and 42.4 percent of New Bedford's residents possessing no high school credential (see Figure 7). If we analyze educational attainment levels across the fifteen communities that make up the SouthCoast, we can see that eleven of these municipalities contain populations in which the proportion of non-high school graduates is greater than the state's average of 15.2 percent. In addition, eight of these eleven have proportions of non-high school graduates that exceed the nation's 19.6 percent average. As in the previous comparison, the cities of Fall River and New Bedford have non-high school graduate populations that dwarf all of the other SouthCoast communities (see Figure 8).

**Figure 7**: A Comparative Analysis of Educational Attainment Levels (2000)



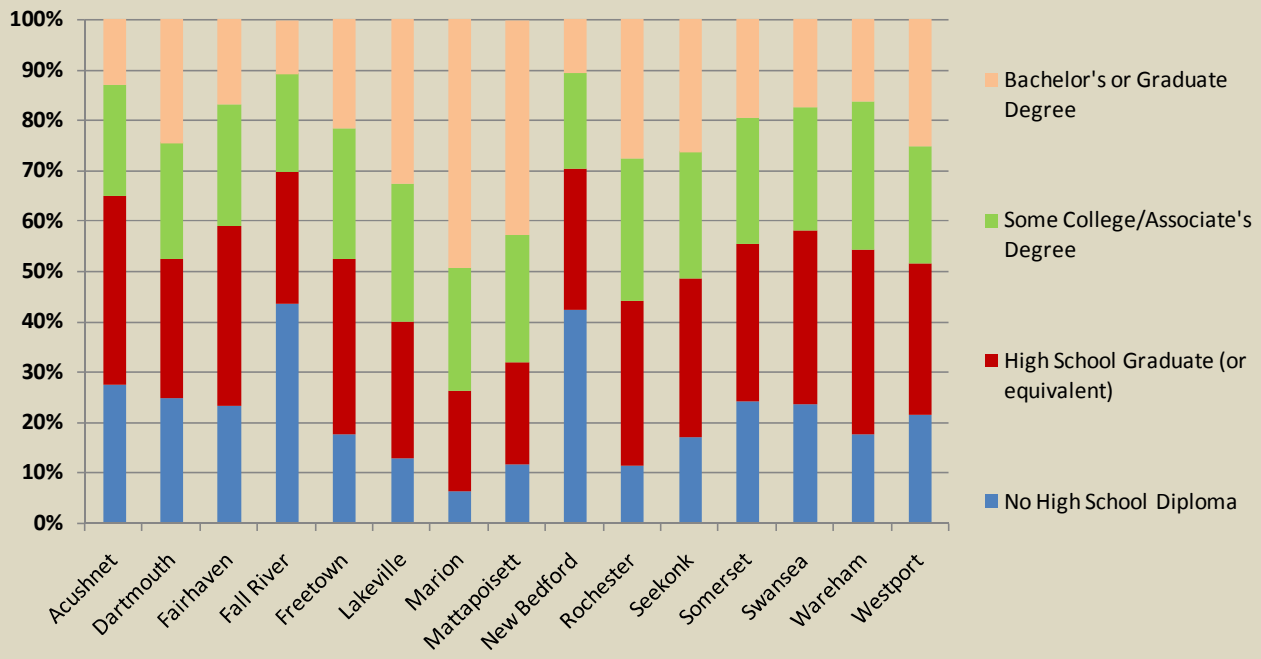

Source: U.S. Census Bureau, 2000 Census Data, Social Characteristics.

Assessing regional success at dropout prevention is difficult as dropout rates are only available from 1990 forward. In addition, while it is helpful to view the educational attainment of the SouthCoast population over several generations and between age cohorts, there are limitations to doing so. When the U.S. Census Bureau conducts the decennial census, only a small portion of the population is selected to complete the Census Long Form, which asks individuals questions regarding educational attainment. As a result of smaller populations in the region's towns, there is insufficient data for these communities that would allow the Census Bureau to provide accurate and statistically significant community-by-community or regional analyses of educational attainment by age cohort. However, we are able to analyze data for Fall River and New Bedford, which, as we have already seen, constitute the region's major centers of educational attainment deficiencies.

In the cities of Fall River and New Bedford, the percent of the population with a high school diploma has nearly doubled in the 40-year period from the mid-1950s to the mid-1990s. Of those residents between 25 and 34 years of age, 72 percent in Fall River and 74 percent in New Bedford have earned a high school degree. It is our expectation that, as the youngest of the age cohorts (the 18- to 24-year-olds) move into their later twenties and thirties, they will eclipse the 72 percent rate (see Figures 9 and 10). While this shows continued progress, it is still below that of those communities and regions with which we find ourselves competing for jobs and business development.

Connecting educational attainment rates to lost economic development opportunities is clearly more valuable if we examine those rates within the context of the labor force rather than the entire population. In this case, we have defined the potential "labor force" as those residents between the ages of 18 and 64. Continuing our analysis of Fall River and New Bedford's data, when we remove residents age 65 and over, there is only a 6 percent drop in both cities in the non-high school graduation population from the total population to the total labor force. In Fall River, the number of high-school graduates decreased from 41.8 percent to 35 percent, while in New Bedford the rate decreased from 41.2 percent to 35 percent. This number still represents more than one-third of each city's age-eligible workforce, which indicates significant challenges that the cities and the region must confront relative to workforce development (see Figures 11 and 12).

**Figure 8**: Educational Attainment Levels in the SouthCoast (2000)




Source: U.S. Census Bureau, 2000 Census Data, Social Characteristics.

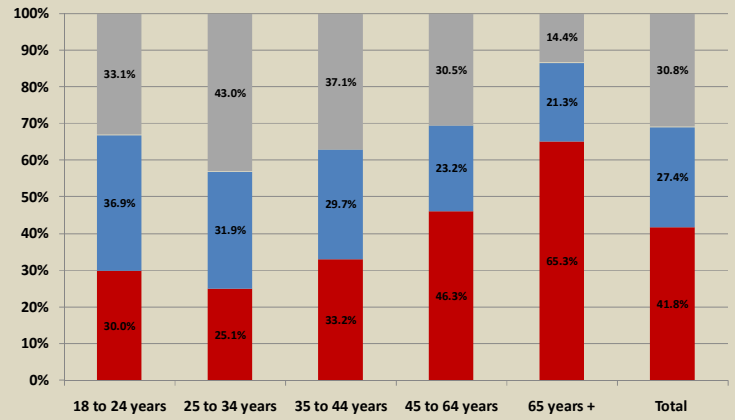
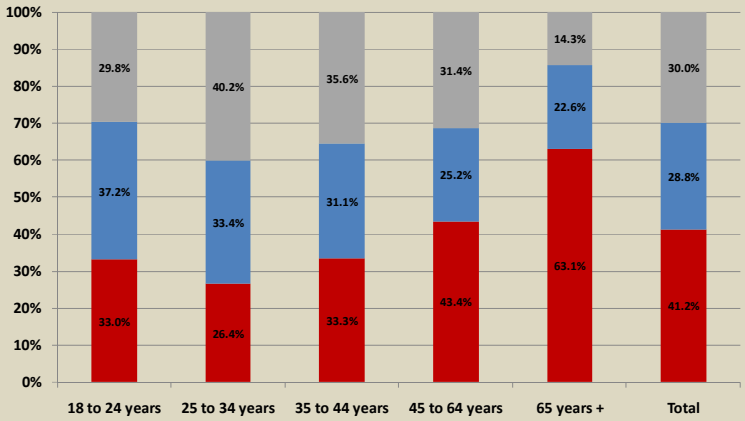



**Figure 9:** Educational Attainment Levels in Fall River (2000) (General Population)

Non-High School Graduate
High School Graduate (or equivalent)
Post-Secondary Degree

**Figure 10:** Educational Attainment Levels in New Bedford (2000) (General Population)

Non-High School Graduate
High School Graduate (or equivalent)
Post-Secondary Degree



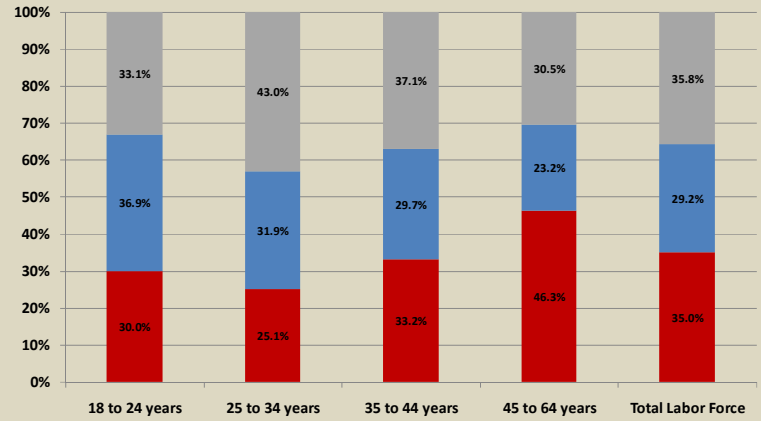
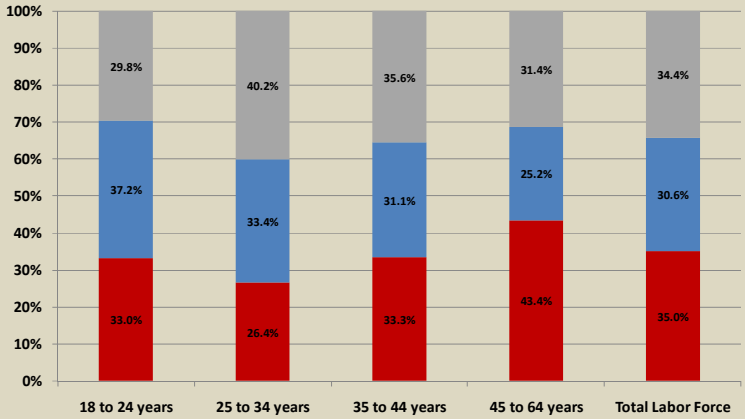




**Figure 11:** Educational Attainment Levels in Fall River (2000) (Labor Force)

Non-High School Graduate
High School Graduate (or equivalent)
Post-Secondary Degree

**Figure 12:** Educational Attainment Levels in Fall River (2000) (Labor Force)

Non-High School Graduate
High School Graduate (or equivalent)
Post-Secondary Degree




Source: U.S. Census Bureau, 2000 Census Data, Social Characteristics.

## Are We Prepared?

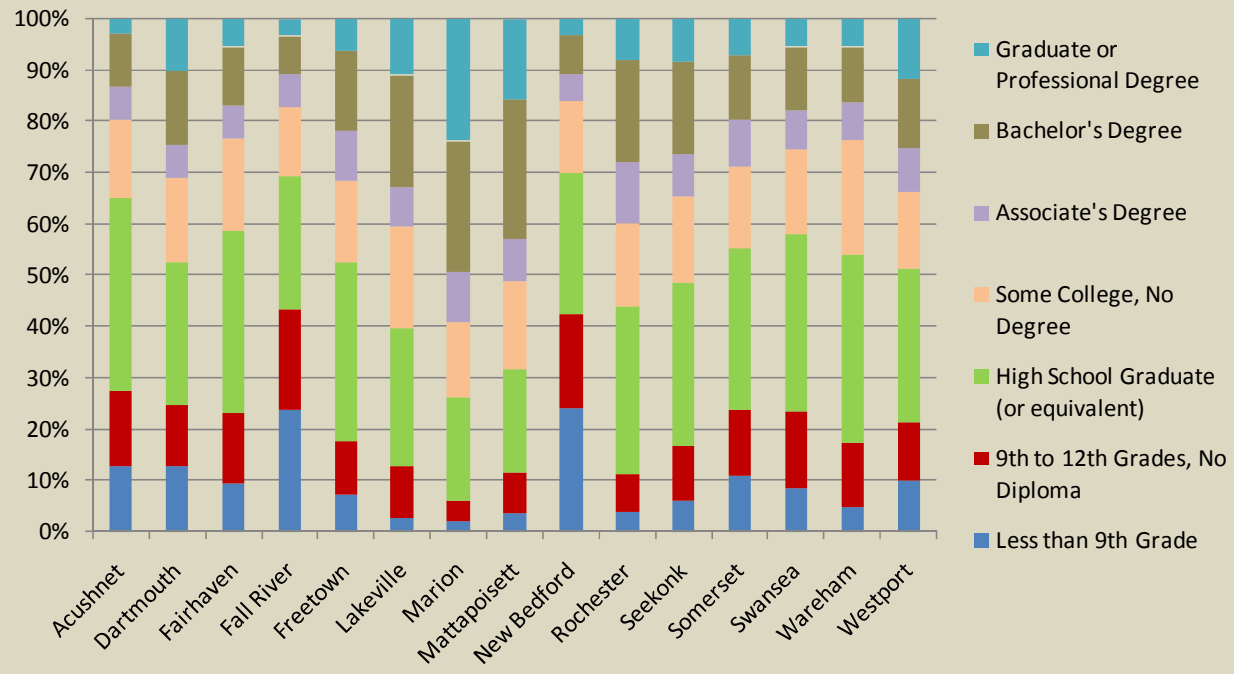
In analyzing educational attainment levels among SouthCoast residents, we must not only recognize the tremendous challenges we face with regard to the population with no high school credential, but also realize the challenges we must confront with regards to enhancing the skills and potentially improving the educational attainment of those who do have high school diplomas. While the latter issue is a topic deserving a separate study, beginning with an effort to raise the educational attainment of those who fall into the former group is substantially complicated by the fact that of the 77,348 residents in the SouthCoast over the age of 25 who have no high school diploma, 39,883 (or 52 percent) never even entered the ninth grade. This means that 16.4 percent of the SouthCoast's population over 25 years has an education less than that of a ninth grader. Even more startling is the fact that of the 39,883 SouthCoast adults with less than a high school diploma, approximately 75 percent of these individuals (29,635) live in the cities of Fall River and New Bedford. Among the rest of the fifteen SouthCoast communities, Dartmouth ranks third with 2,548 individuals over 25 years of age with less than a ninth grade education (see Figure 13).

With such figures as these and the extraordinary demands of the 21st century knowledge economy, it behooves us to ask whether or not we are prepared as a region to attract today's high-tech knowledge-based industries and meet their minimum labor force needs.

Using the *2008-2009 Occupational Outlook Handbook* published by the U.S. Bureau of Labor Statistics, the research team identified 38 careers in the fields of science, financial services, healthcare, information technology/computer information systems, and media that can be part of what is considered today's knowledge-based economy. The list is not meant to be exhaustive, but rather to provide a small sample of careers that can demonstrate the need for higher levels of education. While one of the main factors in selecting these 38 careers was level of growth, two of the careers included on the list has experienced decline. Despite this, the research team decided to include these careers for comparative purposes. In addition to determining the minimum requirements for education, we also set out to determine the kind of salary each career pays as well as the prospects for growth within each field.

Among these 38 careers, one required a Master's degree and licensure, nine required Bachelor's degrees,

**Figure 13**: Educational Attainment Levels in the SouthCoast (2000)




Source: U.S. Census Bureau, 2000 Census Data, Social Characteristics.

nine required an Associate's degree, fifteen required a minimum of a high school diploma and some level of certification, licensure, or on-the-job-training, and only four required less than a high school diploma for entry. Of this last group, two were in the field of healthcare while the other two were in the field of media. In all four cases, these jobs were experiencing average to very fast growth. But among the two careers in healthcare experiencing very fast growth, the median salary was in the $20,000 to $25,000 range (see Figure 14).

In the aggregate, 34 of the 38 careers required at least a high school diploma for entry, 32 careers required more than a high school diploma, and 19 of the 38 careers required some form of post-secondary education. Among the 19 careers that require at least an Associate's degree or higher for entry, 18 of them are experiencing average to very fast growth. The only exception was "computer programmer," which has experienced a slow rate of decline equaling 4 percent.

Considering the nature of the knowledge economy, there is little doubt that in addition to lowering educational attainment levels, the dropout rate has significant implications on our region's economic development. As a high school diploma is the gateway to higher education, dropping out significantly limits an individual's ability to achieve the higher levels of education necessary to compete in today's labor market. The state of Massachusetts outperforms the nation on many educational indicators, with 33.2 percent of its residents having at least a Bachelor's degree compared to only 24.2 percent of the national population. Unfortunately, educational attainment trends in the SouthCoast do not mirror those of the state or the nation. Only 16.8 percent of SouthCoast residents possess at least a Bachelor's degree. In Fall River and New Bedford only 10.7 percent of the population possess a Bachelor's degree or higher (see Figure 13).

Competing for business expansion and development is quite difficult within the context of educational disparities. The SouthCoast is doubly disadvantaged, competing in a state that performs well in comparison to the nation while failing to meet either the state or national thresholds. As such, we find it appropriate to reiterate the findings of the Northeastern study previously cited in this report in which labor force issues ranked third out of forty factors affecting business location decision-making. Considering the results of this survey and the insights we gain from it on the part of business leaders and executives, addressing our region's economic development challenges must begin with an assessment of our labor force and its ability to meet the demands of these industries.

## The Impact on the SouthCoast Region and its Residents

In the past, both regionally and nationally, students leaving school before graduation were able to secure gainful employment that, in many cases, could provide living wages for nearly a working lifetime. Today, such a scenario is extremely unlikely when considering the nature of today's knowledge-based economy and the current economic climate. Failure to graduate from high school also limits one's future income and job opportunities. In addition to difficulties in finding employment, there are a number of consequences strongly associated with failure to complete high school. Dropouts are more likely to require and receive government assistance and females who do not complete high school are more likely to have children at a younger age and raise those children in single-parent households.[7] Additionally, these children have also been found to be more likely to rely on public assistance.[8] Finally, a disproportionate number of prison and death-row inmates failed to complete high school. An estimate by the Department of Justice lists 30 percent of federal and 40 percent of state prison inmates as high school dropouts.[9] Dropouts are also less likely to volunteer and participate in their community.[10] Dropping out also denies individuals access to further education that is increasingly necessary for survival and advancement in today's society.

Students who stay in school through graduation and earn a high school diploma are more likely to secure a better job, have greater opportunities for career advancement, and provide a better quality of life for themselves and their families.[11] Some would suggest that dropping out is an individual's choice, made without consequences to others. However, a region's lack of collective educational attainment has consequences for all who live within that region, regardless of individual levels of educational attainment. For example, utilizing data from the Center for Labor Market Studies at Northeastern University, which estimates that dropouts in Massachusetts earn $9,249 less than high school graduates on an annual basis, we believe that the region is missing out on over $232 million in lost annual wages that it could

**Figure 14**: Knowledge-Based Industries, Careers, & Educational Requirements

| Industry | Job Title | Education/Training Requirements | Job Sector Growth | Median Salary |
|---|---|---|---|---|
| Financial Services | Accountant & Auditor | Bachelor's Degree or Certification | Fast Growth (18%) | $54,630 |
| Financial Services | Financial Manager | Bachelor's Degree | Average Growth (13%) | $90,970 |
| Healthcare | Occupational Health & Safety Specialist | Bachelor's Degree | Average Growth (9%) | $54,920 |
| Healthcare | Occupational Health & Safety Technician | Associate's Degree or Certification | Average Growth (9%) | $54,920 |
| Healthcare | Occupational Therapist | Master's Degree and Licensure | Fast Growth (23%) | $60,470 |
| Healthcare | Physician Assistant | Associate's Degree & Training | Fast Growth (27%) | $74,980 |
| Healthcare | Clinical Laboratory Technologist | Bachelor's Degree | Fast Growth (14%) | $49,700 |
| Healthcare | Clinical Laboratory Technician | Associate's Degree or Certification | Fast Growth (14%) | $32,840 |
| Healthcare | Dental Hygienist | License and Certification | Very Fast Growth (30%) | $30.19/hr |
| Healthcare | Medical Records & Health Information Technician | Associate's Degree and License | Fast Growth (18%) | $28,030 |
| Healthcare | Radiologic Technologist & Technician | Associate's Degree | Fast Growth (15%) | $48,170 |
| Healthcare | Dental Assistant | Associate's Degree or Certification | Very Fast Growth (29%) | $14.53/hr |
| Healthcare | Medical Assistant | Certification and Training | Very Fast Growth (35%) | $26,290 |
| Healthcare | Occupational Therapist Assistant | Associate's Degree or Certification | Very Fast Growth (25%) | $42,060 |
| Healthcare | Occupational Therapist Aide | On-the-Job Training | Very Fast Growth (25%) | $25,020 |
| Healthcare | Physical Therapist Assistant | Associate's Degree | Very Fast Growth (29%) | $41,360 |
| Healthcare | Physical Therapist Aide | On-the-Job Training | Very Fast Growth (29%) | $22,060 |
| Healthcare | Medical Transcriptionist | Associate's Degree or Certification | Fast Growth (14%) | $14.40/hr |
| Healthcare | Diagnostic Medical Sonographer | Certification | Fast Growth (19%) | $57,160 |
| Healthcare | Radiation Therapist | Certification | Very Fast Growth (25%) | $66,170 |
| Healthcare | Emergency Medical Technician or Paramedic | Certification | Fast Growth (19%) | $27,070 |
| IT/CIS | Computer Programmer | Associate's Degree | Slow Decline (-4%) | $65,510 |
| IT/CIS | Computer Software Engineer | Bachelor's Degree | Very Fast Growth (38%) | $79,780 |
| IT/CIS | Computer Support Specialist | Associate's Degree | Average Growth (13%) | $41,470 |
| IT/CIS | Computer System Administrator | Bachelor's Degree | Very Fast Growth (27%) | $62,130 |
| IT/CIS | Computer System Analyst | Bachelor's Degree | Very Fast Growth (29%) | $69,760 |
| Media | News Reporter or Correspondent | Bachelor's Degree | Average Growth (2%) | $33,470 |
| Media | News Analyst | Bachelor's Degree | Average Growth (2%) | $46,710 |
| Media | Television, Video, & Motion Picture Camera Operator | Post Secondary Training | Average Growth (12%) | $40,060 |
| Media | Television, Video, & Motion Picture Camera Editor | Post Secondary Training | Average Growth (12%) | $46,670 |
| Media | Audio & Video Equipment Technician | High School Diploma and Training | Very Fast Growth (24%) | $34,840 |
| Media | Broadcast Technician | Associate's Degree or Certification | Average Growth (12%) | $30,690 |
| Media | Sound Engineering Technician | Certification | Average Growth (12%) | $43,010 |
| Media | Radio Operator | High School Diploma and Training | Rapid Decline (-16%) | $37,890 |
| Media | Graphic Designer | Associate's Degree | Average Growth (10%) | $39,900 |
| Sciences | Science Technician (Biological) | Bachelor's Degree | Average Growth (12%) | $17.17/hr |
| Sciences | Science Technician (Chemical) | Associate's Degree | Average Growth (12%) | $18.87/hr |
| Other | Paralegal & Legal Assistant | Associate's Degree | Very Fast Growth (22%) | $43,040 |

Source: *2008-2009 Occupational Outlook Handbook*, U.S. Bureau of Labor Statistics (http://www.bls.gov/OCO/).

otherwise realize (see Figure 15).[12]

Nationally, over the last twenty-five years, the median income for college graduates, after adjustments for inflation, has increased 13 percent. During that same period, the median income for high school dropouts has decreased 30 percent.[13] This has implications, not only for individual wage earners, but also for the SouthCoast region, as the multiplier effect of money cycling through a local economy is limited where wages are substantially lower.

Aside from lost wages, low levels of educational attainment and high dropout rates significantly increase a community and region's vulnerability to economic hardship and poverty. Nationally, only 60 percent of those who dropout are able to find work within the first year of leaving school.[14] In Massachusetts, the Department of Workforce Development reports that of the fifteen communities that make up the SouthCoast, eleven had unemployment rates in November of 2007 and November of 2008 that exceeded the state average. The only exception was Lakeville, as its unemployment figures in November of 2008 were also slightly higher than the state's average. The other interesting trend to point out is the significant increases in unemployment from November of 2007 to November of 2008, when the national and global economic crisis began to set in. While no one has been entirely immune to this recent recession, its effects have been quite significant in our region (see Figure 16).

The SouthCoast has a total of 243,347 residents over the age of 25, which constitutes a vast majority of the region's potential labor force. Of these, 151,362 (or 62.2 percent) are active in the workforce. In the SouthCoast, 48,133 workers (31.8 percent) do not have

**Figure 15:** Lost Wage Opportunities to the Region Due to Disparities in Educational Attainment

According to a 2007 study by the Center for Labor Market Studies at Northeastern University, dropouts in Massachusetts early $9,249 less than high school graduates annually .†

There are 243,347 residents over the age of 25 that live in the SouthCoast.

- ✧ 31.8% of these residents (77,348) have no high school diploma.

Across the state of Massachusetts, only 15.2% of the population over 25 years of age has no high school diploma.

If the SouthCoast's high school attainment rate were equal to that of the state (15.2%), only 36,989 of the SouthCoast's residents over the age of 25 would have no high school diploma.

- ✧ This would increase the number of residents over 25 with a high school diploma by 40,359.

The SouthCoast has a labor force participation rate of 62.2%. If we presume that 62.2% of those 40,359 additional residents with diplomas will actually work, then the actual regional gain in the number of residents over 25 who have diplomas and are earning an income would equal 25,112.

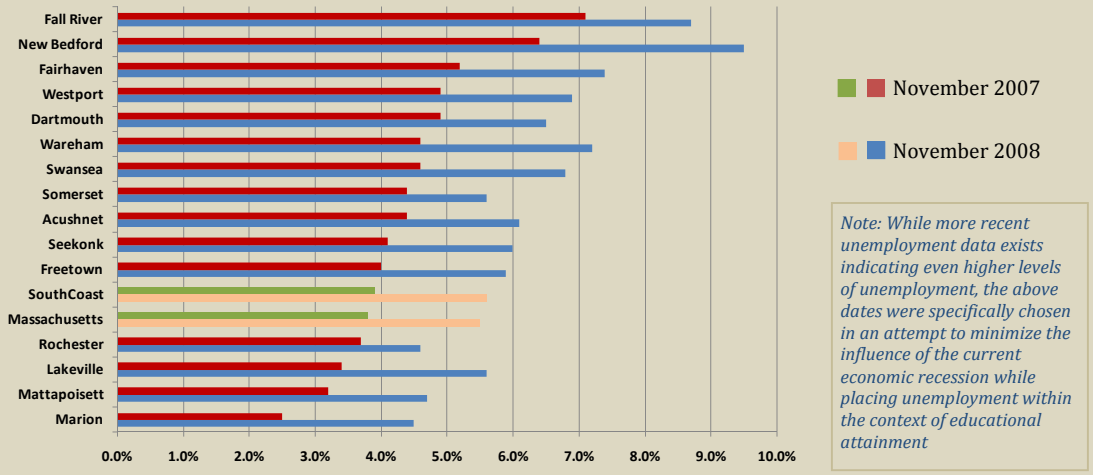
If those 25,112 individuals were earning an income of at least $9,249 (the annual difference in income between dropouts and graduates in Massachusetts), the region would experience an estimated gain in annual income in the amount of $232,260,888.

Source: U.S. Census Bureau, 2000 Census Data, Social Characteristics

U.S. Census Bureau, 2000 Census Data, Economic Characteristics

†Andrew Sum, et al. *An Assessment of the Labor Market, Income, Health, Civic, and Fiscal Consequences of Droppint Out of High School: Findings for Massachusetts Adults in the 21st Century*, Center for Labor Market Studies, January 2007, p. 25.

**Figure 16:** SouthCoast Unemployment Rates (November 2007 - November 2008)




*Note: While more recent unemployment data exists indicating even higher levels of unemployment, the above dates were specifically chosen in an attempt to minimize the influence of the current economic recession while placing unemployment within the context of educational attainment*

Source: Massachusetts Executive Office of Labor & Workforce Development, Labor Force & Unemployment Data.

**Figure 17:** Impact of Lower Educational Attainment Levels on Unemployment

| Actual | | Theoretical | |
|---|---|---|---|
| 243,347 | SouthCoast Population over 25 | 243,347 | SouthCoast Population over 25 |
| 62.20% | Percent in the Workforce | 62.20% | Percent in the Workforce |
| **151,362** | **SouthCoast Workforce** | **151,362** | **SouthCoast Workforce** |
| 31.80% | Percent of Workforce without HS Diploma | 15.20% | Percent of Workforce without HS Diploma |
| **48,133** | **SouthCoast Workforce without HS Diploma** | **23,007** | **SouthCoast Workforce without HS Diploma** |
| **103,229** | **SouthCoast Workforce with HS Diploma** | **128,355** | **SouthCoast Workforce with HS Diploma** |
| 3.5% | National Unemployment - HS Diploma | 3.5% | National Unemployment - HS Diploma |
| **3,613** | **Unemployment Count - HS Diploma** | **4,492** | **Unemployment Count - HS Diploma** |
| 6.5% | Unemployment Rate - No HS Diploma | 6.5% | Unemployment Rate - No HS Diploma |
| **3,129** | **Unemployment Count—No HS Diploma** | **1,495** | **Unemployment Count—No HS Diploma** |
| **6,742** | **Total Unemployment Count** | **5,988** | **Total Unemployment Count** |
| 3,129 | Actual Unemployment - No HS Diploma | 6,742 | Actual Unemployment - Total |
| 1,495 | Theoretical Unemployment - No HS Diploma | 5,988 | Theoretical Unemployment - Total |
| **52.2%** | **Percent Reduction** | **11.18%** | **Percent Reduction** |
| **46.41%** | **Percent of Unemployed without HS Diploma** | **24.97%** | **Percent of Unemployed without HS Diploma** |

a high school diploma, while 103,229 (59.2 percent) have a diploma. We also know that high school dropouts are almost twice as likely as graduates to be unemployed. According to the 2000 Census, 3.5 percent of high school graduates are unemployed while 6.5 percent of non-high school graduates are unemployed.[15]

Applying these national unemployment rates for high school graduates and non-graduates to the SouthCoast's labor force can be useful in estimating the employment status of the SouthCoast's workforce. If we apply the 6.5 percent unemployment rate to the 48,133 age-eligible workers who do not have a high school diploma, 3,129 of these individuals would be unemployed. Similarly, if we apply the 3.5 percent unemployment rate to the 103,229 age-eligible workers who have a high school diploma, 3,613 of these individuals would also be unemployed. Adding these figures together gives us a total unemployment count of 6,742, of which, 46.41 percent do not have a high school diploma.

Looking at the entire state of Massachusetts, 15.20 percent of its labor force does not have a high school diploma. If the SouthCoast labor force's educational attainment mirrored that of the state, we would notice some dramatic shifts in our region's numbers. First, the number of workers in the workforce without a high school diploma would be reduced from 48,133 to 23,007. Second, the number of unemployed persons with no high school credential would decrease substantially from 3,129 to 1,495 persons. In addition, there would be a corresponding increase, though smaller in nature, to the number of unemployed with a high school diploma from 3,613 to 4,492 persons. Using these figures, the total number of unemployed would be 5,988, of which, only 24.97 percent would lack a high school diploma.

By increasing the percentage of workers with a high school diploma, the SouthCoast region would benefit in a number of ways. First, the number of unemployed persons without a high school diploma would be reduced by over half (52.2 percent). And more importantly, the total number of unemployed persons would be reduced by approximately 750, an 11.8 percent reduction (see Figure 17).

In addition to influencing unemployment rates, the likelihood that someone will fall into poverty is three times as great for high school dropouts as for graduates.[16] Figure

**Figure 18:** Impact of Lower Educational Attainment Levels on Poverty Rates

| | Total Families | Families in Poverty | Poverty Rate | Percent of Non-HS Graduates |
|---|---|---|---|---|
| New Bedford | 24,266 | 4,206 | 17.33% | 42.4% |
| Fall River | 23,753 | 3,334 | 14.04% | 43.4% |
| **SouthCoast** | **95,844** | **9,320** | **9.72%** | **31.8%** |
| Wareham | 5,439 | 443 | 8.14% | 17.5% |
| **Massachusetts** | **1,587,537** | **105,619** | **6.65%** | **15.2%** |
| Fairhaven | 4,288 | 278 | 6.48% | 23.2% |
| Westport | 4,097 | 150 | 3.66% | 21.5% |
| Marion | 1,444 | 50 | 3.46% | 6.2% |
| Swansea | 4,556 | 156 | 3.42% | 23.6% |
| Somerset | 5,279 | 167 | 3.16% | 24.0% |
| Mattapoisett | 1,773 | 50 | 2.82% | 4.5% |
| Dartmouth | 7,861 | 220 | 2.80% | 24.7% |
| Freetown | 2,413 | 64 | 2.65% | 17.7% |
| Rochester | 1,306 | 31 | 2.37% | 11.4% |
| Lakeville | 2,658 | 51 | 1.92% | 12.8% |
| Acushnet | 2,832 | 54 | 1.91% | 27.4% |
| Seekonk | 3,879 | 66 | 1.70% | 16.9% |

Source: U.S. Census Bureau, 2000 Census Data, Economic Characteristics

18 itemizes poverty rates in SouthCoast communities, according to 2000 U.S. Census data. While causality between educational attainment and poverty is harder to establish using these numbers, as there are, undoubtedly, other factors found in urban areas that contribute to poverty rates, it is hard to deny that low educational attainment plays a considerable role in perpetuating poverty. In the cities of Fall River and New Bedford, where the percentage of non-high school graduates exceeds 40 percent of the population, poverty rates exceed that of the state and the SouthCoast average. The SouthCoast's poverty rate is primarily driven by poverty rates in the urban areas, as the regional rate is only slightly better than the rates in each city (see Figure 18).

Ultimately, low educational attainment levels have a significant impact on economic conditions and opportunities within a region. On a national scale, labor force participation rates among individuals with no high school diploma have consistently lingered around 50 percent (see Figure 21). In addition, compared to high school graduates, dropouts are nearly twice as likely to be unemployed as those with a high school diploma.[17] Using Census data, we can also see how the SouthCoast compares to the U.S. and the state relative to labor force participation rates among the population over the age of sixteen. Nationally, 63.9 percent of individuals over sixteen are active in the labor force (either employed or unemployed and looking for employment). Throughout the state of Massachusetts, the rate is slightly higher, with a participation rate of 66.2 percent. The SouthCoast's labor force participation rate of 62.2 percent, however, is lower than both the state and national averages. If we single out the region's two urban centers, Fall River has a participation rate of 59.1 percent while New Bedford has a rate of 57.7 percent. What we also notice is that among the communities in the SouthCoast where there are fewer non-high school graduates, labor force participation rates are not only higher than the SouthCoast average but much more in line with or better than the state and national averages (see Figure 19).

**Figure 19:** Labor Force Participation Rates & Educational Attainment in the SouthCoast Region

| | % Population over 25 with no HS diploma | % Population over 16 in the labor force |
|---|---|---|
| **United States** | **19.6%** | **63.9%** |
| **Massachusetts** | **15.2%** | **66.2%** |
| **SouthCoast** | **31.8%** | **62.2%** |
| Marion | 6.2% | 66.7% |
| Rochester | 11.4% | 75.4% |
| Mattapoisett | 11.7% | 64.4% |
| Lakeville | 12.8% | 71.5% |
| Seekonk | 16.9% | 67.9% |
| Wareham | 17.5% | 64.3% |
| Freetown | 17.7% | 75.5% |
| Westport | 21.5% | 65.0% |
| Fairhaven | 23.2% | 63.3% |
| Swansea | 23.6% | 67.9% |
| Somerset | 24.0% | 62.9% |
| Dartmouth | 24.7% | 64.8% |
| Acushnet | 27.4% | 67.2% |
| New Bedford | 42.4% | 57.7% |
| Fall River | 43.4% | 59.1% |

Source: US Census Bureau, 2000 Census Data, Social Characteristics and Economic Characteristics

The high number of high school dropouts has significant social implications for the SouthCoast. According to a model developed by Northeastern University, each person whose educational attainment level is below that of high school graduation has, on average, a negative net fiscal impact, as measured by government taxes and benefits of -$5,300 as opposed to a net fiscal gain for those with at least a high school diploma of +$2,125.[18] This calculation of negative net fiscal impact includes figures on unemployment benefits, TANF benefits, SSI and Social Security Disability payments, food stamps, Medicaid/ Medicare health insurance, and rental subsidies. Considering the number of dropouts and labor force participation rates for the SouthCoast, the research team estimates a negative net fiscal impact of approximately $255 million per year on taxpayers due to this region's high school dropouts (see Figure 20).

**Figure 20:** Estimated Cost of Dropping Out on Taxpayers

In the SouthCoast there are 77,348 individuals over the age of 25 with no high school credential.

If we apply the SouthCoast's labor participation of 62.2%, we can approximate 48, 110 individuals over the age of 25 who are part of the labor force and have no high school credential.

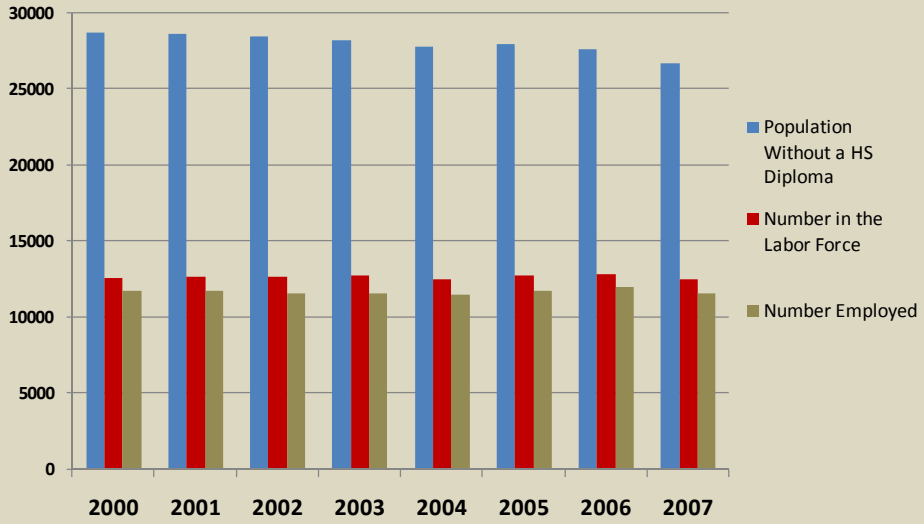
According to a model developed by Northeastern University, individuals with no high school credential have a negative net fiscal impact on society in the amount of -$5,300.

48,110 (labor force with no HS credential)
x -$5,300 (negative fiscal impact per person)

**-254,983,000**

**Figure 21:**

Labor Force Participation & Employment of Non-High School Graduates (National)




Source: Bureau of Labor Statistics

## Risk Factors

Dropping out of school is a clear problem with unclear causes. A number of studies have sought to determine the root causes of dropout behavior and have all arrived at the same conclusion: there is no single cause. There is, however, a long list of primary "risk factors" related to dropping out. The difficulty comes in determining causality - many of these factors are *related* to dropout behavior, but do not necessarily *cause* dropout behavior.[19] Research has show that these risk factors have an impact on not only dropout behavior, but also on other risk factors. An example of this is low academic achievement and excessive absenteeism. While both of these factors play a role in influencing dropout behavior, they also influence each other—a student that is frequently absent is likely to also have low grades and poor academic achievement.

In order to better understand how these factors are interrelated, it is helpful to separate them into groups. A common way to categorize reasons students drop out is to split them into "push factors" and "pull factors." Push factors are characterized by a student leaving school due to something within the school environment itself, while pull factors are related to students leaving school due to disturbances or circumstances originating outside of school that "pull" a student's interest away from school.[20] Results from three separate surveys, conducted between 1980 and 2005 and compiled in Figure 22 show that dropouts gave similar school-related factors as their reasons for leaving school. Among the reasons given, all but three ("getting married," "offered a job and chose to work," and "spent time with people who were not interested in school") are classified as push factors. However, even with the apparent influence of push factors, no single reason was given by all students across a study, indicating that it is not a single factor, but instead a number of factors that leads to dropping out.

Another useful way to categorize factors leading to dropout behavior is to divide them into "individual risk factors" and "family risk factors." Individual risk factors are related to a student's individual characteristics and background, such as low achievement in school, poor attendance, or a tendency towards misbehavior. Family risk factors are related to a student's familial background and familial commitment to education, including things like low socioeconomic status, a large number of siblings, or parents with low educational expectations. In a 2007 report entitled, *Dropout Risk Factors and Exemplary Programs: A Technical Report*, Hammond, et, al., identified a total of 25 significant risk factors related to dropout behavior, from a total of 12 data sources. Of these, 15 are classified as individual risk factors and the remaining 10 are categorized as family risk factors.[21] Hammond, et. al., further divided these two sets of factors into a total of eight categories, with each category grouping factors

**Figure 22:** Top 5 Reasons Given by Dropouts for Leaving School

| 1980 High School and Beyond 10th Grade Cohort Dropouts (Ekstrom, et. al., 1986) | | 1988 National Education Longitudinal Study 8th Grade Cohort Dropouts (Jordan, et. al., 1994) | | 2005 Non-Representative Sample of Dropouts (Bridgeland, et. al., 2006) | |
|---|---|---|---|---|---|
| 1. Didn't like school | 33% | 1. Didn't like school | 51% | 1. Classes were not interesting | 47% |
| 2. Poor grades | 33% | 2. Were failing school | 44% | 2. Missed too many days/could not catch up | 43% |
| 3. Offered job chose to work | 18% | 3. Couldn't get along with teachers | 34% | 3. Spent time with people not interested in school | 42% |
| 4. Getting married | 18% | 4. Couldn't keep up with schoolwork | 31% | 4. Had too much freedom/not enough rules in life | 38% |
| 5. Could not get along with teachers | 15% | 5. Felt like they didn't belong at school | 25% | 5. Was failing in school | 35% |

Source: Hammond, C., Linton, D., Smink, J., and Drew, S., *Dropout Risk Factors and Exemplary Programs*, National Dropout Prevention Center at Clemson University, South Carolina, Communities in Schools, Inc., 2007, p. 38.

that are linked in theme.[22] The full list of individual risk factors, as well as their subcategories, can be seen in Figure 23, while family risk factors can be seen in Figure 24.

While each factor was present in at least two studies, four of them were each present in at least six of the twelve data sources analyzed: *poor attendance* (present in six sources), *retention/overage for grade* (present in seven studies), *low socioeconomic status* (present in ten studies), and *low achievement* (present in all twelve studies). Two other factors of note are *low commitment to school* and *misbehavior*, both of which were mentioned in five of the twelve studies.[23]

*Poor attendance* (or absenteeism) is a common behavioral measure linked to dropout behavior. Several studies found that absenteeism was significantly related to dropout behavior at all grade levels.[24] Absences in the first grade were found to have a strong link to dropping out of school, especially in a Baltimore study that found each instance of truancy in a given year increased a student's likelihood of dropping out by five percent. This means that missing a full week of school would increase a student's likelihood of dropping out by 25 percent, while missing two weeks would result in an increase of 50 percent. Another study found that over 25 percent of students with high absenteeism in their ninth grade school year dropped out within three years. Other factors related to absenteeism include *cutting class* and *excessive tardiness*, each of which had a significant impact on the likelihood of dropout behavior emerging.[25]

**Figure 23:** Significant Individual Risk Factors for School Dropout

| Risk Category & Factor | Number of Data Sources Where Factor is Significant (12 total) | Percent of Data Sources Where Factor is Significant |
|---|---|---|
| **Individual Background** | | |
| Has a learning disability | 2 | 16.7% |
| **Early Adult Responsibilities** | | |
| High number of work hours | 2 | 16.7% |
| Parenthood | 3 | 25.0% |
| **Social Attitudes, Values, & Behavior** | | |
| High-risk peer group | 3 | 25.0% |
| High-risk social behavior | 4 | 33.3% |
| Highly socially active outside of school | 2 | 16.7% |
| **School Performance** | | |
| Low achievement | 12 | 100.0% |
| Retention/overage for grade | 7 | 58.3% |
| **School Engagement** | | |
| Poor attendance | 6 | 50.0% |
| Low educational expectations | 4 | 33.3% |
| Lack of effort | 2 | 16.7% |
| Low commitment to school | 5 | 41.7% |
| No extracurricular participation | 3 | 25.0% |
| **School Behavior** | | |
| Misbehavior | 5 | 41.7% |
| Early Aggression | 2 | 16.7% |

Source: Hammond, C., Linton, D., Smink, J., and Drew, S., *Dropout Risk Factors and Exemplary Programs*, National Dropout Prevention Center at Clemson University, South Carolina, Communities in Schools, Inc., 2007, p. 41.

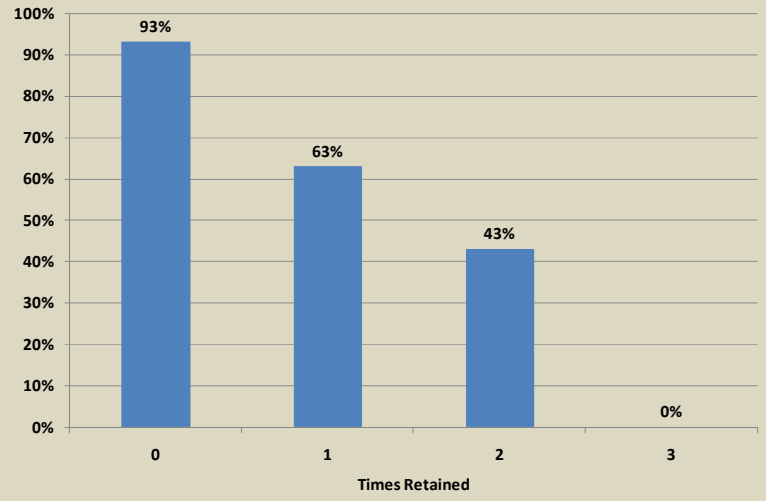
**Figure 24:** Significant Family Risk Factors for School Dropout

| Risk Category & Factor | Number of Data Sources Where Factor is Significant (12 total) | Percent of Data Sources Where Factor is Significant |
|---|---|---|
| **Family Background Characteristics** | | |
| Low socioeconomic status | 10 | 83.3% |
| High family mobility | 3 | 25.0% |
| Low education level of parents | 4 | 33.3% |
| Large numbers of siblings | 2 | 16.7% |
| Not living with both natural parents | 3 | 25.0% |
| Family disruption | 2 | 16.7% |
| **Family Engagement/Commitment to Education** | | |
| Low educational expectations | 2 | 16.7% |
| Sibling has dropped out | 3 | 25.0% |
| Low contact with school | 2 | 16.7% |
| Lack of conversations about school | 2 | 16.7% |

Source: Hammond, C., Linton, D., Smink, J., and Drew, S., *Dropout Risk Factors and Exemplary Programs*, National Dropout Prevention Center at Clemson University, South Carolina, Communities in Schools, Inc., 2007, p. 41.

*Retention/overage for grade* is another significant factor influencing dropout behavior, regardless of the grade level at which the retention occurred. "Retention" refers to a student being "held back" instead of promoted at the end of the school year. Assuming that students complete each grade on their first try, being retained would result in a student who is older than his classmates. Being retained also results in a student being separated from his or her peers and forced to establish new relationships with younger students. Several of the studies analyzed found that multiple retentions lead to a dramatic increase in the likelihood of dropping out. One study presented a progressive relationship between retention and dropping out. Students who had not failed a grade by seventh grade had a 7 percent dropout rate, while those who had failed one grade had a 27 percent chance of dropping out. Failure of two grades was linked to a 57 percent dropout rate, and failure of three grade levels was linked to a 100 percent dropout rate (see Figure 25). Another study found that 80 percent of students retained twice before entering the ninth grade left school, and that 94 percent of students retained in both elementary and middle school dropped out without completing high school.[27]

**Figure 25:** Chances of Graduation per Number of Grade Retentions



*Low achievement* was found to be a reliable predictor of dropout behavior in all twelve studies analyzed. One study found that low academic achievement in the first grade was a major predictor of dropping out by the age of 23. Another study found a relationship between scores on math assessments taken during the eighth grade and dropping out. In this study, 33 percent of students who scored in the lowest quartile in the eighth grade failed to earn a high school diploma.[28] It is also important to note that some variation of *low achievement* was listed as a major reason for dropping out in each of the studies compiled in Figure 23, making it by far the most frequently-recognized and reliable predictor of dropout behavior.

*Low socioeconomic status* (SES) was strongly linked to dropout behavior in a total of ten studies, and was the only "family risk factor" present in a majority of studies. Low SES is also a very reliable indicator of dropout behavior. One study found that 82 percent of students who left school between eighth grade and tenth grade were from families with below-average SES. Multiple studies have also found that socioeconomic level has a much more powerful influence than factors that typically prevent dropout behavior, including good school performance and consistent attendance. Studies of early dropouts (those leaving before tenth grade) found that coming from a family living in poverty drastically increased the likelihood of dropout behavior, even if other positive factors (such as high achievement) were present.[29]

While not mentioned in the above studies, it is important to remember that other factors like ethnicity, limited English proficiency, school location, and teenage pregnancy have also been shown to affect dropout rates. Due to the challenges that minority families often face and the impact that these challenges have on their children, national-level data has shown a higher tendency for students of black and Hispanic families to dropout when compared to white students.[30] In addition, students who have limited or no English skills have been shown to dropout at rates much higher than students who are proficient in English. In 1995, the dropout rate among 16 to 24-year-olds who spoke a language other than English at home was 44 percent. On the other hand, the dropout rate among the same age group for individuals who were proficient in English was 12 percent.[31]

Young people attending inner-city urban schools also face additional challenges that make staying in school very difficult, particularly if the school environment does not offer them a safer alternative to the conditions they often confront on the streets. In urban areas throughout the country, and to a certain degree in our region's cities, drug and alcohol abuse, violence, gang activity, poverty, overcrowded and decaying schools, and resource and technology-limited classrooms increase a student's chances of eventually dropping out. Nationally, less than 50 percent of urban students graduate in four years.[32]

Another risk factor that has become more prominent over the past several years in our Commonwealth is teenage pregnancy. According to the National Campaign to Prevent Teenage Pregnancy, only 40 percent of young teenage mothers graduate from high school. Considering the significant number of young females dropping out of school for this reason and the attention that this social and health concern has received recently in our state and our region's two major cities, its occurrence and prevention should be considered a very prominent part of any effort to reduce dropout rates.[33]

There are also other, more traditional, factors that contribute to the national dropout phenomenon. Among these are boredom with curriculum and course offerings, financial pressures that force students to seek employment to support themselves or their families, demands to become caretakers for siblings or other family members, as well as a school's failure to provide a safe environment free of bullying or other threats.

In some instances, students who are difficult or indifferent are simply allowed or encouraged to leave school because of the demands they place on a school system that has limited resources or whose MCAS (Massachusetts Comprehensive Assessment System) scores are adversely affected by underperforming students. While this report makes no suggestions as to the presence or prevalence in our region of students known as "push-outs," such a condition is perceived to play a role in the national discussion of the dropout challenge. On a final note, this report does not attempt to discern the effect of the MCAS on dropout rates. While a debate exists at the state level over the impact that this exam system may have on students' decisions relative to their high school graduation, it is important to note that national studies have produced no clear evidence linking "exit exams" with the decision to leave school prior to graduation.

## Calculating Dropout Rates

Over the course of the last two decades, significant changes have taken place in the methods and

techniques used by state and federal agencies in the calculation of school dropout rates and in the standards of accuracy and accountability that local school districts are required to meet in recording and reporting their individual dropout rates. How dropout rates are measured and the ways in which data is gathered can have significant implications on how the problem of dropout is defined, perceived, and interpreted, as well as how programmatic and policy measures are developed and implemented to confront the challenge.

In general, there are three different calculation techniques that have been or continue to be employed by both state and federal education departments. These methods and their time period of use reflect a gradual progression toward more reliable depictions of the incidence of dropout. In the meantime, it is important to keep in mind, particularly at the state level, that as the techniques and technology used for data collection have evolved, so too have the reporting requirements and procedures become more uniform and regulated in order to produce statistics that are comparable across school districts and relevant for aggregate analysis.

The first calculation method is known as an "event" dropout rate or an "annual" dropout rate, as the state of Massachusetts has defined it. This measure estimates the percentage of high school students who left high school between the beginning of one school year and the beginning of the next school year without earning a high school diploma or an equivalent degree (such as a GED). Essentially, what this calculation gives us is a snapshot of how many students on a yearly basis, regardless of grade level, decide to drop out of school.

On the other hand, the "status" dropout rate reports the percentage of individuals in a given age range who have not earned a high school diploma or equivalent credential and are not enrolled in school. This measure does not indicate when these individuals dropped out of school. Rather, it focuses on an overall age group as opposed to individuals so as to study educational attainment issues within the general population. As a result, the numbers this rate produces tend to be higher than the event dropout rate.

The third and most recent method of calculation is called the "cohort" rate. A cohort rate measures what happens to a single group of students over a defined period of time, usuallyfrom the ninth grade through graduation. This measure can be particularly useful and informative as it provides information at two levels: it tells us the percentage of students within the cohort that actually graduated, as well as the percentage that dropped out over a four or five-year period of time. While this rate does not tell us when students decide to dropout, it does allow communities and policy makers to determine the rate at which a school district loses students after the students have been enrolled. The use of the cohort rate and the corresponding graduation and dropout rates that it produces has become recognized by many researchers, policy analysts, educators, and advocacy groups as a truer measure of the dimensions and scale of the dropout crisis in American schools.

As it is clear to see, these rates are all calculated differently and, as a result, provide various views and aspects of the dropout problem.

### *Calculating Dropout Rates in the United States*

Until recently, the process of measuring dropout rates in the United States was largely left to the states. Each state was allowed to define dropout in its own way, collect data using whichever systems it desired, and report the data using whatever formulas it wanted. As a result, dropout rates reported to the U.S. Department of Education were not comparable across states.

According to the National Dropout Prevention Center/Network, while the federal government previously provided a definition of who a "dropout" is, only 36 states and the District of Columbia cooperated with the U.S. Department of Education by reporting data. Massachusetts was one the 36 states that has cooperated. The definition of a dropout once used by the federal government closely resembled the definition used by those who report dropout statistics using the event or annual rate. More precisely, it stated that a dropout is "an individual who was enrolled in school at some time during the previous school year and was not enrolled on October 1 of the current school year [and] was not graduated from high school or completed a state- or district-approved educational program." In addition, the federal definition excluded all students who transferred to another school (private or public), enrolled in a state- or district-approved educational program, or were absent due to death, illness, suspension or any other temporary school-recognized absence.[34]

In April of 2008, former Secretary of Education Margaret Spellings announced that a standard formula for calculating graduation and dropout rates would

soon be implemented and that each state would be required to follow the new standard. The announcement of the new regulation was intended to correct a major flaw in the No Child Left Behind Act (NCLB), which required states to report their graduation rates to the U.S. Department of Education (DOE), but allowed states to continue setting their own formulas for calculating them.[35]

The new federal formula was put into place in October of 2008 with an amendment to the NCLB. Under this new regulation, states will be required to report a four-year adjusted cohort graduation rate that reflects "the number of students who entered high school four years earlier (adjusting for transfers in and out, émigrés, and deceased students) and earn a regular high school diploma at the end of their fourth year, before the end of their fourth year, or during a summer session immediately following their fourth year." In addition, states will also be allowed the option to report five-year adjusted cohort graduation rates to reflect changes in rates as a result of students graduating within five years of starting high school. According to the new regulation, states are required to complete the shift to a cohort measurement system by the 2010-11 school year.[36]

### *Calculation Methods in Massachusetts*

In Massachusetts, a dropout is defined as "a student in grade nine through twelve who leaves school prior to graduation for reasons other than transfer to another school and does not re-enroll before the following October 1."[37] Prior to 1993, the Massachusetts Department of Elementary and Secondary Education (DESE) reported a dropout rate known as an "unadjusted annual dropout rate," which included all students who dropped out during a particular school year regardless of whether or not they returned to school by October 1 of the following school year.

After 1993, the DESE began using an "adjusted annual dropout rate" that followed guidelines developed by the U.S. Department of Education. The annual dropout rate closely resembles the event dropout rate and calculates the percentage of students who drop out each year as the number of students who dropped out between July 1 and June 30th of a given year minus the number of dropouts who returned to school by October 1 and divided by the October 1 enrollment of the particular school year. For example, to calculate the dropout rate for a particular school during the 2007-08 school year, the district would report the number of dropouts who left school between July 1, 2007 and June 30, 2008, subtract the number of dropouts who return to school by October 1, 2008, and divide this number by the district's enrollment as reported on October 1, 2007. The number is then multiplied by 100 to yield a percentage.[38]

Starting with the 2001-02 school year, Massachusetts implemented the Student Information Management System (SIMS), which is designed to collect student-level data. The implementation of this data collection system coincided with the state's tracking of four-year cohort graduation rates, which is required by the federal No Child Left Behind Act (NCLB) and by a National Governors Association compact that Massachusetts had signed.[39] SIMS is made up of two components: first, each student is given a unique State Assigned Student Identification number (SASID); and second, the actual SIMS data transmission application that school districts must now use to submit information to the Massachusetts Department of Education.[40]

The use of SIMS has allowed for much more accurate and standardized data collection and reporting. SIMS assigns each student enrolled in a Massachusetts public school district a unique numeric identifier. This means that while a student may transfer from one in-state school to another, he or she will retain a single information profile in the state's records. In addition, one of the greatest improvements this system has offered is the ability to track students who leave school without reporting whether or not they are truly dropping out or moving to another school district or private institution. Previously, students who did not inform school administrators of their intention to move to another community were recorded as dropouts since there was no way for a school to verify that student's enrollment status. The only time a school would ever find out if a "missing" student had actually transferred to another school district was when the student's new school contact his or her previous school for records and transcripts.

Under SIMS, all students who are reported as dropouts are checked against data submitted by all other districts in the state. If a student reported as a dropout by one district is found to be enrolled in another district, the student is no longer considered a dropout but rather as a "transfer."[41] In addition, SIMS data has allowed the state to become much more accurate in tracking the enrollment status of students who did not graduate in four years. Previously, a student who took five years to complete high school or decided to enroll in a GED program was counted as a dropout. Now, with the use

of SIMS data, the DESE is able to report a four-year cohort graduation rate and dropout rate that takes accounts for those students who are continuing their education in some form or another.[42]

In addition, it is important to recognize that before the use of SIMS and the cohort rate, the definition of what constituted dropping out was left to the discretion of the school district. Some districts may have been underreporting, whether intentionally or unintentionally, their number of dropouts. This resulted in considerable inconsistencies across the state. Common points of difference between districts in defining dropout included a variation in grade levels or ages at which students could be classified as dropouts, disparities in the length of time a student could be absent before he or she was considered a dropout, and discrepancies in which programs counted students as being "enrolled" (such as GED programs, alternative high schools, or night schools). By standardizing the process of counting dropouts, the definition of what constitutes a dropout is established, the state's statistics are now more accurate, and it is much easier to compare rates across districts.

While this is a significant improvement over previous data collection and reporting methods, the scope of SIMS is limited to public schools in Massachusetts. Therefore, if a student moves to another state and enrolls in a public school there without reporting this to his/her previous school, he/she is counted as a dropout. The same is true of students who leave public schools and enroll in private schools regardless of whether they reside in Massachusetts or another state.

As mentioned previously, the shift toward use of SIMS has resulted in the tracking of student-level data that allows the state to report four-year and five-year cohort graduation rates. The first set of cohort data was released following the graduation of the class of 2006, which reflects the four-year period from when SIMS data was beginning to be collected for these students who entered the ninth grade in 2002. Since then, four-year cohort graduation rates have been reported for 2007 and 2008, while five-year cohort rates have been also been published for 2006 and 2007. The five-year data allows the state to provide a sort of "update" to the four-year data to reflect increases to the graduation rate as a result of students who earn their diploma or GED during that fifth year of instruction.

## SIMS: *Student Information Management Systems*

SIMS was created as a result of the Education Reform Act of 1993 as a way for the Massachusetts Department of Education to track students across districts and over time.

According to the DOE, SIMS is a "data collection of all students attending public schools or receiving public funds for education in Massachusetts. More specifically, it is a system of on-line applications and reports that facilitates the collection and analysis of student level data [which] differs from past collections where data was collected in the aggregate." In addition, SIMS allows the DOE to "meet federal and state reporting requirements [while helping] to inform policy and programmatic decisions."†

SIMS is made up of two components: a State Assigned Student Identifier (SASID), which is a unique number assigned to each student, and the actual SIMS data transmission application used by districts to submit information to the DOE.

Among other information, examples of the data gathered in SIMS for each student include the following:

- ✧ First Name
- ✧ Gender
- ✧ Truancy
- ✧ Place of Residence
- ✧ Low Income
- ✧ SPED Placement
- ✧ Last Name
- ✧ School
- ✧ Race/Ethnicity
- ✧ Grade Level
- ✧ First Language
- ✧ In-School Suspensions
- ✧ Date of Birth
- ✧ Years in LEP
- ✧ Enrollment Status
- ✧ Days in Attendance
- ✧ Post Graduate Plans
- ✧ Out-of-School suspensions

School districts are required to report student enrollment status three times per year and each report includes student status as of October 1st, student status as of March 1st, and student status as of the last day of instruction.

Source: Massachusetts Department of Education website, *Student Information Management Systems (SIMS)* (http://www.doe.mass.edu/infoservices/data/sims)

†Massachusetts Department of Education, *SIMS User Guide Version 2.0*, February 28, 2006, p 2. (http://www.doe.mass.edu/infoservices/data/sims/UserGuide.pdf)

## SouthCoast Community Profiles

The SouthCoast region contains two cities - Fall River and New Bedford - as well as thirteen towns - Acushnet, Dartmouth, Fairhaven, Freetown, Lakeville, Marion, Mattapoisett, Rochester, Seekonk, Somerset, Swansea, Wareham, and Westport. The region's cities and towns are a diverse lot, encompassing a wide range of ethnic, foreign, and socioeconomic backgrounds. For example, approximately 2.5 percent of Rochester's population is foreign-born, compared with 19.6 percent of New Bedford's population and 19.8 percent of Fall River's residents. Another example can be seen when examining home ownership rates. In Rochester, 93.0 percent of occupied housing units are owner-occupied, compared to 43.8 percent of New Bedford's units and 34.9 percent of Fall River's units. A full comparison of community indicators has been compiled using U.S. Census 2000 data and state educational data and can be found in Appendix B.

By examining the various towns and their characteristics, it is possible to group them into three broad categories, based on income levels and educational attainment. The first category consists of towns that have high incomes and high rates of education; the second, the towns that would be classified as "middle-class," with moderate income and education levels; and the third, towns with low income and low levels of educational attainment.

### *Group 1*

The first group of towns, those with high income and high levels of educational attainment, has a total population of 75,092. This group is comprised of a number of small towns (Acushnet, Marion, Mattapoisett, and Rochester), as well as a handful of larger ones (Dartmouth, Freetown, and Lakeville). There are a total of three high schools in Group 1: Dartmouth, Freetown-Lakeville, and Old Rochester. Freetown-Lakeville is a regional high school for the towns of Freetown and Lakeville, while Old Rochester is a regional high school funded and attended jointly by Marion, Mattapoisett, and Rochester.

Group 1 towns tend to occupy the higher income brackets, with median family incomes equivalent to or greater than the state average of approximately $61,000 annually. Freetown, Mattapoisett, and Rochester all have median family incomes of approximately $70,000, while Lakeville and Marion have median family incomes of approximately $75,000. At the low end of the spectrum are Acushnet and Dartmouth, with median family incomes of approximately $60,000. The towns of Group 1 also have high levels of education among their residents. The U.S. Census reports two measures of education - percent of population with a high school degree or higher, and percent of population with a bachelor's degree or higher. Four of the seven towns in Group 1 exceed the state average with regard to high school graduation rates (Marion, Rochester, Mattapoisett, and Lakeville), and two exceed the state average with regard to post-secondary educational attainment (Marion and Mattapoisett).

### *Group 2*

The second group consists of six towns: Fairhaven, Seekonk, Somerset, Swansea, Wareham, and Westport. Each of these towns operates its own high school for a total of six school districts. Two of the six towns, Fairhaven ($52,000) and Wareham ($46,000), have median family incomes below the state average while Seekonk and Westport are slightly over the state average, at approximately $61,000 and $65,000, respectively. The last two towns, Somerset and Swansea, have median family incomes similar to the state average. In terms of educational attainment, all six rate below the state average for high school graduates, with Seekonk and Wareham being the

## A Note on School Districts

Acushnet, Freetown, Lakeville, Marion, Mattapoisett, and Rochester all have local school districts that do not provide comprehensive K-12 education for students. Instead, they operate regional or joint schools for junior and senior high school. Marion, Mattapoisett, and Rochester operate a joint regional school district called Old Rochester, which provides education for grades seven through twelve. Freetown and Lakeville have a joint school district, called Freetown-Lakeville, for grades five through twelve. Since these towns' individual districts provide elementary education only, there is a very low incidence of dropout in them - the highest five-year average is for Acushnet, with a 0.7 percent dropout rate; the rest of the districts have a dropout rate close or equal to 0 percent. The majority of students who drop out of school do so once reaching high school. As a result, dropouts who live in these communities are counted against the school district in which they dropped out, not for the community in which they reside.

## SouthCoast Communities by Group

(Using Educational Attainment & Median Income)

| Group 1 | Group 2 | Group 3 |
|---|---|---|
| Acushnet | Fairhaven | Fall River |
| Dartmouth | Seekonk | New Bedford |
| Freetown | Somerset | |
| Lakeville | Swansea | |
| Marion | Wareham | |
| Mattapoisett | Westport | |
| Rochester | | |

closest (83.1 percent and 82.5 percent, respectively), versus the state average of 84.8 percent. The other four communities are all within 10 percent, with Westport (78.5 percent) and Fairhaven (76.8 percent) slightly above Somerset (76.1 percent) and Swansea 76.4 percent). Additionally, all six towns sit below the state average of 33.2 percent for bachelor's degrees or post-graduate degrees. In descending order, Westport (25.3 percent), Fairhaven and Seekonk (16.9 percent), Swansea (16.4 percent), Wareham (16.3 percent), and Somerset (15.8 percent) are substantially below the state average.

### *Group 3*

The third group consists of the region's two cities, Fall River and New Bedford. Each city has its own school district. Fall River and New Bedford are both well below the state average in terms of median family income, percentage of high school graduates, and percentage of higher education degrees. The median family income for Fall River is approximately $38,000, while New Bedford's is approximately $36,000. The two cities are also well below the state average for high school graduates, with only 57.6 percent of New Bedford's population and 56.6 percent of Fall River's having high school diploma. Also, 10.7 percent of each city's populations have a bachelor's degree or higher, which is significantly below the state average of 33.2 percent.

*(For further details regarding a variety a indicators across the SouthCoast's fifteen communities, see Appendix B of this report.)*

## Dropout Rates in the SouthCoast

Analysis and comparison of dropout rates over the last twenty to twenty-five years is complicated by several changes that have taken place over time in calculation methods. Aside from the fact that school districts used different methods of calculation prior to standardization, accurate data collection methods were virtually non-existent prior to 1990.

Comparisons of annual dropout rates published by the Massachusetts Department of Education should be done within the context of the inconsistencies in reporting methods among communities and reforms implemented by the state in 2002 to standardize data collection and reporting. The new system, while still possessing some limitations, is more accurate and accounts for unreported student transfers to other in-state schools - a fairly common occurrence in urban systems (for a full discussion of prior and current reporting and data collection methods, refer to the previous section of this report titled *Calculating Dropout Rates*). While use of the four-year cohort method has produced only three sets of cohort dropout rate data, it still allows for valuable comparisons between school districts and the entire state.

Despite imperfections in the data, an analysis of dropout rates and graduation rates is important in understanding trends and is necessary for conducting comparisons within the SouthCoast region and between our region, the state, and other older, urban areas.

Current data indicates that the SouthCoast region lags behind the rest of Massachusetts, with higher dropout rates and lower graduation rates. The most recent dropout figures show a 2008 four-year cohort dropout rate for the region of 17.5 percent as opposed to a rate of 9.9 percent for the entire state. Most notably, Fall River and New Bedford produced four-year cohort dropout rates of 31.8 percent and 26.8 percent, respectively, for the class of 2008 (see Figure 26).

A review of dropout rates in the SouthCoast over the last ten years paints a troublesome picture for the region and its residents. Overall, the SouthCoast lost ground in comparison to the rest of Massachusetts with regard to its annual dropout rates. During that eight-year period, while the state dropout rate increased approximately 6 percent, the rate in the SouthCoast increased almost five times as much, an increase of 30 percent.

## Figure 26: 4-Year Cohort Dropout Rates (2008)

| District | Number in Cohort | Number of Dropouts | 4-Year Dropout Rate |
|---|---|---|---|
| Dartmouth | 350 | 22 | 6.3% |
| Fairhaven* | 174 | 21 | 12.1% |
| Fall River | 836 | 266 | 31.8% |
| Freetown-Lakeville | 210 | 13 | 6.2% |
| New Bedford | 888 | 238 | 26.8% |
| Old Rochester** | 212 | 11 | 5.2% |
| Seekonk | 197 | 13 | 6.6% |
| Somerset | 257 | 7 | 2.7% |
| Swansea | 158 | 6 | 3.8% |
| Wareham | 298 | 37 | 12.4% |
| Westport | 122 | 14 | 11.5% |
| **SouthCoast** | **3,702** | **648** | **17.5%** |
| **Massachusetts** | **77,383** | **7,661** | **9.9%** |

* Acushnet students can choose to attend public high school in either Fairhaven or New Bedford.

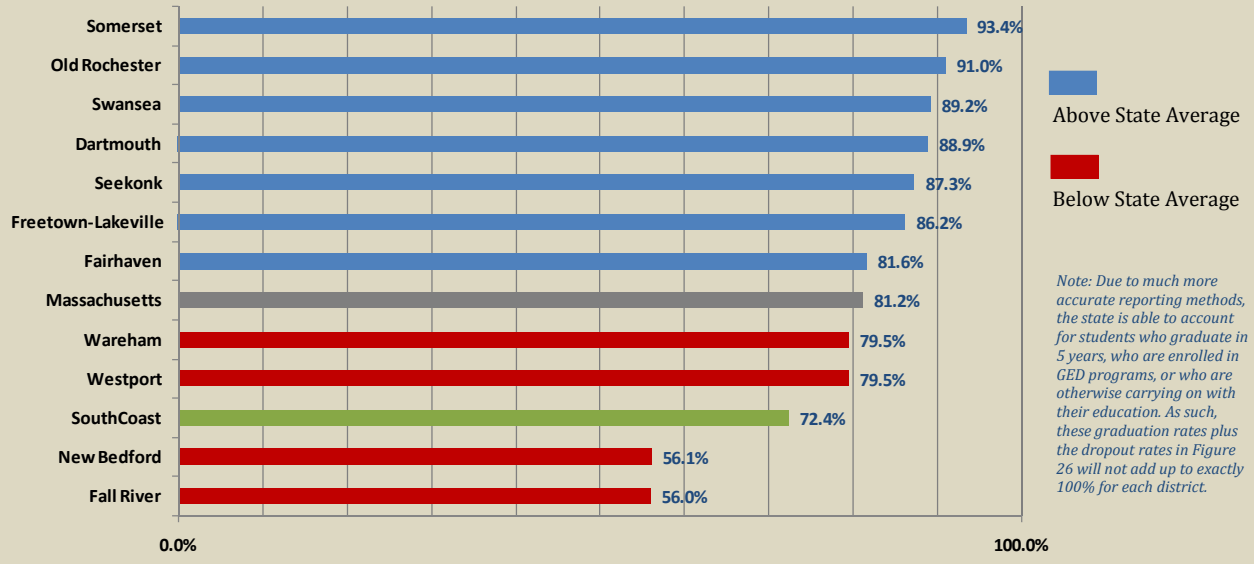
** Marion, Mattapoisett, and Rochester students attending public high school all attend Old Rochester Regional.

Source: Massachusetts Department of Education

As expected, and due in large measure to the number of at-risk youth living in the region's urban areas, Fall River and New Bedford consistently reported higher dropout rates than any of the other communities in the region. In fact, an estimated 75 percent of SouthCoast students who drop out of school before graduation come from these two cities. While dropout rates in the towns of Wareham and Westport do not approximate those of the region's cities, both communities have experienced a great deal of fluctuation in their dropout rates. At times, their rates have fared better than the state average. However, in four of the eight years measured, Wareham had rates above the state average, while in seven of those eight years Westport had rates above the state average (see Figure 28). Fairhaven has also performed at or near the state average over the last decade.

Looking more closely at Wareham and Westport, however, there is cause for concern relative to long-term trends. Averaging three years of data for each community at the beginning and end of the most recent eight-year period indicates an increase in dropout rates for each community that exceeds the regional increase over the same period. During that time frame, Westport's rate appears to have increased by 50 percent while Wareham's rate has doubled. In the case of Westport, one should be careful in drawing conclusions given

## Figure 27: 4-Year Cohort Graduation Rates (2008)




Source: Massachusetts Department of Education

**Figure 28:** Annual Dropout Rates in SouthCoast School Districts (1999-2007)

| District | 1999-00 | 2000-01 | 2001-02 | 2002-03 | 2003-04 | 2004-05 | 2005-06 | 2006-07 | Average Dropout Rate |
|---|---|---|---|---|---|---|---|---|---|
| Dartmouth | 3.1% | 2.8% | 1.4% | 0.8% | 1.8% | 3.4% | 1.4% | 2.3% | 2.1% |
| Fairhaven* | 3.1% | 4.9% | 2.6% | 2.8% | 4.7% | 5.4% | 2.7% | 3.6% | 3.7% |
| Fall River | 6.8% | 6.9% | 7.9% | 10.6% | 10.2% | 11.9% | 11.4% | 9.8% | 9.4% |
| Freetown-Lakeville | 3.2% | 3.1% | 1.7% | 3.0% | 2.2% | 3.7% | 2.6% | 2.0% | 2.7% |
| Old Rochester** | 1.2% | 1.1% | 1.0% | 2.3% | 2.3% | 1.3% | 1.8% | 2.4% | 1.7% |
| New Bedford | 8.6% | 7.0% | 6.9% | 9.3% | 9.7% | 10.4% | 7.4% | 8.3% | 8.5% |
| Seekonk | 1.7% | 0.7% | 1.3% | 1.8% | 1.3% | 1.4% | 1.5% | 2.1% | 1.5% |
| Somerset | 2.7% | 2.6% | 2.7% | 5.1% | 5.2% | 3.8% | 1.9% | 1.1% | 3.1% |
| Swansea | 0.7% | 2.6% | 2.8% | 1.9% | 2.5% | 4.0% | 4.1% | 2.3% | 2.6% |
| Wareham | 1.7% | 0.5% | 3.5% | 3.5% | 4.1% | 2.6% | 4.3% | 3.6% | 2.9% |
| Westport | 0.8% | 4.6% | 6.5% | 4.7% | 7.5% | 7.2% | 4.2% | 4.4% | 5.0% |
| **SouthCoast** | **4.8%** | **4.6%** | **4.7%** | **6.1%** | **6.4%** | **7.0%** | **5.6%** | **5.4%** | **5.6%** |
| **Massachusetts** | **3.5%** | **3.5%** | **3.1%** | **3.3%** | **3.7%** | **3.8%** | **3.3%** | **3.8%** | **3.5%** |

* Acushnet students can choose to attend public high school in either Fairhaven or New Bedford.

** Marion, Mattapoisett, and Rochester students attending public high school all attend Old Rochester Regional.

Source: Massachusetts Department of Education

the volatility of their dropout data, the effects of a small number of dropouts within the context of smaller school populations, and the fact that at the beginning of the eight-year period, their district had an extremely low number of dropouts that could skew the results. Such uncertainty suggests that Westport's rates should be monitored for accurate trends as the state collects more data in the next few years under the current and more precise data collection system.

Wareham's data however, appear to be trending toward elevated rates of dropout. A comparison between the first four years of data relative to the most recent four-year period reveals a clear difference that could be due to many factors. While a cursory review of Wareham's demographic data over the same eight-year period did not indicate a significant increase in the number of potential at-risk students, continued monitoring of its data going forward is warranted.

Fall River's annual dropout rate when comparing the first three years of data to the last three years of data has also increased dramatically (more than 50 percent) over the last eight years when compared to increases in the regional rate. New Bedford's increase in annual dropout rates over the same time frame was approximately 20 percent. Moreover, both of these communities have experienced increases in dropout rates that exceed the state's increase of 6 percent over the same time period.

Conversely, Seekonk, Dartmouth, and Old Rochester, which serves students from Marion, Mattapoisett, and Rochester, have performed particularly well on most measures. According to four-year cohort graduation rates over the last three school years, these communities have consistently produced among the highest rates in the region (see Figures 27, 30, and 32). In addition, results from Somerset and Swansea are

## Figure 29: 4-Year Cohort Dropout Rates (2007)

| District | Number in Cohort | Number of Dropouts | 4-Year Dropout Rate |
|---|---|---|---|
| Dartmouth | 306 | 16 | 5.2% |
| Fairhaven* | 169 | 18 | 10.7% |
| Fall River | 852 | 262 | 30.8% |
| Freetown-Lakeville | 229 | 14 | 6.1% |
| New Bedford | 864 | 184 | 21.3% |
| Old Rochester** | 189 | 12 | 6.3% |
| Seekonk | 202 | 13 | 6.4% |
| Somerset | 270 | 28 | 10.4% |
| Swansea | 180 | 21 | 11.7% |
| Wareham | 256 | 23 | 9.0% |
| Westport | 114 | 12 | 10.5% |
| **SouthCoast** | **3,631** | **603** | **16.6%** |
| **Massachusetts** | **75,912** | **7,136** | **9.4%** |

* Acushnet students can choose to attend public high school in either Fairhaven or New Bedford.

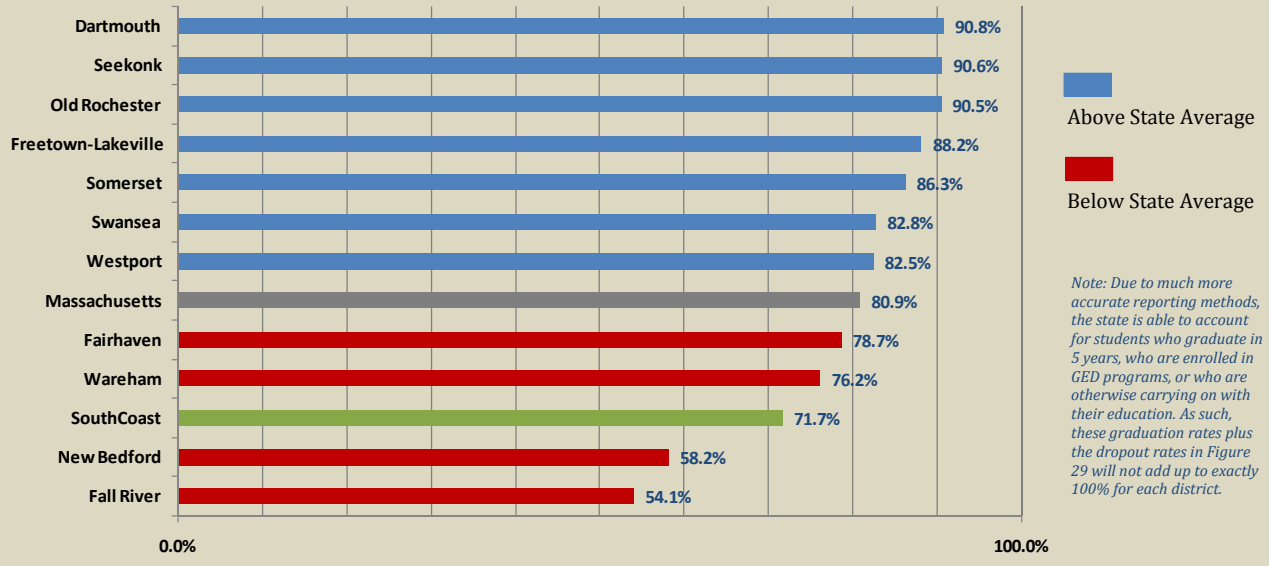
** Marion, Mattapoisett, and Rochester students attending public high school all attend Old Rochester Regional.

Source: Massachusetts Department of Education

very encouraging with Somerset recently being recognized by the Rennie Center for Education Research and Policy as one of ten model districts in dropout prevention based on their reduction in dropout rates over the last four years.[43] They were cited for their support of alternative approaches in which at-risk students are offered the chance to attend an evening school program as an alternative to the daytime high school program. This alternative gives many of these students an opportunity to work while earning a diploma. Oftentimes, these students are identified early enough so that they are able to graduate with the rest of their class. The Swansea school district collaborates and participates in the same program, which, in the short-term, appears to have successfully decreased the dropout numbers in their community.

Annual dropout rates for the region's alternative schools are not as promising. During the 2007-08 school year, the region went from having three alternative schools to having only two, as New Bedford closed its West Side program in 2008 as a result of low graduation rates. Because of this, only Fall River and Wareham have alternative schools currently in operation. Annual dropout rates for each of the three alternative schools during the 2006-07 school year are clearly much higher than what is reported in the region's public high schools (see Figure 33). This, of

## Figure 30: 4-Year Cohort Graduation Rates (2007)




*Note: Due to much more accurate reporting methods, the state is able to account for students who graduate in 5 years, who are enrolled in GED programs, or who are otherwise carrying on with their education. As such, these graduation rates plus the dropout rates in Figure 29 will not add up to exactly 100% for each district.*

Source: Massachusetts Department of Education

## Figure 31: 4-Year Cohort Dropout Rates (2006)

| District | Number in Cohort | Number of Dropouts | 4-Year Dropout Rate |
|---|---|---|---|
| Dartmouth | 348 | 39 | 11.2% |
| Fairhaven* | 186 | 13 | 7.0% |
| Fall River | 824 | 301 | 36.5% |
| Freetown-Lakeville | 223 | 35 | 15.7% |
| New Bedford | 939 | 233 | 24.8% |
| Old Rochester** | 179 | 11 | 6.1% |
| Seekonk | 199 | 9 | 4.5% |
| Somerset | 270 | 28 | 10.4% |
| Swansea | 154 | 16 | 10.4% |
| Wareham | 242 | 32 | 13.2% |
| Westport | 124 | 32 | 25.8% |
| **SouthCoast** | **3,688** | **749** | **20.3%** |
| **Massachusetts** | **74,380** | **8,702** | **11.7%** |

* Acushnet students can choose to attend public high school in either Fairhaven or New Bedford.

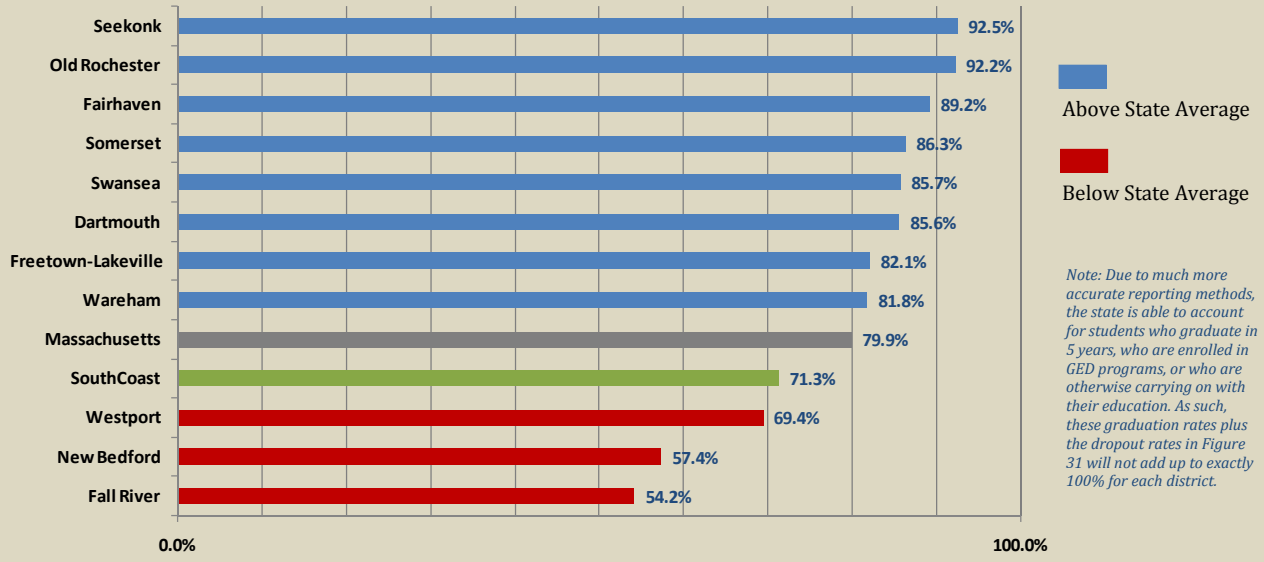
** Marion, Mattapoisett, and Rochester students attending public high school all attend Old Rochester Regional.

Source: Massachusetts Department of Education

course, can be largely attributed to the realities of serving a student population with extreme difficulties both in their education and home life. While New Bedford decided to close its program, Fall River is reporting that its alternative high school, which is still a relatively young program, will have improved its rates by June of 2009 due to an aggressive credit recovery effort and individualized instruction and planning.

Because of their admission requirements and ability to discharge students for academic, disciplinary, or attendance issues, dropout rates are significantly lower in the region's vocational schools. To their credit, they perform at high levels and offer effective programming that attracts a large number of students and, as a result, are forced to place students on waiting lists until openings become available. Their emphasis on career and technology education brings significant relevance to a student's education in a way that is currently lacking for many students in our comprehensive high schools who are at risk of dropping out (see Figure 35).

## Figure 32: 4-Year Cohort Graduation Rates (2006)




*Note: Due to much more accurate reporting methods, the state is able to account for students who graduate in 5 years, who are enrolled in GED programs, or who are otherwise carrying on with their education. As such, these graduation rates plus the dropout rates in Figure 31 will not add up to exactly 100% for each district.*

Source: Massachusetts Department of Education

## Figure 33: Annual Dropout Rates in SouthCoast Alternative Schools (1999-2007)

| District | 1999-00 | 2000-01 | 2001-02 | 2002-03 | 2003-04 | 2004-05 | 2005-06 | 2006-07 |
|---|---|---|---|---|---|---|---|---|
| Fall River Alternative High School | | | | | | | 55.8% | 53.9% |
| New Bedford West Side Alternative High School | 26.1% | 17.8% | 24.5% | 32.8% | 32.3% | 38.4% | 51.8% | 55.7% |
| Wareham Cooperative Junior-Senior High School | | | | | | | | 20.0% |

Source: Massachusetts Department of Education

## Figure 34: 4-Year Cohort Dropout Rates in SouthCoast Alternative Schools (2008)

| District | Number in Cohort | Number of Dropouts | 4-Year Dropout Rate |
|---|---|---|---|
| Fall River Alternative High School | 47 | 36 | 76.6% |
| New Bedford West Side Alternative High School | 32 | 27 | 84.4% |
| Wareham Cooperative Junior-Senior High School | 48 | 10 | 20.8% |

Source: Massachusetts Department of Education

## Figure 35: Annual Dropout Rates in SouthCoast Vocational Schools (1999-2007)

| District | 1999-00 | 2000-01 | 2001-02 | 2002-03 | 2003-04 | 2004-05 | 2005-06 | 2006-07 |
|---|---|---|---|---|---|---|---|---|
| Diman Regional Vocational Technical High School | 2.7% | 1.75% | 3.77% | 0.09% | 3.34% | 2.84% | 0.84% | 1.78% |
| Greater New Bedford Vocational Technical High School | 4.1% | 3.91% | 3.33% | 5.26% | 2.59% | 3.04% | 2.51% | 3.33% |
| Old Colony Regional Vocational Technical High School | 0.7% | 2.23% | 1.8% | 1.27% | 3.21% | 1.10% | 1.25% | 1.03% |

Source: Massachusetts Department of Education

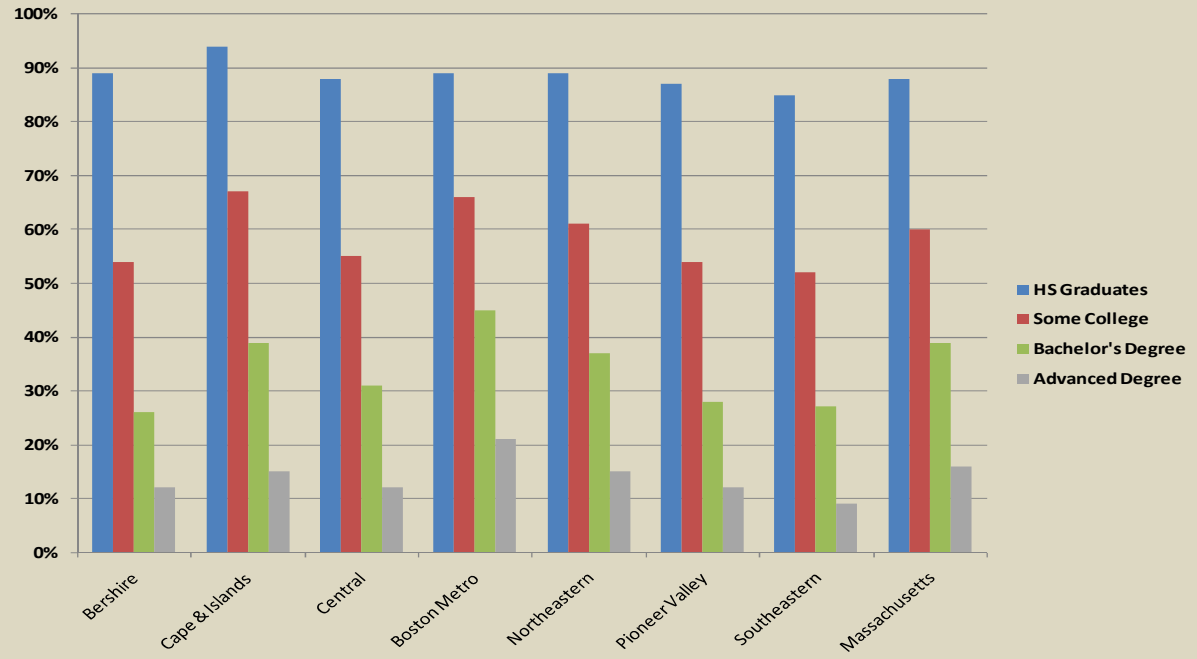
## Comparisons With Other Regions & Urban Areas

Comparing educational attainment data from the region to other regions in the Commonwealth helps explain the difficulty the SouthCoast has had in transitioning to a new knowledge-based economy. When we place the SouthCoast region within the context of the entire Southeastern Massachusetts area, it is clear, based on the data in Figure 36 that this part of the Commonwealth is at a serious disadvantage when competing for high-skilled knowledge-based jobs. The Southeastern region of Massachusetts, of which the SouthCoast is a major part, ranks last in the state with regards to the percentage of residents over the age of 25 with high school degrees, some college, and advanced degrees. In addition, Southeastern Massachusetts ranks close to last in the number of residents with a Bachelor's degree.

Additionally, we attempted to offer comparisons between the SouthCoast's two major cities, Fall River and New Bedford, and a small group of Massachusetts cities collectively referred to as the Gateway Cities. This group of eleven older, urban communities includes Brockton, Fitchburg, Haverhill, Holyoke, Lawrence, Lowell, Pittsfield, Springfield, and Worcester, as well as Fall River and New Bedford. In Figures 37, 38, and 39 presented in the following pages we compared data across several indicators in an attempt to determine any potential relationships or practices in other communities that could be helpful in crafting strategies to apply in our region's urban districts.

Despite similarities in the kinds of challenges that these cities face, Fall River and New Bedford do not fare well in comparison to the other Gateway Cities. Yet their placement in this group of cities does help to put the dropout issue in Fall River and New Bedford in better perspective. By examining this data, we note that the relationship between per-capita income and graduation rates is present. The five urban districts with the lowest per-capita income also have the highest dropout rates (see Figure 37). However, Brockton and Lowell appear to perform significantly better than Fall River and New Bedford on dropout measures despite the fact that these cities have very similar demographics to Fall River and New Bedford and have only slightly higher levels of per-capita income. As a result of these findings, we decided to conduct a

**Figure 36:** Educational Attainment of Persons 25 & Older (2006)




(Source: Executive Office of Housing & Economic Development, Commonwealth of Massachusetts, *A Framework for Action. The State Regional Economic Development Strategy, State and Regional Profiles*, January 2009, p. 52, http://www.mass.gov/Ehed/docs/EOHED/Economic_Framework/Framework_State_&_Regional.pdf)

more in-depth analysis of this disparity. In reviewing data for Brockton and Lowell, we first set out to determine whether these two communities, with dropout rates nearly half of those in the SouthCoast's major cities, were outspending Fall River and New Bedford's districts in any significant way. Since Fall River actually possesses one of the highest per-pupil spending rates among the eleven Gateway Cities, using per-pupil spending to determine rates of dropout is not useful (see Figure 37).

In addition, the research team looked at demographic data for each of the Gateway Cities and focused on numbers for Brockton, Lowell, Fall River, and New Bedford. Aside from racial background, the research team also considered the number of special education students and students whose first language was not English. After analyzing this data, no clear evidence could be gathered that would potentially explain higher levels of risk or dropout in Fall River and New Bedford (see Figure 38).

The variable analyzed that did stand out was the levels of education attainment among the adult population in each city. Compared to Fall River and New Bedford, Brockton and Lowell possessed adult populations with higher rates of high school graduation. In analyzing this data for the Gateway Cities, we determined that in addition to per-capita income, the educational attainment levels of a city's adult population would appear to be related to a community's dropout rates. For the purpose of demonstrating this point, let us look at four of the Gateway Cities in Figure 39 with some of the highest 4-year cohort dropout rates among the eleven cities: Lawrence (36.5 percent), Fall River (31.9 percent) Springfield (28.4 percent), and New Bedford (26.8 percent). Not only do these communities have the highest proportion of adults with no high school degree (36.5 percent, 33.9 percent, 25.6 percent, and 35.9 percent, respectively), but they are also the bottom four communities with regards to adult populations that have some college experience or degree (30.7 percent, 34 percent, 40.3 percent, and 31.8 percent, respectively). Such findings are consistent with dropout prevention research indicating that parental academic achievement plays a significant role in determining a child's level of academic success and likelihood to graduate. This theory is based on the limitations that low educational attainment affords a parent in being effectively engaged in their child's

**Figure 37:** Graduation & Dropout Rates, Per-Capita Income, Average Class Size, & Per-Pupil Spending in Massachusetts Gateway Cities

| District | 4-Year Cohort Graduation Rate (2008) | 4-Year Cohort Dropout Rate (2008) | Per-Capita Income | Average Class Size (High School) | Per-Pupil Spending |
|---|---|---|---|---|---|
| **Brockton** | **72.8%** | **16.0%** | **$21,492** | **30** | **$12,107** |
| **Fall River** | **56.0%** | **31.85%** | **$20,033** | **30** | **$12,686** |
| Fitchburg | 72.0% | 18.6% | $22,599 | 22 | $11,351 |
| Haverhill | 68.5% | 15.6% | $28,848 | 25 | $10,702 |
| Holyoke | 49.8% | 32.9% | $19,758 | 25-30 | $14,719 |
| Lawrence | 35.8% | 36.5% | $15,547 | 18 | $12,039 |
| **Lowell** | **73.8%** | **11.1%** | **$21,780** | **28** | **$12,005** |
| **New Bedford** | **56.1%** | **26.8%** | **$19,526** | **22** | **$11,843** |
| Pittsfield | 74.0% | 12.5% | $24,983 | 24 | $11,487 |
| Springfield | 54.4% | 28.4% | $17,467 | 29-33 | $12,443 |
| Worcester | 68.2% | 14.8% | $23,537 | 25-30 | $12,377 |

Source: Graduation Rate, Dropout Rate, and Per-Pupil Spending: Massachusetts Department of Education
Per-Capita Income: U.S. Census Bureau, American Community Survey, 3-Year Estimates for 2005-2007
Average Class Size reported by each school district

## Figure 38: Demographics in Gateway City Schools

| District | African American | Asian | Hispanic | White | 1st Language Not English | Special Education |
|---|---|---|---|---|---|---|
| **Brockton** | **49.5%** | **2.5%** | **13.6%** | **30.6%** | **31.7%** | **14.2%** |
| **Fall River** | **7.6%** | **4.4%** | **15.4%** | **69.5%** | **26.4%** | **17.5%** |
| Fitchburg | 6.6% | 6.1% | 39.4% | 45.3% | 29.4% | 20.6% |
| Haverhill | 4.0% | 1.6% | 21.8% | 72.1% | 13.6% | 20.1% |
| Holyoke | 3.3% | 0.9% | 76.4% | 19.3% | 51.0% | 25.0% |
| Lawrence | 1.9% | 2.6% | 89.1% | 6.3% | 80.7% | 18.6% |
| **Lowell** | **6.7%** | **28.5%** | **24.4%** | **38.9%** | **45.1%** | **15.9%** |
| **New Bedford** | **11.8%** | **1.1%** | **27.4%** | **51.4%** | **22.1%** | **19.0%** |
| Pittsfield | 10.4% | 1.6% | 7.2% | 77.7% | 5.3% | 17.2% |
| Springfield | 23.2% | 2.2% | 54.8% | 15.7% | 23.7% | 23.9% |
| Worcester | 13.6% | 7.9% | 36.4% | 39.0% | 40.8% | 20.3% |

Source: Massachusetts Department of Education

## Figure 39: Educational Attainment of the Adult Population (over 25 years of age) and Dropout Rates in Gateway Cities

| District | No High School Diploma | High School Graduate | Some College, Associate's, Bachelor's, & Graduate Degrees | 4-Year Cohort Dropout Rate |
|---|---|---|---|---|
| **Brockton** | **18.9%** | **36.6%** | **44.6%** | **16.0%** |
| **Fall River** | **33.9%** | **32.1%** | **34.0%** | **31.9%** |
| Fitchburg | 19.1% | 36.4% | 44.6% | 18.6% |
| Haverhill | 10.9% | 33.1% | 56.0% | 15.6% |
| Holyoke | 21.9% | 30.4% | 47.6% | 32.9% |
| Lawrence | 36.5% | 32.9% | 30.7% | 36.5% |
| **Lowell** | **22.9%** | **32.7%** | **44.4%** | **11.1%** |
| **New Bedford** | **35.9%** | **32.2%** | **31.8%** | **26.8%** |
| Pittsfield | 12.4% | 34.5% | 53.2% | 12.5% |
| Springfield | 25.6% | 34.1% | 40.3% | 28.4% |
| Worcester | 16.5% | 32.0% | 51.6% | 14.8% |

Source: Dropout Rate: Massachusetts Department of Education
Educational Attainment: U.S. Census Bureau, American Community Survey, 3-Year Estimates for 2005-2007

learning and in being a role model for educational motivation

While these findings offer a great view into the cyclical nature of the dropout problem, they also present serious implications and challenges that must be overcome on a broad basis in order for any regional effort at reducing high school dropout to be effective.

## *District Risk Levels*

Socioeconomic status and a community's focus on education are not the only predictors of dropout behavior. The various categories of influencing factors have already been discussed in-depth earlier in this section of the report, and examining each SouthCoast school district in terms of these factors helps to determine possible and probably causes for existing levels of dropout behavior. Five additional indicators related to dropout behavior and appropriate measures of their status are listed in Figure 40.

### *Poor Attendance*

Each year, school districts are required to report both the average number of absences for its students, as well as the corresponding average rate of attendance. The average number of absences per student and attendance rates for the SouthCoast's school districts can be seen in Figure 41.

Almost all of the towns from Group 1 have attendance rates above the state average; Freetown-Lakeville's attendance rate falls slightly below the state average 0.1 percent. The towns from Group 2 (Fairhaven, Seekonk, Swansea, Westport, and Wareham) are all very close to the state average - Seekonk and Fairhaven have rates slightly above the state average (1.1 percent and .07 percent, respectively) while Wareham falls slightly below the state average by 0.8 percent and Westport is equal. Fall River and New Bedford, the cities that make up Group 3, both have attendance rates well below the state average.

### *Retention/Overage for Grade*

While student retention is often necessary, it typically has a negative effect on a student's commitment to completing his or her education. Students held back often experience alienation as a result of being removed from the classmates they have grown accustomed to. This alienation is frequently a cause for

**Figure 41:** 5-Year Attendance Average (2003-2007)

| School District | Average Absences Per Student | Attendance Rate |
|---|---|---|
| Rochester | 6.3 | 96.4% |
| Marion | 6.7 | 96.2% |
| Mattapoisett | 6.6 | 96.2% |
| Acushnet | 6.8 | 96.2% |
| Dartmouth | 7.3 | 95.8% |
| Lakeville | 7.5 | 95.7% |
| Seekonk | 7.5 | 95.7% |
| Fairhaven | 8.1 | 95.3% |
| Freetown | 8.4 | 95.1% |
| Swansea | 8.5 | 95.1% |
| Old Rochester | 8.5 | 95.0% |
| Westport | 9.2 | 94.6% |
| **Massachusetts** | **9.3** | **94.6%** |
| Freetown-Lakeville | 9.5 | 95.5% |
| Wareham | 10.4 | 93.8% |
| New Bedford | 12.1 | 92.7% |
| Somerset | 14.5 | 91.6% |
| Fall River | 14.5 | 91.3% |

Source: Massachusetts Department of Education Student Indicators Data, 2003-2004 through 2007-2008.

**Figure 40:** Common Dropout Risk Indicators and Appropriate Measures

| Indicator | Measure(s) |
|---|---|
| Poor Attendance | Average number of absences, attendance rates |
| Retention/Overage for Grade | Percent of population retained |
| Low Achievement | MCAS performance results |
| Misbehavior/ Behavioral Problems | Rate of in-school/out-of-school suspensions |
| Low Socioeconomic Status | Percent of student population who receive free or reduced lunch |

dropout behavior to develop. The SouthCoast school districts and their respective retention rates are provided in Figure 42.

A district's retention rate reflects the total portion of the population that was retained each year. Group 1's districts all have retention rates below the state average. Group 2's districts mostly fall above the state average, while Group 3's districts retain almost three times as many student's as the state average.

*Low Achievement*

Students who find it difficult to succeed academically frequently develop dropout behavior. A student who fails exams or has difficulty understanding lessons or participating in classroom discussion experiences a kind of social isolation. These students also have a tendency to give up on their education by deciding that high school just "isn't for them." In order to measure academic achievement, one can look to a district's scores on the Massachusetts Comprehensive Assessment System (MCAS). Since the exam covers both literary and mathematical skills, as well as science, technology, history, and social sciences, it provides a picture of a district's general achievement across the whole of academic study.

Due to the variety in districts, it is important to select an appropriate set of MCAS scores. The MCAS exam is taken annually by students in grades three through eight, and then again in the tenth grade. Each exam includes one or more subject areas, determined by grade. Students in eleventh or twelfth grade retake the tenth grade exam if they did not pass both English Language Arts (ELA) and Math. For the purposes of this analysis, the eighth grade exam scores are compared and ranked. Eight grade is the last year before a student enters high school, and represents the point at which students begin to make important decisions about their future and the path their education will take.

It should be noted that the ranking of districts is done on the basis of each district's Composite Performance Index, or CPI. The CPI is calculated by combining the scores from the standard ELA and Math exams with those of the MCAS-Alternative Assessment exam administered to students who are exempt from completing the standard MCAS exam due to severe or complex disabilities. The CPI reflects students' progression towards mastery of the appropriate subject area (marked by a CPI value of 100). Additionally, the data set analyzed is from the 2006, 2007, and 2008 exams, and is comprised of the English Language Arts, Math, and Science exam results. Prior to 2006, eighth

## SouthCoast Communities by Group

(Using Educational Attainment & Median Income)

| Group 1 | Group 2 | Group 3 |
|---|---|---|
| Acushnet | Fairhaven | Fall River |
| Dartmouth | Seekonk | New Bedford |
| Freetown | Somerset | |
| Lakeville | Swansea | |
| Marion | Wareham | |
| Mattapoisett | Westport | |
| Rochester | | |

**Figure 42:** Average Retention Rate (2002-2006)

| School District | Retention Rate |
|---|---|
| Freetown-Lakeville | 0.6% |
| Freetown | 0.6% |
| Seekonk | 0.6% |
| Mattapoisett | 0.7% |
| Rochester | 0.8% |
| Old Rochester | 1.0% |
| Marion | 1.1% |
| Acushnet | 1.7% |
| Lakeville | 1.7% |
| Swansea | 2.0% |
| Dartmouth | 2.0% |
| **Massachusetts** | **2.1%** |
| Westport | 3.4% |
| Fairhaven | 3.6% |
| Wareham | 4.9% |
| Fall River | 5.9% |
| New Bedford | 5.9% |
| Somerset | 6.1% |

Source: Massachusetts Department of Education Student Indicators Data, 2002-2003 through 2005-2006 (2006-07 and 2007-2008).

**Figure 43:** 2006-2008 MCAS English Language Arts (ELA) Scores (3-year average)

| District | P+/A | P | NI | W/F | CPI |
|---|---|---|---|---|---|
| Old Rochester | 16.0% | 71.0% | 10.7% | 2.3% | 94.8 |
| Somerset | 12.7% | 72.3% | 12.3% | 2.3% | 93.9 |
| Freetown-Lakeville | 13.3% | 70.0% | 14.7% | 2.0% | 93.7 |
| Acushnet | 7.0% | 75.3% | 14.7% | 3.0% | 96.6 |
| Swansea | 7.7% | 72.7% | 16.7% | 3.0% | 93.2 |
| Dartmouth | 8.0% | 70.3% | 18.3% | 3.0% | 92.0 |
| Westport | 9.3% | 66.0% | 18.0% | 7.0% | 89.7 |
| Seekonk | 13.3% | 62.3% | 19.0% | 5.3% | 89.3 |
| **Massachusetts Totals** | **7.0%** | **64.0%** | **22.7%** | **6.3%** | **87.9** |
| Fairhaven | 2.0% | 67.7% | 23.0% | 8.0% | 86.9 |
| Wareham | 5.3% | 63.3% | 24.0% | 7.8% | 86.9 |
| Fall River | 3.0% | 50.7% | 33.0% | 13.0% | 79.7 |
| New Bedford | 2.7% | 50.0% | 33.7% | 13.7% | 78.2 |

Source: Massachusetts Department of Education MCAS Performance Results.

**Figure 44:** 2006-2008 MCAS Math Scores (3-year average)

| District | P+/A | P | NI | W/F | CPI |
|---|---|---|---|---|---|
| Old Rochester | 22.3% | 40.0% | 24.3% | 12.7% | 81.5 |
| Acushnet | 13.7% | 38.3% | 31.7% | 16.7% | 75.7 |
| Somerset | 15.3% | 36.0% | 32.7% | 15.7% | 75.6 |
| Freetown-Lakeville | 15.7% | 35.0% | 31.7% | 17.3% | 74.8 |
| Dartmouth | 15.3% | 33.7% | 32.3% | 18.3% | 74.3 |
| **Massachusetts Totals** | **16.3%** | **28.0%** | **29.0%** | **26.3%** | **69.0** |
| Swansea | 10.7% | 28.3% | 38.0% | 23.0% | 68.3 |
| Westport | 11.0% | 27.3% | 33.0% | 28.3% | 66.7 |
| Seekonk | 11.3% | 26.0% | 32.3% | 30.0% | 65.1 |
| Fairhaven | 8.3% | 23.7% | 35.7% | 32.0% | 62.5 |
| Wareham | 7.0% | 20.7% | 40.3% | 32.0% | 59.6 |
| New Bedford | 4.0% | 15.7% | 32.3% | 48.3% | 50.2 |
| Fall River | 4.3% | 15.0% | 33.0% | 48.7% | 50.1 |

Source: Massachusetts Department of Education MCAS Performance Results.

**Figure 45:** 2006-2008 MCAS Science Scores (3-year average)

| District | P+/A | P | NI | W/F | CPI |
|---|---|---|---|---|---|
| Old Rochester | 4.0% | 44.3% | 41.7% | 9.7% | 77.8 |
| Somerset | 2.0% | 40.0% | 48.3% | 9.3% | 75.3 |
| Acushnet | 1.7% | 38.7% | 46.3% | 14.0% | 74.3 |
| Swansea | 2.7% | 37.3% | 47.3% | 12.7% | 73.7 |
| Dartmouth | 2.0% | 36.7% | 45.7% | 15.7% | 71.7 |
| Freetown-Lakeville | 2.0% | 36.0% | 48.7% | 13.7% | 71.6 |
| Westport | 2.3% | 31.7% | 44.3% | 22.0% | 68.2 |
| Massachusetts Totals | 3.3% | 31.7% | 41.3% | 24.0% | 66.6 |
| Seekonk | 1.7% | 30.7% | 47.0% | 21.0% | 66.4 |
| Fairhaven | 1.7% | 26.3% | 49.0% | 22.7% | 64.5 |
| Wareham | 1.3% | 16.0% | 56.3% | 26.3% | 57.4 |
| Fall River | 0.3% | 15.7% | 48.3% | 36.0% | 54.1 |
| New Bedford | .03% | 9.0% | 42.0% | 48.3% | 46.1 |

Source: Massachusetts Department of Education MCAS Performance Results.

grade students only took the Math and Science exams, so the scores analyzed represent a three-year average instead of the typical five-year average.

There are four score categories for the MCAS—Above Proficient/Advanced (P+/A), Proficient (P), Needs Improvement (NI), and Warning/Failing (W/F). Each district's MCAS scores are presented in Figures 43, 44, and 45.

For MCAS English Language Arts scores, the Group 1 communities all performed well above the state averages in P+/A scores, P+ scores, and CPI. Somerset, a Group 2 community, ranked third overall in terms of P scores and second overall in terms of CPI. Swansea, another Group 2 community ranked fifth in terms of P score and sixth overall in terms of CPI. Westport and Seekonk's scores are slightly above the state averages for P+/A and CPI. Fairhaven was below the state average in P+/A scores and slightly below in CPI, but it was also slightly higher than the state in terms of P scores. Wareham's P+/A, P, and CPI scores were all slightly below the state average. Fall River and New Bedford, the two Group 3 communities, posted scores well below the state average.

For MCAS Math scores, the Group 1 communities were once again well above the state average in every category except P+/A scores. Somerset, a Group 2 community, scored above the state average for P and CPI scores. The other Group 2 communities all scored below the state average for CPI scores while their NI scores were greater than the state average by five percentage points or more. Wareham, New Bedford, and Fall River once again occupy the lowest rankings.

For MCAS Science scores, the Group 1 communities scored well above the state average in P and CPI scores. Old Rochester had the best scores in the region with 4 percent of its students receiving a P+/A score, compared to the state average of 3.3 percent. The Group 2 communities are split in half, with Somerset, Swansea, and Westport scoring above the state average in CPI. Seekonk, Fairhaven, and Wareham, also Group 2 communities scored below the state average in P+/A, and CPI scores. Fall River and New Bedford, the Group 3 communities, scored well below the state average in P+/A, P, and CPI scores.

*Misbehavior/Behavioral Problems*

A common problem in schools is student misbehavior. There are many factors which cause behavioral problems to arise, including detachment, isolation, and/or boredom. Behavioral problems can also be indicative of deeper issues, stemming from familial problems or health issues. Regardless of the reasons behind them, behavioral issues are strongly linked with

the development of dropout behavior.

It is possible to measure the existence of misbehavior in a school district using the Massachusetts Department of Education's statistics and reports. Two indicators will be used to measure levels of misbehavior: rate of in-school suspension and rate of out-of-school suspension. These data sets include suspension rates from elementary and middle schools in each district (see Figures 46).

The results of ranking districts according to their suspension rates mirror the other types of ranking already completed. The Group 1 districts tend to have suspension rates well below the state average, while Group 3 district rates are significantly higher (between twice and three times higher). The Group 2 districts have rates approximately equal to the state average. It should be noted that there are a few anomalies. Dartmouth and Old Rochester both have in-school suspension rates well above the state average, and Freetown-Lakeville's out-of-school suspension rate is above the state average. There are a number of potential reasons for these anomalies. Suspension rates are unlike the other indicators and measures used in this analysis, due to the largely arbitrary nature of their application. Each district and administration has its own practices, tendencies, and ideas in the area of student discipline, which in turn affects suspension rates. What is important is that the trend already identified in this analysis with regard to the three groups largely holds true within the context of suspension rates.

*Low Socioeconomic Status*

The fifth and final additional indicator of dropout behavior is low socioeconomic status. The Massachusetts Department of Education measures the number of students in each district who are classified as low-income. There are three possible definitions for "low-income": the student is eligible for free or reduced price lunch, the student receives the

**Figure 46:** SouthCoast School District Suspension Rates, 5-Year Averages (2002-07)

**In-School Suspensions**

| School District | Suspension Rate |
|---|---|
| Freetown | 0.0% |
| Rochester | 0.0% |
| Lakeville | 0.1% |
| Mattapoisett | 0.1% |
| Marion | 0.2% |
| Seekonk | 0.4% |
| Acushnet | 0.7% |
| Freetown-Lakeville | 1.3% |
| Westport | 1.3% |
| Wareham | 2.9% |
| Swansea | 3.7% |
| **Massachusetts Average** | **3.7%** |
| Fairhaven | 4.4% |
| New Bedford | 4.6% |
| Dartmouth | 6.2% |
| Old Rochester | 8.6% |
| Fall River | 14.3% |
| Somerset | 14.4% |

**Out-of-School Suspensions**

| School District | Suspension Rate |
|---|---|
| Freetown | 0.0% |
| Lakeville | 0.0% |
| Mattapoisett | 0.0% |
| Rochester | 0.1% |
| Marion | 0.3% |
| Acushnet | 0.7% |
| Westport | 3.0% |
| Dartmouth | 4.3% |
| Seekonk | 4.4% |
| Old Rochester | 5.3% |
| **Massachusetts Average** | **6.0%** |
| Fairhaven | 7.5% |
| Swansea | 6.9% |
| Freetown-Lakeville | 8.9% |
| Wareham | 11.3% |
| Somerset | 11.4% |
| New Bedford | 12.0% |
| Fall River | 17.3% |

Source: Massachusetts Department of Education Indicators Data, 2003-04 through 2007-08.

Transitional Aid to Families benefits, or the student is eligible for food stamps. The percentage of each district's population that is classified as low income is presented in Figure 47.

The previously-established trends and groupings once again hold firm. The Group 1 districts all have small populations of low-income students. The districts that make up or contribute to Old Rochester (Marion, Mattapoisett, and Rochester) all have low-income rates less than a quarter of the state average. The other districts and towns also have rates well below the state average –ranging from 4.9 percent in Lakeville to 13.7 percent in Acushnet. The Group 3 districts both have significant low-income populations, with Fall River and New Bedford having rates that are twice the state average. The Group 2 districts fall on either side of the state average, with Westport and Fairhaven below and Wareham slightly above.

*Risk Level Index*

After examining the various school districts in terms of dropout risk factors, it is possible to classify them as "low," "medium," or "high" risk districts. A district with low MCAS achievement, a high number of low-income students, and frequent disciplinary action would be classified as "high risk." As such, students in these districts would be more likely to drop out of school. Conversely, a district with high MCAS achievement, low frequency of disciplinary action, and high levels of attendance would be classified as "low risk."

To determine which category each district in the SouthCoast fit into, each district was scored using an index point system. A total of eight variables were used, which reflect the indicators analyzed in this section of the report. They include attendance rate, number of retentions, MCAS English Language Arts scores, MCAS Math scores, MCAS Science scores, number of in-school suspensions, number of out-of-school suspensions, and number of low-income students. Instead of measuring academic achievement as a whole, each portion of the MCAS exam is used as a separate variable because of variations in scoring for each district. Additionally, behavior problems are measured using both in-school and out-of-school suspension rates because of the subjective nature of enforcing student discipline. Each district is scored on a scale of 1 to 3 depending on its score or rank compared to the state average (see Figure 48).
The "equivalency range," which was used in comparing each district's numbers to that of the entire

**Figure 47:** Low-Income Rate 5-Year Average 2002-2007

| School District | Low-Income Rate |
|---|---|
| Lakeville | 4.9% |
| Marion | 5.5% |
| Old Rochester | 5.5% |
| Rochester | 5.8% |
| Mattapoisett | 6.2% |
| Freetown-Lakeville | 7.4% |
| Seekonk | 8.0% |
| Freetown | 8.4% |
| Somerset | 9.1% |
| Swansea | 11.0% |
| Dartmouth | 11.6% |
| Acushnet | 13.7% |
| Westport | 14.6% |
| Fairhaven | 19.6% |
| **Massachusetts Average** | **28.3%** |
| Wareham | 37.7% |
| Fall River | 59.9% |
| New Bedford | 65.0% |

Source: Massachusetts Department of Education Enrollment by Selected Populations data, 2003-04 through 2006-08.

**Figure 48:** Risk Level Index Variables & Index Score Classification Ranges

- Attendance Rate
- Number of Retentions
- MCAS Math Scores
- MCAS English Language Arts Scores
- MCAS Science Scores
- Number of In-School Suspensions
- Number of Out-of-School Suspensions
- Number of Low-Income Students

| Index Score | Classification |
|---|---|
| 8 - 12 | Low Risk District |
| 13 - 18 | Medium Risk District |
| 19 - 24 | High Risk District |

state across the eight variables, was determined separately for each indicator. This is because of the nature of the indicators. Some, such as attendance rate or retention rate, have little variation is the district data, which necessitated a smaller equivalency range in order to properly classify each district. Other indicators, especially the low-income rates, had greater variability between districts, thereby allowing for a wider equivalency range to be used when determining each district's position relative to the state and other SouthCoast districts. Each equivalency range was determined by the staff of the Urban Initiative looking at the scores alone, ignoring the districts they were associated with. This was done to ensure that no bias was present in determining the equivalency ranges. The complete index along with the equivalency range for each variable can be seen in Figure 49.

Examining the risk level of each district that has a public high school shows that the previous groupings largely hold true when they were assessed using income and adult educational attainment levels. Among those districts classified as low risk, two (Freetown-Lakeville and Old Rochester, which includes Marion, Mattapoisett, and Rochester) were previously in Group 1 while one district (Seekonk) was previously in Group 2. There were also five medium risk districts, of which Dartmouth was previously a part of Group 1 while Swansea, Westport, Somerset, and Fairhaven were part of Group 3. Among the three districts classified as high risk, Fall River and New Bedford were previously part of Group 3 while Wareham was situated in Group 2 (see Figure 49).

**Figure 49:** District Index Scores & Risk Levels

| District | Attendance Rate | Number of Retentions | MCAS Math | MCAS Science | MCAS ELA | In-School Suspensions | Out-of-School Suspensions | Low-Income Rate | Total Score |
|---|---|---|---|---|---|---|---|---|---|
| Dartmouth | 1 | 2 | 2 | 1 | 1 | 3 | 2 | 2 | 14 |
| Fairhaven | 2 | 3 | 2 | 3 | 2 | 2 | 2 | 2 | 18 |
| Fall River | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 24 |
| Freetown-Lakeville | 2 | 1 | 1 | 1 | 1 | 1 | 3 | 1 | 11 |
| New Bedford | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 23 |
| Old Rochester | 2 | 1 | 1 | 1 | 1 | 3 | 2 | 1 | 12 |
| Seekonk | 1 | 1 | 2 | 2 | 2 | 1 | 2 | 1 | 12 |
| Somerset | 3 | 3 | 1 | 1 | 1 | 3 | 3 | 2 | 17 |
| Swansea | 2 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 14 |
| Wareham | 2 | 3 | 2 | 3 | 3 | 2 | 3 | 2 | 20 |
| Westport | 2 | 3 | 2 | 2 | 2 | 1 | 1 | 2 | 15 |
| **Equivalency Range** | **(+/-) 1%** | **(+/-) 1%** | **(+/-) 5%** | **(+/-) 5%** | **(+/-) 5%** | **(+/-) 2%** | **(+/-) 2%** | **(+/-) 20%** | |

| School District | Total Score | Risk Level |
|---|---|---|
| Freetown-Lakeville | 11 | Low Risk |
| Old Rochester | 12 | Low Risk |
| Seekonk | 12 | Low Risk |
| Dartmouth | 14 | Medium Risk |
| Swansea | 14 | Medium Risk |
| Westport | 15 | Medium Risk |
| Somerset | 17 | Medium Risk |
| Fairhaven | 18 | Medium Risk |
| Wareham | 20 | High Risk |
| Fall River | 23 | High Risk |
| New Bedford | 24 | High Risk |

# Best Strategies for the SouthCoast

As previously mentioned, there is no single reason that causes dropout behavior to develop. Instead, an at-risk student experiences pressure from a variety of sources, both internal and external, from both school and home. As such, no single technique can, by itself, prevent dropout behavior. Instead, successful prevention programs must utilize several techniques and strategies. Of course, the number, type, and intensity of prevention efforts vary with a community or district's risk level. Additionally, the factors influencing dropout behavior differ between low risk and high risk communities.

A central focus of the work performed herein involved selecting the best, most effective dropout prevention strategies for use in the SouthCoast region, as part of a plan to be implemented by the SouthCoast Development Partnership (SCDP) in concert with other regional stakeholders. In doing so, research was conducted to determine a broad spectrum of options from which to choose a more narrowed, focused agenda for action.

Most all of the efforts to identify the universe of options led back to a group of strategies devised by the National Dropout Prevention Center/Network (NDPC/N) at Clemson University, referred to as their "Fifteen Research-Based Strategies" for preventing dropout. While there is a significant amount of research and other models and strategies, the difference is mostly one of definition and programmatic labeling. Almost all of the approaches reviewed fall within one of the National Dropout Prevention Center's fifteen broadly defined strategies and, as such, has led us to determine that we would utilize those fifteen strategies as the basis for analyzing and recommending a course of action.

Many states and communities have adopted a dropout prevention approach based on the strategies developed by the NDPC/N. Mississippi and Arizona have adopted the fifteen strategies and require local school districts to report back regularly on implementation efforts. The state of Washington has chosen to focus on one strategy, School-Community Collaborations, as a prime strategy for dropout reduction. The strategies are meant to be complimentary and interconnected, but have the ability to stand alone as well (see Figure 51).

While the NDPC/N believes that effective dropout prevention should include some measure of all fifteen of their proposed strategies, they recognize that a concentrated focus on a limited number can be effective and help ensure aggressive action in targeted ways. Such a recognition also comes with the understanding that certain strategies are more effective with certain

## About the National Dropout Prevention Center/Network

The National Dropout Prevention Center/Network (NDPC/N) was established in 1986 to serve as a clearinghouse on issues related to dropout prevention and to offer strategies designed to increase the graduation rate in America's Schools. Over the years, the NDPC/N has become a well-established national resource for sharing solutions for student success.

The NDPC/N serves as a research center and resource network for practitioners, researchers, and policy makers to reshape school and community environments to meet the needs of youth in at-risk situations, including students with disabilities so they receive the quality education and services necessary to succeed academically and graduate from high school. NDPC/N is a well established national resource for sharing solutions that promote student success. It does so through its clearinghouse function, active research projects, publications, and a variety of professional development activities. The NDPC/N also conducts a variety of third-party evaluations and Program Assessment and Reviews. The program review process helps schools develop the capacity for self-directed, continuous school improvement with an emphasis on improving student academic achievement and increasing the graduation rate. By promoting awareness of successful programs and policies related to dropout prevention, the work of the NDPC/N and its members has made an impact on education from the local to the national level.

Source: National Dropout Prevention Center/Network website, "About NDPC/N" (http://www.dropoutprevention.org/about/default.htm)

Smink, Jay and Franklin P. Schargel. *Helping Students Graduate: A Strategic Approach to Dropout Prevention*. New York: Eye on Education (2004) page V.

populations, and that certain strategies might be easier to implement due to the existence of on-going programs or the strength of the leadership capacity to implement. There are other factors as well, such as time, budget constraints, and political feasibility that could pose challenges to implementing the full range of prevention strategies. As a result, it is sometimes necessary to examine the factors individually in order to determine which particular strategy or set of strategies is best suited to the climate at hand.

We are recommending, based on our analysis and discussions with members of the SCDP, that it would be more efficient to select a handful of strategies (approximately four to six) upon which to focus regional efforts and that the Partnership's role and work would be more effective with a concentrated plan for implementation. Such an approach has also been confirmed as sound by Dr. Jay Smink, Executive Director of the NDPC/N for the past twenty years, who made himself available for a primary interview for the purpose of this study.

## Methodology

In determining which strategies would be best for consideration as part of a regional dropout prevention plan for the SouthCoast, we established five scales upon which to evaluate the strategies discussed in this study. The scales include: *Efficacy*, which assesses strategies based upon their level of effectiveness as determined by existing national research; *Flexibility*, which ranks each strategy based upon its frequency of use among nationally-recognized dropout prevention programs; *Applicability*, which selects strategies by their ability to have the greatest impact on SouthCoast students based upon each district's demographic profile and corresponding district risk level; *Expandability*, which selects strategies based upon their frequency of use among existing dropout prevention programs in the SouthCoast region; and *Utility*, which measures strategies that are aligned with the strengths of the SouthCoast Development Partnership and its capacity to foster program implementation (see Figure 50).

Selecting the best strategies based solely on general effectiveness would prove to be too subjective a process. The broadness of the categories has relegated the national research to a series of reviews of the effectiveness of individual programs within each strategy category. Given the subjectivity of much of the overall research, it was determined that we would consider other, more practical factors related to our particular regional circumstances. We worked on the assumptions that each of the fifteen strategies put forth by the NDPC/N has experienced some measure of success in a variety of settings.

Our methodology, therefore, involves devising a way to assess each of the strategies based upon their general effectiveness and relevance to the region. This led to the selection of several criteria used to develop five assessment scales. Our final recommendations are based upon the frequency with which each strategy appears in each of the five scales. While we have approached the task with as much neutrality and objectivity as possible, there is a certain level of subjective analysis in such evaluations. As such, we attempted to thoroughly explain our rationale for strategy selection on each scale. In addition, we recognize that the recommendations should allow for continued discussion within the SCDP and the region about the factors that determine the most effective dropout prevention practices and how they should be implemented.

## Efficacy

The general effectiveness of dropout prevention strategies is often difficult to assess. Each of the strategies bears unique characteristics and a variation

**Figure 50:** Best Strategy Analysis Assessment Scales

| | |
|---|---|
| *Efficacy:* | *This scale assesses strategies based upon their level of effectiveness as determined by existing national research* |
| *Flexibility:* | *This scale ranks each strategy based upon its frequency of use among nationally-recognized dropout prevention programs* |
| *Applicability:* | *This scale selects strategies by their ability to have the greatest impact on SouthCoast students based upon each district's demographic profile and corresponding risk level.* |
| *Expandability:* | *This scale selects strategies based upon their frequency of use among existing dropout prevention programs in the SouthCoast region.* |
| *Utility:* | *This scale measures strategies that are aligned with the strengths of the SouthCoast Development Partnership* |

**Figure 51:** *Effective Strategies for Dropout Prevention from the NDPC/N*

### Early Interventions

*Family Engagement*: research consistently finds that parent/family involvement that is linked to student learning has a greater effect on student achievement than more general forms of involvement. To be effective, the form of involvement should be focused on improving achievement and be designed to engage families and students in developing specific knowledge and skills.

*Early Childhood Education*: early stimulation is essential if young children are to develop and become constructive and creative members of society. These programs provide birth-to-five interventions and additional enrichment that is developmentally appropriate and can enhance brain development.

*Early Literacy Development*: provides early interventions that help low-achieving students improve their reading and writing skills and establishes the necessary foundation for effective learning.

### Basic Core Strategies:

*Mentoring/Tutoring*: provides a one-to-one caring, supportive relationship between a mentor/tutor and a mentee/student that is based on trust.

*Service-Learning*: connects meaningful community service experiences with academic learning. It promotes personal and social growth, career development, and civic responsibility and can be a powerful vehicle for effective school reform.

*Alternative Schooling*: provides potential dropouts a variety of options that can lead to graduation, with programs paying special attention to the student's individual social needs and academic requirements for a high school diploma

*After-School Opportunities*: provides after-school and summer enhancement programs that eliminate information loss and inspire interest in a variety of areas – these can be particularly important for students at risk of school failure because they fill in the afternoon "gap-time" with constructive engagement activities.

### School and Community Perspective:

*Systemic Renewal*: calls for a continuous process of evaluating goals and objectives related to school policies, practices, and organizational structures as they impact a diverse group of learners.

*School-Community Collaboration*: challenges all groups in a community to provide collective support to the schools, resulting in a strong infrastructure that sustains a caring environment where youth can thrive.

*Safe Learning Environments*: calls for a comprehensive violence prevention plan, including conflict resolution, that deals with potential violence as well as crisis management and provides daily experiences at all grade levels than enhance positive school attitudes and effective interpersonal skills.

### Making the Most of Instruction:

*Professional Development*: provides teachers who work with youth at high risk of academic failure the necessary support and opportunities to develop skills, techniques, and learn about innovative strategies.

*Active Learning*: embraces teaching and learning strategies that engage and involve students in the learning process by allowing them to find new and creative ways to solve problems, achieve success, and become lifelong learners.

*Educational Technology*: offers opportunities for delivering instruction to engage students in authentic learning by addressing multiple intelligences and adapting to students' learning styles.

*Individualized Instruction*: allows for flexibility in teaching methods and motivational strategies that takes into consideration each student's unique interests and past learning experiences.

*Career & Technical Education*: these school-to-work type programs recognize that youth need specific skills to prepare them to measure up to the increased demands of today's workplace.

Source: Smink, Jay and Franklin P. Schargel. *Helping Students Graduate: A Strategic Approach to Dropout Prevention*. New York: Eye on Education, 2004.

of program implementation within them that make evaluation across strategies a difficult and imprecise science. In attempting to identify strategies for this scale, we relied on research that has already been conducted nationally and analyzed each of the strategies for trends of demonstrated success. What follows represents our best estimate of the strategies that have a proven track record of being the most successful in dropout prevention.

### *Early Childhood Education*

This strategy is probably the most widely researched among all fifteen strategic areas. The results of decades of assessments have proven that early childhood intervention has great potential for reducing dropout rates and increasing a student's future commitment to stay in school.[44] There have been numerous studies that have determined that young children who experience hands-on, active stimulation of their sensory, cognitive, emotional, social, and verbal skills are more likely to stay in school and become more engaged in their community.[45]

Perhaps as a way to justify the significant expenditure of government funds, early childhood programs have been subjected to studies and assessments at a level much greater than many other programs and interventions. Early Childhood Education programs are typically expensive. As such, there has been a great demand for assessment and proof of results. In that context, these programs have held up very well.

Head Start, created as a national program in 1964 as part of President Lyndon Johnson's Great Society agenda, provided an excellent opportunity to conduct long-term assessments of the effects of early childhood intervention, particularly of at-risk students. Despite the ethical and practical challenges that are inherent to evaluations involving young students, reliable research has been conducted that clearly demonstrates success. The Perry Preschool Study, which was a longitudinal study conducted by Dr. David Weikart and Dr. Lawrence Schweinhart over nearly forty years, determined that while Head Start did not necessarily meet its initial goal of raising IQ scores, such programming confirmed that the at-risk four year olds who had participated in a high-quality, developmentally appropriate Head Start program gained significant social benefits including decreased dropout levels. Those same researchers also determined that for every dollar spent on a high-quality early childhood education program there is a return of seven dollars in preventative costs associated with incarceration, truancy, school dropout, and teen pregnancy.[46]

In addition to this and other traditional studies proving the efficacy of early childhood education in reducing dropout, a new form of research is adding to the data in positive ways. There has recently been a significant expansion of neuro-scientific research seeking to understand the effects of early stimulation on the brains of young children.[46] In the last ten years, scientists have greatly increased their understanding of how the brain works and develops. Children are born with all the brain cells and neurons they will ever have. The first several years of life are characterized by rapid brain growth affected by daily nutrition, motor development and exposure to stimuli, as well as verbal exchanges with adults and a range of other social and emotional interactions. Such interactions, the likes of which are found in and often characterize effective early childhood programs, have provided another method for demonstrating the success of such programs in dropout reduction.[47]

### *Family Engagement*

Research has determined that the impact of family engagement on student achievement is powerful. The effect of positive parental and family involvement in a student's learning has a proven correlation to higher graduation rates.[48]

In 2002, researchers published *A New Wave of Evidence: The Impact of School, Family, and Community Connections on Student Achievement*, which was a synthesis of 51 research studies that had been conducted on the subject dating back to 1994.[49] This groundbreaking research report indicated the effectiveness of family engagement as a dropout prevention strategy across all demographic categories, inclusive of socioeconomic background, race and ethnicity, and educational attainment levels of parents.

Important to note, however, is the distinction between programs that seek to engage families in the traditional sense, such as recruiting for PTOs and fund raising efforts, and those that have found ways to engage families in supporting the learning and academic efforts of their students. Engagement programs that are defined as "logically linked" to student learning are the ones that achieve the greatest results.[50] These programs need to have the improvement of student achievement as their primary focus. Examples include programs that combine students and parents in learning activities, programs that help train parents in how to communicate with their children about school and support and encourage that communication at home, and programs that train and encourage parents to be involved in homework through monitoring,

reviewing, and being active participants in homework activities.

Research has also determined that family engagement is important at all grade levels, even though the nature of that involvement may change. As students get older, parents sometimes falsely believe that involvement is not as important or necessary. Research specifically addresses the impact and the necessity of family engagement in the middle and early high school years in order to ensure the completion of high school and, increasingly, to ensure the continuation and completion of college studies.

*Mentoring/Tutoring*

As a strategy for teaching and providing students an opportunity to learn about real-life experiences from those who have encountered them, mentoring and tutoring have both been practiced within a variety of settings and diverse cultures over the course of hundreds of years, particularly in occupational and academic pursuits. Not only have mentors and tutors provided invaluable practical and theoretical information to mentees and learners of all types, but the value of a positive relationship with an experienced figure, a caring advisor, or a trusted confidante can prove to be a powerful confidence-building experience and a strong motivator.

The effectiveness of Mentoring/Tutoring, when examined within a dropout prevention context, is significant and measurable. As such, it has proven itself a durable approach by filling the role of a caring adult that is often missing in the lives of at-risk students. Even in those families where parents and other family members are physically and emotionally present, Mentoring/Tutoring can supplement a student's social and academic experiences in a way that families may not because the relationship of a mentor/mentee is based on choice rather than family ties.

The results of studies measuring the effectiveness of Mentoring/Tutoring as a dropout prevention strategy show that it is not only successful across a variety of youth groups, but that it is also particularly effective with at-risk youth.[51] Mentors help their mentees focus on goal-setting and help them see the relevance of staying in school. In addition to the relationship itself, this particular strategy has the benefit of attacking the dropout problem on multiple levels, including the encouragement of academic advancement, the fostering of a motivated outlook, the development of self-esteem, the establishment of school-to-life relevance, and the enhancement of problem-solving abilities.

Mentoring/Tutoring is also a community-building strategy. Additional benefits that accrue from a strong, comprehensive school-based mentoring program are the widespread involvement of the community and the opportunity for individuals not otherwise connected to their local schools to invest emotionally in what is happening within their walls. The community is able to assemble and foster a whole new set of advocates for public education with a greater understanding of the challenges that exist in today's schools. Moreover, the benefits of this strategy extend beyond school walls and clearly set a context for establishing responsibility for education throughout the entire community.

Most mentoring programs benefit from a specific structure and set of rules that include:

- a formal relationship between the mentor and the mentee,
- an established pattern for contacts,
- recommended parameters for the meetings or activities,
- a commitment to a time frame (usually 12 months or a school year),
- an ongoing, structured training program,
- monitoring and support by experienced professionals, and
- a consistent assessment and evaluation effort[52]

Mentoring programs can also be structured in a variety of ways, such as traditional mentoring, group mentoring, peer mentoring, team mentoring, intergenerational mentoring, and telementoring.

As a strategy, Mentoring/Tutoring can have its challenges, including the time commitment for volunteers, the social distance that can occur in some matches, the isolation of mentors in unstructured programs, the challenges created by the termination of a relationship, the difficulty recruiting mentors, and the difficulty in matching good mentors with students who have disabilities. Overall, however, it is seen as one of the most effective strategies and is even more popular due to its low-cost, low-tech nature.

The effectiveness of such programs is seen among both school-based and non-school-based programs. The most recognizable non-school-based program is the Big Brother/Big Sister organization. National comprehensive research conducted in 1995 shows the program's ability to significantly reduce conditions that lead to dropout. The impact of this program includes:

- a 46 percent decrease in initiating drug use,
- a 27 percent decrease in initiating alcohol use,
- a 38 percent decrease in the number of times hitting someone, and
- a 37 percent decrease in skipping classes[53]

The Commonwealth Fund's national survey of mentoring programs also reported similar results:

- 52 percent of students skipped school less,
- 48 percent of students improved their grades,
- 49 percent of students got into less trouble at school,
- 62 percent of students improved their self-esteem,
- 47 percent of students got into less trouble outside of school, and
- 35 percent of students improved their family relationships[54]

## Flexibility

In determining the flexibility of the various strategies (those strategies that would offer the greatest array of exemplary program models), we chose a process that relied on a complex compilation of twelve evaluation sources. A list of fifty programs was culled from *The Matrix of Prevention Programs*, compiled by Sharon F. Mihalic in 2005 at the Institute of Behavioral Science's Center for the Study and Prevention of Violence at the University of Colorado at Boulder. The matrix was selected as a starting point because it contained an expansive and comprehensive collection of dropout prevention programs as well as the results from program evaluations conducted by twelve academic or professional organizations. The matrix includes four different rating categories: "Promising," "Effective," "Exemplary," and "Model."

Every program included in the matrix was ranked "Promising" or better by at least one of the twelve evaluation sources. A list of the best programs was then compiled by retaining only those programs that were rated "Exemplary" or "Model" by at least two of the twelve evaluation sources. This left a total of 50 programs out of 360, which serve as the basis for this ranking process.

A review of program descriptions and activities was conducted by the Urban Initiative and each program was then placed into one or more categories based upon the prevention strategies employed. The categories were then aligned with the fifteen "best practice" strategies for dropout prevention developed by the National Dropout Prevention Center/Network.

The classification of various successful dropout prevention programs included the realization that many programs contain and employ components of more than one prevention strategy. Such over-lapping was taken into account, providing clarity to the strength of the strategies possessing multiple implementation options. Indeed, many successful dropout prevention programs retain, as a central characteristic, components that encompass multiple strategies. This, of course, is related to the nature of dropout behavior. Students who drop out rarely do so as a result of a single factor or unpleasant event. Rather, dropout behavior develops as a result of several factors interacting with one another and escalating over a period of many years. This is also why these programs, despite sharing a common goal, seek to accomplish their mission in a variety of ways. While utilizing a multi-technique prevention approach, the majority of programs favor targeted intervention over a more generalized approach.

Those faring the best on the Flexibility scale, in rank order, are Family Engagement, Mentoring/Tutoring, Early Childhood Education, School-Community Collaboration, and After-School Opportunities. Each of these strategies were utilized by at least 25 percent of the Exemplary and Model programs. Figure 52 ranks the fifteen prevention strategies according to the frequency with which they are used by the 50 programs. Family Engagement was the most commonly employed, with 31 of the 50 programs utilizing some form of this strategy to achieve results. Mentoring/Tutoring came in second, with 21 total programs having this component, while Early Childhood Education ranked third with 15 program appearances. The final two strategies (School-Community Collaboration and After-School Opportunities) each had 13 program appearances.

The strength of this scale lies not only in the ability of these strategies to offer multiple options for implementation, but also in the fact that they appeared with great frequency in programs evaluated as the most successful in dropout prevention. We believe this gives them great weight in the overall evaluation process.

**Figure 52:** Frequency of Use by Programs of the 15 Strategies

| Strategy | Number of Programs |
|---|---|
| **Family Engagement** | **31** |
| **Mentoring/Tutoring** | **21** |
| **Early Childhood Education** | **15** |
| **School-Community Collaboration** | **13** |
| **After-School Opportunities** | **13** |
| Individualized Instruction | 12 |
| Professional Development | 8 |
| Safe Learning Environments | 7 |
| Alternative Schooling | 5 |
| Active Learning | 5 |
| Service Learning | 4 |
| Early Literacy Development | 2 |
| Educational Technology | 2 |
| Career and Technology Education | 2 |
| Systemic Renewal | 1 |

**Figure 53:** SouthCoast Community Risk Levels

| School District | Total Score | Risk Level |
|---|---|---|
| Freetown-Lakeville | 11 | Low Risk |
| Old Rochester | 12 | Low Risk |
| Seekonk | 12 | Low Risk |
| Dartmouth | 14 | Medium Risk |
| Swansea | 14 | Medium Risk |
| Westport | 15 | Medium Risk |
| Somerset | 17 | Medium Risk |
| Fairhaven | 18 | Medium Risk |
| Wareham | 20 | High Risk |
| Fall River | 23 | High Risk |
| New Bedford | 24 | High Risk |

## Applicability

The Applicability scale is designed to identify those dropout prevention strategies that have a history of being most effective considering the district profiles and risk level among the communities in the SouthCoast region. To do so, we utilized the profiles and measures of risk level discussed and developed earlier in this report for the SouthCoast's communities. Figure 53 is a reproduction of the previous table indicating risk level for each community so as to help the reader understand the Applicability scale within the context of each community's risk level.

In order to determine which factors are likely to cause dropout behavior in a community, each community profile should be compared to the list of significant risk factors previously identified. Many of the risk factors that are understood to be highly significant - socioeconomic status, poor attendance, and low achievement - are included in the district and community profiles presented. As such, it is possible to compare the community profiles to the list of risk factors and hypothesize which risk factors are likely causes for existing dropout behavior. In order to do this, each district's profile has been compared to a selected list of risk factors. The risk factors were chosen based on their frequency of mention. Of the twenty-five significant risk factors identified, a total of nine were mentioned in 25 percent or more of the literature. Coincidentally, these factors are also ones that are easy to quantify and measure and the majority coincide with measures used by the Urban Initiative to classify districts as low-, medium-, or high-risk (see Figure 54).

### *Low Risk Districts*

*(Freetown-Lakeville, Old Rochester, Seekonk)*

The majority of risk factors associated with dropout behavior that deal with socioeconomic status and poor academic performance are not typically present in low-risk communities. The previously mentioned profiles show us that the SouthCoast's low-risk schools are small towns and communities with high family incomes and high levels of educational attainment along with high performance on standardized exams and low student discipline issues. The only factors that are not clearly quantifiable are the individual factors of "low commitment to school," "low educational expectations," and "high-risk social behavior". It is difficult to create a district measure for these factors, as they are unique to each student.

In this case, it is likely that students who drop out are those that do not feel connected to their peers or those who find classroom learning boring or a waste of time. There are several dropout prevention practices that target and combat these particular risk factors, including Active Learning and Service-Learning. Both of these strategies help break up the normal classroom

routine, which is sometimes the cause of boredom or lack of interest, and instead advocate the use of more hands-on educational techniques and strategies. Group work, class discussions, and other activities that fall outside the "class work" norm all help to connect students with their learning, while at the same time linking the curriculum to real-life events and experiences.

### *Medium-risk Districts*
*(Dartmouth, Swansea, Westport, Somerset, & Fairhaven)*

The districts identified as "medium-risk" present a unique challenge. In most cases, these districts fall into the "average" category in terms of risk factors. For example, the majority of students would fall within the "middle class" in terms of socioeconomic background and tend to have parents with two- or four-year college degrees but not advanced degrees. The number of students retained annually, attendance and absentee rates, and the number of student disciplinary incidents for these districts are approximately equal to the state average. Overall, these students most likely decide to drop out as a result of a combination of disengagement and boredom.

To combat this, it is necessary to ensure students remain engaged in their studies. Programs that employ Educational Technology and Career and Technology Education link education to "real life" experiences and challenges and can help remind students of the relevance of their studies while at the same time helping to break away from the traditional classroom routine. Some students will likely require more intensive intervention efforts. To do so, districts might find it beneficial to pursue a mentoring program. These succeed by working on a variety of levels. They provide at-risk students with positive role models while providing intimate and personal support for those students who require it most.

### *High-risk Districts*
*(Wareham, Fall River, & New Bedford)*

The districts classified as "high-risk" require the most attention. In these districts, the risk factors that lead to dropout behavior are not only present, they are widespread. Students in these districts experience low levels of academic achievement while at the same time receive little to no support from their families or community. Students in these districts are most frequently from homes with little formal education or low educational attainment levels, low income, and low educational expectations. To combat these factors and stem the negative influences these students experience on a day-to-day basis, it is necessary to institute a multifaceted approach.

Perhaps the most important technique is to promote family engagement in the education process. Without support and interest at home, students in high-risk districts are likely to view their education as a low priority. Second, it is important to establish mentoring opportunities for these students. Students who do not receive support at home need the district and community to intervene by creating and providing those supportive relationships that can develop enthusiasm for learning and build self-esteem.

Another important aspect of preventing dropout behavior in high-risk districts is to link the educational process to the "real world". Many students in these districts will not continue their education at a college or university due to financial inability or a lack of desire. As such, it is important to ensure the education they receive in high school is both thorough and multi-dimensional. Linking classroom studies to situations these students will encounter upon graduation is vital. Math class, for instance, can focus on budgeting for bills and expenses, while English can focus on attaining literacy through the use of office memos or trade documents. As important as these core classes are, the educational curriculum should also include education in trades and life skills – developing office, communication, and organizational skills will help ensure these students are qualified and able to compete and succeed in a variety of workplaces.

As a result of this aggregate profile, the dropout prevention strategies selected based on their applicability to the dropout problem as it exists in the SouthCoast region include *Family Engagement*, *Mentoring/Tutoring*, *Educational Technology*, *Service-Learning*, and *Career and Technology Education*.

It should be noted that while *After-School Opportunities* did not score high in our assessment, this strategy could be deemed quite applicable to the circumstances of the SouthCoast as many students are left unsupervised after regular school hours due to parental work schedules or absence. Such a circumstance can lead to issues of safety, a lack of structured homework time or, on occasion, serious misbehavior in the form of gang activity, youth violence, drug or alcohol use, or teen sexual activity, which enhance the possibility of future dropout behavior. Aside from dropout prevention, there may be good public policy reasons why a community might want to pursue a strong After-School Opportunities strategy or an extended school day. Moreover, this strategy could be considered applicable and could potentially be added to the list of strategies on this scale.

**Figure 54:** Presence of Risk Factors by Community Risk Level

| Risk Factor | Number of Data Sources Where Factor is Significant (Total of 12)† | Low Risk | Medium Risk | High Risk |
|---|---|---|---|---|
| Low achievement | 12 | No | Maybe | Yes |
| Low socioeconomic status | 10 | No | Maybe | Yes |
| Retention/overage for grade | 7 | No | Maybe | Yes |
| Poor attendance | 6 | No | Maybe | Yes |
| Misbehavior | 5 | No | Maybe | Yes |
| Low commitment to school | 5 | Maybe | Maybe | Maybe |
| Low educational expectations | 4 | Maybe | Maybe | Yes |
| Low education level of parents | 4 | No | Maybe | Yes |
| High Risk social behavior | 4 | Maybe | Maybe | Maybe |

Source: Hammond, C., Linton, D., Smink, J., and Drew, S., *Dropout Risk Factors and Exemplary Programs*, National Dropout Prevention Center, Clemson University, Community in Schools, 2007, p. 41

## Expandability

This scale includes those strategies with the greatest frequency of use among existing dropout prevention initiatives in the SouthCoast. In order to make this assessment, the Urban Initiative conducted in-person and phone interviews as well as mail surveys with all of the region's school districts seeking information about existing dropout prevention programs (see Appendix A for a copy of the survey questions). In addition to information collected from interviews and surveys, we used our knowledge and research of existing programs to develop an assessment of the scope and success of these programs and their sustainability in the face of tightening municipal budgets.

As a result of our review, the following dropout prevention strategies have been selected within this scale for the potential they possess to enhance existing programmatic structures currently operating in the region. We recognize that there are probably elements of dropout prevention efforts taking place across the SouthCoast that would be representative, in one form or another, of all fifteen strategies. Our recommended list on this scale is not meant to be exhaustive. Rather, it represents our assessment as to which programs have a sufficient base and hold the greatest promise to be incorporated into a larger, coordinated regional strategy.

The following dropout prevention strategies are recommended as the best methods to take advantage of existing dropout prevention efforts in the SouthCoast:

### *Mentoring/Tutoring*

Over the past several years there has been a substantial expansion of volunteer mentoring programs in the SouthCoast's school systems – most notably through the success of the SMILES Mentoring Program.[55] SMILES Mentoring has successfully recruited and supervised over 500 volunteer mentors from the business and civic community to work with at-risk youth within the school setting. They have a significant presence in New Bedford and Fall River, with smaller programs in Wareham and Fairhaven. There are also many tutoring programs in the SouthCoast's schools. Some are sponsored by SMILES, others by private or non-profit entities and, in some instances, the school districts themselves. The presence of these programs, driven by the success of SMILES and others, makes this strategy a logical choice for expansion (see Figure 55).

### *Early Childhood Education*

The SouthCoast, like many communities and regions in Massachusetts, has elements of some early childhood programming in place. While it is not universal, and its expansion has been advocated – albeit inconsistently due to programmatic costs – it has a limited presence in the public school systems, with complementary Head Start programs that currently serve approximately 500 young students throughout the region. Additionally, laws in Massachusetts

**Figure 55:** SMILES Mentoring Program

SMILES Vision Statement: "The Smiles Mentoring Program envisions a community in which every youth experiences nurturing one-to-one relationships and community support, which in turn allows each of them to develop into their full potential capable of making informed, responsible decisions as involved members of our community."

The SouthCoast Mentoring Initiative for Learning, Education, and Service (SMILES) began in 2003 as a partnership involving leaders from the business, faith, and education communities in New Bedford. The program began in direct response to New Bedford's longstanding high and chronic dropout rate, which has contributed to poor workforce education demographics and inhibited economic development. The establishment of SMILES was a direct response to research that identified mentoring as the most effective strategy to keep at-risk students in school through graduation.

Their first mentoring programs were launched in two New Bedford middle schools and were facilitated by staff at the New Bedford Prevention Partnership. In 2006, SMILES was incorporated as a non-profit organization in order to position it for further growth.

Over the course of the 2006-07 school year, SMILES Mentoring achieved significant growth by expanding its operations from two middle schools in New Bedford to twelve schools in both New Bedford and Fall River. The first program in Fall River was opened at the Kuss Middle School in January of 2007. Since then, a second program in Fall River was opened at the Morton Middle School. At the same time, eight new programs were opened in New Bedford at the Roosevelt Middle School, Carney Academy, Winslow Elementary School, Gomes Elementary School, Carter Brooks Elementary School, West Side High School, New Bedford High School, and the Greater New Bedford Regional Vocational Technical High School. In just six months, the number of mentors increased from 100 to 230 in order to facilitate the establishment of these new programs.

Throughout 2007 and 2008, SMILES grew to encompass a total of 26 programs in New Bedford, Fall River, and Wareham. Altogether, these programs engage the service of approximately 500 volunteers every week

More recently, SMILES has begun further plans to expand into the area of literacy education by establishing programs in Fall River at the Green, Doran, Silvia, and Watson Elementary Schools in which adult volunteers come into the schools to read books and short stories to their mentees as a way to enhance each student's reading skills and thereby improve their academic achievement in other subject areas. In addition, SMILES has been working in partnership with officials at Durfee High School and the Bristol County Workforce Development Board to actively pursue a traditional mentoring program at Durfee.

SMILES continues to grow and prosper and hopes to recruit 1500 mentors in New Bedford and 1500 mentors in Fall River over the next 5 years.

Sources: SMILES Mentoring Website:
http://www.smilesmentoring.org/about-us-mission.htm
http://www.smilesmentoring.org/about-our-history.htm

Fuson, Katje. "Guest Opinion: A new opportunity to create SMILES." *Fall River Herald News* (January 13, 2009).
Available online: http://www.heraldnews.com/archive/x1621245832/GUEST-OPINION-A-new-opportunity-to-create-SMILES

mandate special needs services to begin at age three for students identified after appropriate evaluation. The region also has a network of private providers, although cost, particularly for low-income families, is an increasing challenge. Overall, however, there appears to be a reasonable infrastructure in place that could serve as a springboard for greater effort in this strategy category as it is recognized as one of the more effective, long-term strategies for preventing future dropouts.

*Professional Development*

As part of its 1993 Education Reform Legislation, Massachusetts built professional development into its Foundation Budget and, as such, requires that each school system commit a certain percentage of their budget to professional development. This action prompted many school systems to build professional development days into their collective bargaining agreements. Therefore, opportunities exist to have dropout prevention strategies drive professional development decision-making in positive ways.

*Alternative Schooling*

The SouthCoast region seems to have a number of alternative schooling options for students who are not finding success in the traditional school setting. While we recognize that the region's two largest systems (Fall River and New Bedford) have had established alternative high schools, with New Bedford closing its alternative school following the 2007-08 school year, we do not necessarily point to those as the rationale for this recommendation due to the fact that they were not particularly effective in moving students toward graduation and did not appear to have as their mission a predominant goal of having students attain a high school diploma. There is, however, a strong core of alternative schooling in the form of evening school programs that have proven effective in getting non-traditional students a high school diploma. The Durfee Evening School, the New Bedford Twilight School, and the Somerset Evening Program have all graduated students that might not otherwise have graduated by offering a diploma rather than a GED certificate.

While many students who attend these alternative programs graduate after their cohorts and, as such, do not improve the four-year cohort graduation rate, their success helps to improve educational attainment levels in the region. Moreover, as the evidence suggests, the earlier a dropout is brought back to the educational process, the greater success they encounter.

## Utility

The Utility Scale is designed to assess a particular strategy's effectiveness in the hands of a group or several groups of individuals assuming responsibility for driving its implementation. In this instance, this report makes the assumption that the SouthCoast Development Partnership (SCDP), given its role in initiating this analysis, will be the group of focus relative to implementation even if they are not responsible as the primary implementers of any given strategy. Rather than assume a position that would have the SCDP select strategies that they would simply call on others to implement, a presumption was made that for at least part of the overall assessment, we would attempt to determine those strategies whose prospects for success are enhanced when driven by a group whose composition mirrors that of the SCDP.

For this segment, the research team interviewed Dr. Jay Smink, the Executive Director of the National Dropout Prevention Center. Dr. Smink was presented with the history, background, and mission of the SCDP, including its representation as a regional entity and its diverse membership across the public and private sectors, industry types, its media representation, its support by the mayors and the legislative delegations, and its affiliation with the University. Dr. Smink was asked to assess the group's ability to assist the region in driving successful implementation of certain strategies and to help in determining which strategies would be best suited as part of a regional effort driven by the SCDP.

Based on our discussion with Dr. Smink, and our review of various implementation models for each of the prevention strategies, we recommend four strategies on the Utility Scale that would best serve the interests of the SouthCoast, its business community, and the SCDP in particular.

*School-Community Collaboration*

This strategy was selected because it coordinates well with the philosophy that outside organizations can contribute significantly to the quality of a particular school with both volunteers and funding. The SCDP, with its diverse membership and community connections, could play a significant leadership role in fostering such a collaboration. Through this process, groups in the community help to show students that their success matters. Seeing local citizens volunteering at school events shows students that there are others who depend on their success and that their future neighbors, colleagues, and employers all have a stake in their education. The local community can fund events that they perceive to be important to the community as a whole, reinforcing the idea that the community depends on the success of its next generation. It also gives those organizations and businesses who invest in these relationships greater insight into the workings of our schools and an ownership stake that leads to even greater accountability.

*Career and Technology Education*

This strategy was selected because of the knowledge base and resources that we believe the SCDP and the University possess on these issues, which could be very helpful in implementation on a regional basis. Career and Technology Education is very important in today's fast-paced employment market. The majority of jobs available today require at least a basic level of computer literacy – a significant departure from the demands of a generation ago. Technology has become engrained in our society at nearly every level and students who lack the skills necessary to succeed in this new labor market will undoubtedly be unable to

compete with their peers for higher paying jobs.

Unfortunately, many schools lack the most rudimentary of technology education in their curriculums. This is largely due to the high cost of modern technology. In order to stay relevant, it is necessary to upgrade computers and software frequently. Without up-to-date technology in classrooms, students enter the job market already in a disadvantageous position.

The benefits of Career and Technology Education are far-reaching. In addition to ensuring students are ready to succeed when they enter the job market, it also helps increase students' interest in their education. Traditional classroom lessons often suffer because students are unable to comprehend how the material will be relevant to them once they graduate. As a result, they are more likely to become bored and distracted. By integrating technology education into the curriculum, these students become involved again.

*Systemic Renewal*

Systemic Renewal can take many forms. In all instances, however, there is one common denominator: a comprehensive evaluation of existing programs and guidelines with a parallel effort to identify innovations that might improve teaching and learning. Systemic Renewal can be conducted on a small or large scale and can consist of reviewing a single program or course or reviewing an entire curriculum for areas that have the potential for improvement.

This is a strategy that we believe could be well-suited to the type of advocacy that the SCDP could provide. Such "big picture thinking" and the ability to be advocates for change work well when within the context of a coordinated message from a group with leadership capacity and credibility in the region.

Systemic Renewal helps a curriculum keep pace with current trends and innovations in educational techniques. The need to keep students interested and the need for a curriculum that prepares students for a competitive job market makes this strategy particularly important. Systemic Renewal is also very important in schools serving low-income populations, where limited budgets and low expectations combine to create environments detrimental to student success.

As a dropout prevention strategy, systemic renewal comes with two significant drawbacks: money and capacity for change. Turning around failing systems can be an expensive proposition – at least in the short-term – with the results taking a long time to bear fruit. Also, while groups like the SCDP usually find themselves in an advocacy role when it comes to systemic renewal, they sometimes have limited capacity to ensure buy-in from school district leadership and local elected officials. This level of consent typically requires the right people being in place to implement the systemic renewal process over a long period of time.

*Mentoring/Tutoring*

Mentoring provides students with an important resource: a person who is concerned about their success. Many low-income schools suffer from low family and community involvement, which results in feelings that educational success is not important. Mentoring works to reverse that trend by linking students with community members who have a vested interest in their educational success. By matching local business community members with students currently in school, it is possible to bring about great improvements in both student attitudes and action.

This strategy was included on the scale because of the inherent strength a group like the SCDP has to promote and take a leadership role in setting a high standard of community and business volunteerism and to support and recruit mentors and tutors and involve the community in a way that brings benefits to educational systems that go beyond the presence of a caring adult for individual students. Another strength of this strategy is its cost-effectiveness. Since mentoring programs usually work with volunteers from the local community, the administrative costs are usually very low when compared to other strategies.

## The Selected Strategies

The research team's assessment of dropout prevention strategies has led us to recommend an emphasis for the region on the following five strategies ranked by the frequency with which each appeared on the five scales used in our methodology:

### Mentoring/Tutoring

*(Ranked highly on all five scales: Flexibility, Applicability, Utility, Expandability, and Efficacy)*

As a strategy, Mentoring/Tutoring ranked consistently high, with the additional benefits of being low-cost and already having a significant infrastructure in place in the region (SMILES Mentoring, Big Brother/Big Sister, READS Collaborative) upon which to build. It

is also a strategy very applicable to the demographics of the region's two urban school systems. Finally, it is a program designed with the capacity to produce good, short-term results.

### Early Childhood Education

*(Ranked highly on the Flexibility, Expandability, and Efficacy scales)*

While providing quality pre-school programs universally, or at least to families of low-income or with at-risk characteristics, is expensive, this strategy has proven to be one of the best ways to ensure that students from communities where dropout rates are high have the same advantages as students from wealthier communities. It is also considered a long-term strategy that can make a lasting difference.

### Family Engagement

*(Ranked highly on the Flexibility, Applicability, and Efficacy scales)*

This strategy implies more than involving parents in PTOs. Instead, it requires a shift in thinking about ways to engage those parents who are indifferent in their child's learning and will require a new emphasis in teacher training models. In order for a program to be defined as utilizing the Family Engagement approach it must have the improvement of student achievement as its central mission. The program must also establish a link between student learning and the activities that parents are asked to become a part of. In addition, these programs should help with the development of parent-child relationships by encouraging communication at home and educating parents in ways to become more involved in their child's learning.

### Career and Technology Education

*(Ranked highly on the Applicability and Utility scales)*

This strategy, if pursued aggressively in the region, can be a powerful tool in the hands of business leaders. It has proven successful here in the SouthCoast region, as evidenced by the Greater New Bedford Regional Vocational Technical High School, Diman Regional Vocational Technical High School, and Old Colony Regional Vocational Technical High School, whose dropout rates for the 2006-07 school year were 3.3 percent, 1.8 percent, and 1.0 percent respectively. Finding ways to expand this concept to a broader number of students in need could be a sound strategy for keeping students in school and providing them with a head start in the high-tech economy of the future (to see dropout figures for these schools, refer to Figure 35 in this report).

### School-Community Collaboration

*(Ranked highly on the Flexibility and Utility scales)*

This strategy, according to Dr. Jay Smink, Executive Director of the National Dropout Prevention Center/Network, can be very effective in the hands of a dedicated, willing, and committed business sector that actively pursues a mission to improve educational attainment as a way to expand and improve a region's economy. Such partnerships need to extend beyond those where businesses are simply asked to provide funding. They can be beneficial in accomplishing the goals of school systems and communities in areas of dropout reduction, such as establishing and sustaining mentoring programs, recruiting mentors and volunteers, supporting after-school and extended day programs, and taking the lead in devising relevant curriculum changes within career and technical education pathways.

## Putting the Selected Strategies in a SouthCoast Context

Addressing the SouthCoast's dropout problem with a regional strategy is not only necessary but could also place the region at the forefront of collaborative efforts to keep students on a path to graduation. Traditionally, it has been individual schools and school districts that have taken the lead on dropout reduction efforts. Due to the collaboration necessary to bring sometimes disparate and distinct subdivisions together, regional efforts are few and far between. Regional Workforce Investment Boards often target dropout prevention efforts to individual communities due to the difficulty in establishing multi-district initiatives.

There is no apparent, sustained, regional dropout prevention effort happening elsewhere in the Commonwealth of Massachusetts, though there are signs of regional collaboration beginning to take hold. State officials across a number of secretariats, most notably education and workforce development, have begun to encourage such collaboration, supported by America's Promise Alliance, which is a national affiliation of non-profit, private, community, civic, and public entities committed to ensuring that America's youth are afforded the five promises of caring adults, safe places, a healthy start, effective education, and opportunities to help other. In addition, the America's Promise Alliance has committed to supporting a series of dropout prevention summits across the country between 2008 and 2010. As a part of this initiative, the

North Shore Workforce Investment Board hosted a Northeast Youth Summit on March 19, 2009.

There are many benefits to a regional dropout prevention strategy. Increasingly, regions must collaborate on business retention, location, and expansion. Since businesses often review regional data, it makes sense to address the dropout problem in a similar context. The nature of municipal borders has become less relevant in the face of economic development decisions and where the jobs that employ the region's residents are located. As such, all residents should be concerned with the quality of the region's educational attainment. Cross-border collaboration will help the smaller towns provide services on a scale they are currently unable to provide and will prove to be more efficient and economical. Likewise, a solution to this chronic problem will require all available resources, even those from communities who might not believe they have a dropout problem. There must be recognition among all that if the region has a dropout problem, its impact crosses all borders and responsibility for its resolution rests with the entire region, every community within it, and all of its residents.

Regionalizing the approach to reducing dropout in our schools will also allow for a single, concerted attempt at educating the region as to the extent of the problem and the ramification and impact of high dropout rates, as well as facilitating the setting of benchmarks and standards and the forming of effective partnerships in developing solutions.

The SouthCoast, both as a region and within its respective school districts, is home to a variety of programs which attempt to reduce dropout rates. Most of the responsibility, as it exists today, has been taken up by the school districts themselves. There is a significant array of approaches being used throughout the region, particularly in the two largest districts of New Bedford and Fall River. There are other programs in place which, while not designed, focused, or implemented specifically with dropout prevention in mind, also have the effect of potentially reducing dropout.

In evaluating the effectiveness of the programs currently in place across the region, there is evidence that is both objective and subjective, with most of it in the realm of the latter. There does seem to be a greater push to utilize data to assess the effectiveness of programs, as well as to inform the design and re-design of programs. Despite these developments, more needs to be done in this area.

Most of the programs in place today are those implemented by the school districts themselves and, therefore, take place within the boundaries of the sponsoring school district. There are notable exceptions, particularly as they exist within the strategies chosen by this study as areas of focus for the SouthCoast.

The SMILES Mentoring program has recruited and assigned approximately five hundred volunteers, on a region-wide basis, to mentor and tutor at-risk students in a variety of grade levels. Their programming crosses community boundaries and currently exists in the Fall River, New Bedford, Fairhaven, and Wareham public schools. Big Brother/Big Sister, known in Fall River as Big Friends/Little Friends, also operates on a regional basis.

Head Start, a federal program providing early childhood services, also operates on a regional basis as an arm of Citizens for Citizens, Fall River's anti-poverty agency.

There is also evidence of inter-district collaboration in the provision of diploma-alternative programs, with some school systems providing funding for their students in another community's evening or alternative school. Swansea and Somerset offer an example of such collaboration while Dartmouth provides funding to send its students to the New Bedford Evening School.

All five of the selected strategies have some presence in dropout prevention programming across the region. As previously mentioned, *Mentoring/Tutoring* is employed in many schools as a result of the sheer number of SouthCoast students in need of a caring adult to take an interest in them. The READS Collaborative involves nearly six hundred UMass Dartmouth students in tutoring relationships in the New Bedford Public Schools. A number of schools have organized some efforts around peer mentoring for high school students.

The SMILES Mentoring Program has recently become accredited and is quickly becoming recognized as a model program in Massachusetts. It offers a great opportunity to provide a building block for the expansion of this selected strategy throughout the region, particularly given that its cost is relatively low in comparison to other strategies and its impact can be realized with students in a somewhat immediate fashion. SMILES is currently undertaking a long-term review of its results in the areas of student attendance, student achievement and, ultimately, in graduation

rates as part of an internal evaluation of the program's effectiveness.

*Financing: Mentoring/Tutoring is a low cost strategy due to its reliance on volunteers. Quality programs, however, require staffing to provide efficient coordination and group facilitation. In the SMILES program, annual costs are approximately $900 per student match and are not part of the school district's budget. Non-profits, such as SMILES and Big Friends/Little Friends, would seem to provide the most cost-effective vehicle for expansion of these programs as they have the ability to raise funds in the community and have lower overhead costs than public sector entities. An expansion of SMILES to meet its goal of establishing 3000 matches in the region would require additional funding of approximately $2.5 million annually.*

*Early Childhood Education* is also available in the region, but not universally, largely due to the expense to families and school systems. Placing young children in high-quality early childhood programs can be a great equalizer for students from low-income families and provides a strong, sustained effort at ensuring all students graduate from high school. The long-term nature of its outcome assessment, however, makes it an underrated dropout prevention strategy. Properly supported, it could provide a significant boost in the region's educational attainment, in addition to providing school officials assistance in working with parents on parenting skills and enhancement of their own educational attainment, a major factor in a student's ability and motivation to achieve.

Head Start programs, based on national assessments, have proven somewhat effective on the measures we concern ourselves with here. There is evidence that the results of Head Start programs, particularly in the Family Engagement matrix, wear off around the time a student reaches third grade, particularly if there is no, or limited, follow-up in the K-3 system.[56] Long-term results that stem from early childhood programming are most likely to come from high-quality programs that employ well-trained, certified staff operating within a well-designed curriculum and program.

It has been determined that the effectiveness of early childhood programs is directly related to the qualifications of the teachers in such programs.[57] Yet statewide, only 28 percent of teachers in early childhood classrooms have a Bachelor's degree or higher.[58] The rate for teachers in public pre-school classrooms is 90 percent.[59]

In the SouthCoast, more than 500 young children are being served by the Head Start program, primarily through Citizens for Citizens in Fall River and PACE in New Bedford, the region's foremost anti-poverty agencies. There are income guidelines for admission into the program, with a limit of $22,050 for a family of four. Programs are allowed to have 10 percent of their participants exceed the income guidelines. Local Head Start programs are assessed for effectiveness by a federally-run evaluation program whose reports are confidential.[60]

The public schools in the region are offering early childhood (pre-K) programming on a very limited basis, and usually in conjunction with the provision of special needs early childhood programming. As such, a small number of pre-K students, identified with at-risk characteristics, are allowed into these programs that are required for special needs students between the ages of three and five. The state reimburses the school system for 50% of costs, less than the reimbursement rate for K-12 students in the two city school systems, where the need for providing early childhood programming is greatest.

*Financing: Early Childhood programming is one of the more expensive strategies, particularly if the program is defined as high-quality, which requires the qualifications of staff to be at the Bachelor's degree level. The Massachusetts Office of Early Childhood Education estimates the annual cost of quality programs to be approximately $11,000 per student. Due to the limited class size in such quality programs, the cost of providing access to the many three and four year olds in the region's cities who might be classified as at-risk would be astronomical. Even though Massachusetts has committed to subsidizing half of the total cost for such programs, this funding would be subject to annual appropriation. Even at full funding, this would represent a per-student cost to the urban school districts that is greater than their current contribution for the other students they serve.*

As a dropout prevention strategy, *Family Engagement* requires schools to do more than involve parents in PTOs or contact them when their child has expressed a desire to drop out or has already done so. While both of these examples are still important activities, they fail to meet the criteria of true family engagement. To do so, schools need to think differently about approaches to engaging parents, particularly those who may be indifferent in their child's learning. Venturing into this relatively uncharted territory will also require emphasis in new and innovative teacher training models. In order for a program to be defined as utilizing the Family Engagement approach it must have the improvement of student achievement as its central mission while establishing a link between student learning and the activities that parents are asked to become a part of. In addition, these programs should

help with the development of parent-child relationships by encouraging communication at home and educating parents in ways to become more involved in their child's learning.

While there certainly are teachers and programs that actively seek to involve parents in their child's learning, it is this concept of family engagement that must be expanded upon and made a common practice across the region. There may well need to be a commensurate effort to engage parents in raising their own educational attainment so as to help them set a higher standard for themselves and their families while allowing them to be active participants in facilitating their children's learning. While not every parent is willing or able to fully participate, our schools must overcome the perception that engaging families in a serious way is too time consuming and not worth the effort. This will require an emphasis on the Family Engagement approach in both the training of new teachers and the professional development programs available to those currently in the classroom.

*Financing: This could be accomplished as a low-cost strategy by potentially diverting some of the funding currently allocated for professional development in the school districts to training teachers in how to employ family engagement as a dropout prevention strategy. Such training could be further limited to teachers in those schools with significant numbers of at-risk students. Currently, Fall River and New Bedford spend in excess of $2 million each year on training and professional development. Funds placed toward further development of this strategy might be money well-spent. School districts could also issue policies that encourage a family engagement policy at little to no cost.*

*Additional assistance may also be available for funding for this re-training from grant sources and with support from entities like UMass Dartmouth's Center for University and School Partnerships, an arm of the University that is already heavily involved in meeting many of the local school districts professional development needs. Finally, in the training of new teachers, UMass Dartmouth and other higher education institutions can obviate the need for future re-training by incorporating family engagement strategies into the original preparation of the next generation of teachers, and do so within the current budgetary means for providing such programs.*

The success of *Career and Technology Education* in keeping students interested and engaged in their schooling is in great evidence, particularly as it exists in the region's vocational and technical schools (for a look at dropout rates in the region's three vocational schools, refer to Figure 35 of this report). Unfortunately, these programs are limited in the numbers of students they can serve. They are limited in the numbers of students they can graduate in certain programs, due to the over-saturation in a particular field. But there are large numbers of students in our region for whom education does not appear relevant to their future.

National research shows a clear benefit in the form of reduced dropout rates due to employing Career and Technology Education strategies. Youth who participated in a career pathway program were about half as likely to drop out of school as youth who were not. Additionally, students who participated in some form of work-based learning, such as co-ops and internships or job shadowing, were about 30 percent less likely to drop out.[61]

The region's high schools provide limited course offerings that expose students to several career pathways. This is particularly true at the Fall River and New Bedford public high schools. Unfortunately, the level of exposure is limited to a series of exploratory courses without a substantial commitment to building career pathways for every student at every level to pursue throughout their four years. Such systemic change, while requiring additional resources, would significantly enhance the ability to connect students directly with career opportunities, a characteristic that, when lacking, is a significant contributor to dropout rates. There is evidence that school district leadership understands the importance of developing these pathways and they are in the process of attempting to do so. Past experience suggests they will need a great deal of community support and financial resources to be successful.

Career and Technology Education is also heavily dependent on a strong guidance system within the schools, both to guide and oversee the school-career pathways and provide individual counsel to students to ensure the relevance of school programming is made clear. The amount of staff to carry out this function appears to be fairly limited across the region.

*Financing: The amount of money necessary for various components of this strategy varies. The development of career pathways in comprehensive high schools can depend on planning models, how much infrastructure might already be in place and how aggressively a school may wish to expand such programming. It is clear that the establishment of these pathways in any sustainable fashion will probably require additional teaching and administrative staff. In the case of New Bedford and Durfee High Schools, such costs could approximate an additional $500,000 or more of operational funds. Additionally, guidance counselors should be added, increasing the cost by another*

*$500,000 or more. While such costs may sound prohibitive in this current fiscal climate, these are the kind of expenses that additional state and federal funding sources anticipate would be necessary to improve performance and graduation rates within urban schools.*

*Internships, work-study opportunities, and co-op activities that are normally associated with an expansion of career and technology education are relatively low-cost with the burden being shared administratively between school systems and the businesses that provide placements. Minimal staffing is usually necessary to arrange such opportunities and could be an adjunct responsibility of an expanded guidance staff.*

*School-Community Partnerships* also exist throughout the SouthCoast, but not all of them are of a nature to substantially assist schools in the overall effort to motivate and retain students. Certainly, every partnership has potential to reduce dropout rates. But just as parents need to be asked to do more than bake cakes, businesses and other private and non-profit partners need to be asked to do more than write checks. Within the context of the five selected strategies, the best utilization of these partnerships would focus on recruiting mentors, tutors and volunteers from the community, seeking collaboration on curriculum design in career pathways, making intern and externships available and providing funds to sustain mentoring and after-school programs. While the times suggest that the business sector is facing the same fiscal challenges as the public sector, the long-term sustainability of the region is dependent on this leadership by example.

*Financing: There is little to no public cost to these partnerships other than the time principals, administrators and other staff may allot for fostering and securing such partnerships. The outlay from the community partners is variable.*

*After-School Opportunities* are sometimes viewed as superfluous, and are often the first to be sacrificed in difficult financial times. Yet, these programs, whether in the areas of sports, drama, or school social and academic clubs, build interest in learning and promote character-building and teamwork development. Such motivators can help keep children in school. *Extended Day/Extended Year programs* take a similar approach and mix additional academics with extracurricular activities. Early research shows that these programs, which have been piloted in the Fall River school system at several schools with the support of a state grant, are successful in bringing up the test scores and academic attainment of students otherwise considered "at-risk." Such extended time can make up the difference in the deficit that sometimes occurs between students whose parents are actively engaged in their children's learning and those whose parents are less so.

*Financing: The funding of these programs can be expensive. However, at least in the case of after-school programs, the costs can be borne by the public and/or private sectors. Whether they are in the form of extracurricular activities, sports programs, intramurals or tutoring programs, there are examples of programs funded by grants or public budgets. There are also examples of businesses adopting schools through partnerships or sponsorships and offering after-school programs for students. Transportation is often a factor, which can be an expensive obstacle to full participation. The cost of these programs can be quite variable, depending on the offerings and the circumstances. But they almost always include the hiring of staff, which leads to increased costs.*

*Extended Day Programs, as effective as they are, are also a very expensive option. Their cost usually approximates the per hour costs of regular day education. Therefore, across-the-board expansion of such programs may, at least at first, be prohibitive. It may be wise to follow the path taken by the Commonwealth in funding these programs, limiting the expansion to a small number of targeted schools with at-risk students, where the research shows the need and the impact to be greatest.*

## Other Factors to be Addressed

In formulating recommendations for the region based on our selected strategies, it is important that the regional plan consider and address the following issues:

### *Identification and Tracking*

While early identification of at-risk students is essential to effective dropout prevention programs, there is little evidence that such identification is happening systematically throughout the region as part of a coordinated approach to dropout reduction. The school settings within the region's smaller districts possess an ability to identify and target at-risk students through staff observation and team collaboration. Unfortunately, such a process is not always possible or feasible in the schools within larger districts since the use of technological tools and data collection is necessary to ensure that potential dropouts are correctly identified and led toward an intervention that can keep them in school until graduation.

At-risk students can be assessed using a number of indicators including grades and test scores, attendance and tardiness records, history of grade retention,

limited English language ability, misbehavior, family income (based on a student's eligibility of free or reduced lunch), and faculty or staff opinion. (For more information about these indicators, please refer to the previous section of this report titled "Risk Factors.")

Although limited efforts have begun to collect such data, there does not seem to be an efficient protocol for collection, categorization, and dissemination of such information within the context of dropout prevention. As part of Fall River's Multiple Education Pathways Grant, data collection has begun in an effort to identify students who are entering the high school over-aged (through grade retention or other causes) in order to target them for "credit recovery" programs that will enable them to graduate with their peers. The identification of high school age students who fail to see an end to their schooling, due to grade retention or other circumstances requiring credit recovery, is gaining significant attention and focus nationally as a targeted, last chance strategy to prevent drop out.

Nationally, "early warning systems" are gaining in popularity. States and private sector companies are devising methods to collect data for school districts on each student's risk level using a range of at-risk criteria. While districts need to be cautious about how and in what context such information is used, it can, nonetheless, be a valuable tool in determining what level and form of intervention is best-suited for individual students.

Realistically, local school districts typically have the capacity to identify at-risk students by utilizing some of the broader characteristics and criteria previously identified. To some extent, each school district in the region already does so as evidenced by their selection of students to be assigned to some early childhood programs or participation in efforts to assign at-risk students to mentors and tutors.

Equal in importance to early identification of potential dropouts is the tracking and follow-up of those students who actually do drop out. The state of Massachusetts requires each school district to conduct outreach with students who have dropped out of school for a period of up to two years. However, due to a lack of resources in school districts and the inherent difficulty of maintaining up-to-date contact information on students and their families, particularly given the transient nature of many families in that segment of the population likely to have children defined as "at-risk," compliance with this provision is difficult. Tracking of dropouts by school districts is made even more difficult by the number of students who simply stop showing up for school, thereby depriving school staff of a method for collecting accurate contact information and documenting the cause for dropping out.

Maintaining contact with dropouts can be an important tool in bringing students back to school or into an alternative program such as an evening school, GED program or credit recovery option. Such outreach also minimizes the seeming finality of a student's decision to drop out. As these young people experience outside circumstances that might lead them to believe, at that time, that leaving school is the best option for them, they remain susceptible to motivating forces that might lead them to re-enter the educational system, particularly if it is in a way that might be different from a setting in which they weren't particularly successful.

Most every school system attempts to do an exit interview with students who are dropping out in order to inform them of alternatives they might pursue that would lead them to a diploma or equivalent degree. Districts do not always have the resources or motivation to find students who are sixteen years of age or older who stop coming to school in order to keep them in school or steer them to alternatives. Students who are truant on a regular basis bring down a school's attendance rates, a measurement, unlike dropout rates, that affects a school's Annual Yearly Progress (AYP), which is a key indicator in the school-accountability and *No Child Left Behind*/Massachusetts DOE system. There is, therefore, a built-in incentive for high schools to "sign-out" students not showing up regularly for school, countered by nothing other than the moral imperative of trying to keep difficult, at-risk students in school.

To help promote school district policies that either keep students in school, provide them with a range of alternatives for graduation, or actively seek to bring students who have dropped out back to school, the Massachusetts Legislature passed and Governor Deval Patrick signed into law on August 14, 2008, *An Act to Improve Dropout Prevention and Reporting of Graduation Rates*. Section 2 of this bill commissioned the establishment of a dropout prevention and recovery task force and in Section 3, commissioned it with the task of providing recommendations on how the Commonwealth can financially reward school districts for implementing such policies. The issue areas the legislation has authorized the task force to research include the "development of a reimbursement mechanism for districts sending students to alternative education programs," the provision of "financial

incentives for districts that are effectively graduating at-risk students and recovering high school dropouts," and the creation of a "dropout prevention and recovery grant program" that provides districts with funds to "implement early indicator systems," and provides "nonprofit programs and school districts with funding in the development of alternative routes to a diploma or its equivalent."[63]

In New Bedford, 57 percent of students who drop out in the course of a school year simply stop showing up for school, denying school officials an opportunity to conduct an exit interview. There is also a full-time dropout coordinator who makes an effort during the summer months to reach out to students who left school in the prior year, in an attempt to bring them back or provide counseling that encourages them to pursue alternatives. The school reports a 30 percent success rate in such contacts.[62]

Changes in how the state categorizes dropouts, allowing greater flexibility in considering students in evening school and alternative programs, has made it more enticing for school systems to move students to these programs as an alternative to dropping out. There are still improvements that could be made here to give school districts greater credit for students in such programs, especially in the timing of reporting requirements, the ability to go back and amend rates based on the number of students who might come back after the October 1st reporting date, and the ability to promote 5 and 6 year graduation rates, particularly in urban areas where there are large numbers of at-risk students.

*Financing: The use of technology has opened new doors relative to the ways data can be collected and analyzed, but the collecting and analyzing requires staffing, hardware, and software. While an effort to improve currently existing systems is one option for proceeding, it may be wiser to pool resources into a single regional database, utilizing one of the several private contractors currently being developed in the marketplace to provide information on student risk assessment to school districts. For example, the National Dropout Prevention Center at Clemson University is currently working with a national firm on developing a "Dropout Early Warning System" that accesses student data and provides the school system with data on the potential risk a student has for dropping out. Such identification can be crucial. Companies such as these are providing such services in the price range of $3.00 per student for a three year period. (Estimated cost to each of the region's two largest systems is between $98,000 to $108,000 for a three year contract.)*

*Additionally, there are costs associated with the tracking of students who have dropped out, efforts to get then back into school or an alternative program, and the staff needed to keep potential dropouts in school. One or two staff positions dedicated to this cause at the two urban high schools would also increase costs under this category.*

### *An Urban Focus*

The prevalence of dropouts in our nation's urban school systems is well-documented, as these systems are host to greater numbers of students considered to be at-risk.[64]

An estimated 75 percent of the SouthCoast region's dropouts are generated by Fall River and New Bedford, the region's urban school systems. There are a few school settings in the towns of the region, such as Wareham, that also possess urban characteristics and have higher-than-average dropout rates.

The disparity in rates across communities and across individual schools suggests that a targeted approach in plan implementation, focusing on the urban schools of the region, would be the most efficient use of limited resources and offer the greatest impact.

Despite the focus on urban school districts, this approach would not ignore the problem in the suburban parts of the SouthCoast. With a targeted intervention in the region's five medium-risk districts, it is possible to reach a vast majority of our region's potential dropout since more than 90 percent of the SouthCoast's dropouts come from high-risk and medium risk communities.

*Financing: The recommendation to target efforts toward the urban schools with some additional programming in the rest of the region is designed to maximize limited resources. This will also lower costs as programming will not be replicated in every district.*

### *Assessment*

Any regional plan should include ways to continually assess progress against established goals. Goal-setting needs to be conducted early in the process, with clear benchmarks to be achieved and responsibilities assigned to those stakeholder groups and constituencies who have some role to play in reducing the dropout rate and increasing graduation rates.

Benchmarking should take place at three different levels: evaluation of programs, completion of tasks, and statistical review of dropout rates to measure change over time.

Dropout rate reduction and graduation rate improvement should be measured first against peer

communities and, farther into the future, against aspirant communities. Determinations will need to be made as to what is realistic and can be accomplished, while, at the same time, utilizing a benchmarking system to push the region to a greater sense of urgency and achievement.

Dropout reduction is not a problem to be solved overnight, if it is to be fully solved at all. While there is no silver bullet, communities are not helpless and can devise strategies that will reduce and mitigate dropout in the face of substantial societal odds. For these reasons, assessment and benchmarking must be done fairly, with reasonable and clear expectations and, hopefully, with buy-in from the major stakeholders, particularly school officials who may well feel that they bear the brunt of such benchmarking strategies. It is important to note, however, that benchmarking should be done in such a way as to hold the entire region accountable for the results. Therefore, a wide group of stakeholders need to be involved in establishing and accepting the benchmarks.

One model for benchmarking rates could include taking a long-term, twelve year approach to bringing the region to where stakeholders would want it to be in the area of dropout reduction. Such a twelve year period would allow for some assessment at that time relative to the effectiveness of some of the longer-term strategies and provide the framework for interim assessments that could take place at four-year intervals during that time. By no means does this ignore the work that should begin immediately, along with the demand that measurement begin right away, particularly as it relates to the need to demonstrate to businesses that might be thinking about locating or expanding here, that the region is committed to substantial, systemic change. Assessing the performance of responsible parties along the road to goal completion is just as important as measuring the end result of their efforts.

Determinations could be made as to what progress the region might want to see, particularly in the urban districts, by the end of each four-year period. One potential concept for consideration is to require realization of a 2 percentage point reduction in the annual dropout rate by the end of each four-year interval. Another way would be to reduce the four-year cohort dropout rate by 6 to 8 percentage points at the end of each four-year period. Such a reduction should be accompanied by an actual rate reduction in at least three of the four years, which will ensure that stakeholders don't see evaluation as episodic, but as a continuous process.

Finally, in addition to assigning responsibility for tasks and assessing progress based on rate reduction, program evaluation of the selected programs and strategies as they are being implemented is also important. A regional entity such as the SCDP, working in collaboration with various centers at UMass Dartmouth within the newly created School of Education, Public Policy and Civic Engagement, is in a position to provide neutral, independent analysis of what is effective in reducing dropout in the region and what is not.

*Financing: There will need to be ongoing funding mechanisms for regular program monitoring and assessment. Grants or continued cooperation with UMass Dartmouth and its outreach and research centers may provide the best opportunity for low-cost, continuous evaluation.*

### *Adaptability to Changing Conditions*

The hallmark of any successful regional dropout prevention plan will be the flexibility to adapt to ever-changing circumstances and situations. A static plan will likely become obsolete soon after adoption, given the volatile nature of funding sources, economic conditions and the growing interest in Massachusetts and the nation of working to reduce dropout. Assessment of our recommended strategies could lead to the revision of previously adopted approaches. Therefore, the process of implementing a regional dropout prevention plan will need to consider new factors as they are introduced.

The regional plan will also need to be ready to take advantage of new opportunities as they develop in the future. Some of these opportunities may present themselves at the local and regional level, such as new potential partnerships or innovative concepts while others may develop at the state and national levels. Some examples include:

- *UMass Dartmouth School of Education, Public Policy, and Civic Engagement*

  This newly created entity is well-suited to assist the region in dropout prevention efforts from a number of perspectives. As such, it also has a responsibility to be actively involved in the effort.

  Each division of this new school will have the capacity to impact regional dropout and graduation rates in different and unique ways. In Education, the training and preparation of teachers, the redevelopment of curricula in a variety of subject areas, and the development of

new models of school leadership will all significantly enhance any overall regional effort. In Public Policy, there will be significant opportunities to discover links between policies and educational attainment that could lead to innovative programming, assessment tools, and a greater understanding of the causes of dropout within a context of acceptance of the problem as one that is region wide. The Civic Engagement component of the new school will bring the capacity to garner the talents of a wide range of groups and individuals into a collaborative partnership leading to resolution and success.

✧ *The Governor's Readiness Project*

In 2008, Governor Deval Patrick unveiled a report that culminated a nearly year-long effort involving stakeholders from across the state tasked with creating a series of recommendations as a follow-up to the Education Reform Act of 1993. This next iteration of education reform in Massachusetts is fairly comprehensive and seen by many in the current climate, including the Governor, as not immediately affordable. Even though its implementation, in whole or in part, is delayed, there are many components of it that would have a direct impact on this region and, within it, the cities and towns of the region, and their respective abilities to address dropout. Specifically, there are sections which call for a greater emphasis on the state's urban schools and the at-risk students that attend those schools; a greater emphasis on bridging the achievement gap that currently exists between low-income, ELL (English Language Learners) and minority students in relation to the rest of the population; and an expansion of many programs and strategies that would clearly have a positive effect on reducing dropout in this region, such as lengthening the school day and school year, summer programs in high need districts and universal pre-kindergarten programs.

SouthCoast leaders should request a seat at the table in Boston as these programs are prioritized and considered, to insure that the dropout prevention goal and its impact on regional economic development opportunities is not lost on state policy-makers.

✧ *The Federal No Child Left Behind Re-Authorization*

This legislation, one of the most debated and discussed of our time, will almost certainly continue to be considered a factor, either in terms of an expanded federal role in our nation's schools or, in the eyes of others, a lost opportunity for advancing education nationally. While presuming to have fostered greater accountability in educational districts across the country, it is recognized as not really having fully addressed the dropout issue and national graduation rates. Recent efforts at the federal level have been focused on trying to get states to standardize the method by which they calculate graduation rates so that fair comparisons and assessments can be made. Many states have been resistant, although Massachusetts has been recognized as advanced on this scale.

It is anticipated that future forms of this legislation will be more focused on graduation rates than the original legislation was, although what is less clear is whether or not the legislation will limit itself to data collection and accountability measures or if there may actually be funding provided for addressing the problem, a structural flaw often cited in reference to the original NCLB legislation.

Discussions should be ongoing with our congressional delegation to see how the SouthCoast's regional efforts can be aligned with any federal assistance that may become available in the near and mid-term.

✧ *The National Dropout Prevention Center/Network*

The UMass Dartmouth Urban Initiative, at the direction of Chancellor Jean MacCormack, recently entered into an agreement with the National Dropout Prevention Center at Clemson University in South Carolina to be the first satellite affiliate of the Center. This partnership is expected to bring a resource with twenty years of national research experience into this region. It is also expected that as an affiliate partner, UMass Dartmouth, acting through the Urban Initiative, will have first access to the broad array of resources provided by the NDPC including program evaluation and assessment, up-to-date research on dropout prevention strategies and the causes of dropout and a full compendium of best practices, particularly in the area of early identification of students at-risk of dropping out.

*Financing: These resources have the capacity to make financing for a variety of efforts available.*

*The Impact of Adult Educational Attainment Levels*

This final section is intended to follow up on the comparisons offered previously in this report between Fall River and New Bedford and other Gateway Cities in Massachusetts (see the section titled "Comparison with Other Regions and Urban Areas).

Our previous analysis comparing Fall River and New Bedford to other Gateway Cities, which demonstrated that there appears to be a strong relationship between adult educational attainment levels and dropout rates, has implications for strategy and the targeting of resources.[65] It also drives home the fact that the efforts at changing the dropout situation in the region and improving overall graduation and educational attainment rates will require a long and sustained effort. It is not a job that will be accomplished in the short term.

While some other urban centers in the state, with demographics and characteristics similar to New Bedford and Fall River, have lower dropout rates, those same communities also have higher educational attainment rates among their adult populations. As such, the answer to our regional dropout crisis does not lie exclusively in replicating efforts that exist elsewhere. Rather, the situation here is different and requires us to devise our own unique and comprehensive plan that incorporates strategies that are effective with the population within the region and its two cities.

The educational attainment levels of the region's adults are troubling when we consider the potential impact they have on the region's young people. Considering that well over 30 percent of the region's adults do not possess a high school diploma, we should be alarmed by the potentially negative example this sets for today's youth. In addition, these educational attainment deficits on the part of our region's adults suggest that many parents are not well positioned to offer overwhelming motivation and active academic participation in their child's education.

These regional deficiencies should be kept in mind when crafting the details of the regional strategy, particularly as it relates to those practices that emphasize the involvement of other caring adults in the lives of at-risk students. This does not suggest that strategies that seek to involve parents and families should be abandoned. Rather, it requires a merging of approaches that seek to not only involve parents and families but also to motivate adults to improve their own levels of education attainment. By approaching the task in this manner, we are able to better prepare those parents who desire to become more involved in their child's education.

A parallel effort to raise the educational attainment of all adults in the region will not only enhance its overall position, but stands to add a whole new set of allies in the effort to reduce dropout rates.

# Conclusions & Recommendations

The factors that cause a student to drop out are diverse and complex. As such, there is no "silver bullet," no single program or project that will resolve this chronic problem. It will take an unprecedented commitment on the part of many groups and stakeholders, working together, to bring about a change significant enough to alter current trends and produce results that can attract the knowledge-based industries upon which the economic future of the region must be based. Inaction threatens the future of this region, along with our way and quality of life.

Based on the research and analysis conducted as a part of this study, any successful dropout prevention effort will require the leadership of a regional entity capable of recruiting, organizing, and directing stakeholders toward the common goal of implementing the recommended strategies. While focusing on a handful of dropout prevention strategies might provide a roadmap with which the SouthCoast can begin to set a new path, these strategies alone will not solve the problem. We strongly believe that the journey will not be successful if certain concerns are not addressed as the region works toward implementing the selected strategies. We also believe that, at least initially, the region is in need of a strong voice to articulate the problem and provide the leadership necessary to bring about tangible, lasting results.

As parts of the overall regional plan of action for reducing dropout rates, we have developed the following *Conditions of Success* and *Specific Targeted Strategies*, as well as the *Identified Role for the SouthCoast Development Partnership*.

## Conditions of Success

- ✧ The message must be clearly delivered and understood that current dropout rates in the region, particularly in New Bedford and Fall River, are significantly harming the region, its communities, and the residents within them, both economically and socially, and that immediate action is required in order to grow and attract the knowledge-based industries and businesses of the future to this region.

- ✧ Reducing dropout rates is not a problem to be solved solely by the region's school districts but rather, a crisis that we must all take ownership of and resolve to correct as part of a collaborative effort of individuals and stakeholder groups.

- ✧ A regional approach to dropout reduction is appropriate and necessary as the most effective way of educating the region about the problem, fostering recognition of it as a regional concern, and maximizing the limited resources available to solve the problem at hand.

- ✧ The methodology for reducing regional dropout rates should focus on an urban strategy targeting our high-risk communities, while still possessing a broad enough scope to provide services to several medium-risk communities as a way to provide programming in the communities where over 90 percent of our region's dropouts come from.

- ✧ There must be a considerable effort at raising the educational attainment levels of adults throughout the region, particularly among parents and those active in the workforce, as this serves as both a dropout prevention strategy and as an additional way of addressing the challenge of economic renewal.

- ✧ The region and its stakeholders, as well as individual school systems and other entities, must work collaboratively on the creation of a series of benchmarks to measure progress, both individually and collectively, for the purpose of fostering accountability and a sense of urgency throughout the region.

- ✧ Improvements must be made throughout the region in the identification of at-risk students, specifically with the creation of an Early Warning System, to be implemented, at a minimum, in the New Bedford and Fall River school districts.

- ✧ Data systems must be improved in order to enhance tracking of at-risk students and dropouts, including the improvement of exit interview procedures and the creation of additional surveys for the purpose of collecting data and information that can inform the regional dropout prevention effort as it is being implemented.

- ✧ A financial commitment must be made by diverting current resources, seeking new sources of revenue, and leveraging state, federal, and private grants to create and expand programming consistent with the recommendations for reducing regional dropout rates.

- ✧ Every school system in the region must commit to

systemic renewal as a dropout prevention strategy on a level that binds them to a continuous process of evaluating current practices, exploring new educational methods, and supporting a school environment that supports new ideas in an effort to provide students with a quality educational experience.

✧ Partnerships must be established to facilitate collaboration and avoid duplication in regional and district-specific dropout prevention efforts.

✧ The regional collaborative must advocate for funding, programming, and systemic change and renewal while remaining attentive to future opportunities to enhance the regional dropout prevention effort.

## Specific Targeted Strategies

This section is divided into primary and ancillary strategies. They reflect the five strategies that ranked highest in our evaluation, as well as an additional three strategies that will provide further benefits to the region.

### Primary Strategies

✧ *Significant Expansion of Mentoring/Tutoring Opportunities for At-Risk Students*

We recommend building off the success of the SMILES Mentoring Program to assist them in achieving their goal of establishing 3,000 successful matches for the region's students within the next five years. We also recommend greater private and public-sector involvement in ensuring the financial sustainability of the program. We also recommend support for other mentoring/tutoring programs operating in the region to ensure a variety of options for volunteers to serve the region's at-risk students.

✧ *Significant Expansion of Quality Early Childhood Programming to Serve At-Risk Families*

We recommend, particularly in the urban school systems, that space be set aside for the expansion of quality, public pre-school programs, especially, but not exclusively for, children from high-risk families. In addition, as we transition to universal early childhood education, we recommend funding for an expansion of Head Start and other programs like it. This will allow the region to explore a variety of less expensive early childhood programs to ensure the provision of service to as many families in need as possible.

✧ *Greater Family Engagement*

We recommend a stronger emphasis be placed on engaging families in their child's learning. This can be achieved through a combination of school and district level policies that focus on training new and current teaching staff. We also recommend that UMass Dartmouth and other teacher preparation programs throughout the region place an increased emphasis on engaging families in their child's learning as a dropout prevention strategy.

✧ *Greater Focus on Career and Technology Education*

We recommend a greater effort at Durfee High School and New Bedford High School to involve all students in career and technology education. As such, each school should realign its curriculum to allow for the creation and expansion of career pathways for all students to participate in. To support these efforts, the business community, as well as Bristol Community College and UMass Dartmouth, should become invested in the process of curriculum development and implementation and provide support in the creation of internships and externships for students. In addition, a review of guidance departments should take place to determine the appropriate staffing levels necessary to ensure coordination of these pathways and provide contact and support for at-risk students.

✧ *More Meaningful School-Community Partnerships*

We recommend an increase in the number of schools partnering with business and community partners. More importantly, we recommend a review of such partnerships to ensure that they are meaningful and provide substantial benefits to both sides. Where necessary, we also recommend consortiums of community partners to work with schools and among one another in maximizing benefits.

### Ancillary Strategies

✧ *Extended Day Opportunities*

We recommend efforts be made to secure funding for extended day programming at several schools in our urban systems, beginning with those who have the highest percentages of students who might benefit from such programming. We recommend

such programming at the Doran, Watson, Fonseca and Viveiros Elementary Schools in Fall River and at the Hannigan, Phillips Avenue, Pacheco, Hayden/McFadden, Dunbar, Gomes, Rodman and Congdon Elementary Schools in New Bedford. We also recommend extended day programs at the Kuss and Talbot Middle Schools in Fall River and the Roosevelt and Keith Middle Schools in New Bedford.

✧ *After-School Opportunities*

We recommend an expansion of after-school programming and extracurricular opportunities for all students, not only as a dropout prevention strategy but also as a way to enhance the educational experiences of students.

✧ *Continued Support For and Expansion of the Region's Alternative Schools*

We recommend the expansion of access to the region's network of alternative/"second chance" programs, which allow students to earn a high school diploma or GED. We also recommend that opportunities be created for students in the region's suburban communities to access these programs. Greater collaboration between communities in serving students within this system is required if the region is to build off of the existing programs in Somerset, Fall River, and New Bedford.

## Identified Role for the SouthCoast Development Partnership

In commissioning this work, the SouthCoast Development Partnership has formally recognized this issue as one of great importance to the region and its future. The work, however, does not end with the publication of this report. The entire region and all segments of the community must take responsibility for changing the educational dynamic that currently exists. As a region, we will be significantly challenged by demographic and societal issues that will ensure that change will not be sudden. There is hope that, in both the short and long term, we can create momentum and real progress that will indicate a commitment to leading the region into a new era.

As previously stated throughout this report, the dropout problem does not belong to the schools alone. Only through the leadership of a regional entity like the SouthCoast Development Partnership, devoted to promoting and expanding business opportunities throughout the region can we expect accountability and results. The Partnership is well positioned, given its diverse membership, outside perspective, and its affiliation with UMass Dartmouth, to provide the catalyst in this necessary regional effort.

It is within this context that we recommend the adoption of the following as a primary objective of the SouthCoast Development Partnership. To accomplish the primary objective, we also recommend the subsequent tasks be undertaken. These tasks are divided into three categories: action, advocacy, and accountability.

### Primary Objective

*That the SouthCoast Development Partnership assume a role of leadership in the reduction of dropout rates as part of a new regional economic framework that raises educational attainment and supports new job opportunities for the region's residents; and that this be accomplished through the adoption of a mission that includes the provision of leadership, partnership, and support in establishing the conditions of success and implementing the selected strategies outlined in this report.*

### Action

✧ Initiate a regional call to action on the dropout crisis that educates the region and its citizens on the impact of high dropout rates and how they affect everyone.

✧ Support and recruit mentors and tutors as one of the most cost-effective ways to provide at-risk students with caring adults. This effort should include direct involvement in ensuring the sustainability of these programs.

✧ Assess and devise effective and comprehensive career and technical pathways at Durfee High School and New Bedford High School, including the provision of internship and externship opportunities.

✧ Foster the creation and enhancement of meaningful partnerships among schools, businesses, and other community and civic organizations.

✧ Create a consortium of partners that provides a sustained and persistent focus on solving the region's dropout problem, allows for the sharing of data, resources, and best practices between communities, and offers strong advocacy for outside assistance.

- ✧ Focus dropout prevention efforts on the region's urban schools, where more than 75 percent of the region's dropouts originate.

- ✧ Launch a parallel effort to raise the educational attainment levels of the region's adults and its workforce as a way to not only enhance and develop the skills of the incumbent workforce, but also prevent dropout among future generations of workers.

### Advocacy

- ✧ Initiate a regional call to action on the dropout crisis that educates the region and its citizens on the impact of high dropout rates and how they affect everyone.

- ✧ Insist on more expansive and effective early childhood programs, after-school and extended day opportunities, and family engagement efforts that includes new approaches to teacher training and professional development

- ✧ Lead the call for greater use of data in the identification of at-risk students, the development of strategies to service them, and in efforts to track and follow-up with those who dropout.

- ✧ Advocate for an increase in the number of guidance counselors to fully implement a comprehensive career pathway system in each of the urban high schools, which allows for personal contact and career counseling sufficient to service all students.

- ✧ Promote and support additional alternative opportunities for students to achieve a high school diploma or GED through afternoon and evening programs that operate across community boundaries.

### Accountability

- ✧ Create a taskforce that establishes benchmarks, creates timetables, assigns responsibility, and holds stakeholders accountable for meeting stated goals.

- ✧ Insist on program evaluation procedures to assess those efforts that are currently in place and identify those that are not working so as to promote efficiency and provide the greatest impact on our region's at-risk students.

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# Appendix A

## Stakeholder & School District Survey Instruments

## Stakeholder Survey

*The following survey questions were sent to members of the SouthCoast Development Partnership as sponsors of this study.*

1. What do you see as the effects of high dropout rates in the region?
2. What efforts are you aware of, if any, to reduce dropout rates in the region?
3. Do you believe these efforts to be effective?
4. Are there programs that are not currently being offered that you believe should be offered?
5. How do you believe dropout prevention programs/strategies should be assessed for their effectiveness?
6. What do you believe might be the barriers to implementing effective strategies?
7. Which stakeholder groups need to take responsibility for what strategies?
8. What benchmarks might be used in the region to measure progress on dropout prevention?
9. What evaluation criteria would you suggest as most important in assessing dropout prevention programs?

## School District Survey

*The following survey questions were used in face-to-face or phone interviews with representatives of the SouthCoast's school districts.*

1. Does your district/school have policies and practices that are designed to reduce the number of dropouts? Are these policies described in the district/school's improvement plan?

2. Does your district/school have an office whose major responsibility is coordinating dropout prevention programs and services?

3. Does your district/school have an individual whose major responsibility is coordinating dropout prevention programs and services? If so, please describe that person's roles and responsibilities.

4. How does your district/school identify at-risk students? Does your district /school have mechanisms for identifying potential dropouts? If so, please describe it.

*Faculty opinion?*
*Discipline problems?*
*Limited English/second language?*
*Teen Pregnancy?*
*Excessive absenteeism/tardiness?*
*Academic problems/failure?*
*Free/Reduced Lunch?*
*Special educational needs?*

5. Is there a person in the school who has responsibility for working with students identified as "at risk" of dropping out? Does your district/school target students in certain grades?

6. What dropout prevention programs or strategies does your district/school use to reduce the number of dropouts?

*School-Community Collaborations?*
*Family Engagement:?*
*Early Childhood Education?*
*Mentoring/Tutoring?*
*After-School Opportunities?*
*Career & Technical Education?*
*Systemic Renewal?*
*Safe Learning Environment?*
*Early Literacy Development?*
*Service Learning?*
*Alternative Schooling?*
*Professional Development?*
*Active Learning?*
*Educational Technology?*
*Individualized Instruction?*

7. Is the district/school's approach to reducing dropouts effective?
What specific policies or practices are most effective?

8. How do you measure success and/or progress?

9. Are there any challenges to continued implementation or expansion of these programs?

*Funding?*
*Lack of Administrative Interest?*
*Lack of Student Interest?*
*Questionable Effectiveness?*
*Staffing Issues?*
*Time Issues?*
*Space Issues?*
*Lack of Faculty Support?*

10. Have there been any programs that were deemed ineffective and subsequently discontinued?

11. Why were these programs deemed ineffective?

| | |
|---|---|
| *Funding?* | *Staffing Issues?* |
| *Lack of Administrative Interest?* | *Time Issues?* |
| *Lack of Student Interest?* | *Space Issues?* |
| *Questionable Effectiveness?* | *Lack of Faculty Support?* |

12. Aside from your current dropout prevention strategies, what other strategies do you think might be effective in reducing the number of dropouts?

13. What barriers exist to implementing these strategies?

| | |
|---|---|
| *Funding?* | *Staffing Issues?* |
| *Lack of Administrative Interest?* | *Time Issues?* |
| *Lack of Student Interest?* | *Space Issues?* |
| *Questionable Effectiveness?* | *Lack of Faculty Support?* |

14. Are there prevention programs in place that perform targeted interventions for at-risk students?

15. Does your district/school offer any of the following services to at-risk students or those considering dropping out?

    *Counseling?*
    *Tutoring?*
    *Alternative-model high school?*

16. Does your district/school work with community organizations, agencies, other school districts or schools, or local colleges on dropout issues? If so, please describe.

17. Does your district/school gather data on why students drop out, either through questionnaires or other mechanisms? If so, what type of information is collected on those questionnaires? Is it possible to access these questionnaires?

18. Does your district/school contact students who have dropped out? If so, when and how often does this take place? Has this process resulted in any students re-enrolling in high school or pursuing alternative pathways to graduation?

19. Based on your experience and any data you have collected, why do students in your district drop out?

# Appendix B

## SouthCoast Economic & Educational Indicators

| | Acushnet | Dartmouth | Fairhaven | Fall River | Freetown | Freetown-Lakeville | Lakeville | Old Rochester | Marion | Mattapoisett | Rochester | New Bedford | Seekonk | Somerset | Swansea | Wareham | Westport |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Population (2000) (over 16 years) | 8,087 | 25,164 | 13,085 | 72,237 | 6,614 | N/A | 7,438 | N/A | 3,969 | 5,006 | 3,465 | 73,287 | 10,488 | 15,012 | 12,814 | 15,948 | 11,575 |
| Population in Labor Force (2000) (over 16 years) | 5,435 | 16,296 | 8,278 | 42,682 | 4,991 | N/A | 5,371 | N/A | 2,649 | 3,224 | 2,611 | 42,308 | 7,118 | 9,438 | 8,704 | 10,257 | 7,519 |
| Labor Force Participation Rate | 67.2% | 64.8% | 63.3% | 59.1% | 75.5% | N/A | 71.5% | N/A | 66.7% | 64.4% | 75.4% | 57.7% | 67.9% | 62.9% | 67.9% | 64.3% | 65.0% |
| Unemployment Rate November 2007 | 4.4% | 4.9% | 5.2% | 7.1% | 4.0% | N/A | 3.4% | N/A | 2.5% | 3.2% | 3.7% | 6.4% | 4.1% | 4.4% | 4.6% | 4.6% | 4.9% |
| Unemployment Rate November 2008 | 6.1% | 6.5% | 7.4% | 9.2% | 5.9% | N/A | 5.6% | N/A | 4.5% | 4.7% | 4.6% | 9.5% | 6.0% | 6.5% | 6.8% | 7.2% | 6.9% |
| Poverty Rate (2000) | 1.91% | 2.80% | 6.48% | 14.04% | 2.65% | N/A | 1.92% | N/A | 3.46% | 2.82% | 2.37% | 17.33% | 1.70% | 3.16% | 3.42% | 8.14% | 3.66% |
| Median Family Income (2000) | $58,722 | $60,401 | $52,298 | $37,671 | $69,368 | N/A | $75,838 | N/A | $74,265 | $67,246 | $67,031 | $35,708 | $62,361 | $60,067 | $60,567 | $45,750 | $64,568 |
| Housing Units (2000) | | | | | | | | | | | | | | | | | |
| Owner Occupied | 84.0% | 80.7% | 72.5% | 34.9% | 89.1% | N/A | 90.5% | N/A | 78.7% | 77.7% | 93.0% | 43.8% | 88.7% | 81.9% | 84.8% | 75.6% | 82.8% |
| Renter Occupied | 16.0% | 19.3% | 27.5% | 65.1% | 10.9% | N/A | 9.5% | N/A | 21.3% | 22.3% | 7.0% | 56.2% | 11.3% | 18.1% | 15.2% | 24.4% | 12.7% |
| Educational Attainment (2000) | | | | | | | | | | | | | | | | | |
| Less than 9th Grade | 12.7% | 12.9% | 9.4% | 23.9% | 7.2% | N/A | 2.9% | N/A | 2.2% | 3.7% | 4.1% | 24.3% | 6.0% | 11.0% | 8.5% | 5.0% | 10.0% |
| 9-12 Grade, No Diploma | 14.7% | 11.8% | 13.8% | 19.5% | 10.5% | N/A | 9.9% | N/A | 4.0% | 8.0% | 7.3% | 18.1% | 10.9% | 13.0% | 15.1% | 12.5% | 11.5% |
| HS Graduate | 37.6% | 27.8% | 35.6% | 23.1% | 34.8% | N/A | 27.0% | N/A | 20.0% | 20.2% | 32.7% | 27.7% | 31.6% | 31.4% | 34.5% | 36.7% | 29.9% |
| Some College, No Degree | 15.4% | 16.6% | 17.9% | 13.5% | 16.0% | N/A | 19.7% | N/A | 14.8% | 13.0% | 16.0% | 13.9% | 16.9% | 15.8% | 16.4% | 22.2% | 15.1% |
| Associate's Degree | 6.6% | 6.4% | 6.4% | 6.2% | 9.9% | N/A | 7.8% | N/A | 9.7% | 8.2% | 12.2% | 5.3% | 8.3% | 9.2% | 7.9% | 7.3% | 8.3% |
| Bachelor's Degree | 10.2% | 14.3% | 11.4% | 7.5% | 15.4% | N/A | 21.7% | N/A | 25.5% | 27.2% | 19.7% | 7.5% | 18.0% | 12.5% | 12.1% | 10.9% | 13.5% |
| Advanced Degree | 2.8% | 10.2% | 5.5% | 3.2% | 6.3% | N/A | 11.0% | N/A | 23.8% | 15.6% | 8.0% | 3.2% | 8.3% | 7.2% | 5.5% | 5.4% | 11.8% |
| 4-Year Cohort Graduation Rate | | | | | | | | | | | | | | | | | |
| 2006 | N/A | 85.6% | 89.2% | 54.2% | N/A | 82.1% | N/A | 92.2% | N/A | N/A | N/A | 57.4% | 92.5% | 86.3% | 85.7% | 81.8% | 69.4% |
| 2007 | N/A | 90.8% | 78.7% | 54.1% | N/A | 88.2% | N/A | 90.5% | N/A | N/A | N/A | 58.2% | 90.6% | 95.0% | 82.8% | 76.2% | 82.5% |
| 2008 | N/A | 88.9% | 81.6% | 56.0% | N/A | 86.2% | N/A | 91.0% | N/A | N/A | N/A | 56.1% | 87.3% | 93.4% | 89.2% | 79.5% | 79.5% |
| 4-Year Cohort Dropout Rate | | | | | | | | | | | | | | | | | |
| 2006 | N/A | 11.2% | 7.0% | 36.5% | N/A | 15.7% | N/A | 6.1% | N/A | N/A | N/A | 24.8% | 4.5% | 10.4% | 10.4% | 13.2% | 25.8% |
| 2007 | N/A | 5.2% | 10.7 | 30.8% | N/A | 6.1% | N/A | 6.3% | N/A | N/A | N/A | 21.3% | 6.4% | 3.4% | 11.7% | 9.0% | 10.5% |
| 2008 | N/A | 6.3% | 12.1 | 31.8% | N/N | 6.2% | N/A | 5.2% | N/A | N/A | N/A | 26.8% | 6.6% | 2.7% | 3.8% | 12.4% | 11.5% |

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