



RENNIE CENTER  
for Education Research & Policy

POLICY BRIEF

Meeting the  
Challenge:  
Fiscal Implications  
of Dropout Prevention  
in Massachusetts

## Introduction

In 2009, for the first time in a decade, Massachusetts' dropout rate fell below three percent.<sup>1</sup> While this progress is promising, there remain nearly 8,300 students who did not earn their high school diplomas during the 2009-2010 school year.<sup>2</sup> Given that these individuals face significantly lower earning potential, fewer prospects for employment, much higher rates of incarceration and health problems, and are much more likely to utilize public assistance than those who graduate, there is continued cause for concern and attention to the goal of ensuring that every student receives his/her high school diploma.<sup>3</sup>

While the costs of dropping out to an individual are substantial, there are disturbing societal costs as well. Dropouts contribute less in taxes, but require more social services. According to national estimates, the average high school dropout costs taxpayers close to \$300,000 over his/her lifetime through lower tax revenues, reliance on public assistance, and incarceration costs as compared to an average high school graduate.<sup>5</sup> By some estimates, reducing the number of dropouts nationwide by half could save \$45 billion annually in revenues.<sup>6</sup> In Massachusetts, the average high school dropout costs taxpayers close to \$275,000 over his/her lifetime. Comparing the lifetime fiscal impact of dropouts and graduates on the Massachusetts economy, researchers found that the disparity between dropouts and high school graduates was more than \$450,000.<sup>7</sup>

*"We have a moral and a fiscal imperative to reduce the dropout rate and increase the high school graduation rate. Today's students are facing increased expectations in higher education and the workforce and dropping out of school will not get them there."<sup>4</sup>*

Mitchell Chester, Commissioner, Department of Elementary and Secondary Education, 2010

- 1 Massachusetts Department of Elementary and Secondary Education. (March 2010). *High School Dropouts, 2008-2009: Massachusetts Public Schools*. Retrieved from: <http://www.doe.mass.edu/infoservices/reports/dropout/0809/summary.pdf>.
- 2 Massachusetts Department of Elementary and Secondary Education. (February 2011). *High School Dropouts 2009-2010: Massachusetts Public Schools*. Retrieved from: <http://www.doe.mass.edu/infoservices/reports/dropout/0910/summary.pdf>.
- 3 Northeastern University, Center for Labor Market Studies. (May 2009). *Left Behind in America: The Nation's Dropout Crisis*. Khatiwada, Ishwar, McLaughlin, Joseph, and Sum, Andrew. (January 2007). *The Fiscal Economic Consequences of Dropping Out of High School: Estimates of the Tax Payments and Transfers Received by Massachusetts Adults in Selected Educational Subgroups*. Northeastern University, Center for Labor Market Studies.
- 4 Massachusetts Department of Elementary and Secondary Education. (October 29, 2010). "Massachusetts Selected for \$15 Million High School Graduation Initiative Project." Press Release. Retrieved from: [http://www.mass.gov/?pageID=edupressrelease&L=1&L0=Home&sid=Eoedu&b=pressrelease&f=20101029\\_hs\\_grad\\_project&csid=Eoedu](http://www.mass.gov/?pageID=edupressrelease&L=1&L0=Home&sid=Eoedu&b=pressrelease&f=20101029_hs_grad_project&csid=Eoedu).
- 5 Sum, Andrew, Khatiwada, Ishwar, McLaughlin, Joseph & Palma, Sheila. (October 2009). *The Consequences of Dropping Out of High School*. Northeastern University, Center for Labor Market Studies. The average high school dropout has a negative net fiscal contribution of about \$5,200 compared to an average high school graduate who has a positive net fiscal contribution of \$287,000. So, compared to an average high school graduate, an average high school dropout costs taxpayers close to \$300,000 through lower tax revenues, reliance on public assistance and incarceration costs.
- 6 Viadero, Debra. (April 9, 2008). "New center applies cost-benefit analysis to education policies." *Education Week*. 27:32.
- 7 Sum, A., Khatiwada, I., McLaughlin, J. Tobar, P., & Motroni, J. (January 2007). *An Assessment of the Labor Market, Income, Health, Social, Civic and Fiscal Consequences of Dropping Out of High School: Findings for Massachusetts Adults in the 21st Century*. Center for Labor Market Studies Northeastern University.

In light of the societal and individual costs of dropping out, it is critical that schools and districts focus on reducing the number of students who drop out. Yet, in the current environment of constrained resources, many districts are reluctant to launch new programs or invest more resources in existing services that provide additional supports for students at risk of dropping out. Declines in revenue combined with rising costs have constricted local education budgets, forcing superintendents and school business officers to make tough decisions about which programs to fund and which must be cut. While education-related funding under the American Recovery and Reinvestment Act (ARRA) helped prevent deeper cuts through the provision of \$221 million in Massachusetts education funding in fiscal year (FY) 2011, these funds will not be available in FY 2012.<sup>8</sup> Given reductions in current funding and the uncertainty of future funding, stakeholders across Massachusetts are scrutinizing district budgets to determine where they can reduce their overall spending, while preserving the quality of public education.

It is within this context that the Rennie Center for Education Research & Policy engaged in a study to examine the costs and benefits of promising practices for reducing the number of students dropping out of school. Over the past five years, the Rennie Center, in partnership with the Department of Elementary and Secondary Education (DESE) and the Youth Transitions Task Force, has hosted convenings to draw public attention to the dropout crisis and to showcase policies and practices aimed at reducing the number of students dropping out of Massachusetts' public schools. Over the past two years, the Rennie Center has produced three policy briefs on the issues related to reducing dropout rates: promising practices from Massachusetts districts reducing their dropout rates,<sup>9</sup> whether or not to raise the compulsory school attendance age,<sup>10</sup> and trends in statewide disciplinary removal rates.<sup>11</sup>

The policy brief presented here, which was conducted with support from the Massachusetts Association of School Business Officials (MASBO), explores the approaches, costs and potential financial implications of implementing dropout reduction strategies. It highlights a diverse group of five Massachusetts districts that have substantially reduced their dropout rates over the past three years and identifies the district-wide policies and school-based strategies that superintendents and principals indicate have contributed to reducing the number of students dropping out of school.

The policy brief begins with an overview of existing statewide efforts to prevent dropouts; then summarizes the themes common across five districts that have established a systemic approach to reducing their dropout rates; describes the specific strategies viewed as effective by school and district leaders; considers the costs of dropout prevention efforts; and, finally, offers considerations, based on findings, for policymakers and school and district leaders.

8 In their initial analysis of Chapter 70 projections for FY12, the Massachusetts Budget and Policy Center presents three potential scenarios from a high-end maintenance budget that would require a \$214 million increase in funding, to a four percent across the board cut for most districts. See: Massachusetts Budget and Policy Center. (January 4, 2011). "Fiscal Year 2012 Chapter 70 Education Aid Preview." Retrieved from: [http://www.massbudget.org/file\\_storage/documents/FY2012\\_Preview\\_Ch70.pdf](http://www.massbudget.org/file_storage/documents/FY2012_Preview_Ch70.pdf).

9 Rennie Center for Education Research & Policy. (February 2009) *Meeting the Challenge: Promising Practices for Reducing the Dropout Rate in Massachusetts Schools and Districts*. Retrieved from: [http://renniecenter.issuelab.org/research/listing/meeting\\_the\\_challenge\\_promising\\_practices\\_for\\_reducing\\_the\\_dropout\\_rate\\_in\\_massachusetts\\_schools\\_and\\_districts](http://renniecenter.issuelab.org/research/listing/meeting_the_challenge_promising_practices_for_reducing_the_dropout_rate_in_massachusetts_schools_and_districts).

10 Rennie Center for Education Research & Policy. (Spring 2010) *Raise the Age, Lower the Dropout Rate? Considerations for Policy Makers*. Retrieved from: [http://renniecenter.issuelab.org/sd\\_clicks/listing/raise\\_the\\_age\\_lower\\_the\\_dropout\\_rate\\_considerations\\_for\\_policymakers](http://renniecenter.issuelab.org/sd_clicks/listing/raise_the_age_lower_the_dropout_rate_considerations_for_policymakers).

11 Rennie Center for Education Research & Policy. (May 2010). *Act Out, Get Out? Considering the Impact of School Discipline Practices in Massachusetts*. Retrieved from: [http://renniecenter.issuelab.org/sd\\_clicks/listing/act\\_out\\_get\\_out\\_considering\\_the\\_impact\\_of\\_school\\_discipline\\_practices\\_in\\_massachusetts](http://renniecenter.issuelab.org/sd_clicks/listing/act_out_get_out_considering_the_impact_of_school_discipline_practices_in_massachusetts).

## Background and Context

The reduction of Massachusetts' 2008-2009 dropout rate to less than three percent is an indication that some districts are making progress in their efforts to identify and support students at risk of dropping out. The reduction validates the efforts of a cross-section of Massachusetts education stakeholders who have aggressively worked over the past five years to raise the visibility of the dropout crisis. In August 2008, Massachusetts Governor Deval Patrick signed into law *An Act to Improve Dropout Prevention and Reporting of Graduation Rates*. The Act included a provision to create the Graduation and Dropout Prevention and Recovery Commission, which released a report in 2009 that outlined a series of recommendations to reduce dropout rates and improve graduation rates.<sup>12</sup> Included in the report was the establishment of the ambitious goal to cut the statewide dropout rate in half by 2014.

At the same time as the release of the Commission's report, the DESE had plans that supported several of the Commission's recommendations. These plans included the DESE's expansion of the state-designed "Early Warning Indicator Index," which assigns 8th grade students a risk-level based on indicators such as MCAS scores, absenteeism, disciplinary removal and students' age.<sup>13</sup> In November 2010, based on the early warning index, DESE released a report that identified over one-third (7,700) of 8th graders in urban school districts as at high risk for dropping out. The hope is that the early identification of these students will enable districts to provide the necessary supports to ensure their persistence through high school. Also, over the past two years the DESE has convened a Dropout Prevention and Recovery Work Group to provide an avenue for 18 urban districts to share best practices and innovative strategies to support at-risk students.

Due in part to these recent state-level efforts, Massachusetts was one of only two states nationwide to be selected for the highly competitive U.S. Department of Education's High School Graduation Initiative (HSGI) in October 2010.<sup>14</sup> According to the U.S. Department of Education, the initiative awards discretionary grants to state educational agencies and districts to support the implementation of effective, sustainable, and coordinated dropout prevention and re-entry programs in high schools with annual dropout rates that exceed their statewide annual dropout rate. The vast majority of Massachusetts' \$15 million award<sup>15</sup> will be distributed to schools through a competitive process to support planning for and implementation of dropout prevention, intervention and recovery programs.<sup>16</sup>

Massachusetts' efforts to reduce dropout rates are part of a national trend focused on ensuring that all students are prepared for postsecondary success in college and careers. In 2009, President Obama and U.S. Secretary of Education Arne Duncan challenged educators and policymakers to work together on a common goal—ensure that 90 percent of all U.S. students graduate from high school and complete at least one year of postsecondary education or training by 2020.<sup>17</sup> National advocacy organizations, such as America's Promise Alliance, have taken up the challenge, calling for a nationwide "Civic Marshall Plan" to rebuild America's schools and accelerate the progress in increasing graduation rates and workforce-readiness with the same energy and determination with which we rebuilt Europe after World War II.<sup>18</sup> Their plan is a forceful call to action to accelerate the pace of change through a comprehensive community-based strategy grounded in the best practices from schools and districts across the nation that have been successful in reducing their dropout rates and aligning their educational priorities to the demands of a 21st century economy.

12 Massachusetts Graduation and Dropout Prevention and Recovery Commission. (2009). *Making the Connection: A Report of the Massachusetts Graduation and Dropout Prevention and Recovery Commission*.

13 Massachusetts Department of Elementary and Secondary Education. (November 8, 2010). *The Early Warning Indicator Index: Identifying High School Students at Risk of Not Graduating on Time*. Retrieved from: <http://www.doe.mass.edu/dropout/EWIIGuidance.doc>.

14 The other state selected for HSGI was Colorado.

15 Massachusetts' award is a five year grant of \$3 million per year.

16 Massachusetts Department of Elementary and Secondary Education. (October 29, 2010). "Massachusetts Selected for \$15 Million High School Graduation Initiative Project." Press Release. Retrieved from: [http://www.mass.gov/?pageID=edupressrelease&L=1&L0=Home&sid=Eoedu&b=pressrelease&f=20101029\\_hs\\_grad\\_project&csid=Eoedu](http://www.mass.gov/?pageID=edupressrelease&L=1&L0=Home&sid=Eoedu&b=pressrelease&f=20101029_hs_grad_project&csid=Eoedu). Four of the five high schools participating in this study are among the 133 high schools eligible for funding under this grant because they have annual dropout rates higher than the statewide rate of 2.9 percent.

17 President Barack Obama. (February 24, 2009). State of the Union Address.

18 Balfanz, Robert, Bridgeland, John, Moore, Laura & Hornig Fox, Joanna. (November 2010). *Building a Grad Nation: Progress and Challenge in Ending the High School Dropout Epidemic*. Civic Enterprises, Everyone Graduates Center at John Hopkins University and America's Promise Alliance. Retrieved from: [http://www.americaspromise.org/Our-Work/Grad-Nation/~media/Files/Our%20Work/Grad%20Nation/Building%20a%20Grad%20Nation/Building%20a%20Grad%20Nation\\_FullReport\\_FINAL%2011-30-10.ashx](http://www.americaspromise.org/Our-Work/Grad-Nation/~media/Files/Our%20Work/Grad%20Nation/Building%20a%20Grad%20Nation/Building%20a%20Grad%20Nation_FullReport_FINAL%2011-30-10.ashx).

# Methodology

This section describes the methodology for the study, including how the sample of districts and schools was selected and the characteristics of participating districts.

## Sample selection

A small sample of five school districts and one high school within each of those districts was selected for participation in the study. While the challenge of students dropping out of school is typically associated with large urban districts, the study sample was purposefully selected to include both small and large districts in urban, suburban and rural Massachusetts.

The sample selection process began by assigning all Massachusetts school districts to one of three groups based on their location: urban, suburban and rural. Within each group, districts were classified as either small or large based on student enrollment. The threshold for whether a district was small or large was based on the distribution of enrollments within each of the three groups (urban, suburban, and rural), thus the enrollment sizes classified as small and large varied for each group. One small and large district were selected from each group (as described below) with the exception of the rural districts. In the rural districts classified as small, the dropout rates were very low. As a result, only one rural district was selected for participation in the study.

The criteria for selecting districts within the strata described above was based on both the degree and consistency of the decline in dropout rates over three years (school years 2006-07, 2007-08 and 2008-09). Four of the five districts selected have only one high school and each of those high schools were selected for the study. For the one district that has multiple high schools (Lawrence), one high school was selected applying the same criteria used to select districts (consistent decline in the dropout rate over the three-year period). Table 1 shows the location, size and 2006-07 through 2008-09 dropout rates of the participating school districts. It also shows the aggregate percentage point change over the three-year period.

### Participating Districts and Schools

#### Lawrence Public Schools

Business Management & Finance High School

#### Southbridge Public Schools

Southbridge High School

#### Beverly Public Schools

Beverly High School

#### Winchendon Public Schools

Murdock Middle/High School

#### Gill-Montague Regional Public Schools

Turners Falls High School

TABLE 1. LOCATION, SIZE AND DROPOUT RATES OF PARTICIPATING DISTRICTS

District	Location	Size	Dropout Rates			
			2006-2007	2007-2008	2008-2009	% point change
Lawrence	urban	large	14.8%	12.9%	10.2%	-4.6%
Southbridge	urban	small	9.7%	7.3%	5.2%	-4.5%
Beverly	suburban	large	4.7%	2.1%	2.0%	-2.7%
Winchendon	suburban	small	5.8%	5.8%	3.6%	-2.2%
Gill-Montague	rural	n/a	6.5%	5.8%	3.5%	-3%
State	n/a	n/a	3.8%	3.4%	2.9%	-.9%

Source: Massachusetts Department of Elementary and Secondary Education

## Characteristics of participating districts

As shown in Table 2, participating districts vary in size from enrollments of just over 1,000 students in the smallest district, Gill-Montague, to over 12,000 students in the largest district, Lawrence. Four of the five districts have a higher percentage of low-income students than the state. The two urban districts, Lawrence and Southbridge, have a higher percentage of minority and Limited English Proficient (LEP) students than the state.

TABLE 2. CHARACTERISTICS OF PARTICIPATING DISTRICTS, 2009-2010

District	Total Enrollment	High School Enrollment	Demographics						
			Low Income <sup>20</sup>	White	Black	Hispanic	Asian	SPED <sup>21</sup>	LEP <sup>22</sup>
Lawrence	12,184	3237 <sup>19</sup>	86.7%	6.1%	1.9%	89.4%	2.4%	19.8%	23.1%
Southbridge	2166	422	62.5%	53.7%	1.9%	42.4%	1.5%	18.7%	10.7%
Beverly	4269	1243	23.6%	86.4%	2.6%	7%	1.9%	20.4%	0.9%
Winchendon	1626	412	41.9%	89.6%	1.4%	4.9%	2.0%	20.7%	0.7%
Gill-Montague	1085	316	52%	88.4%	1.8%	5.5%	1.2%	20.7%	4.1%
State	957,053	290,502	32.9%	69.1%	8.2%	14.8%	5.3%	17%	6.2%

Source: Massachusetts Department of Elementary and Secondary Education

## Data collection

Research for this study was conducted using structured, one-on-one telephone interviews with district superintendents and high school principals. Interviews were conducted with five principals and four superintendents. In two districts (Lawrence and Winchendon), support staff who have a district-wide role coordinating services for students who are at-risk of dropping out participated in the interview along with the superintendent. A complete list of study participants is included in Appendix A. Interview protocols were designed to gain an understanding of the district- and school-level strategies that superintendents and principals believe are most effective in reducing dropout rates, along with the logistical challenges and costs associated with implementing those strategies. On average, interviews lasted between 45 minutes and one hour. The findings presented in the following section represent common themes from across the interviews with district and school leaders.

19 This is the total high school enrollment (grades 9-12) for Lawrence and not the enrollment for the Business Management & Finance High School. Business Management & Finance High School had a 2009-2010 enrollment of 459 students.

20 % Low Income is the percentage of students enrolled in the district who receive free or reduced priced lunch.

21 % SPED is the percentage of students enrolled in special education in the district.

22 % LEP is the percentage of students enrolled in the district categorized as Limited English Proficient.

## A System-Wide Approach: Common Themes Among Districts

Superintendent and principal interviews revealed that all of the participating districts initiated a system-wide approach to reducing the dropout rate that was integrated with other efforts to improve teaching, learning, and social support for all students. This section describes the common themes.

**Dropout prevention occurs across all grades K-12.** Superintendents and principals interviewed for this study have integrated dropout prevention efforts across all grades and schools. School and district leaders indicated that elementary school literacy and math initiatives, personalized instruction at all grade levels and targeted interventions for students entering high school are equally important strategies for reducing dropout rates. *“The tentacles of the dropout problem are so much broader than what is going on at the high school,”* observed Winchendon Superintendent Brooke Ann Clenchy. *“If we are losing kids in grades 4 and 5, we have no hope of reaching them by the time they hit grades 7 and 8.”* Preventative efforts that build academic competency and social engagement across the K-12 continuum are crucial to how these districts approach dropout reduction.

**Whole school efforts to support students’ academic and social-emotional needs require a change in culture.** District and school leaders recognize that supporting students’ academic and social-emotional development requires a shift in how school faculty engages students and approaches teaching and learning. This shift involves a distributed approach in which all adults in the school buildings are responsible for supporting students’ needs. In the districts participating in this study, teachers, in particular, are asked to be responsive to students’ individual learning styles as well as their emotional well-being. Gill-Montague Superintendent Carl Ladd explained, *“We have to get teachers at the high school level to understand that students will not learn from them if [students] have not developed a relationship with them.”* District and school leaders were clear that changing the culture to support students at risk for academic failure or social disengagement requires buy-in from all constituencies within the school community.

**Data analysis is critical to identify gaps, solve problems and better address student needs.** Mirroring a key finding in the Rennie Center’s *Meeting the Challenge* (2009) policy brief,<sup>23</sup> participating district and school leaders use data for a variety of purposes, including identifying at-risk students, designing targeted interventions, measuring progress and adjusting practices to better support students and families. For many districts, the data analysis illuminates issues with students that they had not considered. This information plays an important role in changing staff behavior and district and school policies in ways that improve their ability to serve students. *“When you do [data analysis] inside your own school,”* observes Beverly High School Principal Sean Gallagher, *“it helps you make rational decisions on the areas you need to attack.”*

**Schools and districts are flexible in their approach to reducing the dropout rate.** For all the participating districts and schools in this study, the emphasis on using district- and school-level data to identify gaps and target interventions has improved their ability to initiate changes and be more responsive to student needs. Superintendents and principals agree that not all dropout prevention strategies work for their students, and they recognize the need to change, add, or subtract strategies based on effectiveness. Lawrence Superintendent Mary L. Bergeron reinforced the need to constantly evaluate what schools are doing and to adjust when programs are unsuccessful: *“We know that every child has different factors that contribute to them not being successful, and we need to identify [those factors] in order to move them forward.”*

**Most districts have not formalized re-engagement strategies for students who have dropped out.** Consistent with a key finding in the Rennie Center’s *Meeting the Challenge* (2009) policy brief,<sup>24</sup> all participating districts lack clear guidelines and coherent systems to re-enroll recent dropouts. Yet, all districts experienced some success with their efforts to re-connect with youth who have dropped out by working with staff, families and students to develop realistic plans to assist

23 Rennie Center for Education Research & Policy. (February 2009) *Meeting the Challenge: Promising Practices for Reducing the Dropout Rate in Massachusetts Schools and Districts*. Retrieved from: [http://renniecenter.issuelab.org/research/listing/meeting\\_the\\_challenge\\_promising\\_practices\\_for\\_reducing\\_the\\_dropout\\_rate\\_in\\_massachusetts\\_schools\\_and\\_districts](http://renniecenter.issuelab.org/research/listing/meeting_the_challenge_promising_practices_for_reducing_the_dropout_rate_in_massachusetts_schools_and_districts).

24 *Ibid.*

youths' transitions back to school. Four of the five participating districts rely on outreach at the high school level, including periodic phone calls or letters to some students who have dropped out, with no formal district-wide system of re-engaging dropouts. Former Turners Falls High School Principal Jeff Kenney noted, *"If we had staff in place and funding available, this is a piece we would really want to have in place."* Among all the participating districts, the largest district, Lawrence, has the most systematic approach, ensuring that all students who drop out receive phone calls and letters to try to reengage them.

**School and district leaders view dropout prevention as a social benefit to students and their communities.** All school and district leaders interviewed believe the benefits of their work to support at-risk students are primarily the students' academic growth, their engagement in school, and their ability to be successful after high school. Asked specifically about the financial impact, Beverly High School Principal Gallagher stated, *"you never want to put money on it... we are in it for serving all kids and ensuring that they are successful. Number one, we have to keep our kids in school."* Others share this perspective, but believe preparing students for postsecondary experiences, such as college, military, or a career, is financially beneficial to the community. *"As a community where poverty is a large issue,"* observes Superintendent Bergeron in Lawrence, *"we are helping to build the economic foundation for this community in the future."*

## Promising Strategies for Reducing Dropouts

Study participants were asked to describe the specific dropout reduction policies, practices or programs that they believe to be the most effective. The five strategies described below represent common approaches across all participating districts that school and district leaders identified as critical to their success in reducing dropout rates. It is important to note that this is not a complete list of all programs and practices that participating schools and districts have put in place to reduce dropout rates; it is only those that were most frequently mentioned as effective in reducing the dropout rate. The challenges and costs associated with implementing these strategies, as described by respondents, are also included here.

### *Early identification and support of at-risk students*

**Early identification and support for at-risk students is essential.** Mechanisms to identify and support students who are at risk for academic failure, social disengagement and dropping out were common among all participating districts and schools. Early identification systems play three key roles: 1) identifying students who are at risk for dropping out; 2) developing targeted interventions for individual students; and, 3) informing school and district-wide conversations about student needs. Methods for identifying at-risk students vary from a district-wide computer-based system in Lawrence that utilizes student-level data, to hard copy rubrics and checklists in smaller districts. Once an identification system was in place, many districts developed student support teams, which meet to discuss how best to meet students' needs. Murdock Middle/High School Principal Steven Meyer described the value of these teams, *"The student support team is key because it is really that information sharing process where we can all bring our concerns to the table. We can hear what each individual on the team is seeing from their perspective and it helps us get an accurate picture on what is going on in all aspects of a student's life."*

**Early identification and intervention systems have start-up costs.** Both the largest (Lawrence) and the smallest district (Gill-Montague) in the study invested \$20,000 in up-front costs to develop systems to assist in the identification of at-risk students. Lawrence Public Schools instituted a computer-based early indicators system that assigns students in 5th through 8th grade a risk level based on three key indicators: attendance rates; class failure rate; and reading level. Known as PARS (*Potential At-Risk Students*), the database tabulates student-level data every spring and produces reports for each school. According to Superintendent Bergeron, PARS has improved the staff's ability to monitor individual students, particularly across the four years preceding high school, and be more proactive in providing a mix of academic and social supports. Lawrence funded this effort with a \$20,000 DESE grant that also supported the work of a Dropout and Graduation Task Force over two years. An additional \$3,000 was invested from the district's budget to create a web page for schools to access data on students who may be at risk. *"It is a minor amount of money,"* observes Superintendent Bergeron, *"that has a big impact."*

District staff in Gill-Montague developed a rubric to identify at-risk students as part of a two-year, \$20,000 Reconnecting Youth grant through a school-community partnership.<sup>25</sup> Funds covered the costs of developing the rubric and providing materials and training to staff. After initial startup costs, the costs related to identification and intervention initiatives are embedded primarily in staff time and training.

**Amount of staff time required for early identification and intervention is a challenge.** Leaders from the smaller districts in the study recognize inherent advantages in their ability to know all students and anticipate potential problems. However, they expressed concern about the amount of time staff must spend on these efforts. In Southbridge, Winchendon and Gill-Montague, it is not uncommon for staff members who are part of student support teams to spend between 25 and 50 percent of their time addressing the academic or behavioral needs of at-risk students. School guidance counselors, social workers and learning support facilitators in all of the participating schools often spend as much as 75 percent or more of their time on this subset of the student population. As a result, school leaders indicated that staff members often have less time to assist students who may be preparing for postsecondary education or careers.

### *Supporting students transitioning from 8th to 9th grade*

**Districts have established programs focused on the transition from middle school to high school.** Mirroring a key finding in the Rennie Center's *Meeting the Challenge* (2009) policy brief,<sup>26</sup> all participating districts in this study have strategies in place to support the transition from middle school to high school. Approaches include summer orientation programs for incoming 9th graders and freshman academies that provide specialized student groupings, supports and dedicated teams of teachers who work exclusively with freshman. These programs vary in terms of the students they target. The largest district in the study, Lawrence, focuses its transitional programs on at-risk students, while the smaller districts tend to provide transitional supports for all students shifting from middle to high school. For example, Turners Falls High School (Gill-Montague) and Southbridge High School have implemented freshman academies that serve all incoming 9th graders. Former Turners Falls High School Principal Kenney launched a freshman academy at the high school as one of his first initiatives to reduce the dropout rate. The academy employs a team of four academic teachers, a special education teacher and a guidance counselor. Since implementation of the academy, Turners Falls High has seen a decline in absenteeism, tardiness and disciplinary referrals for 9th graders.

**Transitional programs present staffing challenges.** For participating districts in the study, supporting the unique needs of students transitioning from 8th to 9th grade presents challenges in how they manage their human capital. Identifying teachers with the right skill sets and disposition to work exclusively with freshman often requires tapping the most effective teachers in the high school. Furthermore, these teachers often work in teams, making it challenging to coordinate the schedules of academic teachers and support staff, such as guidance counselors, so that these staff have common planning time and specialized professional development. This also has an impact on school-wide schedules.

**The costs required to operate transitional programs are primarily staff salaries and related personnel costs.** Most respondents indicated that the costs associated with strategies to support incoming 9th graders are primarily embedded in the salaries of teachers and staff who work specifically with these students. There are additional costs to support team-building, professional development and stipends for teachers who work with students afterschool and during the summer. Gill-Montague, for instance, provides a \$2,500 stipend to one teacher on the freshman team who is responsible for coordinating common planning time and other team activities. Southbridge High School employs three additional teachers in its freshman academy, at a cost of about \$150,000 annually, to provide additional academic support and keep student-teacher ratios to about 15:1. Although not yet in place, Beverly Public Schools received a grant that will support professional development, classroom instruction, and common planning time for teachers for a new transitional program.

25 The rubric includes a particularly extensive set of indicators, including: 10 or more absences in past 12 months; reading 3 years below grade level; failed 2 or more classes in core subject area during school year; not enough credits to advance with peers in grades 9-12; expelled or suspended more than 2 times while in the district system; held back a grade; disciplinary referrals; social agency or court involvement (student or family); homelessness; transience; and, ethnicity.

26 Rennie Center for Education Research & Policy. (February 2009) *Meeting the Challenge: Promising Practices for Reducing the Dropout Rate in Massachusetts Schools and Districts*. Retrieved from: [http://renniecenter.issuelab.org/research/listing/meeting\\_the\\_challenge\\_promising\\_practices\\_for\\_reducing\\_the\\_dropout\\_rate\\_in\\_massachusetts\\_schools\\_and\\_districts](http://renniecenter.issuelab.org/research/listing/meeting_the_challenge_promising_practices_for_reducing_the_dropout_rate_in_massachusetts_schools_and_districts).



**Districts rely on multiple funding sources to support their transitional programs.** For instance, Lawrence Public Schools' summer transition program provides at-risk 8th graders with a variety of summer academic enrichment, coursework and high school orientation programs prior to their freshman year and costs between \$35,000 and \$40,000 annually. The program is funded through a mix of Title 1, IDEA and ARRA funding. With approximately 75 percent of the 80 to 90 students that complete the program each year gaining additional math and English credit during the summer, Superintendent Bergeron considers the program *"a good investment in what needs to happen for kids."* School and district leaders are increasingly concerned about their ability to sustain this program because ARRA funding will not be available beyond the 2010-2011 school year.

### *Credit recovery*

**Districts have aggressively expanded their credit recovery options.** Over the past three years, participating districts have become more aggressive in expanding credit recovery options for students who have failed classes and fallen behind academically. Providing students with more opportunities to regain credit early *"gives students hope,"* notes Beverly High School Principal Gallagher. *"When you have a 16 or 17 year old and you tell them they have to go back and take an entire freshman class, they lose hope."* Superintendents and principals indicated two key goals of these efforts: 1) provide a safety net for students who fall behind in credits; and, 2) ensure that at-risk students, particularly freshman, have the appropriate number of credits to advance with their peers.

Lawrence has initiated credit recovery options through its alternative high school, the High School Learning Center (see text box below). Smaller districts rely on smaller scale and more targeted summer or afterschool credit recovery and academic enrichment programs to provide alternative opportunities for students who fall behind. Beverly High School offers students the opportunity to recover credits through their STAY (Successful Transitioning for At-risk Youth) program. Students who fall behind during the semester are pulled from their mainstream classes to work with teachers on a computer-based learning system that tests students' content knowledge and focuses instruction on specific areas that each student must master to move on. *"We are not waiting until they fail classes at mid-point or during the quarter,"* notes Principal Gallagher. *"Once they get caught up in credits we put them back in the mainstream. It has been a very successful program."*

### **Changing the Structures: Alternative Education**

For some students, the typical structure and schedule of the school day is challenging or untenable. Some districts have created alternatives to meet these students' needs. The Lawrence Public Schools established the High School Learning Center, a school that provides alternative education options for students from the other district high schools. The Learning Center features flexible start times, remedial courses, credit recovery in core subjects and work study programs. Other districts in the study, such as Winchendon, rely on their community partnerships to provide alternative education options for their students. As district Social Worker Jane Greenleaf notes, *"We are trying to recognize that some of our kids are not going to stay in a traditional high school. We reach out to see what else is in the community because we don't really have an alternative program within the school."*

**Staff question the academic rigor of credit recovery programs.** Credit recovery programs require a substantial investment of time and effort to identify and select a program that fits the school's instructional priorities, and school leaders noted that teachers often question the academic rigor of credit recovery programs. As Beverly High School Principal Gallagher observed, *"There were a lot of questions around whether or not it would work and really test the student's knowledge."* Southbridge High School Principal Bill Bishop sees inherent weaknesses in summer-based credit recovery programs. *"One of our classes runs 153 hours per year and to expect that content to be covered in 48 hours of summer school is unrealistic. The true spirit of what we are trying to teach cannot be knocked off in 1/6<sup>th</sup> of the time."* Despite these questions of academic rigor, for all of the participating districts credit recovery is increasingly seen as essential to their efforts to keep students on track academically and progressing with their peers.

**Districts vary in the funding stream they use to pay for their credit recovery programs.** The amount of money districts spend on credit recovery programs varied widely among participating districts, from \$5,000 to over \$300,000. Districts also varied in the funding sources they use to pay for their credit recovery programs. The Lawrence High School Learning Center is funded through the district's foundation budget and costs about \$300,000 annually. The Beverly High School STAY program, which serves 20 or fewer students a year, is currently funded with ARRA money at a cost of \$70,000 annually to cover technology, teacher training and stipends. According to Beverly Superintendent Marie E. Galinski, the district needs to identify additional grants in order for the district to sustain the program.

### *Social and emotional support*

**Some districts utilize community partnerships to support students' social and emotional development.** All districts in this study have implemented programs to support students' social and emotional development. Districts approach this in a variety of ways. In the two smallest districts, Winchendon and Gill-Montague, partnerships with community-based providers of therapeutic and behavioral health services place service-providers in their middle and high schools. Other districts in this study engage teachers and staff in the implementation of a variety of school-based positive behavior and responsive curriculum programs that emphasize students' social, emotional and academic growth in safe and supportive learning environments.

**Social and emotional support programs are funded through a variety of sources.** Some districts rely exclusively on substantial multi-year grants to fund social and emotional supports, such as the three-year \$1 million grant from the Health Foundation of Central Massachusetts that funds the "Winchendon Project," which is described in more detail below. In Beverly, the district used \$350,000 of their ARRA funding to implement social and emotional support programs in their five elementary schools. The district invested an additional \$8,000 in ongoing professional development for staff to implement these programs. Gill-Montague's Reconnecting Youth Program costs the district about \$69,000 a year, mostly in a teacher's salary to staff the program. The district invested an additional \$20,000 in start-up costs to cover training and materials for the curriculum.

### **The Winchendon Project: Community Partnership for Social/Emotional Support**

The Winchendon Project is a partnership, formed in January 2008, between Winchendon Public Schools, the Joint Coalition on Health, and the Health Foundation of Central Massachusetts. The Project funds a variety of wellness and mental health supports for approximately 80 to 100 students per year in both group therapy and individual therapy sessions. It also covers the cost of a full-time Learning Supports Facilitator at Murdock Middle/High School who develops programs and resources for students and families to address risky behavior and promote academic success. Overall, the program has been indispensable to the district's efforts to support students. *"It gives us more of an ability to focus on prevention and education rather than discipline,"* notes Principal Steven Meyer. *"It creates a more positive connection to school."*

**Most districts rely on internal staff to provide social and emotional support through advisory programs.** All but one of the participating districts have incorporated advisory programs designed to link each student in the high school with a caring adult in the building. Advisories generally utilize all adults in a building to serve as an advisor for between 10 and 15 students, either for the entire academic year or for all the years a student is in a school. These programs often follow a set curriculum, but faculty is encouraged to be flexible and responsive to the needs and interests of the students they are advising. Due in part to positive student feedback and results, participating districts are looking for ways to increase the amount of time dedicated to the advisory programs in their high schools and also begin implementing similar programs at the middle school level, despite the challenge of dedicating time within their schedules to advisor-advisee meetings. For the districts in the study, advisories are seen as an important mechanism to support *all* students and build a sense of connectedness within the school community.

**Costs associated with advisory programs are embedded in staff time and salaries.** According to district and school leaders, most of the costs associated with advisory programs are embedded in staff time and salaries, which varies from school to school depending upon how often advisor-advisee meetings are held and the extent to which individual teachers are willing to engage in these activities. There are also costs associated with professional development and other resources related to advisories. In Lawrence, for instance, three professional development days were dedicated to advisory programs during the 2009-2010 school year. In addition, administrative staff generate reports every 10 days that show how each advisor's groups of students are doing academically and in terms of attendance and behavior. To minimize the time teachers must spend preparing for advisory, Gill-Montague developed a curriculum and provided training for all staff at a one-time cost of \$6,000.

*“Advisory is probably one of the key components we use to help all our students, whether they are at-risk or not. It’s a place where students feel comfortable with teachers. It’s a place where they are having dialogue on topics that are important to them, whether they be school related or things happening in the community. It is another vehicle to keep students from leaving before graduation.”*

Business Management & Finance High School  
Principal Edward Reynoso

### *Community partnerships for college and career readiness*

**Most districts utilize community partnerships as a way to increase students' college and career readiness.** Four of the five districts in the study have established strong partnerships with community organizations, including community colleges, local and national businesses, workforce investment boards and other community-based organizations to provide students relevant college and career experience. These partnerships, like those that support students' social and emotional well-being, expand the capacity of districts to serve student needs in a cost-effective way. Furthermore, these partnerships are seen as a way to improve the quality of students' learning.

In Winchendon, a partnership with Mount Wachusett Community College (MWCC) targets prospective first generation college students to provide them with a variety of school- and campus-based programs, designed to connect income eligible students to college pathway programs, college fairs and career fairs. Grants received by MWCC fund the services provided to students as well as a part-time position at Murdock Middle/High School to coordinate the project. A similar program has been in place in Southbridge for four years through a partnership between the district, Y.O.U. Inc., a social service agency based in Worcester, and Nichols College. Students who are selected for the program are followed closely by college faculty and Y.O.U. Inc. staff to keep them on track academically and developmentally for postsecondary success. The partnership is in its final year, but partners are currently re-submitting the grant to seek funding for an additional four years.

**Costs associated with community partnership programs are covered through grants that were acquired by the partner institutions.** For example, the partnership program in Southbridge provides about 50 students annually with the opportunity to earn both high school and college credits. It is funded through a four-year, \$1 million federal grant. A similar program to provide dual enrollment opportunities in Gill-Montague is funded by an anonymous donor and has resulted in more at-risk students graduating, many of whom graduate with college credit and pursue post-secondary education. Typically, the districts' contributions to the partnerships are in the form of staff time for program oversight and office space for partnership activities within the school. For three of the participating districts, partnerships with community agencies have filled gaps in services once provided by the school that ended because budget cuts resulted in fewer school-to-work coordinators and guidance counselors.

**Partnerships require a substantial investment of time.** Both community partnerships to support student social and emotional well-being and to provide students with relevant college and career experience require significant amounts of time and effort to coordinate meetings, establish program goals, select participating students and maintain regular communication regarding student progress. Clear communication between school-based and partner-based program coordinators is vital to ensure that students' learning and working outside of school are aligned and students are making progress toward agreed upon goals.

## Considering the Costs of Dropout Prevention Efforts

This section summarizes the findings about the costs of dropout prevention efforts in participating districts. While the costs incurred by each district varied depending upon its approach to reducing dropout rates and the number of students each served, there were a number of common themes.

**Staff time accounts for most of the cost of dropout prevention.** As previously described, all of the participating districts initiated a system-wide approach to reducing the dropout rate that is integrated with other efforts to improve teaching, learning, and social support for all students. As a result, staff support at-risk students as part of their day-to-day responsibilities; thus, it is difficult for school and district leaders to separate the amount of time staff spends on dropout prevention activities from their other responsibilities. As Winchendon Superintendent Clenchy described, *“The monetary piece is hard to define when you think of staff time, professional development and all the little costs that go into the work.”*

**Few districts have staff members who are dedicated solely to dropout prevention.** Only two of the five participating districts—Lawrence and Winchendon—indicated that they have dedicated staff members who coordinate district-wide programs for students at risk of dropping out. Lawrence employs one student support services facilitator at the district level who is responsible for managing programs across all schools for the district’s approximately 12,000 students. Winchendon, with a total enrollment of approximately 1,600 students, has a district-wide social worker who is largely responsible for coordinating the school-based student support teams, counseling services, and community services for students and families in the district. It was more common for districts to involve all staff members in supporting at-risk students as part of their day-to-day responsibilities.

**When staff salaries are not taken into account, the costs associated with discrete dropout prevention services are low.** This study sought to shed light on how much money from district budgets was spent on activities aligned with dropout reduction over the last two years (academic year 2008-09 and 2009-10). As noted above, it was difficult for study participants to assign specific costs to staff time designated to dropout prevention efforts. As a result, the school and district leaders interviewed for this study were only able to account for some of the dropout prevention related costs. Not including staff costs, the annual investment in dropout reduction strategies among participating districts for the 2009-2010 school year ranged from \$133,000 for the smallest district, Gill-Montague (.7 % of annual budget), to roughly \$500,000 for Lawrence (.3% of annual budget), the largest district.

**Districts must pay some out-of-pocket costs for services, programs and initiatives.** While most dropout prevention costs are subsumed in staff salaries, there are a range of services, programs and initiatives for which districts must pay. For example, there are start-up costs associated with early identification and intervention systems and costs to run credit recovery programs, implement new curricula, and provide additional training and resources for staff. All participating districts also pay stipends to teachers for work with students after school or during the summer. Additionally, districts may need to hire specialists for services that internal staff may not be qualified to provide, such as therapeutic and behavioral health services. Some participating districts utilize community partnerships as a way to provide some of these services. As described earlier, costs associated with community partnership programs are typically covered through grants acquired by the partner institutions.

**Heavy reliance on grant funding creates sustainability challenges.** To fund initiatives above and beyond the supports provided by existing staff, four of the five districts rely almost exclusively on grant funding. Only Lawrence supports a large portion of their dropout reduction programs through Chapter 70, Title 1 and IDEA funding. Managing grant cycles during a time of economic uncertainty has most participating superintendents concerned about the sustainability of their dropout prevention programs. *“We don’t know if we are at a place to financially sustain these programs once the grant funding dries up,”* notes Winchendon Superintendent Clenchy. Smaller districts, such as Gill-Montague, constantly pull money from various sources to plug gaps created when grant funding ends. *“One year the money may come right out of the high school budget, another year there may be a grant available,”* observed former Turners Falls High School Principal Kenney. *“A lot of times it is digging and finding a couple thousand here and a couple thousand there to make these programs work.”* Superintendent Ladd is frank: *“We really scab money from everywhere.”*

Currently, three of the five participating districts are at the end of multi-year grant cycles for key services that they believe are essential to their success in reducing their dropout rates. If new sources of funding cannot be found, the current district budget will have to cover the costs of these services, or the services will be cut. *“That is the juggling act in sustaining successful programs and helping kids through grant funding and dealing with budget cuts that have been happening,”* observes Beverly High School Principal Gallagher. *“If the \$30,000 we are investing in a particular program is taken away, it would have a major impact on dozens of families.”*

A key issue for district leaders and school business officers to consider is the extent to which they can reallocate existing resources to offset the costs of dropout prevention strategies. As described below, for 27 percent of districts statewide, investments in dropout reduction efforts may be self-sustaining under certain circumstances, provided these efforts result in student persistence, which in turn results in per pupil funding for those students who persist, through the foundation budget. Although not directly based on the findings of this study, two examples that illustrate how, for some districts, per pupil funding obtained from increased enrollments due to successful dropout prevention strategies can be re-invested to serve at-risk students are shown in the box below.

## Reaching the Goal: Considering Per Pupil Funding as a Mechanism to Sustain Dropout Prevention

Study findings suggest that staff salaries account for most of the cost of dropout prevention, yet there are some critical services, programs and initiatives for which districts must pay out-of-pocket. Many districts rely heavily on grant funding to support these initiatives, which raises concerns about sustainability. In this time of fiscal constraints and economic uncertainty, district leaders piece together funding from various sources and scrutinize their budgets to determine how funding can be reallocated to support key district priorities. For some districts, it may be possible for dropout prevention initiatives to become self-sustaining. The two scenarios described on pages 14 and 15 are meant to encourage district leaders to consider whether increased funding that their districts would receive by keeping students at risk of dropping out enrolled in school could be allocated to serve at-risk students. The scenarios are based on a set of assumptions that district leaders need to modify based upon their own enrollments, student characteristics and foundation budget. The hope is that district leaders and school business officers will consider how these, or similar approaches, could be used as the basis for financial planning to better serve at-risk students.

### Foundation budget basics

The Massachusetts Education Reform Act of 1993 established targets for how much money each district should spend on education each year based on enrollment and characteristics of the student body (for example, the percentages of low-income students and English language learners). This is referred to as the foundation budget. Each district must contribute local funding at a level determined by a formula that takes into account local property values and personal income. Chapter 70 aid makes up the difference between the required local contribution and the foundation budget.<sup>27</sup> As a result, districts whose annual net spending is equal to the foundation budget receive additional per pupil funding when their enrollment increases. In other words, as enrollment increases, additional Chapter 70 funding is provided so the district remains at the foundation amount. For these districts, it is worthwhile to consider how the increased funding received by keeping students at risk of dropping out in school could be re-invested to serve at-risk students. Currently, 87 (of 326) districts statewide have a net school spending equal to their foundation budget, including two of the five districts that participated in this study—Lawrence and Southbridge.<sup>28</sup> The two scenarios illustrate how successful dropout prevention strategies in these 87 districts could result in funds that could then be reinvested to serve at-risk students.

*Continued on next page.*

27 Moscovitch, Edward. (December 2010). *School Funding Reality: A Bargain Not Kept*. Boston: Massachusetts Business Alliance for Education. Retrieved from <http://www.mbae.org/wp-content/uploads/2010/02/School-Funding-Reality-A-Bargain-Not-Kept.pdf>.

28 Massachusetts Department of Elementary and Secondary Education, Office of School Finance. (January 26, 2011). *Preliminary Chapter 70 FY12: Regional District Summary*. Retrieved from: [http://finance1.doe.mass.edu/chapter70/chapter\\_12p\\_reg.pdf](http://finance1.doe.mass.edu/chapter70/chapter_12p_reg.pdf).

## Two scenarios

It is important to consider the scenarios described in this section in light of the following cautions:

- **These are hypothetical examples.** In presenting these examples, we are not asserting that keeping a certain number of students will result in a guaranteed return on investment. Nor are we asserting that these funds would fully cover the costs of the services these students would require.
- **Investments may precede funding.** Funding for students who do not drop out is received the following year; thus, the district may incur expenses for educating students that will not be offset until the following year.
- **Each district's Chapter 70 situation is different.** As noted earlier, a district's ability to increase revenue through Chapter 70 is dependent on its net school spending each year relative to its foundation budget. Only those districts that are spending at a level equal to their foundation budget would receive additional per pupil funding as enrollments increase. Per pupil Chapter 70 funding for the 87 districts that have an annual net spending equal to their foundation budget ranges from approximately \$1,100 to \$10,700 according to DESE FY 2012 budget figures.

The first scenario explores the potential financial impact that would result if districts succeeded in preventing their *Very High Risk* and *High Risk* (as determined by the Early Warning Indicator Index)<sup>29</sup> students from dropping out. The second scenario describes the potential financial impact that would result if districts met the Graduation and Dropout Prevention and Recovery Commission's goal to reduce the number of dropouts in half by 2014. We submit that it may be prudent for district leaders and school business officers to consider how these or similar approaches could be the basis for financial planning for serving at-risk students.

### SCENARIO 1: Keeping all incoming high-risk students in 9th grade enrolled.

In fall 2010, DESE released a revised version of the Early Warning Indicator Index (EWII) to aid districts in identifying and supporting students who may be at risk of not graduating on time from high school. Using the EWII system, the DESE assigned students who were enrolled in 8th grade at the end of the 2009-2010 school year one of five risk levels: *Very High Risk*, *High Risk*, *Borderline*, *At Risk*, or *Low Risk*. Assume a particular district uses information from the EWII as the basis for financial planning and provides all of their incoming *Very High Risk* and *High Risk* students with additional supports in 9th grade which in turn results in all or a substantial portion of these students staying in school. If that district is able to provide these additional supports and educate these students through 9th grade at a cost that is equal to the funding they received through Chapter 70 for successfully keeping these students enrolled, then the district has maintained its dropout prevention supports without additional funding.

At the start of academic year 2010-2011, there were ten districts statewide that had more than 100 incoming 9th grade students assigned to the *Very High Risk* and *High Risk* levels, ranging from 122 in Fall River to 643 in Boston. Of these ten districts, only Boston's net school spending is greater than their foundation budget. If we assume the remaining nine districts receive \$9,000 per pupil in Chapter 70 funding (based on the average per pupil funding in these nine districts according to DESE FY 2012 figures), the financial impact of keeping all of these students would be sizeable—ranging from approximately \$1.1 million in Fall River to \$4.5 million in Springfield. Yet, it is important to note that in 2010-2011 a majority of districts in Massachusetts had far fewer incoming 9th graders considered *High Risk* or *Very High Risk*. In fact, 77 percent of districts (219 of 285)<sup>30</sup> had fewer than ten students in the *Very High Risk* and *High Risk* categories.

### SCENARIO 2: Reducing the dropout rate in half.

In 2009, the state's Graduation and Dropout Prevention and Recovery Commission established the ambitious goal of reducing the statewide dropout rate in half by 2014. In this scenario, we focus on this goal and describe a method for how the costs of dropout reduction strategies may be offset by the funding districts might receive if they met this goal.

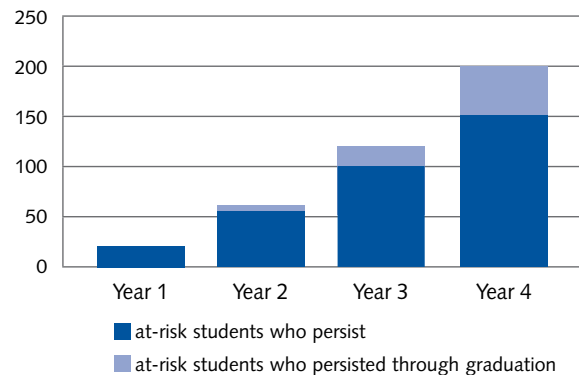
29 Massachusetts Department of Elementary and Secondary Education. (November 8, 2010). *The Early Warning Indicator Index: Identifying High School Students at Risk of Not Graduating on Time*. Retrieved from: <http://www.doe.mass.edu/dropout/EWIIGuidance.doc>.

30 Massachusetts Department of Elementary and Secondary Education. *2010-2011 Early Warning Indicator Index Risk Level Calculator*. Retrieved from: <http://www.doe.mass.edu/dropout/EWIICalculator.xls>.

As an example, if 160 students dropped out of a district in 2009-10, and the district seeks to reduce its dropout rate in half by 2014, the district could reduce its dropout rate by 20 students per year over the four years. In Year 1, the district will need to keep 20 students from dropping out; in Year 2 it will need to keep 40 students; in Year 3 it will need to keep 60 students; and in Year 4 it will need to keep 80 students.

Calculating the potential additional funding a district could receive by reducing the total number of dropouts in half by 2014 requires making some assumptions, some of which may not be realistic. The assumptions that will be used for this example are as follows: 1) the district's net school spending is equal to the foundation budget and it receives \$9,000 in Chapter 70 funding for each student they enroll in a given year (based on the average per pupil funding in urban districts that have net school spending equal to their foundation budget according to DESE FY 2012 budget figures), 2) students the district keeps, who would have otherwise left school, progress one grade level each year and they are evenly distributed across all four grade levels, and 3) of the students the district keeps, who would have otherwise left school each year, 25 percent will graduate the following year. The figure shows the additional students that the district keeps, who would have otherwise left school each year over the four years:

- **Year 1:** 20 additional students stay in school, adding \$180,000 to what the district can allocate to educate their at-risk students.
- **Year 2:** 40 additional students stay in school, along with 75% of the students from Year 1, for a total of 55 additional students, adding \$495,000 to what the district can allocate to educate their at-risk students.
- **Year 3:** 60 additional students stay in school, along with 75% of the students from Year 2 and 50% of the students from Year 1, for a total of 100 students. This would add \$900,000 to what the district can allocate to educate their at-risk students.
- **Year 4:** 80 additional students stay in school, along with 75% of the students in Year 3, 50% of the students from Year 2, and 25% of the students from Year 1 for a total of 150 students. This would add \$1.35 million to what the district can allocate to educate their at-risk students.



Notably, this scenario applies to fewer than ten districts in the state—those with over 160 students who dropout annually and a net school spending equal to their foundation budget. For 79 percent of districts across the state (215 districts of 272 statewide),<sup>31</sup> 20 or fewer students drop out each year. For these districts, cutting their dropout rate in half would result in keeping ten or fewer students. If we assume these districts receive \$5,000 per pupil in Chapter 70 funding (based on the average per pupil funding in the 87 districts that have a net school spending equal to their foundation budget), the financial impact of keeping these students would be less substantial. Applying this same formula would result in approximately \$94,000 in additional funding that the district can allocate to educate its at-risk students in Year 4.

## Conclusion

Both of the scenarios presented here are based on a set of assumptions and are intended to illustrate that it is possible for some districts' investments in dropout reduction efforts to become self-sustaining. The assumptions here are used for illustrative purposes only. Districts would need to modify these assumptions based upon their own enrollments, student characteristics and foundation budget. The hope is that these scenarios provide a compelling example for district leaders and school business officers to consider how these, or similar approaches, could be the basis for financial planning to better serve at-risk students.

31 Massachusetts Department of Elementary and Secondary Education. (February 2011). *High School Dropouts 2009-2010: Massachusetts Public Schools*. Appendix A: Annual Dropout Rates by District and School: 2001-02 to 2009-10. Retrieved from: <http://www.doe.mass.edu/infoservices/reports/dropout/0910/>.

# Considerations

We propose the following considerations, based on findings, for school and district leaders and state policymakers.

## For school and district leaders

**Incorporate strategies that promote engagement and student success into every aspect of the school experience.** In all schools and districts that participated in this study, dropout reduction strategies are integrated with system-wide approaches to improve teaching, learning, and social supports for all students. School and district leaders interviewed see efforts to improve the educational and social experiences of students across the K-12 continuum as an essential component of their overall dropout prevention strategies. Building the capacity of all staff to serve at-risk students allows schools and districts to absorb much of the cost of dropout prevention in existing staff salaries.

**Support staff in taking on new roles and responsibilities.** Whole school efforts to support students at risk of dropping out requires teachers to take on new roles and responsibilities. According to the school and district leaders who participated in this study, some of the promising strategies for reducing dropouts also require additional time from existing staff. It is important that schools and districts provide professional development and training to teachers as they develop new skills and take on new responsibilities, like student advisories.

**Analyze data to determine what works and allocate resources accordingly.** District and school leaders who participated in this study highlighted the need to continually analyze data to understand which programs are working for students. Given the limited resources available and the increasing uncertainty of education funding, it is important that resources are allocated to strengthen and expand programs that evidence suggests are effective in addressing the needs of at-risk students.

**Use the Early Warning Indicator Index to budget for dropout prevention initiatives for incoming high school students.** The DESE Early Warning Indicator Index is a powerful tool for districts to identify 8th graders who may be at risk of not graduating from high school on time. It can also be a powerful tool to assist districts in budgeting for services to support incoming high school students. Understanding the unique needs of at-risk students before they enter high school can assist districts in planning and budgeting for the necessary supports to ensure that these students persist through high school.

**Formalize strategies for reaching out to and re-engaging students who have dropped out.** There is a clear role for the district in strengthening their capacity to reach out to and connect with students who have dropped out or become truant. Participating districts lack clear guidelines or a coherent system to re-enroll recent dropouts. Among all the participating districts, only the largest district (Lawrence) has a systematic approach, ensuring that all students who drop out receive phone calls and letters to try to reengage them. In order to reach the state's goal of reducing the dropout rate in half by 2014, districts may wish to consider creating clear guidelines or protocols for schools to follow for re-connecting with students who have dropped out, or engage community partners to assist with these efforts.

## For state policymakers

**Work to establish sustainable funding streams for districts' dropout prevention initiatives.** The sustainability of dropout reduction strategies is a major concern of the districts that participated in this study. A heavy reliance on grant funding and uncertainties about future education funding forces district and school leaders to make difficult choices about which programs to fund or cut. While not a long-term solution, funding from Massachusetts' Race to the Top (RTTT) grant includes some support for dropout reduction strategies, including scaling effective programs, strengthening public-private partnerships, and improving data collection and analysis capabilities, primarily in turnaround districts.<sup>32</sup> DESE may con-

32 Massachusetts Department of Elementary and Secondary Education. (2010). Race to the Top Application for Initial Funding. (CFDA Number 84,395A). Retrieved from: [http://www.mass.gov/Eoe/docs/race2top\\_app.pdf](http://www.mass.gov/Eoe/docs/race2top_app.pdf).



sider establishing a formula-based model in which districts are provided with additional funding based on the number of their students identified by the Early Warning Indicator Index as *High Risk*.

**Continue to promote, provide and seek ways to expand data collection and analysis tools for schools and districts.**

Participating districts developed rubrics, checklists and other tools to identify at-risk students based on district- and classroom-specific indicators, and provided training to staff on how to use them. These tools have been valuable in improving school-level discussions and targeting interventions for students, but the cost of developing them can be substantial. Schools and districts often do not have the capacity to develop tools for collecting and analyzing data related to students who are at risk for dropping out. By assisting districts in the development of tools and protocols to identify at-risk students, the state can help ensure that all districts, regardless of size and capacity have the ability to use data to better serve students at risk of dropping out.

**Strengthen the ability of districts to establish partnerships.** Study findings show districts rely on strategic partnerships to build their capacity to provide a variety of student services, from mental and physical health supports to college and career preparation. Building on a key strategy of the state's Race to the Top application, the state can play a role in identifying community partners and connecting districts with those businesses, colleges/universities, other state and city agencies, and community organizations that can provide staffing and additional resources to support at-risk students.<sup>33</sup> DESE could further this effort by supporting the replication of effective programs in districts across the state and by providing seed money to support strategic planning and coordination for partnership activities. The Executive Office of Education could also support the development of partnerships through its Child and Youth Readiness Cabinet,<sup>34</sup> whose purpose is to foster and coordinate efforts to enhance the level of collaboration across the state departments and agencies that serve Massachusetts children, youth and families. The Governor's Readiness Centers may also serve as a mechanism for connecting K-12 educators with institutions of higher education, which might provide professional development for educators and/or services for at-risk students.

**Facilitate outreach to dropouts.** Consistent with a key finding in the Rennie Center's *Meeting the Challenge* (2009) policy brief,<sup>35</sup> this study found that districts lack clear guidelines and coherent systems to re-enroll recent dropouts. As suggested in the Rennie Center's policy brief, *Raise the Age, Lower the Dropout Rate?*,<sup>36</sup> DESE may wish to consider establishing a database with the names and last known addresses of dropouts and providing access to this database to representatives from agencies whose purpose is to engage and enroll high school dropouts in education and training programs.

**Expand alternative education options.** As noted in this policy brief, for some students, the traditional school structure does not fit. The state legislature and DESE may consider supporting the expansion of alternative education options for students whose needs are not met by the traditional high school schedule and setting.

33 Massachusetts Department of Elementary and Secondary Education. (2010). Race to the Top Application for Initial Funding. (CFDA Number 84,395A). Retrieved from: [http://www.mass.gov/Eeoe/docs/race2top\\_app.pdf](http://www.mass.gov/Eeoe/docs/race2top_app.pdf).

34 For more information on the Child and Youth Readiness Cabinet, please see: Rennie Center for Education Research & Policy. (June 2009). Toward Interagency Collaboration: The Role of Children's Cabinets. [http://renniecenter.issuelab.org/sd\\_clicks/listing/toward\\_interagency\\_collaboration\\_the\\_role\\_of\\_childrens\\_cabinets](http://renniecenter.issuelab.org/sd_clicks/listing/toward_interagency_collaboration_the_role_of_childrens_cabinets).

35 Rennie Center for Education Research & Policy. (February 2009) *Meeting the Challenge: Promising Practices for Reducing the Dropout Rate in Massachusetts Schools and Districts*. Retrieved from: [http://renniecenter.issuelab.org/research/listing/meeting\\_the\\_challenge\\_promising\\_practices\\_for\\_reducing\\_the\\_dropout\\_rate\\_in\\_massachusetts\\_schools\\_and\\_districts](http://renniecenter.issuelab.org/research/listing/meeting_the_challenge_promising_practices_for_reducing_the_dropout_rate_in_massachusetts_schools_and_districts).

36 Rennie Center for Education Research & Policy. (Spring 2010) *Raise the Age, Lower the Dropout Rate? Considerations for Policy Makers*. Retrieved from: [http://renniecenter.issuelab.org/research/listing/raise\\_the\\_age\\_lower\\_the\\_dropout\\_rate\\_considerations\\_for\\_policymakers](http://renniecenter.issuelab.org/research/listing/raise_the_age_lower_the_dropout_rate_considerations_for_policymakers).

# Appendix A: List of Interviewees

## Lawrence Public Schools

- Superintendent Mary L. Bergeron
- Student Support Services Facilitator Carl DeRubeis
- Business Management & Finance High School, Principal Edward Reynoso

## Southbridge Public Schools

- Southbridge High School, Principal William K. Bishop

## Beverly Public Schools

- Superintendent Marie E. Galinski
- Beverly High School, Principal Sean T. Gallagher

## Winchendon Public Schools

- Superintendent Brooke Ann Clenchy
- District Social Worker Jane Greenleaf
- Murdock Middle/High School, Principal Steven C. Meyer

## Gill-Montague Regional Public Schools

- Superintendent Carl M. Ladd
- Turners Falls High School, former Principal Jeffrey Kenney





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## About MASBO

The Massachusetts Association of School Business Officials (MASBO) is a non-profit professional organization of school administrators whose general responsibilities include the business affairs of public and non-public schools. MASBO has been actively engaged in the promotion of the establishment of the highest standards of school business administrators since 1957. The organization's general mission is to provide for the betterment of education throughout the Commonwealth.

MASBO's purposes are: to promulgate and establish the highest standards of ethics and efficiency in business methods and practices for schools, and to make them available to its members and the interested public; to conduct, sponsor, or join with others in conducting or sponsoring research and services concerning school business management and administration of schools; and to cooperate with various educational associations and with governmental organizations in developing and improving school business management and educational administration.

## About the RENNIE CENTER

The Rennie Center's mission is to develop a public agenda that informs and promotes significant improvement of public education in Massachusetts. Our work is motivated by a vision of an education system that creates the opportunity to educate every child to be successful in life, citizenship, employment and life-long learning. Applying nonpartisan, independent research, journalism and civic engagement, the Rennie Center is creating a civil space to foster thoughtful public discourse to inform and shape effective policy. For more information, please visit [www.renniecenter.org](http://www.renniecenter.org).

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