



Massachusetts Department of
**ELEMENTARY & SECONDARY
EDUCATION**

**Race to the Top
Application for Initial Funding**

Massachusetts

Submitted by:

Governor Deval Patrick

Commissioner Mitchell D. Chester

Maura Banta, Chair

Board of Elementary and Secondary Education

CFDA Number: 84.395A

V. ELIGIBILITY REQUIREMENTS

A State must meet the following requirements in order to be eligible to receive funds under this program.

Eligibility Requirement (a)

The State's applications for funding under Phase 1 and Phase 2 of the State Fiscal Stabilization Fund program must be approved by the Department prior to the State being awarded a Race to the Top grant.

The Department will determine eligibility under this requirement before making a grant award.

Eligibility Requirement (b)

At the time the State submits its application, there are no legal, statutory, or regulatory barriers at the State level to linking data on student achievement (as defined in this notice) or student growth (as defined in this notice) to teachers and principals for the purpose of teacher and principal evaluation.

The certification of the Attorney General addresses this requirement. The applicant may provide explanatory information, if necessary. The Department will determine eligibility under this requirement.

Massachusetts certifies that it does not have any legal, statutory, or regulatory barriers at the state level to linking data on student achievement or student growth to teachers and principals for the purpose of teacher and principal evaluation. Furthermore, the Board of Elementary and Secondary Education's regulations on evaluation of teachers and administrators include this provision, at 603 CMR 35.04(3) (emphasis added): *School committees are encouraged to establish programs and standards which provide for a rigorous and comprehensive evaluation process for teachers and administrators. **The evaluation process may include consideration of the extent to which students assigned to teachers and administrators satisfy student academic standards or individual education plans, and the successful implementation of professional development plans, as provided in M.G.L. c.69, §1B and c.71, §38.***

The language in bold mirrors the following provision in G.L. c. 71, s. 38, referring to arbitration of teacher performance standards (emphasis added): *In reaching a decision, the arbitrator shall seek to advance the goals of encouraging innovation in teaching and of **holding teachers accountable for improving student performance.***

I. SELECTION CRITERIA: PROGRESS AND PLANS IN THE FOUR EDUCATION REFORM AREAS

(A) State Success Factors (125 total points)

(A)(1) Articulating State's education reform agenda and LEAs' participation in it (65 points)

The extent to which—

- (i) The State has set forth a comprehensive and coherent reform agenda that clearly articulates its goals for implementing reforms in the four education areas described in the ARRA and improving student outcomes statewide, establishes a clear and credible path to achieving these goals, and is consistent with the specific reform plans that the State has proposed throughout its application; *(5 points)*
- (ii) The participating LEAs (as defined in this notice) are strongly committed to the State's plans and to effective implementation of reform in the four education areas, as evidenced by Memoranda of Understanding (MOUs) (as set forth in Appendix D) or other binding agreements between the State and its participating LEAs (as defined in this notice) that include— *(45 points)*
 - (a) Terms and conditions that reflect strong commitment by the participating LEAs (as defined in this notice) to the State's plans;
 - (b) Scope-of-work descriptions that require participating LEAs (as defined in this notice) to implement all or significant portions of the State's Race to the Top plans; and
 - (c) Signatures from as many as possible of the LEA superintendent (or equivalent), the president of the local school board (or equivalent, if applicable), and the local teachers' union leader (if applicable) (one signature of which must be from an authorized LEA representative) demonstrating the extent of leadership support within participating LEAs (as defined in this notice); and
- (iii) The LEAs that are participating in the State's Race to the Top plans (including considerations of the numbers and percentages of participating LEAs, schools, K–12 students, and students in poverty) will translate into broad statewide impact, allowing the State to reach its ambitious yet achievable goals, overall and by student subgroup, for— *(15 points)*
 - (a) Increasing student achievement in (at a minimum) reading/language arts and mathematics, as reported by the NAEP and the assessments required under the ESEA;

- (b) Decreasing achievement gaps between subgroups in reading/language arts and mathematics, as reported by the NAEP and the assessments required under the ESEA;
- (c) Increasing high school graduation rates (as defined in this notice); and
- (d) Increasing college enrollment (as defined in this notice) and increasing the number of students who complete at least a year's worth of college credit that is applicable to a degree within two years of enrollment in an institution of higher education.

In the text box below, the State shall describe its current status in meeting the criterion, as well as projected goals as described in (A)(1)(iii). The narrative or attachments shall also include, at a minimum, the evidence listed below, and how each piece of evidence demonstrates the State's success in meeting the criterion. The narrative and attachments may also include any additional information the State believes will be helpful to peer reviewers. For attachments included in the Appendix, note in the narrative the location where the attachments can be found.

Evidence for (A)(1)(ii):

- An example of the State's standard Participating LEA MOU, and description of variations used, if any.
- The completed summary table indicating which specific portions of the State's plan each LEA is committed to implementing, and relevant summary statistics (see Summary Table for (A)(1)(ii)(b), below).
- The completed summary table indicating which LEA leadership signatures have been obtained (see Summary Table for (A)(1)(ii)(c), below).

Evidence for (A)(1)(iii):

- The completed summary table indicating the numbers and percentages of participating LEAs, schools, K–12 students, and students in poverty (see Summary Table for (A)(1)(iii), below).
- Tables and graphs that show the State's goals, overall and by subgroup, requested in the criterion, together with the supporting narrative. In addition, describe what the goals would look like were the State not to receive an award under this program.

Evidence for (A)(1)(ii) and (A)(1)(iii):

- The completed detailed table, by LEA, that includes the information requested in the criterion (see Detailed Table for (A)(1), below).

Recommended maximum response length: Ten pages (excluding tables)

Note: Please see the general appendices for a letter certifying ESE's general counsel as the designee of the Attorney General; a glossary of Massachusetts education terminology; and a comprehensive list of works cited across section (A) through (F).

(A)(1)(i)

Massachusetts has worked tirelessly to earn its reputation as one of the nation's leaders in school reform and innovation. Fifteen years ago, our student performance was typical of the nation's. But beginning with the landmark Education Reform Act of 1993, we set—and stuck to—high, but achievable standards. We invested substantial amounts of money to increase and equalize funding for K–12 education, held both our students and teachers accountable, and helped to lead the nationwide charter school movement. Today, on both national and international assessments, our students consistently score at or near the top. At first glance, it would appear that we have completed our mission, but a closer look at our test results tells a more nuanced story. The numbers illustrate that not all of our students receive a world-class education in Massachusetts, and that too many of our teachers are not receiving the curricular and instructional support they need to help every student to excel. The job that began with the passage of the Education Reform Act of 1993 is unfinished.

We are poised to take on the next phase of education reform with an administration and legislature committed to action and with a broad set of stakeholder groups committed to ensuring all students succeed. We will not stop until we can say confidently that every student in Massachusetts graduates ready for success in the 21st century. That “success” may look different for every student, but we envision a responsive system that will have the tools, technology, and innovation in place to ensure that every student can say:

“I look forward to school each day because I am challenged and engaged there. I understand how what I’m learning connects with the real world. When I get in trouble in school or at home, my teachers reach out to me. I know what I’m good at, I know what I need to work on, and I know where to turn when I need help. My parents and my teachers have been talking to me about college for as long as I can remember, and I am on track to get there. One day, I plan to get a job that I’m great at and keep learning throughout my career.”

And every teacher can say:

“I know how to reach every student in my classroom and support them all to achieve high standards. I have access to curriculum and instructional tools inside and outside of my classroom that help me motivate each student. I receive honest, useful feedback from my peers and principal, recognition when I succeed, and support when I do not. I have the data to help me understand where kids are academically and what they need. And when students have needs I cannot address, I know where to turn for help. All of my students have the ability to go college, and I know that it’s my job to prepare them so they have that choice.”

Massachusetts has the momentum we need to achieve this vision for every student and teacher, and Race to the Top funding will provide the resources we need to get there faster.

In 1993, we embarked on a bold course for change, developing rigorous academic content and performance standards, strong assessments, an accountability system, and a revamped school finance system that increased levels of funding while addressing fiscal inequities. The results are evident: Our students ranked first against their peers nationally on the National Assessment of Educational Progress (NAEP) reading and mathematics assessments in 2005 and 2007. On the Trends in International Mathematics and Science Study (TIMSS), they ranked second (4th grade) and first (8th grade) in science, and third (4th grade) and sixth (8th grade) in mathematics, against their international peers.

But while every student has benefited from education reform, troubling achievement gaps remain. On the 2009 Massachusetts Comprehensive Assessment System (MCAS) tests, across all grades, 64% of white students scored proficient or advanced in mathematics, compared with 33% of their African American peers. Statewide, 87% of white students graduate in four years, compared with 58% of their Hispanic and 68% of their African American peers. Among the students who begin as a cohort of entering ninth graders, 10% drop out during high school, including 20% of low-income students, and 25% of English language learners. And more than one-third of public high school graduates entering Massachusetts public colleges take at least one remedial course in their first semester (DOE 2008).

We must address the root causes of the variation we see in student outcomes, recognizing that raising standards and conducting assessments are not good enough. In our first phase of education reform, we successfully increased accountability for results but did not provide teachers with the resources they needed to help all students achieve at high levels. Now we must provide more meaningful opportunities for teachers and leaders to develop professionally, with a focus on supports that help them individualize instruction and accelerate learning for every student. That said, we also must recognize that academic challenges are not the only ones students face. Teachers cannot teach a child who is distracted or absent because of issues outside the classroom. We need to better understand students' non-academic challenges and give them the physical, social, and emotional supports they need to focus on learning.

These issues are what drive Massachusetts' second phase of reform, which kicked off in 2008 with Governor Patrick's Education Action Agenda. This robust plan was the final product of the Commonwealth Readiness Project, a nine-month effort by a diverse group of education, business, and civic leaders charged with assessing the public education system in Massachusetts. Their effort created goals that aim to individualize learning, develop and retain effective teachers, heighten focus on college and career readiness, and unleash innovation and systemic change (see Appendix A1). These goals and the specific recommendations of the Education Action Agenda are the foundation for Massachusetts' Race to the Top (RTTT) proposal, as well as for groundbreaking January 2010 state legislation, which expands charter school caps, provides additional authority and strategies to intervene in the lowest performing districts, and creates Innovation Schools to foster greater experimentation and collaboration within districts.

Entering this next phase of education reform will require us to transform relationships within the education sector to promote greater continuity for students. The Patrick administration set the tone for this change two years ago by establishing the Executive Office of Education (EOE) and appointing a Secretary of Education who is responsible for developing a seamless, high quality, comprehensive education system from birth through higher education. The EOE works with the Departments of Early Education and Care (EEC), Elementary and Secondary Education (ESE), and Higher Education (DHE), as well as the University of Massachusetts (UMass). During its first year, the EOE built the architecture for an integrated P-16 education system. EOE also oversaw the appointment of an exceptional team of new leaders for the state's education departments and helped them launch coherent policy

agendas. It created a Child and Youth Readiness Cabinet co-chaired with the Secretary of Health and Human Services to build partnerships among all Massachusetts public agencies that serve children, focusing first on promoting school readiness for preschoolers and college and career readiness for students in K–12. And it established six regional Readiness Centers statewide to serve as hubs for collaboration among local, regional, and state education stakeholders and to deliver coherent professional development and instructional services to early education and out-of-school time programs, schools, districts, and communities. These partnerships and structures are foundational to our RTTT proposal.

Massachusetts will focus its RTTT dollars on work that will accelerate our Education Action Agenda, with the goal of transforming teaching and learning in every classroom and every school across the state. In our proposal, we have carefully selected investments that take advantage of this one-time infusion of dollars to build knowledge, expertise, systems, tools, and resources that will continue to pay off long after RTTT grant funding ends. These activities will be focused on achieving four objectives:

1. Developing and retaining an effective, academically capable, diverse, and culturally competent educator workforce
2. Providing curricular and instructional resources that support teacher effectiveness and success for all students
3. Concentrating great instruction and supports for educators, students, and families in our lowest performing schools
4. Increasing our focus on college and career readiness for all students

1. Developing and retaining an effective, academically capable, diverse, and culturally competent educator workforce: A pillar of the state’s reform plan is to develop an effective, academically capable, diverse, and culturally competent educator workforce. We will transform the entire career continuum and licensure system for both principals and teachers by emphasizing effectiveness as the key barometer of progress. Reaching this goal will require rewarding practices that work, changing practices that do not, and connecting consistent, high quality feedback to supports in the school and to opportunities to advance.

- **Embed educator effectiveness into the culture and professional processes of every school and district:** Massachusetts will develop an approach to differentiate educator effectiveness using multiple measures, including student growth data, and

align these measures of effectiveness with decisions along the educator career continuum. We will pursue this work in collaboration with participating LEAs and union partners, developing new approaches to measurement and evaluation with a representative set of 10 pilot LEAs and engaging regional networks to pursue this work in all participating LEAs so that we can achieve statewide implementation at the end of the grant. In LEAs, measures of effectiveness will inform local evaluation, professional development, career pathways, and the removal of ineffective educators. The state will incorporate effectiveness measures and performance-based components into a redesigned, tiered licensure system.

- **Ensure all educators receive high quality support to improve instruction and reach their professional potential:**

Massachusetts will use RTTT funds to make an unprecedented investment in educator development aligned with the state’s overall reform agenda. For principals and administrators, ESE will deliberately focus on strengthening instructional leadership and improving working conditions to better support staff. For teachers, ESE will focus on programs and activities that support individualized instruction for each student—including use of the PreK-12 teaching and learning system (see Objective 2 below) and strategies to proactively close achievement gaps.

2. Providing curricular and instructional resources that support teacher effectiveness and success for all students: Massachusetts

is widely regarded for its high quality academic standards and student assessments, but we have not provided adequate capacity and expertise to ensure that these resources inform day-to-day teaching and learning. Few schools or districts have the capacity to develop curriculum resources or instructional approaches powerful enough to sufficiently meet the learning needs of every student.

The state will take the lead, collaborating with LEAs, in developing a statewide PreK–12 teaching and learning system that will provide teachers and leaders with a unified system of standards, curricula, assessment tools, and online resources designed to support individualized instruction in every classroom and school. The anchors of our teaching and learning system are:

- **A new suite of diagnostic assessments to ensure timely, actionable information on student learning for teachers:** In a survey of teachers, principals, and superintendents we conducted as part of our RTTT planning, respondents identified interim and formative assessment as a top priority for RTTT funds, particularly for low achieving schools (see Appendix A2 for survey

results). Teachers need this information to improve instruction and individualize learning; leaders need it to help teachers in their schools develop; and districts need it to understand which curricula, training, and supports for teachers are most effective. The teaching and learning system will make formative, interim, and curriculum-embedded assessments available to every educator in the Commonwealth. ESE will provide intensive support through courses, supports for professional learning communities, and other modes of delivery to ensure this information informs daily classroom practice.

- **High quality curriculum materials, model units, and instructional resources accessible through a Digital Library:** Principals and superintendents also identified model curricula and instructional resources as top priorities. The PreK–12 teaching and learning system will include model curricula units and lesson plans based on common standards that are aligned within and across grade levels. These will be cross-linked to a Digital Library of instructional resources, to interim and formative assessments, and to a data system that will provide access to timely information to address individual student needs and improve programs. The system will also connect teachers to resources helpful to educators in other districts and states who have been successful in serving students facing similar challenges. Such proven methods will be especially important for differentiating instruction for students with disabilities and English language learners and for teachers of science, technology, engineering, and math (STEM).

3. Concentrating great instruction and additional supports for educators, students, and families in our lowest performing schools

To close the achievement gap and dramatically improve dropout and graduation rates, we must transform our lowest performing schools. This will require an infusion of additional supports to address the challenges faced by these schools. We plan to concentrate RTTT funds on investments to achieve the following goals:

- **Develop a specialized corps of educators prepared to tackle the challenges of low achieving schools:** Great principals and teachers are critical to rapidly improving low achieving schools. The state will work with LEAs to accelerate the flow of highly effective educators into these schools. We will recruit, train, support, and retain experienced teachers and leaders to take on this unique challenge. The state has a wealth of expertise and success to draw from: urban teacher and principal

residency networks, on-the-ground presence of national teacher recruiting and mentoring groups, innovative induction programs in districts, and strong professional development for instructional leaders. Working with these experts, we will design and implement a model to attract highly effective educators, provide them with the tools and training they need to succeed, and retain them in the low achieving schools where they are most needed.

- **Provide targeted supports to meet the needs of low income students:** Low income students and families often need additional social, emotional, and health supports to help students focus on learning and to foster school readiness among early learners. Massachusetts will identify the key supports needed and ensure they are available in the districts with greatest need. Success will hinge on coordinating and aligning the state, district, and community organizations that offer these services; Massachusetts has already identified several cities ready to create wrap-around zones with integrated services, including investments in early childhood education. Detailed evaluations will be conducted to determine the circumstances under which student achievement is most improved and will lead to recommendations on how these services can be locally funded and sustained.
- **Build district capacity to prevent low achievement and sustain progress:** Over the past year, the state, in collaboration with districts and experts, worked to define 11 Conditions for School Effectiveness that districts must put in place to ensure their schools operate effectively (see Appendix E5). Massachusetts' new accountability system has improved the state's ability to identify the lowest performing schools and the conditions they need support to implement, but many districts still lack the infrastructure and skills to actually create these conditions. We will use this new system to provide targeted assistance and to increase training, consultation, and direct service through proven partners. In addition to building district capacity, the state's strategy to turn around the lowest performing schools will also include the creation of a nonprofit turnaround intermediary to manage lead partners and school turnaround operators.

4. Increasing our focus on college and career readiness for all students

State policy requires proficiency on rigorous grade 10 tests to graduate from high school, but grade 10 proficiency is not a robust indicator of college and career readiness. Graduation requirements vary between districts, and half of our high school dropouts each year had already met state requirements for graduation. The implications are significant: more than one-third of public high school graduates who enroll in Massachusetts public colleges take at least one remedial course in their first semester, and nearly 20% of those who started out as first-time, full-time, degree-seeking candidates drop out by their second year (ESE 2009b). We must develop middle and high school pathways that keep students on track for high school graduation and ensure students arrive at college with the experience and skills they need to advance and succeed.

- **Provide high achievement by aligning existing scholarship opportunities to Common Core standards:** Massachusetts will make MassCore—currently a recommended program of high school studies—the *de facto* curriculum for the Commonwealth. The state will also strengthen two existing state programs that promote college and career readiness: the John and Abigail Adams Scholarship program and the Certification of Occupational Proficiency—by explicitly linking them to Common Core standards and providing incentives for achievement. We will also build an Early Warning Indicator System to identify students at the highest risk of dropout and develop school and district capacity to successfully intervene early and keep students on the path to graduation.
- **Embed rigorous curriculum in low performing schools:** We will provide funding for LEAs with struggling schools to scale proven, rigorous college and career pathways such as International Baccalaureate (IB) and Early College High School programs focusing on science, technology, engineering, and mathematics (STEM). This will take advantage of our state’s strong STEM sector and foster college readiness and interest in STEM careers among students participating in these programs. We will also engage Massachusetts Readiness Centers to work with secondary schools, colleges, and businesses to ensure alignment between core standards and the requirements of first-year college-credit-bearing courses.

Finally, achieving our four ambitious objectives hinges on the development of a robust state data and information infrastructure. Through RTTT we will transform our data systems so that they can efficiently deliver comprehensive, accessible, actionable, and timely data to all Massachusetts K–12 educators and key stakeholders; invest in technology to support the PreK–12 teaching and learning system and associated assessments and a more effective educator workforce; and strengthen and expand training and supports so that educators can use data effectively to inform instructional decisions.

Massachusetts is ready and eager to embark on the next generation of reform. We have used the RTTT planning process to mobilize stakeholders to agree on and launch new efforts; funding will enable us to accelerate these efforts and broaden their reach statewide. With our strong foundation, history of successful implementation, and longstanding nonpartisan political commitment to education reform, Massachusetts has what it takes to create a public education system that will prepare all students for success. We have traveled a great distance since 1993, and as we look ahead, we still have much to learn. However, we also believe Massachusetts can serve as a model for all states—and that our RTTT work will propel both the state and our nation into the next generation of education reform.

(A)(1)(ii–iii)

Conversations that began with the Commonwealth Readiness Project in 2008 have gained renewed vigor as we talked with LEAs, unions, school committees, early education and higher education professionals, business leaders, community groups, and other stakeholders to develop our RTTT proposal. We have been energized by the statewide momentum to identify and develop powerful solutions together and to ensure successful implementation in every classroom and school. We realize the magnitude of the work ahead, but we are confident that we have a solid platform and a clear design for how Massachusetts—with RTTT resources—can reach our goals.

We are joined in our work by 256 participating LEAs (65% of the 392 LEAs eligible to sign). These LEAs represent the full range of districts and charter schools in Massachusetts and cover 1,336 schools, 72% of K–12 student enrollment, and 86% of students in poverty statewide (see summary table for (A)(1)(iii)). We required all LEAs to obtain signatures on our standard Memorandum of

Understanding (MOU) from the LEA leader, school committee or board chair, and union leader (where applicable) in order to qualify as a participating LEA (see summary table for (A)(1)(ii)(c)) for our percentage of applicable signatures, Appendix A3 for our MOU and Appendix A4 for a map of participating LEAs). We also received, but did not accept, MOUs from an additional 62 LEAs that obtained only two of the three required signatures. This level of participation represents a major step forward for Massachusetts. In a culture of strong local control, we have secured broad statewide commitment to a common set of strategies for the next phase of education reform.

With the participation of these LEAs, we will be able to make strong progress in reducing the achievement gap and will show statewide improvement in student achievement, high school graduation, and college enrollment. We expect that students who are currently furthest behind will make faster, more dramatic improvements and that gains will accelerate in the two years following RTTT as the benefits from the state's investments take off. Our goals for each measure, described below, are ambitious yet grounded in the state's historic ability to continuously improve statewide performance (see Appendix A5). They are:

- 1) Increase historic rates of gain in student performance on NAEP and MCAS (our ESEA assessment) by 15% between 2010 and 2014 and another 25% between 2014 and 2016. This will increase the share of students scoring in *Advanced* and *Proficient* and reduce the share scoring in *Warning* or *Failing (Below Basic)* on NAEP).
- 2) Reduce achievement gaps in student performance on NAEP and MCAS by 25% between 2010 and 2014, and another 25% between 2014 and 2016.
- 3) Maintain our first-in-the-nation standing on all four NAEP assessments in 2010, 2012, and 2014.
- 4) Improve overall high school graduation and college enrollment rates by 5% between 2010 and 2014 and an additional 5% between 2014 and 2016.
- 5) Reduce achievement gaps in high school graduation, college enrollment, and college course completion rates by 15% between 2010 and 2014 and another 15% between 2014 and 2016.

If we attain these goals, by 2014, an additional 13% of students will score *Advanced* or *Proficient* on the mathematics MCAS. We will no longer have some of the largest achievement gaps on NAEP, and we will cut our MCAS achievement gap almost in half in just six years. About 3,000 more students will graduate from high school by 2014, and an additional 2,000 students in the class of 2014 will enroll in college. And we will accomplish this without compromising our standards.

While RTTT will enable us to reach these goals faster, Massachusetts is committed to pursuing our agenda with or without RTTT funding. We will support our most critical investments, such as implementing the Common Core Standards; redesigning our accountability, assistance, and educator development systems; and improving our data systems, through private or repurposed funding. These investments are part of the governor’s Education Action Agenda, and we have already established significant momentum among all stakeholders to succeed. But without funding, we will have to proceed more slowly and with less support for LEAs. We anticipate that it could take four to six additional years to achieve the results we could obtain by 2014 with RTTT funding.

Summary table for (A)(1)(ii)(b)

Elements of State Reform Plans	Number of Participating LEAs (#)	Percentage of Total Participating LEAs (%)
B. Standards and Assessments		
(B)(3) Supporting the transition to enhanced standards and high-quality assessments	242	95%
C. Data Systems to Support Instruction		
(C)(3) Using data to improve instruction:		
(i) Use of local instructional improvement systems	256	100%
(ii) Professional development on use of data	256	100%
(iii) Availability and accessibility of data to researchers	256	100%
D. Great Teachers and Leaders		
(D)(2) Improving teacher and principal effectiveness based on performance:		
(i) Measure student growth	256	100%
(ii) Design and implement evaluation systems	256	100%
(iii) Conduct annual evaluations	256	100%

(iv)(a) Use evaluations to inform professional development	256	100%
(iv)(b) Use evaluations to inform compensation, promotion and retention	256	100%
(iv)(c) Use evaluations to inform tenure and/or full certification	256	100%
(iv)(d) Use evaluations to inform removal	256	100%
(D)(3) Ensuring equitable distribution of effective teachers and principals:		
(i) High-poverty and/or high-minority schools	256	100%
(ii) Hard-to-staff subjects and specialty areas	256	100%
(D)(5) Providing effective support to teachers and principals:		
(i) Quality professional development	256	100%
(ii) Measure effectiveness of professional development	256	100%
E. Turning Around the Lowest-Achieving Schools		
(E)(2) Turning around the lowest-achieving schools	256	100%

Note: Massachusetts' MOU required signatures from the LEA leader, school committee or board chair, and union leader (where applicable) to become a participating LEA and a commitment to negotiate in good faith those portions of the MOU subject to collective bargaining. The extent to which a LEA needs to negotiate over issues in contract negotiations depends on the local collective bargaining agreement and past practice in the LEA. Massachusetts' MOU includes two optional initiatives in support of criteria B3: Roll out a statewide PreK–12 teaching and learning system; and Increase college and career readiness. If an LEA committed to implement either or both of those initiatives, it earned credit for participation in criteria B3.

Summary table for (A)(1)(ii)(c)

	Number of Signatures Obtained	Number of Signatures Applicable	Percentage (%) (Obtained/Applicable)
LEA Superintendent (or equivalent)	256	256	100%
President of Local School Board (or equivalent, if applicable)	256	256	100%
Local Teachers' Union Leader (if applicable)	203	203	100%

Summary table for (A)(1)(iii)

	Participating LEAs (#)	Statewide (#)	Percentage of total statewide (%)
LEAs	256	392	65%
Schools	1,336	1,832	73%
K-12 students	667,941	931,391	72%
Students in Poverty	252,392	294,692	86%

Note: Two schools were opened in the Fall of 2009, so K–12 enrollment and students in poverty data are not available for these two schools.

Detailed table follows on next page

Detailed table for (A)(1)

	LEA Demographics			Signatures on the MOUs			MOU terms	Preliminary Scope of Work -- Participation in each application Plan Criterion																	
	# of Schools	# of K-12 students	# of Students in Poverty	LEA Superintendent (or equivalent)	School Board (or President of Local School Board (or equivalent, if applicable))	Local Teachers' Union Leader (if applicable)	Uses standard terms and conditions	(B)(3)	(C)(3)(i)	(C)(3)(ii)	(C)(3)(iii)	(D)(2)(i)	(D)(2)(ii)	(D)(2)(iii)	(D)(2)(iv)(a)	(D)(2)(iv)(b)	(D)(2)(iv)(c)	(D)(2)(iv)(d)	(D)(3)(i)	(D)(3)(ii)	(D)(3)(iii)	(D)(5)(i)	(D)(5)(ii)	(E)(2)	
Participating LEAs																									
Abby Kelley Foster Charter Public (District)	1	1,425	772	Yes	Yes		Yes	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Academy Of the Pacific Rim Charter Public (District)	1	474	248	Yes	Yes		Yes	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Acushnet	2	1,002	172	Yes	Yes	Yes	Yes	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Advanced Math and Science Academy Charter (District)	1	633	28	Yes	Yes		Yes	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Agawam	8	4,230	840	Yes	Yes	Yes	Yes	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Amesbury	4	2,324	421	Yes	Yes	Yes	Yes	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Amherst	4	1,314	443	Yes	Yes	Yes	Yes	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Amherst-Pelham	2	1,731	299	Yes	Yes	Yes	Yes	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Ashland	5	2,530	228	Yes	Yes	Yes	Yes	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Assabet Valley Regional Vocational Technical	1	933	252	Yes	Yes	Yes	Yes	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Atlantis Charter (District)	1	702	338	Yes	Yes		Yes	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Attleboro	10	5,785	1,644	Yes	Yes	Yes	Yes	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Auburn	6	2,309	327	Yes	Yes	Yes	Yes	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

(A)(2) Building strong statewide capacity to implement, scale up and sustain proposed plans (30 points)

The extent to which the State has a high-quality overall plan to—

(i) Ensure that it has the capacity required to implement its proposed plans by— (20 points)

- (a) Providing strong leadership and dedicated teams to implement the statewide education reform plans the State has proposed;
- (b) Supporting participating LEAs (as defined in this notice) in successfully implementing the education reform plans the State has proposed, through such activities as identifying promising practices, evaluating these practices' effectiveness, ceasing ineffective practices, widely disseminating and replicating the effective practices statewide, holding participating LEAs (as defined in this notice) accountable for progress and performance, and intervening where necessary;
- (c) Providing effective and efficient operations and processes for implementing its Race to the Top grant in such areas as grant administration and oversight, budget reporting and monitoring, performance measure tracking and reporting, and fund disbursement;
- (d) Using the funds for this grant, as described in the State's budget and accompanying budget narrative, to accomplish the State's plans and meet its targets, including where feasible, by coordinating, reallocating, or repurposing education funds from other Federal, State, and local sources so that they align with the State's Race to the Top goals; and
- (e) Using the fiscal, political, and human capital resources of the State to continue, after the period of funding has ended, those reforms funded under the grant for which there is evidence of success; and

(ii) Use support from a broad group of stakeholders to better implement its plans, as evidenced by the strength of the statements or actions of support from— (10 points)

- (a) The State's teachers and principals, which include the State's teachers' unions or statewide teacher associations; and
- (b) Other critical stakeholders, such as the State's legislative leadership; charter school authorizers and State charter

school membership associations (if applicable); other State and local leaders (e.g., business, community, civil rights, and education association leaders); Tribal schools; parent, student, and community organizations (e.g., parent-teacher associations, nonprofit organizations, local education foundations, and community-based organizations); and institutions of higher education.

In the text box below, the State shall describe its current status in meeting the criterion. The narrative or attachments shall also include, at a minimum, the evidence listed below, and how each piece of evidence demonstrates the State's success in meeting the criterion. The narrative and attachments may also include any additional information the State believes will be helpful to peer reviewers. The State's response to (A)(2)(i)(d) will be addressed in the budget section (Section VIII of the application). Attachments, such as letters of support or commitment, should be summarized in the text box below and organized with a summary table in the Appendix. For attachments included in the Appendix, note in the narrative the location where the attachments can be found.

Evidence for (A)(2)(i)(d):

- The State's budget, as completed in Section VIII of the application. The narrative that accompanies and explains the budget and how it connects to the State's plan, as completed in Section VIII of the application.

Evidence for (A)(2)(ii):

- A summary in the narrative of the statements or actions and inclusion of key statements or actions in the Appendix.

Recommended maximum response length: Five pages (excluding budget and budget narrative)

Massachusetts is prepared to provide the leadership, program management, and focus on implementation necessary to effectively execute its RTTT proposal. Drawing on its existing operational systems and making thoughtful investments in tools and resources with sustained impact, Massachusetts will use RTTT as an opportunity to transform its relationship with LEAs and to strengthen LEAs' abilities to implement education reforms. These investments in state and LEA capacity-building will be a legacy of RTTT well after grant funding ends.

(A)(2)(i)(a-c)

If Massachusetts receives Race to the Top funding, the commissioner of ESE will be responsible for overall implementation and results. The commissioner has made it clear that this work will not be in addition to what we already do; it is our future strategy and the core work of the agency. To support the commissioner, the existing Office of Strategic Planning, Research, and Evaluation (OSPRES) will manage the implementation process and monitor the grant, reporting directly to the commissioner for this function. OSPRES will integrate RTTT-funded staff and repurpose its existing staff to enhance the unit's emphasis on supporting effective implementation, drawing from Sir Michael Barber's "deliverology" approach (Barber 2008), which emphasizes the use of real-time data, focused analysis and reports, and strong leadership involvement to drive implementation. RTTT will fund an implementation manager who will report to the OSPRES director and be responsible for developing an agency-wide program management, evaluation, and communication strategy, as well as for building systems for LEA accountability and support for grant implementation.

The agency senior executives who oversaw the proposal development will continue to lead the work in their areas of expertise and will be accountable for project execution (see Appendix A6 for resumes of key personnel and areas of responsibility). Each assurance area has a set of projects that will form the core work of existing departments. Each project has an assigned project manager who will track and ultimately be accountable for results; these staff will receive intensive training on effective project management. Each project will also have an associated evaluation design, conducted by an objective third-party evaluator where feasible, to gather information for program improvement and to measure program outcomes. The implementation manager from OSPRES will work with ESE project managers to plan implementation, set goals and benchmarks, develop reporting plans, and define the evaluation process for each project. The state also will identify a lead manager with responsibility for working with each participating LEA to ensure they successfully implement their plan. This individual, ranging from a senior manager for the largest urban districts to a middle manager for mid-sized districts or groups of smaller districts, will look at each participating district's scope of work holistically to ensure coordination across all projects and will be responsible for frequent communication with the district about their progress and needs. OSPRES will support these managers with tools and information to track LEA progress.

The implementation manager and OSPRE director will meet with the commissioner and the lead senior manager for each assurance area approximately every six to eight weeks. These half-day working sessions will cover two agenda items. First, the team will review progress in one assurance area in depth. Second, the OSPRE director and implementation manager will highlight any emerging projects and/or LEA plans at risk, as well as patterns of problems with implementation across projects and LEAs. The implementation manager will be responsible for following through with agency staff and districts when ineffective practices are discovered to ensure they are modified or ended; results will be reported back in the next progress review meeting. These reviews will also serve as a basis for identifying opportunities for dissemination of best practices. Additional activities include a kick-off session for participating districts early in the 90-day planning period to provide technical assistance on implementation and budget development, followed by annual half-day technical assistance sessions; training and tools for ESE staff on effective project management; state and district-level reports for monitoring implementation and outcomes, and an external evaluation of the agency's project and grant management functions to provide feedback and identify opportunities for improvement.

OSPRE is well positioned to take on the overall program management function. It is already responsible for tracking performance measures for the agency's and the Board of Elementary and Secondary Education's priorities, which are closely aligned with both the governor's Education Action Agenda and Massachusetts' RTTT proposals. OSPRE also currently administers the State Fiscal Stabilization Fund (SFSF) program; Massachusetts SFSF recipients rated the state among the highest in satisfaction with the guidance they received on the program (USGAO 2009). Additional program management staff will be added to OSPRE to ensure ESE has sufficient staff to support this important function. These will include a research and evaluation manager and a policy analyst, who will work with OSPRE staff on analytical projects to support effective implementation and identify best practices; an operations and grants manager to oversee administrative functions and manage fund disbursement, along with the LEA grant review and monitoring process; a fiscal officer, who will monitor spending plans and manage contracts; a communication specialist to disseminate best practices and coordinate convening events with participating LEAs; an information technology project manager to coordinate the

implementation of all RTTT data systems projects; a data analyst to support federal reporting and state analytical needs; and an administrative assistant. (See Appendix A6 for an organizational chart and Appendix A7 for brief job descriptions.)

To guide its grant implementation, Massachusetts will create two advisory groups. One will be a State Implementation Advisory Group composed of stakeholders representing the key constituencies required to ensure successful implementation and follow-through. Its role will be to provide overall guidance on strategy and implementation and to develop plans for continuing the work once the grant runs out. This group will meet three times yearly and will be convened by Mass Partners, a coordinating organization of the key state associations for education. The group will include all Mass Partners members (school committees, superintendents, teacher unions, elementary and secondary principals, and personnel administrators), as well as additional stakeholders such as the Executive Office of Education (EOE), DHE, EEC, the Massachusetts Charter Public School Association, and the Massachusetts Business Alliance for Education. The second will be an External Advisory Group composed of state, national, and international leaders in education policy, who can provide guidance on the overall direction of Massachusetts' RTTT activities, as well as advice on revising strategies as needed. This group will meet twice per year and will be composed of a mix of practitioners, researchers, and policymakers, including education ministers from at least one other high-performing country to provide an international perspective. Agendas and activities for both groups will be coordinated by OSPRE.

Massachusetts will also be held accountable for achieving its goals by the state's Board of Elementary and Secondary Education, which has legal responsibility for all agency activities. In summer 2008, the Board committed to four priorities for ESE efforts over the next several years: strengthening educator development, improving curriculum and instruction, developing accountability and assistance systems, and coordinating non-academic (social, emotional, and health) and academic resources to provide more effective supports. By design, these priorities align closely with our proposed activities in this grant.

(A)(2)(i)(d)

Massachusetts' proposed RTTT budget totals \$287 million (see Appendix A9 for the budget summary and narrative and detailed project budgets). The budget includes \$24 million in supplemental funding for participating LEAs, an allocation from the state's share

of funds to support LEAs in implementing critical initiatives. We have focused our resources on investments that will continue to pay off, rather than activities that will be difficult to sustain without grant funding. We have also chosen to contract for many services rather than add agency staff, as we can get better value by capitalizing on the expertise of our state's strong nonprofit and technology sectors. Further, we will coordinate, reallocate, or repurpose approximately an additional \$33.8 million (19% of available funds) and 53.0 FTEs (11% of agency staff) from federal and state funding sources to support our proposed RTTT activities (see Appendix A10). We have included \$12.5 million (approximately 4% of the budget) for independent program evaluation to support our commitment to holding ourselves accountable for results, identifying best practices, and making work available nationally for others to learn from.

OSPRE will be supported in grants and fiscal management by existing agency systems. ESE currently administers more than 11,000 federal and state grants without a single fiscal audit finding in the three previous A-133 Single Audits. The Commonwealth's Massachusetts Management Accounting and Reporting System will control the total award and track information about individual expenditures. ESE's Spending Plan model will translate spending restrictions and set-asides into expense budgets and reconcile budgets against actual spending. KPMG recently audited the agency's ARRA readiness and found that "the Department has controls in place to help prevent fraud, waste, and abuse for all state and federally funded grant programs" (KPMG 2009).

(A)(2)(ii)

Deep and longstanding partnerships among educational, political, business, and community stakeholders, and an unequivocal commitment to continuous education improvement, are the foundation for our successes to date. These factors will continue to be crucial for our RTTT proposal to succeed. Securing letters of support for the Massachusetts proposal was the final stage in a comprehensive process of engaging stakeholders in our RTTT work. For months, stakeholders across the Commonwealth have been deeply engaged in discussions about our proposed strategies and their potential impact on students, educators, families, and communities. We gathered input in many ways: a statewide survey that received more than 3,400 individual responses; seven face-to-face regional forums and eight webinars on RTTT; two special meetings of the superintendents, union leaders, and school committee

leaders for districts in our Urban Superintendents Network; one statewide meeting of superintendents, union leaders, and school committee leaders for all LEAs; and four sessions with the Board of Elementary and Secondary Education. We also held numerous meetings and focus groups with state association leaders, local and national funders, business leaders, community-based and nonprofit organizations, parents, and individual staff from our largest districts. We offered an opportunity for general public comment on an outline of our proposal, and solicited comment on a full draft of the proposal from the state’s superintendents, school committees, and teachers’ unions, as well as funders and national experts.

A total of 146 stakeholders have signed letters of support (see Appendix A11). We are energized by our stakeholders’ commitment to not only endorse but also contribute to RTTT efforts going forward. To name just a few, Mass Partners has agreed to convene our stakeholder advisory group. The Massachusetts Business Alliance for Education has already launched work to share private sector expertise in performance evaluation and compensation with the field. The Massachusetts Association of School Superintendents is developing training for district leaders aligned with our priorities. And in addition to supporting our state’s planning efforts, our local philanthropic community is already investing in innovative projects aligned with our proposal in many of our lowest performing schools. The enthusiasm on the part of these and other stakeholders to embrace our RTTT plan during and after the four-year grant period further strengthens our confidence that we will accomplish our reform agenda.

(A)(2)(i)(e)

To sustain results after funding ends, we will continue to rely heavily on stakeholder support. While already strong, we know there is more we can do to strengthen these relationships, especially among district-based stakeholders who currently view our agency as focused more on compliance than support. Among the most powerful effects of RTTT will be the development of a more effective and collaborative way of working with districts. We have already begun this work. For instance, to introduce our RTTT proposals, we held the first joint meetings of the superintendents, union leaders, and school committee leaders in our 24 largest urban districts. This proved so effective that we plan to convene this group at least once per year. Receiving RTTT funding would allow us to reach our goal of establishing an educational culture characterized by cross-functional communication within our agency, a shared vision and

vocabulary for education reform both within and outside the agency, increased collaboration with stakeholder groups and between school administrators and teachers, and strengthened feedback loops to identify and disseminate practices that work. After four years, we expect this new culture and the new structures will have become the norm and expectation for our working relationships within and outside the agency.

In addition, RTTT will build the human capacity and infrastructure to sustain the work at the state and local levels. In the aftermath of RTTT, our districts will be more effective in supporting their low-performing schools. Our teachers and leaders will have access to data, tools, resources, and professional development that will make them more effective in improving learning among all Massachusetts students. Our coordination with other education sectors will be more robust. Our relationships with stakeholders will be stronger. Our agency will be more capable of sustaining education reform. Coordinating other funding sources with our RTTT activities will provide a sustainability plan for those areas where additional funding already exists. Our efforts in identifying effective practices will strengthen requests for state and private funding. Taken together, we are confident that we have strategies in place to ensure that the fiscal, political, and human capital resources we build through Race to the Top will allow us to continue this important work long after funding ends.

(A)(3) Demonstrating significant progress in raising achievement and closing gaps (30 points)

The extent to which the State has demonstrated its ability to—

- (i) Make progress over the past several years in each of the four education reform areas, and used its ARRA and other Federal and State funding to pursue such reforms; (5 points)
- (ii) Improve student outcomes overall and by student subgroup since at least 2003, and explain the connections between the data and the actions that have contributed to — (25 points)
 - (a) Increasing student achievement in reading/language arts and mathematics, both on the NAEP and on the assessments required under the ESEA;

(b) Decreasing achievement gaps between subgroups in reading/language arts and mathematics, both on the NAEP and on the assessments required under the ESEA; and

(c) Increasing high school graduation rates.

In the text box below, the State shall describe its current status in meeting the criterion. The narrative or attachments shall also include, at a minimum, the evidence listed below, and how each piece of evidence demonstrates the State's success in meeting the criterion. The narrative and attachments may also include any additional information the State believes will be helpful to peer reviewers. For attachments included in the Appendix, note in the narrative the location where the attachments can be found.

Evidence for (A)(3)(ii):

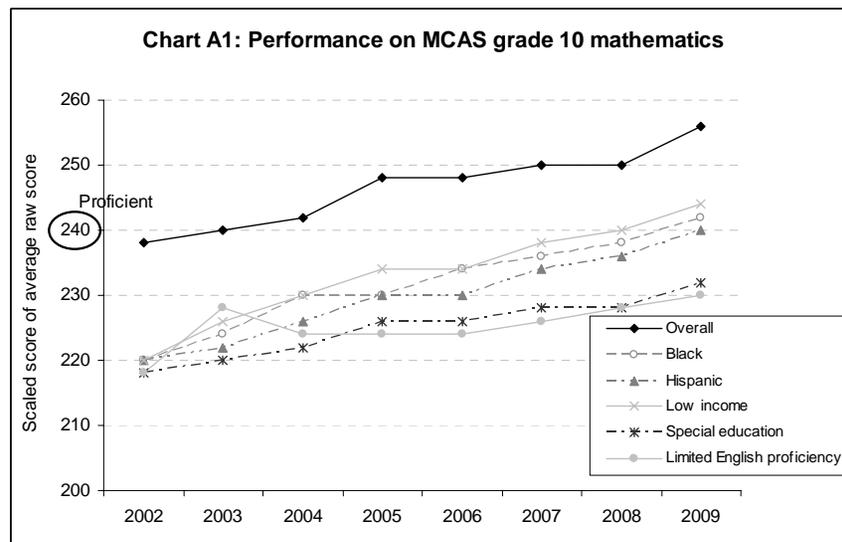
- NAEP and ESEA results since at least 2003. Include in the Appendix all the data requested in the criterion as a resource for peer reviewers for each year in which a test was given or data was collected. Note that this data will be used for reference only and can be in raw format. In the narrative, provide the analysis of this data and any tables or graphs that best support the narrative.

Recommended maximum response length: Six pages

(A)(3)(i-ii)

See Appendix A12 for Massachusetts historical data.

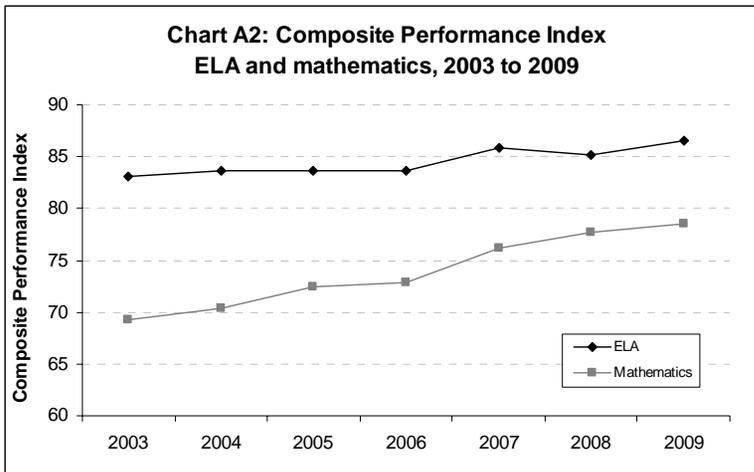
One chart summarizes Massachusetts' remarkable progress in education reform and the substantial work left to be done. As chart A1 shows, from 2002 to 2009, Massachusetts' tenth graders improved their performance on our grade 10 mathematics assessment by 18 scaled score points,¹ moving the average student from just barely *Proficient* to nearly *Advanced*. Performance improved even faster



among our lowest performing subgroups. The average scaled score for low income students increased 24 points, from 220, the borderline between *Failing* and *Needs Improvement*, to 244, squarely in the *Proficient* category. Statewide, this improvement translated into a gain of 31 percentage points in students performing at *Proficient* or higher—a remarkable increase over just eight years. The state's tenth graders also made substantial progress on the English language arts (ELA) assessment, with an average scaled score increase of 6 points statewide, and nearly three times that in some subgroups. At the start of the decade the

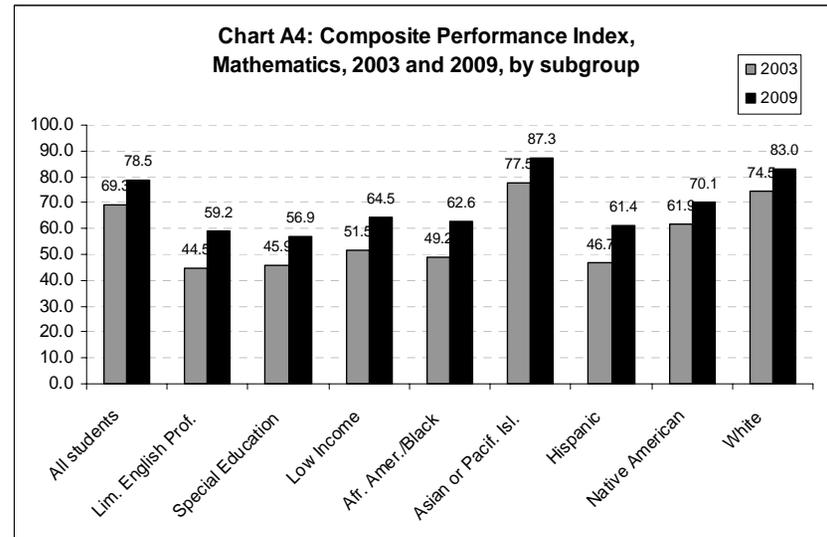
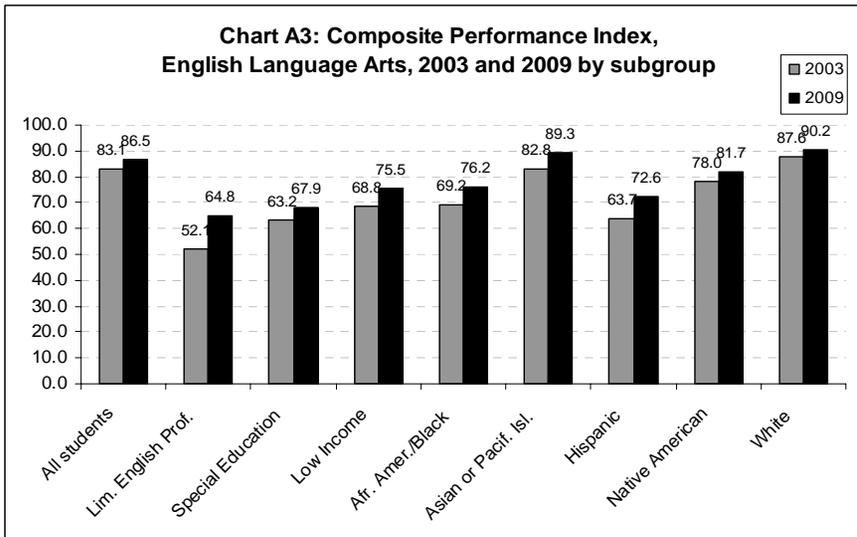
typical score for black, Hispanic, and low income students scored substantially below proficient, but by 2009 the average low income student scored *Proficient* in mathematics and the others groups were closing in on proficiency. We achieved these results without easing our standards, and without increasing the high school dropout rate. In fact, our standards are often judged the strongest in the nation, and our dropout rate held steady over the period while cohort graduation rates steadily improved.

¹ Measured as the scaled score of the average raw score. For technical reasons, only raw scores, not scaled scores, can be averaged across students.



This pattern of improvement extends beyond tenth grade. Our Composite Performance Index (CPI)—a measure of progress to proficiency on our state assessments that we use as part of our Adequate Yearly Progress determinations—shows substantial improvement for all grades in both subjects over this period (see chart A2 for data; see General Appendix 2 for an explanation of how CPI is calculated). Average student performance in ELA as measured by CPI improved by 4% over the seven years; in mathematics, by 14%. We also see faster improvement among the subgroups most likely to show low achievement (see charts A3 and A4). While statewide ELA performance

increased by 4% on CPI, limited English proficient students improved by 24% and poor students by nearly 10%. In mathematics, the gains are even more striking: Every subgroup saw at least a 10% improvement, and English language learner, special education, and



low income students all improved by at least 25% over the seven-year period, much faster than the overall average. Similarly, nearly all traditionally low performing subgroups have shown significant increases in performance on NAEP from 2000 to 2009. In many cases achievement gaps have also narrowed significantly. Without question, every student in Massachusetts has benefited from the last 15 years of education reform.

This strong improvement has helped us maintain “first in the nation” status on the National Assessment of Educational Progress for the last three NAEP administrations. Compared with other states in 2005 and 2007, we tied for first or scored first alone in English language arts and mathematics in grades 4 and 8, and we have already repeated this performance on the 2009 mathematics assessments. Further, according to the 2007 Trends in International Mathematics and Science Study, in which Massachusetts was one of only two states to participate as a “country”, the state’s fourth graders ranked second worldwide in science achievement and tied for third in mathematics; our eighth graders tied for first in science and ranked sixth in mathematics.

We have also seen improvement in cohort high school graduation rates, overall and for many subgroups. Statewide, 81.2% of the 2008 cohort graduated within four years of their first enrollment in ninth grade, one of the highest rates in the nation. While the overall 4-year graduation rate increased by 0.3 percentage points relative to 2007, rates improved by 1.5 to 3 percentage points for limited English proficient, special education, and African American students.

Education reform in Massachusetts has been powerful and effective, but it remains unfinished. Even as our students’ overall performance on our state mathematics assessments has improved across grades, performance on science and reading has held steady rather than accelerating. Even as Massachusetts’ low income fourth graders tied for first place on the NAEP ELA test, our low income achievement gap for that test was the 17th largest in the nation. Even as our achievement gaps for current and former English language learners have held steady, their performance is still relatively low and their share of total student enrollment is growing. And even as our cohort graduation rate has substantially improved, well over 7,000 students in each cohort still drop out during high school—one-third of whom had already met the state requirements for graduation.

We attribute our success to date to a combination of high standards, accountability, and support. The Commonwealth embarked on standards-based education reform in 1993 with the passage of the Massachusetts Education Reform Act, which substantially increased the state's financial investment in K–12 education while also increasing accountability for results. This legislation established the key elements undergirding education reform in Massachusetts: a set of curriculum frameworks that set standards in all core curriculum areas, a rigorous system for assessing students' progress toward those standards (MCAS), and a foundation budget (see section (F)(1)) that ensured each district had sufficient resources available to support implementing the standards. Additional elements of accountability were added over the years, including the competency determination (scoring at least *Needs Improvement* on the state grade 10 English language arts and mathematics tests) as a requirement for high school graduation beginning with the high school class of 2003; processes to review performance and target assistance to underperforming districts and schools; and a major revision of the educator licensure requirements in 2001 that led to higher standards for entry and the recertification of 70,000 educators statewide.

More recently, our policy reforms have paralleled many aspects of USED's four assurance areas:

In **Standards and Assessments**, we have added high school science to our competency determination requirement for high school graduation beginning with the class of 2010, and the Board of Elementary and Secondary Education adopted MassCore, a rigorous recommended high school course of studies. In 2001, Massachusetts became the first state to incorporate standards and assessment for technology and engineering within the science frameworks; we are still the only state to include technology and engineering prominently in our standards at all age levels. We have built a growth model allowing us for the first time to measure the change in an individual student's performance over time. In areas where student performance has been weak statewide, such as early literacy and middle school mathematics, and for student groups such as students with disabilities and English language learners, the state has provided funding for professional development for educators to improve their content knowledge and pedagogical skills. Our performance standards have been judged nearly equivalent to NAEP's on three of the four NAEP assessments (NCES 2007), and our recent revisions to our ELA and mathematics standards are informing the development of the CCSSO/NGO Common Core Standards (see section (B)(1)).

In **Data Systems to Support Instruction**, we have provided free statewide access to a Data Warehouse housing state- and local-level education data in an easy-to-use system, including both pre-built reports and the option for more complex queries. We have developed a rigorous curriculum for training educators on how to effectively use education data and have certified providers to deliver it. We have implemented a new collection of educator-level data on preparation and course assignments, allowing us to better plan for our educator workforce. Funded by our 2009 State Longitudinal Data Systems grant and a state technology bond, we are currently piloting a new data collection system that will connect teachers with the students they serve. Another new data tool (the Schools Interoperability Framework) will reduce the burden of providing data and facilitate real-time data access. Finally, we have partnered with WGBH public television and Moodle to provide curriculum supports through MassONE, our web-based teacher support system.

In **Great Teachers and Leaders**, Massachusetts recently strengthened the standards for teachers seeking certification in elementary or special education, requiring them to earn a minimum score on both the overall state licensure test and its mathematics sub-section. We also adopted new performance standards for administrators. We have supported alternate routes to certification (see section (D)(1)) and incubated innovative models of educator preparation. To support faster and more coherent progress in this important policy area, an associate commissioner was recently hired to lead a newly reorganized center for educator policy, preparation, and licensure. The center has already launched stakeholder-based efforts to develop new performance standards for educational leaders, to define the knowledge and skills of professional teaching practice, and to produce an annual report about the state's educator workforce. This unit is poised to make strong progress in improving educator policy over the next several years.

In **Turning Around the Lowest Achieving Schools**, over the last 16 months, ESE has partnered intensively with key stakeholders to develop a new Framework for District Accountability and Assistance that defines the roles, responsibilities, and expectations of both the district and the state, based on the performance of the district's schools. Three major stakeholder groups and the Board consulted regularly with ESE on every step of the framework's design. Its elements were vetted against the latest academic research and supported by Massachusetts' participation in a National Governors Association initiative convened in partnership with Mass Insight Education and Research Institute to help four states develop state turnaround plans and policies that create the conditions to

improve chronically low-performing schools. The resulting framework identifies specific Conditions for School Effectiveness that districts provide for their schools through district systems of support. A set of district standards and indicators measure the strength of these systems of support and are assessed through regular district accountability reviews (20 scheduled for 2010–2011). In the new framework, DESE focuses efforts on supporting and building district capacity to ensure the Conditions exist in each of its schools. Just as importantly, DESE holds districts accountable for the performance of all of its schools, placing each district at one of five accountability designations based on the performance of its lowest achieving school. Level 3 schools (and districts) are schools with No Child Left Behind status of corrective action or restructuring. Level 4 schools (and districts) are “underperforming districts” with one or more persistently low achieving school. Level 5 schools (and districts) are those schools that districts have been unable to turn around and for which DESE assumes major responsibility; as early as 2012, ESE expects to identify its first Level 5 schools. In February, ESE will announce 36 Level 4 schools; all Level 4 districts are participating LEAs in this proposal. (See Appendices E2 to E6 for a schematic of the framework, the membership of the stakeholder groups involved in its development, the District Standards and Indicators, the associated Conditions for School Effectiveness, and a summary of academic research on the conditions.)

The Framework was built on lessons learned from earlier attempts to turn around low performing schools. Between 2001 and 2006 ESE identified 57 schools as underperforming or chronically underperforming and directed modest state resources and technical assistance to support their improvement (up to \$25,000 each in state grants for underperforming schools and up to \$150,000 each for chronically underperforming schools). The limits of “light touch” turnaround without close district engagement were evident: only seven schools exited status on the basis of substantial improvement, and of the 44 identified schools that remain open, only four have made dramatic progress. To help these schools and districts improve more quickly, last year the legislature moved the district accountability function from the former Office of Education Quality and Accountability to ESE, allowing the agency to more closely tie accountability with assistance and revamp its entire accountability and assistance framework.

The law passed on January 14, 2010 by the Massachusetts Legislature allows all staff in Level 4 and 5 schools to be required to reapply for their positions and provides staffing flexibility that was not available under previous law; unlike previous law, it also

allows for the alteration of collective bargaining agreements and allows the commissioner under certain conditions to appoint a receiver for a Level 5 school (not just for a Level 5 district). The new law allows for dismissal from the district of teachers with professional teacher status (tenure) in Level 4 and 5 schools under a “good cause” (legitimate business reason) rather than “just cause” standard. The new law makes the lowest 10% of districts eligible for designation as Level 5 districts, including all of the districts likely to have Level 4 or 5 schools. As a result, a district’s desire not to be designated as Level 5 will serve as further motivation for rapid improvement of its persistently low achieving schools.

Since 2001, ESE has built strong working relationships with the state’s urban districts by co-sponsoring the Urban Superintendents’ Network and by providing direct district assistance supported by federal Title I and state school improvement funding through its Urban District Assistance Office. Working with educators from the state’s 10 largest urban districts (known as the Commissioner’s Districts), ESE has also built a suite of tools, protocols, and resources that districts can use to assess and strengthen their district systems of support and ensure effective implementation of the conditions for school effectiveness. Building on this success, ESE has used federal Title I, Title IID, Title III, and IDEA funding in combination with state sources to launch six regional District and School Assistance Centers (DSACs) to support districts in making effective use of these tools. Priority for assistance goes to districts with schools designated for corrective action or restructuring under NCLB (Level 3, 4, and 5 districts). As will be described throughout this proposal, the state views the DSACs as a primary vehicle for convening and collaborating with our 256 participating LEAs to achieve our RTTT goals.

We know what we’ve done right, we know what we can do better, and we know the steps we need to take to get there. Resources from Race to the Top will allow us to build the skills, expand the capacity, and create the tools we need to get there faster. We are committed to evolving into a state where every student’s needs are met, where every teacher and leader is well-trained and supported, and where every district has the tools, guidance, and direction necessary to continue to improve. Through the strategies detailed in this proposal, we expect to see our graduation rates rise, our achievement gap shrink, and our performance continue to improve. The nearly one million children in our public schools have waited long enough.

(B) Standards and Assessments (70 total points)

State Reform Conditions Criteria

(B)(1) Developing and adopting common standards (40 points)

The extent to which the State has demonstrated its commitment to adopting a common set of high-quality standards, evidenced by (as set forth in Appendix B)—

(i) The State's participation in a consortium of States that— (20 points)

- (a) Is working toward jointly developing and adopting a common set of K-12 standards (as defined in this notice) that are supported by evidence that they are internationally benchmarked and build toward college and career readiness by the time of high school graduation; and
- (b) Includes a significant number of States; and

(ii) — (20 points)

- (a) For Phase 1 applications, the State's high-quality plan demonstrating its commitment to and progress toward adopting a common set of K-12 standards (as defined in this notice) by August 2, 2010, or, at a minimum, by a later date in 2010 specified by the State, and to implementing the standards thereafter in a well-planned way; or
- (b) For Phase 2 applications, the State's adoption of a common set of K-12 standards (as defined in this notice) by August 2, 2010, or, at a minimum, by a later date in 2010 specified by the State in a high-quality plan toward which the State has made significant progress, and its commitment to implementing the standards thereafter in a well-planned way.¹

In the text box below, the State shall describe its current status in meeting the criterion. The narrative or attachments shall also include, at a minimum, the evidence listed below, and how each piece of evidence demonstrates the State's success in meeting the

¹Phase 2 applicants addressing selection criterion (B)(1)(ii) may amend their June 1, 2010 application submission through August 2, 2010 by submitting evidence of adopting common standards after June 1, 2010.

criterion. The narrative and attachments may also include any additional information the State believes will be helpful to peer reviewers. For attachments included in the Appendix, note in the narrative the location where the attachments can be found.

Evidence for (B)(1)(i):

- A copy of the Memorandum of Agreement, executed by the State, showing that it is part of a standards consortium.
- A copy of the final standards or, if the standards are not yet final, a copy of the draft standards and anticipated date for completing the standards.
- Documentation that the standards are or will be internationally benchmarked and that, when well-implemented, will help to ensure that students are prepared for college and careers.
- The number of States participating in the standards consortium and the list of these States.

Evidence for (B)(1)(ii):

For Phase 1 applicants:

- A description of the legal process in the State for adopting standards, and the State's plan, current progress, and timeframe for adoption.

For Phase 2 applicants:

- Evidence that the State has adopted the standards. Or, if the State has not yet adopted the standards, a description of the legal process in the State for adopting standards and the State's plan, current progress, and timeframe for adoption.

Recommended maximum response length: Two pages

(B)(1)(i)

In spring 2009, Massachusetts Governor Deval Patrick and ESE Commissioner Mitchell Chester signed a Memorandum of Agreement (MOA) with the Council of Chief State Officers (CCSSO) and the National Governors Association (NGA) that committed the Commonwealth's support to the development of K–12 internationally benchmarked, rigorous Common Core Standards in English language arts and mathematics aligned to college and career expectations (see Appendix B1 for the MOA, see Appendix B2 for the list of the 51 states and territories participating in the Common Core efforts, see Appendix B3 for the draft standards, and Appendix B4 for evidence of international benchmarking).

Feedback from our staff, scholars, and local educators to the CCSSO and NGA on drafts of the Common Core Standards in July, October, and December 2009, along with the fact that six members of our staff serve on working groups on the Core Standards provide further evidence of our state’s commitment to the Common Core Standards Initiative (see Appendix B5 for Massachusetts’ representation on Common Core working teams and Appendix B6 for comments on the Common Core Standards drafts).

(B)(1)(ii)

Legal Process for Adopting Standards: Chapter 69, Section 1D of the Massachusetts General Laws states, “the Board [of Education] shall establish a set of statewide educational goals for all public and elementary schools in the Commonwealth.” Further, the statute states that “the Board shall direct the Commissioner [of elementary and secondary education] to institute a process to develop academic standards for the core subjects of mathematics, science and technology, history and social science, English, foreign languages and the arts” (see Appendix B7 for relevant Massachusetts regulations for adoption of standards). In practice, the Commissioner convenes Curriculum Framework Advisory Panels of local educators, scholars, and business and community leaders to assist ESE staff to develop standards, which are then presented to the Massachusetts Board of Education for consideration. The Board then votes to release draft standards for public comment and further revision, if necessary, prior to adoption.

Plan for Adopting the K–12 Common Core Standards in 2010: Based on the original projected January 2010 release date for the K–12 Common Core Standards, Massachusetts planned an August 2010 adoption date. When NGA/CCSSO announced in January that the final version would not be available until March, ESE moved its proposed adoption date to fall 2010 to allow for a required public comment period (see Appendix B8 for a January 15, 2010 memo outlining the detailed timeline for the adoption of the Common Core Standards from the ESE Commissioner to the Board of Elementary and Secondary Education and Appendix B9 for a list of Massachusetts Common Core adoption working groups).

(B)(2) Developing and implementing common, high-quality assessments (10 points)

The extent to which the State has demonstrated its commitment to improving the quality of its assessments, evidenced by (as set forth in Appendix B) the State's participation in a consortium of States that—

- (i) Is working toward jointly developing and implementing common, high-quality assessments (as defined in this notice) aligned with the consortium's common set of K-12 standards (as defined in this notice); and
- (ii) Includes a significant number of States.

In the text box below, the State shall describe its current status in meeting the criterion. The narrative or attachments shall also include, at a minimum, the evidence listed below, and how each piece of evidence demonstrates the State's success in meeting the criterion. The narrative and attachments may also include any additional information the State believes will be helpful to peer reviewers. For attachments included in the Appendix, note in the narrative the location where the attachments can be found.

Evidence for (B)(2):

- A copy of the Memorandum of Agreement, executed by the State, showing that it is part of a consortium that intends to develop high-quality assessments (as defined in this notice) aligned with the consortium's common set of K-12 standards; or documentation that the State's consortium has applied, or intends to apply, for a grant through the separate Race to the Top Assessment Program (to be described in a subsequent notice); or other evidence of the State's plan to develop and adopt common, high-quality assessments (as defined in this notice).
- The number of States participating in the assessment consortium and the list of these States.

Recommended maximum response length: One page

(B)(2)

On January 6, 2010 the Commissioner signed a Memorandum of Understanding (MOU) to participate in the Balanced Assessment State Consortium, fulfilling the requirements outlined in this notice (see Appendix B10 for the Balanced Assessment Consortium MOU and Appendix B11 for the list of states participating in the Consortium). The Consortium intends to develop a system of assessments designed to measure the extent to which individual students, schools, and LEAs of member states are achieving the Common Core Standards referred to in section (B)(1), and includes (1) standards-based assessments that are part of a tightly integrated

system of standards, curriculum, assessment, instruction, and teacher development; (2) assessments that elicit evidence of actual student performance; (3) assessments that involve teachers in their development and scoring; (4) assessments *of* learning (summative), as well as assessments *for* learning (curriculum-embedded/formative); (5) assessments that are structured to continuously improve teacher effectiveness and student performance; (6) assessments that use multiple measures to evaluate students and schools; and (7) assessments that use both technologies that enable greater assessment quality and information systems that support accountability.

As part of the Consortium, Massachusetts would (1) adopt and, if necessary, augment the Common Core Standards; (2) create and deploy curriculum frameworks that address the standards; (3) build and manage an assessment system based on those standards that includes both on-demand and curriculum-embedded assessments; (4) develop rubrics and examples of student work benchmarked to the performance standards used to report results of the assessments; (5) create a system for ensuring the comparability of locally managed and scored assessment components; (6) work with higher education institutions to infuse principles of the assessment system into teacher preparation programs; and (7) implement high-quality professional development focused on examination of student work, curriculum and assessment development, and scoring of assessment items. In general, given our long and successful history of designing, developing, and implementing the Massachusetts Comprehensive Assessment System (MCAS), we anticipate playing an active role in the governance of the Consortium, and in further articulating the design and development of its various components, selecting contractors to assist in implementation of the system, and working closely with our LEAs to ensure a smooth transition from our existing assessment program to the Balanced Assessment System.

On January 13, 2010 the Commissioner signed on with an additional assessment consortium MOU led by Achieve (see Appendix B12 for the Achieve MOU and a letter from Achieve confirming our commitment to the Consortium with the list of states participating in the Consortium). This Consortium seeks to establish a system of academically rigorous summative assessments based upon college and career readiness standards that are internationally benchmarked, and which will yield comparable student achievement results across states.

The assessments that will be developed will be summative in nature and will be designed to be part of a comprehensive assessment system that can align to interim and formative assessments that directly support improvements to curriculum and instruction. The MOU is based upon the commitment of participating states to adopt and follow 12 principles (see Appendix B13 for the full list of principles) that are closely aligned with our own (e.g., that our assessments must be rigorous and able to be benchmarked with the National Assessment of Educational Progress (NAEP); that assessments must measure student proficiency, ensure accountability and support the improvement of teaching and learning; etc.).

The commitment of the members of this Consortium to “high expectations for students and schools that are firmly grounded in what it takes to be successful” is fundamental to Massachusetts’ mission. Since this Consortium is committed to ensuring that summative assessments are part of a larger system of assessment supports for schools, we believe that its goals are compatible with the goals of the Balanced Assessment Consortium. As part of the Achieve Consortium, Massachusetts commits to enacting the same seven activities that are specified for our participation in the Balanced Assessment Consortium. Further, given our long and successful history of designing, developing and implementing the MCAS, we anticipate playing a very active role in the governance of the Consortium by further articulating the design and development of its various components, selecting contractors to assist in implementation of the system, and working closely with our LEAs to ensure a smooth transition from our existing assessment program.

Reform Plan Criteria

(B)(3) Supporting the transition to enhanced standards and high-quality assessments (20 points)

The extent to which the State, in collaboration with its participating LEAs (as defined in this notice), has a high-quality plan for supporting a statewide transition to and implementation of internationally benchmarked K-12 standards that build toward college and career readiness by the time of high school graduation, and high-quality assessments (as defined in this notice) tied to these standards. State or LEA activities might, for example, include: developing a rollout plan for the standards together with all of their supporting components; in cooperation with the State’s institutions of higher education, aligning high school exit criteria and college entrance requirements with the new standards and assessments; developing or acquiring, disseminating, and implementing

high-quality instructional materials and assessments (including, for example, formative and interim assessments (both as defined in this notice)); developing or acquiring and delivering high-quality professional development to support the transition to new standards and assessments; and engaging in other strategies that translate the standards and information from assessments into classroom practice for all students, including high-need students (as defined in this notice).

The State shall provide its plan for this criterion in the text box below. The plan should include, at a minimum, the goals, activities, timelines, and responsible parties (see Reform Plan Criteria elements in Application Instructions or Section XII, Application Requirements (e), for further detail). Any supporting evidence the State believes will be helpful to peer reviewers must be described and, where relevant, included in the Appendix. For attachments included in the Appendix, note in the narrative the location where the attachments can be found.

Recommended maximum response length: Eight pages

(B)(3)

Over the past 15 years, Massachusetts has instituted high quality, rigorous standards and summative assessments that national organizations such as Achieve, the American Federation of Teachers (AFT), the Fordham Foundation, and *Education Week* have rated highly (see Appendix B14 for a list of references). Our standards and assessments have contributed significantly to our students' high performance on state, national, and international tests, yet serious achievement gaps still remain among subgroups of students. We set high standards, but did not equip all of our educators with the tools required to achieve them. To address these gaps we must ensure that standards drive what is taught in every classroom. We will do this by developing and implementing a tightly aligned and unified system that links standards to curricula and instructional resources and provides educators with formative, interim, and summative assessment tools. We will further reinforce the adoption of high standards through changes in college and career readiness policies and incentives, and help scale proven programs that adopt rigorous curricula in lower performing schools. Specifically, Massachusetts has identified three strategies for deploying RTTT funds that will lead to higher achievement for *all* students:

1. **Disseminate the K–12 Common Core Standards** by providing local educators with technical assistance, tools, and other supports necessary to make a smooth transition to the new standards.
2. **Create a unified PreK–12 teaching and learning system, working together with the Balanced Assessment State Consortium** (see section (B)(2)), comprised of model curricular units that are tightly aligned to online interim assessments,

curriculum-embedded performance tasks, summative assessments, tools for locally constructed formative assessments, teaching resources and a statewide Digital Library. The teaching and learning system will be accessible through state-of-the-art technology platforms linked to near-real-time data analysis and reporting tools, and supported by in-person and online training and professional development (see section (C)(3) for a description of how effective uses of technology will enhance the teaching and learning system).

3. **Expand implementation of proven secondary school programs, policies, and incentives** that engage students and effectively prepare them to meet the Common Core College and Career Ready Standards by the time they graduate.

Strategy 1: Disseminate the Common Core Standards

Goal: Disseminate the K–12 Common Core Standards statewide, incorporate them into statewide assessments, and play a national role in their development and adoption by sharing presentations and guidance documents with other states.

Broad dissemination of the Common Core Standards using technology and a variety of professional development venues is critical to our two-year plan for ensuring that educators, stakeholders, and the public understand the content and philosophy of the standards and their implications for curriculum, instruction, and assessment.

Activities and Timeline (note: all activities to be completed by 2012):

	Year 1 (2010–2011)	Year 2 (2011–2012)
Disseminate the Common Core Standards	<ul style="list-style-type: none"> • Conduct comparative analysis of standards with Massachusetts Curriculum Frameworks and augment K-12 Common Core Standards as needed. • Create presentation materials on the Common Core Standards. • Hold 12 meetings to disseminate general information on the Common Core Standards and 12 2-day STEM and ELA focused seminars. • Load Common Core Standards into public ESE standards database. Use annual Curriculum Conference to address the Common Core Standards. 	<ul style="list-style-type: none"> • ESE and stakeholders continue to disseminate the standards in regional meetings and conferences. • ESE and its assessment contractor review item banks to evaluate the alignment of existing items to the Common Core Standards.

	<ul style="list-style-type: none"> • ESE staff and discipline-specific Curriculum Framework Advisory Panels work with consultants to produce guidance documents on applications of the Common Core Standards to all other academic and vocational/technical frameworks. 	
<p><i>Responsible parties:</i> ESE; Curriculum Framework Advisory Panels (P–16 educators, scholars, and business representatives); Governors’ Readiness Centers (P–16 educational support units housed in state colleges and universities); Massachusetts Business Alliance for Education; Measured Progress (ESE summative assessment contractor).</p>		

Strategy 2: Create a unified PreK–12 teaching and learning system

Goal: Make a permanent investment in improved teaching and learning by creating, together with the Balanced Assessment State Consortium, a unified system of standards, curricula, assessment tools, and online resources that are easily accessible by all educators in Consortium member states.

ESE has created some of the nation’s most demanding standards for seven subject areas and technically robust summative assessments in STEM subjects, English language arts, and history and social science. Yet statewide standards and tests—no matter how rigorous —do not alone raise the level of daily instruction in classrooms. To close the achievement gap, we must provide our educators with the instructional tools and resources required to meet the learning needs of every student. With Race to the Top funds, we intend to transform teaching and learning statewide, and particularly in our lowest-performing schools, through a standards-based system of curriculum, instructional tools, and assessments for teachers in all subject areas.

Activities: To create the new system we will work with the Balanced Assessment State Consortium, drawing on the experience and imaginations of our most effective P–16 educators as we design curriculum and assessments. With the Consortium we will build a unified PreK–12 teaching and learning system that incorporates the following elements:

- Model standards-based curriculum units and syllabi for all grade levels in STEM subjects, the humanities, and the arts, created in collaboration with nearly 300 teachers from across the state

- An online interim assessment using MCAS released items, as well as other items available to the Consortium, in mathematics and reading for grades 3–8, and in Algebra I, geometry, and reading at the high school level
- Formative assessments composed of a bank of released items from MCAS and other items from the Consortium states, along with teacher-developed items
- Curriculum-embedded performance tasks (such as science experiments, research projects, and oral presentations) for all grade levels in STEM subjects, English language arts, history and social science, and selected vocational-technical areas
 - Performance tasks will integrate the assessment of content knowledge and skills, and will evaluate skills not now assessed on MCAS that are critical to the success of students in college and the workplace.
 - Among the performance tasks to be developed is a college readiness analytical writing assessment based on the Common Core Standards, which will be used as one criterion for the state’s John and Abigail Adams Scholarship (see Strategy 3).
- A Competency Tracking system that allows users to monitor an individual student’s mastery of academic content standards
- A Digital Library of online resources aligned to standards for all subject areas
- A new technology platform that makes our resources and tools broadly available and will deliver, score, and report interim assessment results in a timely manner (see section (C)(3) for a detailed description of this system)
 - As part of this work, ESE will invest in a pilot (for 5,000 students) of a vendor-built integrated instructional improvement system with additional functionality to support online professional collaboration

Timelines:

Task	Year 1 (2010–2011)	Year 2 (2011–2012)	Years 3 and 4 (2012–2014)
System Design	<ul style="list-style-type: none"> • Form T&L Leadership Team, including external stakeholders (P–16 educators, business and community organizations) and ESE staff. • T&L Team contracts curriculum design, digital library, and assessment experts to advise project, and hires content and 	<ul style="list-style-type: none"> • Communication with stakeholders continues. • T&L Team holds monthly meetings 	<ul style="list-style-type: none"> • Communication with stakeholders continues. • External evaluation of system.

	assessment staff. <ul style="list-style-type: none"> • T&L and RTTT teams collaborate on evaluation design, T&L System, data systems, professional development, and a sustainability plan. • T&L Team consults stakeholders, completes system design and training plans, and begins development work with assistance of ESE assessment contractor, Measured Progress. 	to review progress and coherence of all components of the T&L System.	
<i>Responsible parties:</i> Race to the Top (RTTT) and Teaching and Learning (T&L) Leadership teams, external stakeholders.			

Task	Year 1 (2010–2011)	Year 2 (2011–2012)	Year 3 (2012–2013)	Year 4 (2013–2014)
Model Curricula and Syllabi	<ul style="list-style-type: none"> • Nearly 300 P–16 educators are selected for Curriculum Design (CD) teams organized by content and grade span. • Professional development on Common Core Standards and curriculum units is offered. 	<ul style="list-style-type: none"> • CD teams refine curriculum drafts in all subject areas. • ESE content staff, project manager, and editor review all drafts for consistency of style and accuracy of content. • Curriculum units are piloted. • ESE posts first set of units on website and Digital Library, and conducts professional development on use of the T&L system. 	<ul style="list-style-type: none"> • CD teams continue to develop, pilot, and refine units. • ESE posts second set of units on its website and Digital Library. • ESE recruits and trains new members for the CD teams and continues to conduct professional development on use of T&L System. 	<ul style="list-style-type: none"> • ESE continues support for development and piloting. • ESE posts third set of curriculum units on its website and Digital Library and continues to conduct professional development on use of T&L System.
<i>Responsible parties:</i> ESE Center for Curriculum and Instruction working with Balanced Assessment State Consortium, ESE-identified national experts on curriculum design, Readiness Centers, MA Departments of Higher Education (DHE), MA Department of Early Education and Care (EEC), the University of Massachusetts (UMass), the Massachusetts Business Alliance for Education (MBAE) (see sections (C)(2) and (C)(3) for technology and section (D)(5) for professional development).				
Assessment Tools	<ul style="list-style-type: none"> • Convene technical assessment advisory 	<ul style="list-style-type: none"> • Development begins for interim assessments, 	<ul style="list-style-type: none"> • Core system components are 	<ul style="list-style-type: none"> • All system components are fully

Task	Year 1 (2010–2011)	Year 2 (2011–2012)	Year 3 (2012–2013)	Year 4 (2013–2014)
	committees; consult stakeholders on design of all system components. <ul style="list-style-type: none"> • Design work begins. • Professional development system design refined and launched. 	curriculum-embedded performance tasks, competency tracking system, and formative assessment tools. <ul style="list-style-type: none"> • Professional development implemented. • Pilot sites selected and training provided. 	operational. <ul style="list-style-type: none"> • Professional development system implementation continues. 	operational. <ul style="list-style-type: none"> • Professional development system implementation continues.
<p><i>Responsible parties:</i> ESE Office of Student Assessment working with Balanced Assessment State Consortium; ESE-identified LEAs already implementing interim assessments; Measured Progress (ESE’s vendor for summative, interim, and performance assessments) (see sections (C)(2) and (C)(3) for technology and section (D)(5) for professional development).</p>				
Digital Library	<ul style="list-style-type: none"> • ESE reviews initial set of resources proposed for inclusion in Digital Library. • ESE selects a contractor to manage logistics. 	<ul style="list-style-type: none"> • ESE recruits and trains PreK–16 resource review teams to review content supporting Common Core and Massachusetts standards. • ESE begins initial rollout of platform to 15 pilot LEAs. 	<ul style="list-style-type: none"> • ESE recruits and trains new members of the resource review teams. • ESE continues support for implementation. 	ESE continues resource review teams and support for implementation.
<p><i>Responsible parties:</i> ESE Center for Curriculum and Instruction working with Balanced Assessment State Consortium; ESE partners such as museums, archives, and libraries; qualified vendors delivering professional development services to educators on how to access, use, and contribute to the Library (see sections (C)(2) and (C)(3) for technology and section (D)(5) for professional development).</p>				

Strategy 3: Expand implementation of proven secondary school programs, policies, and incentives

Goal: Prepare students in low-performing schools for success in college and a career by adopting MassCore as the default curriculum for all high school students in the Commonwealth, aligning existing state scholarship opportunities to the Common Core Standards, and expanding educational pathways with proven rigorous curricula, particularly in STEM fields.

Students who merely meet the minimum passing standard on MCAS high school tests are about five times more likely to be required to take remedial coursework upon entering college than students who score at higher levels. More than one-third of the public high school students who enroll in Massachusetts public colleges and almost two-thirds of those in community colleges require one or more remedial courses. The problem is particularly severe in urban high schools where the trend known as “10-6-4-1” has become a familiar pattern: for every 10 students entering as ninth graders, 6 graduate from high school, 4 enter college, and only 1 graduates in 6 years (see Appendix B15 for methodology).

Activities:

- ESE will make MassCore—currently a *recommended* program of studies that includes a minimum of four years of mathematics and three years of lab-based sciences, four years of English, three years of history and social science, and a year of art—the *default curriculum* for all students in the Commonwealth. ESE will use RTTT funds for grants to high schools so that they can offer all students the courses and credits expected in MassCore.
- ESE will strengthen two existing state programs that provide college and career incentives—the John and Abigail Adams Scholarship Program and the Massachusetts Certificate of Occupational Proficiency (COP)—by explicitly linking them to the Common Core Standards. Currently, eligibility for the Adams Scholarship (a public college four-year tuition waiver) is based on grade 10 English language arts and mathematics MCAS scores. New Adams Scholarship requirements will include the successful completion of MassCore, an analytical writing assessment, a college mathematics placement assessment, and an end-of-course Science and Technology/Engineering MCAS test. ESE will also work with stakeholders to revise the current Career/Vocational Technical Education Standards to incorporate the Common Core Standards and needs of the

state's employers. The state will develop employer-based incentives for students to pursue the value-added Certificate of Occupational Proficiency prior to high school graduation; part of implementing the COP will include enhancing the existing Competency-Tracking system to better track students against standards.

- ESE will provide supplemental funds to LEAs and community partners (such as Jobs for the Future and Mass 2020) to implement and scale proven programs that will embed rigorous curricula in lower performing schools, including six new STEM Early College High Schools (ECHS), 12 International Baccalaureate (IB) programs, and a subset of Innovation Schools (see section (F)(2) for descriptions of these schools). ESE will give Level 3 LEAs and schools priority for these funds. Three new STEM ECHSs will be based upon Columbus, Ohio's highly successful Metro Early College High School and will be located on state college or university campuses; three will be on community college or high school campuses. ESE will use RTTT funds to build the capacity of the Massachusetts Department of Higher Education (DHE) to provide dual enrollment opportunities required to support these schools. ESE will also launch up to 12 new high school or middle school IB sites, based upon early signs of success of the IB program in Brockton High School (the state's largest urban high school), across the Springfield LEA, and in several charter schools. The IB program's rigorous, internationally benchmarked curriculum will complement the state's existing AP initiatives. ESE will also provide planning grants and implementation funds for LEAs to create Innovation Schools that choose to adopt either of these programs or other standards-based, STEM-focused models approved by ESE.
- In addition to the three projects outlined above, ESE recognizes that a more intensive set of interventions is required to increase college and career readiness in the state's lowest performing (Level 4 and 5) middle and high schools. In section (E)(2), ESE will propose a set of strategies focused on dropout prevention and recovery, including implementation of an "Early Warning Indicator Index" in six Level 4 LEAs, capacity building supports for LEAs and high schools, and use of funds to create a both a dropout-focused high school and an alternative high school as part of the state's comprehensive school turnaround strategy.

Timeline:

Task	Year 1 (2010–2011)	Year 2 (2011–2012)	Year 3 (2012–2013)	Year 4 (2013–2014)
MassCore as the default high school curriculum	<ul style="list-style-type: none"> • Board of Education votes to require MassCore beginning with the class of 2014. 	<ul style="list-style-type: none"> • ESE provides grants to expand the number of STEM courses. • ESE provides technical assistance to implement MassCore. 	<ul style="list-style-type: none"> • ESE continues to provide grants to expand the number of STEM courses and technical assistance to implement MassCore. 	<ul style="list-style-type: none"> • ESE provides grants for districts to expand the number of STEM courses offered, including funds for dual enrollment.
<i>Responsible parties:</i> ESE Office of Secondary School Services, the Executive Office of Education (EOE), Department of Higher Education (DHE), Massachusetts Business Alliance for Education (MBAE), the ESE Board of Education.				
Task	Year 1 (2010–2011)	Year 2 (2011–2012)	Year 3 (2012–2013)	Year 4 (2013–2014)
The Adams Scholarship and the Certificate of Occupational Proficiency as college readiness incentives	<ul style="list-style-type: none"> • Adams Scholarship policy revision team convenes to consider new requirements, including college readiness analytical writing and math assessments, and the completion of MassCore. • Include the Common Core Standards in the Career and Vocational Technical Education Framework. 	<ul style="list-style-type: none"> • Announce new requirements for Adams Scholarship for class of 2014. • Contractor begins work on writing assessment. Writing assessments piloted in RTTT schools. • Stakeholders provide feedback on desired enhancements to the Competency Tracking (CT) system to assist teachers and students in monitoring progress. 	<ul style="list-style-type: none"> • Writing assessments are operational with full reporting of results. • Performance level standards and qualifying standard for Adams Scholarship set for writing assessment. • Hire contractor to implement enhancements to the CT system. • New CT system piloted in vocational technical schools. 	<ul style="list-style-type: none"> • Qualifying score on writing assessment and other new requirements in place for Adams scholarship eligibility. • Expanded, enhanced CT system operational. • Results of CT system available to for use as one criterion for the state’s Certificate of Occupational Proficiency.
<i>Responsible parties:</i> ESE Office of Student Assessment, EOE, DHE, UMass, ESE assessment contractor, Department of Labor and				

Workforce Development, regional Workforce Investment Boards, the Massachusetts Association of Vocational Administrators (see sections (C)(2) and (C)(3) for technology and section (D)(5) for professional development).				
Early College High Schools and IB Programs in low performing schools	<ul style="list-style-type: none"> • Hold statewide IB and ECHS informational conferences for school districts interested in starting programs. • IB and ECHS design teams select partners to support districts and select sites for funding. 	<ul style="list-style-type: none"> • Hold state IB and ECHS network meetings to foster collaboration and effective implementation. • ESE and partners provide technical assistance to sites. • First set of schools open. 	<ul style="list-style-type: none"> • State IB and ECHS network meetings continue. • Ongoing support and technical assistance is provided to sites by ESE and highly qualified partners. • Sites develop sustainability plans. 	<ul style="list-style-type: none"> • State IB and ECHS network meetings and technical assistance continue. • Hold conference for all LEAs to showcase effective implementation of IB and ECHS. • Conduct final evaluation of these models
<u>Responsible parties:</u> ESE Office of Secondary School Services, ESE selected partners, DHE, UMass (see sections (C)(2) and (C)(3) for technology and section (D)(5) for professional development).				

Performance Measures Performance measures for this criterion are optional. If the State wishes to include performance measures, please enter them as rows in this table and, for each measure, provide annual targets in the columns provided.	Actual Data: Baseline (Current school year or most recent)	End of SY 2010-2011	End of SY 2011-2012	End of SY 2012-2013	End of SY 2013-2014
% of LEAs adopting the Common Core Standards–section (B)(1)	n/a	100%	100%	100%	100%
% of LEAs implementing summative assessments based on MA’s newly adopted standards–section (B)(2)	n/a	n/a	n/a	100%	100%
% of LEAs making significant use of one or more components of the teaching and learning system–section (B)(3)	n/a	n/a	50%	75%	90%
% of participating LEAs which have implemented the interim assessment system–section (B)(3)	n/a	n/a	n/a	50%	75%
% of high school graduates successfully completing MassCore–section (B)(3)	50%	55%	65%	75%	85%
% of vocational-technical students earning a Certificate of Occupational Proficiency–section (B)(3)	n/a	n/a	n/a	n/a	50%
Number of Early College High Schools (ECHS) and International Baccalaureate Schools established as a direct result of Race to the Top funding–section (B)(3)	n/a	n/a	6 ECHS; 6 IB	6 ECHS; 12 IB	6 ECHS; 12 IB

(C) Data Systems to Support Instruction (47 total points)

State Reform Conditions Criteria

(C)(1) Fully implementing a statewide longitudinal data system (24 points – 2 points per America COMPETES element)

The extent to which the State has a statewide longitudinal data system that includes all of the America COMPETES Act elements (as defined in this notice).

In the text box below, the State shall describe which elements of the America COMPETES Act (as defined in this notice) are currently included in its statewide longitudinal data system.

Evidence:

- Documentation for each of the America COMPETES Act elements (as defined in this notice) that is included in the State’s statewide longitudinal data system.

Recommended maximum response length: Two pages

(C)(1)

Massachusetts has implemented an Education Data Warehouse (EDW) that addresses all of the 12 essential elements stipulated by the America COMPETES Act. With current state efforts, all 12 elements will be in place by September 2011.

- 1) **Unique statewide student identifier:** In 1998, Massachusetts implemented a confidential, unique State Assigned Student Identifier (SASID) that ensures that a student cannot be identified by unauthorized parties.
- 2) **Student-level demographic and program participation data:** Our Student Information Management System (SIMS) has collected student-level enrollment, demographic, and program participation data for all public school students since 2001.
- 3) **Student-level information on P-16 enrollment, transfer, dropout, and graduation:** SIMS captures information on enrollments, transfers, dropouts, and graduations for all K–12 public school students. We assign SASIDs to children enrolled in early education programs and we capture their enrollment in elementary school. Data matching conducted by the

Department of Higher Education (DHE) captures the enrollment of public high school students into public post-secondary programs.

- 4) **Capacity to communicate with higher education data systems:** DHE conducts data matching with our database of public high school graduates and provides FERPA (Family Educational Rights and Privacy Act) -compliant reports regarding students' subsequent enrollment and performance in post-secondary education. DHE is preparing to assign SASIDs to all public higher education students to increase the ease and frequency of these analyses.
- 5) **State data audit system:** Massachusetts currently has extensive data verification systems to assess data quality, validity, and reliability, including complex validation rules that confirm each data element meets all required specifications.
- 6) **Individual student test records under section 1111(b) of ESEA:** Massachusetts has collected student-level test record data since 1998 (including every student's response to every Massachusetts Comprehensive Assessment System (MCAS) question as required by ESEA Title I, Part A 1111(b)) and provides these data to LEAs.
- 7) **Information on students not tested:** The data system referenced above in #6 also provides information on students not tested by grade and by subject.
- 8) **A teacher identifier system with the ability to match teachers to students:** Massachusetts established its Education Personnel Information Management System (EPIMS) in 2007. EPIMS includes a unique teacher identifier and links teachers to their assigned classes via a unique class code. We are currently piloting the linkage of teachers to students (via class assignments) in 70 LEAs and will conduct the first statewide collection of these data in October 2010.
- 9) **Student-level transcript information:** The 70-LEA pilot mentioned above in #8 also includes collection of courses completed and grades earned. These data will be collected statewide beginning in October 2010.
- 10) **Student-level college readiness test scores:** Massachusetts uses a combination of MCAS, SAT, and Advanced Placement test results to assess student-level college readiness. We have conducted a study that found that low scores on the grade 10 MCAS assessments are strongly associated with a higher likelihood of enrollment in remedial education in college.

11) **Data about transitions from secondary to postsecondary schools:** DHE conducts data matching with our database of public high school graduates and provides FERPA-compliant reports regarding their enrollment and subsequent performance in post-secondary education, including enrollment in remedial coursework.

12) **Other data necessary for alignment and preparation for postsecondary education:** Each spring Massachusetts collects information on whether graduating seniors have completed MassCore, our recommended curriculum for college readiness; data matching with DHE provides postsecondary course enrollment and completion data. A new statewide data collection beginning in October 2010 will collect additional elements at the high school level, including course enrollments and grades/marks.

(See Appendix C1 for further documentation on Massachusetts’ status on each element.)

Reform Plan Criteria

(C)(2) Accessing and using State data (5 points)

The extent to which the State has a high-quality plan to ensure that data from the State’s statewide longitudinal data system are accessible to, and used to inform and engage, as appropriate, key stakeholders (*e.g.*, parents, students, teachers, principals, LEA leaders, community members, unions, researchers, and policymakers); and that the data support decision-makers in the continuous improvement of efforts in such areas as policy, instruction, operations, management, resource allocation, and overall effectiveness.¹

The State shall provide its detailed plan for this criterion in the text box below. The plan should include, at a minimum, the goals, activities, timelines, and responsible parties (see Application Instructions or Section XII, Application Requirements (e), for further detail). Any supporting evidence the State believes will be helpful to peer reviewers must be described and, where relevant, included in the Appendix. For attachments included in the Appendix, note in the narrative the location where the attachments can be found.

Recommended maximum response length: Two pages

¹ Successful applicants that receive Race to the Top grant awards will need to comply with the Family Educational Rights and Privacy Act (FERPA), including 34 CFR Part 99, as well as State and local requirements regarding privacy.

(C)(2)

Goal: Transform state data systems to efficiently deliver comprehensive, accessible, actionable, and timely data to all Massachusetts K–12 educators and key stakeholders.

To achieve our state’s vision of education reform and close achievement gaps, we must enhance our strategic use of data and information to make decisions and ensure that we are continually learning and improving. Without reliable data about our students, our educators, and our services, we remain limited in our ability to deliver effective interventions when and where they are needed most. Today, LEAs across our state are eager to use data in new and powerful ways, but we run the risk of wasting scarce resources — both human and financial — if every one of our 392 builds its own set of systems and tools. To meet this demand, we have invested significantly in statewide systems, but capacity challenges within our Education Data Warehouse (EDW) and a cumbersome public website limit their current utility for supporting decisions. Moreover, existing data verification systems are strong, but must continue to expand to support the increasing use of data for instruction, policy, operations, management, and resource allocation.

Going forward, Massachusetts must transform our state data systems to capture and comprehensively integrate data at individual student and educator levels. These systems must efficiently deliver this information directly to teachers, principals, LEA leaders, parents, students, community members, unions, researchers, and policymakers. This transformation supports many of the goals and strategies laid out in other sections of this proposal (see Appendix C2 for more context and detail on activities for each project in section (C)). We will use RTTT funds to pursue three data systems strategies:

- 1. Improve the Education Data Warehouse to better support the needs of its 80,000 anticipated users**
- 2. Improve the usability of ESE’s public website**
- 3. Add enhanced data audits to our existing data validation protocols**

Strategy 1: Improve the Education Data Warehouse to better support the needs of its 80,000 anticipated users

The Education Data Warehouse is the information backbone of the many projects and strategies identified elsewhere in the proposal, such as the PreK–12 teaching and learning system and efforts to increase educator effectiveness statewide. Significant investments in this system are crucial to the success of our overall reform plan.

Massachusetts has already invested in a statewide, unlimited EDW license for public K–12 educators. In its current form, the EDW integrates data from SIMS, EPIMS, and MCAS (including item-level responses to every MCAS test for every student and a measure of individual student-level growth), and LEAs have the option to import local data as well (see Appendix C3 for an overview of ESE data systems). While this is an important first step, meeting our goal of serving all of the state’s 80,000 educators will require us to accommodate 10 times the 8,000 current EDW users (see Appendix C4 for a graph of historical and projected EDW users). Several dozen intuitive, secure, FERPA-compliant reports, each with many views and variations, are available, and more technically adept users can generate their own reports (see Appendix C5 for a sample student growth report and Appendix C6 for a sample MCAS item analysis report). However, we have learned from the past year’s 300 percent increase in EDW users that it is neither efficient nor sustainable to provide full functionality to every user. We need to transition to a system that provides users with customized information based on their likely needs (data mart architecture), which will allow the system to generate the vast majority of reports in seconds while maintaining appropriate security levels for confidential information. Finally, as users begin to rely on data to inform daily operational and instructional decisions, the need to both input and access real-time data will significantly increase — creating the need for a software solution that will integrate and translate data across LEAs and the state (the Schools Interoperability Framework, or SIF).

In addition, the EDW currently does not include data from the early education or higher education sectors and is not accessible to staff from these agencies. The EDW also lacks reports on the early indicators of dropout — which is necessary to support the prevention and recovery strategies that will be discussed in Section (E)(2) — as well as linkages to the National Student Clearinghouse to track college enrollment and persistence. Expanding the EDW to include these elements is the first step toward

achieving the state’s “Readiness Passport” (see Appendix C7 for a conceptual schematic), a priority initiative in the 2008 Education Action Agenda focused on developing and implementing a data tool for educators, parents, guardians, and agencies that documents key elements of a child’s educational experiences as well as captures various services, interventions, supports, data, and performance evaluations related to that child (EOE 2008).

Activities:

- *Transition the Education Data Warehouse to a data mart architecture.* We will greatly enhance the EDW’s capacity to serve the 80,000-person user base by separating, routing and processing of data requests to servers matched to the report and resource demands of each user group, and by expanding the processing power available to users who require the most robust functionality. We will also establish processes for routing and scheduling of ad hoc reports.
- *Enhance the Education Data Warehouse’s utility to the field through expanded user access, data sources, and reports.* We will build a set of user portals to provide easy access to relevant data dashboard and reporting tools. We will expand secure differentiated access to the EDW to key stakeholders in early and higher education, as well as to private special education schools and the Department of Youth Services (DYS). We will integrate additional early and higher education data into the EDW and will build reports that flag students as high risks for dropout. We will rely on user groups, focus groups, and other sources of feedback to ensure these enhancements are meeting user needs.
- *Expand the Schools Interoperability Framework (SIF).* We will work with LEAs to procure a SIF vendor and rollout SIF to 150 LEAs. In 40 LEAs, we will pilot a more comprehensive SIF solution which integrates data from SIS, HR, and other LEA data systems. To lay the foundation for future cross-agency data integration (required for the Readiness Passport), we will also work with vendors and the Department of Early Education and Care (EEC) to implement SIF solutions that will ultimately allow for seamless integration of PreK-12 data (and strengthen the platform for the teaching and learning system described in Section (B)(3)).

Strategy 2: Improve the usability of ESE’s public website

Our agency’s public website, one of the largest and most complex state government websites in Massachusetts, has an extraordinary wealth of information and resources for educators, parents, students, policy leaders, researchers, and the public at large. The website’s “Profiles” section includes aggregate data on every LEA and school in the Commonwealth on dozens of measures, from student demographics and performance data to teacher salaries to school technology resources (see Appendix C8). However, the current website is not as user-friendly as it must be to ensure fast, simple access to these resources.

Activities: We will redesign the ESE public website to automate ESE data updates, provide for intuitive navigation, and respond accurately and flexibly to visitor-generated searches.

Strategy 3: Add enhanced data audits to our existing data validation protocols

Our existing data validation systems are robust and ensure that we have high quality data. But as we increase access to and use of these systems, they are insufficient to support high-stakes decisions around instruction, management, operations, and resource allocation. We must add a regular process of randomly conducted data audits to enhance the data’s validity.

Activities: We will develop a protocol for conducting data audits, pilot it in five LEAs, and then begin conducting 12 audits per year.

Timeline:

Tasks	Year 1 (2010–2011)	Year 2 (2011–2012)	Year 3 (2012–2013)	Year 4 (2013–2014)
Improve the EDW to better support the needs of its 80,000 users	<ul style="list-style-type: none"> • Document requirements for functional, FERPA-compliant access for the projected simultaneous use patterns of all anticipated users • Evaluate options and finalize system architecture • Purchase hardware and software licenses • Pilot Stage One EDW rollout 	<ul style="list-style-type: none"> • Develop and validate user reports and analytical tools • Complete technical implementation, including P–20 links • Implement Stage Two EDW rollout to teachers • Pilot and evaluate early indicators • Extend access to DYS & private special education 	<ul style="list-style-type: none"> • Implement EDW rollout to remaining teachers and to key stakeholders in early and higher education • Develop early indicators reports and incorporate into EDW • Implement SIF with an additional 40 	<ul style="list-style-type: none"> • Full P–20 EDW rollout to all K–12 educators • Implement SIF with an additional 30 LEAs

Tasks	Year 1 (2010–2011)	Year 2 (2011–2012)	Year 3 (2012–2013)	Year 4 (2013–2014)
	to teachers <ul style="list-style-type: none"> • Implement SIF with 40 LEAs • Collect and evaluate user preferences and build educator portals 	schools <ul style="list-style-type: none"> • Implement SIF with an additional 40 LEAs • Rollout educator portals 	LEAs	
Improve the usability of ESE’s public website	Collect and evaluate user preferences and finalize web design	<ul style="list-style-type: none"> • Rearchitect and streamline data flows • Redesign navigation 	Continue to implement changes based on user feedback	Continue to implement changes based on user feedback
Add enhanced data audits to our existing data validation protocols	Develop data audit process and protocols	Pilot data audit process and protocols in 5 LEAs	Conduct 12 LEA data audits	Conduct 12 LEA data audits
<p><i>Responsible parties:</i></p> <p><u>Improve EDW:</u> ESE Associate Commissioner, Chief Information Officer, IT Director, Director of Data Analysis for early indicators</p> <p><u>Improve website:</u> IT Director</p> <p><u>Data audits:</u> Director of Data Collections, Director of Audit and Compliance</p>				

Performance Measures Performance measures for this criterion are optional. If the State wishes to include performance measures, please enter them as rows in this table and, for each measure, provide annual targets in the columns provided.	Actual Data: Baseline (Current school year or most recent)	End of SY 2010-2011	End of SY 2011-2012	End of SY 2012-2013	End of SY 2013-2014
Access to the EDW is expanded from 8,000 to 80,000 users, covering all K-12 stakeholders (including adult education, incarcerated youth, and private special education placements) and key stakeholders from early and higher education	8,000	12,000	40,000	60,000	80,000
On-demand EDW reports are generated within a maximum of 60 seconds, 95% of the time	70%	70%	80%	95%	95%

(C)(3) Using data to improve instruction (18 points)

The extent to which the State, in collaboration with its participating LEAs (as defined in this notice), has a high-quality plan to—

- (i) Increase the acquisition, adoption, and use of local instructional improvement systems (as defined in this notice) that provide teachers, principals, and administrators with the information and resources they need to inform and improve their instructional practices, decision-making, and overall effectiveness;
- (ii) Support participating LEAs (as defined in this notice) and schools that are using instructional improvement systems (as defined in this notice) in providing effective professional development to teachers, principals and administrators on how to use these systems and the resulting data to support continuous instructional improvement; and
- (iii) Make the data from instructional improvement systems (as defined in this notice), together with statewide longitudinal data system data, available and accessible to researchers so that they have detailed information with which to evaluate the effectiveness of instructional materials, strategies, and approaches for educating different types of students (*e.g.*, students with disabilities, English language learners, students whose achievement is well below or above grade level).

The State shall provide its detailed plan for this criterion in the text box below. The plan should include, at a minimum, the goals, activities, timelines, and responsible parties (see Reform Plan Criteria elements in Application Instructions or Section XII,

Application Requirements (e), for further detail). Any supporting evidence the State believes will be helpful to peer reviewers must be described and, where relevant, included in the Appendix. For attachments included in the Appendix, note the location where the attachment can be found.

Recommended maximum response length: Five pages

Goal: Empower educators to meet the learning needs of every Massachusetts student and close achievement gaps by creating a technology platform to make the PreK-12 teaching and learning system available to all educators, training educators to translate the data from these tools to improve daily instruction, and providing researchers with data needed to evaluate the impact of these tools.

Imagine the Massachusetts classroom of the future — where a teacher has up-to-the-minute information about how each of her students is progressing and is equipped with the instructional tools to help each one excel. Down the hall, another teacher accesses the Digital Library and pulls down a model lesson plan developed by an effective educator in another LEA also working with English language learners in order to help his students meet the Common Core Standards. To achieve this vision, we must build a data system that facilitates instructional improvement rather than merely supports reporting and compliance. The first step is for ESE to play a lead role in building the necessary data platform in partnership with our LEAs and then to support them in adopting and effectively implementing the state’s instructional improvement system in every school and classroom (see section B3 for a description of the Massachusetts Pre-K-12 teaching and learning system). ESE support is particularly critical for many smaller and mid-size LEAs to take advantage of the new system and to benefit from economies of scale (see Appendix C9 for record of ESE legacy system builds). ESE must also make information available to researchers, so that we can continuously assess the impact of the system and identify both best practices and priorities for improvement.

To this end, the state will use RTTT funds to pursue three strategies:

- 1. Invest in the data systems and technology necessary to support the Pre K–12 teaching and learning system**
- 2. Strengthen and expand educator training and supports for data use**
- 3. Make state longitudinal data available to researchers through the EDW**

(C)(3)(i)

Strategy: Invest in the data systems and technology necessary to support the PreK–12 teaching and learning system

An anchor of our Race to the Top proposal is the development and implementation of a statewide PreK-12 teaching and learning system that allows every educator to provide individualized instruction to meet the needs of our diverse student population. Significant investments in technology supports, particularly for the Digital Library and the unified assessment system, are necessary for the system to operate at full potential. After evaluating build versus buy options, our current plan is to build the systems to avoid incurring high ongoing subscription costs, though we will continue to pursue this question with LEAs and members consortia we expect to work with during the grant review period and may revise our approach. We will also conduct a pilot of a vendor-built comprehensively integrated instructional improvement system that connects teachers to instructional resources and peers who have successfully served students facing similar challenges. We will compare student outcomes from the two systems to make a decision on how to proceed after the grant ends. Our plan is to do this work with a coalition of LEAs, particularly as we develop the assessment tools. Key LEAs, including Boston and Springfield, have agreed to help us develop and roll out these systems, and we will engage other LEAs as well to confirm that we develop tools that meet the needs of all LEAs.

Activities:

- *Develop and implement a Digital Library for use by all Massachusetts LEAs, schools, and educators.* In conjunction with our participation in the Balanced Assessment State Consortium (see section (B)(2)), we will build a Digital Library within the PreK–12 teaching and learning system featuring electronic access to ESE’s *Curriculum Frameworks*, including both Common Core Standards and any additional Massachusetts standards. The Library will incorporate model curricula units, lesson plans, and instructional materials, some developed specifically for the system, some submitted directly by local educators. It will also provide a flexible search tool so that educators can find resources by standard and by organizing idea, as well as tools to assemble resources into units and lesson plans. These tools will be available to assessment consortia members referenced in section (B)(2).

- *Develop a “test builder engine” that enables educators to assemble, score, and access results from assessments.* We will tag all released MCAS items and performance tasks by standard and load them into two item banks: a secure bank for items designated for interim assessments and accessible only to designated LEA personnel, and a non-secure bank with items available to all educators and other interested users. The non-secure bank will also allow LEAs to include locally developed items. We will build an online assessment delivery system for LEA use with hard copy backup (including scannable answer sheets), along with tools to automate as much scoring as possible and to support additional hand scoring as needed. Finally, we will build systems to load results into the EDW for delivery to LEAs, schools, and teachers within 24 to 72 hours of scoring.
- *Pilot a vendor-built comprehensively integrated instructional improvement system and evaluate its impact.* We will procure a vendor with a demonstrated record of success in developing and deploying such a system, implement the system with approximately 5,000 students, and evaluate its student impact relative to the model curricula and unified assessment system to inform future state investments.

(C)(3)(ii)

Strategy: Strengthen and expand educator training and supports for data use

Over the last five years Massachusetts has dramatically increased the data available to educational leaders for policy development and operational decisions. We have incorporated standards for using data to support continuous instructional improvement into our approval of educator preparation program and educator licensure regulations, and we have developed and delivered a variety of professional development opportunities for teachers and principals on effective data use. What we have learned is that, for most educators, significant investment in training and job-embedded activities is required before data use becomes a regular component of their practice. We seek to build upon our existing six-course sequence of EDW training to include additional topics; we will also invest in online delivery so that we can make the courses more broadly accessible and easier to integrate into daily job activities. (Additional professional development activities supporting the PreK–12 teaching and learning system are discussed in section (D)(5).)

Activities:

- We have identified a need for ten additional courses in data use and analysis, in addition to six ESE already offers, and will develop classroom and online versions of these courses. Topics will include the new statewide student growth model, effective use of the PreK–12 teaching and learning system, and use of the EDW to inform professional development planning and educator evaluations, among others.
- We will upgrade ESE’s online course delivery infrastructure and related tools and release all sixteen courses online.
- We will expand capacity in regional District and School Assistance Centers (DSACs) to launch, train, and directly support district and school data teams (see section (D)(5) for a description of ESE’s proposed system of professional supports).

(C)(3)(iii)

Strategy: Make state longitudinal data available to researchers through the EDW

ESE already has a robust system for sharing confidential student-level data with researchers. Its standard legal agreement for data-sharing is publicly available from the Data Quality Campaign (see Appendix C10 for a sample Memorandum of Understanding (MOU)), and the agency is currently pursuing more than a dozen research projects with nationally known researchers. However, our website does not currently provide the particular aggregate breakdowns that researchers often require to answer their research questions. Access to our EDW would allow researchers to create their own aggregate data tables to better support investigations of the effectiveness of instructional materials, strategies, and approaches for educating different students.

Activities:

- *Build researcher access to aggregate data in the EDW.* We will build researcher access to data and reports through the EDW as part of our transition to the data mart architecture discussed in section (C)(2).
- *Develop processes and protocols for allowing researcher access.* We will expand our processes for allowing researcher access to data to accommodate EDW access.

Timeline:

	Year 1 (2010–2011)	Year 2 (2011–2012)	Year 3 (2012–2013)	Year 4 (2013–2014)
1. Invest in the data systems and technology necessary to support the statewide PreK–12 teaching and learning system	<ul style="list-style-type: none"> • Document functional, access, and performance requirements • Evaluate options and finalize architecture • Engage contractor(s), purchase licenses • Design search engine • Start pilot of vendor-built system 	<ul style="list-style-type: none"> • Create detailed system designs • Develop and validate the system and integrate into the EDW • Continue vendor pilot 	<ul style="list-style-type: none"> • Complete and evaluate the pilot, modify as needed • Launch Digital Library • Plan test builder rollout to all LEAs • Continue vendor pilot 	<ul style="list-style-type: none"> • Launch test builder • Evaluate impact of state-built instructional systems versus vendor system
2. Strengthen and expand educator training and supports for data use	<ul style="list-style-type: none"> • Develop a data training implementation plan • Develop training requirements • Develop curricula for growth model courses; pilot the courses • Plan approach for enhancing the capacity of district and school level data teams • Through DSACs, establish district-level pilot, 2 data teams in 12 districts/schools; evaluate and enhance 	<ul style="list-style-type: none"> • Revise courses as indicated and make available through classes and online • Through DSACs, establish district-level data teams in 2 districts/schools; evaluate and enhance the data team model as needed 	<ul style="list-style-type: none"> • Develop curricula for courses on the PreK–12 teaching and learning system; pilot the courses and train trainers • Continue course delivery • Launch an additional 2 data teams through DSACs 	<ul style="list-style-type: none"> • Continue course delivery • Launch an additional 2 data teams through DSACs

	the data team model as needed			
3. Make state longitudinal data available to researchers through the EDW	Continue existing processes of providing confidential data to researchers	Continue existing processes of providing confidential data to researchers	Develop processes and protocols for sharing aggregate data with researchers via the EDW	Build researcher data mart and begin providing EDW data to researchers
<p><i>Responsible parties:</i></p> <p><u>Goal 1:</u> ESE Associate Commissioner, CIO, IT program manager</p> <p><u>Goal 2:</u> Training Project Manager, Professional Development Coordinator</p> <p><u>Goal 3:</u> IT Director, Director of Strategic Planning, Research, and Evaluation</p>				

Performance Measures Performance measures for this criterion are optional. If the State wishes to include performance measures, please enter them as rows in this table and, for each measure, provide annual targets in the columns provided.	Actual Data: Baseline (Current school year or most recent)	End of SY 2010-2011	End of SY 2011-2012	End of SY 2012-2013	End of SY 2013-2014
Percent of scores from formative and interim assessments in the PreK-12 teaching and learning system returned within 24 to 72 hours	0%	0%	0%	80%	100%
Percent of teachers (from all LEAs) using the PreK-12 teaching and learning system and the EDW to inform instructional decisions	0%	0%	10%	25%	50%
Number of high quality district data teams created in Level 4 and 5 schools	1	3	5	7	9

(D) Great Teachers and Leaders (138 total points)

State Reform Conditions Criteria

(D)(1) Providing high-quality pathways for aspiring teachers and principals (21 points)

The extent to which the State has—

- (i) Legal, statutory, or regulatory provisions that allow alternative routes to certification (as defined in this notice) for teachers and principals, particularly routes that allow for providers in addition to institutions of higher education;
- (ii) Alternative routes to certification (as defined in this notice) that are in use; and
- (iii) A process for monitoring, evaluating, and identifying areas of teacher and principal shortage and for preparing teachers and principals to fill these areas of shortage.

In the text box below, the State shall describe its current status in meeting the criterion. The narrative or attachments shall also include, at a minimum, the evidence listed below, and how each piece of evidence demonstrates the State's success in meeting the criterion. The narrative and attachments may also include any additional information the State believes will be helpful to peer reviewers. For attachments included in the Appendix, note in the narrative the location where the attachments can be found.

Evidence for (D)(1)(i), regarding alternative routes to certification for both teachers and principals:

- A description of the State's applicable laws, statutes, regulations, or other relevant legal documents, including information on the elements of the State's alternative routes (as described in the alternative route to certification definition in this notice).

Evidence for (D)(1)(ii), regarding alternative routes to certification for both teachers and principals:

- A list of the alternative certification programs operating in the State under the State's alternative routes to certification (as defined in this notice), and for each:
 - The elements of the program (as described in the alternative routes to certification definition in this notice).
 - The number of teachers and principals that successfully completed each program in the previous academic year.
 - The total number of teachers and principals certified statewide in the previous academic year.

Recommended maximum response length: Two pages

(D)(1)(i)

Massachusetts licensure regulations allow for multiple alternative routes to initial licensure (see Appendix D1 for the relevant educator certification law and Appendix D2 for licensure regulations). The alternative routes include district-based models, the SEA, higher education institutions, professional associations, and other non-profit organizations. Unlike many states, candidates in alternative route programs receive the same initial license as those completing traditional preparation programs. Alternative routes usually provide both a residency-style experience for candidates and a streamlined path to licensure. Multiple alternative routes to administrative licensure, such as the Panel Review—a state-run portfolio-based process for career changers (employing highly accomplished educational leaders as assessors)—and a 300-hour district-based Administrative Apprenticeship—completed under the supervision of a mentor—also exist. In addition, programs like the Boston School Leadership Institute, which provides district-based licensure for aspiring principals, novice principals, and other school-based administrators, allows for expedited training and placement of administrators in high-need schools. These routes ensure high and consistent standards statewide, while the district focus allows for local flexibility in the recruitment and preparation of teachers and administrators.

(D)(1)(ii)

A total of 39 alternative route programs conforming to the USED's Race to the Top (RTTT) definition are currently approved statewide, with additional approvals pending. The Boston Teacher Residency, an alternative master's program in education that recruits and trains educators for immediate placement in Boston Public Schools, is one example of the state's commitment to innovation in high quality, practice-based pathways to teaching. Several charter schools have also developed successful school-based residency alternative routes to certification. The number of teachers and leaders prepared through alternative routes has grown steadily in recent years – up to 1037 educators (15% of newly licensed teachers) in 2008 (see Appendix D3 for a current list of the programs and data on program completion).

(D)(1)(iii)

Massachusetts has invested resources in recent years to gather data along the career continuum in order to identify, monitor, and evaluate areas of educator shortage. ESE regularly collects data on the educator pipeline from the state's Education Personnel Information Management System (EPIMS), and Educator Licensure and Recruitment system (ELAR); from Title II and state annual reporting data; and from ESE's annual survey of projected program completers, Highly Qualified Teachers (HQT) reporting, and waiver data. The planned linkage of EPIMS and ELAR in 2010 will enhance the state's and LEAs' abilities to target areas of shortage and identify patterns of inequitable distribution of effective teachers and leaders (see section (C)(2) for a description of the planned linkages across data systems).

Governor Patrick's recent Commonwealth Readiness Project illustrates the state's use of data to inform policy decisions. The Recruiting and Retaining Educators Subcommittee used retirement projections, teacher waiver data, and EPIMS to formulate a set of recommendations, including expanded recruitment efforts and incentives to teach in hard-to-staff schools and on high need subjects. These recommendations also led to the reorganization of educator policy, preparation, licensure, and leadership into a cohesive center at the Department in 2008, and helped shape the recommendations for expanding the pool and pipeline of effective teachers discussed in section (D)(3).

Massachusetts has shown a willingness to experiment with incentives, including differential pay and signing bonuses for STEM (Science, Technology, Engineering, and Mathematics) teachers, as a direct outgrowth of supply/demand data analysis. The 2008 National Council on Teacher Quality (NCTQ) *State Policy Yearbook* noted that Massachusetts is one of only 17 states meeting all goal components regarding differential pay for teachers in shortage subjects and high need schools (NCTQ 2008).

Reform Plan Criteria

(D)(2) Improving teacher and principal effectiveness based on performance (58 points)

The extent to which the State, in collaboration with its participating LEAs (as defined in this notice), has a high-quality plan and ambitious yet achievable annual targets to ensure that participating LEAs (as defined in this notice)—

- (i) Establish clear approaches to measuring student growth (as defined in this notice) and measure it for each individual student; (5 points)
- (ii) Design and implement rigorous, transparent, and fair evaluation systems for teachers and principals that (a) differentiate effectiveness using multiple rating categories that take into account data on student growth (as defined in this notice) as a significant factor, and (b) are designed and developed with teacher and principal involvement; (15 points)
- (iii) Conduct annual evaluations of teachers and principals that include timely and constructive feedback; as part of such evaluations, provide teachers and principals with data on student growth for their students, classes, and schools; (10 points) and
- (iv) Use these evaluations, at a minimum, to inform decisions regarding— (28 points)
 - (a) Developing teachers and principals, including by providing relevant coaching, induction support, and/or professional development;
 - (b) Compensating, promoting, and retaining teachers and principals, including by providing opportunities for highly effective teachers and principals (both as defined in this notice) to obtain additional compensation and be given additional responsibilities;
 - (c) Whether to grant tenure and/or full certification (where applicable) to teachers and principals using rigorous standards and streamlined, transparent, and fair procedures; and
 - (d) Removing ineffective tenured and untenured teachers and principals after they have had ample opportunities to improve, and ensuring that such decisions are made using rigorous standards and streamlined, transparent, and fair procedures.

The State shall provide its detailed plan for this criterion in the text box below. The plan should include, at a minimum, the goals, activities, timelines, and responsible parties (see Reform Plan Criteria elements in Application Instructions or Section XII, Application Requirements (e), for further detail). Any supporting evidence the State believes will be helpful to peer reviewers must be described and, where relevant, included in the Appendix. For attachments included in the Appendix, note in the narrative the location where the attachments can be found.

Recommended maximum response length: Ten pages

Massachusetts' consistently high scores on national and international assessments are testimony to the many great teachers and leaders working today in our classrooms. However, while many teachers deliver a world-class education, too many students do not receive consistently high quality instruction. Our goal is to create a system that recognizes, supports, and retains the many talented educators we have, while ensuring that every student receives great instruction and that we close achievement gaps across our state. Achieving this goal will require bold changes and new partnerships within LEAs and at the state level.

Over the next four years, we will develop and roll out a performance-based system to better develop, retain, and advance our educator workforce. This system will create a coherent approach to defining and assessing teacher and leader effectiveness, using multiple measures of impact anchored in student growth (see sections (D)(2)(i–ii)). We will work closely with LEAs and union partners to design and embed multiple measures of effectiveness into local evaluations and across the career continuum. Our intent is to attract and retain promising recruits; to support, identify and promote effective instructional practices; to provide opportunities for advancement; to provide educators with opportunities to improve; and to remove ineffective educators through fair and transparent processes.

This work will result in new local evaluation models and state licensure regulations and career ladders (see sections (D)(2)(iii–iv)), and will enable us to address equitable distribution as we expand the supply of effective educators for priority subjects and specializations (see sections (D)(3) and (D)(4)). At the same time, we will ensure that we place and retain our strongest educators in the schools where they are most needed. We will act on the results of a powerful teacher and principal survey, Mass TeLLS, to ensure

that we enhance working conditions and proactively support our educators (see section (D)(3)). Finally, we will make an unprecedented investment in educator development and supports aligned with the state’s reform priorities (see section (D)(5)). By 2014, we will have an educator workforce of the highest quality and a redesigned statewide educator development system that will serve as a national model.

With 256 LEAs participating in our RTTT proposal, we have an historic opportunity to work side-by-side with stakeholders across the state to transform our educator development system and to reach a significant percentage of educators working in high need schools. Our ambitious plan to build Massachusetts’ performance-based system focuses on six interrelated strategies:

- 1) Measuring student growth for each individual student**
- 2) Differentiating levels of effectiveness**
- 3) Using effectiveness measures in educator evaluation**
- 4) Ensuring evaluations include timely and constructive feedback from principals, including data on student growth**
- 5) Using evaluations to inform decisions**
- 6) Reinforcing effectiveness and continuous improvement through state-level reforms**

(D)(2)(i)

Strategy 1: Measuring student growth for each individual student

Goal: Continue to refine Massachusetts’ approach to how individual student growth is measured and connect student growth data to individual educators.

Activities: In October 2009, Massachusetts publicly released the state’s first student growth data, allowing educators to quantify how an individual student’s MCAS performance had changed over time. Massachusetts measures student growth by comparing the change in a student’s MCAS performance from one year to the next, relative to that of all other students who had similar previous results (the student’s “academic peers”). For example, if the student performed better than 70 percent of her academic peers, she would receive a

student growth percentile of 70. To measure growth for a group of students, such as a classroom, school, or district, the growth percentiles for all students are aggregated to create a median for the group (see Appendix D4 for the October 2009 growth model report).

Students in grades 4 through 8 in 2008 or 2009 who had two or more consecutive years of MCAS results were included in the initial stage of growth reporting, along with students in grade 10 in 2009 who attended Massachusetts public schools in their eighth, ninth, and tenth grade years. The state provides educators with access to reports of student growth results by district, school, grade, and subgroup through its Education Data Warehouse, and school and district aggregate growth data are available to the public on ESE's Profiles website. At present, the state is conducting a pilot with 80 LEAs to connect student growth and achievement data to individual teacher and principal information. By the end of 2010, the state will collect this data for all principals and teachers in tested grades and subjects. Going forward, the state will continue to build out other measures of student growth including new tools for including non-tested grades and subjects. ESE will create these tools in alignment with the effectiveness work described below.

(D)(2)(ii)

Strategy 2: Differentiating levels of effectiveness

Goal: Develop statewide guidelines for assessing the effectiveness of teachers and principals through an iterative process that builds on and includes national research and development efforts, LEA pilots, and statewide networks.

We will develop valid assessments for teacher effectiveness, including impact on student growth, and new approaches to measuring principal effectiveness, including impact on student growth and on teacher effectiveness within a school. This work will be a catalyst to promote effectiveness across the entire educator career continuum and create powerful new tools for educators as they pursue their own career advancement.

Activities: Beginning in spring 2010, Massachusetts plans to convene a panel of statewide and local education leaders (including superintendents, unions, school committees, and members of the higher education community), principals, and teachers from a

representative sample of LEAs and schools, along with national experts, to guide development of an approach to measuring teacher and principal effectiveness via multiple measures, anchored on student growth data. In addition to building on current national projects, such as the Gates Measures of Effective Teaching project, we will seek input through the Education Personnel Advisory Council of the Board of Elementary and Secondary Education (EPAC) and ongoing ESE partnerships with multiple groups, including in-state groups such as the Working Group for Educator Excellence, national organizations such as the Interstate New Teacher Assessment and Support Consortium (INTASC) of the Council of Chief State School Officers (CCSSO) and the State Consortium on Education Leadership (SCEL), and Wallace Foundation-funded projects to revise principal standards (see Appendix D5 for a description of the Gates project and Appendix D6 for descriptions of these existing partnerships).

The provisional definitions of teacher and principal effectiveness will include at least three summative rating categories (from highly effective to ineffective), and at a minimum are expected to incorporate the following:

- Multiple measures of teacher/principal impact on student academic performance and growth, measured through summative and supplemental assessments (acknowledging that state assessments exist for a limited set of subjects and grade levels today, so will need to be developed as part of this work)
- Supervisor evaluations based on research-based observational tools and rubrics of professional practice
- Evidence of educator content knowledge, professional skills, cultural competency, and ongoing professional growth

Examples of other possible measures include:

- Additional student measures such as promotion, graduation and attendance rates
- Student and/or parent feedback on school and classroom experience
- Measures of school culture, conditions, and climate (such as Mass TeLLS and/or other data)

Strategy 3: Using effectiveness measures in educator evaluation

Goal: Accelerate development and implementation of evaluation models based on effectiveness measures, and ensure statewide implementation through revised evaluation regulations.

Massachusetts has not revised its educator evaluation regulations since 1995, and the regulations currently do not include any measures of effectiveness based on student performance (see Appendix D7 for current evaluation law and Appendix D8 for current evaluation regulations). Moreover, the implementation of these regulations varied in quality because the state did not provide LEAs with viable models or the necessary supports to do the work well.

Activities: Beginning in summer 2010, Massachusetts will work with LEAs to develop new evaluation models by selecting 10 representative LEAs as pilots that are interested in playing a leadership role in statewide development of these models. The majority of the pilot sites will enroll at least 50% Title I eligible students, and the sample will also include at least one urban, one rural, and one suburban district; at least one high-performing district (as identified by current student achievement and growth results); and at least one charter school or alternative LEA. Pilot LEAs will need to demonstrate buy-in from the local teachers union, principals, and school committee, and will designate a working group comprised of representatives from each group. By fall 2011, these working groups will partner with the state (supported by nationally recognized consultants and experts) to design and implement specifications for local evaluation models as well as detailed project plans, timelines, and milestones. At least one pilot program will be selected based on its willingness to implement a peer review model in its local evaluation and HR process.

The goal of the pilot project is to use the measures of effectiveness outlined above to create new local evaluation models that are high quality and financially sustainable for LEAs in the long term. The working groups will stay closely connected to national efforts, revising their models as needed to reflect emerging promising practices and validated research-based approaches. Another priority is to develop validated models that really work in our schools (not just on paper), and so the pilots will also focus on the training district and school administrators need to conduct equitable and affordable evaluations (see Strategy 4 below). Given the intensive work

required to innovate and implement new models, the state will use a significant share of RTTT funds to support the LEA pilots and will also expect LEAs to allocate a portion of their own RTTT funds to this work.

These pilot projects will serve as learning labs for the state. In fall 2010, ESE will launch a set of regional networks for all participating LEAs to assess current evaluation models and HR practices, laying the groundwork for LEAs to learn from and contribute to the pilot projects. These networks will include district administrators and educator leadership, and will convene periodically during the first three years of the grant. In addition, the state will regularly hold open sessions to convene teachers, principals, superintendents, school committees, and union leadership (including state-level organizations), as well as community and business leaders to share progress reports, best practices and input into the state's revision of its regulations.

A shortcoming of the implementation of the 1995 guidelines was a lack of attention to implementation support. Through the pilots, the state will develop a set of practical local models to recommend and tools to help LEAs develop new evaluation systems. While districts will continue to have flexibility and ownership of local evaluation, the new regulations will ensure consistent use and reporting based on a common set of statewide guidelines to assess educator effectiveness. The regional networks described above will be critical in providing information and support on new evaluation practices within all participating LEAs. In addition, the state will proactively support local implementation, encouraging participating LEAs to use their RTTT funds to help offset the costs of transitioning to a new model. By 2013, with the rollout of new evaluation regulations, the state will require all LEAs to revise local evaluation systems to include the new measures of educator effectiveness.

(D)(2)(iii)

Strategy 4: Ensuring evaluations include timely and constructive feedback from principals, including data on student growth

Goal: Invest to build administrator and principal capacity to conduct evaluations and provide meaningful feedback.

A recently conducted and soon to be published study of evaluation practices in a Massachusetts urban district highlights a key issue for the state: in 2008 and 2009, less than 25% of non-tenured teachers in the district received their state-required annual

evaluations and over a quarter of the district's school leaders failed to turn in any evaluations over the two-year period. Variability in the quality of local evaluations—both in terms of what is evaluated and the consistency and rigor of the evaluation process itself—is a leadership issue that the state plans to address using RTTT funds. Specifically, Massachusetts will use RTTT funds to provide training and support to ensure that LEA administrators, principals, and other evaluators conduct regular formal and informal evaluations and provide meaningful feedback to both teachers and principals.

Activities: As described in sections (C)(3) and (D)(5), Massachusetts will undertake work to give educators access to data on their own students and provide training to help them use this data to improve instruction, inform professional development, and accelerate professional growth. In addition, the state will provide administrator, principal, and teacher evaluation training as part of the support for LEA implementation of new evaluation models. The state will contract with capable third party providers to create and deliver new regional training and tools focused on conducting and delivering fair, transparent evaluations, including online modules which will be available statewide. In the pilots, the state will also partner with LEAs to develop models for the conditions needed to make this possible, including evaluation strategies for large schools where principals may be challenged to conduct evaluations and provide regular, high quality feedback. Through the regional networks described under Strategy 3, LEAs will have the opportunity to share best practices and to work with the state and key associations to figure out innovative solutions that meet the needs of every school. The state will reinforce the importance of this professional development through changes to principal evaluation that hold leaders accountable for ensuring equitable, high quality evaluations are conducted and delivering actionable feedback to every educator (described in Strategy 2 above).

(D)(2)(iv)

Strategy 5: Using evaluations to inform decisions

Goal: Create evaluation models that drive key decisions along the career continuum by embedding measures of effectiveness into all HR practices

Activities: At least three LEAs participating in the evaluation pilots will receive financial and technical support to align the newly developed measures of effectiveness with decisions along the career continuum (from recruiting new teachers through advancing and retaining experienced ones). Specifically, these LEAs will work with the state to refine local approaches to induction, professional development, advancement to new roles and responsibilities, professional teaching status (tenure), compensation, and the removal of ineffective teachers. In pursuing this work, the state will build on promising models from other states and LEAs across the nation as well as on homegrown models such as Springfield’s “Instructional Learning Teams” and career ladder and the Brooke Charter School (a Teacher Incentive Fund site), in addition to other initiatives of promise. A statewide coalition of educators (WGEE) is already working with three districts to develop pilots to align key HR functions across the continuum and measure the impact on student achievement. They will, prospectively, be included among the ten pilot LEAs referenced in (D)(2)(ii).

Through these pilots and the regional networks of participating LEAs described in Strategy 3, the state will pursue improvements to local human resource systems to transition them from compliance to effectiveness-driven organizations. The state’s current District Standards and Indicators, used to monitor and assess LEA performance, include the extent to which the LEA “identifies, attracts, and recruits effective personnel, and structures its environment to support, develop, improve, promote, and retain qualified and effective professional staff who are successful in advancing achievement for all students” (see Appendix E4 for full list of District Standards and Indicators). This standard provides a platform for the state and LEAs to promote activities that deliberately link HR practices to the guidelines for educator effectiveness. Using lessons learned from the pilot LEAs, district staff will have opportunities to conduct self-assessments of current HR practices, address the local structures and systems that impede HR functions, and share promising practices for recruitment, selection, induction, advancement, professional teaching status (tenure), and the removal of ineffective teachers. Collaboration is critical to the success of this work, and ESE will invest considerable effort in ensuring that the right people — including LEA leadership and our state and local unions — are at the table working out solutions together.

The state will also use RTTT funds to support four alternative compensation pilots among the 10 LEAs selected as evaluation pilots. The state will work with these LEAs to include performance, knowledge, professional skills, and/or willingness to take on

tough assignments in addition to longevity and education attained as the bases for compensation. The state will capture learnings and best practices from these 4 pilots and continuously share them with the regional networks of participating LEAs. In support of this work, ESE will provide these LEAs with supplemental RTTT funds to implement individual, team, and school-level incentives tied to multiple measures of effectiveness and to create new teacher leader positions and career pathways tied to the LEA's new evaluation system.

Finally, the state will also use RTTT funds to begin a statewide conversation about how changes in policies and practices may support the overall goal of ensuring that every student experiences great teachers and school leaders. In partnership with unions and other educator associations, we will collaboratively review current tenure structures, pension and benefits policies, and the prevailing "step and lane" system used in most teacher contracts. Together, we will develop and pursue a set of recommendations at both the state and LEA levels to strengthen educator effectiveness, systematically build educator capacity, improve the performance of ineffective teachers, and develop fair and streamlined approaches to removing those who do not improve.

Strategy 6: Reinforcing effectiveness and continuous improvement through state-level reform

Goal: Use measures of teacher and principal effectiveness to create a multi-tiered licensure system that is performance and portfolio-based, and create a statewide career ladder.

Activities: The revised performance-based licensure system and career ladder will include a probationary or apprentice license, initial license, professional license, and teacher leader license(s). The licensure system will be designed in close consultation with statewide stakeholders, national experts, EPAC, and state and national teacher unions. Today, licenses are not linked to an educator's performance on the job, but rather to coursework and other credentials. In parallel with new effectiveness-based evaluation regulations, the state will embed effectiveness into the licensure process, from initial through re-licensure. At a minimum, the professional teaching license of the future will likely include: measures of effectiveness; evidence of professional growth; a portfolio review based on professional teacher standards; and demonstrated content knowledge.

The state will also create a career ladder to include a range of new teacher roles and make new compensation structures possible. For example, significant work has already been done by the Massachusetts Teachers Association (MTA) to articulate a statewide teacher pathway. MTA advocates that the state use licensure to certify and provide additional compensation to highly effective teachers interested in pursuing an “Instructional Leadership Path” with roles such as induction coach, curriculum developer, or mentor, and an “Education Management Path” for those interested in taking on additional school-level operational roles (see Appendix D9).

ESE will deliberately align work to build a statewide career ladder and performance-based licensure system with LEA adoption of the state’s revised evaluation regulations, educator preparation program approval, and statewide professional development, ensuring greater coherence among processes that are currently fragmented in Massachusetts and many other states. Massachusetts will use RTTT funds to develop the licensure system, which will eventually be self-supporting through candidate fees. We will engage and seek ongoing partnerships with Massachusetts’ professional educators in the development of the new career pathways and the licensure system and will also seek to include educators as trained assessors in the review of candidate portfolios.

Timelines for Strategies 1-6:

	Year 1 (2010–2011)	Year 2 (2011–2012)	Year 3 (2012–2013)	Year 4 (2013–2014)
1. Measuring student growth for each individual student	<ul style="list-style-type: none"> ESE will finalize links across student and educator data to track student results by individual teachers and principals 	<ul style="list-style-type: none"> In parallel to developing measures of effectiveness, ESE will create models for measuring growth in non-tested subjects ESE will continue to test and refine models 		
<p><i>Responsible parties:</i> The ESE Director of Student Assessment Services and the Director of Planning, Research, and Evaluation will manage development and refinement of student growth model. The Center for Educator Policy, Preparation, and Licensure will hire additional personnel to oversee all strategies outlined in section (D)(2).</p>				
2. Differentiating levels of effectiveness	<ul style="list-style-type: none"> ESE will convene a panel of stakeholders to guide development of measures of effectiveness for both principals and teachers 	<ul style="list-style-type: none"> Measures of effectiveness will continue to be updated based on results from MA pilot programs and ongoing national work 		
<p><i>Responsible parties:</i> ESE Center for Educator Policy, Preparation, and Licensure will facilitate the statewide panel, with additional input from contracted national experts, the Education Personnel Advisory Council (EPAC), and ongoing partnerships.</p>				
3. Using effectiveness measures in educator evaluation	<ul style="list-style-type: none"> ESE will work with LEAs to identify 10 LEAs to pilot new evaluation systems LEAs will establish working groups to 	<ul style="list-style-type: none"> ESE will provide financial support and technical assistance to pilot LEAs to implement new evaluation systems 	<ul style="list-style-type: none"> Pilot LEAs will continue to implement evaluation systems, with financial support and technical assistance from ESE 	<ul style="list-style-type: none"> All participating LEAs will be expected to revise local evaluation systems based on new regulations

	Year 1 (2010–2011)	Year 2 (2011–2012)	Year 3 (2012–2013)	Year 4 (2013–2014)
	develop new evaluation system based on preliminary measures of effectiveness <ul style="list-style-type: none"> • ESE will update EPIMS to track LEA evaluation data 	<ul style="list-style-type: none"> • ESE and pilot LEAs will share progress reports through regional networks 	<ul style="list-style-type: none"> • ESE will continue to convene networks to share progress reports and collect input on new evaluation guidelines • ESE will establish new evaluation guidelines to be implemented in Year 4 	
<p><i>Responsible parties:</i> ESE Center for Educator Policy, Preparation, and Licensure will oversee work and revise evaluation guidelines. All participating LEAs will be involved in the regional networks and provide input for new evaluation guidelines, while a subset of 10 LEAs will implement the new evaluation systems. National experts will also consult on development of evaluation models.</p>				
4. Ensuring evaluations include timely and constructive feedback from principals, including data on student growth		<ul style="list-style-type: none"> • Regional networks described in Strategy 3 will share best practices for successful evaluation practices 	<ul style="list-style-type: none"> • ESE will continue to convene regional networks 	<ul style="list-style-type: none"> • ESE will provide funding to train and support principals, superintendents, and other administrators in using new evaluation guidelines
<p><i>Responsible parties:</i> ESE Center for Educator Policy, Preparation, and Licensure will convene regional networks on best practices for evaluation. The Center will contract vendors to develop training materials and sessions, including online modules, on new</p>				

	Year 1 (2010–2011)	Year 2 (2011–2012)	Year 3 (2012–2013)	Year 4 (2013–2014)
evaluation system.				
5. Using evaluations to inform decisions	<ul style="list-style-type: none"> ESE will work with LEAs to identify 3 pilots to align HR practices and 4 pilots to implement models of alternative compensation 	<ul style="list-style-type: none"> Pilot LEAs will begin implementation, with financial support and technical assistance from ESE 	<ul style="list-style-type: none"> Regional networks will identify and codify best practices for aligning HR practices, informed by results from pilot 	<ul style="list-style-type: none"> ESE will share best practices and support work at all participating LEAs to align HR practices and compensation with new evaluation guidelines
<p><i>Responsible parties:</i> ESE Center for Educator Policy, Preparation, and Licensure will support pilot LEAs and convene regional networks to share results. Pilot LEAs will lead efforts to use evaluations for key HR decisions related to promotion, compensation, and professional development.</p>				
6. Reinforcing effectiveness and continuous improvement through state-level reforms	<ul style="list-style-type: none"> ESE develops framework for new tiered licensure system, including performance assessments and career ladders 	<ul style="list-style-type: none"> ESE continues to define licensure system, informed by results of measures of effectiveness developed by pilots 	<ul style="list-style-type: none"> ESE seeks approval by Board of Education for new licensure system and develops implementation plans for rollout of performance assessments ESE begins rollout of new initial licensure process 	<ul style="list-style-type: none"> ESE rolls out performance assessments for professional licensure, re-licensure and career ladders
<p><i>Responsible parties:</i> ESE Center for Educator Policy, Preparation, and Licensure will develop licensure framework in conjunction with national experts and statewide stakeholders.</p>				

Performance Measures Notes: Data should be reported in a manner consistent with the definitions contained in this application package in Section II. Qualifying evaluation systems are those that meet the criteria described in (D)(2)(ii).		Actual Data: Baseline (Current school year or most recent)	End of SY 2010-2011	End of SY 2011-2012	End of SY 2012-2013	End of SY 2013-2014
Criteria	General goals to be provided at time of application:	Baseline data and annual targets				
(D)(2)(i)	Percentage of participating LEAs that measure student growth (as defined in this notice).	0%	100%	100%	100%	100%
(D)(2)(ii)	Percentage of participating LEAs with qualifying evaluation systems for teachers.	0%	0%	4%	33%	100%
(D)(2)(ii)	Percentage of participating LEAs with qualifying evaluation systems for principals.	0%	0%	4%	50%	100%
(D)(2)(iv)	Percentage of participating LEAs with qualifying evaluation systems that are used to inform:	-	-	-	-	-
(D)(2)(iv)(a)	<ul style="list-style-type: none"> Developing teachers and principals. 	0%	0%	4%	33%	100%
(D)(2)(iv)(b)	<ul style="list-style-type: none"> Compensating teachers and principals. 	0%	0%	2%	2%	25%
(D)(2)(iv)(b)	<ul style="list-style-type: none"> Promoting teachers and principals. 	0%	0%	1%	1%	50%
(D)(2)(iv)(b)	<ul style="list-style-type: none"> Retaining effective teachers and principals. 	0%	0%	1%	25%	100%
(D)(2)(iv)(c)	<ul style="list-style-type: none"> Granting tenure and/or full certification (where applicable) to teachers and principals. 	0%	0%	1%	25%	100%
(D)(2)(iv)(d)	<ul style="list-style-type: none"> Removing ineffective tenured and untenured teachers and principals. 	0%	0%	1%	25%	100%

The state has set ambitious goals for measuring and strengthening the effectiveness of its educator workforce, based on the Strategies laid out in section (D)(2).

Criteria (D)(2)(i)

As described in Strategy 1, the state currently measures student growth through the growth model. This data will be available statewide, and thus to all participating LEAs, by the end of Year 1 of RTTT.

Criteria (D)(2)(ii)

As described in Strategy 3, a set of 10 pilot LEAs, representing 4% of participating LEAs, will take a leadership role in using measures of effectiveness in their evaluation systems by the end of Year 2. Through the LEA regional networks, the state expects that a larger share of participating LEAs will implement new evaluation systems for teachers and principals in Year 3. By Year 4, all participating LEAs will be required to have a qualifying evaluation system in place as a result of the revised statewide evaluation regulations.

Criteria (D)(2)(iv)(a-d)

A subset of the evaluation pilots will use evaluation systems to inform decisions along the career continuum. In Year 2, all pilot LEAs will be expected to use evaluation to inform development; among these, 4 pilot LEAs (representing 2% of participating LEAs) will use evaluation to inform compensation while another 3 pilot LEAs (representing 1% of participating LEAs) will use evaluation to inform promotion, retention, tenure and removal. In Years 3 and 4 the state will expect an increasing percentage of participating LEAs to inform decisions via qualifying evaluation systems.

General data to be provided at time of application:		
Total number of participating LEAs.		256
Total number of principals in participating LEAs.		1,382
Total number of teachers in participating LEAs.		53,933
Note: Headcount data on principals and teachers is for school year 2008-2009.		
Criterion	Data to be requested of grantees in the future:	
(D)(2)(ii)	Number of teachers and principals in participating LEAs with qualifying evaluation systems.	
(D)(2)(iii) ¹	Number of teachers and principals in participating LEAs with qualifying evaluation systems who were evaluated as effective or better in the prior academic year.	
(D)(2)(iii)	Number of teachers and principals in participating LEAs with qualifying evaluation systems who were evaluated as ineffective in the prior academic year.	
(D)(2)(iv)(b)	Number of teachers and principals in participating LEAs with qualifying evaluation systems whose evaluations were used to inform compensation decisions in the prior academic year.	
(D)(2)(iv)(b)	Number of teachers and principals in participating LEAs with qualifying evaluation systems who were evaluated as effective or better and were retained in the prior academic year.	
(D)(2)(iv)(c)	Number of teachers in participating LEAs with qualifying evaluation systems who were eligible for tenure in the prior academic year.	

(D)(2)(iv)(c)	Number of teachers in participating LEAs with qualifying evaluation systems whose evaluations were used to inform tenure decisions in the prior academic year.	
(D)(2)(iv)(d)	Number of teachers and principals in participating LEAs who were removed for being ineffective in the prior academic year.	

(D)(3) Ensuring equitable distribution of effective teachers and principals (25 points)

The extent to which the State, in collaboration with its participating LEAs (as defined in this notice), has a high-quality plan and ambitious yet achievable annual targets to—

- (i) Ensure the equitable distribution of teachers and principals by developing a plan, informed by reviews of prior actions and data, to ensure that students in high-poverty and/or high-minority schools (both as defined in this notice) have equitable access to highly effective teachers and principals (both as defined in this notice) and are not served by ineffective teachers and principals at higher rates than other students; (15 points) and
- (ii) Increase the number and percentage of effective teachers (as defined in this notice) teaching hard-to-staff subjects and specialty areas including mathematics, science, and special education; teaching in language instruction educational programs (as defined under Title III of the ESEA); and teaching in other areas as identified by the State or LEA. (10 points)

Plans for (i) and (ii) may include, but are not limited to, the implementation of incentives and strategies in such areas as recruitment, compensation, teaching and learning environments, professional development, and human resources practices and processes.

The State shall provide its detailed plan for this criterion in the text box below. The plan should include, at a minimum, the goals, activities, timelines, and responsible parties (see Reform Plan Criteria elements in Application Instructions or Section XII, Application Requirements (e), for further detail). In the text box below, the State shall describe its current status in meeting the criterion. The narrative or attachments shall also include, at a minimum, the evidence listed below, and how each piece of evidence demonstrates the State’s success in meeting the criterion. The narrative and attachments may also include any additional information the State believes will be helpful to peer reviewers. For attachments included in the Appendix, note in the narrative the location where the attachments can be found.

Evidence for (D)(3)(i):

- Definitions of high-minority and low-minority schools as defined by the State for the purposes of the State’s Teacher Equity Plan.

Recommended maximum response length: Three pages

Massachusetts is embarking on an ambitious course to both increase the supply of effective teachers in hard-to-staff subjects and specialty areas and to ensure the equitable distribution of effective educators, particularly in high poverty and high minority schools. We recognize that efforts to increase the supply are only as effective as the retention supports available for great teachers and leaders once they are inside our schools, and so will also address working conditions and leadership development as part of this work.

Massachusetts has identified four key strategies, which the state will build upon and accelerate using RTTT funds:

- 1) Publish and monitor data regarding educator effectiveness**
- 2) Expand the supply of effective educators through recruitment and preparation initiatives**
- 3) Concentrate placement of effective educators in lowest achieving schools (this initiative will be outlined in (E)(2))**
- 4) Increase the retention of effective teachers**

Strategy 1: Publish and monitor data regarding educator effectiveness

Goal: Monitor and publish data regarding educator effectiveness and distribution annually through the “Status of Educator Workforce” report.

The first step in diagnosing and addressing the distribution of effective educators is to have a clear picture of the current state of the system and to monitor key supply, demand, and distribution trends by LEA, school, student characteristics, and other priority indicators. Massachusetts is already developing the “Status of the Educator Workforce” report with the goal of publishing the first edition in summer 2010 and annual publications thereafter (see Appendix D10 for further description of the report).

Activities: Massachusetts will develop the first report in 2010 for all LEAs and schools, using proxies for teacher and leader effectiveness (for example, % highly qualified, % of teachers on waivers, and % of teachers with less than three years of experience). While these are not robust measures of effectiveness, they will provide the state with an initial picture of trends within the educator workforce. In subsequent years, student growth data and educator effectiveness measures will be incorporated into the report. While Massachusetts does not expect to use RTTT funds for the report, the report will be a critical source of information for subsequent initiatives to address equitable distribution, educator effectiveness, and other policy priorities.

Timeline:

	Year 1 (2010–2011)	Years 2–4 (2011–2014)
Publish and monitor data regarding educator effectiveness	ESE will complete first report, using proxies for educator effectiveness	<ul style="list-style-type: none"> • ESE and partners will use report results to inform efforts to build educator pipeline and distribute educators equitably, including revision of its statewide plan for equitable distribution • ESE will continue to publish annual reports, including data on teacher and principal effectiveness as available from work in (D)(2)
<i>Responsible parties:</i> In partnership with the state Board of Elementary and Secondary Education and the Education Personnel Advisory Council (EPAC), ESE will develop, manage and fund this work. LEAs will submit data and distribute the report locally as appropriate.		

Strategy 2: Expand the supply of effective educators through recruitment and preparation initiatives

Goal: Expand the supply of effective educators through intensive recruitment and preparation initiatives aimed at increasing the number and diversity of academically talented candidates entering teaching, particularly those specializing in STEM, special education, English language learners and by developing improved models of recruitment, preparation, and induction.

Given critical shortages in high need areas, Massachusetts seeks to increase the diversity, cultural competence and academic caliber of candidates entering education. ESE will use RTTT to expand the pool of these candidates and to strengthen the educator pipeline (which includes recruitment, preparation, selection, and induction) through investment in a limited number of highly leveraged, research-based initiatives. This strategy will help ensure that newly prepared teachers have the necessary knowledge and skills to be effective in the state's increasingly diverse classrooms, and that the state develops transformative models for educator preparation that will influence all programs via revised approval regulations (see section (D)(4)). Massachusetts is already planning a statewide diversity summit to identify issues and action steps needed to increase the effectiveness, diversity, and cultural competence of the current and future workforce and to link these issues explicitly to closing statewide achievement gaps.

Activities: Through the regional Readiness Centers, ESE will connect with P-16 education leadership and local communities, analyze educator workforce data, and identify the highest priority gaps in each region of the state (see Appendix D11 for a description of the Readiness Centers). In response to these needs, Massachusetts will use RTTT funds to expand the number of high-quality pathways for potential teachers and principals via targeted initiatives, including the following: a) pre-collegiate recruitment initiatives; b) pathways for students in community colleges, including articulation agreements between two- and four-year colleges; c) initiatives for school paraprofessionals and teacher aides in SPED and ELL settings; d) outreach to college students not currently on the path to teaching; e) programs to attract midcareer candidates into teaching; f) support for a limited number of pilot programs designed to build the pipeline for educators in critical shortage areas and create model practice-based programs.

To do this, ESE will manage a competitive RFP process to source regional and statewide initiatives aligned with these strategies. At present, Massachusetts has several strong initiatives already in place and the RFPs, one each for teacher and principal programs, will enable the state to expand and strengthen homegrown models and spur additional innovation. The RFP process will give preference to initiatives that recruit, prepare, and place academically talented and diverse candidates in cohorts via practice-based and residency models; provide extended induction support, including increased collaboration between LEAs and preparation programs during the first two years of a teacher's placement; emphasize content and pedagogical knowledge; and utilize community-based

financial and nonmonetary incentives to attract and retain candidates. ESE will also prioritize existing models with proven or highly promising results (for example, scaling the Boston Teacher Residency program already or importing programs such as UTeach), a commitment to ongoing evaluation of program outcomes, and a reliable ongoing funding source identified. In total, ESE expects to increase the statewide supply of effective teachers and principals in high priority areas by at least 650 by Year 4 through the RFP process, and further increase the number of effective educators through more systemic changes in educator preparation. Finally, ESE will create a clearer source of information for potential candidates through revision of the GEM (Gateway for Educators of Massachusetts) and MECC (Massachusetts Educator Career Center) websites.

Timeline:

	Year 1 (2010–2011)	Year 2 (2011–2012)	Year 3 (2012–2013)	Year 4 (2013–2014)
Expand the supply of effective educators through recruitment and preparation initiatives	<ul style="list-style-type: none"> ESE will use the Status of the Educator Workforce report and work through Readiness Centers to identify and prioritize gaps in the educator workforce ESE will revise GEM and MECC with consultant help and manage the statewide RFP process 	<ul style="list-style-type: none"> Through RFPs, ESE will launch recruitment initiatives and provide grants for new preparation programs ESE will convene statewide summit on educator diversity 	<ul style="list-style-type: none"> ESE will continue to fund initiatives, monitoring and reporting initial results ESE will identify initial promising practices to inform LEA recruitment strategies and revise standards for preparation programs 	<ul style="list-style-type: none"> ESE will continue to fund initiatives, assisting LEAs and other stakeholders in developing plans for ongoing sustainability
<p><u>Responsible parties:</u> ESE staff, including two new staff members hired to oversee recruitment and equitable distribution initiatives, will manage the program in collaboration with the Readiness Centers and LEA working groups. ESE will provide funds for the RFPs through its portion of Race to the Top dollars and participating LEAs will be required to fund an increasing share of local ongoing costs to ensure successful transition from the state to the local community by the end of Year 4.</p>				

Strategy 3: Concentrate placement of effective teachers and leaders in lowest achieving schools

In section (E)(2), Massachusetts outlines an approach to developing a corps of teachers and leaders for placement in the state's lowest achieving schools.

Strategy 4: Increase the retention of effective teachers

Goal: Increase the retention of effective teachers by improving educator working conditions in the state's lowest performing schools, including additional induction support for new teachers in high need schools and/or hard-to-staff subjects.

Massachusetts will ensure that teachers work in learning environments that support their ability to be highly effective, especially teachers working in high need schools.

Activities: In March 2008, more than 40,000 Massachusetts teachers and principals participated in Mass TeLLS, a survey of teaching and learning conditions in the Commonwealth. Mass TeLLS is an important asset in the state's ongoing efforts to recruit and retain effective teachers, and the state will use RTTT funds to implement the survey in 2010 and 2012 as a way to measure progress toward achieving our goals. The state will encourage LEAs to create teams of teachers, school leaders and statewide union representatives to create actionable plans to improve working conditions in a subset of low-performing schools. The state will identify and share promising practices with all LEAs through the six regional District and School Assistance Centers (DSACs) and with principal development programs and networks so that emerging school leaders can benefit from what the teams develop and learn (see (D)(5)).

Massachusetts will also use RTTT to pursue new, innovative online hybrid approach strategies to providing induction support to new teachers, particularly those in low-performing schools or working with high need populations such as special education and English language learners, building off of existing state and national models. Such models pair trained mentors with new teachers via the use of both face-to-face observation and mentoring, and online support and critique of videotaped lessons. For experienced teachers working in these schools, Massachusetts will offer supplemental funds towards National Board for Professional Teaching Standards Certification for 500 teachers. Teachers who pursue National Board certification may be offered lead roles to support new teachers through induction programs. Massachusetts will also encourage LEA's to use RTTT funds so that teams of new and

experienced teachers working in low performing schools can access NBPS' *Take One* program to support their own professional development and growth.

Timeline:

	Year 1 (2010–2011)	Year 2 (2011–2012)	Year 3 (2012–2013)	Year 4 (2013–2014)
Increase the retention of effective educators	<ul style="list-style-type: none"> • ESE and the Mass TeLLS coalition will conduct a second survey • LEAs will form teams to focus on working conditions initiatives • ESE will launch support for National Board certification, which will continue all four years 	<ul style="list-style-type: none"> • ESE will launch online hybrid induction initiative, which will continue for three years 	<ul style="list-style-type: none"> • ESE and the Mass TeLLs coalition will conduct a third survey 	<ul style="list-style-type: none"> • Mass TeLLS initiatives on working conditions complete final year, sharing results for other schools to adopt and implement
<p><u>Responsible parties:</u> ESE will partner with the Mass TeLLS coalition to contract with a survey vendor to administer and analyze Mass TeLLS. LEAs and school-level working teams will be responsible for designing, implementing, and monitoring school-level intervention plans on working conditions. ESE will oversee induction and National Board initiatives in high need schools.</p>				

Performance Measures for (D)(3)(i) <i>Note: All information below is requested for Participating LEAs.</i>	Actual Data: Baseline (Current school year or	End of SY 2010- 2011	End of SY 2011- 2012	End of SY 2012- 2013	End of SY 2013- 2014
General goals to be provided at time of application:	Baseline data and annual targets				
Percentage of teachers in schools that are high-poverty, high-minority, or both (as defined in this notice) who are highly effective (as defined in this notice).	10%	N/A	N/A	13%	20%
Percentage of teachers in schools that are low-poverty, low-minority, or both (as defined in this notice) who are highly effective (as defined in this notice).	20%	N/A	N/A	24%	30%
Percentage of teachers in schools that are high-poverty, high-minority, or both (as defined in this notice) who are ineffective.	35%	N/A	N/A	25%	15%
Percentage of teachers in schools that are low-poverty, low-minority, or both (as defined in this notice) who are ineffective.	15%	N/A	N/A	13%	10%
Percentage of principals leading schools that are high-poverty, high-minority, or both (as defined in this notice) who are highly effective (as defined in this notice).	10%	N/A	N/A	13%	20%
Percentage of principals leading schools that are low-poverty, low-minority, or both (as defined in this notice) who are highly effective (as defined in this notice).	20%	N/A	N/A	24%	30%
Percentage of principals leading schools that are high-poverty, high-minority, or both (as defined in this notice) who are ineffective.	35%	N/A	N/A	25%	15%
Percentage of principals leading schools that are low-poverty, low-minority, or both (as defined in this notice) who are ineffective.	15%	N/A	N/A	13%	10%

At present, Massachusetts does not have a statewide methodology measuring educator effectiveness, nor does the state link individual educators with student growth information in all LEAs. The development of an approach to differentiate effectiveness based on multiple measures is central to the state's RTTT proposal (see section (D)(2)). Based on the plan we have laid out, we expect to be able to measure effectiveness, via multiple measures, by the end of Year 3 of the grant.

The baseline measures above are informed by benchmarks from other districts and states (Pittsburgh Public Schools 2009; Teacher Advancement Program 2009; Tennessee Department of Education 2007; The School District of Palm Beach County 2009). We have further adjusted the benchmark estimates given our history of high student achievement. We also cannot ignore the socioeconomic realities that exist in the state, and thus the baseline measures show a gap between effectiveness in high-poverty, high-minority schools and low-poverty, low-minority schools. The gap reflects the additional challenges faced by educators in high-poverty, high-minority schools where the ability to make an impact is influenced by the socioeconomic status of their students. It also reflects the higher percentage of teachers on waivers in these schools, and the typically higher patterns on turnover these schools experience.

The targets set in Years 3 and 4 represent the state's aspiration to dramatically improve the effectiveness of both teachers and principals. In particular, the targets signal the state's intent to:

- 1) Increase the number of highly effective teachers and principals
- 2) Decrease the number of ineffective teachers and principals
- 3) Close any existing effectiveness gaps across schools

As Massachusetts develops and launches its approach to measure of effectiveness, working in conjunction with the partners described in section (D)(2), the state will revisit these performance targets and recalibrate as appropriate.

(See Appendix D12 for a definition of high-poverty and high-minority schools.)

General data to be provided at time of application:	
Total number of schools that are high-poverty, high-minority, or both (as defined in this notice).	509
Total number of schools that are low-poverty, low-minority, or both (as defined in this notice).	1,335
Total number of teachers in schools that are high-poverty, high-minority, or both (as defined in this notice).	20,415
Total number of teachers in schools that are low-poverty, low-minority, or both (as defined in this notice).	17,617
Total number of principals leading schools that are high-poverty, high-minority, or both (as defined in this notice).	485
Total number of principals leading schools that are low-poverty, low-minority, or both (as defined in this notice).	454
<p>Note: Data above, including headcount data on teachers and principals, is for school year 2008-2009. See Appendix D12 for a definition of high-poverty and high-minority schools.</p>	
Data to be requested of grantees in the future:	
Number of teachers and principals in schools that are high-poverty, high-minority, or both (as defined in this notice) who were evaluated as highly effective (as defined in this notice) in the prior academic year.	
Number of teachers and principals in schools that are low-poverty, low-minority, or both (as defined in this notice) who were evaluated as highly effective (as defined in this notice) in the prior academic year.	
Number of teachers and principals in schools that are high-poverty, high-minority, or both (as defined in this notice) who were evaluated as ineffective in the prior academic year.	
Number of teachers and principals in schools that are low-poverty, low-minority, or both (as defined in this notice) who were evaluated as ineffective in the prior academic year.	

Performance Measures for (D)(3)(ii) <i>Note: All information below is requested for Participating LEAs.</i>	Actual Data: Baseline (Current school year or most recent)	End of SY 2010-2011	End of SY 2011-2012	End of SY 2012-2013	End of SY 2013-2014
General goals to be provided at time of application:	Baseline data and annual targets				
Percentage of mathematics teachers who were evaluated as effective or better.	75%	N/A	N/A	79%	88%
Percentage of science teachers who were evaluated as effective or better.	75%	N/A	N/A	79%	88%
Percentage of special education teachers who were evaluated as effective or better.	65%	N/A	N/A	70%	85%
Percentage of teachers in language instruction educational programs who were evaluated as effective or better.	65%	N/A	N/A	70%	85%

As noted above in the performance measures for (D)(3)(i), Massachusetts does not currently have the ability to measure the effectiveness of its educator workforce and expects to have an approach to measure effectiveness via multiple measures by Year 3. In absence of a true baseline, the performance measures set above signal the state’s intent to pursue significant gains in the percentage of effective teachers statewide, while closing any existing gap in the effectiveness of teachers across all subjects and specialty areas.

The estimated baseline and annual targets reflect some of the challenges faced by teachers in certain subject and specialty areas. The effectiveness of all math and science teachers is expected to be roughly equal to the average effectiveness across the state (as estimated for (D)(3)(i)), since teachers in these subjects are spread across all schools. Notwithstanding, the percentage of teachers on waivers in these subjects tend to be higher than in other teaching fields. Finally, estimates for teachers of special education and English language learners (referenced as language instruction educational programs above) are set at the same levels as high-poverty, high-minority schools in (D)(3)(i), recognizing that these groups face particular challenges and that the percentage of teachers on waivers is highest among this group.

General data to be provided at time of application:	
Total number of mathematics teachers.	6,988
Total number of science teachers.	5,303
Total number of special education teachers.	8,224
Total number of teachers in language instruction educational programs.	1,527

Note: Headcount data on teachers is for school year 2008-2009.

Data to be requested of grantees in the future:	
Number of mathematics teachers in participating LEAs who were evaluated as effective or better in the prior academic year.	
Number of science teachers in participating LEAs who were evaluated as effective or better in the prior academic year.	
Number of special education teachers in participating LEAs who were evaluated as effective or better in the prior academic year.	
Number of teachers in language instruction educational programs in participating LEAs who were evaluated as effective or better in the prior academic year.	

(D)(4) Improving the effectiveness of teacher and principal preparation programs (14 points)

The extent to which the State has a high-quality plan and ambitious yet achievable annual targets to—

- (i) Link student achievement and student growth (both as defined in this notice) data to the students’ teachers and principals, to link this information to the in-State programs where those teachers and principals were prepared for credentialing, and to publicly report the data for each credentialing program in the State; and
- (ii) Expand preparation and credentialing options and programs that are successful at producing effective teachers and principals (both as defined in this notice).

The State shall provide its detailed plan for this criterion in the text box below. The plan should include, at a minimum, the goals, activities, timelines, and responsible parties (see Reform Plan Criteria elements in Application Instructions or Section XII, Application Requirements (e), for further detail). Any supporting evidence the State believes will be helpful to peer reviewers must be described and, where relevant, included in the Appendix. For attachments included in the Appendix, note in the narrative the location where the attachments can be found.

Recommended maximum response length: One page

High quality preparation pathways in Massachusetts are critical for preparing the next generation of great teachers and principals. The Department of Elementary and Secondary Education approves 90 organizations throughout the state, both traditional and alternative (as defined in this proposal). However, the state does not adequately hold programs accountable for the effectiveness of its graduating teachers and principals.

Goal: Define measures of effectiveness for preparation programs and align the program approval process to these measures.

The state will develop and implement a transparent system of accountability for preparation programs that is anchored in the effectiveness of program graduates. This accountability system will align with new educator standards and be informed by the measures of effectiveness developed in section (D)(2). New preparation approval standards will require stronger partnerships between institutes of higher education (IHEs) and LEAs, practice-based models of preparation, and a tighter integration between preparation and induction during the first two years of a teacher's placement. Pilots for these models will be developed through the RFP program discussed in the previous section. The result will be programs better aligned with the state's educator workforce needs, including greater selectivity in admissions, as well as stronger preparation in content knowledge, pedagogy, and cultural competency.

Activities: Massachusetts has already begun work to increase the accountability of preparation programs. Through a partnership with 12 representative preparation programs, ESE is piloting a new program approval process that is based on outcome indicators, and will be aligned with measures of effectiveness as they are developed. Draft Effectiveness Indicators and a Preparation Program Report Card have been outlined, and will incorporate evidence of student growth and district collaboration programs (see Appendix D13 for a list of programs involved in the pilot, Appendix D14 for a draft program Report Card, and Appendix D15 for draft Effectiveness Indicators). Through the statewide pilots, ESE will develop a transparent statewide accountability system, anchored in measures of student achievement and growth of program graduates, that includes web-based public reporting for all preparation entities and new program approval regulations.

Timeline:

	Year 1 (2010–2011)	Year 2 (2011–2012)	Year 3 (2012–2013)	Year 4 (2013–2014)
Improve the effectiveness of preparation programs	<ul style="list-style-type: none"> ESE will conduct a NY Pathways-style study of a sample of programs to assess program completers' impact on student learning Based on results from study and work in (D)(2), ESE will refine effectiveness indicators 	<ul style="list-style-type: none"> ESE will use effectiveness indicators to modify regulations 	<ul style="list-style-type: none"> ESE will conduct statewide conferences to provide assistance on new requirements ESE will manage updates to ELAR to create a platform for capturing new approval evidence 	<ul style="list-style-type: none"> ESE will roll out new requirements for existing programs ESE will complete 20 visits each year, completing reviews with the new approval process by 2016
<p><i>Responsible parties:</i> ESE staff, including one new FTE, will engage national experts and statewide stakeholders to refine effectiveness indicators and develop new program approval process. ESE will hire staff and contractors to make the technology changes needed to support the work above, including assigning a Massachusetts Education Personal Identifier (MEPID), integrating ELAR in the Education Data Warehouse, and updating ELAR based on changes to the licensure system.</p>				

Performance Measures	Actual Data: Baseline (Current school year or most recent)	End of SY 2010-2011	End of SY 2011-2012	End of SY 2012-2013	End of SY 2013-2014
General goals to be provided at time of application:	Baseline data and annual targets				
Percentage of teacher preparation programs in the State for which the public can access data on the achievement and growth (as defined in this notice) of the graduates' students.	0%	0%	0%	60%	100%

Percentage of principal preparation programs in the State for which the public can access data on the achievement and growth (as defined in this notice) of the graduates' students.	0%	0%	0%	20%	100%
<p>As described in section (C)(2), the state plans to link the databases for students (SIMS), teachers (EPIMS), and licensure (ELAR) in order to collect data on the effectiveness of a preparation program based on its graduates' impact on student growth. This data will become publicly available beginning in Year 3 of Race to the Top, starting with programs that have at least 20 educators completing the program each year (to ensure a fair and reliable sample size). By Year 4, the state will have at least two years of data for each program and so expects to publicly report such data for all of its approved programs.</p>					
General data to be provided at time of application:					
Total number of teacher credentialing programs in the State.	73				
Total number of principal credentialing programs in the State.	33				
Total number of teachers in the State.	75,356				
Total number of principals in the State.	1,901				
<p>Note: Data above, including headcount data on teachers and principals, is for school year 2008-2009.</p>					
Data to be requested of grantees in the future:					
Number of teacher credentialing programs in the State for which the information (as described in the criterion) is publicly reported.					
Number of teachers prepared by each credentialing program in the State for which the information (as described in the criterion) is publicly reported.					

Number of principal credentialing programs in the State for which the information (as described in the criterion) is publicly reported.			
Number of principals prepared by each credentialing program in the State for which the information (as described in the criterion) is publicly reported.			
Number of teachers in the State whose data are aggregated to produce publicly available reports on the State’s credentialing programs.			
Number of principals in the State whose data are aggregated to produce publicly available reports on the State’s credentialing programs.			

(D)(5) Providing effective support to teachers and principals (20 points)

The extent to which the State, in collaboration with its participating LEAs (as defined in this notice), has a high-quality plan for its participating LEAs (as defined in this notice) to—

- (i) Provide effective, data-informed professional development, coaching, induction, and common planning and collaboration time to teachers and principals that are, where appropriate, ongoing and job-embedded. Such support might focus on, for example, gathering, analyzing, and using data; designing instructional strategies for improvement; differentiating instruction; creating school environments supportive of data-informed decisions; designing instruction to meet the specific needs of high need students (as defined in this notice); and aligning systems and removing barriers to effective implementation of practices designed to improve student learning outcomes; and
- (ii) Measure, evaluate, and continuously improve the effectiveness of those supports in order to improve student achievement (as defined in this notice).

The State shall provide its detailed plan for this criterion in the text box below. The plan should include, at a minimum, the goals, activities, timelines, and responsible parties (see Reform Plan Criteria elements in Application Instructions or Section XII, Application Requirements (e), for further detail). Any supporting evidence the State believes will be helpful to peer reviewers must be described and, where relevant, included in the Appendix. For attachments included in the Appendix, note in the narrative the location where the attachments can be found.

Recommended maximum response length: Five pages

(D)(5)(i)

Strategy 1: Enhance the statewide professional development system

Goal: Ensure that every Massachusetts educator has access to effective professional support and development opportunities aligned with the state’s reform agenda, including using the PreK–12 teaching and learning system, addressing the specific needs of lowest achieving students, and embedding measures of effectiveness in evaluation, licensure, and re-licensure.

In Massachusetts, as in many states, the quality of professional development (both the content and the providers) varies enormously. The most recent Mass TeLLs survey found that less than half of Massachusetts educators believe that the professional supports s/he receives provide the knowledge and skills to teach effectively (Hirsch 2008). To close the achievement gap, Massachusetts must use RTTT funds to make an unprecedented statewide investment in educator development. For maximum impact, the supports available to educators must be both connected to the state’s overall reform agenda and grounded in research about what it really takes for professional development to make a meaningful impact on how educators craft daily practice in schools and classrooms.

Massachusetts will use RTTT funds to enhance a statewide professional development system that focuses on instructional leadership for school and district leaders and on individualizing and differentiating instruction for classroom teachers. The system will provide supports to drive statewide implementation of the PreK–12 teaching and learning system, including the model curriculum and unified assessment system (see sections (B)(3) and (C)(3)); close the achievement gap in all seven content areas through focused investment in educator content knowledge (particularly adolescent literacy and STEM subjects) and five instructional strategies (using student data to make decisions, “backwards design” of curriculum, universal design, English as a second language, and cultural competence); and reinforce improvements to LEA evaluation models and the state’s licensure system (see sections (D)(2) and (D)(4)).

In recent years, Massachusetts has built the foundation for this significant RTTT investment. This foundation includes state regulation requiring induction programs for new teachers and completion of individual professional development plans (IDPDs) as part of license renewal. The state has also developed high quality courses and institutes in several high need areas critical to closing

the achievement gap (including adolescent literacy and STEM, ELL, and cultural competence). To distribute this content, ESE has begun to build out several delivery channels, including DSACs and Readiness Centers, relationships with strong public and private vendors, online and hybrid face-to-face/online versions of several institutes and courses, and ESE-convened networks of urban leaders focused on literacy and STEM. In collaboration with educators in several large urban LEAs, ESE has also developed a new suite of tools and resources focused on data-driven instruction and decision making (“Professional Learning Communities” or “PLCs”) in high need schools. ESE has also partnered with the National Institute for School Leaders (NISL) to customize its two-year program for school leaders focused on strategic instructional leadership.

Activities: ESE will collaborate with LEAs and practitioners in the field to expand and enhance this system of professional development and support by: a) selecting vendors and organizational partners to create a system that supports Massachusetts educators in the acquisition of the core knowledge and skills needed to make effective use of the PreK–12 teaching and learning system, meet the needs of lowest achieving students, and embed educator effectiveness into LEA and school practices; b) working with these providers to develop the system while simultaneously piloting it in schools and districts; c) rolling out the system statewide while refining the offerings and strengthening a set of cost effective and accessible channels that we believe are critical to delivering the support educators will need and d) evaluating the effectiveness of professional supports and incorporating revised educator development guidelines into local evaluation and licensure systems (see section (D)(5)(ii)). To ensure that the state’s investment is sustained beyond the grant, ESE will prioritize development of content and delivery mechanisms that encourage networking within and between LEAs, offer low-cost solutions (including online and hybrid models), and build the capacity of partners and LEAs to carry the work forward locally.

Implementation support will occur through six channels, building on ESE’s knowledge and experience base to date. ESE will use the tiered approach described below to maximize the number of educators reached statewide, while also providing more intensive, concentrated support to low-performing LEAs and schools.

1. Free online modules and videos available through the Digital Library: RTTT funds will support ESE’s work with local educators and educational partners to develop a set of online resources hosted in the Digital Library, including basic technical training on using the PreK–12 teaching and learning system and video examples of high quality instruction. Investments include online/video resources focused on introducing the model curriculum units and the interim, formative, and curriculum-embedded assessments, and modeling strategies for implementation in classroom practice. Once developed with RTTT funds, ESE commits to maintaining these resources and providing free access to teachers and principals in Massachusetts and worldwide. Professional development in high priority areas will be supplemented by online resources and/or made available as online or hybrid, e.g., scaling training on working with English language learners by codifying and delivering existing content to a broader set of educators.
2. Statewide and regional convenings to launch new products and services: ESE will use existing statewide and regional convenings, including the annual Curriculum Summit and DSAC Awareness Sessions (see Appendix D16 for a menu of current offerings at the DSACs), to introduce the new PreK–12 teaching and learning system statewide. Similar forums will be utilized to refine and share the new evaluation models and licensure requirements that are part of the state’s revamped approach to educator effectiveness (see section (D)(2)).
3. Regional networks to build leadership capacity at the LEA and school levels: RTTT funds will be used to expand capacity of the six DSACs to create regional networks of LEA and school leaders (including curriculum directors, principals, and instructional coaches) that focus on systemic implementation of the PreK–12 teaching and learning system, including sharing strategies for data-driven decision making and establishing a culture of continuous improvement (see (C)(3) for DSAC data team targets). This also includes expansion of successful regional networks focused on educator content knowledge, including the Massachusetts ESE/Intel Math Initiative. Through regional networks described in section (D)(2), LEA administrators and school leaders will also be able to participate in training and ongoing support for effective supervision and evaluation. These

networks will also be used to conduct needs assessment, creating a feedback loop between LEAs and the state to ensure the right supports are available.

4. Intensive professional development institutes: ESE will make targeted investments to scale successful models of intensive professional development in low-performing schools and districts. Building on the successful and longstanding statewide Professional Development Institute program, funds will be used to expand the capacity of the regional Readiness Centers to convene K–12 educators with institutes of higher education and other high quality vendors for professional development that focuses on priority educator content areas (such as the STEM fields), and with community-based partners for professional development that focuses on student supports and cultural competence. ESE will also use RTTT funds to assess and expand a NISL-like, 24-month professional development cohort for LEA and school administrators to reinforce the role of the principal as instructional leader and emphasize the importance of strategic, data-driven leadership.
5. Regional training to support use of ESE-developed tools and resources: ESE will use DSACs for a “train-the-trainer” approach to roll out to teachers the technical knowledge and skills required to make use of the PreK–12 teaching and learning system, including training on how to access, interpret, and act on the results of formative and interim assessments. Through this same channel, ESE will provide more implementation support for effective use of the Education Data Warehouse (see section (C)(2)), the new competency-based tracking system being developed as part of the Certificate of Occupational Proficiency initiative for vocational technical programs (see section (B)(3)), and the Professional Learning Communities tools described below.
6. Job-embedded professional development through Professional Learning Communities: RTTT funds will enable statewide strengthening of collaborative professional development that improves practices in local contexts. ESE will expand its Professional Learning Communities (PLC) tools—which currently include Learning Walks and Data Teams—to include modules focusing on the teaching and learning system and to scale these tools to a larger number of LEAs (see Appendix D17 for a description of the PLC vision and tools). ESE will continue its pilot work with at least 3 LEAs in order to test and codify

the PLC tools, and then use RTTT funds to provide technical assistance to at least 30 LEAs in order to accelerate widespread adoption. In Level 4 schools, ESE will also support intensive onsite training on implementation of the PreK–12 teaching and learning system and fund work with proven partners on data-driven, tiered instruction and social-emotional and behavioral supports (see section (E)(2) for a description of these Priority Providers). The ESE will make these tools, materials, and protocols available for free and build capacity among partners to support local PLCs with high impact areas of focus, similar to the way that the Mathematics Learning Community program has been developed and disseminated.

Timeline:

	Year 1 (2010–2011)	Year 2 (2011–2012)	Year 3 (2012–2013)	Year 4 (2013–2014)
Enhance the statewide professional development system	<ul style="list-style-type: none"> • Continue to build delivery infrastructure for professional supports, including DSACs and Readiness Centers • Work with field to identify the highest priority knowledge and skills and to map these to specific programs and activities; begin developing and piloting professional development system • Build online/hybrid tools and plan initial set of statewide institutes • Launch PLC pilots 	<ul style="list-style-type: none"> • Continue to develop professional development system and pilot delivery in targeted districts through appropriate channels, including DSACs, Readiness Centers, and networks • Continue PLC pilots and begin to capture learning for dissemination with other LEAs 	<ul style="list-style-type: none"> • Roll out and refine professional development system • Begin PLC work with 30–40 other districts, with a focus on data driven instruction 	<ul style="list-style-type: none"> • Continue significant investment in implementation of priority content and channels • Provide statewide training on evaluation system to school leaders and teachers

Responsible parties: Existing staff at ESE will manage LEAs and vendors to develop much of the core content, and will fund DSACs and Readiness Centers to deliver much of the regional and LEA-based supports. LEAs will have the opportunity to use a significant portion of their RTTT funds to enable administrators and educators to participate in the most relevant, high impact activities given the particular needs of LEAs and school teams.

(D)(5)(ii)

Strategy 2: Hold ESE, providers and LEAs responsible for providing effective professional supports

Goal: Hold ESE, providers, and LEAs responsible for providing effective professional supports aligned with the state’s priorities and ensure that all teachers and leaders have access to differentiated supports as they progress along the career continuum.

ESE will use RTTT funds to develop sound processes for assessing the impact of professional supports and will use existing LEA and state levers to shift the flow of funds toward high-quality providers.

Activities: ESE will use the National Staff Development Council’s (NSDC) Standards Assessment Inventory as a starting point for evaluation of professional development efforts at the state level. ESE will conduct the NSDC survey in a representative subset of schools to assess the match between professional development practice, student needs, and NSDC’s Standards for Staff Development, the widely recognized “gold standard” for the design of professional development (see Appendix D18 for a copy of the Standards for Staff Development). Results from this work will provide the state with a baseline of quality against which to monitor progress and will allow ESE to collaborate with LEAs to conduct an initial audit of providers across the state.

Building on the work of NSDC and the increased availability of educator effectiveness data, ESE’s Office of Planning, Research, and Evaluation (OSPRE) will use part of the state’s RTTT funds to develop, pilot and refine standards for effective professional development and a set of processes and tools that the state and LEAs can use to assess the impact of professional supports on educator practice. By the third year of RTTT, ESE’s Center for Targeted Assistance will make these tools available through the regional DSACs and will collaborate with other agencies to provide technical assistance. Specifically, ESE Offices responsible for major

grants in priority RTTT areas including Special Education, Literacy, Title I, English Language Acquisition, Science and Technology/Engineering, and Mathematics will encourage the use of common standards and tools as ways to meet grant evaluation requirements for professional development. Going forward, the Center for District and School Accountability will ensure that district review teams recognize use of the tools as an example of "best practice" in meeting district standards for human resource management and program evaluation and ESE will highlight the processes and tools in the district self-assessment protocol made available to districts in anticipation of their reviews. As a result of these efforts, by the end of the RTTT grant period 80% of districts will have used one or more of the professional development assessment tools and experienced their value first hand. Over time, the state and participating LEAs will be able to identify those activities and vendors with the largest positive impact on educator effectiveness and student growth and ESE will revise the state's preferred provider list to include only those vendors and activities.

Through its work with LEA human resource staff, ESE will further support LEAs in revising current approaches to professional development at the individual, team, school, district, and state levels to ensure that they reinforce the priorities outlined above. ESE will ensure that the new statewide approach to standards-based professional learning is linked to the work on measures of effectiveness, evaluation, licensure, and career ladders. By Year 4 of the grant, ESE will revise professional development regulations and guidelines in concert with changes in evaluation, licensure, and relicensure. The state's enhanced career ladder will also reinforce this movement toward quality providers and supports by rewarding educators who demonstrate proficiency in these areas with additional opportunities to participate in leadership networks and to deliver job-embedded training at their schools.

Timeline:

	Year 1 (2010–2011)	Year 2 (2011–2012)	Year 3 (2012–2013)	Year 4 (2013–2014)
Hold ESE, providers and LEAs responsible for providing effective professional supports	<ul style="list-style-type: none"> • Conduct NSDC survey in representative sample of schools and LEAs • Use survey results to 	<ul style="list-style-type: none"> • In regional networks (described in (D)(2)), include IPDPs and professional supports in revisions to the 	<ul style="list-style-type: none"> • Update professional development requirements related to licensure and seek board approval 	<ul style="list-style-type: none"> • Continue to refine approach to evaluating effective professional supports; share findings across DSACs,

	inform initial preferred provider list	career continuum	<ul style="list-style-type: none"> • Explore approaches to link effectiveness data with professional supports; share findings across DSACs, Readiness Centers, and other networks • ESE will conduct second NSDC survey 	Readiness Centers, and other networks <ul style="list-style-type: none"> • Implement licensure and relicensure regulations linked to performance, measures of effectiveness, and professional growth • Revise professional development regulations and guidelines
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Responsible parties: Existing staff at ESE OSPRE will oversee work to develop metrics to evaluate professional supports as part of the overall Race to the Top program evaluation strategy described in section (A)(2) and will work closely with the Center for Education Policy, the Center for Targeted Assistance, and the Center for School and District Assistance – as well as other grant offices within the agencies. ESE will also convene LEAs, IHE, DSACs, and Readiness Centers to monitor use and effectiveness of supports over time and will ensure alignment between professional supports and changes to evaluation models and state licensure regulations.

Performance Measures Performance measures for this criterion are optional. If the State wishes to include performance measures, please enter them as rows in this table and, for each measure, provide annual targets in the columns provided.	Actual Data: Baseline (Current school year or most	End of SY 2010-2011	End of SY 2011-2012	End of SY 2012-2013	End of SY 2013-2014
Percentage of LEAs using ESE-developed tool and processes to evaluate the impact of professional supports	0%	0%	10%	25%	80%

(E) Turning Around the Lowest-Achieving Schools (50 total points)

State Reform Conditions Criteria

(E)(1) Intervening in the lowest-achieving schools and LEAs (10 points)

The extent to which the State has the legal, statutory, or regulatory authority to intervene directly in the State's persistently lowest-achieving schools (as defined in this notice) and in LEAs that are in improvement or corrective action status.

In the text box below, the State shall describe its current status in meeting the criterion. The narrative or attachments shall also include, at a minimum, the evidence listed below, and how each piece of evidence demonstrates the State's success in meeting the criterion. The narrative and attachments may also include any additional information the State believes will be helpful to peer reviewers. For attachments included in the Appendix, note in the narrative the location where the attachments can be found.

Evidence for (E)(1):

- A description of the State's applicable laws, statutes, regulations, or other relevant legal documents.

Recommended maximum response length: One page

(E)(1)

New statutory authority:

Schools: A new Section 1J of Mass. Gen. Laws, c. 69, passed by the Massachusetts Legislature on January 14, 2010, makes eligible for designation as underperforming (Level 4) or chronically underperforming (Level 5), on the basis of student performance data and school or district reviews, the lowest 20% of schools at each level statewide based on a measure of student academic performance to be developed by ESE. 4% (72) of the state's schools may be designated as either at any given time.(1J(a)) ***For an underperforming school (Level 4)*** the superintendent is to develop a turnaround plan (1J(b)-(g)) with approval by the commissioner (1J(b)); at the school's annual review the commissioner may in certain cases require changes to the plan, the appointment of an external partner, or a new turnaround plan (1J(k)); and when the plan expires may, among other courses of action, determine that the school is chronically underperforming (1J(l)). ***For a chronically underperforming school (Level 5)*** the commissioner creates the

turnaround plan (1J(m)) and may, if he determines certain conditions exist, appoint an external receiver to operate the school and implement the plan (1J(r)). The commissioner evaluates each school at least annually and if it has failed to meet multiple goals may appoint a receiver if one has not been appointed previously or, after a full school year, may terminate the receiver's contract.(1J(v)) The commissioner has similar options when the turnaround plan expires, or may renew the plan.(1J(w))

Districts: The new law's c. 69, s.1K, makes the lowest 10% of districts eligible for declaration by the Board as chronically underperforming, based on a fact-finding report; 2.5% of districts (7) may be so designated at any given time.(1K(a)) After such a declaration, the Board designates a receiver "with all the powers of the superintendent and school committee" (1K(a)); the commissioner and receiver create the turnaround plan (1K(b)). The commissioner evaluates the receiver's performance at least annually and may take various actions, up to termination of the receiver, depending on how well the plan's goals have been met. (1K(h))

Critical Powers under Turnaround Plans: Under the new law (1J(d),(g),(o), 1K(d),(e)), any turnaround plan may, "[n]otwithstanding any general or special law to the contrary," provide for reallocation of the budget, revision of district policies and practices, alteration of collective bargaining agreements (either after expedited bargaining with a resolution process that considers students' needs at Level 4 schools and Level 5 districts, or unilaterally at Level 5 schools), and the requirement that all staff reapply for their positions. Teachers with professional teacher status (tenure) may be dismissed under a "good cause" rather than "just cause" standard.

See Appendix E1 for all documents referenced above.

Reform Plan Criteria

(E)(2) Turning around the lowest-achieving schools (40 points)

The extent to which the State has a high-quality plan and ambitious yet achievable annual targets to—

(i) Identify the persistently lowest-achieving schools (as defined in this notice) and, at its discretion, any non-Title I eligible secondary schools that would be considered persistently lowest-achieving schools (as defined in this notice) if they were eligible to receive Title I funds; and (5 points)

(ii) Support its LEAs in turning around these schools by implementing one of the four school intervention models (as described in Appendix C): turnaround model, restart model, school closure, or transformation model (provided that an LEA with more than nine persistently lowest-achieving schools may not use the transformation model for more than 50 percent of its schools). (35 points)

The State shall provide its detailed plan for this criterion in the text box below. The plan should include, at a minimum, the goals, activities, timelines, and responsible parties (see Reform Plan Criteria elements in Application Instructions or Section XII, Application Requirements (e), for further detail). In the text box below, the State shall describe its current status in meeting the criterion. The narrative or attachments shall also include, at a minimum, the evidence listed below, and how each piece of evidence demonstrates the State's success in meeting the criterion. The narrative and attachments may also include any additional information the State believes will be helpful to peer reviewers. For attachments included in the Appendix, note in the narrative the location where the attachments can be found.

Evidence for (E)(2) (please fill in table below):

- The State's historic performance on school turnaround, as evidenced by the total number of persistently lowest-achieving schools (as defined in this notice) that States or LEAs attempted to turn around in the last five years, the approach used, and the results and lessons learned to date.

Recommended maximum response length: Eight pages

Massachusetts will invest significant time, resources, and support in a targeted set of schools and districts to break the cycle of underperformance and accelerate the gains of students most in need. In section (E)(2)(i) below, we outline the state's newly developed

process to accurately and aggressively identify our lowest-achieving schools. In (E)(2)(ii), we propose an ambitious strategy for using RTTT and other funds to close the achievement gap by changing the trajectory of our lowest-performing schools.

(E)(2)(i)

Goal: Identify the persistently lowest-achieving schools in the state.

Activities: ESE has created a process to identify those schools most in need of intervention, based on MCAS scores (both absolute performance and progress) as well as a new measure of student growth (see section (D)(2)). The process aligns with this notice's definition of persistently lowest-achieving schools. It also builds on the Framework for District Accountability and Assistance work ESE started in 2008 to redefine how Massachusetts works with districts to intervene in struggling schools (see section (A)(3) for further description of the Framework's development).

By February 8, 2010, Massachusetts will announce the 36 persistently lowest-achieving schools that are the focus of our initial turnaround work (2% of all schools). Located in 9 urban districts, with more than half in the Boston and Springfield districts, these 36 schools will be the first schools identified as Level 4 in ESE's rollout of the framework. We will announce the schools as part of the Title IG competitive grant opportunity, with these schools receiving the highest priority for these funds. Each district will be responsible for achieving accelerated improvement in these 36 schools, aided by strong ESE guidance and support, Title IG resources, and increased authority to act. As early as 2012, ESE will designate Level 4 schools that fail to achieve ambitious annual benchmarks after two or more years as Level 5 schools. At Level 5, ESE will assume major responsibility and authority to implement turnaround strategies for dramatic improvement. Projected annual targets for the number of Level 4 and 5 schools are included in the performance measures table at the end of this section.

Timeline: The Framework for District Accountability and Assistance, its standards and indicators, accountability tiers and complementary assistance tools and strategies, and the measures to identify schools are already in place. The framework will be refined as ESE learns from its initial implementation. (See Appendices E2-E6 for a schematic of the Framework, the membership of

the stakeholder groups involved in its development, the associated District Standards and Indicators, the associated Conditions for School Effectiveness, and a summary of academic research on the conditions).

Responsible parties: ESE’s Center for Targeted Assistance will lead the turnaround work, drawing on knowledge and resources from other centers and units, notably the Center on Leadership and School Redesign. The initiatives described below will build on work already underway and are designed both to enhance districts’ capacity to rapidly improve the performance of their struggling schools and to pave the way for even more aggressive and effective state intervention if district efforts are unsuccessful.

(E)(2)(ii)

Despite extensive statewide and national research and collaboration with leading education experts, Massachusetts has yet to find a single proven intervention strategy for every low-achieving school that ensures the three dimensions called for by Mass Insight: students’ readiness to learn, teachers’ readiness to teach, and leaders’ readiness to act (Calkins *et al.* 2007). There is no silver bullet. To that end, our strategy calls for building expertise and capacity at the state level, within our districts, and for proven and promising partners. This approach will allow us to transform today’s struggling schools but and help us prevent other schools from falling into that category in the future.

Experience and independent research (Augustine 2009, Lane 2009) support this focus on building district capacity. Given the dearth of proven turnaround operators nationally and the state’s history of local control, rapid and sustained school turnaround depends on robust district systems of support. Districts must successfully manage the implementation of at least one of the four intervention models—a role that is particularly important for the transformation model, which relies on district decision-making and successful changes to evaluation systems, incentives, governance, and schedules. More specifically, the districts must learn to support school leaders in a focused way rather than distracting them with endless lists of initiatives and light touch improvement strategies. Accordingly, a coherent state strategy cannot ignore the district deficiencies that have contributed to persistently low-achieving schools.

Massachusetts will use RTTT funds to pursue four interconnected strategies to build state and district capacity to turn around the persistently lowest achieving schools, and to prevent others from falling into that category in the future:

- 1. Develop a specialized corps of turnaround teacher and leader teams**
- 2. Build the capacity of proven partners to support struggling schools**
- 3. Build district capacity to intervene in struggling schools**
- 4. Develop, attract, and manage lead partners and turnaround operators**

Additional investments to scale up the regional DSACs will provide targeted professional development to help teachers and leaders in smaller districts prevent more schools from entering Level 4 (see section (D)(5)).

Strategy 1: Develop a specialized corps of turnaround teacher and leader teams

Goal: Accelerate the flow of highly effective teachers and leaders into turnaround schools by recruiting, training, supporting, and retaining a corps of Massachusetts turnaround teachers and leaders committed to turning around our persistently lowest-achieving schools.

Great principals and teachers are critical to achieving rapid improvement in low-performing schools. All four school intervention models require a pipeline of strong teachers and leaders who can be successful in persistently low-achieving schools. Existing district capacity to fulfill this need is insufficient (see Fuller and Young 2009 for data on high turnover in low-performing schools). We will build on the efforts described in section (D)(3) (focused on enhancing the supply and distribution of an effective, academically capable, diverse, and culturally competent educator workforce) by recruiting and supporting proven, experienced teachers and leaders to do this critically important work in our lowest achieving schools. Under the law just passed by the Massachusetts Legislature, those in charge of Level 4 and 5 schools—the superintendent or the commissioner or his appointed receiver—will have enhanced authority to act. The law allows all staff in Level 4 and 5 schools to be required to reapply for their positions, and allows teachers with professional teacher status (tenure) to be dismissed from the district under a good cause (legitimate business reason) rather than just

cause standard. It also provides for the alteration of collective bargaining agreements as they apply to the school, either unilaterally (for Level 5) or after expedited bargaining with a resolution process that considers students' needs (for Level 4).

Activities: ESE will work with districts, providers, and experts to identify and develop a corps of turnaround teachers and leaders, building a model with five elements: 1) recruitment/selection, 2) preparation, 3) placement, 4) support, and 5) retention. Massachusetts has a wealth of expertise and success to draw upon: urban teacher and principal residency networks, on-the-ground presence of national teacher recruiting and mentoring groups, innovative induction programs in districts, and strong professional development for instructional leaders.

Today these programs are effective but disparate and small in scale. In November 2009, ESE engaged with an initial group of providers, experts, funders, and Level 4 district leaders to outline the major components of the new model to develop turnaround teachers and leaders. Initial feedback from both partners and providers has been very positive. We will use RTTT funds to determine approaches to develop and scale preparation programs, cohort strategies for teacher and leader placement into turnaround schools, necessary induction and supports, appropriate incentives to attract and retain these educators, and the right exit strategy for the state and districts as schools improve.

- For turnaround leaders, expert consensus is that proven leaders are needed to achieve dramatic improvement at the persistently lowest-achieving schools. At a minimum, Massachusetts' approach will include a plan for the five elements listed above. Expected components of the approach include robust "executive search" to identify and recruit leaders; up to six months of training, planning, and mentoring before placement; and involvement of the principal in staff selection and planning with a team of turnaround teachers. Schools replacing their principals under the turnaround and transformation models will be able to draw on a state-supported pool of experienced, effective school leaders while a stream of new, well-trained principal candidates will be prepared to "back-fill" the positions the experienced leaders vacate.
- For turnaround teachers, we will draw on both experienced teachers with proven success in the classroom as well as the enhanced pipeline of new teachers (see section (D)(3)), with experienced teachers providing additional instructional leadership.

For Level 4 schools employing the turnaround and transformation models, we will supply sufficient experienced teachers to take on 30-40% of a school’s staffing needs. Under the restart model, schools will draw on both new and experienced teachers. Experienced teachers will receive, at a minimum, incentives (e.g., loan forgiveness, career ladder opportunities, compensation) to work in Level 4/5 schools, up to six months of intense training and support, ongoing mentoring and interaction with a cohort, and opportunities for close collaboration with turnaround leaders.

- Turnaround teachers and leaders will be provided with intensive professional development for tiered instruction and behavioral supports to meet likely challenges, including remediating students performing significantly below grade-level, working with English language learners and students with special behavioral or emotional needs (see section (D)(5)), and improving school-level working conditions (see section (D)(3)).

By 2014, ESE and districts will have developed sufficient numbers of teachers and leaders to fill most of the leadership and core teaching positions in the Level 4 schools. Thereafter, philanthropy and Title I grants will fund continued efforts to recruit and support turnaround teachers and leaders.

Timeline:

	Year 1 (Sep. 2010)	Year 1 (Jan. 2011)	Year 2 (Sep. 2011)	Years 3–4
Program design and assessment	<ul style="list-style-type: none"> • Convene experts to design program models with an emphasis on recruitment, training, and retention of experienced educators 	<ul style="list-style-type: none"> • Continue to build program models with expert input, focusing on placement and Year 1 supports 	<ul style="list-style-type: none"> • Update recruitment, training, and retention models 	<ul style="list-style-type: none"> • Assess early results and modify model as needed • Link learning and results to broader MA human capital initiatives
Principal pipeline	<ul style="list-style-type: none"> • Select the first class of 10 proven principals, engaging executive search experts 	<ul style="list-style-type: none"> • Work with higher education and residency programs to launch training and induction in Western MA (Springfield) and 	<ul style="list-style-type: none"> • Place first leaders in schools • Select second class for original regions and first class for two more regions 	<ul style="list-style-type: none"> • Select and place cohorts of 12 leaders each year (45 total by Year 4) • Continue induction

		Greater Boston	(11 additional principals)	and support
Teacher pipeline	<ul style="list-style-type: none"> Select the first class of 50 proven teachers 	<ul style="list-style-type: none"> Work with higher education and residency programs to launch training and induction in Western MA (Springfield) and Greater Boston 	<ul style="list-style-type: none"> Place first class in schools Select second class for original regions and first class for two more regions (100 additional teachers) 	<ul style="list-style-type: none"> Select and place cohorts of 150 teachers each year (450 total by Year 4) Continue induction and support
<p><i>Responsible parties:</i> ESE will work with local philanthropy to invest in consulting support for program design and assessment. The state’s RTTT allocation will fund initial investments in each of four regions in the state and appropriate convenings of teacher and leader cohorts. In addition to program design investments, the state will partially fund district per-teacher and per-principal recruitment, training, and support costs.</p>				

Strategy 2: Build the capacity of proven partners to support struggling schools

Goal: Identify and help scale effective partners to address priority conditions for school effectiveness that great teachers and leaders alone cannot solve: students’ social, emotional, and health needs; expanded learning opportunities; and effective use of data about student learning.

Struggling schools currently do not have the experience or capacity to implement the new strategies for instructional reform and expanded learning opportunities that the transformation, turnaround, and restart models require. To provide the necessary supports, we will focus on scaling up interventions that work, tapping into our state’s rich set of innovative and nationally recognized nonprofits, residency and training programs, and school supports. By the end of Year 4, we will have executed a rigorous process to identify and scale proven partners to support the priority Conditions for School Effectiveness wherever appropriate in Level 4 schools.

Activities: Massachusetts proposes to identify, vet, and scale up partners with a track record of providing services that improve student achievement. RTTT funds will be used to identify and make capacity-building grants through a Priority Provider process, with a focus on expansion beyond providers’ current states, districts, and/or schools. Ongoing costs to engage partners at Level 4/5 schools will be funded primarily by Title IG, supplemented in the short term, if needed, by participating districts’ RTTT allocations.

In the first two years of the grant, we will focus on three interconnected conditions that experience has shown are critical to catalyzing rapid improvement of low-performing schools: social-emotional supports that ensure students enter the classroom ready to learn (such as Readiness Counselors), an expanded school day and year, and effective use of data to support tailored instruction (see Appendix E7 for further description of these three priority supports). We will work closely with partners to tailor current offerings in these areas to the specific needs of persistently low-performing schools. By Year 4 of the RTTT grant, ESE will make additional partner investments for more of the Conditions for School Effectiveness (see Appendix E5), based on the school/district conditions that continue to limit student improvement and the availability of strong providers.

ESE will advance these efforts by helping districts to assess the quality of potential partners. Identifying a provider that best meets the needs of a particular struggling school is often challenging, given that providers are only responsible for a piece of the school-improvement puzzle and thus the impact of their work is difficult to assess. We believe part of the value that ESE can provide districts is helping to assess partner quality and to build their capacity to meet district needs. Through this strategy, we will do both. We will use RTTT funds to design and implement a vendor review (“Priority Provider”) process that places a strong emphasis on program quality assessment, proven outcomes, and capacity to expand and customize their approach to the context of Massachusetts’ schools. The Priority Provider process will build upon and enhance ESE’s Request for Proposal (RFP) process. Outside experts (with the guidance of ESE and the input of key stakeholders) will design the process, customizing it to each of the Conditions for School Effectiveness. Each application will be scored by a team that includes an ESE staff member, a stakeholder (e.g., a teacher or administrator) in the specific area, and an independent third party with expertise in site visits and school audits. Providers with successful applications will be added to a newly created “List of Priority Providers.” Districts will have confidence that Priority Providers have made it through a rigorous screen for quality. This one-time investment will also result in a lasting process, building capacity within the Department and the field to assess potential vendors and partners for quality.

Year 1 (2010–2011)	Year 2 (2011–2012)	Year 3 (2012–2013)	Year 4 (2013–2014)
<ul style="list-style-type: none"> • Hire one FTE at ESE to develop Priority Provider process; engage 	<ul style="list-style-type: none"> • Evaluate and refine Priority Provider process and 	<ul style="list-style-type: none"> • Evaluate and refine the Priority Provider process 	<ul style="list-style-type: none"> • Finalize list of Priority Providers

consulting support <ul style="list-style-type: none"> • Identify Priority Providers on data usage, ELO, and social-emotional supports • Make grants to three Priority Providers to allow them to fully respond to requests from two new districts with Level 4 schools 	identify the next three critical conditions based on school/district conditions that are limiting success <ul style="list-style-type: none"> • Make grants to three Priority Providers to seed the capacity to expand to 50% of all Level 4 schools 	and identify the next three conditions to address <ul style="list-style-type: none"> • Make grants to three Priority Providers to seed the capacity to expand to 75% of all Level 4 schools 	<ul style="list-style-type: none"> • Execute three-year impact evaluation of Priority Providers • Transition fully to district and Title I-G funding for school-partner collaboration
<p><i>Responsible parties:</i> ESE will take the lead, with consulting support, to define the Priority Provider process, to make capacity-building grants to scale up providers’ work in new districts and a first set of new schools, and to evaluate the work. Districts will identify school needs and employ RTTT and Title IG funds to engage approved partners in support of school intervention.</p>			

Strategy 3: Build district capacity to intervene in struggling schools

Goal: Strengthen district capacity to intervene successfully, sustain improvement, and prevent other schools from failing by investing in four district systems of support: effective governance and leadership, integrated human resource management and development systems, enhanced family/community engagement and support, and improved dropout prevention and recovery.

All four school intervention models depend on changes to district systems of support. We will work directly with districts, engaging external experts and providers as appropriate, to equip leaders (including superintendents, school committees, and union leaders) with the knowledge and skills needed for successful implementation.

Activities: The state will use the Priority Provider process defined above to identify, vet, and scale up partners who can provide districts with training, consulting, and implementation assistance. ESE will use RTTT funds to help districts engage the right partners to work with both the district office and Level 4 schools in the following priority areas:

- **Effective Governance and Leadership:** Experience tells us that collaboration among superintendents, school committees, and teacher unions is essential to the success and sustainability of school turnarounds. ESE already has begun to partner with key

state associations of these groups to support district-wide strategic goal-setting and implementation. We propose to build on these partnerships to facilitate effective use of the tools, protocols, technical assistance, coaching, and networks that are necessary for successful intervention. One aspect of this work involves effective collaboration with unions, which ESE is advancing by providing implementation support related to the Mass TeLLS Working Conditions survey (see section (D)(3)). Grants to the state associations will cover startup costs both to develop the required expertise and to support districts' efforts to develop and implement potent district-improvement strategies.

- **Human Resource Management and Development Systems:** As described in section (D), insufficient HR systems can cripple an district's ability to attract and retain effective teachers and leaders. We will use RTTT resources to create and facilitate effective use of tools (including model contract provisions) and networks that will help districts address weaknesses in one or more core HR functions: personnel administration; management and development; labor relations; organizational development; and professional standards. Massachusetts will fund partnerships designed to build Level 4 districts' capacity to design, implement, and sustain effective systems in human resource management.
- **Enhanced Family and Community Engagement and Support:** Experience has repeatedly shown that strong parent and community engagement is a critical lever of school turnaround. An appropriately informed, engaged, and demanding community, and families with high expectations for their children and schools are required to sustain the effective governance and HR systems described above. ESE will identify and fund proven partners that (in collaboration with the state's Center for Targeted Assistance and Office of Adult and Community Learning) will train and consult with Level 4 districts on strengthening family and community engagement in persistently low-achieving schools. The state will support districts in building systems of parent/community engagement as a means to raise expectations and, ultimately, to develop local partnerships that sustain higher expectations for both adults and students. As part of this work, ESE will pilot three "wrap-around zones" comprising five districts in Years 2–4, coordinating social/community services provided by government and nonprofits into a coherent whole. This strategy will build on a successful effort to integrate behavioral supports in Worcester

(Wally 2009). We believe that high quality early education is an essential ingredient in turning around low-performing elementary schools. Accordingly, in the wrap-around zones the state will also invest in training for center- and home-based PreK providers in neighborhoods with low-performing elementary schools, ensuring higher-quality services and alignment with early math and literacy curricula.

- Improved Dropout Prevention and Recovery:** Working in collaboration with public and nonprofit agencies and community-based partners, ESE will provide support to Level 4 districts to identify and intervene with middle and high school students at risk of dropping out. The state will build on an existing urban district early warning initiative, using data from ESE’s Student Information Management System and recommendations from the Graduation and Dropout Prevention and Recovery Commission, by funding additional pilots of the expanded Early Warning Indicator System (EWIS) in six districts. Support for the pilots will include data analysis assistance, training for administrators and teachers, protocols and policies for intervention, and the addition of local data to the state-level system (see section (C) for description of infrastructure investments). ESE will also identify and fund proven partners to help districts develop and implement strategies within high need middle and high schools, including a dropout-focused Innovation School, to ensure preventative and remedial actions are taken based on the information gathered.

Timeline:

Year 1 (2010–2011)	Year 2 (2011–2012)	Year 3 (2012–2013)	Year 4 (2013–2014)
<ul style="list-style-type: none"> Identify partners and engage four districts in one or more of the governance, HR, or community-engagement systems of support Provide grants to state associations and funding for HR experts 	<ul style="list-style-type: none"> Engage a total of eight districts in one or more of the systems of support Support six districts in piloting the Early Warning Indicator System Initiate three wrap-around zones Evaluate progress to date 	<ul style="list-style-type: none"> Continue to support district engagement with key partners and wrap-around zones 	<ul style="list-style-type: none"> Continue to support district engagement with key partners and wrap-around zones

Responsible parties: ESE will take the lead to develop tools and identify Priority Providers. District central offices will participate in guided assessments to identify their most pressing needs from among the four listed above, and will collaborate with ESE Targeted Assistance staff and partners to work on those needs.

Strategy 4: Develop, attract, and manage lead partners and turnaround operators to execute the restart model at Level 4 and 5 schools

Goal: Build significant additional capacity to manage and conduct the restart model in Level 4 and Level 5 schools by creating a nonprofit school-improvement intermediary organization that will identify and manage a network of strong turnaround operators.

Within the first two years of the grant, several of the largest districts will likely employ the restart model at some of their Level 4 schools. By 2012, ESE will likely identify the first group of Level 5 schools in which the state has authority to require the restart model. Given the dearth of proven lead partners and turnaround operators in the state and, more broadly, in the nation (of the nationally recognized models, most have worked in only one or two schools), ESE must act quickly to increase the capacity and to ensure a robust system exists to contract, manage, and evaluate lead partners and operators. To meet this need, several other states have developed effective school-improvement intermediaries that are public-private partnerships. These organizations are typically nonprofits, structured outside of the state government in order to increase speed, flexibility, and access to private funds. ESE will learn from these models and work with private funders to incubate a nonprofit school-improvement intermediary organization. The intermediary will support, manage, and evaluate school turnaround providers via performance-based contracts, and will work closely with districts and the state to implement these models in Level 4 and 5 schools.

Activities: Several private funders have already approached ESE about developing an innovative public-private partnership to do this work. Using RTTT and philanthropic funds, this partnership will work with national and state experts in organization design and school turnaround to incubate a separate 501(c)(3) organization. This entity's mission will be to accelerate and ensure the quality of school turnaround work in Massachusetts by building, identifying, and managing high quality turnaround providers. Its first priority

will be to scale up several school turnaround providers based on proven practices from successful turnarounds and high performing urban charter schools (see Appendix E8 for more detail on the business model of this organization).

In addition, ESE will work with one restart operator to establish a new model for alternative high schools, which serve some of our most lowest-performing students. The schools will operate as a network to build knowledge around dropout prevention, recovery, and alternative education effective practices, which will in turn benefit other alternative programs and traditional high schools across Massachusetts. This work will be enhanced by a newly formed network of the state’s alternative schools and collaboratives that is using Title IID ARRA funds to develop hybrid face-to-face and online competency-based courses in MassCore subjects. The work of this restart operator will also complement the state’s current investment to enhance district capacity for dropout prevention and recovery, as defined above.

Timeline:

Year 1 (2010–2011)	Year 2 (2011–2012)	Year 3 (2012–2013)	Year 4 (2013–2014)
<ul style="list-style-type: none"> • Work with state experts and other experts in incubation and intermediary design, and with philanthropic funders to design and create the full scope of the nonprofit intermediary • Engage alternative education operator to work in one Level 4 restart school in fall 2010 	<ul style="list-style-type: none"> • Conduct competitive process to identify school turnaround operators • Spring 2011: Identify lead partners and turnaround operators, who will have one year for planning, development, and incubation • Engage alternative education operator to work in two additional Level 4 restart schools in fall 2011 	<ul style="list-style-type: none"> • Engage operators at five Level 5 restart schools, then employ Title I School Improvement Grants, district, and philanthropic funding to provide ongoing support • Continue support for alternative education operator in three Level 4 restart schools 	<ul style="list-style-type: none"> • Continue support for lead partners and turnaround operators at five Level 5 restart schools • Continue support for alternative education operator in three Level 4 restart schools

Responsible parties: ESE will use RTTT state funds for early-stage consulting support and planning and the convening of experts and funders to design and create the nonprofit intermediary. In the short term, the state will reallocate staff to participate in planning. The state will also contribute to the per-school costs to engage operators in Years 3–4. The new statewide intermediary, in concert with philanthropic funders, will build its own capacity to support the work and will recruit existing lead partners and school operators to MA. It will then play a leading role in contracting and holding operators accountable for performance.

Evidence

Approach Used	# of Schools Since SY2004-05	Results and Lessons Learned
#1 Declaration of Underperforming schools and districts with targeted assistance and intervention plans	41	<p><u>Results:</u> 41 schools have been declared Underperforming by ESE since SY2004-05. With a variety of interventions, only 10 have shown meaningful improvement and four to five could justifiably be labeled as turnaround schools. Despite significant allocation of state and district resources toward school intervention plans, the 10% turnaround rate mirrors the national data on schools in restructuring making AYP. In addition, five districts were declared underperforming based on district-level assessments, of which one exited underperforming status. See #4 below for detail on the district and school-level intervention in Holyoke.</p> <p><u>Lessons Learned:</u> Massachusetts' experience with these schools has driven the redesign of its accountability and assistance systems over the past two years, as described above. ESE learned that intervention efforts must:</p> <ul style="list-style-type: none"> • Focus on district systems in order to build the district's capacity to support its schools: Without affecting changes in district functions, individual school changes cannot be sustained. • Develop a system for arranging, planning and overseeing ESE's intervention and support to a district and its schools. • Develop clear criteria for a district's status, i.e., entering and exiting Level 4 and 5 • Clarify ESE's capacity and authority to positively affect the dynamics of local governance • Recognize the need for customized timelines and milestones and long-term support

<p>#2 Declaration of Chronically Underperforming schools with targeted assistance and intervention plans</p>	<p>3</p>	<p><u>Results:</u> MA has declared three schools Chronically Underperforming in Holyoke and Fall River (all from 2000-2005, with ongoing intervention). Of these three schools, only one, Kuss Middle in Fall River, has made AYP.</p> <p><u>Lessons Learned:</u> More dramatic intervention, including the district-level supports (described above), are needed to achieve turnaround.</p>
<p>#3 Commonwealth Pilot School model (increased school level autonomy in exchange for increased accountability at candidates for “chronically underperforming” designation)</p>	<p>5</p>	<p><u>Results:</u></p> <ul style="list-style-type: none"> • An external evaluation by the UMass Donahue Institute (see Appendix E9) identified the following results and lessons learned • Organizational structures were substantially revised in four of the five schools, including the hiring and integration of new staff. • New scheduling strategies enabled large increases in collaborative professional time at all schools. • Compensation was provided to teachers at schools with increased teacher work weeks. • New governance structures were established to support school- and community-based decision making. • In Year 1, four of the five schools showed improvement in vision, culture, and practice. • Improvements in staff collaboration and in the schools’ freedom to make decisions were reported at all five schools. • Improvement was reported with regard to the quality of instruction, sense of direction, focus on student needs, and approach to student support services at four schools. • Mixed impacts were reported on student behavior. • Limited improvement was reported on subject area curricula and the use of assessment data. • In Year 2, staff of all four schools cited improvement in vision, culture, and practice; however, there was some concern that freedom to make decisions had diminished. <p><u>Lessons Learned:</u></p> <ul style="list-style-type: none"> • Successful change begins with an objective, deeply informed

		<p>understanding of need and required support.</p> <ul style="list-style-type: none"> • Planning, technical assistance, and support are required at both the school and district levels. Autonomies may require fundamental changes to existing school and district operations, with implications for budgeting, human resources, governance, and curriculum, instruction, and assessment systems. When there is a substantial migration of students and staff, there may be impacts on other district schools. • Short-term (implementation) and mid-term (culture and practice) performance benchmarks are needed. Otherwise, AYP is perceived as the de facto success criteria, which may obscure intermediate accomplishments. • Uncertainty regarding commitment to the model complicates implementation. Despite the substantial technical assistance and targeted grants to the five participating schools, some leaders and staff have expressed uncertainty about ESE's commitment.
<p>#4 District-level turnaround partner (America's Choice in Holyoke as an approach for underperforming districts and schools)</p>	<p>2 (also included above)</p>	<p><u>Results:</u></p> <ul style="list-style-type: none"> • America's Choice worked as a district-level turnaround partner in Holyoke from 2006-2008, implementing its Ramp-Up Math and Ramp-Up Literacy curricula in six schools. In addition, two underperforming schools received an additional 30 days of support from America's Choice coaches. Results were mixed (see Appendix E10 for summary of learnings). <p><u>Lessons learned:</u></p> <ul style="list-style-type: none"> • An upfront assessment of district strengths and needs is essential. • Effective use of data must be a driving force in turning around a district. • District-level capacity and improving school performance must go hand in hand. • Differentiating instruction is critical to addressing all students' needs. • In any partnership, it is critical to make certain that parents, teachers, administrators, and other members of the community understand the changes involved in working with an outside partner.

Performance Measures	Actual Data: Baseline (Current school year or most recent)	End of SY 2010-2011	End of SY 2011-2012	End of SY 2012-2013	End of SY 2013-2014
The number of schools for which one of the four school intervention models (described in Appendix C) will be initiated each year.	0	46	46	46	61

In the table above, we have identified the total number of schools where one of the four intervention models will be in process in each year. These schools will be supported by the strategies defined above.

The state will require that districts initiate one of the four intervention models in all 36 schools declared Level 4 within the next year, both to receive supports and to be eligible for Title IG funding. We do not expect that every element of the transformation model will be in place in each school using that intervention by the end of Year 1; however, districts must have begun to implement some elements of transformation within the first year. In Years 2 and 3, intervention models will be up and running in all 36 Level 4 and 5 schools in the state, including some schools implementing turnaround, restart, or closure. In Year 4, with an additional round of Title IG funding available, we plan to increase the number of interventions by identifying 10 additional Level 4 and 5 schools and requiring them to initiate one of the intervention models. This will result in a total of 46 Level 4 and 5 schools by Year 4 implementing one of the intervention models.

Using available Title IG funding, the state will also initiate a competitive process to attract Level 3 schools to volunteer to implement the turnaround, transformation, or restart models. Significant Title IG funding (up to \$500,000 per school per year) will be available to 10 schools submitting dramatic plans for Years 1-3. In Year 4 we will make funding and support available to an additional 5 schools for a total of 15 Level 3 schools implementing intervention models. Creating an incentive for dramatic intervention in the lowest-performing Level 3 schools will be a powerful strategy to spur innovative practices, build knowledge on effective transformation strategies, and prevent additional schools from declining to Levels 4 and 5.

(F) General (55 total points)

State Reform Conditions Criteria

(F)(1) Making education funding a priority (10 points)

The extent to which—

- (i) The percentage of the total revenues available to the State (as defined in this notice) that were used to support elementary, secondary, and public higher education for FY 2009 was greater than or equal to the percentage of the total revenues available to the State (as defined in this notice) that were used to support elementary, secondary, and public higher education for FY 2008; and
- (ii) The State’s policies lead to equitable funding (a) between high-need LEAs (as defined in this notice) and other LEAs, and (b) within LEAs, between high-poverty schools (as defined in this notice) and other schools.

In the text box below, the State shall describe its current status in meeting the criterion. The narrative or attachments shall also include, at a minimum, the evidence listed below, and how each piece of evidence demonstrates the State’s success in meeting the criterion. The narrative and attachments may also include any additional information the State believes will be helpful to peer reviewers. For attachments included in the Appendix, note in the narrative the location where the attachments can be found.

Evidence for (F)(1)(i):

- Financial data to show whether and to what extent expenditures, as a percentage of the total revenues available to the State (as defined in this notice), increased, decreased, or remained the same.

Evidence for (F)(1)(ii):

- Any supporting evidence the State believes will be helpful to peer reviewers.

Recommended maximum response length: Three pages

(F)(1)(i)

Massachusetts is a national leader in our support for public education, and our commitment continues even in the face of the current historic economic downturn. Table F1 shows the share of the Commonwealth's revenues that went to and will continue to fund K-12 education and higher education in fiscal years 2008, 2009, and 2010. Despite the declining revenues, current estimates predict that the state will increase the share of total state revenues funding education programs in fiscal year 2010.

Table F1: Education expenditures as a share of total state revenues, fiscal years 2008 to 2010

	FY08	FY09	FY10
Chapter 70 (K-12 local aid)	\$3,725,671,328	\$3,536,824,061	\$3,869,847,585
Special Education circuit breaker	\$220,000,000	\$215,337,070	\$133,119,160
Regional transportation aid	\$58,300,000	\$58,357,600	\$40,521,840
Other K-12 state grants and programs	\$247,397,202	\$246,384,065	\$210,602,044
University of Massachusetts	\$479,008,592	\$475,026,934	\$379,900,504
State colleges	\$215,789,565	\$210,173,408	\$171,387,324
Community colleges	\$240,185,710	\$230,749,551	\$188,150,763
Massachusetts School Building Authority	\$607,100,000	\$702,000,000	\$634,700,000
Massachusetts Teachers' Retirement System and Boston Teachers' Retirement System	\$907,420,000	\$891,941,000	\$933,254,000
Total state revenues	\$20,879,200,000	\$18,259,500,000	\$18,278,700,000
Education spending as % of total state revenue	32%	36%	36%
K-12 spending as % of total state revenue	28%	31%	32%

Notes: Data are current as of October 30, 2009. FY08 and FY09 expenditure figures are final; FY10 figures are budgeted or estimated. FY08 revenues are final; FY09 are estimated; FY10 are projected.

(F)(1)(ii)

The state distributes education aid, commonly referred to as Chapter 70, to school districts through a progressive funding formula. The formula establishes an adequate spending level for each school district and ensures that every district reaches this spending goal each year through a combination of state aid and local resources. Chapter 70 aid is non-categorical funding and can be used to fund a variety of district operating costs, with the exception of transportation and capital expenditures.

The foundation budget—the amount that each school district must spend to provide an adequate education to every student—has been in place in Massachusetts since fiscal year 1994. It is calculated using a set of assumptions about how much districts should spend per pupil across expenditure categories and for a variety of student groups, assigning higher rates to students whose resource needs are assumed to be greater, such as students with disabilities, vocational students, English language learners, and low-income students. Rates are adjusted for inflation each year.

The formula has produced a progressive distribution of state aid. Districts that educate the highest percentage of low income students, based on their eligibility for free or reduced price lunch, receive the most state aid per pupil. Table F-2 shows that in fiscal year 2008, districts serving the highest numbers of low income students received almost three times as much state aid per pupil as districts in the lowest quartile, and more than twice as much as districts in the second quartile.

Grant funding is another major source of support for Massachusetts school districts, and the data show that the state delivers our federal and state grant dollars to districts in a similarly progressive way. Districts that serve the greatest numbers of low income students received more than twice as much federal grant funding per pupil as districts in the next highest quartile in fiscal year 2008 (see Table F2). The same was true for state grant funds, which comprise a smaller yet equally important source of district funding. The state awards grants to fund expanded learning time, academic support programs, and full-day kindergarten, among other priorities, with high poverty schools receiving priority for these grants (see section (F)(3)).

The progressive distribution of state aid and grant dollars means that districts with the highest percentage of low income students spend more per pupil than other districts when all funding sources (local, state, and federal) are taken into consideration (see Table F-

2). Spending differences between the lowest, second, and third quartiles are small, but districts serving the neediest students spend an average of nearly \$2,000 more per student than districts in the next highest quartile.

As of fall 2009, Massachusetts has 392 school districts, including charter and vocational schools. Our districts are small by national standards, enrolling an average of about 3,000 students. The state’s commitment to fund districts progressively and to prioritize high poverty schools for school-level grants helps to ensure that resources are targeted to the neediest schools and students.

Table F2: Chapter 70, grant funding and total spending per pupil, fiscal year 2008

Quartile of enrollment of low income students	FY08 Chapter 70 aid per pupil	FY08 federal grants per pupil	FY08 state grants per pupil	FY08 spending per pupil, all funds
Lowest quartile (fewest number of poor students)	\$1,942	\$265	\$76	\$11,528
Second quartile	\$2,677	\$329	\$60	\$11,303
Third quartile	\$3,207	\$484	\$64	\$11,952
Highest quartile (greatest number of poor students)	\$5,764	\$1,040	\$134	\$13,679
Difference between lowest and highest quartile	\$3,822	\$775	\$58	\$2,151

Note: FY08 is the most current year for which ESE has data on all three categories: state aid, grant awards, and per-pupil spending.

(F)(2) Ensuring successful conditions for high-performing charter schools and other innovative schools (40 points)

The extent to which—

- (i) The State has a charter school law that does not prohibit or effectively inhibit increasing the number of high-performing charter schools (as defined in this notice) in the State, measured (as set forth in Appendix B) by the percentage of total schools in the State

that are allowed to be charter schools or otherwise restrict student enrollment in charter schools;

(ii) The State has laws, statutes, regulations, or guidelines regarding how charter school authorizers approve, monitor, hold accountable, reauthorize, and close charter schools; in particular, whether authorizers require that student achievement (as defined in this notice) be one significant factor, among others, in authorization or renewal; encourage charter schools that serve student populations that are similar to local district student populations, especially relative to high-need students (as defined in this notice); and have closed or not renewed ineffective charter schools;

(iii) The State's charter schools receive (as set forth in Appendix B) equitable funding compared to traditional public schools, and a commensurate share of local, State, and Federal revenues;

(iv) The State provides charter schools with funding for facilities (for leasing facilities, purchasing facilities, or making tenant improvements), assistance with facilities acquisition, access to public facilities, the ability to share in bonds and mill levies, or other supports; and the extent to which the State does not impose any facility-related requirements on charter schools that are stricter than those applied to traditional public schools; and

(v) The State enables LEAs to operate innovative, autonomous public schools (as defined in this notice) other than charter schools.

In the text box below, the State shall describe its current status in meeting the criterion. The narrative or attachments shall also include, at a minimum, the evidence listed below, and how each piece of evidence demonstrates the State's success in meeting the criterion. The narrative and attachments may also include any additional information the State believes will be helpful to peer reviewers. For attachments included in the Appendix, note in the narrative the location where the attachments can be found.

Evidence for (F)(2)(i):

- A description of the State's applicable laws, statutes, regulations, or other relevant legal documents.
- The number of charter schools allowed under State law and the percentage this represents of the total number of schools in the State.
- The number and types of charter schools currently operating in the State.

Evidence for (F)(2)(ii):

- A description of the State's approach to charter school accountability and authorization, and a description of the State's applicable laws, statutes, regulations, or other relevant legal documents.

- For each of the last five years:
 - The number of charter school applications made in the State.
 - The number of charter school applications approved.
 - The number of charter school applications denied and reasons for the denials (academic, financial, low enrollment, other).
 - The number of charter schools closed (including charter schools that were not reauthorized to operate).

Evidence for (F)(2)(iii):

- A description of the State’s applicable statutes, regulations, or other relevant legal documents.
- A description of the State’s approach to charter school funding, the amount of funding passed through to charter schools per student, and how those amounts compare with traditional public school per-student funding allocations.

Evidence for (F)(2)(iv):

- A description of the State’s applicable statutes, regulations, or other relevant legal documents.
- A description of the statewide facilities supports provided to charter schools, if any.

Evidence for (F)(2)(v):

- A description of how the State enables LEAs to operate innovative, autonomous public schools (as defined in this notice) other than charter schools.

Recommended maximum response length: Six pages

(F)(2)(i)

(See Appendix F1 for complete charter school statutes and Appendix F2 for regulations.)

The Massachusetts charter school statute defines two types of charter schools:

1. Commonwealth charter schools are newly formed independent local education agencies serving students from either a single district or a region made up of multiple districts. Massachusetts currently has 55 operating Commonwealth charter schools, serving over 26,000 students. Students are accepted into a school through an open lottery and retain the right to attend if they

move out of the district or region. Siblings are given preference in enrollment. Charter school teachers and staff are not part of collective bargaining, enabling schools to establish their own work rules and working conditions.

2. Horace Mann charter schools also operate as independent local education agencies, but teachers remain a part of the local collective bargaining unit. Massachusetts currently has seven Horace Mann charter schools. The primary differences from a Commonwealth charter are that the original charter application, subsequent applications for renewal of the charter, and any requests to the Board of Elementary and Secondary Education to amend the charter must receive approval from the school committee and local collective bargaining unit prior to Board approval. A recent statutory change, however, allows for the creation of 14 Horace Mann charter schools that do not require local union approval. Horace Mann charters can be established as conversion schools and, in those cases, currently enrolled students receive preference for enrollment. Additionally, conversion of an existing district school into a Horace Mann charter does not require union approval but instead a memorandum of understanding regarding any waivers to applicable collective bargaining agreements that requires approval by a majority vote of that school's teachers. Enrollment is otherwise limited to the district in which the school is located, with siblings receiving preference.

Massachusetts General Law c. 71, § 89 includes multiple types of requirements regarding the number and types of charter schools that may be approved, two of which limit the overall number of schools. The first limits the number of charter schools to a total of 120, including 72 Commonwealth charters and 48 Horace Mann charters, in comparison to 1,770 non-charter public schools (i.e., these types of charters can represent what amounts to approximately 7% of all public schools). The second requirement limits the amount of any district's net school spending that can be reallocated to charter schools to 9%. In addition, no less than two charters granted in any year must be granted in districts where overall student performance on the statewide assessment system is in the bottom 10 percent for two consecutive years; only one regional charter can be granted to a charter school located in a district in the top 10 percent on the statewide assessment system; and Commonwealth charters can be granted in communities with a population less than 30,000 only if the charter is regional. Currently, 55 Commonwealth charters and 7 Horace Mann charters are operating in

Massachusetts for a total of 62 charters, or 3% of schools and 2.8% of students. Notably, however, in our state's largest district, Boston, charter schools currently represent approximately 12% of all public schools, and the state's new charter law will allow for a near doubling of the allowable spending on charters in Boston, as well as several other of the state's lowest performing districts.

The goal of Massachusetts' recently passed "smart cap" law is to increase the number of proven providers operating in low-performing districts and serving high-needs students. Consequently, for a subset of districts, only one restriction applies: statewide, for districts in the bottom 10% for academic achievement for two consecutive years, the net school spending cap (i.e., the amount of any district's net school spending that can be reallocated to charter schools) increases to 18%, rather than 9% as it is for all other districts. In fiscal year 2011, this cap is set at 12%; by statute, it increases by one percentage point a year to reach 18% in 2017. Charter schools opening in these districts are not subject to the limitation, described above, of 72 Commonwealth charters, which means that, with the passage of this new law, the total number of charters in the state could well exceed 7% of all public schools.

For districts authorized to exceed the 9% net school spending cap, only so-called "proven providers" may apply. A high performing, proven provider is defined by statute as "an applicant, or a provider with which an applicant proposes to contract, [that] has a record of operating at least one school or similar program that demonstrates academic success and organizational viability and serves student populations similar to those the proposed school seeks to serve, from the [eight identified categories of students]." These categories of students are: English Language learners; special needs students; students eligible for free lunch; students eligible for reduced price lunch; students who are sub-proficient, as defined by statute; students who are determined to be at risk of dropping out of school based on predictors determined by the SEA; students who have dropped out of school; and other at-risk students who should be targeted in order to eliminate achievement gaps among different groups of students.

Lastly, the state's sole charter authorizer, the Board of Elementary and Secondary Education is authorized to give priority in its deliberations to these "proven providers."

(F)(2)(ii)

Massachusetts is one of only two states in the nation with a single authorizer, the Board of Elementary and Secondary Education. For this reason, accountability is handled consistently for all charter schools in the state. The Charter School Office of the Department of Elementary and Secondary Education operates under a comprehensive set of standards and protocols that have been developed since 1993, when the state’s charter legislation was first enacted. Over the past several years Massachusetts’ authorizing and accountability process has been hailed as a national model. Massachusetts was one of eight charter authorizers highlighted in USED’s 2007 report “Supporting Charter School Excellence Through Quality Authorizing.”

Under Commonwealth of Massachusetts Regulations 603 CMR 1.00, charter schools are held accountable in three areas: faithfulness to charter, academic success, and organizational viability. The process of accountability begins with the application for a charter, which uses an extensive set of criteria in all three areas of accountability in addition to an assessment of the capacity of the board of trustees. The most detailed section of the application requires answers to questions on curriculum development and implementation, instruction, professional development, and use of instructional time. The information provided against these criteria becomes a critical element in determining if the application should be chartered. Massachusetts uses a phased application process in which applicants first submit a prospectus and, depending on the outcome of the prospectus review, may be invited to submit a full application.¹ Newly chartered schools are required to complete an opening procedures process to ensure schools have met state and

¹ G.L. c. 71, s. 89 provides that the application for a Commonwealth charter school must include: (i) the mission, purpose, innovation and specialized focus of the proposed charter school; (ii) the innovative methods to be used in the charter school and how they differ from the district or districts from which the charter school is expected to enroll students; (iii) the organization of the school by ages of students or grades to be taught, an estimate of the total enrollment of the school and the district or districts from which the school will enroll students; (iv) the method for admission to the charter school; (v) the educational program, instructional methodology and services to be offered to students, including research on how the proposed program may improve the academic performance of the subgroups listed in the recruitment and retention plan; (vi) the school’s capacity to address the particular needs of limited English-proficient students, if applicable, to learn English and learn content matter, including the employment of staff that meets the criteria established by the department; (vii) how the school shall involve parents as partners in the education of their children; (viii) the school governance and bylaws; (ix) a proposed arrangement or contract with an organization that shall manage or operate the school, including any proposed or agreed upon payments to such organization; (x) the financial plan for the operation of the school; (xi) the provision of school facilities and pupil transportation; (xii) the number and qualifications of teachers and administrators to be employed; (xiii) procedures for evaluation and professional development for teachers and administrators; (xiv) a statement of equal educational opportunity

federal statutory and regulatory requirements. Enrollment is by open lottery and does not allow for quotas or set demographic requirements.

Recently passed legislation requires that all charter schools create student recruitment and retention plans to attract and retain a student population that, when compared to students in similar grades in schools from which the charter school is expected to enroll students, contains a comparable academic and demographic profile. In districts authorized to exceed their 9% net school spending cap, charter applicants must provide and annually update recruitment and retention plans designed to attract and retain, when compared to the population of students in the grades and schools from which the charter is expected to enroll students, a comparable or greater percentage of: (1) English language learner or special needs students; and (2) a comparable percentage of students from two or more of the following categories: students eligible for free lunch; students eligible for reduced price lunch; students who are sub-proficient; students who are determined to be at risk of dropping out of school based on predictors determined by the department; students who have dropped out of school; and other at-risk students who should be targeted in order to eliminate achievement gaps among different groups of students. Additionally, the statute requires that, at the request of a charter school, districts must provide to a third party mail house authorized by the SEA the addresses for all students in the district who are eligible to enroll in the charter. This will allow for broad-based recruiting to help charter schools reach recruitment and retention goals.

A charter school's success in the three areas of accountability is defined by Common School Performance Criteria developed by the Department. These criteria were used to create protocols for site visits during the charter term, renewal inspections in the fifth year, and federal programs inspections to ensure schools have implemented requirements. ESE has also developed numerous guidance

which shall state that charter schools shall be open to all students, on a space available basis, and shall not discriminate on the basis of race, color, national origin, creed, sex, ethnicity, sexual orientation, mental or physical disability, age, ancestry, athletic performance, special need, proficiency in the English language or academic achievement; (xv) a student recruitment and retention plan, including deliberate, specific strategies the school will use to ensure the provision of equal educational opportunity as stated in clause (xiv) and to attract, enroll and retain a student population that, when compared to students in similar grades in schools from which the charter school is expected to enroll students, contains a comparable academic and demographic profile; and (xvi) plans for disseminating successes and innovations of the charter school to other non-charter public schools.

documents for charter schools, including a guide on fiscal policies and procedures, technical advisories on amendments and transportation, and annual report guidelines. Each charter school is required to submit an annual report of the school's progress on an accountability plan that details goals and measures in the three areas of charter accountability, and each charter school must annually contract for and submit an independent audit. The charter school statute also requires that, when deciding on renewal, the ESE Board must consider the extent to which the school has followed its recruitment and retention strategies.

Over the course of each school's charter term, the Department builds a body of evidence regarding the school's success, using data from the annual statewide assessment, the school's annual reports and audits, and information contained in reports produced after interim site visits by the Department and the final renewal inspection visit. Academic success is also assessed by statistical comparisons with the sending district(s) to determine if the charter school is achieving at an equal to or higher level. At the five year mark, charters may be renewed, non-renewed, renewed with conditions, or placed on probation, also with conditions. Revocation, as defined in the regulations, is possible at any time during the charter term.

Charter applications are denied when a combination of factors are unveiled through the review panel process and interview with the founding group. Factors may include quality of the proposed model for curriculum and instruction, or capacity of the founding board to implement the proposal.

Lack of academic success was a major factor in the closure of two of the three charter schools closed in the past five years. The first school was closed at the five year renewal, primarily for academic and governance reasons. The second was renewed with stringent outcome conditions regarding academic success and meeting the terms of its charter; the conditions were not met and the charter was revoked. The third school's charter was revoked in the second year of operation for failure to meet accountability standards in all three areas, including implementation of the academic program, governance, and financial oversight and management.

Table F3: Charter School Applications and Approvals, 2005–2009

School year	Charter prospectuses submitted	Final charter applications made	Charter applications approved	Charter applications denied	Charter schools closed by the Board
2004–05	8	5	2	3	2
2005–06	14	4	3	1	0
2006–07	10	4	1	3	0
2007–08	10	5	3	2	0
2008–09	7	3	1	2	1
Total	49	21	10	9	3

(F)(2)(iii)

The funding formula in the Massachusetts charter school statute uses three components to calculate charter school tuition rates. The first is a per-pupil foundation rate, based on student demographic and enrollment factors and adjusted annually for inflation. The foundation rates are the same rates used to establish foundation budgets for traditional school districts. The second factor is the “above-foundation” adjustment. The foundation rates are adjusted upward to reflect the amount by which the sending districts’ spending on their own students exceeds their foundation budget. The third component is a per-pupil facilities component, which is discussed under (F)(2)(iv), below.

Charter school tuition rates vary from under \$9,000 to more than \$20,000 per pupil, reflecting the differences in spending of sending districts. In general, the charter tuition formula is designed to ensure that charter schools are receiving the same amount per pupil as is spent in the sending districts. The only differences result from adjustments for student demographics (for example, a charter school with a higher percentage of low income students than the sending district will receive relatively more funding per pupil) and exclusion of certain cost elements not borne by charter schools (most notably tuition costs for students placed in private special education schools). In fiscal year 2008, charter schools on average spent \$10,628 per student as compared with \$12,454 for districts, a difference of \$1,826 per student. This difference is attributable to the fact that districts bear higher costs for special education than charter schools do and have higher average teacher salaries. The average salary for teachers in district schools in fiscal year 2008 was \$64,000 per year, as compared to \$52,000 per year for charter schools.

Charter school tuition is paid by the sending districts, and as a result draws from the same local and state revenue sources that fund traditional public schools. The state provides reimbursement to sending districts for the amount that their charter school tuition increases from one year to the next. Based on recently enacted legislation, in each fiscal year, districts are reimbursed for 100% of the increase in tuition over the prior year, and 25% of the difference in increased costs for the next five years. Reimbursement for facilities costs is based on a statewide rate that is calculated annually (see description below in (F)(2)(iv)). Federal grants are distributed directly to charter schools by the Department in accordance with federal requirements.

(F)(2)(iv)

The funding formula for Massachusetts charter schools includes a facility component that is based on a set per-pupil amount, adjusted annually for inflation. In addition, MassDevelopment, a quasi-public agency, issues tax-exempt bonds to finance the acquisition, rehabilitation, or construction of charter schools through multiple vehicles, including Qualified Zone Academy Bonds for school renovations and upgrades; real estate loans of up to \$5,000,000 for facility acquisition, renovation, construction, and permanent financing; and charter school loan guarantees for a portion of a bank loan or tax-exempt bond for acquisition, construction, or renovation of owned and leased charter school facilities. Recently enacted legislation offers incentives to districts to offer unused school buildings to charter schools. No facility requirements are placed on charter schools beyond the normal building code and accessibility requirement, and these same requirements apply to traditional district schools. Lastly, the state legislature passed a law in 2009 requiring the Massachusetts School Building Authority (MSBA) to oversee Massachusetts' allocation of American Recovery and Reinvestment Act Qualified School Construction Bonds (ARRA QSCBs). (See text of Section 137 of Chapter 27 of the Acts of 2009 in the appendices.) The MSBA was authorized to use a portion of the state's allocation of ARRA QSCBs for charter schools.

(F)(2)(v)

Both the state and local districts enable the operation of innovative, autonomous schools other than charter schools. Three districts (Boston, Springfield, and Fitchburg) operate a total of 23 pilot schools: district-based schools with autonomy over staffing, budget, curriculum and assessment, governance and policies, and school calendar, and with greater accountability for results. In addition, the state allowed five schools in three districts facing determinations of underperformance to become Commonwealth Pilot Schools, with the same autonomies and accountability as district-based pilot schools.

Recent state legislation enabled the creation of Innovation Schools, another kind of innovative, autonomous school (see Appendix F3). Innovation Schools are in-district public schools, authorized by the local school committee, with increased autonomy and flexibility in the areas of curriculum, budget, school schedule and calendar, staffing (including waivers or exemptions from collective

bargaining agreements) and school district policies. These unique schools—which may be established by superintendents, school committees, teachers, parents, colleges and universities, charter school operators and others—will promote high levels of student achievement through an innovation plan and represent an in-district alternative to charter schools. Responsibility for designing and meeting the terms of the innovation plan under which the school operates may rest with either school leadership (as well as faculty, for the design phase) or with an external partner or partners. Innovation Schools are intended to be a fiscally neutral school redesign model in which long-term support for new or different programs or services will be primarily supported through increased flexibility in how the school’s existing budget is used. Unlike charter schools, local school committees, not ESE, have final approval over the authorization of Innovation Schools. However, ESE is responsible for the overall organization, coordination, and monitoring of the Innovation Schools initiative, including the provision of technical assistance and support and the development of prospectus applications and other documents related to the approval process. In summer 2009 ESE issued \$200,000 in planning grants to 16 districts (encompassing efforts at 22 schools) to prepare for transitions to Innovation Schools. Twenty Innovation Schools are poised to open in fall 2010 and 2011.

(F)(3) Demonstrating other significant reform conditions (5 points)

The extent to which the State, in addition to information provided under other State Reform Conditions Criteria, has created, through law, regulation, or policy, other conditions favorable to education reform or innovation that have increased student achievement or graduation rates, narrowed achievement gaps, or resulted in other important outcomes.

In the text box below, the State shall describe its current status in meeting the criterion. The narrative or attachments shall also include, at a minimum, the evidence listed below, and how each piece of evidence demonstrates the State’s success in meeting the criterion. The narrative and attachments may also include any additional information the State believes will be helpful to peer reviewers. For attachments included in the Appendix, note in the narrative the location where the attachments can be found.

Evidence for (F)(3):

- A description of the State’s other applicable key education laws, statutes, regulations, or relevant legal documents.

Recommended maximum response length: Two pages

Massachusetts has a demonstrated history in establishing innovative conditions, policies, and programs favorable to education reform. Beyond those already mentioned elsewhere in the application (such as the Innovation Schools described in (F)(2)(v)), a key element of these conditions is the state legislature's funding priorities. (See Appendix F4 for complete statutory budget language.)

Recognizing the importance of additional time to improving outcomes for low performing students, the state funds two programs that increase time for academics. First, we are the only state in the nation to support a statewide Expanded Learning Time program, funded at \$15.7 million in FY10 and serving 23 primarily high poverty schools. This program, currently in its fourth year, provides an additional 300 hours of time in participating schools to support additional time for academics, enrichment, and professional development. An independent evaluation by Abt Associates suggests that most participating schools are implementing the program effectively and that teachers feel they have more time to differentiate instruction and explore subjects in-depth. Student achievement results for the first two years of the program show relatively small impacts on MCAS scores, but we expect to see improvements as schools gain more experience with the model. (Abt Associates 2009) Second, the legislature also funds after-school and out-of-school time grants (\$2 million in FY10) to improve the quality of after-school and summer programs. In FY08, this program supported 48 programs in providing services to 6,750 students statewide, including 980 students with disabilities and 630 English language learners.

The state funds a variety of programs aimed at helping students meet high school graduation requirements and improve their college and career readiness. Largest is a set of programs supporting students in grades 8 and above in passing the required high school MCAS examinations. These programs, totaling \$9.3 million in FY10, have resulted in increases of 12 to 34 percentage points (depending on student grade of enrollment) in the share of students earning a Competency Determination, relative to students eligible for but not served by the program (ESE 2009). The state also funds a Connecting Activities program (\$2 million in FY10) designed to link high school students to the world of work through internships and work-based learning, with priority to students scoring in *Needs*

Improvement or Warning/Failing on MCAS test(s). A study of FY07 participants showed that 57 percent of students who participated in the program earned a Competency Determination, as compared to 43 percent who were eligible for but not served by the program. Finally, the state provides \$1.3 million each year to the WPI School of Excellence, a STEM-focused high school in Worcester affiliated with Worcester Polytechnic Institute, and \$1.5 million to Youth Build, an alternative education program serving overage high school students and featuring GED or high school completion, job skill development, community service, and mentoring.

Our full-day kindergarten grant program, funded at \$25.9 million in FY10, supports districts to transition from half-day to full-day kindergarten and provides resources to improve the quality of full-day kindergarten programs. As a result of this program, between FY00 and FY09 the share of Massachusetts students attending full-day kindergarten rose from 29 to 77 percent. Currently 265 of the state's 280 non-charter school LEAs enrolling kindergarten-age students (89%) offer full-day kindergarten. Proposed regulations to be voted by our Board in January 2010 would require full-day kindergarten in all Level 4 elementary schools.

In FY10 the state legislature consolidated three separate early literacy programs into a single line item funded at \$4.2 million. The Department can now more effectively target districts with identified literacy proficiency gaps, expand its focus beyond K–3 to the equally important area of adolescent literacy, and provide professional development and resources statewide. The consolidated line item serves over 100,000 students in 380 high priority schools statewide.

Together with local school aid already provided through Chapter 70 and other fiscal programs outlined in section (F)(2), these legislative investments signal Massachusetts' deep commitment to innovative supports designed to meet the needs of all students and to close achievement gaps statewide.

I. COMPETITION PRIORITIES

Priority 1: Absolute Priority -- Comprehensive Approach to Education Reform

To meet this priority, the State's application must comprehensively and coherently address all of the four education reform areas specified in the ARRA as well as the State Success Factors Criteria in order to demonstrate that the State and its participating LEAs are taking a systemic approach to education reform. The State must demonstrate in its application sufficient LEA participation and commitment to successfully implement and achieve the goals in its plans; and it must describe how the State, in collaboration with its participating LEAs, will use Race to the Top and other funds to increase student achievement, decrease the achievement gaps across student subgroups, and increase the rates at which students graduate from high school prepared for college and careers.

The absolute priority cuts across the entire application and should not be addressed separately. It is assessed, after the proposal has been fully reviewed and evaluated, to ensure that the application has met the priority.

Priority 2: Competitive Preference Priority -- Emphasis on Science, Technology, Engineering, and Mathematics (STEM). (15 points, all or nothing)

To meet this priority, the State's application must have a high-quality plan to address the need to (i) offer a rigorous course of study in mathematics, the sciences, technology, and engineering; (ii) cooperate with industry experts, museums, universities, research centers, or other STEM-capable community partners to prepare and assist teachers in integrating STEM content across grades and disciplines, in promoting effective and relevant instruction, and in offering applied learning opportunities for students; and (iii) prepare more students for advanced study and careers in the sciences, technology, engineering, and mathematics, including by addressing the needs of underrepresented groups and of women and girls in the areas of science, technology, engineering, and mathematics.

The competitive preference priority will be evaluated in the context of the State's entire application. Therefore, a State that is responding to this priority should address it throughout the application, as appropriate, and provide a summary of its approach to addressing the priority in the text box below. The reviewers will assess the priority as part of their review of a State's application and determine whether it has been met.

Recommended maximum response length, if any: One page

Investment in STEM is a critical component of Massachusetts' overall reform agenda and is integrated throughout our RTTT proposal. As noted in section (A)(3), we have made a rigorous commitment to high standards in STEM, leading to striking results: our fourth- and eighth-grade

students lead the nation in mathematics achievement and are ranked internationally in both science and mathematics.

This success belies the fact that too few of our students are reaching their full potential. Large and persistent achievement gaps persist on the basis of race, language, income, and disability. And too few of our students are interested in pursuing STEM careers; according to the College Board, 20.5% of Massachusetts students who took the 2008 SAT indicated an interest in pursuing a career in the STEM fields, below the national average of 26.3%. This is particularly troubling given our high-tech economy, where 10% of our state's job vacancies in 2008 were in STEM fields (DWD 2008). Dramatically changing these trends is critical for the future of our students and the continued prosperity of our state. We will use RTTT funds to make targeted STEM investments that address key challenges:

Individualize STEM instruction (see sections (B)(3), (D)(5)): Massachusetts will incorporate STEM subjects into all aspects of the PreK–12 teaching and learning system, and we will prioritize formative and interim assessments for mathematics and science. Educators will have access to high-quality curriculum materials, model units, and lesson plans, designed to model what an effective STEM classroom looks like, what engages and excites students in STEM, and how to better integrate courses.

Expand the supply of effective STEM educators (see sections (D)(3), (D)(5)): Given critical shortages of STEM educators, Massachusetts will scale up intensive recruitment and preparation programs. We will also invest in retention efforts, as every year we lose STEM teachers, particularly mid-career changers, because they do not receive sufficient classroom support. We will use RTTT funds to provide additional induction and coaching for new STEM educators as well as opportunities to participate in proven professional development networks for science and K–8 mathematics instruction (e.g., Massachusetts Intel Mathematics Initiative).

Increase STEM college and career readiness among under-represented groups (see section (B)(3)): The state will continue to emphasize STEM in MassCore, which will become the state's default high school curriculum, and will include a minimum of four years of mathematics and three years of lab-based science. We will also provide supplemental funding to LEAs to scale proven programs that embed rigorous STEM curricula in lower-performing schools, including six new early college high schools, twelve International Baccalaureate programs, and planning and implementation of STEM-focused Innovation Schools.

In October 2009, Governor Patrick established a STEM Advisory Council that will serve as a central advisory body, convening public and private sector stakeholders to increase student interest in and

preparation for careers in STEM fields. This Council, along with several related channels, will be leveraged to achieve rapid and effective implementation by our Race to the Top investments: a) seven existing regional PreK–16 STEM networks that connect districts, higher education, and industry with the purposes of increasing student interest in STEM careers, adding to the pool of qualified STEM teachers, and improving the quality of STEM offerings; b) a significant collection of leading-edge STEM institutions such as the Museum of Science; c) The Robert H. Goddard Council, comprised of high-level representatives from industry, state government, and K–12 and higher education, which advises the Board of Higher Education and the legislature on STEM workforce development programs and policy; and d) the STEM-focused Greater Boston Readiness Center that provides targeted professional development and instructional services to educators and shares promising practices via the Readiness Center Network.

With our history of high standards, our commitments from our policymakers and STEM partners (see Appendix A11 for letters of support), and our deliberate use of Race to the Top investments in innovation and capacity-building, we are confident that Massachusetts will dramatically increase the STEM proficiency of our students and their successful pursuit of STEM-related careers.

Priority 3: Invitational Priority – Innovations for Improving Early Learning Outcomes (*not scored*)

The Secretary is particularly interested in applications that include practices, strategies, or programs to improve educational outcomes for high-need students who are young children (prekindergarten through third grade) by enhancing the quality of preschool programs. Of particular interest are proposals that support practices that (i) improve school readiness (including social, emotional, and cognitive); and (ii) improve the transition between preschool and kindergarten.

The State is invited to provide a discussion of this priority in the text box below, but such description is optional. Any supporting evidence the State believes will be helpful must be described and, where relevant, included in the Appendix. For attachments included in the Appendix, note in the narrative the location where the attachments can be found.

Recommended maximum response length, if any: Two pages

Massachusetts has a deep commitment to developing and implementing innovative strategies to improve learning outcomes for young children, particularly those living in high need communities. We firmly believe that we cannot turn around our lowest-performing schools unless we reach out to students before they enter the K–12 system. In 2005, Massachusetts became the first state in the nation to establish a single agency, the Department of Early Education and Care (EEC), to oversee both early education and care programs and after-school services. The agency was established in accordance with one primary principle—state resources must fundamentally be re-organized to better address the different needs of children and their families—and its primary purpose is to develop a more unified, coherent, and efficient system of early education and care.

The core priorities of EEC are as follows: 1) create a delivery system that will provide high-quality services across the state; 2) increase and promote families’ access to affordable support services; 3) establish a system to build an effective and diverse educator workforce; 4) disseminate information to stakeholders to advocate for and convey the value of early education and care; and 5) develop the organizational infrastructure that is needed to achieve key goals. Governor Patrick’s Education Action Agenda (EAA), which was issued in June 2008, and a landmark early education bill (An Act Relative to Early Education and Care), which the Governor signed in July 2009, established the foundation for several key EEC initiatives: 1) the development of a Quality Rating and Improvement System (QRIS) to assess and improve the level of quality in early education and after-school programs (to date, this work

has informed the development of a regulatory framework for kindergarten readiness and a statewide assessment system to measure the developmental progress of young children ages 3 to 5); 2) the creation of the Birth to School Age Task Force to support the healthy development of children, particularly those from low-income families; and 3) the expansion of universal pre-kindergarten to promote school readiness and inform the establishment of accessible, affordable, and high-quality programs.

Massachusetts' Race to the Top application includes three specific investments deliberately connected to the Governor's EEC agenda:

Focus on PreK services in the "Wrap-around Zones" (see section (E)(2)): Massachusetts will allocate RTTT funding to establish "wrap-around zones," in three communities—regions within which students and families will receive more comprehensive instructional and support services. In each zone, funding will also be used to support home- and center-based early education and care providers that serve as feeder programs for the lowest-performing elementary schools in the district. Early childhood educators in these programs will have access to professional development opportunities focused on aligning early literacy and mathematics instruction with K–3 curricula.

Provide instructional and professional development services (see section (D)(5)): The purpose of the regional Readiness Centers is to improve the quality of teaching across the educational continuum and throughout Massachusetts by leveraging partnerships among institutions of higher education, school districts, early education providers, and business and community partners. Massachusetts will use Race to the Top funding to support the provision of instructional and professional development services to early childhood and out-of-school-time educators. For example, with guidance and support from EEC, Readiness Centers will provide targeted professional development related to core skills and competencies, the QRIS, and child care regulations.

Link early education standards and assessments K–3 (see section (B)(3)): In partnership with EEC, ESE will make targeted investments in early education through the PreK–12 teaching and learning system, aligning PreK and K–3 standards, providing model curriculum through the Digital Library, and developing formative assessments and curriculum-embedded performance tasks in early grades.

The investment of Race to the Top funds in these projects will strengthen our current efforts to provide children and families with high-quality educational and development opportunities. In addition, the existence of a strong state-level organizational framework and robust collaboration among multiple partners will ensure that we can sustain the impact of these investments in the years to come.

Priority 4: Invitational Priority – Expansion and Adaptation of Statewide Longitudinal Data Systems *(not scored)*

The Secretary is particularly interested in applications in which the State plans to expand statewide longitudinal data systems to include or integrate data from special education programs, English language learner programs, early childhood programs, at-risk and dropout prevention programs, and school climate and culture programs, as well as information on student mobility, human resources (*i.e.*, information on teachers, principals, and other staff), school finance, student health, postsecondary education, and other relevant areas, with the purpose of connecting and coordinating all parts of the system to allow important questions related to policy, practice, or overall effectiveness to be asked, answered, and incorporated into effective continuous improvement practices.

The Secretary is also particularly interested in applications in which States propose working together to adapt one State’s statewide longitudinal data system so that it may be used, in whole or in part, by one or more other States, rather than having each State build or continue building such systems independently.

The State is invited to provide a discussion of this priority in the text box below, but such description is optional. Any supporting evidence the State believes will be helpful must be described and, where relevant, included in the Appendix. For attachments included in the Appendix, note in the narrative the location where the attachments can be found.

Recommended maximum response length, if any: Two pages

Massachusetts is currently pursuing the development of a comprehensive longitudinal data system. Progress to date has been funded by the state and by supplemental funds secured through the 2008 LDS grant. ESE has already implemented several of the key data elements and the functionality described by this invitational priority in the state’s Education Data Warehouse (EDW). This includes integration of data related to the enrollment, attendance, and performance of students who are in special education, who are English language learners, and who are at risk of dropping out, as well as data on student mobility and human resources information for teachers, principals, and other staff.

Going forward, the statewide longitudinal data will continue to be a critical component of the governor’s Education Action Agenda and is a priority in the state’s Race to the Top application. Governor Patrick strongly supports the development and implementation of a Readiness Passport: an integrated P–16 data tool for parents, guardians, and agencies to document key elements of a child’s educational experiences as well as to chronicle various services, interventions, supports, data, and performance evaluations related to that child (EOE 2008). The Passport is meant to ease transitions

between schools and programs and to transform data into actionable information on policy, practice, and program effectiveness.

The governor has convened a Child and Youth Readiness Cabinet, composed of senior-level representatives of the Massachusetts public agencies that serve children, as well as a Readiness Passport Interagency Working Group to drive forward developing this system. EOE also commissioned a report from Public Consulting Group to lay out the context, challenges, and opportunities related to increased data-sharing across agencies, so we are prepared to take on this important work and have the governance structures in place to succeed.

Our goal with both our RTTT application and our pending 2010 State Longitudinal Data Systems grant proposal is to build out the remaining foundation of the Passport through pursuit of four strategies:

Improving and integrating education data collection systems: We will assign a SASID (a unique student identifier) as soon as a student is touched by the public education system, whether in early, K–12, higher, or adult education, to facilitate data-linking across systems. Our Education Personnel Information Management System (EPIMS) will expand to include information related to educator evaluation, and we will also begin assigning a MEPID (unique educator identifier) as soon as prospective educators take their first concrete step toward licensure (e.g., enrollment in a preparation program or registration for a state licensure exam). We will expand our Student Information Management System to include data related to participation and completion in college and career pathways (see section (B)(3)) and link this to National Student Clearinghouse data on college enrollment and completion patterns. We will also build tools to simplify the process of submitting data to the agency and implement an auditing system to improve data quality across all our systems.

Expanding access to the Education Data Warehouse (EDW): We will expand secure, differentiated EDW access to all K–12 educators, private special education schools, the Division of Youth Services (serving incarcerated students), researchers, and key stakeholders in early and higher education. We will also explore the feasibility of expanding access to parents and students for individual student-level data. If this application and/or ESE’s 2009 LDS application are funded, the EDW will expand to include early childhood and higher education students; an improved “Early Warning Information System” to support dropout prevention and recovery; and enhanced data and related reports on school climate.

Enhancing the Education Data Warehouse’s utility: The EDW will serve as the information backbone of many of the projects in our Race to the Top proposal, most notably the PreK–12 teaching and learning system, the digital library, and the educator evaluation system. Beyond this, we will

enhance the data and tools available in the EDW to include the expanded data elements noted above. We will integrate ELAR, the Department's educator licensure transactional database, with EPIMS through the EDW. And we will build reports and tools that help identify students at risk of dropout or ready for accelerated instruction and that measure college enrollment and completion outcomes.

Providing training on effective data use: For most educators, significant investment in training and job-embedded activities is required before data use becomes a regular component of their practice. To this end, we have built training activities throughout our RTTT and 2010 SLDS proposals to ensure that the data we are collecting and disseminating is effectively used for instructional decision making. These activities include classroom and online courses, supports for district- and school-based data teams, and other curricular materials.

By implementing these strategies, we will expand our state longitudinal data system to serve a much broader spectrum of users. We will be able to analyze the college enrollment and completion rates of our high school graduates even if they enroll outside the Massachusetts public higher education system, and we will be able to differentiate those outcomes for students participating in new program initiatives such as Early College High Schools. We will be able to connect early learning experiences to student outcomes in the K–12 system, and to connect educator preparation, licensure, teaching assignment, and student outcomes. Finally, we will meet all 12 elements of a longitudinal data system as defined in the America COMPETES Act. Together, we will successfully make a leap forward in achieving our long-term goal of a Readiness Passport connecting timely, relevant, and actionable information for all Massachusetts public agencies serving our children and communities.

Priority 5: Invitational Priority -- P-20 Coordination, Vertical and Horizontal Alignment (*not scored*)

The Secretary is particularly interested in applications in which the State plans to address how early childhood programs, K-12 schools, postsecondary institutions, workforce development organizations, and other State agencies and community partners (*e.g.*, child welfare, juvenile justice, and criminal justice agencies) will coordinate to improve all parts of the education system and create a more seamless preschool-through-graduate school (P-20) route for students. Vertical alignment across P-20 is particularly critical at each point where a transition occurs (*e.g.*, between early childhood and K-12, or between K-12 and postsecondary/careers) to ensure that students exiting one level are prepared for success, without remediation, in the next. Horizontal alignment, that is, coordination of services across schools, State agencies, and community partners, is also important in ensuring that high-need students (as defined in this notice) have access to the broad array of opportunities and services they need and that are beyond the capacity of a school itself to provide.

The State is invited to provide a discussion of this priority in the text box below, but such description is optional. Any supporting evidence the State believes will be helpful must be described and, where relevant, included in the Appendix. For attachments included in the Appendix, note in the narrative the location where the attachments can be found.

Recommended maximum response length, if any: Two pages

Massachusetts is currently pursuing an ambitious plan to integrate the P–20 system and support our learners through every stage of their educational careers. The state has already established the governmental and organizational framework that is necessary to both promote and sustain P–20 coordination, and is pursuing additional policies and strategies that will increase both vertical and horizontal alignment across the state.

In 2008, the Massachusetts legislature overwhelmingly approved Governor Patrick’s proposal to establish the Executive Office of Education (EOE), the single and responsible authority to advance public education in the state. Under the leadership of a Secretary of Education, the primary function of the EOE is to create and sustain a truly seamless education system from birth through higher education. As described in section (A)(1), the EOE is working in partnership with the Departments of Early Education and Care (EEC), Elementary and Secondary Education (ESE), and Higher Education (DHE) and also with the University of Massachusetts (UMASS) to create and sustain a truly seamless education system from birth through higher education.

Massachusetts' Race to the Top proposal was crafted with significant guidance and input from the EOE and the three departments, and the success of the following strategies depends on the deliberate and continued coordination of these entities:

Standards and Assessments: As described in section (B)(3), Massachusetts will use RTTT funding to develop a unified and more coherent PreK–12 teaching and learning system. ESE's ongoing partnership with EEC and DHE will ensure alignment between the early education and K–3 standards/assessments, inform a seamless PreK–12 model curriculum, strengthen the link between K–12 and higher education, and address strategies related to college and career readiness (including the implementation of MassCore as the default curriculum for all high school students, revisions to the criteria for the Adams Scholarship, the establishment of STEM-focused early college high schools and Innovation Schools, and expansion of dual enrollment opportunities).

Data Systems: As described in section (C), enhancements to the state's Education Data Warehouse (EDW) and the expansion of existing databases will assist educators with the collection, transfer, usage, and application of data. ESE has and will continue to partner with the EOE, ESE, DHE, UMASS, and other state agencies to ensure that the collection and management of data supports the implementation of RTTT initiatives including, among others, using data from the "Early Warning Indicator System" (EWIS) to prevent students from dropping out of school, and linking teacher preparation, licensure, and evaluation to measures of effectiveness.

Great Teachers and Leaders: The depth and breadth of the initiatives and strategies described in sections (D)(1) through (D)(5) necessitate continued and consistent collaboration among ESE, EOE, DHE, UMASS, and other stakeholders, and ESE will coordinate these partnerships both during and beyond the four-year RTTT grant. For example, ESE will continue its partnership with DHE, institutions of higher education, and other partners to develop and embed measures of educator effectiveness into every component of the system; improve the content, quality, and structure of teacher preparation programs; and increase the diversity of the educator workforce. RTTT funding also will be allocated to the Readiness Centers to supplement the capacity of ESE to provide instructional and professional development services and to convene stakeholders to address cross-sector priorities.

Turning Around Low-Achieving Schools: As described in Invitational Priority #3, RTTT funding will be allocated to support professional development opportunities for early childhood educators about early literacy, mathematics instruction, and standards/assessments through the "wrap-around zones." RTTT funds will also support the "Early Warning System" in six LEA pilots and act upon the

recommendations of the Graduation and Dropout Prevention and Recovery Commission by building district and school capacity to partner with other agencies and community-based organizations to identify and intervene with middle and high school students most at risk of dropping out.

Massachusetts has already made great strides in building a more unified and cohesive public education system. We have the statewide architecture necessary to promote P–20 coordination and alignment; we are building capacity at multiple levels to develop, implement, and sustain efforts over time; we have increased policy and programmatic coherence; and we are actively leveraging existing partnerships between education agencies and other organizations and building new ones. With support from RTTT, the state can accelerate this critical work and realize Governor Patrick’s vision of creating an outstanding public education system that truly promotes growth and success from birth through higher education—for all students.

Priority 6: Invitational Priority -- School-Level Conditions for Reform, Innovation, and Learning
(not scored)

The Secretary is particularly interested in applications in which the State's participating LEAs (as defined in this notice) seek to create the conditions for reform and innovation as well as the conditions for learning by providing schools with flexibility and autonomy in such areas as—

- (i) Selecting staff;
- (ii) Implementing new structures and formats for the school day or year that result in increased learning time (as defined in this notice);
- (iii) Controlling the school's budget;
- (iv) Awarding credit to students based on student performance instead of instructional time;
- (v) Providing comprehensive services to high-need students (as defined in this notice) (e.g., by mentors and other caring adults; through local partnerships with community-based organizations, nonprofit organizations, and other providers);
- (vi) Creating school climates and cultures that remove obstacles to, and actively support, student engagement and achievement; and
- (vii) Implementing strategies to effectively engage families and communities in supporting the academic success of their students.

The State is invited to provide a discussion of this priority in the text box below, but such description is optional. Any supporting evidence the State believes will be helpful must be described and, where relevant, included in the Appendix. For attachments included in the Appendix, note in the narrative the location where the attachments can be found.

Recommended maximum response length, if any: Two pages

Over the past 15 years, Massachusetts LEAs have led the way in establishing innovative, semi-autonomous public schools that feature high degrees of flexibility and autonomy. In 1995 Boston began the successful Pilot Schools initiative, which has resulted in the creation of 23 innovative, semi-autonomous schools, some of which are now among the most successful and highly sought-after schools in the city. Seeking to build on this success, Governor Patrick's Education Action Agenda (released in July 2008) proposed the creation of up to 40 semi-autonomous Readiness Schools by 2013. In 2009 ESE, working with the Executive Office of Education (EOE), awarded planning grants to 16 urban, suburban, and rural LEAs across the state to facilitate the establishment of 22 Readiness Schools, most of which are scheduled to open in fall 2010 or fall 2011.

With final passage of major education legislation reform legislation in January 2010, Massachusetts is now positioned to dramatically expand these existing initiatives by giving all of our LEAs the ability to establish schools with greater flexibility and autonomy. The law authorizes the creation of Innovation Schools—in-district public schools with increased autonomy in the areas of curriculum, budget, school

schedule and calendar, staffing (including waivers from collective bargaining agreements), and school district policies. Innovation Schools may be established as new schools or as conversions of existing schools, and can be proposed by a wide variety of eligible applicants, including superintendents, school boards, administrators, teachers, parents, colleges and universities, non-profit organizations, charter school operators, and consortia of those groups.

Innovation Schools will be developed through an inclusive, locally based process that will involve the development of an “innovation plan” that will detail the areas of autonomy and flexibility the school seeks to incorporate, as well as a performance contract that will include annual measurable goals on core academic measures. In cases where an existing public school is being proposed for conversion, school faculty will vote to accept the innovation plan (including any collective bargaining waivers) on the basis of a 2/3 vote; in the case of new Innovation Schools, such waivers will be facilitated through an expedited collective bargaining process. All Innovation Schools will be subject to final authorization by the local school committee, with provisions for annual evaluation and renewal after the school’s initial authorization period has expired.

Because the Governor’s Readiness Schools concept largely overlaps with the Innovation Schools framework authorized in the new law, during the spring of 2010 the school districts that were awarded Readiness School planning grants will continue to be developed using the newly established statutory framework. As detailed in this application, Massachusetts intends to use Race to the Top funds to support the start-up and establishment of these schools, including a subset of STEM-focused schools as well as a dropout-prevention high school and an alternative high school model.

At present, many of the proposed Innovation Schools under development in the 16 LEAs plan to incorporate the specific type of autonomy and flexibility referenced in this Invitational Priority. For example, nearly all of the LEAs intend to establish schools that use unique curricular and student support models that remove obstacles to student engagement and actively support student engagement and achievement (especially for high needs populations such as low-income students, English language learners, and students with disabilities). Nearly all the forthcoming Innovation Schools plan to feature enhanced budgetary autonomy. More than half will seek to establish new structures for the school day or school year that result in increased learning time, and several plan to use increased autonomy to arrange staffing in ways that differ from traditional processes.

In addition, the January 2010 education law also will support LEAs in using flexibility and autonomy to facilitate the turnaround of low-performing schools in Massachusetts. As further detailed in section

(E) of this application, the new law allows local superintendents and the commissioner to develop turnaround plans to promote the rapid improvement of schools that are designated by the state as Underperforming or Chronically Underperforming. In each case, the law mandates that these turnaround plans incorporate comprehensive services to high need students and their families, such as health services, social services, and workforce development services for students and families. Moreover, these turnaround plans will also include strategies to effectively engage families and communities in supporting the academic success of their students through a variety of statutorily mandated and optional components. Finally, the new law gives local superintendents and the commissioner the ability to include other turnaround plan components that will enhance flexibility in low-performing schools, such as budgetary flexibility, increased planning time for teachers, and provisions to authorize bonuses and other awards to attract and retain high-quality educators.