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September 2008

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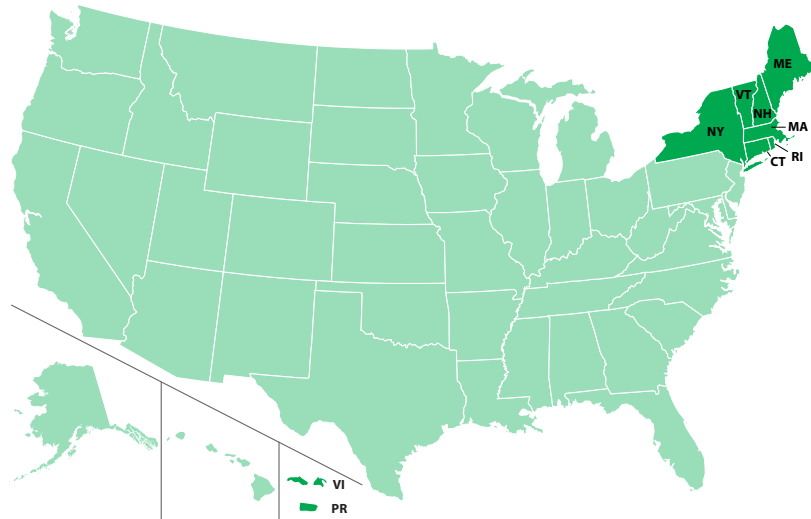
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Summary
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Developing the "Compendium of Strategies to Reduce Teacher Turnover in the Northeast and Islands Region": a companion to the database

This report provides state-, regional-, and district-level decisionmakers in the Northeast and Islands Region with a description of the Compendium of Strategies to Reduce Teacher Turnover in the Northeast and Islands Region, a searchable database of selected profiles of retention strategies implemented in Connecticut, Maine, Massachusetts, and Vermont.

Decisionmakers in the Northeast and Islands Region are facing teacher turnover problems and need to address them, but they have limited resources and information for doing so. There is inadequate information about which strategies work; how they are designed, developed, and implemented; and the impacts they have had.

This project, which developed the Compendium of Strategies to Reduce Teacher Turnover in the Northeast and Islands Region, is intended to provide decisionmakers with a tool for learning from the experience of others in their region. It provides a collection of program and policy descriptions in a searchable database that can be probed for a variety of key features. In addition, because the Compendium includes contact information, it can link decisionmakers to policy and program experts. Decisionmakers can contact program leaders directly with questions that are relevant to the decisionmakers' work and context.

The Compendium is not a complete inventory of teacher retention policies and programs in these states but a sample that offers an overview of the range of interventions that have been implemented. A primary selection criterion used for including a policy or program in the Compendium was that increasing teacher retention was an explicit goal. The research team looked for evidence at the program level—from written documents, program web sites, conversations with program experts, and other venues—that retaining teachers was at least one of the program's explicit purposes.

Measures of quality, implementation, or impact were not among the criteria for inclusion, so it should be assumed that the policies and programs in the Compendium vary along these dimensions. Moreover, inclusion in the Compendium does not imply any measure of endorsement, and readers should not draw any conclusions about a program's merit or standing in the field from its inclusion.

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This report provides state-, regional-, and district-level decisionmakers in the Northeast and Islands Region with a description of the Compendium of Strategies to Reduce Teacher Turnover in the Northeast and Islands Region, a searchable database of selected profiles of retention strategies implemented in Connecticut, Maine, Massachusetts, and Vermont.

WHY THIS STUDY?

This section of the report provides a brief overview of current research on the impact of teacher turnover on schools and teachers, describes the size and scope of the teacher turnover problem nationally and its impacts on the Northeast and Islands Region, and details the objectives of the Compendium project—its intended purpose and audience.

Current research

Teacher turnover is a costly problem for schools and students at the national, state, and local levels—and turnover rates have risen over the last decade. Across job types the Department of Labor conservatively places the average cost of turnover at 30 percent of an employee's salary. The Alliance for Excellent Education (2005) estimates the combined annual cost of replacing public school teachers who leave the profession or transfer from school to school at $4.9 billion. A study by the Texas Center for Educational Research (2000) finds that teacher turnover costs represent 150 percent of leaving teachers' salaries and estimates that these costs reach as high as $2.1 billion a year for the state. According to the Texas State Board for Educator Certification, 19 percent of beginning teachers leave at the end of their first year of teaching and approximately 43 percent leave after their third year. The Texas Center for Educational Research (2000, p. 16) report estimates the turnover cost for first-year teachers alone to be "upwards of $216 million per year [and] the three-year turnover costs to be as much as $480 million per year."

A more recent report by Barnes, Crowe, and Shaeffer (2007) for the National Commission on Teaching and America's Future estimates the turnover costs for Chicago Public Schools, Milwaukee Public Schools, Granville County Schools (North Carolina), and Jemez Valley Public Schools and Santa Rosa Public Schools (New Mexico). It finds that the cost per school leaver was $15,325 in the Milwaukee Public Schools and $17,872 in the Chicago Public Schools, with an annual turnover cost of $76–$128 million in Chicago.

Although these approaches to calculating turnover costs arrive at different estimates, turnover costs in each case are quite large and represent a loss of valuable resources that could be spent meeting other education needs.

Perhaps more important than financial costs, high turnover rates also have costs for children's education—slowing student learning because of frequent changes in school staff (Claycomb 2000). Guin (2004) finds a significant negative correlation between student performance and turnover: schools with higher turnover rates had fewer students meeting standards on statewide assessments in both reading and math. *No Dream Denied* describes the downward spiral that accompanies the revolving door of high teacher turnover: as teachers leave and are replaced by less experienced staff that require additional support and professional development, they drain the capacities of the experienced teachers who stay on (National Commission on Teaching and America's Future 2003). Not surprising, novice teachers, less effective than their more experienced colleagues, feel overwhelmed when starting their career in a school where adequate support is hard to find (Murnane and Phillips 1981, Fetler 1999). Thus, the downward cycle continues. Frequent loss of new teachers makes meeting high expectations even more difficult for students because they lack the experienced instruction needed to succeed.

In addition, several researchers have found that low-achieving schools, more common in urban, rural, and minority communities, face higher turnover rates (Hanushek, Kain, and Rivkin 2004; National Commission on Teaching and America's Future 2003; Plecki et al. 2005). For example, Hanushek, Kain, and Rivkin (2004) find higher turnover rates in grades 4–8 among Texas teachers working in low-achieving schools than among teachers in higher achieving schools. Moreover, "the magnitude of the effect holds across the full range of teacher experience" (Hanushek, Kain,

and Rivkin 2004, p. 347). Plecki et al. (2005, p. vi) study the association among race, poverty, turnover, and student achievement and find "a mutually reinforcing pattern [in which] school poverty, retention, and school performance are linked to one another."

With the costs of teacher departures so high, understanding the rate of teacher turnover is critical to understanding the scope of the problem. According to 1999/2000 data from the National Center for Education Statistics, "approximately a third of America's teachers leave teaching sometime during their first three years of teaching; almost half may leave during the first five years" (National Commission on Teaching and America's Future 2003, p. 24). Other national studies conducted by Ingersoll and by Marvel et al. confirm these estimates: in a study of 2004/05 Teacher Follow-up Survey data, Marvel et al. (2006) find that 24 percent of teachers younger than age 30 either left their school or left teaching after one year. Ingersoll's (2003) analysis of four cycles of Schools and Staffing Survey and Teacher Follow-up Survey data shows increasing percentages of teachers leaving the profession. In 1991/92 teachers equivalent to 91 percent of teachers hired the previous year had left; in 1994/95 that rate was 110 percent; and in 2000/01 it was 124 percent (Ingersoll 2003), indicating that more teachers were leaving the profession than had been hired the previous year.

Research conducted at state and local levels shows similar patterns. Hanushek, Kain, and Rivkin (2004) find that in Texas teachers with 0–2 years of experience were almost twice as likely as teachers with 11 or more years of experience to leave Texas public schools and almost four times as likely to switch districts. Useem, Offenburt, and Farley (2007) report that in Philadelphia only 73 percent of newly hired teachers completed their first year in 2002/03. Hansen et al. (2004) find that in Miami Dade County turnover was higher for less experienced teachers and that between 1990/91 and 2000/01 secondary school teachers with 1–2 years of experience left the district at twice the rate of those with 9–10 years of experience. In a recent

> **Frequent loss of new teachers makes meeting high expectations even more difficult for students because they lack the experienced instruction needed to succeed**

New York Times article on teacher recruitment nationwide Sam Dillon reported that in Guilford County, North Carolina, "turnover had become so severe in some high-poverty schools that principals were hiring new teachers for nearly every class, every term" (2007, p. 1). In a study currently under way of teacher turnover in a large, urban district in the Northeast and Islands Region, an analysis of three years of employment data by Abigail Jurist Levy shows that turnover varies widely within that district, from an average of 13 percent among the 10 schools with the highest retention rates to an average of 35 percent among the 10 schools with the lowest (National Science Foundation grant 455749).

Scope of the problem in the Northeast and Islands Region

States in the Northeast and Islands Region are affected by these national trends and are trying to address them. At the same time, there is little ongoing systematic analysis of employment data designed to accurately assess and follow trends in the nature of the teacher workforce or to implement policy to improve retention and measure its impact. As Voorhees, Barnes, and Rothman (2003, p. iii) report in their study of data systems in 14 states, "Much of the critical information already exists, but it is buried in the nooks and crannies of different data bases—data bases maintained by schools and colleges, by state licensing boards, by state unemployment insurance agencies . . . ."

It is not surprising then that little can be said definitively about teacher retention rates in the four states covered in the Compendium (Connecticut, Maine, Massachusetts, and Vermont). A lack of information about the size and scope of the turnover problem was also evident during discussions with key informants about retention policies and programs in preparation for the Compendium. Data systems that would make information on teacher supply, quality, and mobility readily available to states, districts, and the public are not in place.

Lack of data systems notwithstanding, interviews conducted to assess the region's research needs found that teacher retention was a concern for the states in this study, particularly for their urban and rural districts, and the Compendium was developed in response to their concerns. In addition, the Massachusetts Department of Education reports that "due to looming retirements, over 50% of the current teaching force in Massachusetts (35,000 teachers) will need to be replaced in the next decade, . . . and 29% of newly hired science teachers are typically not licensed to teach their respective subject areas" (Massachusetts Department of Education 2007). The Maine Education Policy Research Institute reports teacher shortages in mathematics, science, foreign language, and special education (Gardner and Silvernail 2000). Connecticut's Commissioner of Education reports shortages for 2006/07 in eight instructional areas, including mathematics, science, special education, and bilingual education (McQuillan 2007).

Although the problem of high teacher turnover is acknowledged, and some New England states and districts have taken steps to address it, few tools are available to inform decisionmakers' attempts to reverse turnover trends. A few reports describe the steps that some districts and states across the country have taken to address retention, including National Commission on Teaching and America's Future (2002), Troen and Boles (2003), and Johnson (2004). In addition, the National Comprehensive Center for Teacher Quality at the Education Commission of the States has created a database of state-level retention initiatives, but district-level programs are not included. Currently, however, no single document offers policymakers and administrators an overview of the policy and program options already in place, the aspects of retention they address, their structure, and their implementation details. Such a single reference source would assist state and district leaders in their decisionmaking and implementation activities to reduce turnover and help them connect to colleagues in their region who are working on similar issues.

> **Few tools are available to inform decisionmakers' attempts to reverse turnover trends**

Objectives of the Compendium

This project is intended to provide decisionmakers in the Northeast and Islands Region with two products: the Compendium of Strategies to Reduce Teacher Turnover in the Northeast and Islands Region, a searchable database of profiles of state, regional (multiple districts in the same state), and district retention strategies that have been implemented in Connecticut, Maine, Massachusetts, and Vermont; and this accompanying summary report.

The Compendium is intended to:

- Introduce decisionmakers to retention policies and programs recently begun in the region. The collection of profiles contains information organized by program goals and description, participation, costs, design, context, data sources, and contact information.

- Provide easily accessible information that is concise, accurate, and thorough in a format that is easy to manipulate and absorb.

- Be searchable by such key features as state, urbanicity, district size, policy family, type of program, target audience, target grade level, target content area, and cost per participant.

- Provide a bridge from decisionmakers to specific policy and program experts. When decisionmakers identify programs specific to their work and context, they can use the contact information provided in the database to seek additional information.

The Compendium is not an inventory of all the retention programs that have been implemented in the four participating states. Rather, it reflects the variation in strategies, contexts, and implementation approaches. A complete inventory would be prohibitively costly to produce, considering that several states in the region have mandated that all districts

> **The Compendium reflects the variation in strategies, contexts, and implementation approaches to retention programs**

implement induction, mentoring, or other retention programs. Nor did inclusion in the Compendium depend on meeting any measure of program quality, implementation, or impact. Thus, the policies and programs included in the Compendium likely vary along all of these dimensions. Rigorous external evaluations of the impact of retention policies are rare, and so there is little evidence of their effect that could have been cited in this report. Inclusion in the Compendium, therefore, implies no endorsement of the policies or programs, and readers should not draw any conclusions regarding any program's standing in the field.

This accompanying summary report is intended to support the Compendium by:

- Setting a national and regional context for the Compendium by providing an overview of the teacher turnover problem.

- Explaining the methodology used to create the Compendium and the rationales behind the decisions made, including the types of retention addressed, the retention policy structure of the Compendium, the search procedures used to identify retention policies and programs, the selection criteria applied, the development of the profile templates, and the limitations of the project.

Study constraints

Several constraints to this project should be noted. First, there was no intention to provide an exhaustive inventory of efforts by Connecticut, Maine, Massachusetts, and Vermont to reverse teacher turnover trends. Rather, the goal was to provide brief overviews of policies and programs that represent the various approaches found in those states. Thus, it is inappropriate to draw conclusions about the extent of efforts that these states and their districts are making based on the findings discussed here. Moreover, the profiles are brief descriptions of programs and do not provide the detail needed to make meaningful assessments about how well they mirror what research indicates makes particular

approaches effective—when there is even any research to support such statements.

Second, it is likely that there are policies and programs at work in these states that are not included in the Compendium, because of insufficient publicly available information to enable identification of the programs or to provide adequate descriptive information to be useful to a reader.

Third, independent estimation of program implementation, quality, and impact was beyond the scope of the project, which relied solely on the information provided by public web sites, program documents, and program contacts to describe the nature and design of policies and programs. Any statements about program outcomes come from these sources.

Fourth, the research shows clearly that factors at the school level play a major role in teachers' decisions to stay or move on (Ingersoll 2001; Guarino et al. 2004; Guin 2004). But documenting school policies and practices that have been implemented to reverse teacher turnover trends would have added a level of complexity to this project that would have made it unachievable with the time and resources available.

POLICY FRAMEWORK FOR ORGANIZING THE PROFILES: AN OVERVIEW OF POLICY FAMILIES

This section provides an overview of the policy families used to classify and organize the profiles and defines the types of retention policies and programs addressed in the Compendium. (See box 1 for definitions of retention policies and retention programs.)

Three key works in the literature were consulted to determine how to classify and organize the profiles included in the Compendium. The review of the literature on recruitment and retention by Guarino, Santibanez, Daley et al. (2004) divides policies into three categories: compensation, pre-service, and in-service. Allen's (2005) examination of the literature, based on the work of Guarino, Santibanez,

Daley et al. and that of Ingersoll and Kralik (2004), focuses on the categories of working conditions, compensation, teacher preparation, induction and mentoring, and recruitment strategies. And Shapiro and Laine (2005) organize their analysis into three groups: human resource preparation, access, and process; financial incentives; and school structure and operations, which includes school- and district-level organizational structure and systems.

Based on these fundamentally congruent clusters of policies identified in the literature, the research team constructed four policy families to classify and organize the Compendium profiles: financial incentives, pre-service programs, in-service programs, and central systems and supports.

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Financial incentives

Compensation plans and benefit packages are the basic financial incentives related to teacher retention—so commonplace that they are rarely thought of in this light. However, the relationship between pay and teacher retention has been studied extensively. This project includes compensation policies when they have been altered explicitly to influence teacher retention. In addition to compensation and benefits plans, states and districts have added many other financial incentives to their policy repertoire, including low-cost or no-cost loans, housing subsidies, signing bonuses, subsidized housing, and loan forgiveness programs.

Allen (2005) reviews 28 research studies that looked at the relation between teacher compensation and retention; however, he finds no studies that examined the impact of other financial incentives, such as those just mentioned. He finds that compensation plays a key role in recruitment and retention, but that its impact is confounded by other variables,

BOX 1
Definitions of key terms

Retention policies and programs

Pressman and Wildavsky (1984, p. xxiii) offer an "over-simplified" view of the difference between *policy* and *program* that informed the distinctions made for this project: "Policies imply theories. Whether stated explicitly or not, policies point to a chain of causation between initial conditions and future consequences. Programs make the theories operational by forging the first link in the causal chain connecting actions to objectives."

An example of a retention policy profiled in the Compendium is Maine's Minimum Teacher Salary, which implies a relationship between pay and retention in schools in the island and rural regions of the state. The policy goal is to reduce teachers' tendency to leave poor, isolated districts for areas where pay is higher by offering equal pay across the state. An example of a program is the Master Teacher Program in Massachusetts (Massachusetts Department of Education 2003), which reflects the state's approach to retaining high-quality, experienced teachers. The state reimburses half the application fee of teachers who apply for National Board Certification and pays an annual bonus of $2,500 to teachers who stay and mentor novice teachers after receiving certification. The funds are provided through the No Child Left Behind Act of 2001, an example of a program that makes a federal policy operational at the state level.

Types of retention

The Compendium focuses on policies and programs for retaining teachers in states, regions, and districts. Left out is the individual school, which plays a critical role in teacher job satisfaction and their decisions about whether to remain in or leave their school, district, or profession altogether (see, for example, the work of Ingersoll 2001, 2003 and Johnson 2004). Moreover, it is at the school level where teacher turnover directly affects student progress. But the substantial differences in the nature, scope, and quantity of policies and programs implemented in these different domains restrict the feasibility of including all of them in this first version of the Compendium.

Retaining teachers in the profession is a very different goal from retaining them in a specific region, and this first issue is less relevant to the Compendium's intended users—state and district decisionmakers. Because of resource constraints, decisionmakers want investments that will have a direct and positive impact on their jurisdictions.

Although the decisions to focus on state, regional, and district policies and programs for retaining teachers at those levels have shaped the current version of the Compendium, they do not preclude expanding it to include policies and programs that affect teacher retention within schools or the teaching profession.

Licensure and certification

The four states whose policies and programs are included in the Compendium use the terms *licensure* and *certification* to mean essentially the same thing. Massachusetts and Vermont refer to levels of teacher *licensure*, whereas Connecticut and Maine refer to levels of teaching *certification*. To avoid any appearance of inconsistencies or difference in meaning, the term *licensure* was applied consistently throughout the report and in the program and policy profiles.

such as the teacher's gender, level of experience, current job satisfaction, and working conditions.

Pre-service programs

Pre-service programs refer to the range of teacher preparation programs that prepare candidates to enter the profession. Darling-Hammond (2000) and others (Claycomb 2000; Reynolds 2002; Sconzert 2000) note the positive relationship between teacher preparation and teacher retention: teachers who complete an extended teacher education program are more likely to remain in teaching than teachers placed in districts with minimal preparation. Of interest to this project are pre-service programs designed to encourage graduates to remain in their first teaching positions—programs pairing a university with a district (Boston's Teacher Residency Program) and alternative certification programs designed for various population groups new to teaching (returning servicemen and women, mid-career professionals).

Guarino, Santibanez, and Daley (2006) examine 11 studies that address pre-service approaches. Nine were confined to alternative routes to certification, and two looked at efforts to recruit minority candidates into teaching. The authors conclude that "nontraditional and alternative teacher education programs appeared to attract more diverse student populations, and their graduates appeared to have higher rates of entry into and retention in teaching than graduates of traditional programs" (p. 58).

In-service programs

In-service policies and programs refer to the supports that teachers receive once they are teaching in a district. Often initiated at the school level, these supports can include mentoring and induction programs, professional development opportunities, and formal and informal arrangements to collaborate with colleagues. Only district- or state-level in-service programs were examined. These may include induction programs, which are typically designed to address challenges associated with being a new teacher (see Kapadia, Coca, and Easton 2007). Mentoring programs, an important and widespread subset of induction programs with some common and distinct features, are included as a subcategory of in-service programs in the Compendium. Other in-service programs may also include alternate certification programs intended to bring teachers with provisional or conditional certification to full certification.

Allen (2005) reviews 14 studies that examine the impact of induction and mentoring programs. Of those, 12 had previously been reviewed by Ingersoll and Kralik (2004). But wide variations in methodological issues made drawing conclusions about their impact impossible.

Central systems and supports

Central systems and supports refer to policy and program initiatives to modify district or school structures or systems to improve the school climate for teaching. These include human resource systems, recruitment strategies that

target candidates most likely to stay once hired, teacher transfer and assignment policies, teacher recognition programs, professional learning communities, and opportunities for teachers to take leadership roles in the school or district.

Unlike the other policy families, central systems and supports has little research that corresponds directly to the way it is defined here. Allen (2005) focuses on studies that examine working conditions, such as teacher autonomy, administrative support, class size, and student characteristics and attitudes, but he does not examine the impact of central systems, such as recruitment and hiring practices directed toward recruiting a more suitable pool of candidates, an issue with which many districts are grappling. Thus, his findings—which he describes as providing "limited evidence" at best—are not relevant to the Compendium.

A DESCRIPTION OF THE COMPENDIUM DATABASE AND PROFILES

This section describes the selection criteria and profile templates, the database, and the profiles in the Compendium based on a selection of program features that are described in the profiles. Details of the search protocol are provided in box 2 and appendix A.

Selection criteria and profile templates

To screen for useful examples of retention programs, four selection criteria were applied to candidate policies and programs:

> **Four selection criteria were applied to candidate policies and programs to screen for useful examples of retention programs**

- Evidence of the explicit goal of reducing teacher turnover (in the state, region, or district).

- In place within the last five years or under development.

BOX 2

Search protocol

State-level searches were conducted in Connecticut, Maine, Massachusetts, and Vermont to identify teacher retention policies and programs. These state-level searches also provided information on district and regional teacher retention activities. Searches were designed to identify teacher retention policies and programs and then, if they met the selection criteria, to collect public information for the profiles (see appendix A for details).

Data were collected from publicly available web sites, public documents, and individual contacts using protocols developed by the research team. (Individuals were contacted by email; sample letters are included in appendix B.) For state-level policies and programs the researchers began by searching state education agency web sites using the identified search terms. When evidence gathered through these state-level searches indicated that policies and programs were implemented by specific districts in the state, these leads were pursued through searches of the districts' school department web sites, local newspapers, local union chapters, and other sources of publicly available information. If a state education agency web site yielded little information,

researchers relied on interviews with a project advisor in that state to identify existing programs. A list of national organizations was also compiled to search for national initiatives that may have been implemented at the state or local level (table A1 in appendix A lists these organizations), and the web sites of 28 national organizations were examined to identify any national retention initiatives implemented at the local level (see box A2 in appendix A for the list of organizations). All of these data sources—documents, web sites, and individuals—were important to the identification of state- and district-level programs.

The search process was cyclical. As more was learned about particular policies or programs, some programs initially appearing to meet the search criteria clearly did not. Or as the search moved from the state to the district level, new programs were discovered at the state level that warranted inclusion. These searches identified some 29 documents, 134 web sites, and 49 program contacts.

Profile templates (see appendix C, table C2) guided researchers as they compiled information. Completed profiles were sent to the primary program contact for review and verification. A list of more than 30 search items identified from the literature reviews and exploratory work at the

national level was used to identify state-level policies and programs that met the following criteria (box A1 in appendix A lists the search terms):

- Have the explicit purpose of reducing teacher turnover.

- Have publicly available descriptive information.

- Were in operation or under development between 2002 and 2007.

During the search it became evident that each state's department of education and associated structures for addressing teacher retention were organized uniquely, so search methods were tailored to each state's particular environment. (Appendix A explains how.) Team members conferred frequently to maintain consistency in search methods.

Throughout the project the research team sought the counsel of advisors with program and policy experience from each state included in the study (Georgette Nemr, Connecticut; Barbara Moody, Maine, Len Lubinsky, Massachusetts; and Nancy Richardson, Vermont). The team met regularly with the advisors, who provided guidance at each phase of the project, including during development of the policy framework.

- At least some program information available through public forums, such as the web, newspapers, and journals.

- Illustrative of variations in approaches that can be found across the region.

While the intention was to profile 35–50 policies or programs, only 33 were profiled, and no programs were dropped because of redundancy. The two most frequent reasons for not including profiles were the requirement that increasing teacher retention be an explicit goal of a policy or program

and a lack of response from program contacts or not enough program information.

Finally, it should be noted again that the selection criteria do not include any measures of quality or degree of implementation or impact, and inclusion in the Compendium does not imply any measure of endorsement.

To represent retention programs consistently in the Compendium profiles, the research team created information templates so that each profile would provide an overview of the retention program—its goals, participation, costs, data sources, how it functioned, what lessons were learned during its implementation, its context, and contact information. The templates also served as the foundation for the database design. Initially, eight templates were drafted: one for each state and district program. Later, templates were added for regional programs and in-service and mentor programs, for a total of 13 (for an example, see table C2 in appendix C).

The Compendium database

The primary product of this project is the Compendium database (http://www2.edc.org/relnei/teacherdb).[1] The database is searchable by:

- State.
- Urbanicity.[2]
- District size.
- Policy family.

- Type of program.
- Cost per participant.
- Target audience.
- Target grade level.
- Target content area.

Users can also enter their own search terms. For more about how to navigate the database, see appendix C, "Users guide for reading and navigating the Compendium."

Overview of Compendium profiles

This section describes the distribution of the profiles across policy families, regions, and target audience. It also reviews the profiles by participant eligibility requirements and selection criteria, target grade level and content area, funding and program assessment approaches, partners, and lessons program experts learned from implementation.

Distribution of profiles. Table 1 shows the distribution of the 33 Compendium profiles by state and policy family (a list of the 33 profiles included in the Compendium is in table C3 in appendix C). Several programs were difficult to categorize because they contained features that fell within more than one policy family, such as the Massachusetts Initiative for New Teachers (MINT). These programs were categorized according to the project teams' assessment of the most prominent and distinguishing features. Arguments could be made for different policy family assignments in some cases.

TABLE 1

Distribution of 33 Compendium profiles by state and policy family

State	Financial incentives	Pre-service programs	In-service programs	Central systems and supports	Total
Connecticut	2	1	4	0	7
Maine	3	0	6	1	10
Massachusetts	2	2	7	1	12
Vermont	1	1	2	0	4
Total	8	4	19	2	33

Source: Authors' analysis based on data described in text and appendix A.

TABLE 2

Distribution of Compendium profiles by policy family and program level

Policy family	State	Regional	District	Total
Financial incentives	7	0	1	8
Pre-service	1	1	2	4
In-service	6	1	3	10
In-service/mentoring	0	0	9	9
Central systems and support	0	0	2	2
Total	14	2	17	33

Source: Authors' analysis based on data described in the text and appendix A.

Table 2 displays the distribution of profiles by policy family and program level. The bulk of the profiled programs are in-service or in-service/mentoring programs. Of the 10 in-service programs, 2 are state-level alternate certification programs (Maine), 3 are state-mandated induction programs for new teachers (Connecticut, Massachusetts, Vermont), and 5 are regional (multidistrict within a state) and district induction programs. All nine of the in-service/mentoring programs are district-level programs with a heavy mentoring component and are located in rural, suburban, and urban districts.

One goal of the Compendium was to pay special attention to urban and rural districts, where teacher retention is a more pronounced problem. Of the 19 regional or district profiles, 6 were categorized as having been implemented in rural communities, and 8 were categorized as urban (table C3 in appendix C).

Of the eight financial incentives programs, seven are state-level programs that include a mix of minority scholarship or loan forgiveness programs (Connecticut and Vermont), annual stipends to National Board Certified teachers (Massachusetts and Maine), a mortgage assistance program (Connecticut), a scholarship program for career changers (Massachusetts), and a statewide increase in the minimum base salary for teachers (Maine). The one district-level financial incentives program is a privately financed award for excellence in teaching in a rural district in Maine.

The four pre-service programs are all alternate routes to certification at the state, regional, or district levels. The two central systems and supports programs are both at the district level. One is an applicant tracking system in Boston, and the other is a teacher support program in rural Maine.

Participation and target audience. Participation and target audience differentiate between individuals who participate in retention programs and the types of individuals that a program targets. More than half of teachers participating in the retention programs profiled in the Compendium are beginning teachers. This finding seems consistent with the research, which finds that teachers are more prone to depart within the first three years (National Commission on Teaching and America's Future 2003). Likewise, these programs focus on teachers who are beginning their careers—first- and second-year teachers and new to the district teachers. The research also suggests that teachers of color are leaving the field of teaching at a greater rate than their white counterparts, but only two of the profiled programs targeted teachers of color (Plecki et al. 2005). Both (Connecticut and Vermont) were loan reimbursement programs.

More than half (18) of the programs profiled are targeted to beginning teachers—not surprising, in light of the preponderance of induction programs in the sample (table 3). Of the seven programs targeted to mid-career professionals, career changers, and conditionally certified teachers, all are alternate routes to certification programs.

TABLE 3
Target audience by program level of Compendium profiles

Target audience	State	Regional	District	Total
Beginning teachers	4	1	13	18
Mid-career professionals, career changers, and others	2	1	2	5
Conditionally certified teachers	2[a]	0	0	2
Others[b]	6	0	2	8
Total	14	2	17	33

a. Both programs are in-service, alternate routes to certification programs, structured so that teachers can continue teaching while they work on certification.

b. Includes minority college students and teachers, National Board Certified teachers, teachers in hard-to-staff schools or districts, specialists, tenured teachers, and teacher applicants.

Source: Authors' analysis based on data described in text and appendix A.

Seven of the eight programs targeted to others are financial incentives programs directed to a specific population, such as minority college students and teachers (Connecticut and Vermont), National Board Certified teachers (Maine and Massachusetts), teachers in hard-to-staff districts (Connecticut), specialists eligible for the minimum salary adjustment (Maine), and tenured teachers (Maine). The remaining program targeting "others" is an applicant tracking system (Massachusetts).

Participant eligibility requirements and selection criteria. Eligibility requirements and selection criteria generally go hand in hand and differ principally by policy family.

- *Financial incentives programs.* Eligibility requirements and selection criteria are synonymous with the specified target audience (such as minority teachers, National Board Certified teachers, teachers in certain geographic or hard-to-staff areas). For most programs meeting the eligibility requirements precluded the need for any selection process.

- *Pre-service program.* All of these are alternate route to certification programs with eligibility requirements that include a college degree in a certain field, a minimum grade point average, or a minimum score on a qualifying exam. All the programs involve a competitive application process.

- *In-service programs.* Most of the programs profiled are induction programs for beginning teachers, so there are no eligibility requirements other than to be a new teacher, and no additional selection criteria were applied.

- *In-service/mentoring programs.* No eligibility requirements or selection criteria were imposed on mentees. Eligibility requirements for mentors include a minimum number of years of teaching in the district (three or more years) and participation in a mentor training program. Selection criteria included match of grade level or content area with the mentee or some general reference to the "needs of the school."

- *Central systems and supports programs.* No eligibility requirements or selection criteria were imposed.

Target grade level. The majority (28) of the policies and programs are targeted to teachers in all grade levels (K–12). Only five are targeted to middle and high school teachers. Four of these are state and regional alternate route to certification programs, of which three are targeted to mathematics and science teachers. The remaining program is a mentoring program in a rural district in Maine designed to help ease teacher isolation in small schools.

Target content area. The majority (27) of programs are targeted to teachers in all content areas. Three programs—all secondary-level, alternate route to certification programs in Maine and Massachusetts—target mathematics and science teachers along with a mix of teachers in other subjects (including English, foreign languages, English as a second language, and industrial arts). Two state-level in-service programs in Maine and Vermont aim to retain special education teachers in rural districts. One financial incentives program in Connecticut (a mortgage assistance program) targets teachers in specific "certification shortage areas" that include secondary mathematics, science, foreign languages, and English, and a variety of other K–12 subjects, such as remedial reading, bilingual education, or teachers of English to speakers of other languages.

Funding. Annual program costs range from $5,000 to $3 million. A common funding source for several programs is Title IIA grants provided by the U.S. Department of Education. Of the 24 programs that reported on the duration of their funding (for 9 program this information was either not available or not applicable), the majority of them (20) are funded annually, and only four programs had longer term funding commitments of five or more years. Year to year funding commitments suggest uncertain futures for these retention programs, which depend on the continual grant-writing efforts of state or district officials.

All four states have statewide, unfunded policy mandates for induction and mentoring programs at the district level, placing the financial burden on the districts. Among the Connecticut programs profiled in the Compendium, districts spent from $16,000 on 12 participants (approximately $1,333 per participant), on East Windsor Beginning Education Support Training, to $100,000 on 250 participants (approximately $400 per participant), on Bridgeport New Teacher Induction, representing a

significant variation in resources and investments. Massachusetts districts relied on a combination of funding sources, including federal grants and private foundations. The Chittenden program in Vermont is the only program fully funded by participating teachers.

Program assessment approach. Considering that a goal of each program profiled in the Compendium is to increase teacher retention, it is notable that only two programs have an assessment approach that includes tracking either recipients of a financial incentive or program graduates over time. Sixteen programs employ either an informal approach to assessing participant satisfaction or a more systematic evaluation, usually conducted by an external university evaluator. These evaluations appear to focus on the quality of the intervention and current participants' engagement in it, rather than measuring long-term impacts on retention. The remaining 15 programs have no assessment approach in place. It is likely that the data needed to conduct these program evaluations do not exist or are not readily accessible, as the findings of Voorhees, Barnes, and Rothman (2003) would suggest, although it is not possible to be certain.

Partners. Seventeen of the program informants identified program partners, but they did not consistently differentiate between partners and service providers. Informants' responses often reflected their subjective view of the organizations they worked with as much as the nature of those organizations' contributions.

The 17 programs that reported having partnerships with other entities described a variety of arrangements and types of partners. Fourteen programs identified institutions of higher education, and most of these college or university partners functioned in an educational capacity, providing courses and approving licensure. Some also served in an administrative or oversight function. A varied group of other education-related organizations served as partners; 6 of the 17 programs reported arrangements with independent education consulting firms, coalitions, or nonprofit

> **Considering that a goal of each program profiled is to increase teacher retention, it is notable that only two programs have an assessment approach that includes tracking either recipients of a financial incentive or program graduates**

organizations, all of which performed a variety of functions from administration to practitioner coaching. And state departments of education (5) and teacher unions (4) were mentioned as partners that played important roles as funders, advisors, and program overseers. As the numbers suggest, some programs had multiple partners.

Lessons from implementation

Informants' discussion of lessons varied with the nature of the program, but the clearest themes emerged from the comments of informants from in-service and in-service/mentor programs.

In-service programs. Four of the ten in-service program informants commented on lessons, and three mentioned principal and teacher buy-in. The influence of principals on a program's sustainability and outcomes for teachers was clearly articulated. And the challenges faced by one rural district in finding "exemplary" leaders was noted, as was the difficulty in scheduling release time for teachers to facilitate their participation.

In-service/mentor programs. Six of the nine program informants discussed lessons, and chief among them was the importance—and difficulty—of finding time for mentors and mentees to work together. Not surprising, this was particularly difficult for the two rural programs. Another point made frequently was the importance of tailoring the mentor-mentee training to individual needs. Finally, several individuals mentioned the importance of district- and school-level buy-in—among administrators and teachers.

Summary of state contexts and approaches to retention

The individual context of each state provides another lens through which to view the way states, regions, and districts have addressed retention (table 4). An overview of selected demographic data by state provides a sense of the differing contexts, opportunities, and constraints that educators and policymakers in these states confront. The wide variations in numbers of teachers and

students, population, and income put the efforts required to retain teachers into perspective.

Connecticut

The efforts to locate teacher retention policies and programs in Connecticut suggest that, while statewide efforts at retention are not formally centralized, the Bureau of Educator Standards and Certification, Division of Teaching, Learning, and Assessment, Connecticut State Department of Education (which houses the state Title II Teacher Quality Enhancement grant) is the locus of much of the publicly available information on retention. The bureau provides a window to statewide programs and a source of contacts to regional and district efforts. For the programs that were identified retention also appears to come partnered with either recruitment or teacher-quality enhancement.

> **The influence of principals on a program's sustainability and outcomes for teachers was clearly articulated by program informants who commented on in-service programs**

The Bureau of Educator Standards and Certification also houses the state's Beginning Educator Support and Training (BEST) Program, a state-mandated induction program profiled by this project as one of the key retention-related programs in Connecticut. Sources consulted indicate that since this program began in the mid-1980s, other retention strategies have been tried, but none has been particularly successful at the state level. This finding coincides with the research on retention, which suggests that the most effective retention strategies are administrative and support initiatives at the district and school levels that improve the quality of the teaching environment (Guarino, Santibanez, Daley et al. 2004; Ingersoll 2001).

In 2006 the Connecticut State Department of Education convened a steering committee charged with "issuing a comprehensive series of recommendations for consideration by the State Board of Education about how to attract and retain

TABLE 4
Demographic data for the four states covered by the Compendium profiles

Indicator	Connecticut	Maine	Massachusetts	Vermont
Number of students	575,059	195,498	971,909	96,638
Percent American Indian/Alaska Native	0.4	0.5	0.3	0.4
Percent Asian/Pacific Islander	3.6	1.4	4.6	1.6
Percent Black, non-Hispanic	13.7	2.0	8.3	1.5
Percent Hispanic	15.4	0.9	12.9	1.0
Percent White, non-Hispanic	67.0	95.1	72.4	94.7
Percent eligible for free or reduced-price lunch	26.6	33.8	28.2	26.4
Percent English language learner	5.2	1.7	5.3	1.8
Percent with Individualized Education Program	11.6	16.9	15.5	11.3
Number of teachers	39,687	16,684	73,596	8,851
Student–teacher ratio	14.5	11.7	13.2	10.9
Number of schools	1,111	680	1,879	391
Number of households	1,301,670	518,200	2,443,580	240,635
Percent owner occupied	66.8	71.6	61.7	70.6
Percent renter occupied	33.2	28.4	38.3	29.5
Per capita income in 1999 (dollars)	28,766	19,533	25,952	20,625

Source: U.S. Department of Education, National Center for Education Statistics 2000, 2006b.

high-quality educators to Connecticut's public school districts. Such recommendations will address recruitment, preparation, certification, induction, and evaluation, [as well as] ongoing professional development" (Connecticut State Department of Education 2006, p. 1).

Maine

All the state-level policies and programs in Maine that were identified and profiled for the Compendium were initiated in the last two years, suggesting that the state has only recently begun addressing turnover. And while the state Title II office is a center for information and contacts about state-level programs that address teacher retention, it does not appear to have a formal role.

Maine's strong regional support system for its teachers is very involved in teacher retention efforts. This system includes the Regional Teacher Development Centers, cross-district collaboratives

and partnerships, and the University of Maine's system of regional campuses. These regional entities are partners or service providers in many of the profiled programs. In the Maine Alternate Route to Certification program the Regional Teacher Development Center network manages the program; the University of Maine system provides partial funding, teaching faculty, and fiscal management; and the Maine Department of Education provides partial funding and grants certification to participating teachers. In another example, the Washington County New Secondary Teacher's Seminar program, the DownEast Community Learning Alliance's consortium of five rural high schools pools funding and resources to provide mentoring to new secondary teachers in all its member schools.

Massachusetts

The impetus for public policy initiatives to recruit and retain qualified educators in Massachusetts began in 1998 with the Teacher Quality

Enhancement Act, which legislated funding through the Teacher Quality Endowment Fund. Several statewide programs were implemented as a result of these funds, but once the funding was repealed, only two programs survived with funding.

At the state level Massachusetts approaches teacher retention primarily through the induction and mentoring mandate. At the district level the information provided by state experts to project staff conducting this project and the large number of programs identified for and included in the Compendium seem to confirm that many districts are complying with the Massachusetts Department of Education mandate that an orientation and mentoring program be provided for all new teachers.

Vermont

Vermont is primarily a rural state. Its most urbanized city is Burlington, with a population of about 40,000. School-level personnel—principals or teachers—are the contacts for district or supervisory union programs. Support for educators statewide is provided through six funded Educational Service Agencies and the Vermont Higher Education Collaborative for Education Workforce Development. Vermont's rural nature and its decentralized education structure made several potential contacts for the profile project unreachable within the constraints of the project.

Each of the three Vermont profiles included in the Compendium is different and unrelated, again a reflection of the state's decentralization of education resources. The state has a mandated mentoring policy. Funding is provided to the local Vermont chapter of the National Education Association, which provides training to districts that apply for support. Vermont had previously supported teacher retention through a tristate consortium with Maine and New Hampshire. When the National Science Foundation funding for this initiative expired, the programming was supported in part through district efforts. A program to support the retention of special education

teachers was supported through the Vermont Higher Education Collaborative. The third program profile is of a minority diversity program largely based in Burlington that began as a spinoff of an upstate New York project.

LIMITATIONS AND OBSERVATIONS ABOUT THE STUDY

As already mentioned, the study is not intended as an inventory of all that Connecticut, Maine, Massachusetts, and Vermont are doing to reverse teacher turnover trends. Rather, the goal is to provide brief overviews of some of the policies and programs that illustrate the various approaches found in those states. Thus, it would be inappropriate to draw conclusions about the extent of effort that these states and their districts are making to improve retention based on the findings discussed here—nor is it meaningful to do so. Moreover, as brief descriptions, the program profiles do not provide the detail necessary to meaningfully speculate about how well they mirror what the research indicates is effective. In fact, as Allen (2005) suggests, in many cases the research is not strong enough to support such statements about what makes programs effective.

> It would be inappropriate to draw conclusions about the extent of effort that these states and their districts are making to improve retention based on the findings discussed here—nor is it meaningful to do so

It was beyond the scope of this project to independently assess program implementation, quality, or impact. Information on the nature and design of policies and programs and statements about program outcomes came from public web sites, program documents, and program contacts. Furthermore, the scarcity of evaluation data makes any comparison of impact across policies and programs impossible. Having such information would obviously have increased the utility of the individual profiles and of the Compendium.

Nonetheless, these profiles represent the most up to date information that was available at the time each profile was completed during the period between July 2006 and August 2007.

This Compendium represents interventions that states and districts have put in place. It does not include those implemented at the school level. The research shows clearly that school climate and other school-level factors play a major role in teachers' decisions to stay or move on (see appendix A for details). Whether school climate has a greater influence on these decisions than other factors at the district or state level is unknown. In any case, documenting school policies and practices to reverse teacher turnover trends would have changed the scale of this project and added a level of complexity that would have rendered it unachievable with the resources available. Adding examples of such interventions could constitute another project and would certainly make the Compendium more valuable to its users.

> There is an opportunity for practitioners and researchers to study mentoring programs systematically in order to generate more and better evidence of what is working and why, how, for whom, and to what extent

With these study limitations in mind, several observations can be made about the programs included in the Compendium. First, many mentoring programs have been mandated at the state level and implemented at the district level even though the research has yet to discern what aspects of these programs are most powerful. There is an opportunity for practitioners and researchers to study these programs systematically in order to generate more and better evidence of what is working and why, how, for whom, and to what extent.

Second, the assessment approaches in place for these programs are meager at best. Two programs employ a tracking mechanism to observe whether participants stay in their positions over time. The remaining 12 evaluations are either informal or, if more rigorous, focus on annual rather than longitudinal outcomes. There may be good reasons

for this, as many states and local data systems may lack the data structure or capacity to do assessments, as reported by Voorhees, Barnes, and Rothman (2003). The short funding horizon of most programs also works against developing analytical tools. But the fact remains that these are missed learning opportunities that would benefit the programs themselves, the states and districts that rely on them, and the broader education community. In addition to Voorhees, Barnes, and Rothman, other resources that could provide data system and evaluation guidance include Clements (2001) and the Center for Teaching Quality, whose web site contains the *Teaching Quality Data Systems Roadmap.*

Third, solving complex problems in an environment where resources are uncertain and in short supply makes a difficult problem more so. Only 3 of the 33 programs had funding commitments as long as five years, while the rest relied on annual reallocations. The uncertainties associated with unfunded mandates can decrease the effectiveness of programs. Three of the four states had legislation that required districts to fund local efforts. This approach raises the obvious dilemma: districts with the highest poverty levels and the greatest turnover rates also have the fewest resources to address the problem.

The Compendium represents a first phase of what could become a larger and more comprehensive effort. This phase gathered information about four states' and multiple districts' efforts to reduce teacher turnover and organized the information to facilitate its use by others in the field. Possibilities for expansion include adding school-level retention programs, including additional states in the region, creating detailed case studies on the implementation of specific retention programs, and expanding the selection criteria to include other efforts. And the Compendium could serve as a model that, through collaboration with other regional educational laboratories, could be replicated in other areas of the country—thus expanding the body of knowledge and experience and opening it to a broader audience of users.

NOTES

1. The database was developed by Bob Duncan of Software Consulting Alliance, Inc., a small business in Cambridge, Massachusetts.

2. The National Center for Education Statistics' locale codes were used for designations of urbanicity (U.S. Department of Education, National Center for Education Statistics 2006a).

APPENDIX A
METHODOLOGY

This section describes the search for programs at the state, regional, and district levels; details about the policies and programs profiled in the Compendium; and decisions about which programs to include. Searches were designed to identify teacher retention policies and programs and then to collect information about them from publicly available web sites, public documents, and individual contacts, all identified using the protocols described below.

Search protocol—state level

State-level searches were conducted in Connecticut, Maine, Massachusetts, and Vermont to identify teacher retention policies and programs and to anchor the district-level search by providing information about policies that districts may have been implementing. The state-level searches also provided information on district and regional teacher retention activities, aiding the identification and selection of district and regional programs.

Literature reviews and initial exploratory work at the national level identified more than 30 search terms, which were used to begin the state-level investigation (box A1 lists the terms). In addition to searching state department of education web sites, a list of national organizations was also compiled, and their web sites were reviewed to locate national initiatives that have been implemented at the state or local level (table A1 lists these organizations and their web sites). This state-level search was intended to identify all state-level policies and programs that:

- Have the explicit purpose of reducing teacher turnover.

- Have publicly available descriptive information.

- Were in operation or under development between 2002 and 2007 or are under development.

As the search proceeded, it became clear that each state's department of education and associated structures for addressing teacher retention were organized uniquely. To ensure that data were collected from publicly available web sites, public documents, and individual contacts, methods were tailored to each state's environment. Project advisors' guidance was critical for this phase of the work. In addition, team members conferred

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BOX A1

Search terms used to begin the state-level investigation of teacher-retention programs

Teacher OR educator
    retention program

Teacher OR educator retention
    (AND district)

Teacher OR educator turnover
    (AND district)

Teacher OR educator preparation
    (AND district)

Teacher OR educator quality
    (AND district)

Teacher OR educator recognition
    programs (AND district)

Teacher OR educator certification
    (AND district)

Teacher OR educator recruitment
    (AND district)

Teacher OR educator licensure
    (AND district)

Monetary OR financial rewards
    OR incentives OR bonus AND
    teachers (AND district)

Mortgage OR housing OR
    relocation assistance for
    teachers (AND district)

Loan forgiveness OR reimbursement
    AND teachers (AND district)

School assignment OR transfer
    AND teachers (AND district)

Mentoring OR induction AND
    teachers AND district

Massachusetts OR Vermont OR
    Maine OR Connecticut AND
    teacher retention (AND district)

TABLE A1

National organization web sites for district- and regional-level program searches for Compendium profiles

National organization	Web site	Yielded
Alliance for Excellent Education	www.all4ed.org	Nothing
American Association for the Advancement of Science	www.aaas.org	Nothing
Center for the Study of Teaching and Policy	www.depts.washington.edu/ctpmail	Nothing
Center for Teaching Quality	www.teachingquality.org	Nothing
Council of Chief State School Officers	www.ccsso.org	Nothing
Council of the Great City Schools	www.cgcs.org	Nothing
Education Commission of the States	www.ecs.org	Nothing
Education Week	www.edweek.org/ew/index.html	Vermont mandatory mentoring program for all districts; Quality Counts 2006 report on all 50 states' retention policies
Just 4 Kids	www.just4kids.org/en	Nothing
Massachusetts Association of School Committees	www.masc.org	Nothing
Milken Family Foundation	www.mff.org	Nothing
National Association for Bilingual Education	www.nabe.org	Nothing
National Association of Elementary School Principals	www.naesp.org	Must be a member to read articles
National Association of Secondary School Principals	www.principals.org	Nothing
National Association of Special Education Teachers	www.naset.org	Nothing
National Association of State Boards of Education	www.nasbe.org/Standard/index.html	Nothing
National Board for Professional Teaching Standards	www.nbpts.org	Nothing
National Center for Alternative Education	www.teach-now.org/default.cfm	Hartford, Connecticut, Alternate Route to Teacher Certification program and also the Montpelier, Vermont, Peer Review program
National Center for Special Education Personnel	www.personnelcenter.org/aboutus.cfm	Nothing
National Commission on Teaching and America's Future	www.nctaf.org	Nothing
National Comprehensive Center for Teacher Quality	www.tqsource.org/topics/recruitment.asp	Teacher Recruitment and Retention State Policy Database
National Coordination and Dissemination Center to Improve Strategies for the Recruitment and Retention of Qualified Personnel for Children with Disabilities	www.nichcy.org/index.html	Nothing
National Council for the Social Studies	www.ncss.org	Nothing
National Council of Teachers of English	www.ncte.org	Nothing
National Council of Teachers of Mathematics	www.nctm.org	Nothing
National Governors Association	www.nga.org/portal/site/nga	Nothing
National Institute for Excellence in Teaching	www.talentedteachers.org	Nothing
National Rural Education Association	www.nrea.net	No state affiliates for the four states and no search function on site

(CONTINUED)

TABLE A1 (CONTINUED)

National organization web sites for district- and regional-level program searches for Compendium profiles

National organization	Web site	Yielded
National Rural Network	www.nationalruralnetwork.org	Not relevant to education
National Science Teachers Association	www.nsta.org	Nothing
New Teacher Center	www.newteachercenter.org	Bristol and New Britain, Connecticut, districts with retention programs of potential relevance to the Compendium
Northeast Regional Resource Center	www.rrfcnetwork.org/nerrc	Nothing
Public Education Network	www.publiceducation.org	Nothing
Rural Policy Research Institute	www.rupri.org/?flashVersion=6	Nothing
Teacher Quality	www.teacherquality.us/Public/PromisingPractices.asp	Nothing
Urban Superintendents' Association of America	www.usaa.org	No search function on site

Source: Research team's search and information collection for the Compendium project as described in this appendix.

frequently to use consistent search methods across the states and to ensure that policies and programs had the same likelihood of being identified in each state.

Connecticut. Connecticut's State Department of Education web site provided a useful first step in identifying possible state-level policies and programs for investigation. In addition, Connecticut's Title II Project Director, Georgette Nemr, also an advisor to this project, was helpful in describing recent state teacher retention efforts—in identifying contacts for current programs, programs tried and abandoned, and future direction for retention efforts in the state.

Maine. In Maine the project's standard search protocol yielded little information on state-level programs of interest to the project. Barbara Moody, Title II Coordinator for the state and a project advisor, identified appropriate policies and programs. Ms. Moody pointed out two recent documents that described most of the statewide programs that were identified as candidates for the Compendium: the *Maine State Teacher Quality Action Plan 2006–2007* (Maine Department of Education 2007b) and *Maine's State Equity Action Plan 2006–2007* (Maine Department of Education 2007a). In addition, she identified program

contacts who provided further information, contacts, and programs.

Massachusetts. Several publicly available documents illuminated the Massachusetts landscape of teacher retention policies and programs. These documents included a list of fellowships and awards in the Commonwealth, a slide presentation of the state's mentoring and induction policy, and a written evaluation of state-level programs to support teacher recruitment and retention (Massachusetts Department of Education 2003). Through these documents and contacts with state personnel, it became apparent that although Massachusetts had had a number of teacher retention efforts in place earlier in the decade, many of those programs had ceased operation, often because of lack of funding. Several terminated policies and programs no longer met the second criteria of being in place within the last five years.

Vermont. Because so little information on district-level retention policies and programs was available on the state department of education's web site, the search relied heavily on published materials and reports, education consultants, school personnel, education service agencies, and project advisor Nancy Richardson, who provided guidance on which districts to examine. Vermont's context was

unique, and the search required persistence to find, for example, a statewide financial incentives program offered through the American Federation of Teachers rather than the more common state department of education source.

Search protocol—district level

Begun simultaneously with the state-level search in each state, the district-level search continued, as necessary, after a state-level search was concluded. When evidence gathered through state-level searches indicated that policies and programs were implemented by specific districts in the state, those indicators were pursued through searches of those districts' school web sites, local newspapers, local union chapters, and other sources of publicly available information.

Boolean logic was used to group search terms, facilitating the retrieval of documents or links on a web site that were directly applicable to the project or that led to another site with relevant information. In addition, 28 national organizations' web sites were reviewed in an effort to identify national retention initiatives implemented at the local level (see box A2). Few of these efforts yielded direct links to district-level programs with a teacher-retention component that was located in one of the Compendium states. More often, search strategies for regional- and district-level programs were based on each state's unique context and the nature and extent of its retention initiatives.

For example, in Massachusetts, a state policy mandating that all districts with 100 percent highly qualified teachers must provide mentoring programs aided the identification of these targeted districts. These districts were then systematically searched to identify those with retention-related policies or programs. When a state had enacted a policy requiring district-level implementation, the state policy was profiled, and then selected district-level programs were also profiled (how programs were selected is covered below under selection criteria). The intention was to capture

the basic policy requirements as well as a range of implementation approaches.

The following paragraphs describe the application of the search protocols at the district level.

Connecticut. It was more difficult to identify district-level programs than state-level programs using the search protocols, web sites, and project advisors' guidance. All of Connecticut's district programs profiled in the Compendium are variations in implementation of the state-level Beginning Educator Support and Training (BEST) program. Because providing and supporting the BEST program were mandatory for all districts, it was difficult to find district-level programs that were uniquely implemented. As a result, the state liaison recommended districts that demonstrated how the BEST program is typically implemented.

Maine. At the district level the search protocols (see box A1 and table A1) for each web site yielded only a handful of useful information items. As with identifying state-level programs of interest, Maine contacts proved to be most helpful in directing the research team to regional partnerships and programs as well as district-level programs. It became clear that Maine has a unique approach among the states included in this project to supporting schools and districts that are spread out across a predominantly rural state. Districts have created regional partnerships with other districts and shared resources in order to do so.

Massachusetts. In addition to the standard search protocol, identifying district-level programs in Massachusetts also relied heavily on referrals, in large districts as well as small. District informants were identified by contacting education collaboratives, higher education institutions, and urban districts. In addition, a Google search using the Boolean logic terms mentioned earlier for Massachusetts yielded several reports that included various district- and regional-level programs. While not all programs mentioned in these reports fit the study's criteria for inclusion, these reports (see Massachusetts program profiles for resources

BOX A2

National organizations consulted as part of the search protocol

Websites of the following organizations were reviewed in an effort to identify national retention initiatives implemented at the local level:

- American Association for the Advancement of Science (www.aaas.org)

- Center for the Study of Teaching and Policy (www.depts.washington.edu/ctpmail)

- Center for Teaching Quality (www.teachingquality.org)

- Council of Chief State School Officers (www.ccsso.org)

- Council of the Great City Schools (www.cgcs.org)

- Education Commission of the States (www.ecs.org)

- Just 4 Kids (www.just4kids.org/en)

- National Association for Bilingual Education (www.nabe.org)

- National Association of Elementary School Principals (www.naesp.org)

- National Association of Secondary School Principals (www.principals.org/)

- National Association of Special Education Teachers (www.naset.org)

- National Association of State Boards of Education (www.nasbe.org/Standard/index.html)

- National Center for Special Education Personnel (www.personnelcenter.org/aboutus.cfm)

- National Commission on Teaching and America's Future (www.nctaf.org)

- The National Coordination and Dissemination Center to Improve Strategies for the Recruitment and Retention of Qualified Personnel for Children with Disabilities (www.nichcy.org/index.html)

- National Council for the Social Studies (www.ncss.org)

- National Council of Teachers of English (www.ncte.org)

- National Council of Teachers of Mathematics (www.nctm.org)

- National Governors Association (www.nga.org/portal/site/nga)

- Northeast Regional Resource Center (http://www.rrfcnetwork.org/nerrc)

- National Rural Education Association (www.nrea.net)

- National Rural Network (www.nationalruralnetwork.org)

- National Science Teachers Association (www.nsta.org)

- The New Teachers Center (www.newteachercenter.org)

- Public Education Network (www.publiceducation.org)

- Rural Policy Research Institute (www.rupri.org)

- Teacher Retention Portal (http://teacherretention.edreform.net/)

- Urban Superintendents' Association of America (www.usaa.org)

used) were a starting point for further investigation, which eventually yielded a regional-level program (TEACH! SouthCoast) and two district-level programs profiled in the Compendium (Worcester Beginning Teacher Support and Lawrence Mentor/Peer Assistance).

Vermont. Publicly available information in Vermont that was relevant to this project was difficult to navigate and yielded little information. Written documents provided individual contacts that helped locate programs implemented at the district level. It was typical in Vermont to find district program coordinators who also had responsibilities at the

school level, which meant that they were often difficult to contact. Because of the lack of information available on the web about the landscape of Vermont's attempts to reduce teacher turnover, the number of programs that could be identified and subsequently profiled without significant help from regional- and district-level personnel was limited.

Challenges associated with search procedures

As the overviews and details of the search process suggest, publicly available information did not suffice, and the most valuable resources for identifying and providing information on state and

district retention initiatives were people. Often, these were the people listed as contacts on program web sites. More often, however, these were people identified by contacts who shared their contacts. The project advisors were a particularly important source of information about specific programs, and they were invaluable in linking the Compendium project to potential programs and contacts in their states.

The search process did not progress from the state to the regional to the district levels, nor did project staff complete one profile and then move on to the next. Rather, the process was cyclical. As information was gathered and more was learned about particular policies or programs, some programs initially appearing to meet the criteria no longer did. Or as the search moved from the state to the district level, new state-level programs were discovered that warranted inclusion.

Additionally, the number and variety of potential programs were occasionally constrained by the

selection criteria, which are described below, or by the policies themselves. For example, state and district web sites varied greatly in the information they provided, and with so little publicly available information, reliance on individuals to locate programs and provide information increased. A lack of response from program contacts to project staff queries was also problematic. As in the state-level searches, the district-level search protocols were also modified within each state.

During the search and information collection process, 41 people provided information that is included in Compendium profiles (table A2). The information collected from them falls within the fields identified in the profile templates; an example is included in table C2 in appendix C.

Selection criteria

Selection criteria were applied to the policies and programs identified through the search process. Since the Compendium is intended to serve

TABLE A2
Number of staff providing information included in Compendium profiles, by position, state, region, and district

Staff position	State	Region	District	Total
Director, professional development	1		3	4
Director, new teacher programs	3		2	5
Director, finance	1		1	2
Director, curriculum			3	3
Director, communications	1			1
Associate commissioner	1			1
Staff, human resources division			2	2
Coordinator, Title IIA	2			2
Director, teacher division	1			1
Program director	1	3	4	8
Assistant superintendent			1	1
Program assistant			2	2
Principal			1	1
Staff, grants division	1			1
Officer, teachers union			1	1
Other	3		3	6
Total	15	3	23	41

Source: Research team's search and information collection for the Compendium project as described in this appendix.

decisionmakers as a learning tool, programs were sought that would offer learning opportunities. The selection criteria, outlined below, are intended to screen for useful examples of retention programs.

To be included in the Compendium, retention policies and programs must meet the following criteria:

- *Show evidence of the explicit goal of reducing teacher turnover (in the state, region, or district).* Evidence most often came in the form of information provided by staff through telephone interviews or in written documents or web sites.

  The literature on logic models and evaluation theory points to the relationship between explicit program goals and program design: when goals have been articulated, program design is more likely to reflect them (Rossi, Lipsy, and Freeman 2004; Blake 2000; Renger 2006; and Israel 2001). Financial incentives, pre-service and in-service programs, and central systems and supports may have many outcomes. To ensure that retention was a purposeful outcome the team sought programs where the goal of retention could be articulated by those closest to the programs' design and operation.

- *Have been in place within the last five years or under development.* The policy context in education has undergone significant changes since the No Child Left Behind (NCLB) Act has been in place. The team sought programs that Compendium users can learn from: those that are more likely to be viable in the current environment or are under development and thus may offer models of new or unique approaches.

- *Provide at least some program information through public forums, such as the web, newspapers, and journals.* Without relying solely on publicly available information to

identify programs and provide program information, the team sought to triangulate the information that was collected to ensure that the profiles represented the most accurate descriptions possible.

- *Illustrate variations in approaches that can be found across the region.* In states that had mandated that districts implement a particular type of retention program, it was necessary to make choices about which district-level programs to profile. The intention was to create a state-level profile that described the state's directive and to select district programs that would demonstrate how districts had adapted their design. Project advisors and other experts contacted by project staff with the knowledge and expertise about retention programs in their state were relied on to provide guidance in these cases.

The criteria below were devised to guide program selection in cases where there were enough similar policies or programs that met these criteria that choices could be made about which to be profiled. These criteria represent the priorities of the project:

- Highlight rural and urban districts.

- Highlight high- and low-poverty districts.

- Highlight strategies aimed at high-turnover disciplines (such as science, mathematics, and special education).

Completed profiles were reviewed for accuracy by the primary program contact, whose permission was also sought to include contact information with the profile. Of the 33 profiles, 3 were included in the Compendium without a contact person's review, approval, or contact information: the Chittenden Central Supervisory Union Teacher Apprentice Program in Vermont, the New Bedford Induction/Mentoring Program in Massachusetts, and the Portland Strengthening and Sustaining Teachers Mentoring Program in Maine. For each

there was considerable publicly available information from multiple sources so that the project team had a high level of confidence in its accuracy. This difference is noted in a footnote to these profiles so that Compendium users are aware of this shortcoming.

The intention was to use the selection criteria to achieve as much variation along these dimensions as possible. The goal for the Compendium was to profile 35–50 policies or programs. In the end the selection criteria winnowed the total number of policies and programs profiled to 33 and resulted in less than the hoped-for amount of variation. No program was excluded from the Compendium because it was redundant. Table A3 displays the number of policies and programs that were identified as potentially appropriate but were not included in the Compendium, along with the reasons for exclusion.

The most limiting criterion was the stipulation that policies and programs have increasing teacher retention as an explicit goal. The experiences in gathering information from program contacts bore out its validity. The team did not assume, for example, that every district mentoring program in

TABLE A3

Policies or programs that did not meet selection or other criteria for inclusion in the Compendium

Criterion	Number of programs
Selection criteria	
Not explicitly about retention	20
About retention, but not retention within district, region, or state	9
Was not in place within last five years or not under development	1
Other criteria	
No response from program contacts/not enough information	18
Other	1
Total	**49**

Source: Research team's search and information collection for the Compendium project as described in this appendix.

Massachusetts, where mentoring programs were mandated by the state, had retention as an explicit goal. Instead, evidence was gathered as it was for other programs. And while most mentoring programs did have retention as an explicit goal, not all did.

The second most frequent reason for not including profiles was no response from program contacts to project staff inquiries or not enough program information. The issues of lack of publicly available information, not enough program information overall, and nonresponse were difficult to tease apart. Where publicly available information was limited or not easily found, the project team relied more on program experts. Where program experts were available, the team relied less heavily on public information. The expectation remained, however, that multiple sources of information were required to verify the information included in each profile. The search protocol called for staff to make at least three attempts to reach each program contact, either by telephone or email. Often, many more attempts were made, but on many occasions program contacts were ultimately determined to be unreachable.

Finally, since the selection criteria do not include any measures of quality, degree of implementation, or degree of impact, it is likely that the policies and programs included in the Compendium vary along each of these dimensions. Moreover, the selection criteria do not imply any measure of endorsement of the policies and programs, and users of the Compendium should not draw any conclusions regarding the programs' standing in the field.

Development of profile templates

To represent retention programs consistently in the Compendium profiles, the research team created templates that contained the categories of information that would be included. Development of the templates was an iterative process that took place over many months. In consultation with the project advisors, the research team identified the

types of information that would be useful to Compendium users and feasible to collect. The goal was to provide profiles that gave an overview of the retention program—what it did, how it functioned, what lessons were learned during its implementation, information about the context in which the program functioned, and contact information so that users could reach program experts directly to learn more about the program.

Weekly team meetings were held to ensure that the templates were used to capture information at a consistent level of specificity and were applied consistently in the field. The templates also served as the foundation for the database design. They were reexamined during the final phases of the project as the database was developed and data were prepared to be uploaded.

Initially, eight templates were drafted: one for each state- and district-level program in each policy family. As the search progressed, the templates were revised based on experience in the field and guidance from advisors. Templates were tailored to the specific program level and the policy family. A third type of template was added to accommodate regional programs within states that were encountered. Finally, a template was created for the subcategory of in-service/mentor programs. Altogether 13 templates were designed; an example is included in appendix C.

Summary of data collection activities

The profile templates served as a guide for researchers as they compiled information on each program from the 29 documents, 134 web sites, and 49 program contacts consulted for the Compendium. Researchers contacted individuals by email; sample letters are shown in appendix B. As profiles were completed, they were sent to the primary program contact for review and verification that the information was accurate. Written permission to include the program profile in the Compendium, along with the primary program contact's name and email address was obtained from all contacts.

APPENDIX B
SAMPLE LETTERS TO POTENTIAL CONTACTS

Sample one: introductory letter

Hello Mr./Ms. xxx,

How are you? I received your contact information from [. . .]. I was speaking with xx about induction and mentoring programs in [state] and she mentioned the work that you're doing in your district. I'd love to learn more and here's why . . .

I am working on a project (described below) to identify and describe policies and programs aimed at reducing teacher turnover in Massachusetts. Our initial source of information has been state department of education web sites. Now we're talking with state and district officials to learn more about specific programs. Would you have time to speak by phone on Wednesday [date] or Thursday [date], by chance?

[the project, in brief]:

The Northeast and Islands Regional Education Lab (REL-NEI), funded by the U.S. Department of Education, is developing a compendium of teacher retention strategies in our region. We are focusing our efforts on policies and programs that have been implemented in the last five years to reduce teacher turnover rates at the state and district levels in Connecticut, Maine, Massachusetts, and Vermont. Although high teacher turnover is a recognized issue, there are few tools available to assist and inform decision makers with reversing these trends. The purpose of the compendium is three-fold:

- Document teacher retention policies and programs that have been implemented in the region;

- Increase awareness of the variety of responses to turnover that states and districts in the region have put into practice; and

- Support communication across states and districts around strategies to address teacher turnover.

Thanks again for your time,

Researcher

Sample two: approval letter

Hello (name),

I hope all is well with you.

Thanks again for speaking with me about the teacher retention strategies in your district several weeks ago. I appreciate your time and willingness to share information about all the work that's going on there.

I have attached, for your review, a draft profile of your [name] program based on our conversation. We would very much appreciate your review of the *accuracy* of the information here and, if possible, the *addition* of missing information where indicated (yellow highlights). We will be completing this project by the beginning of August, and will need confirmation from you that the information is accurate by [date]. Note that we have listed you as the contact person, should the reader want to learn more about the program. If you are not comfortable being listed as the contact person, can you please let me know?

Please note that this draft is in an Excel format, which has provided a convenient format for us to describe programs but is NOT the form in which it will appear in our final product. Our final product will be a *searchable database* of state and district level policies and programs geared toward teacher retention. The purpose of this database is to document programs in the New England region, increase awareness of various responses to teacher turnover, and support communication across states about these strategies. We're very excited to release this database and will let you know as soon as it's "live."

Thank you very much for your help with this project! We look forward to hearing from you by [date] with your suggested changes and/or additions, and if you have any questions or concerns, please let me know.

Sincerely,

Researcher

**APPENDIX C
USERS GUIDE FOR READING AND
NAVIGATING THE COMPENDIUM**

A user guide to the *Compendium of Strategies to Reduce Teacher Turnover in the Northeast and Islands Region* database, this appendix is intended to help users navigate the Compendium. Users can search the database using various filters, including state, per-participant cost, target grade level, urbanicity (size of city or town served), program level (district, regional, or statewide), policy family (central systems and supports, financial, inservice,

inservice mentoring, preservice supports), target audience (for example, beginning teachers, college graduates, conditionally certified, mid-career professionals), target content area, and program type (nature of incentive or support). The Compendium also includes contact information so that decisionmakers can contact program leaders directly for additional information or with questions about teacher attrition in their own contexts. This appendix describes how to log in to, search, and view profiles in the database, as well as clarifies how information for profiles varies.

Logging in to the database

Users can access the database online at http://www2.edc.org/relnei/teacherdb. No passwords are needed. The search page displayed in figure C1 is the first page to appear.

FIGURE C1
Compendium opening search page

Search REL

Text Search

Type in one or more words and press search:

[ ] [Search]

Keyword Search

Narrow your search down by selecting multiple keywords from the list below:

States

- [ ] Connecticut
- [ ] Maine
- [ ] Massachusetts
- [ ] Vermont

Per-participant Cost

- [ ] $0 - $199
- [ ] $200 - $399
- [ ] $400 - $599 *
- [ ] $600 - $799 *
- [ ] $800 - $999
- [ ] $1,000 - $1,499
- [ ] $1,500 - $2,999
- [ ] > $3,000

Grade Level

Target Audience

- [ ] Beginning teachers
- [ ] College graduates
- [ ] College seniors
- [ ] Conditionally certified
- [ ] Mid-career professionals
- [ ] Minority students in post-secondary teacher preparation programs
- [ ] National Board-certified teachers
- [ ] New to district teachers
- [ ] Racially and ethnically diverse students in post-secondary teacher preparatory programs
- [ ] Recent college graduates
- [ ] Teacher applicants *
- [ ] Teachers
- [ ] Tenured teachers
- [ ] None
- [ ] Other

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* Term has no associated profile.

Searching the database

Users can search the database in two ways:

1. Enter text into the search box at the top of the opening page.
2. Select one or more keywords that appear in one or more specific search categories.

These categories appear in table C1, along with all or a sample of related search terms.

Search terms with an asterisk (*) have no associated profiles.

TABLE C1

Compendium search categories and related search terms

Category	Related search terms
States	Connecticut Maine Massachusetts Vermont (All of the terms in this category)
Per-participant cost	$0–$199 $200–$399 $400–$599 (3 of the 8 terms in this category)
Target grade level	Elementary school Middle school High school Pre-K None Other (All of the terms in this category)
Urbanicity	Large city Large town Mid-size city (3 of the 9 terms in this category)
Program level	District-level Regional-level State-level (All of the terms in this category)
Policy family	Central systems and supports Financial Inservice Inservice mentor Preservice (All of the terms in this category)
Target audience	Beginning teachers College graduates Conditionally certified Mid-career professionals (4 of the 15 terms in this category)
Target content area	English Science Mathematics (3 of the 18 terms in this category)
Program type	Alternate route to certification Mortgage assistance Teacher supports (3 of the 10 terms in this category)

Source: Authors' compilation based on the Compendium database.

Once users have entered the search terms, a screen with the names of the retrieved profiles will appear (figure C2).

FIGURE C2
Display of retrieved profiles

Search Results

Your search returned the following results:

- Boston New Teacher Development Program
- Brookline Teachers Mentoring Teachers program
- Lawrence Mentor/Peer Assistance Program
- Lowell Teacher Academy
- Massachusetts Induction Policy
- New Bedford Induction/Mentoring program
- Special Educator Induction Support (SEIS) Program
- Vermont Educator Mentoring Policy
- Worcester Beginning Teacher Support Program

Not find what you were looking for? Try again.

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Viewing profiles

Clicking on a profile will bring up the profile summary (figure C3). Clicking on the PDF icon in the lower left corner of the profile summary will open the full profile.

FIGURE C3
Display of profile summary

Brookline Teachers Mentoring Teachers program

Program Goals: To support beginning and new-to-district teachers during their first two to three years in the public schools of Brookline so that they remain in the district.

State: MA

Program Level: District

Policy Family: Inservice Mentor

Program Type: Induction

Per-Participant Costs: n/a

Urbanicity Level: Urban fringe of large city

Grade Levels: None

Target Audience: Beginning teachers

Target Content Areas: None

View full report

PDF - 3 pages - 21kb

Back to search results.

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Profile information

The information for each profile varies slightly by policy family. For example, only profiles of mentoring programs contain information about the roles and commitments of mentors and mentees. Table C2 displays the sections that are included in all profiles, regardless of family; the fields contained within each section; and a brief description of each field. Some fields are self-explanatory; those are left blank in the description column. Table C3 lists the 33 profiles by their policy family, and table C4 breaks up these profiles by state.

TABLE C2
Profile sections, fields, and descriptions

Item	Description
Policy overview	
Program name	Name of program
State	State where program resides
Goal(s) of this policy/program	Brief statement of program goals
Program description	Brief description of the program
2006/07 school year participation	
Unit of participation	The entity that a policy or program is intended to serve (individual teachers, a district, a region, or a state)
Number of participants	
Note	Other relevant information as appropriate
2006/07 school year program costs	
Source(s) of funding	
Total amount of funding	
Duration of funding	From the initiation of program to conclusion of funding
Per-participant cost	Total funding divided by total number of participants
Note	Other relevant information
Program design	
Type of program	Specific type of program within a policy family
Authoritative body	Entity with governing control over the program
Date policy/program established	
Date policy/program expires	
Target audience	Audience the program aims to retain
Target grade level	Grade level in which target audience teaches
Target content area	Content that target audience teaches
Comment	Additional information from program experts
Summary of implementation process	Brief description of how the program was put in place
Lessons learned from implementation	Brief description of what program experts learned from their implementation experience
Program assessment approach	Approach to evaluating the impact of the program
Partner institution(s)	Name(s) of collaborating institutions
Role of partner institution(s)	Description of the role(s) of collaborating institutions
Service provider(s)	Organizations providing services to participants through the program
Role of service provider(s)	Description of the service(s) provided
Note	Other relevant information

(CONTINUED)

TABLE C2 (CONTINUED)
Profile sections, fields, and descriptions

Item	Description
District descriptive information	
Name of district	
Total number of schools	
Number of elementary schools	
Number of middle schools	
Number of K–8 schools	
Number of K–9 schools	
Number of K–12 schools	
Number of high schools	
Level of urbanicity	Designation reflecting how the district is situated relative to populous areas, as determined by the U.S. Census
Number of teachers	
Note	Other relevant information
Student-level information	
Number of students	
Percentage of White (non-Hispanic)	
Percentage of Black (non-Hispanic)	
Percentage of Hispanic or Latino	
Percentage of Asian	
Percentage of American Indian or Alaska Native	
Percentage of Hawaiian or Pacific Islander	
Percentage of other	
Percentage of low-income students	
Note	Other relevant information
Data and contact information	
Data sources	All data sources are listed and numbered; the numbers will vary across profiles
1.	
2.	
3.	
Contact information	Name and email address of primary source of program information
Date of profile completion	Date when information was confirmed to be accurate

Note: n/av = not available; n/a = not applicable.

This Compendium is the first phase of what could become a more comprehensive effort. It is not a complete inventory of all teacher retention–related programs and policies in the Northeast and Islands Region but a sample of the range and variety of interventions that have been implemented. Inclusion in the Compendium did not require any measure of quality, implementation level, or impact, and so it should be assumed that the policies and programs vary along these dimensions. Moreover, the selection criteria do not imply any measure of endorsement by project staff or the Regional Educational Laboratory Northeast and Islands, and therefore users should not draw conclusions about any program's merit or standing in the field.

TABLE C3
Profiles by state, level, and policy family

Profile	State	Level	Family
Alternate Route to Certification	Connecticut	State	Pre-service program
Beginning Educator Support and Training	Connecticut	State	In-service program
Boston Applicant Tracking System	Massachusetts	District	Central systems and supports
Boston New Teacher Development	Massachusetts	District	In-service/mentoring program
Boston Teacher Residency	Massachusetts	District	Pre-service program
Bridgeport New Teacher Induction	Connecticut	District	In-service program
Brookline Teachers Mentoring Teachers	Massachusetts	District	In-service/mentoring program
Chittenden Central Teacher Apprentice Program	Vermont	District	Pre-service program
East Windsor Beginning Education Support Training (BEST)	Connecticut	District	In-service program
Fairfield Level 1 Induction	Connecticut	District	In-service program
Lawrence Mentor/Peer Assistance	Massachusetts	District	In-service/mentoring program
Lowell Teacher Academy	Massachusetts	District	In-service/mentoring program
Maine Alternate Route to Certification	Maine	State	In-service program
Maine Special Education Alternative Route to Certification	Maine	State	In-service program
Maranacook Peer Mentoring	Maine	District	In-service/mentoring program
Massachusetts Initiative for New Teachers	Massachusetts	State	Financial
Massachusetts Master Teacher	Massachusetts	State	Financial
Massachusetts Teacher Induction	Massachusetts	State	In-service program
Minimum Teacher Salary	Maine	State	Financial
Minority Teacher Incentive Grant	Connecticut	State	Financial
MSAD 22 Teacher Mentoring	Maine	District	In-service/mentoring program
NBC Salary Supplement	Maine	State	Financial
New Bedford Induction/Mentoring	Massachusetts	District	In-service/mentoring program
Patience Norman Prize	Maine	District	Financial
Portland Strengthening and Sustaining Teachers	Maine	District	In-service/mentoring program
Special Education Induction Support (SEIS)	Vermont	State	In-service program
TEACH! SouthCoast	Massachusetts	Regional	Pre-service program
Teachers Mortgage Assistance	Connecticut	State	Financial
Union 98 New Teacher Leader	Maine	District	Central systems and supports
Vermont Educator Mentoring	Vermont	State	In-service program
Vermont Teacher Diversity Scholarship	Vermont	State	Financial
Washington County New Teacher's Seminar	Maine	Regional	In-service program
Worcester Beginning Teacher Support	Massachusetts	District	In-service/mentoring program

Source: Research team's search and information collection for the Compendium project as described in appendix A.

TABLE C4
Regional and district profiles, by state

State	Profile
Connecticut	Bridgeport New Teacher Induction Program East Windsor Beginning Educator Support Training (BEST) Program Fairfield Level 1 Induction Program
Maine	MSAD 22 Teacher Mentoring Program Patience Norman Prize for Teacher Excellence Peer Mentoring, Maranacook Area Schools Portland Strengthening and Sustaining Teachers (SST) Mentoring Program Union 98 New Teacher Leader Program Washington County Secondary New Teachers Seminar
Massachusetts	Boston Applicant Tracking System Boston New Teacher Development Program Boston Teacher Residency Program Lawrence Mentor/Peer Assistance Program Lowell Teacher Academy New Bedford Mentoring Program TEACH! SouthCoast Teachers Mentoring Teachers, Brookline Worcester Beginning Teacher Support Program
Vermont	Chittenden Central Supervisory Union Teacher Apprentice Program

Source: Research team's search and information collection for the Compendium project as described in appendix A.

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