APPENDIX C3:
Statewide Assessment Research Methodology

As mandated in the Act Relative to Children's Mental Health (M.G.L. 321, Section 19), a Task Force on Behavioral Health and Public Schools was created to build a Framework to promote collaborative services and supportive school environments for children, to develop and pilot an Assessment Tool based on the Framework to measure schools' capacity to address children's behavioral health needs, to make recommendations for using the Assessment Tool to carry out a statewide assessment of schools' capacity, and to make recommendations for improving the capacity of schools to implement the Framework.

In December 2009, an Interim report was submitted to the legislation that (i) described the Framework; (ii) explained the Assessment Tool and the results of its pilot use; and (iii) proposed methods of using the Assessment Tool to assess statewide capacity of schools to promote collaborative services and supportive school environments. This self-report pilot Assessment Tool was designed to assist schools as they examine their current practices to support students' behavioral health at all intervention levels, ranging from prevention efforts for the whole school community to intensive supports for individual students. This pilot Assessment Tool served as the foundation for the statewide assessment. The findings from this statewide assessment are included in the Main Report document in Section II – Statewide Findings. This Appendix C3 includes supplementary information, such as the selection and recruitment of schools, data collection and analysis procedures, statistical properties of the Assessment Tool, and assessment findings.

Background Information and Procedures

In the pilot stage, 15 school districts completed the Assessment Tool and provided feedback and suggestions for improvement. These findings were reported in the *Interim Report to the Legislature: The Behavioral Health and Public Schools Task Force.* For the statewide assessment, the Assessment Tool was enhanced by formatting it into a web-based tool. Webinar sessions and technical assistance were offered to schools as they completed the survey. The tool itself was modified to reduce redundancy and clarify items, which brought the number of questions down from 122 items to 98 items. It was also re-designed to help schools identify areas where schools needed additional guidance and strategies that could enhance behavioral health services by creating an action plan upon completion.

For the statewide assessment, 20% of the Commonwealth's school districts were targeted to obtain a stratified sample based on geography, school type,

school size, income level, and achievement levels using Student Information Management System (SIMS) data. Roughly 100 schools were asked to participate and, in total, data were gathered from 24 school districts. The schools completed varying amounts of the tool, with 70% of the school completing more than 70% of the items.

Given the wealth of information gathered in both the pilot and statewide assessments, there was an attempt to determine if the data from both trials could be consolidated. The two versions of the Assessment Tools were independently compared by one doctoral-level researcher and two graduate assistants. Basing the comparison on the 98-items of the statewide Assessment Tool, the three raters had 100% agreement on 81-items at the first review. The remaining 17-items were re-examined until all reviewers agreed. The samples were compared and overall the findings from the two samples were similar (i.e. professional development was identified as the domain with weakest implementation and academic and non-academic supports was the domain with the greatest implementation). Moreover, no statistically significant differences were found between the means of the six domains. Thus, it was determined to be a valid use of both samples to consolidate the data. This also made the data more robust and strengthened the statistical properties of the Assessment Tool. Henceforth, the information will include the data and findings from the combined samples.

Participating Schools

The 39 school districts that completed the Assessment Tool represented 10 of the 11 counties in the Commonwealth (see Figure 1). Participating schools were primarily comprised of elementary schools (36%) and high schools (34%), with remaining participants being K-8 (16%), middle school (8%), K-12 (3%), or early childhood centers (3%). The sample of schools was relatively reflective of the composition and demographics of schools throughout the Commonwealth (e.g., attendance rates, suspension rates, limited English proficiency, low income, etc.). The majority of participating schools were part of public districts (31), with 6 Charter Schools, and 2 Vo-Tech High Schools.

Each site identified a primary contact/coordinator as well as team members assisting with the Assessment Tool's completion. The majority (60%) of respondents identified the school administrator as the professional primarily responsible for the completion of the tool. School support administrators and personnel (e.g., Head of Guidance, school psychologists, school adjustment counselors, and school nurses) were the primary contact in 25% of the schools, with the remaining schools identifying a district administrator (14%). Almost every team included a school-based mental health professional (e.g., school psychologist, school adjustment counselor/ social worker, and/or guidance counselor) and the majority of teams included an educator (general or special

education teacher – 70%). School nurses were members of the team in 40% of the respondents, and 11% of the teams included parents/family members.

Materials

The statewide Assessment Tool was comprised of 98-items that examined the current level of implementation and priority for future action within the six areas of the Framework. Implementation levels were scored based on the school's current practices based on a 4-point scale. The responses ranged from 'To some extent' – 1, "To a moderate extent" – 2, "To a great extent" – 3, and 'A fully implemented way' – 4. Thus, higher scores represented more skilled and consistent implementation of strategies. Respondents also indicated their priority for future action on the strategies with the options to either sustain -1, or increase/enhance -2 their efforts. With each item, schools could also indicate specific areas where they would like additional guidance and support.

The statistical properties of the Assessment Tool were examined for reliability and consistency. As expected, there was an inverse and significant correlation between the level of implementation and the priority for action (see Figure 2). In other words, the more frequently the action step was implemented, the less it was a priority to address it. The opposite was also true in that the less frequently the item was implemented, the higher a priority it was for action.

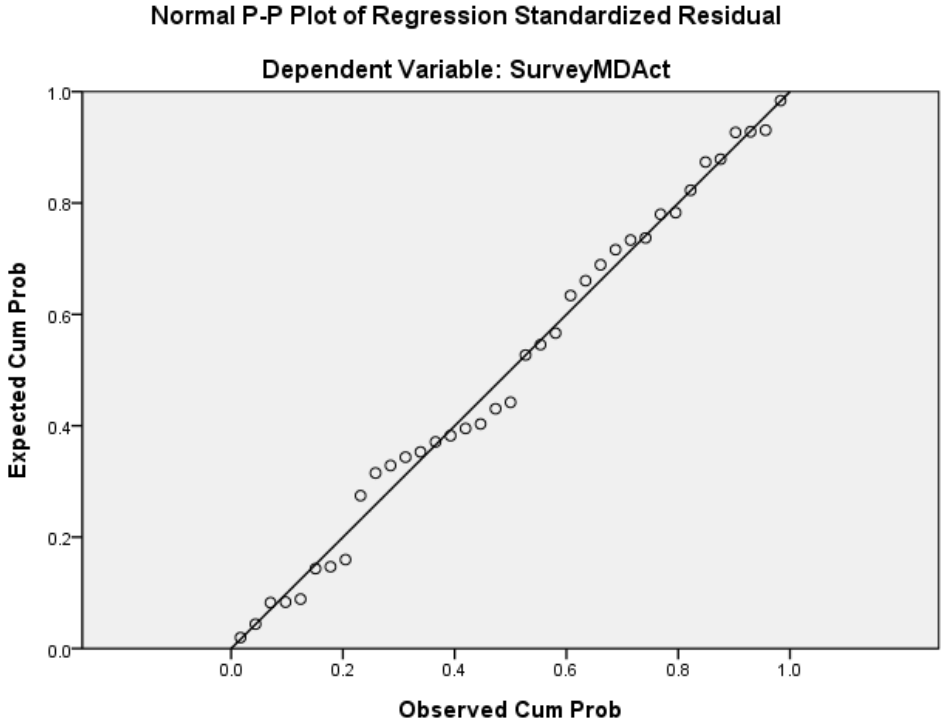

Figure 2. Correlation between Implementation and Priority of Action for Survey

The internal consistency reliability coefficient (Cronbach's alpha) was calculated to ascertain the degree to which the items in each section correlated with one another, or measured the same construct. Generally a cut-off of .80 is required for a "good scale", and all of the six domains demonstrated a level of reliability that exceeds this standard. The reliability coefficients were as follows:

- Leadership .87
- Professional Development .97
- Access to Resources and Services .92
- Academic and Non-academic Supports .92
- Policies and Procedures .92
- Collaboration with Families .93

Review of the Assessment Findings

Using all 39 school respondents, the average implementation of each strategy was calculated in addition to calculating the mean for each of the six domains. These findings are reviewed by domain – first, exploring the level of implementation and, second, examining the items and desire to increase or enhance work in the particular strategy. These findings are presented in Figure 3 with detailed information listed in Tables 1 and 2.

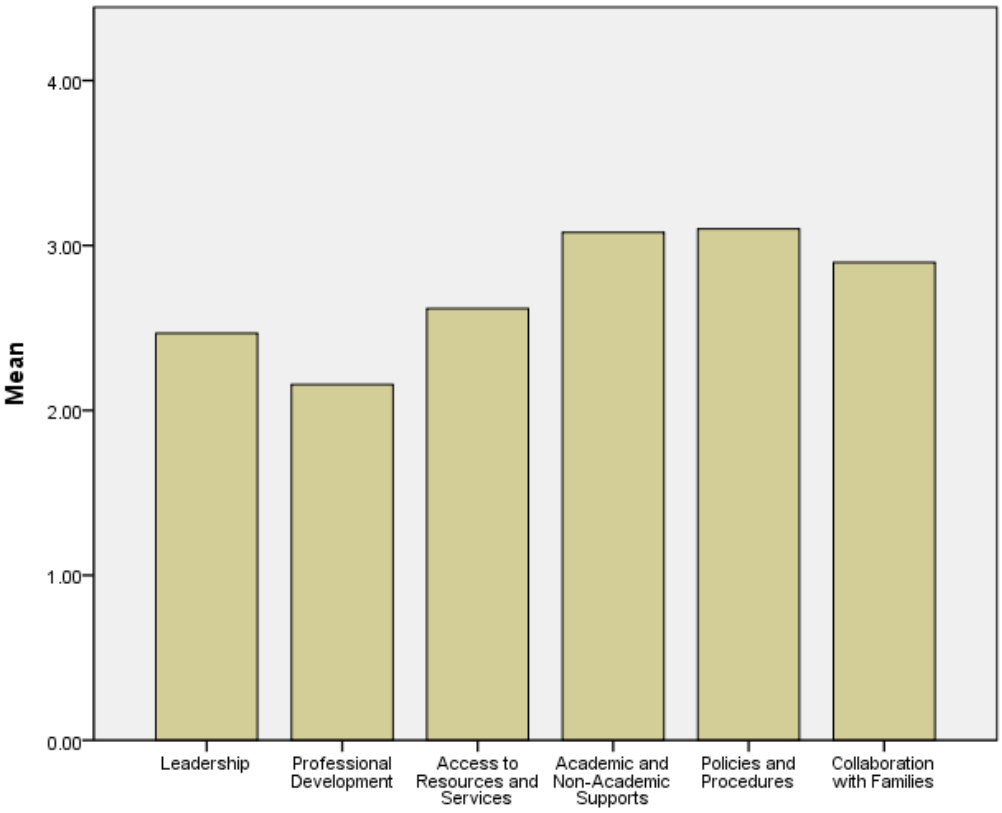

Figure 3. Average Implementation of Behavioral Health Strategies by Domain (range 1 to 4).

Leadership: *Leadership* is demonstrated by school and district administrators creating supportive school environments and promoting collaborative services in the interest of students' behavioral health. Overall, schools reported that leadership strategies to address behavioral health needs at the school and district-levels were "moderately" implemented (2.49). This area was also identified as being in great need for future action and priority (1.65), as the majority of respondents indicated a priority to increase or enhance their action on 90% of the strategies.

Respondents indicated that school leaders provide the vision for implementing effective strategies to build student's strengths and promote school success. However, there is a great need for the school leaders to develop professional development plans that increase the skills of the school staff in promoting behavioral health as well as their involvement in behavioral health policies and protocols connected to supporting students with behavioral health needs. High priority for future action included the development of a district-wide action plan to address supportive school environments and intensive services, policies and protocols to support behavioral health needs, and data systems to monitor

and track the behavioral health outcomes of the students. Narrative data highlighted the need for more effective leadership in team meetings, parent relationships, positive school climate, and the development of a strategic plan as well as vision and mission statements to guide practice.

Guidance was most frequently requested in the areas of supporting the district as it sets measurable behavioral outcome goals and data systems to collect, track, and analyze the data related to these goals.

Professional development: *Professional development* targets school administrators, educators, and behavioral health providers on topic areas needed to enhance schools' capacity to improve students' behavioral health. Overall, professional development strategies addressing behavioral health needs had the lowest rate of implementation (2.19) of all the domains and as having the greatest need for additional action (1.66). Professional development strategies for teachers, administrators, and all staff were "moderately" implemented. The majority of respondents indicated a priority to increase or enhance their action on 96% of the strategies. Furthermore, at least 75% of the schools sought to increase or enhance their actions on approximately 60% of the strategies.

Implementation was highest in the professional development opportunities targeting strategies to create a supportive classroom community and safe, caring relationships between adults and peers. Other specific strategies effectively implemented included de-escalation interventions to avoid physical restraint. The vast majority (e.g., greater than 70%) of respondents indicated a need to increase their efforts and/or action for more than half of the professional development strategies. More specifically, these areas included the following:

- Identification of school problems and how behavioral health symptoms may manifest in a school setting
- How behavioral health problems impact all aspects of a student's functioning from learning to behavior in school, at home, and in the community
- Administrator skills in managing and evaluating policies and protocols related to supporting students' behavioral health
- Administrative skills to support well-being of educators and behavioral health staff
- Meaningful ways for school leaders to engage a broad range of students in school planning and decision-making groups with staff
- Administrative skills in disciplinary approaches that balance accountability with an understanding of behavioral health needs of students

- Staff skills in building relationships and communicating with all families
- Separate roles and common objectives of school staff and behavioral health providers
- Understanding of the school as a host environment, including familiarity with school and district structures and requirements for community behavioral health providers.
- Familiarity of child-serving systems, including state agencies and state-sponsored resources

Narrative data reiterated a desire for additional training on crisis management as well as state and district policies, the creation of professional development committees, and focused trainings on diversity and cultural sensitivity. Guidance was most frequently requested in the areas of building skills to help students develop safe, caring relationships with adults and peers, as well as staff developing relationships with families. Other areas for guidance included strategies to support students to self-regulate emotions and behaviors and attention to achieve academic success, identify early warning signs or behavioral health symptoms including those related to trauma and other environmental risk factors, and school-wide and individual approaches that help meet the needs of at-risk students.

Access to resources and services: *Access to resources and services* includes the identification, coordination, and creation of school and community behavioral health services that improve the school-wide environment. The Framework also recognizes the need for resources that are clinically, linguistically and culturally appropriate for students and their families. Overall, schools reported that access to resources and services strategies to address behavioral health needs at the school and district-levels were implemented "to a great extent" (2.65). There was a modest need to increase or enhance actions in this section (1.45), though only one item was identified where the vast majority of respondents sought to increase action (e.g., mapping resources).

Respondents reported the most effective practices related to confidentiality of student behavioral health records and in-district referral systems for students with behavioral health needs. Guidance was requested and priority for action focused on mapping services and resources to identify strengths and gaps in the school- and community-based behavioral health services. Narrative data highlighted limited resources for school staff, including inadequate after-school programming and inconsistent community-based services, and culturally sensitive resources.

Academic and non-academic supports: *Academic and non-academic approaches* enable all children to learn, including those with behavioral health needs, as

well as promoting success in school. Overall, schools reported the highest rate of implementation in the area of academic and non-academic support strategies to address behavioral health needs. The strategies in this area were rated as being implemented "to a great extent" (3.09). There was less need to increase or enhance actions in this section (1.47) and no specific items were indicated by the vast majority of respondents.

The most effective practices were reported in the areas of maintaining high quality instruction and high academic standards for all students, targeting academic supports for students at-risk for academic difficulties, creating safe learning environments, and encouraging the development of positive relationships between students and adults. Areas targeted for growth include strategies to continuously monitor the progress of targeted interventions, to implement evidence-based primary prevention programs that support and promote the development of social, health and respectful behaviors, and procedures regarding CBHI.

Narrative data discussed administrators supportive of addressing behavioral health services but lacking enough time or money to access additional resources. Guidance was sought for evidence-based primary prevention programs that support and promote the development of social, health and respectful behaviors and procedures to inform families of CBHI.

Policies and protocols: *Policies and protocols* provide a foundation for schools to implement and support work that promotes behavioral health. Overall, schools reported that policies and protocols strategies to address behavioral health needs at the school and district-levels were implemented "to a great extent" (3.10). This was the area with the lowest rate to enhance or increase action (1.34).

Respondents reported high degrees of implementation in the areas of appropriate reporting and documentation of suspected child abuse or neglect (51A) and confidentiality protocols and procedures. Priority actions focused on protocols to ensure effective communication for families using CBHI services and protocols to encourage effective partnerships through formal agreements with community-based providers. These strategies were also the areas where schools were seeking additional guidance. Narrative data indicated a preference for policies and protocols in electronic format, as well as a more dynamic policy handbook. They also focused on the need for improved communication with district-level administrators, better clarification of policies including absences, and enhanced efforts with children who are living in out-of-home placements or who do not have eligible for MassHealth.

Collaboration with families: *Collaboration with families* includes fostering connections between home and school in order to increase schools' capacity to improve students' behavioral health. Overall, schools reported that collaboration with families strategies to address behavioral health needs at the school and district-levels were implemented "to a great extent" (2.93). There was a modest amount of need to increase or enhance actions in this section (1.46).

Respondents' highest rates of implementation were with strategies in which administration and staff creates a safe, welcoming environment where families feel that their voices are valued and that families have the opportunity to communicate their needs with classroom-based staff and school leaders. They also reported working effectively with families to identify, encourage, and build upon students' strengths and engage in shared-decision making about their child and other school policies.

Priority for future action and guidance was requested with professional development trainings that focus on awareness and sensitivity to cultural, linguistic, and other aspects of family diversity (e.g., disability, socioeconomic level, and gender roles) and on mechanisms to regularly share information about school-wide programs that address the behavioral health of students. Narrative data identified desire for improved communication with families and more time to develop relationships with families, as well as the need to create opportunities for family collaboration and involvement with schools.

Table 1. Implementation Levels by Domain

Framework Section	Overall Average Current Implement Level (1-4 scale)	Highest implemented action step within the section	Lowest implemented action step within the section
I – Leadership	2.49	School administrators create leadership, vision, and support for building students' strengths.	Superintendent and school committee set measurable outcome goals that will help student with behavioral health needs succeed in school.

II – Professional Development	2.19	Professional development opportunities address staff skills in de-escalation strategies and intervention that are alternatives to physical restraints.	*For community providers* – Training increases understanding of the school as a host environment. *For school staff* – Training increases understanding of separate roles and common objectives of school staff and behavioral health providers.
III – Access to Resources and Services	2.65	Standard and compliant practice of confidentiality of student behavioral health records.	Schools mapped resources and created recommendations to address gaps in resources and services.
IV– Academic and Non-academic Supports	3.09	School encourages and supports the development of positive relationships between students and adults.	Referral procedures in place to educate caregivers of services through CSAs as part of CBHI.
V – Policies and Protocols	3.10	Appropriate reporting and documentation of suspected child abuse or neglect under section 51A of chapter 119 of the Massachusetts General Laws.	Policies that ensure effective communication for families using CBHI services, and protocols to support consultation and effective partnerships with community-based providers.
VI – Collaboration with Families	2.93	Schools create safe, welcoming environment, and Families can communicate the needs of their families and children with school staff and leaders.	Monitoring family involvement by systematically examining attendance and inviting family feedback about areas of concern and interest.

Table 2. Priority Levels by Domain

Framework Section	Overall Average Current Priority Level (1-2 scale)	Increase Action Percentage by Item*	Specific Items in which 70% of Schools Seek to Increase or Enhance Action
I – Leadership	1.65	90%	• District-wide action plan. There is a district-wide behavioral health plan that addresses the three-part approach of supportive school environments, early interventions, and intensive services. (75%) • School leaders develop and oversee a professional development plan to increase skills among school staff and behavioral health providers to implement the district's/school's approach to promoting students' behavioral health. (74%) • School leaders are involved in the creation and revision of behavioral health policies and protocols, with the input of staff, to address a range of topics connected with supporting the behavioral health needs of students. (73%)
II – Professional Development	1.66	96%	• Professional development opportunities address identification of school problems and how behavioral health symptoms may manifest in a school setting. (79%) • Training supports an understanding how behavioral health problems impact all aspects of a student's functioning from learning to behavior in school, at home, and in the community. (76%) • Training seeks to increase administrator skills in ways to support the well-being of educators and behavioral health staff. (75%) • Training seeks to increase administrator skills in managing and evaluating the policies and protocols related to supporting students' behavioral health. (75%) • Professional development opportunities address staff skills in building relationships, and

			communicating with all families. (74%) • Training increases understanding the separate roles and common objectives of school staff and behavioral health providers. (74%) • Training addresses meaningfully ways for school leaders to engage a broad range of students in school planning and decision-making groups with staff. (73%) • Professional development opportunities address administrator skills in disciplinary approaches that balance accountability with an understanding of behavioral health needs of students. (72%) • Training increases understanding of the school as a host environment, including familiarity with school and district structures and requirements. (72%) • Training seeks to increase skills in classroom observations, consultations with educators, and ways to support school personnel, students and their families. (72%) • Professional development opportunities address strategies for positive and appropriate responses to student's needs, in the classroom and throughout the school. (71%) • Training increases familiarity of relevant child-serving systems, including state agencies and state-sponsored resources. (71%) • Training provides teacher/instructor strategies to manage classroom behaviors, including ways to de-escalate behavior to reduce disruptive behavior. (71%) • Training provides teacher/instructor strategies and approaches to improve instruction that support students with or who may be at risk for developing behavioral health needs. (70%) • Professional development opportunities increase understanding a teacher/instructor's particular role in crisis intervention for an individual student or group of students. (70%)
III – Access to Resources and Services	1.45	44%	• The school develops recommendations to fill the resource/service gaps identified in the mapping process. (70%)

IV– Academic and Non-academic Supports	1.47	46%	• No items
V – Policies and Protocols	1.34	17%	• Protocols are in place ensure effective communication and information for families using CBHI services through MassHealth. (84%)
VI – Collaboration with Families	1.46	47%	• School staff receives professional development on and demonstrate awareness and sensitivity to cultural, linguistic, and other aspects of family diversity (e.g., disability, socioeconomic level, and gender roles). (72%)

Seeking Additional Guidance

Specific information was also sought to determine the particular strategies in which schools were seeking additional guidance as they provide for the behavioral health needs of their students. This information was gathered exclusively from the statewide assessment participants. They are listed here sequenced by the highest number of requests for Guidance:

- Outcome goals. The superintendent and school committee set measurable behavioral outcome goals that reflect the contributing factors that will help students with behavioral health needs succeed in school and deal with life's challenges.

- The staff is supported in building skills to help students develop safe, caring relationships with adults and peers.

- Data systems. The district has a system that allows for the collection, tracking, and analysis of data related to behavioral outcome goals.

- The staff is trained in supporting students to self-regulate their emotions, behaviors, and attention to achieve academic success.

- Professional development addresses staff skills in identifying the early warning signs or behavioral health symptoms, including those related to trauma and other environmental risk factors.

- Training increases knowledge of school-wide and individualized approaches/services that help meet the needs of at-risk students.

- Professional development opportunities address staff skills in building relationships, and communicating with all families.

- Training increases understanding the separate roles and common objectives of school staff and behavioral health providers.

- Training addresses the needs of diverse student populations.

- Training increases familiarity of relevant child-serving systems, including state agencies and state-sponsored resources.

- Professional development opportunities address identification of school problems and how behavioral health symptoms may manifest in a school setting.

- The school maps its resources to identify strengths and unmet needs, communication protocols, and the roles of school/district staff and community providers.

- The school develops recommendations to fill the resource/service gaps identified in the mapping process.

- School staff receives professional development on and demonstrate awareness and sensitivity to cultural, linguistic, and other aspects of family diversity (e.g., disability, socioeconomic level, and gender roles).

- The school has mechanisms in place to regularly share information about school-wide programs and school efforts to address the behavioral health of students.

Summary

The findings presented in this report utilize the wealth of information gathered from both the pilot and Statewide Assessment processes. The tool examined the current practices and needs of schools in the Commonwealth as they address their students' behavioral health needs and promote the positive development of all students. The Assessment Tool was determined to be a reliable instrument that can help guide schools as they address the behavioral health needs of students.

The findings from the assessment process indicate that, overall, schools effectively provide Academic and Non-academic Support services to promote positive academic and behavioral health for all students. These areas were perceived as areas of strength by the schools as they broadly addressed the needs and development of their communities. Moreover, there were strong indications that they appropriately implement the necessary Policies and Procedures to ensure the confidentiality and protections for their students. There are exceptions to these areas specifically related to the CBHI initiatives.

The domains in which they reported less implementation, and in which they are seeking the greatest growth and future action, are in the areas of Professional Development for staff, teacher and administrators and Leadership at the school- and district-level. These areas for growth are also identified as challenging based on the limited time for Professional Development and the competition with trainings focused solely on academic development. The findings from this assessment can help guide recommendations to fully implement the Behavioral Health and Public Schools Framework, as well as highlight the infrastructures needed at the Massachusetts Department of Elementary and Secondary Education to support its use by districts.