**Appendix D. The Postsecondary EWIS** *(July 2022)*

# Why use a Postsecondary EWIS?

The Department is committed to preparing all students for success in the world that awaits them after high school. Our mission is to strengthen the Commonwealth's public education system so that every student is prepared to succeed in postsecondary education, compete in the global economy, and understand the rights and responsibilities of American citizens, and in so doing, to close all proficiency gaps 5

Although Massachusetts is an education leader nationally and nearly 70% of public high school graduates enroll in postsecondary education immediately after graduation, there are inequities in college engagement across the state, specifically among racial & ethnic groups and income levels, students who are English learners, and students with disabilities. To support schools and districts in understanding whether their high school students are on track to succeed in postsecondary opportunities, EWIS includes three college success milestones.

# Postsecondary Milestones

Massachusetts EWIS, or Early Warning Indicator System, is a tool to systematically identify students that may need additional attention in order to reach an upcoming academic milestone. To build context and understanding, educators may wish to learn to what extent their former students have met postsecondary milestones in prior years. School and district results for postsecondary outcomes are on the ESE website in [Profiles](https://profiles.doe.mass.edu/) (see Students – Graduation Rate); in the [District Analysis and Review Tools](https://www.doe.mass.edu/dart/) (see Success after High School DART) and in [Edwin](https://www.doe.mass.edu/edwin/) (see Postsecondary Readiness & Success reports). Instructional videos ([CCTE Data Resources](https://www.doe.mass.edu/ccte/ccr/resources/data.html)) can help users navigate these resources.

The Massachusetts EWIS identifies students in grades 1 through 12 as high, medium and low risk of missing important academic milestones throughout the academic trajectory, including college success. There are three EWIS Risk Levels: Low Risk, Moderate Risk and High Risk. EWIS Risk Levels quickly provide information to educators about the likelihood that a student will miss an upcoming academic milestone. For example, a student identified as Low Risk is likely to meet the academic milestone; a student identified as High Risk is unlikely to meet the academic milestone. Exhibit A-1 shows the EWIS Academic Milestones.

# Exhibit -A1. Massachusetts EWIS Age Groups, Grade Levels, and Academic Milestones

| The Massachusetts EWIS | | | |
| --- | --- | --- | --- |
|  | **Age Group** | **Grades** | **Academic Milestones: Expected student outcomes** |
| K–12 | Early Elementary | 1, 2,3 | **Reading by the end of third grade** Meeting or exceeding expectations on the 3rd grade ELA Massachusetts State Assessment |
| Late Elementary | 4, 5, 6 | **Middle school ready** Meeting or exceeding expectations on 6th grade ELA and Mathematics State Assessments |
| Middle Grades | 7, 8, 9 | **High school ready** Passing grades on all 9th grade courses |
| High School | 10, 11, 12 | **High school graduation** Completing high school graduation requirements in four years |
| Postsecondary | **College Enrollment** Enrolling in postsecondary education |
| **College Persistence** Enrolling in a second year of postsecondary education |
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**EWIS Risk Levels**

A Risk Level is assigned to every student who was enrolled in a Massachusetts public school in the prior year (and for whom there are state level data), and for each outcome. The Risk Levels are determined on an individual student basis using data from the previous school year, and reflect students’ risk at the beginning of the school year. A student in grades 10-12 may have a Risk Level for each of four milestones. For example, a student may be Low Risk for graduating high school, Moderate Risk for enrolling in college and High Risk for persisting in college, depending on the student’s specific indicator data. Exhibit A-2 shows the Risk Levels.

# Exhibit 2. Massachusetts EWIS Student Risk Levels


High Risk At risk for not reaching the upcoming academic milestone
Approximately 25% of high risk students  meet this milestone

Moderate Risk Moderately at risk for not reaching the upcoming academic milestone
Approximately 60% of moderate risk students meet this milestone

Low Risk Likely to reach the upcoming academic milestone
Approximately 90% of low risk students meet this milestone


To develop the EWIS Risk Levels, researchers use a rigorous statistical method19 to create a valid EWIS model for each grade level and outcome. The postsecondary models include historical longitudinal data from ESE data collections and SAT and AP from College Board. National Student Clearinghouse (NSC) data are used in developing the college enrollment and college persistence models. Higher Education Information Resource System (HEIRS), student data from public higher education institutions across Massachusetts, are used in developing the academic persistence models. (Approximately 30% of the college-going high school graduates across the state attend Massachusetts public institutions.) Altogether, the model allows users to identify students who are at risk of missing key academic milestones within the K–12 and postsecondary educational trajectory.

# Postsecondary EWIS Reports

ESE collaborated with partners using EWIS in the field to develop and test EWIS Postsecondary reports. The designs of the reports support their use. With the District/School View Report (EW303) a user can get an overview of student risk across the postsecondary milestones, and use this to set priorities. The Indicator Report (EW319) is helpful for investigating patterns in indicator data for groups of students. EW601 is useful for identifying students’ unique strengths and needs, and combining with local data for diagnosis and monitoring. The reports can be filtered using demographic fields, and can be downloaded for analysis or sharing, consistent with district confidentiality guidelines. Several reports are hyperlinked to other reports for additional details. Instructional videos on the [College and Career Readiness Data Resources](https://www.doe.mass.edu/ccte/ccr/resources/data.html) (can help users navigate these resources.

Educators can use the reports to understand the broad trends within their school or district and (alongside local data) to diagnose students’ needs. Once the underlying causes of risk are understood, educators can provide interventions to meet students’ strengths and needs using the Early Warning Implementation Cycle. See the Early Warning Implementation Cycle on-demand e-learning tutorial on the [EWIS website](https://www.doe.mass.edu/ccte/ccr/ewis/) for more.

# Resources

Teachers, guidance counselors, school leaders and other school staff – people equipped with information about high school graduation and success after high school – are important points of contact for students. These adults may help students understand relationships between their interests and dreams, and the education and training requirements needed to get there. Talk to your students about the importance of attendance, behavior and courses in high school. Hold high expectations for students, let them know when they’re doing well, and talk about how to be even more successful next time. See these resources to learn more about supporting students in your community.

# ESE’s Resources

* + MassCore (<https://www.doe.mass.edu/ccte/ccr/masscore/>)
  + EWIS (<https://www.doe.mass.edu/ccte/ccr/ewis/>)
* The **What Works Clearinghouse (WWC)** reviews the existing research on

different *programs, products, practices,* and *policies* in education to provide educators with the information they need to make evidence-based decisions. We focus on the results from *high- quality research* to answer the question, “What works in education?”

* + College Bound with What Works Clearinghouse

<https://ies.ed.gov/ncee/wwc/collegebound1>

* + Helping students navigate the path to college – what high schools can do

<https://ies.ed.gov/ncee/wwc/PracticeGuide/11>

* The **College Readiness Indicator Systems (CRIS)** initiative was developed in response to a troubling pattern: More students than ever are enrolling in college after high school, but many of them are not college ready, as evidenced by persistently low rates of college completion. The sense of urgency to close the gap between college eligibility and college success is a growing concern among policymakers, educational leaders, and the business community.
  + The CRIS Framework has three distinct & interdependent college readiness dimensions: academic preparedness, academic tenacity, and college knowledge.
    - **Academic preparedness** refers to key academic content knowledge and cognitive strategies needed to succeed in doing college-level work. Examples of indicators of academic preparedness are student GPA and the availability of Advanced Placement courses at a school.
    - **Academic tenacity** refers to the underlying beliefs and attitudes that drive student achievement. Attendance and disciplinary infractions are often used as

proxies for academic tenacity; other indicators include student self-discipline and the extent to which teachers press students for effort and rigor.

* + - **College knowledge** is the knowledge base and contextual skills that enable students to successfully access and navigate college. Examples of college knowledge indicators are students’ knowledge of the financial requirements for college and high schools’ promotion of a college-going culture.
  + Find at: [https://gardnercenter.stanford.edu/publications/college-readiness-indicator- system-cris-resource-series](https://gardnercenter.stanford.edu/publications/college-readiness-indicator-%20system-cris-resource-series)
* **Implementing Academic Interventions** from REL Southeast
  + This info-graphic illustrates the necessary components in the complex process of developing and delivering academic interventions successfully.
  + [https://ies.ed.gov/ncee/edlabs/infographics/pdf/REL\_SE\_Implementing\_high\_school\_aca demic\_interventions.pdf](https://ies.ed.gov/ncee/edlabs/infographics/pdf/REL_SE_Implementing_high_school_aca%20demic_interventions.pdf)
* **Minimum Admission Standards for State Universities and UMass** from Massachusetts Department of Higher Education
  + This Reference Guide provides detailed information about the minimum standards for undergraduate admission to Massachusetts’ state universities and University of Massachusetts (UMass) campuses (UMass Amherst, UMass Boston, UMass Dartmouth, and UMass Lowell).
  + <https://www.mass.edu/foradmin/admissions/documents/DHEAdmissionsStandardsReferenceGuide_2019.pdf>
* The definition of **College & Career Readiness** from Massachusetts Board of Elementary and Secondary Education
  + Massachusetts students who are college and career ready and prepared for civic life demonstrate the knowledge, skills and abilities that are necessary to successfully complete entry-level, credit-bearing college courses, participate in certificate or workplace training programs, enter economically viable career pathways, and engage as active and responsible citizens in our democracy.

<https://www.doe.mass.edu/bese/docs/fy2016/2016-01/joint-item1.html>