**Introduction – What is Being Monitored**

One of the Board’s four goals is to increase the *percent of graduates earning a state high school endorsement* to **75%** by June 2024. There are five (5) different state high school diploma endorsements: Career, College, College/UNC, NC Academic Scholars, and Global Languages. The five endorsements are earned based on course taking, grade point average (GPA), reading scores on a nationally norm-referenced exam, and a diversity of other criteria. The specific criteria to earn the aforementioned endorsements are outlined in Table 1 (see below).

**Table 1. State High School Endorsement Criteria**

<table>
<thead>
<tr>
<th>Endorsement</th>
<th>Courses</th>
<th>Grade Point Average (GPA)</th>
<th>Test Score*</th>
<th>Other</th>
</tr>
</thead>
</table>
| Career Endorsement   | Future-Ready Core mathematics sequence of Algebra I, Geometry, Algebra II, Math I, II, III or Integrated Math I, II, III and a fourth mathematics course aligned with the student’s post-secondary plans. | Unweighted grade point average of at least 2.6 | ACT: 22 SAT: 480 | Complete a CTE concentration in one of the approved CTE Career Pathways.  
Earn at least one industry-recognized credential. Earned credentials can include Career Readiness Certificates (CRC) at the Silver level or above from WorkKeys assessments or another appropriate industry credential/certification. |
| College Endorsement  | Future-Ready Core mathematics sequence of Algebra I, Geometry, Algebra II, Math I, II, III or Integrated Math I, II, III; and a fourth mathematics course aligned with the student’s post-secondary plans.  
The fourth math course must meet University of North Carolina System Minimum Admission Requirements or be acceptable for earning placement in a credit-bearing college math class under the North Carolina Community College System’s Multiple Measures Placement policy. | Unweighted grade point average of at least 2.6 | ACT: 22 SAT: 480 | N/A |
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<tbody>
<tr>
<td>Future-Ready Core mathematics sequence of Algebra I, Geometry, Algebra II, Math I, II, III or Integrated Math I, II, III and a fourth mathematics course that meets University of North Carolina system Minimum Admission Requirements that include a mathematics course with either Algebra II, Math III or Integrated Mathematics III as a pre-requisite. Complete three units of science including at least one physical science with a lab, one life science and one additional science course. Complete U.S. History or equivalent coursework. Complete two units of a world language (other than English).</td>
<td>Weighted grade point average of at least 2.5</td>
<td>ACT: 22 SAT: 480</td>
<td>N/A</td>
</tr>
</tbody>
</table>

| North Carolina Academic Scholars Endorsement | Unweighted grade point average of at least 3.50 | N/A | N/A |
| The student shall complete the Future-Ready Core mathematics sequence of Math I, II, III; Algebra I, Geometry, Algebra II; or Integrated Math I, II, III and a fourth-level mathematics course that meets University of North Carolina system Minimum Course Requirements that include a mathematics course with either Math III, Algebra II, or Integrated Mathematics III as a pre-requisite.  
The student shall complete three course credits of science including an Earth/Environmental science course, Biology, and at least one physical science course that must include either physics or chemistry.  
For students entering ninth grade in 2012-13 or later, the student shall complete four course credits of social studies. The student shall complete two course credits of a world language (other than English). The student shall complete four elective course credits in any one subject area, such as Career and Technical Education (CTE), JROTC, Arts Education, World Languages, or in another content area. | Unweighted grade point average of at least 3.50 | N/A | N/A |
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<tr>
<th>Endorsement</th>
<th>Requirement</th>
<th>Score requirement</th>
</tr>
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<tr>
<td>Global Languages Endorsement</td>
<td>Complete a four-course sequence of study in the same world language, earning an overall unweighted GPA of 2.5 or above in those courses.</td>
<td>The student shall earn a combined unweighted 2.5 GPA or above for the four English Language Arts courses required for graduation. N/A</td>
</tr>
</tbody>
</table>

*Students must earn at least the benchmark reading score established by a nationally norm-referenced college admissions test to earn any of the NC State Board of Education High School Diploma Endorsements. The minimum score required to meet the benchmark is noted in the table.*
Evaluation of Current Performance: Off-Track
Currently, 40.8% of students in Grade 12 are projected to earn at least one state high school diploma endorsement (see Graph 1 below). However, the data upon which this projection relies on is very poor, and it is highly likely that end-of-year results will vary a good deal from this projection. Additionally, findings of severe data quality issues (see section below) reduces our confidence in the projection put forward.

Graph 1.

Severe Data Quality Concerns
The quality of graduation endorsement data utilized for this report is very poor. Nevertheless, the quality of the data does not mean that it could not provide useful insight. It does however mean that the projections for earned endorsements for this year will likely vary greatly from final numbers in the fall.

The data systems currently at our disposal (including PowerSchool) are insufficient for us to efficiently and reliably collect data on students projected to earn an endorsement. To gather data used for this projection, high school counselors worked 3-4 weeks to manually reconcile student course taking with endorsement requirements. Counselors, in the absence of an existing data system to utilize, used Google spreadsheets, excel documents, and
pdf files to compile and report these data. This diversity of data collecting and reporting methods further puts into question the reliability of this reporting.

Our efforts to provide an in-year progress report revealed errors in the tabulation and reporting of Global Language Endorsement data, resulting in over reporting of endorsements earned. This error appears to have affected data over multiple years. The error results primarily from how the Global Language Endorsement data is stored in Power School. The business rules previously followed outlined that each of the five NC high school diploma endorsements would be represented in PowerSchool as one row of data per endorsement earned per student. This paradigm was found to hold true for each graduation endorsement with the exception of the Global Language endorsement. The Global Language endorsement is reported in not one, but several entries per student, one for each portion of the endorsement met. This means that students meeting a portion of the Global Language endorsement have, in the past, been calculated as earning the endorsement when they may not have completed all of the requirements to earn credit for the endorsement. Furthermore, during the course of preparing this monitoring report it was discovered that PowerSchool does not appear to take into account the relatively new reading exam requirement passed in December 2019. This likely has contributed to additional over reporting as well.

*These errors are significant, and contribute to over reporting of at least 10.6 percentage points. Specifically, we reported 61.2% of graduates in 2021 earned an endorsement, when the actual percentage was 50.6% based on the data stored in PowerSchool.*

**Strategic Moves Needed**
The data quality and integrity issues surfaced point to a variety of needed strategic moves that must accompany efforts to better support students in this area. To address data quality issues, as well as support more efficient and effective progress monitoring, the following actions are required:

- Conduct a review of school and central office processes for diploma endorsement reconciling and reporting to determine the depth of process challenges, to surface any promising practices, and to compare available school-based data with what is being collected in PowerSchool.

- Develop an automated information system that will reconcile requirements for each endorsement and assist with monitoring progress towards earning endorsements. This project will be time consuming and complex, and will likely take up to a year to complete.

- Unify existing data collection processes if an automated system cannot be created.

Of equal or greater importance are actions to help raise our performance in this area. The tactics outlined below revolve around four (4) strategic priorities: awareness about endorsements, focus on endorsements, high school reading mastery, and grade point average. Efforts under consideration are the following:

- Designate an “Diploma Endorsement Champion.” Though several may work on endorsements, no one person is designated as the owner or champion of district efforts in this area. Assigning responsibility of this measure to a person will help create focus, prioritization, help mitigate data quality challenges, lead progress monitoring, and provide accountability.
• Form a Diploma Endorsement Improvement Team. Creating an improvement team could help develop, implement, measure and monitor strategies to help students and schools improve endorsement attainment.

• Build student and family awareness of endorsements through an orchestrated campaign for our rising 11th graders.

• Develop a post-secondary plan for students as they move through high school that incorporates their goals and includes endorsements that might help them meet their goal.

• Expand the CTE concentrator program to encourage more students to include a CTE concentration in their plan.

• Incorporate an endorsement review into student-counselor meetings regarding course selection and academic planning.

• Utilize PSAT and Pre-ACT results, the best predictors for how a student will perform on the ACT and SAT, to inform efforts to maximize later SAT and ACT reading performance. This will include the creation of new data reports for school use.

• Emphasize skills assessed by the ACT in reading into English III courses for rising 11th graders, who will take the ACT in March 2023.

• Look for possible incentives and supports for 11th graders who will take the ACT. Over the past 12-24 months, colleges in the UNC System and across the country have stopped requiring entrance exams like the ACT and SAT for admissions. Though beneficial to many students, this creates a disincentive for students to take the exam seriously, for it has no value add for them. This is a major issue moving forward.

Additional strategies and tactics should and will be considered during the summer for the coming school year.

Requests of the Board
The most efficient and cost effective response to our diploma endorsement data quality issues is for our state’s student information system – PowerSchool – to accurately calculate students having earned, or on track to earn, a high school diploma endorsement. Those calculations should be rendered in student, school and district-level reports, and updated nightly, or at least each semester, offering updates at the same frequency of grade point average (GPA) calculations. This response will require PowerSchool to both prioritize and invest in producing this solution. As CMS staff begin advocating for just this type of investment of time, energy and money with our colleagues at the NC Department of Public Instruction, we ask that you too advocate for such a digital solution with the state.

In the interim, we ask that the Board consider modifying interim goals 3.1, 3.2 and 3.3. As Mr. Crabill outlined in his white paper for the Board, CMS Interim Measures Deep Dive: Continuous Improvement in Action, if interim metric data are lacking in availability, “…the school board should expect the superintendent to provide an implementation plan with timelines that describe the process involved with going from the current state of not having available data, to the planning process, the piloting process, the district-wide implementation, and finally to data reporting.” We request an opportunity to put such a plan in front of the Board by June 30, which includes near term steps to both monitor progress and influence adult behaviors.