MARYLAND LONGITUDINAL DATA SYSTEM (MLDS) 550 West Baltimore Street Baltimore, MD 21201

GOVERNING BOARD MEETING December 9, 2016 MINUTES

The meeting of the Maryland Longitudinal Data System (MLDS) Governing Board was held on December 9, 2016, in the Maryland State Department of Education (MSDE) Board Room of the Nancy S. Grasmick Building. Ms. Schulz, Vice Chair of the Governing Board, called the meeting to order at 9:05 a.m. and noted that a quorum was present.

The following Governing Board members were in attendance:

Dr. James Fielder, Secretary of Higher Education and Chair of the Governing Board

- Ms. Kelly Schulz, Secretary of the Maryland Department of Labor, Licensing, and Regulation and Vice Chair of the Governing Board
- Dr. Karen B. Salmon, State Superintendent of Schools, Maryland State Department of Education
- Dr. Ben Passmore, Assistant Vice-Chancellor for Policy, Research, and Analysis, University System of Maryland (Designee for Chancellor Robert Caret)
- Mr. Dennis Hoyle, Senior Research Analyst, Maryland Independent Colleges and Universities Association (Designee for President Tina Bjarekull)
- Dr. Clayton Wilcox, Superintendent of Washington County Public Schools
- Mr. Steven Rizzi, Vice President, PAR Government
- Ms. A.J. Brooks, Privacy Analyst, United States Department of Health and Human Services
- Dr. Scot Tingle, Assistant Principal, Snow Hills High School
- Mr. Christopher J. Biggs, Information Assurance Manager, Raytheon Company

The following MLDS Center staff members were in attendance:

- Mr. Ross Goldstein, Executive Director, MLDS Center
- Ms. Tejal Cherry, Director of System Management Branch, MLDS Center
- Ms. Laia Tiderman, Data Management Coordinator, MLDS Center
- Dr. Angela Henneberger, Director of Research, MLDS Center
- Ms. Dawn O'Croinin, Assistant Attorney General for the Governing Board and MLDS Center
- Ms. Jamese Dixon-Bobbitt, Executive Associate, MLDS Center

Approval of September 9, 2016 Meeting Minutes

Ms. Schulz asked for a motion to approve the minutes from the September 9, 2016 meeting. Dr. Wilcox made a motion to approve the minutes that was seconded by Dr. Passmore. The motion was unanimously approved.

Governing Board Bylaws

Dawn O'Croinin began by noting that the remaining issue from the September meeting was fleshing out the process for providing notification and a comment period to agency data partners on grants in which the Center is applying or participating. At the request of Ms. Schulz, Ms. O'Croinin explained that the proposed bylaws state that the Center may apply for grants within the Board-approved research agenda after giving timely written notice to the data-sharing agencies (which include MHEC, MSDE, and DLLR). There is a similar proposed provision for instances where the Center seeks to support a grant application from a Maryland university. The required written notice from MLDS must include a grant opportunity checklist (a document that will provide a succinct overview of the proposed grant project), a copy of the grant notice, and the curriculum vitae for researchers who may work on the project. The data sharing agencies may submit written comments to the Center and the Chair of the Governing Board. The notice of the grant and the comments of the partner agencies must be provided to the full Governing Board prior to its next meeting.

There was a discussion on the timeframe for providing notice and comments. Ms. Schulz suggested two weeks for MLDS to provide notice and agency partners to respond was a reasonable expectation. Mr. Biggs questioned whether the notification period would result in the Center not being able to apply for grants for close to 30 days to allow time for notice and response. Ms. O'Croinin responded that notification and responses would be happening at the same time as the application process. Dr. Fielder agreed that a parallel process, not a sequential process, would be expected. Dr. Passmore agreed and noted the fact that the Center and universities are working on the grant does not mean that the notice and review process by the agencies is a mere formality. If the notice and review results in a need to stop the grant application, that is what will happen.

Ms. Schulz made a motion to accept the proposed changes specifying that the timeframe for the MLDS Center to provide notice and for the agencies to submit written comments is 14 days. Dr. Salmon seconded the motion, which was unanimously approved.

Dual Enrollment Report

Dr. Henneberger began by noting that the findings presented are highlights from the 2016 Dual Enrollment Report, an annual report submitted by the Center to the Governor and General Assembly. Dr. Henneberger provided the following overview.

- 1. Definition of Dual Enrollment For purposes of the report a student is dually enrolled if the student has overlapping enrollments in both a secondary school in the state and an institution of higher education in the State.
- 2. Rates of Dual Enrollment
 - a. There was an overall increase in dual enrollment.
 - b. Most dually enrolled students are 12th graders and the largest increase in dual enrollment was among 11th graders.
 - c. Eleven percent of 12th graders are dually enrolled, which is a 2% increase from last year. There is a big range in dual enrollment among jurisdictions. For example, 2% of high school seniors are dually enrolled in Baltimore City compared to 30% in Washington County.
 - d. Demographic Characteristics of dual enrollment:
 - i. Gender the majority of dually enrolled students are female (59%) compared to male (41%);
 - Free and Reduced Price Meals (FARMS) Only 21% of dually enrolled students are FARMS eligible compared to 79% of dually enrolled students who are not FARMS eligible;
 - iii. Race The majority of dually enrolled students are white (64%);
 - iv. Ethnicity The majority of dually enrolled students (93%) are non-hispanic; and

- v. The percentage of FARMS eligible, non-white, and Hispanic students who dually enrolled saw a modest increase since last year.
- 3. Course Taking This year's report will be the first to include student course taking patterns. There was only course taking information for 29% of students. Of those students the majority were taking courses classified as Miscellaneous, which includes study skills and CTE courses. English language and literature was the second highest course classification. There was a discussion on why the course taking information was so limited and the benefits of gaining more insights into courses being taken. Laia Tiderman explained that the limited course taking information was a result of several factors. First, the MLDS definition of dual enrollment includes students who enroll in college courses on their own initiative and not through the high school. Those students are not receiving high school credit for the courses. For those students who are taking the courses through the high school, the misassignment of the proper course classification could be a result of misalignment with CEDS (Common Education Data Standards) or simply poor data collection. Ms. Tiderman reminded the Governing Board that this data collection is new and it generally takes a few cycles to address problems. There was broad agreement that improvements in the reporting should be a priority. Dr. Passmore suggested that the Center look for next steps for improving the data to support additional analysis. Ms. Schulz noted that the P20 Council was also looking into this issue.
- 4. College Enrollment Outcomes For 2012-2013 high school graduates, the rate of college enrollment in 2013-2014 for dually enrolled students was 91% compared to 63% of non-dually enrolled students. Of the enrollees, 83% of the dually enrolled students were enrolled in the following academic year compared to 55% of the non-dually enrolled students. While the dually enrolled students had higher enrollment and retention, the percent (8%) that did not continue to a second year of college was the same for the dually enrolled students as the non-dually enrolled students.

Dr. Henneberger concluded by noting that as more years of data become available, trends in long-term outcomes can be examined (for example, student degree attainment and workforce outcomes).

Dr. Fielder thanked Dr. Henneberger for the presentation and reiterated Dr. Passmore's request for Center staff to report back to the Board for dual enrollment reporting. Ms. Schulz noted that the P20 Council's report includes a series of recommendations to the MLDS, which staff can also consider when reviewing next steps.

2016 Annual Report

Mr. Goldstein noted that the report was sent to the Governing Board for their review. The report contains an introductory section highlighting accomplishments and activities of the Center. After the introduction, the report contains five required sections. The first section is on the implementation of the MLDS data system and the development and activities of the Center. The second section lists the studies performed by the Center, including a listing of dashboards, policy reports and data requests. The third and fourth sections of the report are on data determined to be unnecessary and proposed or planned expansion of data (which will be covered during the discussion on the data inventory). The final section is for recommendations by the Governing Board. The report contains three proposed recommendations: (1) Support the legislation to increase the amount of time a student record may remain linked to a workforce record in the MLDS from 5 years to 20 years; (2) the development and implementation of a communication plan that creates awareness of the MLDS output and information; and (3) the establishment or modification of data sharing agreements with partner agencies to receive and include apprenticeship data in the MLDS data system.

Dr. Salmon noted her support for the second recommendation regarding developing a communication plan. She travels around the state and frequently gets questions about the Center, its role and its research agenda. Developing a one page fact sheet would be a good way to help folks understand the mission of the Center. She also noted that the Center's web traffic is low and outreach combined with more user friendly information may help increase the number of visitors to the website.

Ms. Schulz asked whether the legislative change was for "20 years" or "up to 20 years." In response, Ms. O'Croinin explained that the legislative proposal approved by the Governing Board changes the data linkage limitation from "5 years" to "20 years." However, the MOUs with the data sharing partners would specify the actual data retention requirements. Specifically, federal law requires the MOUs for Unemployment Insurance workforce data to specify the time periods needed for the studies. Ms. O'Croinin noted that for the Center's primary longitudinal studies 20 years would be appropriate. Grant related studies would tie data retention to the timeframe of the grant.

Regarding the third recommendation, Ms. Schulz noted that it is great that there is interest in understanding apprenticeship outcomes - especially as it relates to the youth apprenticeship program. However, because the programs are so new to DLLR and to the state, especially as they relate to youth, time is needed in DLLR to understand how they are laying out the future expectations for data gathering and collecting. They are currently working with MSDE on data gathering systems. DLLR does not want to withhold information. Staff at DLLR needs to get their feet on ground and understand the scope of the data. What data they will have and how it is being collected. Ms. Schulz also noted that the youth program is still a pilot program. The registered apprenticeships involve data arrangements with the federal government and will require time to work with partners at the federal and local level to determine what is available and what can be shared.

Dr. Passmore noted that he made the recommendation as a result of his work with the P20 Council Workgroup on Workforce Development. Efforts to gather data were frustrated by various data limitations. His feeling was the Center could be a productive partner in the effort to improve apprenticeship reporting. Ms. Schulz responded that DLLR has resources to identify and gather information. It would be a disruption to current work to switch gears to move everything over to MLDS. It is an internal project - eventually they will share the information with MLDS.

In response to a question from Mr. Rizzi, Ms. Schulz stated that she was proposing to remove the recommendation on apprenticeship data. Ms. O'Croinin suggested that since there seemed to be agreement on the importance of the apprenticeship data, perhaps the recommendation could be changed to directing the MLDS to collaborate with data partners on exploring apprenticeship data and its gaps. Ms. Schulz stated that she does not want to discourage interest in this important topic and supports the idea of collaboration by the Center. Dr. Passmore noted his support for keeping, but modifying the recommendation, noting that apprenticeship is a critical area for the MLDS to pay attention. Dr. Fielder noted his support for DLLR having time to develop and standardize the collection of apprenticeship data before MLDS collection occurs. Ms. Schulz stated her support for a recommendation for the Center to

collaborate with data partners. At the request of Dr. Fielder, Mr. Goldstein restated the recommendation as follows: In recognition of the important role of apprenticeship programs as a strategy for improving workforce outcomes of Maryland students and the interest in the topic expressed by the Governor's P20 Leadership Council, the MLDS Center should continue to work with the Governor's P20 Council to explore ways to grow and analyze apprenticeship data.

Dr. Salmon made a motion to change the third recommendation as proposed by Secretary Schulz and restated by Mr. Goldstein. Ms. Schulz seconded the motion, which was unanimously approved. Next, Dr. Wilcox made a motion to approve the 2012 Annual Report. Dr. Salmon seconded the motion, which was unanimously approved.

Center Output

Mr. Goldstein began by noting that the Center completed four policy reports in 2016, which will be turned into dashboards over the next few months. The topics of the reports include: Remedial Coursework in Maryland; High School Persisters - Examining of College and Workforce Outcomes; Preparation and Retention of Early Childhood Care Workforce; and Assessing the Workforce Outcomes of Postsecondary STEM Graduates. The Center also held six Research Series seminars, mostly related to the policy reporting.

The Center received eleven data requests in 2016, of which eight were fulfilled. The three that were not fulfilled were not longitudinal data requests and therefore referred back to the appropriate agency. The Center has received and responded to several recent data requests focusing on graduates from Maryland colleges and universities who go into teaching in Maryland public schools. Specifically, the requests were for data on first time teachers, where they went to school, the county where they go to teach, the degree earned, and the salary they are receiving. Because of the level of interest and the work done so far, staff is working to create a dashboard on this topic.

In response to a question from Mr. Rizzi, Mr. Goldstein confirmed that the requests being discussed are treated as Public Information Act (PIA) requests. There are other ways to interact with the Center. For example, Center staff took part in an MHEC intersegmental meeting to discuss data and reporting needs of Maryland public and private colleges and universities. The goal is to provide timely and useful information to stakeholders. Mr. Rizzi noted that it would be good to have a way for researchers and stakeholders to request data other than through a formal PIA request. Ms. O'Croinin responded that the PIA process is not confrontational and is being administered by the Center in a manner that is collaborative and supportive of the requester. The Center does not require a formal request or a specific citation to the PIA. In response to a question, Mr. Goldstein responded that the Center does not have a form for the data requests, but it is something that will be developed.

Finally, Mr. Goldstein reviewed a series of charts on MLDS website usage.

1. New and Returning Visitors - there were a higher percentage of new visitors (57.5%) than returning visitors (42.5%) in November. In comparison, in September, the trend was reversed with more returning visitors (69.2%) than new visitors (30.8%).

- 2. Top Dashboards the top dashboards for September through November were listed in descending order. Dashboard #2 High School Graduates Initial Postsecondary Enrollments by Year, was the most popular dashboard.
- 3. Users and Page Views the number of users and the number of page views was provided for the prior three month period and shows an uptick in November with 518 users and 1,628 pageviews.

Finally, Mr. Goldstein noted that the web usage is modest and points to a need to grow the audience.

Changes and Revisions to the Data Inventory

Ms. Tiderman began by discussing changes made to the formatting and presentation of the Data Inventory. The Data Inventory had been a list of data elements in a static document. It has been changed to a dynamic format that is sortable. Substantive changes made will still be presented in a static document, but then incorporated into the online dynamic version. Ms. Tiderman demonstrated the new data inventory and noted that it makes the Center more transparent to its data partners and the public. The new version also includes a definition of the data elements and can serve as a public data dictionary

Next, Ms. Tiderman presented the proposed substantive additions to and removals from the data inventory.

- 1. Workforce
 - a. There are no proposed additions.
 - b. There are six data elements proposed for removal. The elements are parts of the employer address and telephone numbers.
- 2. PK-12
 - a. Proposed additions:
 - i. Assessment Test Date this data element was missing from prior approval of the Assessment data elements and is therefore being proposed to align to the data submission from MSDE.
 - ii. Kindergarten Readiness Assessment (KRA)
 - iii. High School Status and Completers this data provides information on students who are exiting Maryland public high schools.
 - Standard Student Demographic String MSDE maintains a Standard Student Demographic String that is reported on all data submissions to and from MSDE. The Data Inventory did not clearly cite these fields from MSDE. Additionally, MSDE is in the process of revising the Standard Demographic String to include new data elements which will be provided to MLDSC.
 - v. Unique Student Identification System (USIS) and the Unique Teacher Identification System (UTIS) Each teacher and student in Maryland's public school system is assigned a unique identifier called a SASID for students and a SATID for teachers. Occasionally, it is discovered that a student or teacher was assigned multiple unique identifiers. In these cases, MSDE and the local school systems thoroughly research the identities. If it is determined that the identities are the same, the unique identifiers are merged together. MSDE is providing these data elements to the MLDS to assist with identity matching. These data elements will only be maintained in the Master Data Management system.
 - b. Proposed removals the data elements are either no longer collected by MSDE or have been determined not to be appropriate for inclusion in the MLDS.
- 3. Postsecondary (MHEC)

- a. Proposed additions
 - i. SAT Mathematics Score and Evidenced Based Reading and Writing Score -MHEC is updating their data collections to accommodate revisions to the SAT assessment, including a data element for a new mathematics score, and a new Evidence Based Reading and Writing Score.
 - ii. Flag MHEC is providing a new flag to identify the link between their End-of-Term (EOT) and Enrollment Information (EI) data collections.
- b. There are no proposed removals.

Ms. Schulz made a motion to approve the data elements identified for additions to and removal from the Data Inventory. Dr. Salmon seconded the motion, which was unanimously approved.

Data Collection Calendar

Ms. Tiderman began by explaining that the Data Collection Calendar guides collection of data from partner agencies. The Calendar is developed in collaboration with the data partners during the Data Governance Advisory Board meetings. The schedule is based on the agency data collection schedule to determine when they will be able to review and provide the data to the MLDS.

Along with the Calendar, staff have developed a process for late data submissions. Specifically, the process is a series of escalating notifications to data stewards (one week past due), the agency head (two weeks past due) and then the MLDS Governing Board (three weeks past due). There is also an option to extend the deadline in cases where staffing shortages or other issues are preventing the agency from meeting the schedule. If the extended deadline is not met, then notification is sent directly to the MLDS Governing Board. Dennis Hoyle, asked how late filings are currently handled. Ms. Tiderman responded that there is no process. Generally agencies have been compliant with the agreed upon schedule, but when files are late a formal documented procedure is needed.

Mr. Tingle asked whether the Center collects Accuplacer data. Ms. Tiderman stated that the Center does not have Accuplacer data and explained that Accuplacer data is maintained by the institution that administers the test. In comparison, the College Board administers and maintains the SAT scores. This allows MSDE to directly obtain the scores from the College Board. MHEC could collect the test scores but currently does not do so. Dr. Wilcox stated that Accuplacer is an area that requires a deeper dive. It is a significant issue for many students with significant consequences. There is a lot of variance in the cut scores used to determine which students are required to take remedial courses. Those cut scores are not known. Therefore creating a large repository is important. Dr. Salmon agreed with Dr. Clayton and noted that there is so much accountability for K12 and comparatively very little for higher education. Dr. Passmore also agreed and noted that this issue is analogous to the apprenticeship data discussion. The data that is present is unknown - yet it is used to manage processes without being rolled up to a standardized data set. Dr. Passmore noted that the process of collecting the data would be complex. Dr. Clayton agreed with the notion that it is "dark data" - but stated that it should be brought into the light. Without knowing the data, it creates a concern that the reason it is not reported is because it drives revenue for Community Colleges. Dr. Fielder noted that accountability in higher education is an important topic and one that will be considered during MHEC's upcoming Quadrennial Planning sessions. Data and metrics will be included in that planning as necessary resources to answer important questions.

Dr. Salmon made a motion to approve the Data Collection Calendar. Ms. Brooks seconded the motion, which was unanimously approved. Dr. Salmon complimented Ms. Tiderman on her presentation and ability to present data in a clear and understandable manner.

Old Business

There was no old business.

New Business

There was no new business.

Closed Session

Dr. Fielder noted that the Board needed to move into a closed session to discuss the independent security audit. The reason for the closed session is to avoid the risk of disclosing information about the MLDS IT infrastructure that could compromise the security of the system if made public. Ms. Brooks made a motion to move to a closed session. Dr. Salmon seconded the motion, which was unanimously approved.

Summary of Closed Session

The closed session was attended by:

- 1. The members of the Governing Board who were in attendance at the open meeting;
- 2. Ross Goldstein, Executive Director;
- 3. Tejal Cherry, Chief Information Officer;
- 4. Dawn O'Croinin, AAG;
- 5. Andrew Silberstein, representative of the audit firm, Cyber Engineering Services, Inc.; and
- 6. Charles Ames, Director of Security Services, DoIT.

Ms. Cherry provided an overview of the purpose of the audit, how it was implemented, and DoIT's role. Next she reviewed the tasks completed under the first phase of the audit and provided a summary of corrective actions taken to date. Those tasks included:

- 1. Physical Security Assessment
- 2. Threat Assessment
- 3. Automated Scans and Assessment
- 4. Code Review

Finally, Ms Cherry described the final phase of the audit, which was a penetration test of the system. A penetration test is the evaluation of an IT infrastructure by trying to exploit vulnerabilities, such as operating systems, service and application flaws, improper configurations, or end-user behavior. The results of the penetration test, findings, and proposed corrective actions were the focus of the discussion among the Board and invited guests.

Adjournment

Dr. Fielder reminded the members that the next meeting will be held on March 10^{th} at 9 a.m. at the same location. The open meeting adjourned at 10:40 a.m. and the closed meeting adjourned at 11:40 a.m.

Respectfully submitted, Ross Goldstein Executive Director

Approved: March 10, 2017