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

GOVERNING BOARD MEETING

September 8, 2017
MINUTES

The meeting of the Maryland Longitudinal Data System (MLDS) Governing Board was held on September 8, 2017, in the Maryland State Department of Education (MSDE) Board Room of the Nancy S. Grasmick Building. Dr. Fielder, Chair of the Governing Board, called the meeting to order at 9:00 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
Dr. Karen Salmon, State Superintendent of Schools, Maryland State Department of Education
Ms. Kelly Schulz, Secretary of the Department of Labor, Licensing, and Regulation
Dr. Ben Passmore, Assistant Vice-Chancellor for Policy, Research, and Analysis, University System of Maryland (Designee for Chancellor Robert Caret)
Ms. Tina Bjarekull, President, Maryland Independent Colleges and Universities Association
Mr. Brad Phillips, Research and Policy Director, Maryland Association of Community Colleges (Designee for Dr. Bernard Sadusky)
Dr. Farzad Moazzami, Associate Professor, Acting Assistant Vice President for Academic Affairs, Morgan State University (Designee for President David Wilson)
Dr. Jack Smith, Superintendent of Montgomery County Public Schools
Dr. Scot Tingle, Assistant Principal, Snow Hills High School
Mr. Christopher J. Biggs, Information Assurance Manager, Raytheon Company
Ms. A.J. Brooks, Privacy Analyst, U.S. Department of Health & Human Services (by phone)

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 and Research Assistant Professor, University of Maryland, School of Social Work
Dr. Laura Stapleton, Associate Director of Research, MLDS Center and Associate Professor in the Department of Human Development and Quantitative Methodology, University of Maryland, College of Education
Ms. Ann Kellogg, Director of Reporting Services, MLDS Center
Ms. Dawn O'Croinin, Assistant Attorney General for the Governing Board and MLDS Center
Ms. Jamese Dixon-Bobbitt, Executive Associate, MLDS Center

Introductions
Ms. Schulz introduced Cody O'Brien a new staff member with the Department of Labor, Licensing and Regulation who is working with internal data and statistical analysis for various projects. Dr.

Henneberger introduced Dr. Bess Rose, a new statistician who will be working with the Center in a full time capacity and is also a researcher with the University of Maryland, School of Social Work.

Approval of June 09, 2017 Meeting Minutes
Dr. Fielder asked for a motion to approve the minutes from the June 9, 2017 meeting. Ms. Schulz made a motion to approve the minutes that was seconded by Dr. Salmon. The motion was unanimously approved.

PARCC Alignment Study
Dr. Salmon introduced Dr. Dara Shaw who recently joined MSDE to serve as the founding Executive Director of the newly established Research Department. Dr. Shaw explained that PARCC Inc. asked MSDE to take part in a multistate alignment study. The study would analyze the alignment of achievement on the PARCC exam with success in postsecondary education (i.e. enrollment, persistence, and completion of credit bearing courses in the freshman year of college). Participation in the multistate study would require releasing data to PARCC Inc. and combining the data with other states. MSDE has a standing agreement with the Maryland Assessment Research Consortium (MARC) at the University of Maryland, College of Education. MARC is one of the leading psychometric analysis groups in the nation. Instead of participating in the multistate study, an independent alignment study with MARC as the primary researchers utilizing MLDS Center data and MSDE providing funding and project management support is a preferable solution. It has the advantage of not require turning state data over to PARCC Inc. or result in PARCC Inc. performing an alignment study on its own test.

The planned schedule for the alignment study is to begin now with the MARC researchers' looking at the data, understanding the available data elements, and formulating an initial analysis plan. The actual alignment study will take place a year from now to give time for students who took the test to move into college.

Ms. Bjarekull asked which other states are in the PARCC consortium and what are they doing? Dr. Shaw responded that she does not know which states are doing an alignment study. The states that are in the PARCC consortium include New Mexico, New Jersey, Rhodes Island, Colorado, and Washington D.C. Dr. Shaw also noted that there is an informal agreement among the states not to compare data. The rationale for this is that such comparisons are inadvisable given the different state requirements and ways in which programs are implemented. This points to another advantage of doing a Maryland focused alignment study - the researchers will be fully informed of Maryland's implementation and practices.

Dr. Smith asked whether other states could utilize the analysis being conducted by MARC to conduct their own alignment study. Dr. Shaw stated that this may be feasible and has been a subject of internal discussions. Dr. Smith went on to raise a concern about the uneven administration of certain programs such as Algebra II and English 11 and asked whether they will be left out of the analysis? Dr. Shaw agreed with Dr. Smith's concerns noting that the analysis will not include instances where the sample size is too uneven. The MARC team will look at not just sample size but also issues such as distribution and selection bias in determining whether and how to do the analysis.

In responding to a question from Dr. Passmore, Mr. Goldstein stated that the MARC researchers will need to become staff of the Center before gaining access to the data for the analysis. They will have to complete the staff authorization process, criminal history background check, and comply with all Center requirements for data use and security.

Summary of Center Output

Ann Kellogg began by noting that a new teacher education dashboard has been completed and posted on the website. The dashboard was the result of a data request from Dr. Shaw. A dual enrollment dashboard is in final review and will be released in the coming weeks. Two data briefs from the Research Branch are in final review. One data brief corresponds to the high school to workforce dashboards and the other is on Youth Apprenticeship. The Center has also been working on replicating a study completed in Ohio on the financial returns to short-term postsecondary credentials. The data examine wages pre and post graduation for students earning a certificate or associate degrees in Maryland's community colleges. The data will be used to produce a data snapshot rather than a dashboard so that more contextual information can be provided on the data.

Next, Ms. Kellogg noted that the Center has received quite a lot of data requests. Topics include outcomes for computer science, STEM, and nursing graduates. Currently there are ten open requests and a total of 31 different requests for data so far this year.

Finally, the Center has been looking for opportunities to collaboratively engage with the partner agencies. With MHEC, the Center is working to use its data to replicate the alumni survey that the colleges produce. The survey provides information on workforce participation and the career track of graduates. Also, the Center is working to provide data for the Student Outcome and Achievement Report (SOAR). SOAR is a report produced by MHEC that provides feedback to high schools on the performance of their students in college. With MSDE, the Center has been working to provide data on CTE student performance in college. With the P20 Council, the Center has been working on compiling data to support a required report for the More Jobs for Marylanders Act. The report requires the Governor's Workforce Development Board and the Center to set annual income earnings goals for 25 year olds who graduated from high school but who have not earned a college degree. Center staff has compiled data analyzing the current wages and trajectory of 25 year olds who have not earned a college degree.

Ms. Schulz asked about the data briefs and whether they will be going out for review. Dr. Henneberger responded that the apprenticeship brief is a five page research policy brief. The policy briefs are intended to set out the Center's interest on a cutting edge research topic and describe how Center data can provide relevant information on that topic. The brief is fully drafted and ready for external review. The other document is a one page data brief that follows from a dashboard that has already been published. Ms. Schulz stated that her understanding was the MLDS Governing Board would undertake policy initiatives at the direction of the P20 Council. Since the P20 Council did not recommend this topic to the Center, Ms. Schulz asked for an explanation of the process for the Center to determine what initiatives to undertake. Mr. Goldstein responded that one way for the Center to make decisions on topics is by working closely with the partner agencies to address questions that help them with policy issues or important questions. Another way is through attending meetings and hearings and learning about important topics that policy makers are discussing. Apprenticeship has been a frequent topic, both with the MLDS Governing Board and the P20 Council. The purpose of the brief is simply to put forth an explanation of how the Center can be a resource and tool for making decisions on this topic. In response to Ms. Schulz, Mr. Goldstein clarified that the reference to "policy" was a misnomer since the brief neither recommends nor comments on policy. Mr. Goldstein also noted that the the Center is not empowered to make policy. Ms. O'Croinin clarified that the MLDS Center is not a part of the P20 Council and while it will collaborate with P20 Council it is not required to receive the Council's direction for its work. Ms. Schulz stressed the importance of collaboration and the need for the State to move in one direction on policy issues and that the P20 Council is in the best position to coordinate those efforts.

In response to a question from Ms. Schulz about the type of information relied upon for the brief, Dr. Henneberger stated that the brief largely outlines describes the data within in the system that could be used to provide information to the State. Other information gathered was from various materials publically available on the Internet. Finally, Dr. Passmore noted that the question of apprenticeship had been covered by both the MLDS Governing Board and the P20 Council - both groups wanted to know more about what the Center could do with the data.

Research Updates

Dr. Henneberger provided the Board with an update on new members of the Research Branch:

1. Dr. Bess Rose, statistician and researcher at the School of Social Work;
2. Dr. Jane Lincove, faculty member with the School of Public Policy at UMBC; and
3. Mr. Dante DeTablan, a graduate student at the School of Social Work.

In addition to their work supporting and producing the Center output already discussed, the Research Branch has also been involved in coordinating grant applications, which will be discussed later in the meeting.

Security Update

Intrusion Detection System

Ms. Cherry began by discussing the implementation of the intrusion detection system (IDS), which was approved at the last meeting. The procurement process took about a month to complete and then another month was spent on implementation. The implementation required a lot of work by staff to address various issues with networking, system access, and connectivity. The IDS is fully installed and operational. It is connected to the MLDS network and monitors the portion of the system that maintains the most sensitive personally identifiable information. Staff received the first report on September 6th. The report is still being evaluated and staff will provide feedback on the type of information to be included.

In response to a question from Dr. Fielder, Ms. Cherry stated that the IDS hardware is located in the MSDE data center inside the Center's locked cage. There is still the ongoing question of whether the Center will move to the DoIT managed data center. Ms. Cherry noted that there are a lot of management changes are happening at Dot and there is now the potential that the Center will not move. More information should be available in the next six months. For a future meeting, Mr. Biggs requested that staff provide a summary of the information included in the IDS reports.

Dr. Moazzami noted the difference between an Intrusion Detection System versus an Intrusion Prevention System (IPS). The IPS actively prevents intrusions as opposed to detecting evidence of intrusions. Ms. Cherry stated that both IDS and IPS were considered. IPS was cost prohibitive. Ms. Cherry also noted that the Center has detailed plans in place for responding to an issue that may be detected.

Dr. Tingle noted the discussion at the last meeting about the cost of the IDS and the fact that the Center only had money for it due to staffing vacancies. Accordingly Dr. Tingle asked staff to talk about what steps will be taken if the determination is made that the IDS provides valuable and necessary information and should be continued. Mr. Goldstein confirmed that the IDS was fully paid for using FY 2017 funds

and will be in place for a full calendar year. If it is determined that IDS is needed, the following options will be reviewed:

1. DoIT may provide IDS as part of the enterprise system. DoIT has stated that it will consider whether it can provide IDS as part of the suite of enterprise security services it currently offers the state agencies. If this is available it may be a more affordable way to have an IDS since costs would be spread out among the various agencies.
2. If DoIT is not providing IDS, MLDS may look for its own partnerships to help share costs. MSDE would be a good partner since they also have sensitive data and share a data center.
3. Work the cost into the Center's annual budget. Agencies are given a spending target each year and have to work within that targeted amount. There is a process to submit an over-the-target request, but they are difficult get. The most likely outcome will be the need to decide where cuts can be made to make room for this expenditure. One possibility is reducing the amount of money that goes to the research budget or another contract. The Center budget is tight and there limited room for cuts.

Ms. Bjarekull asked for clarification on what the system is detecting. Ms. Cherry responded that the IDS captures all traffic and then creates alerts for any non-normal traffic. The Center has an Incident Management Plan to guide the response should an alert provide evidence of a breach or attempted breach. Finally, Mr. Biggs noted that IDS is a good first step before considering IPS. IDS provides an opportunity to monitor and analyze traffic which will provide better information for future security decisions.

Data Security and Safeguarding Plan (DSSP)

Ms. Cherry explained that at the last meeting there was a question about how the Center's DSSP aligns with the DoIT security plan. To address this question, staff has undertaken a detailed comparison of the DoIT plan and the DSSP to ensure that the DSSP has all of the DoIT required components. As gaps are identified, the DSSP will be updated accordingly. The full review and any recommended changes to the DSSP will be brought to the Board for review and approval.

Enterprise Management Plan - Service Level Agreement

Mr. Goldstein noted that there is a memorandum and copy of the draft service level agreement in the meeting folder. The goal of the SLA is to ensure that DoIT is accountable for the parts of the operation and security of the system that they will be in control of through the enterprise management plan. This SLA is written to include the possibility of fully moving to the enterprise environment.

Mr. Goldstein noted that Ms. Cherry attended a meeting for agency CIOs with acting Secretary of Information Technology Michael Leahy. Ms. Cherry mentioned that the Center was working on an SLA. Mr. Leahy stated that he was surprised that SLAs did not already exist between DoIT and the agencies and that he was looking forward to working with us to get this in place and possibly use it as a model for other agencies. In addition, the SLA was provided to Parris Jackson, CIO of MHEC to review. She provided valuable feedback that will be incorporated. Staff plans to ask other CIOs for their input. Finally, Mr. Goldstein provided an overview of the different sections and content of the SLA.

Mr. Biggs pointed to two provisions in the SLA regarding DoIT's responsibility to provide IDS services under this agreement. Ms. Cherry responded that this was to ensure equipment for IDS can be located in the hosted environment. Ms. O'Croinin further clarified that IDS is currently procured through the DoIT master contract. When the Center is in the DoIT environment, DoIT staff may need to play a role in maintaining the IDS and responding to any issues.

Dr. Passmore asked for clarification on where the agency stands in terms of moving to the statewide enterprise system. Specifically, does the agency want to move? Ms. Cherry stated that her preference is not to move the System to the enterprise data center. While DoIT provides services that are advantageous to the Center (such as the firewall and antivirus software), staying at the MSDE data center gives the Center more control over security. Under Secretary Garcia, moving to the enterprise was a requirement. However, under Secretary Leahy, it is not a clear directive. Mr. Goldstein added that the Center is also dependent on MSDE. If MSDE fully moves to the enterprise system, then the Center will have to move also since we rely on their ongoing management of the data center. Dr. Passmore stated that at some point the Board should receive a recommendation from staff on how staff wants to proceed. Mr. Biggs, noted that the benefit to the enterprise is that it helps reduce costs by consolidating services. Ms. Schulz stated that there is no guarantee of cost savings as that is not necessarily DoIT's purpose in creating the enterprise system. Ms. Schulz went on to acknowledge that DLLR has experienced similar challenges to gathering information about the enterprise plan from DoIT and has therefore decided to go it alone.

Data Governance Updates

Implementation of Changes in De-linking Requirement

Ms. Tiderman noted that legislation passed last year that allows the Center to keep a student record linked to a workforce record for 20 years after the student's last enrollment in a Maryland education institution. Staff reviewed the Center's data management procedures to determine how to implement the change. There is a de-linking procedure for the old law. A new de-linking procedure will be created and reviewed with the advisory boards.

Development of Data Retention and Disposal PLan

The de-linking requirement led to a broader discussion about data retention and disposal. There are requirements under the law and in the MOUs with the partner agency regarding data retention. In addition, State law requires agencies to have a document retention schedule. The staff will work on these issues and present plans to the Data Governance Advisory Board.

In response to a question from Mr. Biggs, Ms. Tiderman stated that while the earliest data received by the agency is from academic year 2007-2008, that is not the date that it was received. To prepare for removing data at the twenty year mark, staff must start now to ensure the system is structured in a way that can identify and remove data after 20 years. Ms. Tiderman also clarified that the limitation on retention only applies to personally identifiable data.

Development of a Protocol for External Researchers

Ms. Tiderman began by noting that the Center is asked to partner with various researchers on different projects. This creates a need for a clearly defined way for that authorization to be requested, reviewed and granted. Accordingly, staff has been working on creating a process that will provide clear defined

and controlled steps for both researchers and the agency to follow. Staff started by gathering the various legal requirements, including State law, regulations and the requirements of the MOUs with the partner agencies. In addition, staff gathered procedures used in other jurisdictions including Texas, Ohio and at the National Center for Education Statistics at the U.S. Department of Education. Some of the issues that the procedures will address relate to ensuring that the work is consistent with the Governing Board's Research Agenda and provides a value to the State of Maryland. At this point, staff is close to having a first draft. That draft will be shared with the Research and Policy Advisory Board during the October meeting. Ms. O'Croinin is making sure that a parallel review is being done by the partner agency AAGs.

Dr. Fielder asked for clarification on the current process for data sharing. Ms. O'Croinin responded by noting that data is never shared. Only authorized staff of the Center are allowed to access the data. Ms. O'Croinin also clarified that currently the decision for who can become authorized staff of the Center rests with the Executive Director of the Center based on a referral from the Research Director.

Ms. Bjarekull asked for staff to discuss the necessity of providing access for additional researchers; noting that doing so could change the dynamics of the Center's output and could open the Center up to lawsuits if access is denied. Ms. Tiderman responded that currently, the regulations allow for additional authorized staff to be appointed. The goal of the policy is to establish procedures around the process to ensure an orderly and transparent process. The PARCC alignment study discussed at the beginning of the meeting is a good example of a researcher request that can be managed through this type of process and ensure that the work is consistent with the Research Agenda, informs policy, and provides a benefit to the Center and the State. Dr. Henneberger added that having a way for researchers to apply to access the data in a clear and consistent manner will allow the Center to leverage expertise from around the state at a low cost.

MLDS Data Collection Calendar
Ms. Tiderman explained that the Data Collection Calendar is updated annually. The Calendar provides dates for when the agencies will provide different data collections to the Center. The Center works closely with the partner agencies (through the Data Governance Advisory board) to collaboratively establish the dates that meets the Center's needs and is consistent with the agencies' schedules. Dr. Passmore made a motion to approved the Data Collection Calendar that was seconded by Dr. Salmon. The motion was unanimously approved.

Old Business
Budget Report
Already discussed during the presentation on the Intrusion Detection System.

Memoranda of Understanding
Ms O'Croinin informed the Board that the Memoranda of Understanding presented at the last meeting were both finalized and signed by all parties.

New Business
Mr. Goldstein began by noting that there are memoranda for both grants in the folder. The first request was to support the IES Grant Application of Dr. Ken Elpus, Professor of Music at University of

Maryland, College Park. If awarded the study will use Center data to compare the outcome of two sets of students in International Baccalaureate programs: those who take an arts elective and those who do not. The goal is to determine if there are any difference in postsecondary outcomes base among the two groups. Due to the application due date, the Center's support for the grant has already been approved by Secretary Fielder. The grant checklist was used to facilitate the review process.

The second request is for the Board's approval. It is a request to support the School of Social Work's (SSW) Promise Neighborhood Implementation Grant. SSW applied for this same grant last year with the Center's support, which was approved by the Governing Board. SSW did not get the the grant, but is submitting an application under this new round of funding. The Center data will be used to fulfill the same research inquiry: a program evaluation of the impact of the interventions funded through the implementation grant. Dr. Salmon made a motion to approve the Center's support for the Grant, noting that MSDE has already provided its support. Dr. Smith seconded the motion, which was unanimously approved.

Adjournment

Dr. Fielder thanked the members for their time and attention to the Governing Board's business. Ms. Schulz made a motion to adjourn the meeting which was seconded by Dr. Salmon. The motion was unanimously approved and the meeting concluded at 10:30 a.m.

Respectfully submitted,
Ross Goldstein
Executive Director

Approved: *[pending]*