

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

GOVERNING BOARD MEETING

September 12, 2014

MINUTES

The meeting of the Maryland Longitudinal Data System Governing Board was held on September 12, 2014, in the Maryland State Department of Education (MSDE) Board Room of the Nancy S. Grasmick Building. Chair Kirwan called the meeting to order at 10:00 a.m. and noted that a quorum was present.

The following Governing Board members were in attendance:

Dr. William “Brit” Kirwan, Chancellor, University System of Maryland
Mr. Brian Roberts, Change Management Specialist, Montgomery County Government
Mr. Leonard Howie, Secretary of Labor, Licensing, and Regulation
Ms. Catherine Shultz, Acting Secretary of Higher Education
Dr. David Wilson, President, Morgan State University
Mr. Pat Pscherer, Md. Independent Colleges and University Assn. (Designee for Ms. Bjarekull)
Mr. Steven D. Rizzi, Vice President, PAR Government
Ms. Jennifer Mullinix, Math Teacher, Wilde Lake Middle School, Columbia, Maryland
Dr. Renee Foose, Superintendent of Howard County Public Schools
John White, Maryland State Department of Education, (Designee for Dr. Lowery)

The following staff members were in attendance:

Mr. Ross Goldstein, Executive Director, MLDS Center
Dr. Michael Woolley, Director of Research and Policy Services Branch, MLDS Center
Ms. Chandra Haislet, Director of IT and Data Management Branch, MLDS Center
Dr. Jon Enriquez, Director of Reporting and Portal Services Branch, MLDS Center
Ms. Dawn O’Croinin, Assistant Attorney General for the Governing Board and MLDS Center
Ms. James Dixon-Bobbitt, Executive Associate, MLDS Center
Mr. Jared Billings, Director of Education Policy, Office of the Governor

Executive Director’s Report

Staffing

Mr. Goldstein introduced Ms. Batul Sultana who is the MLDS Center’s new OBIEE Developer. She is responsible for creating dashboards and participating OBIEE and webcenter integration. Ms. Sultana is a great addition to the team and is making an immediate impact.

Despite this one bright spot, there has been little success with hiring new positions. The Center broadened its advertising campaign to include LinkedIn and InDeed - a job search aggregator. There are important positions left to fill, including the Database Administrator, ETL Analyst, and Webcenter Developer. One issue seems to be money. The Center made an offer to a qualified ETL candidate who at first accepted the offer but later turned it down when his employer offered him a significant salary increase to stay. The other issue is the visa status of the applicants - many of whom are in the U.S. on an H-1B visa. The H-1B visa program requires employer sponsorship. As a practice MSDE (which provides recruitment and hiring support for the Center) does not engage in the H-1B visa program. However, it is not a prohibited practice and some state agencies have sponsored employees through the H-1B visa program. Accordingly, Dawn O’Croinin, is researching the H-1B visa program. She has met with Assistant Attorneys General in other agencies that are engaged in the program. Based on her initial analysis it appears that the Center meets the criteria to sponsor H-1B visa employees. If the Center is able to open the search up to H-1B visa candidates, then there is a high level of confidence that the vacant positions will be filled.

Chairman Kirwan noted his support for hiring through the H-1B visa program and asked whether Board action was required. Ms. O’Croinin stated that the decision to hire an employee under the H-1B visa program is an administrative function and does not require Board action. Secretary Howie asked if the Center is undertaking any direct recruitment activities at colleges and universities. Mr. Goldstein responded that staff has been talking about exploring the possibility of establishing an internship program at a college or university to attract talented students to begin training with and working for the Center. In response to a question by Mr. Rizzi, Mr. Goldstein responded that budget restraints are a factor in staffing. Many qualified candidates are only interested in working as contractors - which is more lucrative and provides greater flexibility. The Center wants to be self-sustaining and not reliant on contractors. Ultimately there are candidates, like Ms. Sultana who are very qualified and see advantages of working for the state. They are just harder to find. It can be done - especially if the Center can sponsor H-1B visa candidates.

Mr. Goldstein noted that despite not having the positions filled, the database administrator and ETL developer functions are being completed by MSDE contractors. However, web development has been at a standstill. There is no contractor available at MSDE to do the work. The Center has its own contract for web services, but the resource left after a few weeks and the vendor has not, until recently, been unable to find a suitable replacement. The replacement is expected to start next week. There is also an interview for a permanent webcenter employee later today.

Meetings

Several staff attended the *2014 NCES Stats-DC Data Conference*, which took place during the last week of July. The focus of the conference was on longitudinal data systems and state

practices surrounding the development, management, security and privacy of those systems. There were also presentations on the research being conducted using longitudinal data. Chandra Haislet and Chuck Shelton provided a presentation on the Maryland longitudinal data system and its security architecture. The session was very well attended and well received.

Mr. Goldstein attended the *21st Century Career Counseling Jobs Jam*. The event was sponsored by US Departments of Labor and Commerce and hosted at Morgan State University. The purpose was to bring together developers, data owners, and different policy experts to come up with ideas for applications and technology tools to help facilitate access to the job market for young adults. The applications did not require the type of data being collected by the Center.

Finally, the Data Governance and the Research and Policy Advisory Boards continue to meet monthly. The Boards have reviewed the data center location move, reviewed security plans, worked on the data collection schedule, provided guidance on early childhood data collection, and discussed how to handle longitudinal data requests.

Data Center Location

Mr. Goldstein noted that the Board was briefed on the decision to move the data center from Department of Public Safety and Correctional Services to the Maryland State Department of Education (MSDE) in the July monthly report. A few key points from that report were highlighted, including the fact that the Center is not taking any servers out of DPSCS and that staff assessed the MSDE facility as equivalent to DPSCS in terms of physical and technical security. The advantages of MSDE are that it provides a service that is more in line with the Center's needs and is easier to manage due to proximity and less reliance on contractors. MSDE offers a co-location model versus the hosted solution at DPSCS. The co-location model allows the MLDS Center staff to set up the data system in the manner that works best for them.

Finally, Mr. Goldstein noted that MSDE has a shared interest in the work of the Center and Peter Cevinini, CIO for MSDE, is actively involved in making sure the Center and MSDE have a successful and collaborative relationship. He has been very inclusive in decisions affecting the center, including the installation of additional cameras, long term backup strategies, and network monitoring.

Branch Updates

System Management Branch

Chandra Haislet, Director of the System Management Branch began by providing a timeline of major system development milestones. The majority of tasks are completed. Security and user access is complete, including the establishment of LDAP accounts and user groups as well as the completion of security background checks and staff security training. The development environment at DPSCS is also complete. Staff has installed the database design, including the development of the party model (which associates a person with an organization and the person's

role at that organization). OBIEE data cubes have also been created to allow easier access to and the ability to manipulate the data. The cubes are now available for use by the research team. The one delay is the webcenter and OBIEE integration. Progress is on hold until webcenter developer is hired and brought on board. The test and development environments are waiting to be installed. There is a slight delay due to the decision to switch from DPSCS to MSDE but the system should still be online by early to mid-October. Once setup, it is a relatively simple process to image the environment at DPSCS on to the environments at MSDE. Finally, data loads are also completed. The legacy data from all three agencies has been loaded and an ongoing data collection schedule is also being established. Automated workflows are in place, which eliminate the need for human interaction with the data from the time it is sent to MLDS through matching and de-identification. There are also data quality checks that have been established and are in place to identify data issues and, if need be, send non-compliant data back to the agencies.

Dr. Kirwan asked about the unfinished work indicated on the timeline and what tasks are left to be completed past October (which is the last month on the timeline). Ms. Haislet responded that if a webcenter developer starts soon, she is confident that the remaining unfinished work will be timely completed by the end of October and that the timeline lists all tasks necessary to complete the system development. There was a general discussion about the lack of a webcenter developer and when that becomes a critical issue for the development of system. Ms. Haislet noted that there were several options and backup plans in place to mitigate the lack of a resource.

Finally, Ms. Haislet reviewed a handout of a schematic of the system design and noted that the master data management system, operational data store, and data warehouse components are in place and operational.

Policy and Information Services Branch

Jon Enriquez, Director of the Policy and Information Services Branch, presented a live system view of the OBIEE tool. Dr. Enriquez explained that the tool lists available data elements and allows the user to select the elements for display in a dashboard. The fact that data is available and reports can be created mean that once the webcenter developer starts he or she will have data to work with for inclusion on the website. Acting Secretary Shultz asked whether PARCC assessments will be loaded? Dr. Enriquez responded that after a review by the Data Governance Advisory Board, PARCC assessment data would be added. Ms. Haislet noted that PARCC data will be lagging for the first year or two.

Research Services Branch

Michael Woolley, Director of the Research Services Branch began by discussing the hiring of a research coordinator, which will be a faculty position at the University of Maryland, School of Social Work. The process is in the later stages. Two finalists have been identified and one has and the other will be conducting a day long interview at the university and provide a research

presentation. Dr. Woolley stated that he was very impressed by the high quality candidates who applied for the job. The research coordinator will be the only full time member of the research team and is critical to managing the research agenda and output.

Dr. Woolley also noted his excitement to begin testing the system capabilities following the Board meeting. The research team has been working on the front end of the planned research reports, but needs access to data to complete their analyses.

Finally, Dr. Woolley informed the Board that the next Research Series will take place on October 3rd. It will be a small panel discussion on online education. Dr. Kirwan complimented the series and noted that it provides a meaningful opportunity for cross institutional and cross disciplinary activities. Dr. Kirwan asked whether the focus of the online education panel will be on K-12 or higher education. Dr. Woolley stated that the panel currently includes a high level thinker on online education as well as a higher education practitioner. He hopes to include someone with a K-12 perspective but has not identified anyone yet. In response to a question by Dr. Wilson, Dr. Woolley explained that the current focus of the Research Series was general policy information on topics related to the research agenda. However, as the system gets completed and the research begins, the focus will change to presenting information about what the Center is learning based on Maryland data.

Data Collection Schedule

Ms. Haislet presented the proposed data collection schedule for the Governing Board's approval. The schedule went through several iterations and received input from the Data Governance Advisory Board. The schedule has a page for each of the agencies (MHEC, MSDE, and DLLR) and lists the specific data files to be provided. The schedule provides several steps for each data file.

1. A data collection window - the period of time during which the agency could begin to provide required data.
2. A final deadline for the data - the goal was to balance the flexibility of the collection window with a deadline so the Center can plan its work.
3. A period of time for cross agency reconciliation where the Center and the agencies can work back and forth on data matching and quality issues.
4. A deadline for the agencies to provide final sign off on the data.

Ms. Haislet also explained that the determination of whether the data will be provided annually, quarterly, or otherwise depends on the data source and how often it is collected by the agency.

In response to a question from Mr. Rizzi, Ms. Haislet stated that data match statistics will be gathered and closely monitored as an indication of the reliability of the system. This information will be provided to the Board. In response to a question from Secretary Howie, Ms. Haislet explained that managing data coming from different timeframes will be accomplished by

establishing cohorts of data and timestamping the data. Further, the data collection schedule will allow researchers to know what data from what periods of time will be received and become part of the system. In response to a question from Dr. Wilson, Ms. Haislet clarified that the data collection schedule represents the manner in which new data will be collected moving forward. Currently the Center has collected and loaded these data sets representing 2008 to present.

Dr. Kirwan asked for a motion to approve the data collection schedule. Dr. Wilson moved approval, which was seconded by Ms. Shultz. The motion was unanimously approved.

Strategy for Early Childhood Data Collection

Chandra Haislet stated that after the last Board meeting the Center engaged with the early childhood learning branch at MSDE. An employee from that division is now on the Data Governance Advisory Board to provide information on early childhood data - including what is available now and what will be available in the future. Ms. Haislet has recommended a phased-in schedule to collect data for existing public pre-k students (who have SASID numbers). She also noted that recent legislation expanding public pre-k requires MSDE to collect data on those expanded programs and that data will be available to the Center in the Spring. Finally, Ms. Haislet noted that the Center has taken an important first step to initiate the conversation on early childhood data collection and ensure that there is a strategy in place to collect data and keep a focus on early childhood data as the Center develops. In response to a question, Dr. Woolley responded that there were important research opportunities even though the data set is very limited.

Dr. Wilson asked a question about the possibility of unintended consequences - for example, if schools or programs are ranked or the research suggests a better outcome at particular schools. Jared Billings responded that the goal of the Center is not to provide rankings but to evaluate programs to guide policy.

Ms. Mullinx asked whether teacher information will be individually identifiable. Ms. Haislet responded that there is identifiable teacher information in the database, but information reported by the Center must be de-identified and aggregated.

A discussion followed about what information will be available to the public - especially parents and teachers. Mr. Goldstein responded that the website currently has and will continue to include a section for parents and students that will provide relevant information for that population - such as information to help guide higher education decisions.

Security Review and Update

Mr. Goldstein provided an update for the Governing Board on the implementation of the *Data Security and Safeguarding Plan (DSSP)*. Since the *DSSP* contains many security requirements that have to be developed, staff is working on a detailed implementation guide that goes through

the entire *DSSP* and indicates how each of the requirements are being addressed.

Mr. Goldstein presented a series of forms and requirements in the *DSSP* that staff must complete prior to having access to the system.

First, the *Rules of Security Behavior* form, takes the place of the non-disclosure agreement. It contains all of the non-disclosure agreement requirements and also addresses other security related requirements including the following:

- Training;
- Acting in conformance with the *DSSP*;
- Not sharing passwords;
- Reporting risks or vulnerabilities;
- Requirements for a Criminal History Background Check; and
- Consequences for violating the rules which include:
 - Removal of system access;
 - Potential civil or criminal penalties; and
 - Employee disciplinary actions.

In response to a question, Mr. Goldstein clarified that this form is signed by all members of the staff, including researchers.

Second is a written policy for *Conducting Criminal History Background Investigations (CHBI)*. The CHBI policy establishes that the legal authority for the background investigations is pursuant to the State's Information Security Policy which states that security clearance is required for personnel who access a sensitive system (which the MLDS is). The CHBI policy also specifies that it is applicable to all employees and contractors - regardless of job classification. Finally, the CHBI policy specifies what findings in a background investigation will result in a staff member not being granted access to the system. Those findings include any felony conviction or conviction in the last 10 years of a crime that qualifies as an infamous crime (such as treason, perjury, forgery, obstruction of justice or other misdemeanor involving dishonesty).

Third is a form for staff to complete acknowledging receipt and review of the *Data Security and Safeguarding Plan*.

Fourth is a document that outlines the security training requirements. There are two aspects to the training requirements. First is required security training, either through the State's *Mentor Training Program* (which includes ongoing training and certificates of completion) or through a Cyber Security Awareness training program available on the Department of Defense website. The second aspect to the training involves ensuring that staff understand the legal requirements surrounding educational data. These trainings include two FERPA online tutorials provided by

the Privacy Technical Assistance Center (PTAC). Staff is looking for similar classes related to labor data.

Fifth is the *Temporary Staff Appointment Form*. Pursuant to State law, only staff of the MLDS Center is permitted access to the system. This form documents the process for appointing staff. Staff can only be appointed by the Branch Directors (Dr. Enriquez, Dr. Woolley, and Ms. Haislet) with the approval of the Executive Director. Currently temporary staff appointed include the university researchers appointed by Dr. Woolley and the system development contractors appointed by Ms. Haislet.

Sixth is the *User System Access Request Form*, which must be completed before access to the system is granted. In the first part of the form the requester provides a statement of business needs and his or her planned method of system access. The form states that the device that accesses the system must be limited to a device issued by the MLDS, partner agency, or university (and no personal devices). The network through which the system is accessed is either MSDE's internal network, or an external network (which must be a secure home or work network). Part two of the form is a series of confirmations that the requester has completed all of the security requirements and that his or her supervisor agrees with the access request. Part three of the form is completed by the system administrator who assigns the requester to a functional group that contains only the rights necessary to complete the stated business needs, and assigns an access duration date. Part four is final approval by the Executive Director.

Acting Secretary Shultz suggested the following changes:

1. On the *DSSP Acknowledgement Form*, require staff to acknowledge having read the plan and that they understand and will comply with it.
2. On the *Rules of Security Behavior*, specifically reference the Data Security Breach Policy and clarify that breach notification must be immediately provided.

There was a discussion about the temporary staff appointment process. A concern was raised that the appointment process is somewhat open ended and could create false expectations or public concern that access to the data is not be sufficiently restricted. Mr. Goldstein noted that currently only the research team and computer support staff have received temporary staff appointments. Mr. Goldstein noted his agreement that the appointments should not be handed out indiscriminately and should be limited to individuals who are identified as necessary for the Center to complete its work. A researcher with a research interest that is not part of the Center's research agenda would not be appointed as staff. Instead, he or she would need to request an aggregate de-identified data set pursuant the regulations approved by the Board at the last meeting.

The discussion of temporary staff appointment also focused specifically on doctoral students and whether only doctoral students at the University of Maryland, College Park or University of

Maryland, Baltimore could avail themselves of this opportunity. Dr. Woolley confirmed that currently, due to the structure of the Center research team and its planned funding, only the doctoral students working with him and Dr. Stapleton would be staff of the Center. However, there are other opportunities to work with center and engage in research projects. Mr. Goldstein noted that the Center could partner with other institutions on grants which would provide the opportunity for additional institutions to work with the Center while providing funding necessary to pay for the inclusion of additional staff from those institutions.

Mr. Rizzi inquired about the process for publishing research and reports. Specifically, how will the Center ensure that information being published will not inadvertently disclose confidential information? Mr. Goldstein responded that in addition to planned reviews by the Data Governance and Research and Policy Advisory Boards, business rules are being applied to the system to ensure public data sets are FERPA compliant.

Dr. Kirwan asked about security plans to ensure that outside attackers are not able to access or compromise the system. Mr. Goldstein responded that funds are available to conduct an annual security audit. While the Center does not have a full-time security officer on staff, plans are being made to work with University of Maryland, Baltimore to share one of the Certified Information System Security Officers at the university.

In response to Dr. Kirwan's question about liability of Board members for a data breach, Ms. Shultz, noted that the Maryland Tort Claim Act would protect members from liability. Ms. O'Croinin will provide the Board with a more comprehensive answer to the issue of liability.

Update on Inter-Agency Agreements

Ms. O'Croinin advised that all of the agreements for data sharing are complete as are agreements establishing the administrative requirements between the Center and the respective agencies. Currently, an agreement between MSDE and the Center is being created to establish the terms for hosting the system at the MSDE data center.

Discussion

Dr. Wilson stated his interest in closing the achievement gap. Specifically, he stated that data should be brought to bear on this issue and asked if there is a plan in place to allow the Center to measure progress against the closing of the achievement gap. Dr. Woolley noted that one of the research questions asks how results of all other research questions vary by different critical student subgroups and backgrounds. Accordingly achievement gap issues will be pervasive throughout all of the research. Dr. Wilson stated that there have been a lot of reports and proposed solutions, but what he wants is to use the system to create accountability for closing the achievement gap. Mr. Rizzi agreed that more discussion on the research agenda would be worthwhile, noting that it is not enough to create a body of information from the data. Rather, the data should not only inform policy makers but also uncover issues and proactively provide

information for moving forward. Acting Secretary Shultz (who assumed the chairman duties after Dr. Kirwan departed the meeting) suggested that this topic be added to the next Governing Board meeting agenda for further discussion and consideration.

Adjournment

Ms. Shultz asked for a motion to adjourn the meeting. A motion was made by Mr. Rizzi and seconded by Mr. Pscherer. The meeting adjourned at 12:01 p.m.

Respectfully submitted,
Ross Goldstein
Executive Director

Approved: 10/22/2014