



## Monthly Report for August 2017

*Submitted September 1, 2017*

### Meetings

#### STATS-DC

The National Center for Education Statistics (NCES), in the U.S. Department of Education's Institute of Education Sciences (IES), held their annual NCES STATS-DC Data Conference August 1<sup>st</sup> through August 3<sup>rd</sup>. The conference is an opportunity for professional networking, updates on federal and national activities affecting data collection and reporting, and information about the best new approaches in collecting, reporting, and using education statistics. This year, MLDS Center staff provided two presentations during the conference.

1. Laia Tiderman and Ann Kellogg - *Which Came First? The Dashboard or the Population?* Abstract - Maryland Longitudinal Data System Center staff found that the current dashboard production process was cumbersome and slow. Center staff began rethinking the development process and asked, "What if we start from the population and not the question?" The Center is piloting an alternative process that defines key population groups and that can be used repeatedly to address multiple research questions. This approach requires the Center to work with stakeholders to define criteria for "key populations" as well as redesign its dashboard processes. This session discussed the Center's experience with this alternative process and the criteria it used for defining key population groups.
2. Angela Henneberger - *Dual Enrollment in Maryland: Using Propensity Scores to Strengthen Program Evaluation With State Longitudinal Data.* Abstract - The Center is legislatively required to submit an annual report on dual-enrollment program participation (simultaneous enrollment in both a public high school and college). Programs such as dual enrollment are often difficult to evaluate causally due to the absence of randomization. Modern causal inference techniques, such as propensity score methods, can be used to strengthen causal inferences in the absence of randomization in education sciences. The presenters will apply this approach to program evaluation using data from the MLDS and discussed the strengths and limitations of using this approach with state longitudinal data systems.

#### Korean Delegation

On August 3<sup>rd</sup> Ross Goldstein, Laia Tiderman, Ann Kellogg, and Angela Henneberger conducted an information session for a delegation of Korean education officials from the Korean Ministry of Education and Center for Educational Statistics. The presentation included an overview of the Center including governance and administration, the development of the System, data sources, data matching, and a discussion about data security and privacy. In addition, the presentation covered a description of the Center's research and analysis, including examples of dashboards and policy reports produced by the Center. The Korean Delegation asked many insightful and detailed questions. Both the Korean Delegation and MLDS Center staff appreciated the opportunity to discuss the important work we do.

### P-20 Workforce Development Workgroup Meeting

Ross Goldstein attended the Workforce Development Workgroup conference call meeting on August 29<sup>th</sup>. Ross provided a brief overview of the suite of suggested workforce data tools that were developed by the [National Skills Coalition](#) as part of their [State Workforce Education Alignment Project](#). The Center continues to review the different tools to determine which would be appropriate and useful for the State. The meeting was also a good opportunity to learn about other workforce development initiatives and ways that the Center may be able to provide actionable information to support those efforts.

### Meeting with Department of Legislative Services Staff

On August 7<sup>th</sup> Ross Goldstein, Laia Tiderman, Ann Kellogg, and Angela Henneberger met with education policy and budget analysts at the Department of Legislative Services (DLS). MLDS staff provided an overview of recent output and DLS staff discussed their upcoming priorities and areas where MLDS could provide information. A follow-up conversation to discuss a specific data request from DLS is scheduled for the end of the month.

## **Reporting/Data Requests**

### Dashboards

The Center has 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 certificate and 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.

A data request from MSDE, for college enrollment rates for CTE students was completed. The data from this request will provide the framework for updating an existing dashboard on college enrollment rates for Maryland high school graduates.

### Population Attributes

The population hierarchy was modified based upon feedback from the Center's presentation at NCES STATS-DC. The next attribute was selected for the project. This attribute will identify initial postsecondary enrollment by lag between high school graduation and postsecondary enrollment. This attribute will be used in updating and rebuilding the existing dashboards on college enrollment rates for Maryland high school graduates.

### SOAR Report

The Center is collaborating with Maryland Higher Education Commission (MHEC) to produce the Student Outcome and Achievement Studies report (SOAR). SOAR is a periodic report produced by MHEC in response to the General Assembly's 1988 charge to improve information to high schools and local school systems concerning the performance of their graduates in college. The first data table required for SOAR has been created and validated.

### More Jobs for Marylanders Act of 2017

The More Jobs for Marylanders Act (2017 Md. Law, Chap. 149/SB317) contains two sections that require input from the MLDS Center.

1. **Apprenticeship Data** - Section 5 of the bill requires, *That the State Department of Education, the Department of Labor, Licensing, and Regulation, and the Maryland Longitudinal Data System Center jointly shall determine ways to expand and analyze available data, including participation in career and technology education courses, relating to individuals who participate in registered apprenticeship training programs.* Ross Goldstein and Matt Koerner attended a meeting with DLLR and MSDE staff to discuss the status of both CTE and apprenticeship data. The Center's contribution to the discussion and the report (which is required from MSDE and DLLR) was to note that apprenticeship data and certain CTE data are not currently provided to the MLDS. The Center noted that both agencies are working towards providing data in the future. In addition, the Center noted that the Governing Board (in the 2016 Annual Report) recognized the important role of apprenticeship programs as a strategy for improving workforce outcomes of Maryland students, and as such, had directed the Center to work with the Governor's P20 Council to explore ways to grow and analyze apprenticeship data.
2. **Income Goals** - The legislation also creates a requirement (Ed. Art.§ 21-204) for the Center and the Governor's Workforce Development Board to develop annual income earnings goals for high school graduates who have not earned at least a 2-year college degree by age 25. As a first step, the Center is developing a baseline report that will show the actual earnings of a cohort of high school graduates who did not earn a postsecondary degree and who are now 25. Because the System begins with the academic year 2007-2008, the Center has three graduating classes who are currently 25 years old or older. The Center is exploring different ways to disaggregate the data, including by postsecondary completion and county. The Center expects to provide some preliminary data early next month..

### **Managing For Results (MFR)**

Part of the state budget process requires agencies to develop performance measures and report annually on those measures (see table below). This year, the Center reported a slight decline in the number of dashboards and policy reports added to the website. However, there was a large increase in the number of data requests that the Center responded to this year. Accordingly, the amount of Center output has increased over previous years. Over the coming months, we will work to turn data requests into dashboards that can be posted on the website and accessed by the public. There was also a decrease in the number of website page views this year. We are not satisfied with this outcome and it will be a major area of focus for the Center over the next few months as we implement different strategies to improve website page views. Finally, there was an increase in the number of seminars conducted, an increase in the number of times MLDS data were cited, and an increase in the number of written responses to formal requests for information.

| <i>Performance Measure</i>                                       | <i>2016</i> | <i>2017</i> |
|--|-------------|-------------|
| Number of new dashboards and policy reports added to the website | 22          | 17          |

|   |        |       |
|---|--------|-------|
| Number of page views on the MLDS Center website   | 11,197 | 9,486 |
| Number of seminars conducted on the use and analysis of longitudinal data               | 15     | 25    |
| Number of data requests from various stakeholders                                       | 5      | 40    |
| Percent of data requests fulfilled within 30 days of the request                        | 80%    | 77%   |
| Number of new reports generated annually  | 4      | 4     |
| Number of times MLDS data are cited   | 0      | 3     |
| Number of written responses to formal requests for information from state policy makers | 0      | 6     |
| Number of reports published in scholarly journals annually                              | 0      | 0     |

### **Regulations in Maryland Register**

At the June Governing Board meeting, action was taken to amend the Center's regulations on longitudinal data requests to be in compliance with the Public Information Act (PIA). Compiling electronic records in response to a longitudinal data request has been determined to fall under PIA. Provisions that treated longitudinal data requests in a manner inconsistent with PIA were removed by the amendments. Since the June meeting, the regulations were submitted to the Division of State Documents, reviewed by the AELR committee, and are now posted for public comment in the [Maryland Register](#) (Volume 44, Issue 17, Friday, August 18, 2017). The public comment period will be through September 18, 2017.

### **Grants**

#### Arts Education

The Center has issued a letter of support to Dr. Kenneth Elpus, Professor of Music Education, University of Maryland, College Park, for his grant application to the Institute of Education Sciences (IES) for a research project under the Education Research Grants program (CFDA 84.305A). This project proposes to use data from the MLDS to understand how postsecondary enrollment, persistence, and degree attainment vary among International Baccalaureate (IB) Diploma Program students who do and do not elect to include an arts education course in their IB course of studies. Prior to the letter of support the grant notification checklist was submitted to the partner agencies and approval to provide the letter of support was received from Secretary Fielder.

#### Promise Heights

The Center has issued a conditional letter of support to Dr. Richard Barth, Dean of the School of Social Work (SSW), in support of SSW's application for a U.S. Department of Education Promise Neighborhoods Implementation Grant. This is the same grant that SSW submitted last year, but did not receive an award. The Governing Board approved the Center's support for last year's grant. The

grant notification checklist will be sent out by the end of August. The MLDS Governing Board will be asked to grant its approval for the Center to support the grant at the September 8<sup>th</sup> meeting.

## **Research Branch**

### Postdoctoral Fellow

The Research Branch completed a search for a postdoctoral fellow to work 25% on the MLDS project. Two candidates were interviewed, and an offer will be extended to one of them. This postdoctoral fellow will be supported in part by UMB and was the result of a proposal submitted by Dr. Henneberger to mentor a fellow and have him or her work on a Center related project. (A notification checklist for the proposal was submitted, which was reviewed and approved by the Board in March.)

### Policy Brief:

The Research Branch has conceptualized a new type of output—a research policy brief. The MLDS data will often lag behind cutting edge issues due to the time in which data are received from the state agencies and the time and effort necessary to link the data in the MLDS. A research policy brief is a way to state the MLDS Center's interest in conducting research on a cutting edge topic on which the Center Research Branch cannot yet access data. These, three to five page, policy briefs will outline the importance of the topic and the research that could be conducted with the MLDS data. The first research policy brief has been drafted on youth apprenticeships.

### Research Series

Dr. Henneberger and Heath Witzen are revising their NCES STATS-DC presentation (*Dual Enrollment in Maryland: Using Propensity Scores to Strengthen Program Evaluation With State Longitudinal Data*) for the first research series. This first Research Series presentation will take place Thursday, October 5, 2017. See the MLDS Center website for additional information.

### Additional Data Analyses

The data in the system were checked to examine the linking of the out-of-state records past 5 years of the date of last attendance in a Maryland institution. The brain drain analyses are being re-run after this change was implemented in order to include workforce outcomes for out of state college attendees.

Data analysis on the outcomes of Maryland college attendees are being prepared for presentation to the MHEC Data Advisory Group. Two projects are being prepared for the presentation:

1. Replication of the MHEC Graduate Follow-Up Survey Reports - Every three years, the Maryland Higher Education Commission conducts a follow-up survey of postsecondary graduates after they have completed their program. While these surveys are a valuable tool that helps the State and institutions better understand student outcomes, there was an interest in determining if the data available in the System could streamline the process. Working with the MHEC Data Advisory Group, Center Research Staff have begun replicating the Follow-Up Survey Reports conducted by MHEC. Research Staff will share the differences in the data reported from the System, and the limitations.

2. 'Proof of Concept' on RAQ#11-timely and effective postsecondary completion- As a result of last year's Research Series (Value Added Modeling and Alternate Approaches for Ranking Institutions), Research Staff conceived of a model to provide propensity score weighted outcomes for institutions who enroll (some) similar students to the target institution. Research staff will present their thoughts and seek feedback from the MHEC Data Advisory Group.

### **Synthetic Data Project**

The Synthetic Data Project (SDP) Research Team are busy preparing for the Expert Consultant Summit scheduled for this fall in College Park. The summit will convene experts on data synthesis. The SDP team will present its work on the project and get feedback and input on the continued development of the SDP models.

The technical project manager, Kotes Cheruku, has been studying the data and is currently reviewing the data quality and the data extracts done previously by Daniel Bonnery, James Zheng and Yating Zheng. Kotes has proposed a plan and structure for the databases that are needed and the schedule and deadlines for building those databases. Daniel, James and Yating have also synthesised the demographic characteristics in the MLDSC data.

### **System Management**

#### Tasks

The System Management team worked on the following tasks this month:

1. Completed McAfee deployment on all the workstations and servers per DoIT standards;
2. Completed applying Windows patches on all the servers, workstations and virtual machines;
3. Completed a cold backup of ODS & MDM database servers;
4. Completed creation of an email distribution list for Synthetic Data Project;
5. Worked with CyberESI on the implementation of the Intrusion Detection System (IDS) monitoring services (CyberESI has set up their appliances in the MLDS environment and has begun generating reports);
6. Continued working with DoIT on procuring equipment necessary to meet the MLDSC requirements for our environment at the TierPoint location; and
7. Continued working to meet DoIT's requirement to update IP addresses to the statewide standards (one of the five VLANS has some ongoing issues that the team is working with Oracle to resolve).

### **Data Loading**

1. Completed loading "Postsecondary Attendance" files from MHEC 2014-2016 EIS collections; and
2. Staff continued the ongoing work of performing identity resolution for individuals who have multiple system identifiers for the same identifier (SSN).