Monthly Report for September 2017
Submitted October 6, 2017

Day to Serve
Day to Serve is an annual initiative that promotes volunteerism and encourages people to serve their communities. Maryland participates with Virginia, West Virginia, and Washington D.C. To encourage State employees to participate, Governor Hogan offered employees four consecutive hours of paid leave to take part in a volunteer activity. Jamese Dixon-Bobbitt organized a MLDS Day to Serve event on Friday, September 22nd at Our Daily Bread. Eight staff members took part in the volunteer activity by helping serve lunch to approximately 600 people in need. Staff fulfilled various roles including preparing and serving the meal, dishwashing and pot scrubbing, and trash removal.

Meetings
Research and Policy Advisory Board (RPB)
At the September 7th meeting, the RPB reviewed the design for the Center's upcoming dual enrollment dashboards and Annual Report. The RPB was updated on the project to create population metrics and Dr. Henneberger provided an update on the activities of the research team. Finally, Ross Goldstein reviewed the Center's Managing For Results budget submission and the agenda for the upcoming Governing Board meeting.

P20 Council - Workforce Development Workgroup
Ross Goldstein participated in a conference call with the Workforce Development Workgroup of the P20 Council. Mr. Goldstein was asked to provide a brief overview of the workforce data tools developed by the National Skills Coalition as part of the State Workforce Education Alignment Project (SWEAP). The tools include:
1. *Dashboards* focused on the performance outcomes of different workforce development programs;
2. *Pathway Evaluators* that help policymakers understand what combination of programs and services achieve the best labor market outcomes for different groups of people; and
3. *Supply and Demand Reports* that compare the supply of skilled workers completing training programs with employer demand as measured by the number of job openings.

The Center has been looking at each of these tools to determine whether the System has the required data elements and whether the projects are cross-sector. One project for which there is both data and opportunities for meaningful cross sector analysis, is the Pathway Evaluators for students into particular careers such as nursing and the allied health professions. Chancellor Caret indicated that there was a USM workgroup studying healthcare workforce development. The Center will collaborate with the USM workgroup on this effort.

P20 Council Quarterly Meeting
On September 12th, Ross Goldstein, Laia Tiderman and Ann Kellogg presented a preliminary data analysis to the Governor's P20 Leadership Council. The analysis supports the a requirement in the *More Jobs for Marylanders Act* (2017 Md. Law, Chap. 149/SB317) for the MLDS 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."

Three high school graduate cohorts were available for the analysis (2008, 2009, 2010) as all have reached age 25. Individuals included in the wage analysis were restricted to those with continuous wage visibility (at least 5 years of wage data within the 7 year period) and frequent wage visibility (at least 3.5 years of wage data within the 7 year period). The presentation provided data on quarterly earnings at age 18, 21, and 25 for individuals with a postsecondary certificate, some college, and no college enrollment for each of the two wage visibility groups.

Ross Goldstein and Ann Kellogg attended a follow-up meeting with the Executive Director of the Governor's Workforce Development Board (GWDB) on September 27th to discuss the presentation and how the Center can work with GWDB to provide information data analysis in support of the development of an earnings goal. Based upon the feedback, the Center will expand the data analysis to include regional wage data. The Center will also use data from the MIT Living Wage Calculator or other similar resources to supplement the analysis. The Center will provide the GWDB with a draft analysis by the end of October that it may use in the final report.

Reporting/Data Requests
MSDE Division of Career and College Readiness, Career Technical Education (CTE) Branch
Center staff met Student and Assessment Services Branch of CTE on September 13th. CTE is requesting MLDS Center's assistance for the second year, in providing reports for federal reporting requirements. MSDE CTE Office is required to submit two aggregate data files to U.S Department of Education, EDFacts. Both these federal reporting requirements relate to the outcomes of CTE students after they leave high school. Center Staff are working with CTE to meet their reporting deadlines.

Legislative Services
On August 7th Ross Goldstein, Laia Tiderman, Ann Kellogg, and Angela Henneberger met with education policy and budget analysts at the Department of Legislative Services (DLS) in early August to discuss their upcoming priorities and areas where MLDS could provide information. There were two projects discussed at that meeting.

The first requested project is to provide an analysis of Student Pathways - specifically 12th grade high school exiters from 2008. Using Center data to calculate the percentage of this cohort that graduated with a high school diploma, entered college, and graduated from college. The Student Pathways analysis is scheduled for completion in early October. The Student Pathways project will be further developed as a Center output to include additional subgroup analysis and median earnings.

The second requested project is an evaluation of teacher preparation programs. Before conducting this type of evaluation, the Center convened a group of experts from MSDE, MHEC, USM, and MICUA to help define the scope of the analysis and define outcome indicators. A first meeting was held on September 29th, with a second follow up meeting to be scheduled.

Dual Enrollment Report

The Center began data analysis for its Annual Dual Enrollment Report. The College and Career Readiness and College Completion Act of 2013 ("CCR-CCA") established a statutory requirement that the Center provide an annual report to the Governor and General Assembly on the number of students who are dually enrolled in high schools and in colleges or universities, as well as information about the courses taken by dually enrolled students.   A draft of the report will be present to the Research and Policy Advisory Board in November with the final report presented at the December Governing Board meeting.

Research Branch

Personnel

The following researchers have become staff of the Center and part of the Research Branch:

1. Dr. Jane Lincove, Associate Professor in the School of Public Policy at UMBC. Her research focuses on the economics of education, education policy, international development, and the equity and efficiency of market-based education reform.
2. Dr. Dawnsha Mushonga has been hired as a postdoctoral fellow in school based prevention and intervention sciences at the School of Social Work. She will be supervised by Dr. Henneberger and she will be spending approximately 20% of her time on an MLDS project.
3. Mr. Dante DeTablan, a doctoral student in the School of Social Work, was a graduate research fellow for the month of September. Dante received a full-time job and will not continue on with the graduate research fellowship, but we are currently discussing additional options to continue his collaboration with the MLDS Center. His research interests include school resources, family involvement, and student mobility patterns.

Conference Submissions

Dr. Henneberger submitted a paper symposium on using secondary data analysis to inform education practice and policy to the Society for Research on Adolescence (SRA). Co-authors on this submission are Heath Witzen and Alison Preston. The paper uses propensity score matching to evaluate dual enrollment program participation in Maryland. The strengths and limitations of propensity score matching with secondary data will be discussed.

Research Series

Dr. Henneberger and Heath Witzen have been preparing additional statistics for the first research series of the semester, Thursday October, 5, 2017. This presentation will present a propensity score matching approach to examine the outcomes associated with dual enrollment program participation after controlling for a number of relevant student characteristics. Additional models have been run examining college enrollment outcomes over time, college degree attainment, and earnings six years after high school.

Additional Data Analyses

The research team has completed their replication of the results included in the 2016 MLDS Center report on remedial education. The tables and figures presented in the report were replicated in the new ODS schema, which required transferring the SAS code from the prior ODS language to the new ODS language. Results were largely consistent, and discrepancies were reported to the Executive Director and the CIO.

The research team has been working on a data request for updated numbers in the tables of the 2016 research report "Assessing the Workforce Outcomes of Maryland Science, Technology, Engineering, and Math (STEM) Postsecondary Graduates."

The research team has created a research analysis plan to respond to Senator Ferguson's request for analyses related to student level socioeconomic status and school level socioeconomic status.

Synthetic Data Project (SDP)

The SDP team has been working this month across four domains. (1) SDP staff are developing the initial Gold Standard Data Set (GSDS) of postsecondary to workforce data to be used as an initial pilot in the development and design of the synthesization models and methods. The in-depth analysis to create the GSDS has led to questions regarding missing values. The SDP staff worked with the MLDSC Data Team for clarification of these issues. (2) An SDP workgroup is developing and running initial synthesization models and working with the MLDSC Systems Team to ensure sufficient processing capacity to process the large data sets. (3) The new IT Project Manager, is working on the design and build of the databases and structures to house the three eventual GSDS and synthetic data sets. (4) SDP staff are preparing for the methodological expert consultants meeting in late October. The meeting will be an opportunity to show them our progress, the results of our initial synthesization processes, and to receive feedback on how to proceed.

The Institute of Education Sciences (IES) Statewide Longitudinal Data Systems Grant Program produces a monthly publication - *SLDS Issue Brief.* The August edition is devoted to *Maryland's Synthetic Data Project*. The *Issue Brief* provides an overview of what synthetic data are, the goals of the Center's Synthetic Data project, and a discussion of the benefits of using synthetic data.

Website

A new feature has been added to the homepage of the MLDS Website that highlights selected dashboards by providing a fact from the dashboard to encourage visitors to click through to find out more. There are four rotating facts that will be updated periodically. The first four facts are:

- **700 ...**Maryland's public K-12 system hires approximately 700 bachelor's degree graduates from Maryland's public colleges as novice teachers each year.
- **72%** ...… of Maryland public college graduates majoring in teaching are employed as novice teachers in a Maryland public K-12 school within 1 year of graduation.
- **60%** … the average number of Maryland public high school graduates that enroll in a Maryland college immediately following high school graduation.
- **56%** … of Maryland public high school graduates who enroll in a Maryland college are female.

System Management

Tasks

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

1. SWGI Compliant IP Addresses - The Center has successfully completed moving all of its servers to new IP addresses. It took four months to make changes consistent with DoIT's statewide

centralized SWIGI compliant IP address policy. Staff had to resolve and troubleshoot many issues between the Center's system and DoIT during the transition.

2. Virtual Private Network (VPN) - Implementation of DoIT's Pulse Secure VPN Solution, which provides Remote Access as a Service (RAaaS), has been completed. Staff are currently testing to ensure users have no issues connecting.

3. System Patches (DoIT remedial) - The Center has completed implementing all remediation patches with coordination from DoIT.

4. Encryption of Laptops - Currently all MLDSC laptops were encrypted by DoIT. Staff are in the process of scheduling encryption of all MLDSC desktop computers with DoIT.

5. Master File Transfer Software (MFT) - Staff are evaluating two MFT products to replace the current product - TIBCO MFT. The two products are: GoAnywhere, and a DoIT enterprise product called MoveIT. Staff will evaluate the pros and cons for both products before making a final decision. Encryption in flight and at rest, as well as a high level of security, are the major considerations in the evaluation.

Top 10 dashboards hits:

Dashboard Name	Number of Hits
1. High School Graduates - Initial Postsecondary Enrollments	23
3. High School Graduates Initial Postsecondary Enrollments By County	17
16. Initial Postsecondary Enrollments - Type of Institution by Race/ Ethnicity	16
2. High School Graduates - Initial Postsecondary Enrollments By Year	15
25. Overview of High School Outcomes	14
11. High School Graduates with Initial Postsecondary Enrollments	11
26. Workforce Participation by High School Outcomes	9
7. Initial Postsecondary Enrollments - In State vs Out of State	9
22. High School Outcomes and Postsecondary Enrollment Status - Overview	6

24. High School Outcomes and Postsecondary Enrollment Status - Annualized Wages OverTime	6

Data Loading

- Completed loading Wages for 2016 Quarters 3 and 4 and 2017 Quarter 1;
- Completed loading SAT scores from MHEC for 2008 to 2017;
- Completed loading ACT scores from MHEC for 2016 and 2017;
- Completed loading Remedial Assessments from MHEC for 2016 and 2017;
- Completed loading MHEC degree information from 2016;
- Completed loading the GED and NEDP files; and
- Ongoing work on identity resolution for individuals who have multiple system ID's for the same identifier (SSN).