



# MLDS CENTER

Maryland Longitudinal  
Data System

**Better Data • Informed Choices • Improved Results**

Research Highlights from  
the Maryland  
Longitudinal Data System  
Spring 2016

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Governing Board,  
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MLDSC Research Branch

# The MLDSC Research Branch at the University System of Maryland

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# Objectives of the Research Branch

- Conduct rigorous analyses using advanced statistical methods for the analysis of longitudinal education and workforce data.
- Research reports include:
  - Background literature on the research topic
  - In-depth analyses on critical research and policy topics that would not be possible to study without the longitudinal cross-sector data of the MLDS
  - Future directions for research and reporting.

# Research Highlights Outline

- Early Childhood Care and Education Workforce
- Science, Technology, Engineering, and Math (STEM) Workforce
- Developmental/Remedial Coursework
- The Outcomes of High School Persisters
- The Workforce Outcomes of High School Students
- These 5 reports respond to 8 of the Research Agenda questions.

# Early Childhood Care and Education (ECCE) Workforce (RAQ 17)

- About 50% of Maryland ECCE degree earners were found in an ECCE industry in the workforce for four quarters in the calendar year following graduation.
- Of those workers:
  - about 50% were retained in the ECCE workforce after 5 years and
  - about 30% re-enrolled in higher education after 5 years.

# STEM Workforce (RAQs 15 and 16)

- About 40-50% of in-state residents and about 10-15% of out-of-state residents earning STEM degrees in Maryland were found in the workforce for 4 quarters in the calendar year following graduation.
- Of Maryland degree earners found in the workforce the year after graduation:
  - About 65% of in-state and about 60% of out-of-state residents earning a Bachelor's degree were retained after 5 years.
  - About 75% of in-state and about 50% of out-of-state residents earning a Master's degree were retained after 5 years.
  - About 60% of doctoral degree earners were retained after 5 years.

MLDSC Draft– As of 6/7/16

# Developmental/Remedial Coursework (RAQs 3 and 6)

- Report will enhance the Maryland SOAR report and provides the longitudinal context.
- Of 2013-2014 high school graduates enrolling in a Maryland college in 2014-2015:
  - 65% took a remedial math assessment; lower for English and reading
  - 37% needed remedial coursework in math; 18% in English; 18% in reading
- Currently working on analyses examining:
  - High school predictors
  - Transfer
  - Graduation
  - Time to degree

# The Outcomes of High School Persisters (RAQs 2 and 20)

- A *persister* is a student who:
  - did not formally withdraw from high school **and**
  - did not earn a high school diploma or certificate of completion by the end of the 4<sup>th</sup> year.
- Currently working on analyses examining:
  - College enrollments
  - Workforce outcomes.
- Report will provide an in-depth look at the outcomes of a critical group of students typically lost to research analyses during transition points between high school and college or the workforce.



# Workforce Outcomes of High School Students (RAQs 18 and 20)

- A comparison of workforce outcomes for high school non-completers, diploma earners, certificate of completion earners, and GED earners will include:
  - Wages over time
  - Industry information
  - Wages by industry.
- Research report will include a comparison of methods to calculate wages using the MLDS:
  - Four quarter wages
  - Annualized wages.

## Next Steps

- Collaborate with the data and dashboard teams to:
  - Translate research reports into highlights for creation of dashboards.
  - Discuss highlights on published dashboards in order to inform reporting briefs.
- The goal of this collaborative effort is to make the Center research and reporting accessible to a wide variety of audiences.

# Research Agenda Questions Addressed

- **RAQ2:** What percentage of Maryland high school exiters go on to enroll in Maryland postsecondary education?
- **RAQ3:** What percentage of Maryland high school exiters entering college are assessed to need to take developmental courses and in what content areas?
- **RAQ6:** How likely are students placed in developmental courses to persist in postsecondary education and transfer and/or graduate?
- **RAQ15:** Are exiters of Maryland colleges successful in the workforce?

# Research Agenda Questions Addressed

- **RAQ16:** Assess STEM post-graduate student state and regional job acceptance and retention.
- **RAQ17:** Assess training and retention of early childhood workforce in Maryland.
- **RAQ18:** What are the workforce outcomes for Maryland students who earn a high school diploma (via high school graduation or GED®) but do not transition to postsecondary education or training?
- **RAQ20:** What are the workforce outcomes of Maryland high school non-completers?