

MLDS CENTER

Maryland Longitudinal
Data System

Better Data • Informed Choices • Improved Results

Using Multiple Data Sources from Maryland's SLDS to Uncover Hidden Teacher Pathways

Ann T. Kellogg, Molly B. Abend, Ross
Goldstein, & Angela K. Henneberger

April 23, 2026

Agenda

- Brief Overview of the MLDS Center
- Educator Landscape in Maryland
- Using Maryland's SLDS to Strengthen and Diversify the Teacher Workforce (Institute of Education Sciences (R305S240013))
- Maryland College Labor Sector and Wage Explorer: Educator Preparation Programs (TCLaWE)

Overview of the Maryland Longitudinal Data System Center

WHAT does the MLDS Center do?

- **Independent state agency** that **develops** and **maintains** a data system containing student and workforce data from all levels of public education, child and youth services, and the State’s workforce.
- **Generate timely and accurate information** about **student performance** that can be used to **improve the State’s education system** and **guide decision makers** at all levels.



Establishment (2010–2013)

2010: MLDS Center established by state law as an independent unit of state government.
2013: Operations officially began.



Early Development (2014–2015)

2014: Initial data loading started with 14 collections.
2015: First data outputs were produced.



Expansion (2018–2020)

2018: Achieved 10 years of linked data availability.
2020: Experienced a 35% increase in unique data collections.

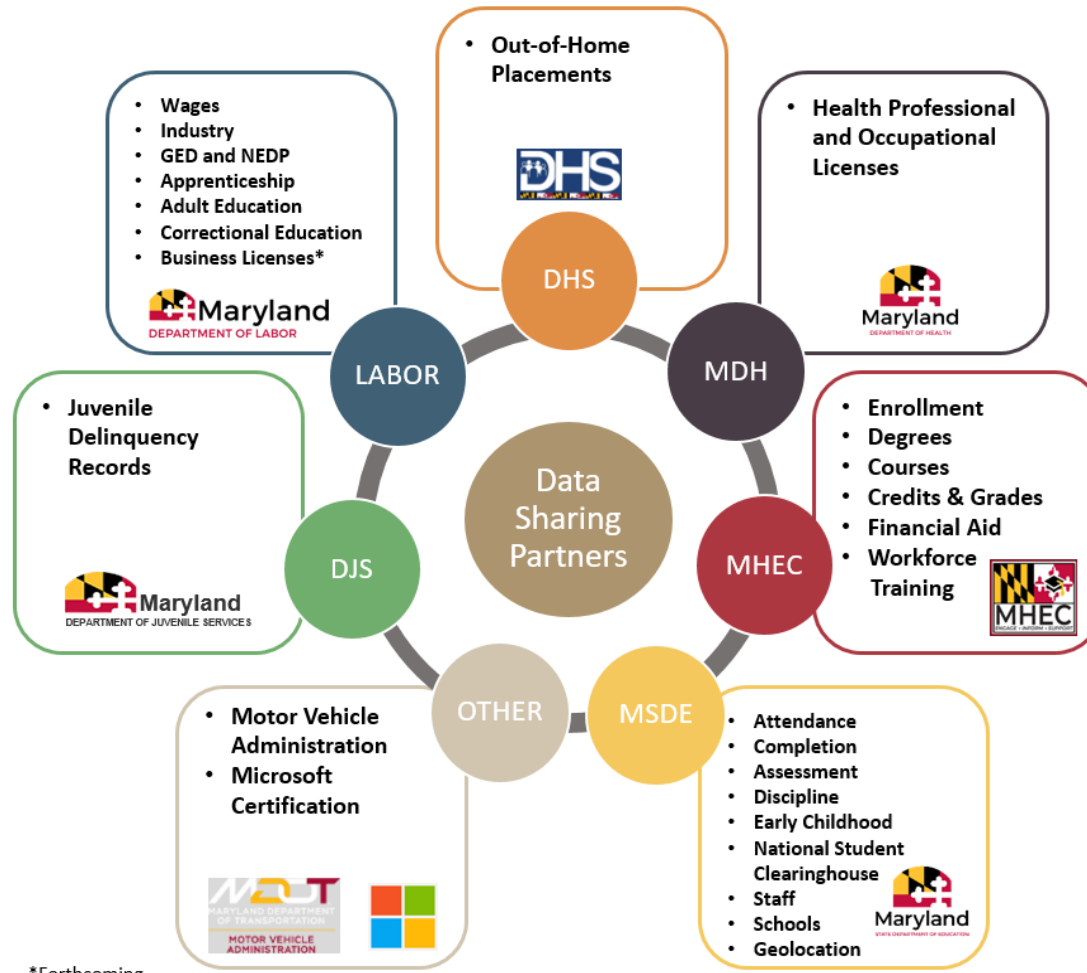


Extension (2023–2025)

2023: Achieved 15 years of linked data availability.
2025: Now managing 43 different data collections.

WHAT Data are Collected?

MLDS Data Delivery System



*Forthcoming

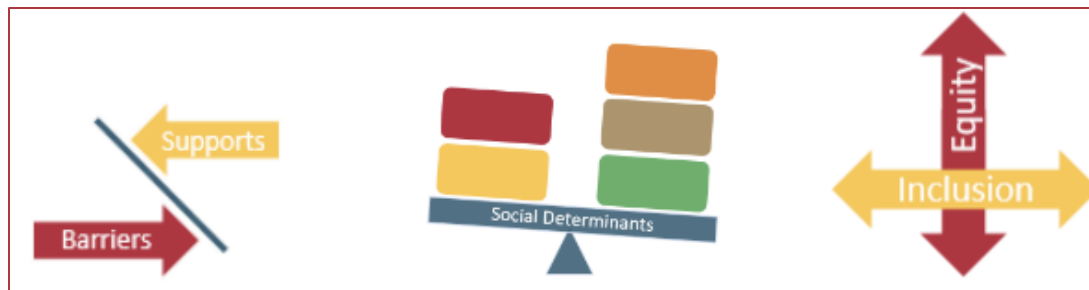
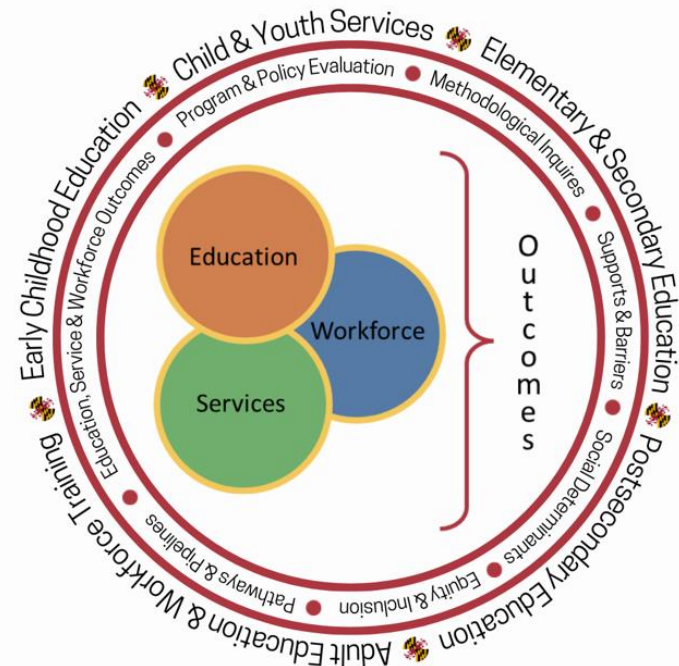
HOW is the MLDS Center Organized?

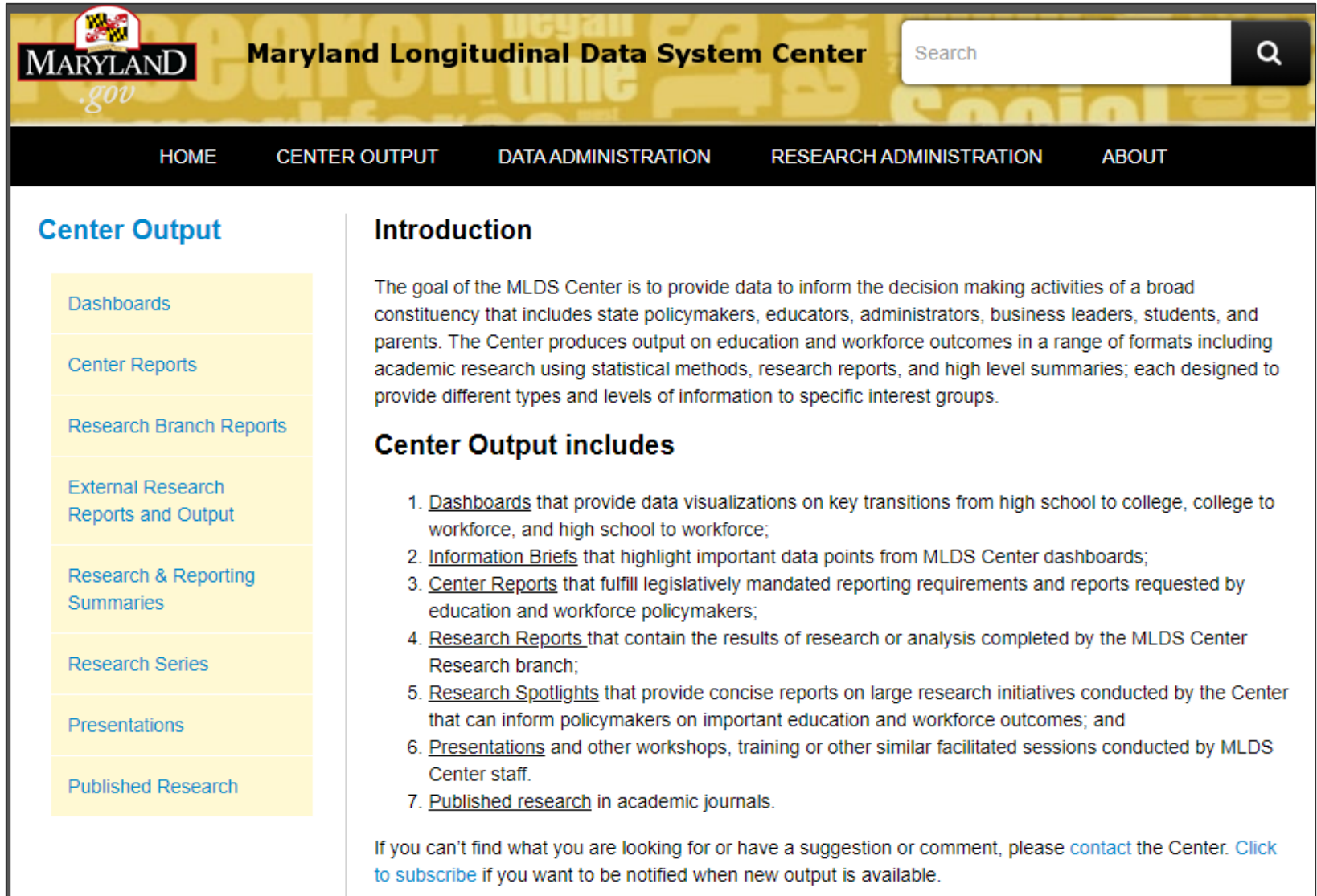


Research Agenda

Research Categories

- **Pathways & Pipelines:** The entry, transition, and exit points students take into specific education, service and labor sectors.
- **Educational, Service & Workforce Outcomes:** Student-level and/or institutional-level characteristics and the importance of these characteristics in predicting outcomes.
- **Program & Policy Evaluations:** Determines whether a given program or policy has been successful.
- **Methodological Inquiries:** Improves the selection and application of research and statistical methods when using MLDS data.





The screenshot shows the homepage of the Maryland Longitudinal Data System Center. At the top left is the Maryland state logo with the text 'MARYLAND .gov'. To its right is the title 'Maryland Longitudinal Data System Center' and a search bar. Below this is a navigation menu with links for HOME, CENTER OUTPUT, DATA ADMINISTRATION, RESEARCH ADMINISTRATION, and ABOUT. The main content area is divided into two columns. The left column, titled 'Center Output', contains a vertical list of links: Dashboards, Center Reports, Research Branch Reports, External Research Reports and Output, Research & Reporting Summaries, Research Series, Presentations, and Published Research. The right column, titled 'Introduction', contains a paragraph about the center's goal and a list of seven items included in the center output. At the bottom of the right column is a paragraph with contact and subscription information.

MARYLAND .gov **Maryland Longitudinal Data System Center** Search

HOME CENTER OUTPUT DATA ADMINISTRATION RESEARCH ADMINISTRATION ABOUT

Center Output

- Dashboards
- Center Reports
- Research Branch Reports
- External Research Reports and Output
- Research & Reporting Summaries
- Research Series
- Presentations
- Published Research

Introduction

The goal of the MLDS Center is to provide data to inform the decision making activities of a broad constituency that includes state policymakers, educators, administrators, business leaders, students, and parents. The Center produces output on education and workforce outcomes in a range of formats including academic research using statistical methods, research reports, and high level summaries; each designed to provide different types and levels of information to specific interest groups.

Center Output includes

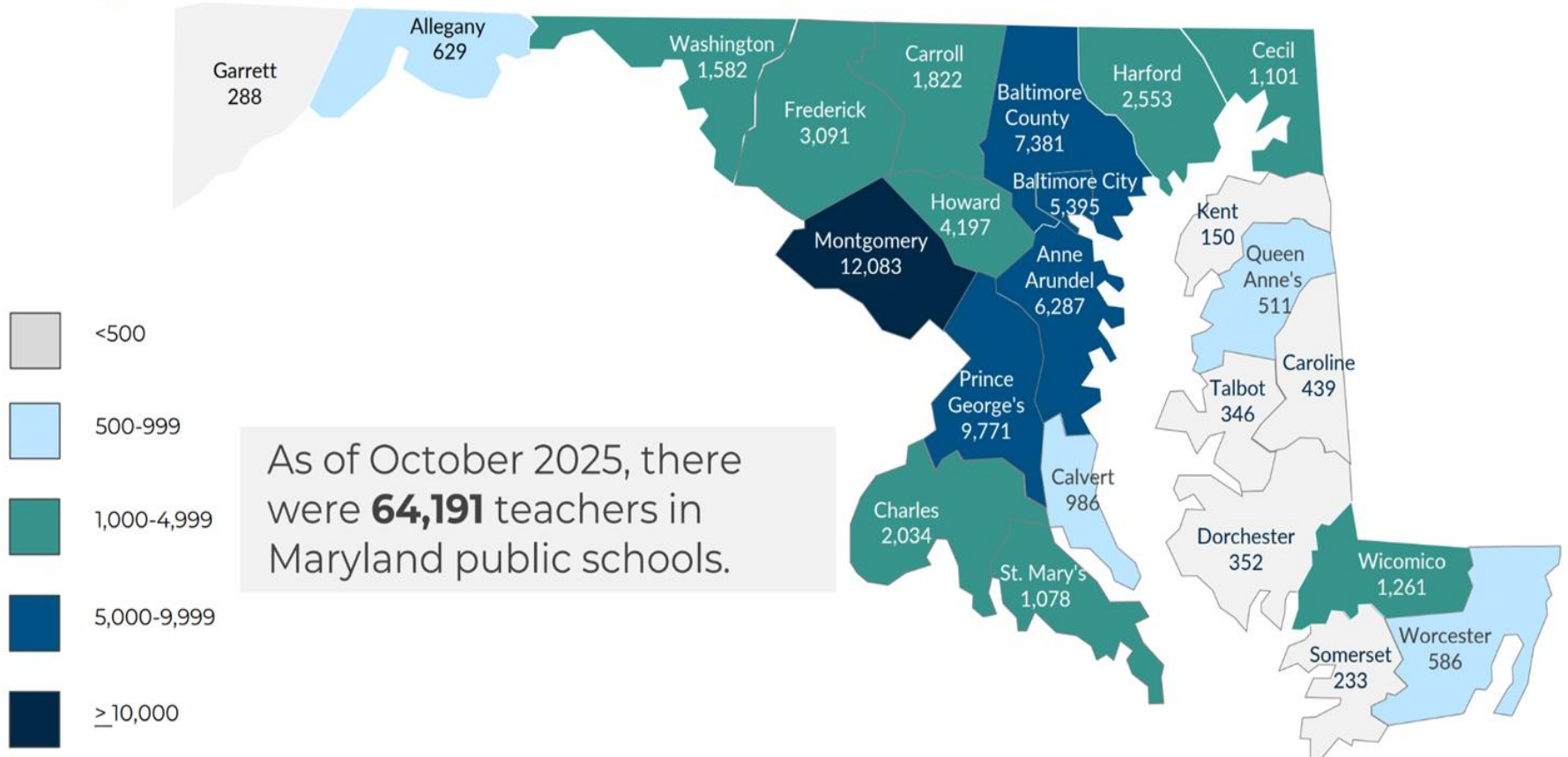
1. Dashboards that provide data visualizations on key transitions from high school to college, college to workforce, and high school to workforce;
2. Information Briefs that highlight important data points from MLDS Center dashboards;
3. Center Reports that fulfill legislatively mandated reporting requirements and reports requested by education and workforce policymakers;
4. Research Reports that contain the results of research or analysis completed by the MLDS Center Research branch;
5. Research Spotlights that provide concise reports on large research initiatives conducted by the Center that can inform policymakers on important education and workforce outcomes; and
6. Presentations and other workshops, training or other similar facilitated sessions conducted by MLDS Center staff.
7. Published research in academic journals.

If you can't find what you are looking for or have a suggestion or comment, please [contact](#) the Center. [Click to subscribe](#) if you want to be notified when new output is available.

<https://mldscenter.maryland.gov/CenterOutput.html>

Educator Landscape in Maryland

Maryland Teacher Workforce, SY 2025-2026



Note: The total number of teachers includes 35 teachers in The SEED School, which is not included in any LEA counts. Only teachers whose primary role is teaching are included in the total count.

Source: MSDE Staff Data Collection

Maryland Teacher Race/Ethnicity Trends

The Maryland teacher workforce has been gradually diversifying over the past five years.

| | 2021-2022 | 2022-2023 | 2023-2024 | 2024-2025 | 2025-2026 |
|------------------------|-----------|-----------|-----------|-----------|-----------|
| Asian | 4.3% | 4.4% | 4.6% | 4.8% | 4.9% |
| Black/African American | 18.8% | 19.5% | 20.4% | 21.4% | 22.1% |
| Hispanic/Latino | 4.2% | 4.5% | 4.7% | 4.9% | 5.1% |
| White | 70.6% | 69.5% | 68.1% | 66.6% | 65.5% |

Source: MSDE Staff Data Collection.

National Board Certified Teachers (NBCTs), SY2025-2026

The number of NBCTs increased by 39% from October 2024 to October 2025.

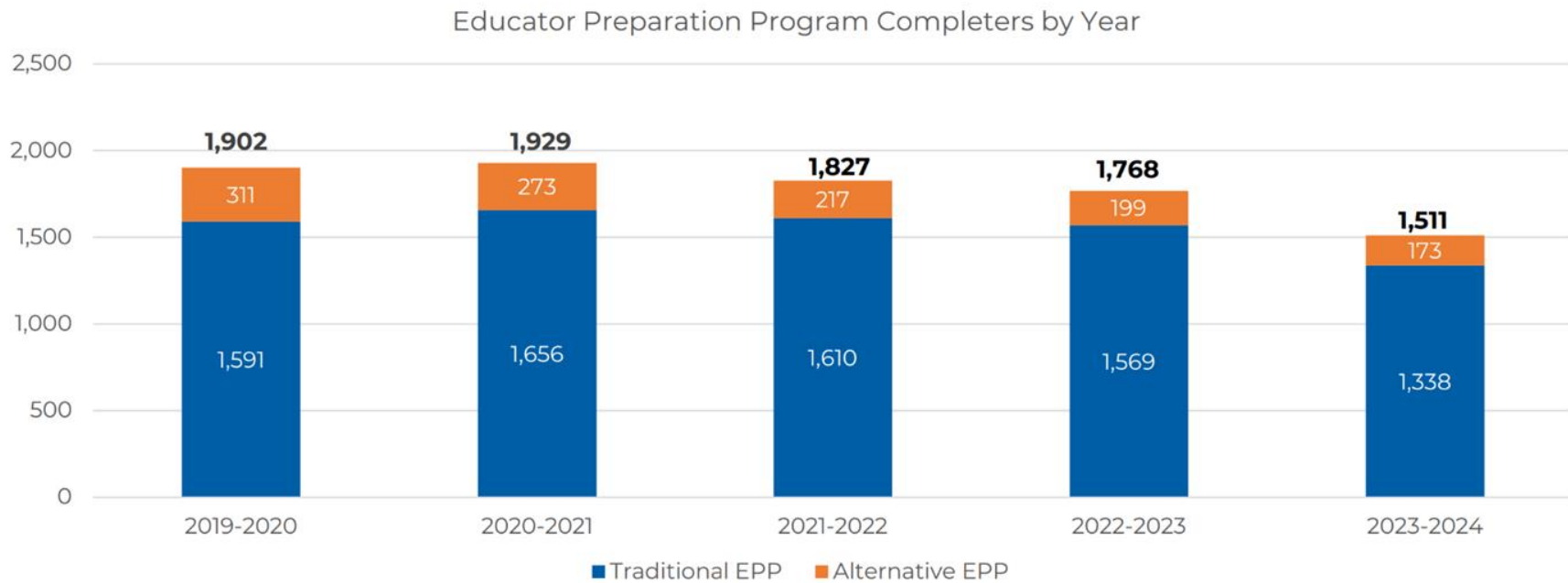


- As of October 2025, there were **3,173 NBCTs actively teaching** in Maryland public schools.
- NBCTs **comprise 4.9%** of the total teacher workforce.

Source: MSDE Staff Data Collection

Maryland Teacher Preparation Program Completer Trends

The number of completers in both alternative and traditional programs has declined over the past few years.



Source: Title II Reports (title2.ed.gov)

Educator Preparation Completers Entering Maryland Public Schools as Teachers

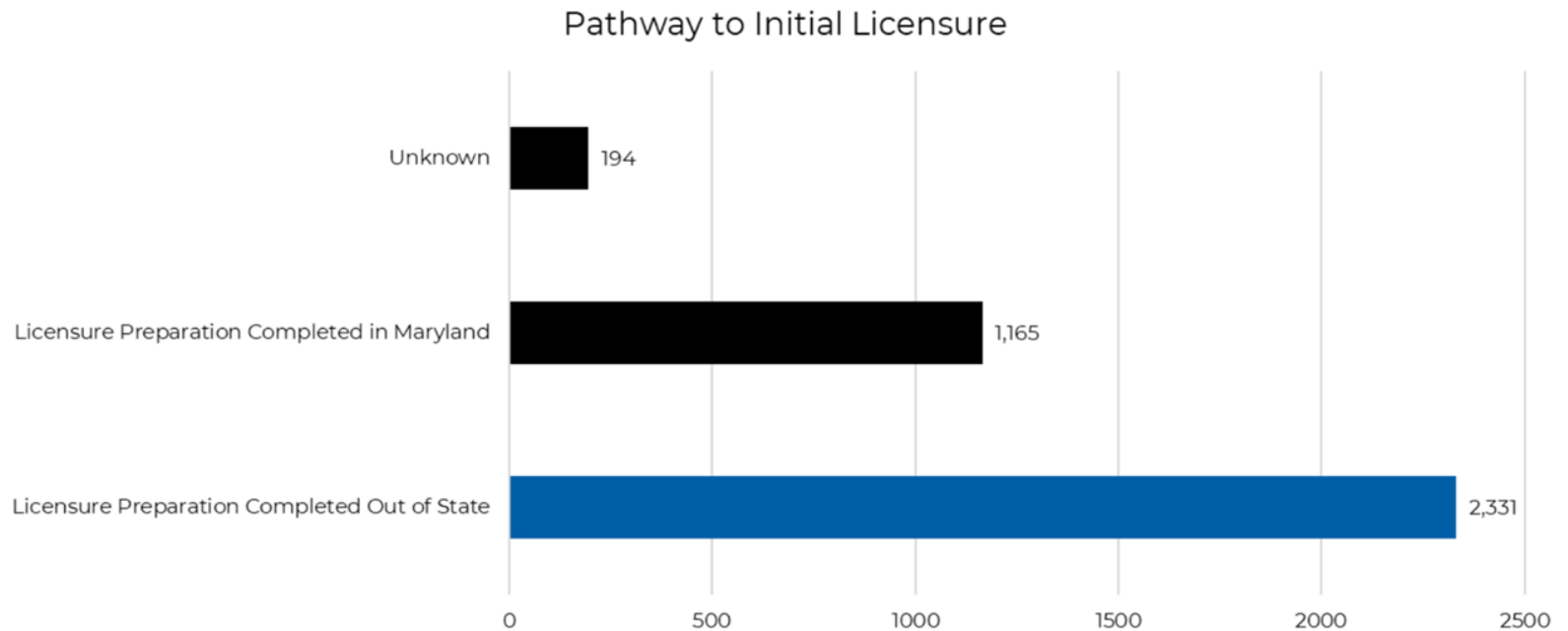
| Educator Preparation Program Group | Undergraduate Completers 2018-2023 | Teaching within 3 years of Program Completion | |
|---------------------------------------|------------------------------------|---|-----------------|
| | | N | % of Completers |
| Early Childhood Education | 1,835 | 1,317 | 72% |
| Elementary Education | 2,883 | 2,086 | 72% |
| Middle School | 168 | 139 | 83% |
| Subject Area Specialists (PreK to 12) | 2,140 | 1,470 | 69% |
| Total | 7,026 | 5,012 | 71% |

Between 69% and 83% of Educator's prepared in Maryland are teaching at Maryland public schools within 3 years of completion

Source: Maryland Longitudinal Data System Center. (2025) *2025 Report: Progress in Increasing the Preparation and Diversity of Teacher Candidates and New Teachers*. Baltimore, Maryland.

Pathways to Licensure: In-State vs. Out-of-State

In 2023-2024, applicants awarded initial licensure in Maryland were more likely to complete their preparation in another state.

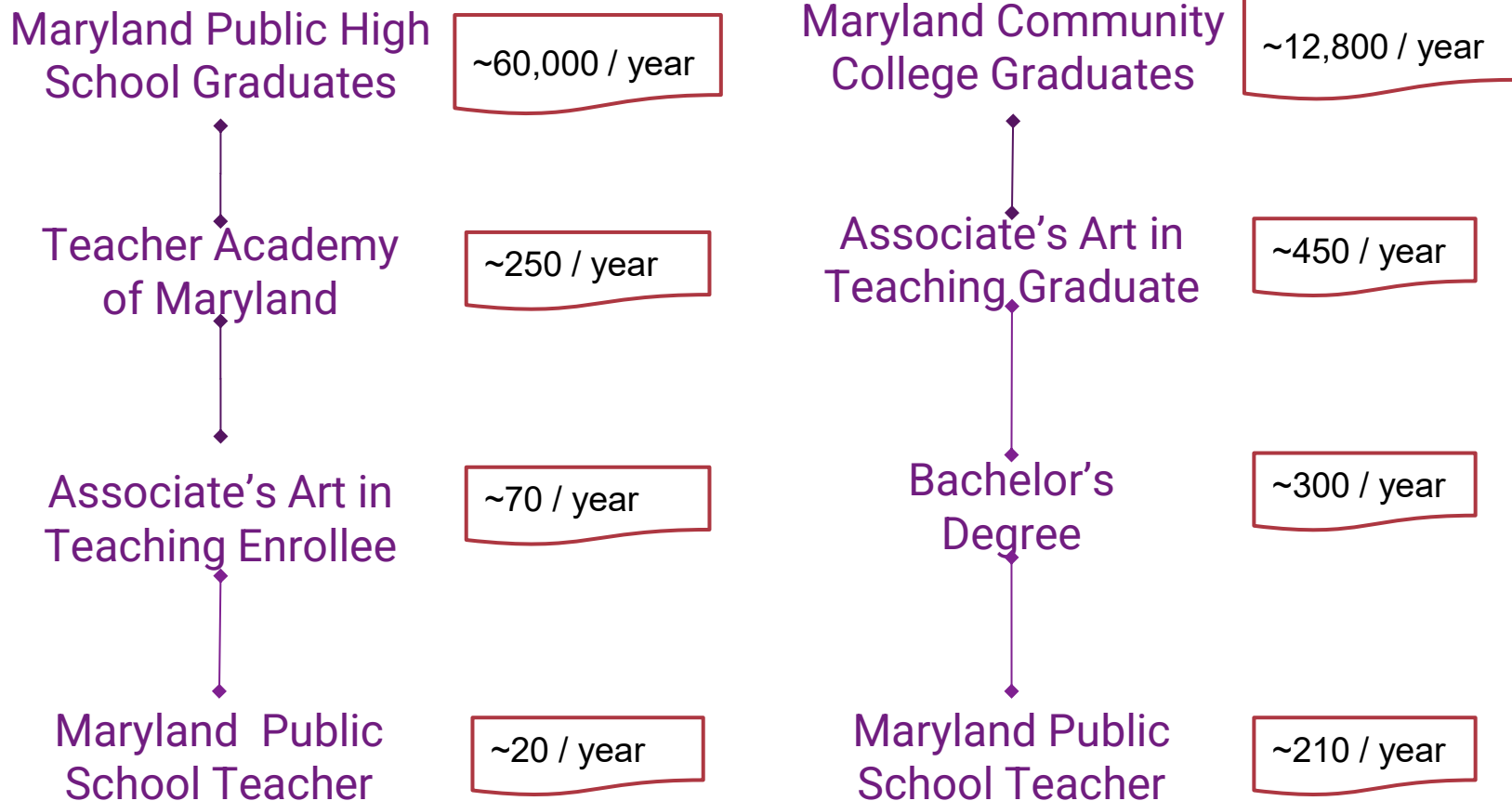


Notes: The data below represent applications that were approved from July 1, 2023, to June 30, 2024. These data exclude applications that lead to the issuance of a resident teacher or conditional license. There were applicants who qualified for licensure under multiple pathways- in those instances, the preparation program was identified as the primary pathway to avoid duplicate counts.

Source: MSDE Licensure System

Supporting Teacher Production in the State of Maryland

Maryland Education Pipeline to Maryland Public School Teaching



Maryland Education Pipeline to Maryland Public School Teaching

| Academic Year | Undergraduate Students | | | Graduate Students | | |
|---------------|------------------------|------------------|---------------------|------------------------|------------------|---------------------|
| | Teaching Fellows | | | Teaching Fellows | | |
| | Total Students Awarded | Average Award | Total Funds Awarded | Total Students Awarded | Average Award | Total Funds Awarded |
| 2020 | 49 | \$ 14,833 | \$ 726,801 | 9 | \$ 11,762 | \$ 105,861 |
| 2021 | 88 | \$ 17,576 | \$ 1,546,706 | 15 | \$ 13,461 | \$ 201,914 |
| 2022 | 93 | \$ 18,493 | \$ 1,719,841 | 14 | \$ 11,793 | \$ 165,096 |
| 2023 | 145 | \$ 22,302 | \$ 2,885,454 | 44 | \$ 17,270 | \$ 660,084 |
| Totals | 375 | \$ 19,273 | \$ 6,878,802 | 82 | \$ 15,034 | \$ 1,132,955 |

Source: Maryland Longitudinal Data System Center. (2024) *2024 Report: Progress in Increasing the Preparation and Diversity of Teacher Candidates and New Teachers*. Baltimore, Maryland.

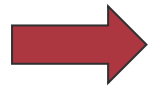
Using Maryland's SLDS to Strengthen and Diversify the Teacher Workforce

(Institute of Education Sciences (R305S240013))

Using Maryland's SLDS to Strengthen and Diversify the Teacher Workforce

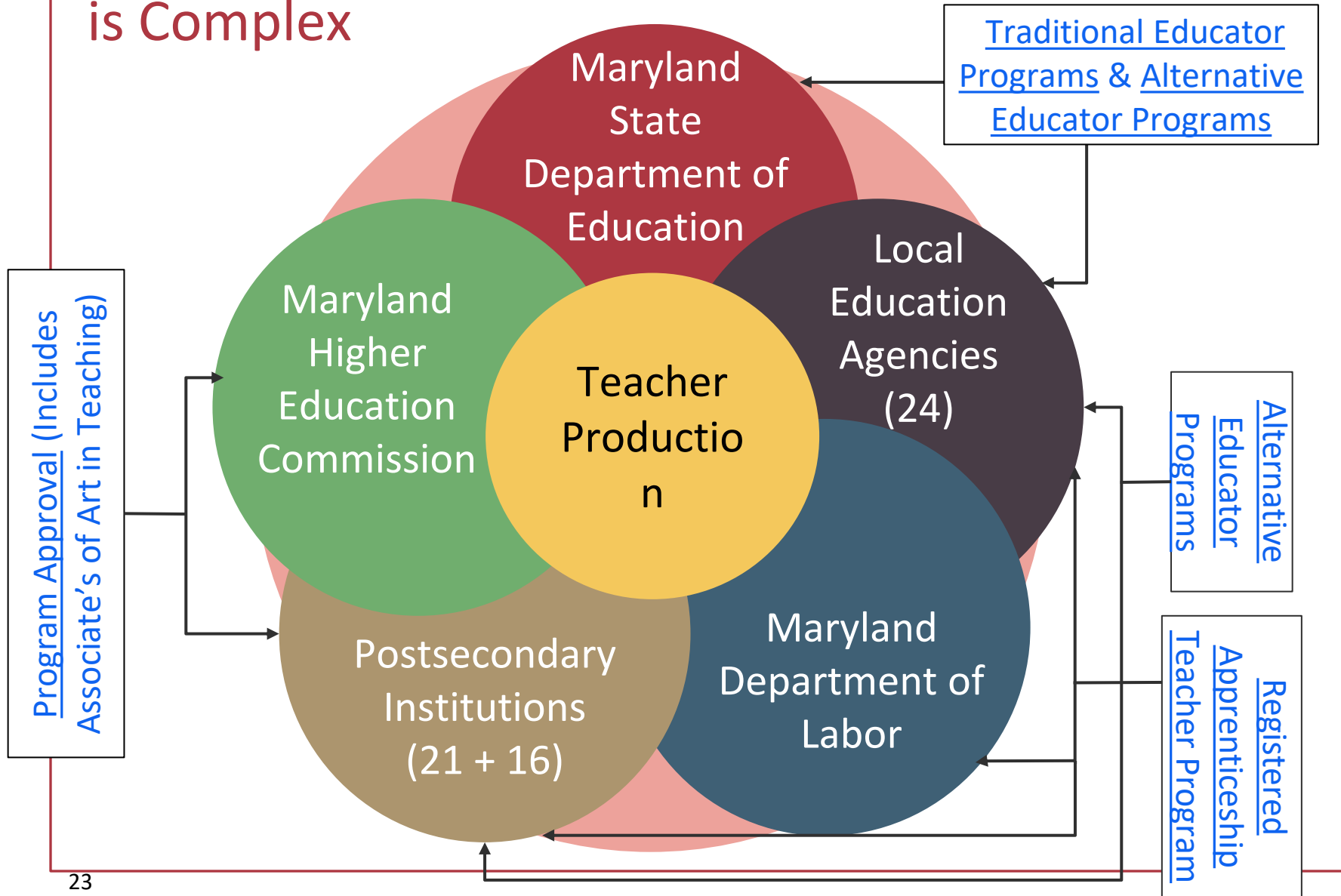
- Research to inform state and local strategies to expand and diversify the teacher pipeline.
 - Increase production of teachers of color
 - Remove obstacles for Maryland high school graduates of color to enter the teaching profession
- Develop dashboards to disseminate results.
 - Points of entry and exit for high school graduates
 - Common pathways into teaching for teachers of color
 - Identify points for potential expansions in the teacher pipeline, and common points of leakage or blockage.

The Approach!

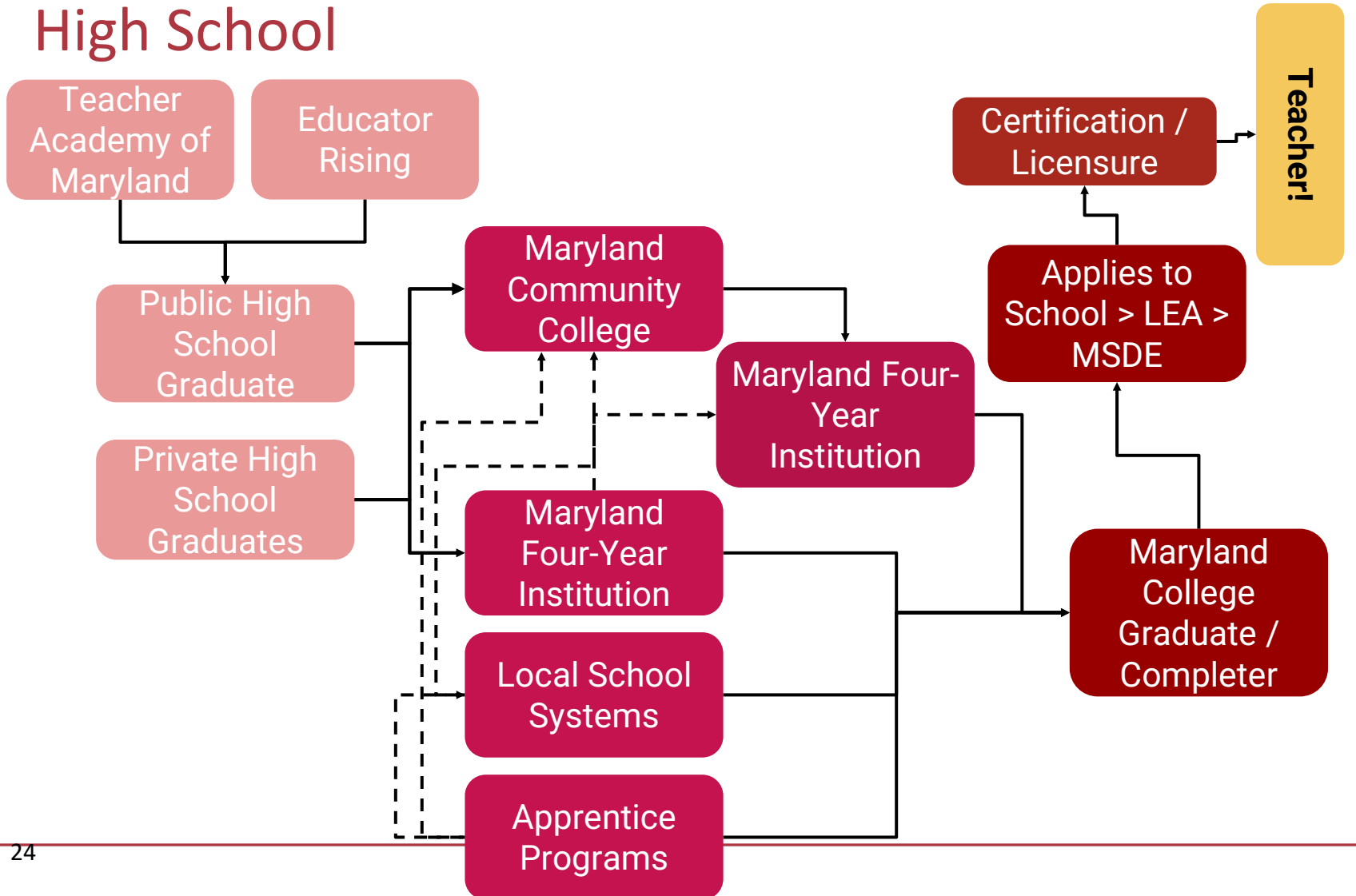


Forward Mapping: How we *EXPECT* teachers to be produced!

Educator Preparation Pipeline is Complex



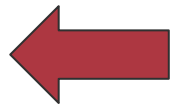
Forward Mapping: Key Stages of the Expected Pathway from High School



Forward Mapping: Are the data collected? Are the data in the system?

| Pathway Entry Point | Data Available |
|--|---|
| <p>1 Maryland High Schools</p> | <ul style="list-style-type: none"> ± High School Graduates (Public-Yes, Private-No) ✓ Teacher Academy of Maryland ± Educator Rising (Towson University) |
| <p>2 Maryland Community Colleges</p> | <ul style="list-style-type: none"> ✓ College Enrollments ✓ College Graduates ± Alternative Preparation Programs & Apprenticeship ✓ Associate of Art in Teaching |
| <p>3 Maryland Four-Year Institutions</p> | <ul style="list-style-type: none"> ✓ College Enrollments (Transfers & Non-Degree) ± College Graduates/Completers ± Educator Preparation Majors |
| <p>4 Certification / Licensure</p> | <ul style="list-style-type: none"> ± Licenses/Certifications X Applications for Licensure/Certifications |

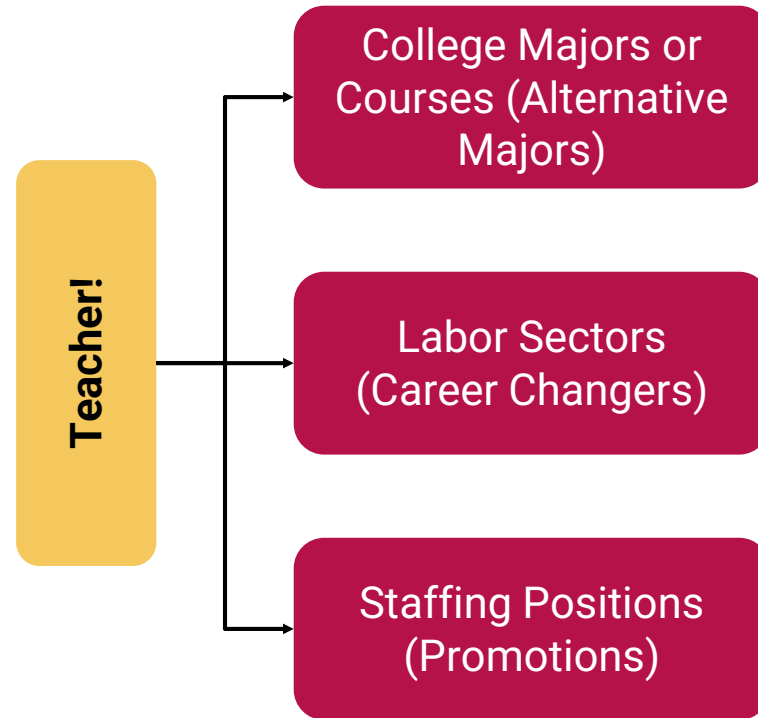
The Approach - Part 2!



Backward Mapping: How *ARE* teachers produced?

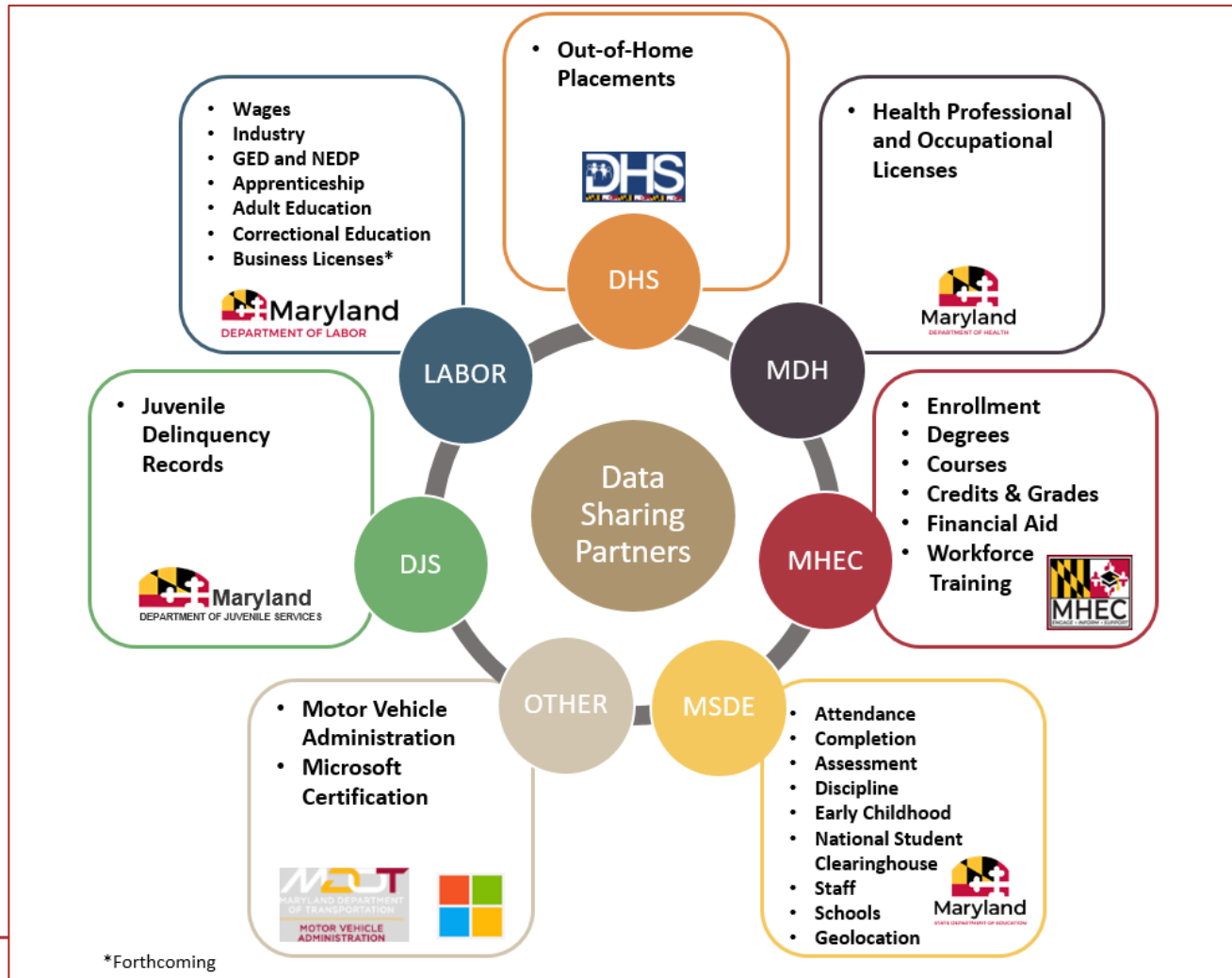
The backward map --

What hidden pathways were producing teachers?



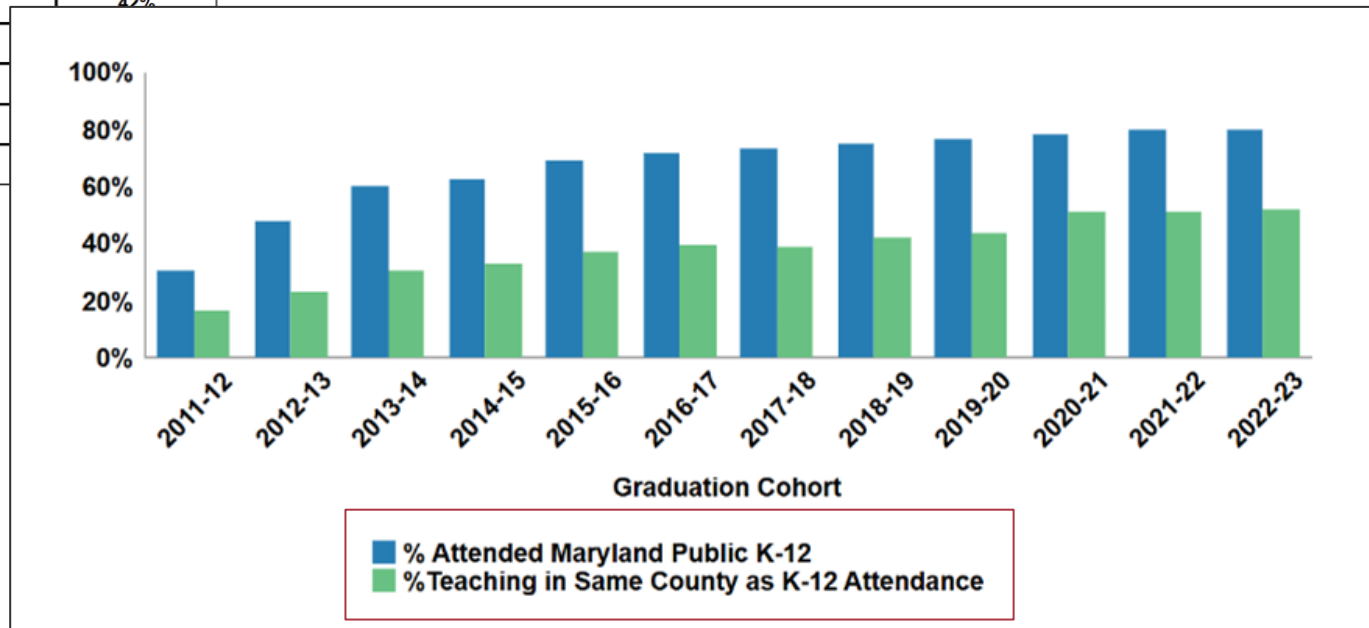
How can we build (and expand) the pathway for persisters!

What data exist that could reveal hidden teacher production pathways?



| Graduation Cohort | % Attended Maryland Public K-12 | % Teaching in Same County as K-12 Attendance |
|-------------------|---------------------------------|--|
| 2011-12 | 31% | 17% |
| 2012-13 | 48% | 23% |
| 2013-14 | 60% | 31% |
| 2014-15 | 63% | 33% |
| 2015-16 | 69% | 37% |
| 2016-17 | 72% | 40% |
| 2017-18 | 73% | 39% |
| 2018-19 | 75% | 42% |
| 2019-20 | 77% | |
| 2020-21 | 78% | |
| 2021-22 | 80% | |
| 2022-23 | 80% | |

The backward map -- Where did teachers come from? How can I disaggregate their origins to inform hidden pathways?



Source: MLDS (n.d), Bachelor's Degree Graduates from Maryland Four-Year Colleges and Universities Employed as Novice Teachers in Maryland Public Schools in the First Year Following Graduation.

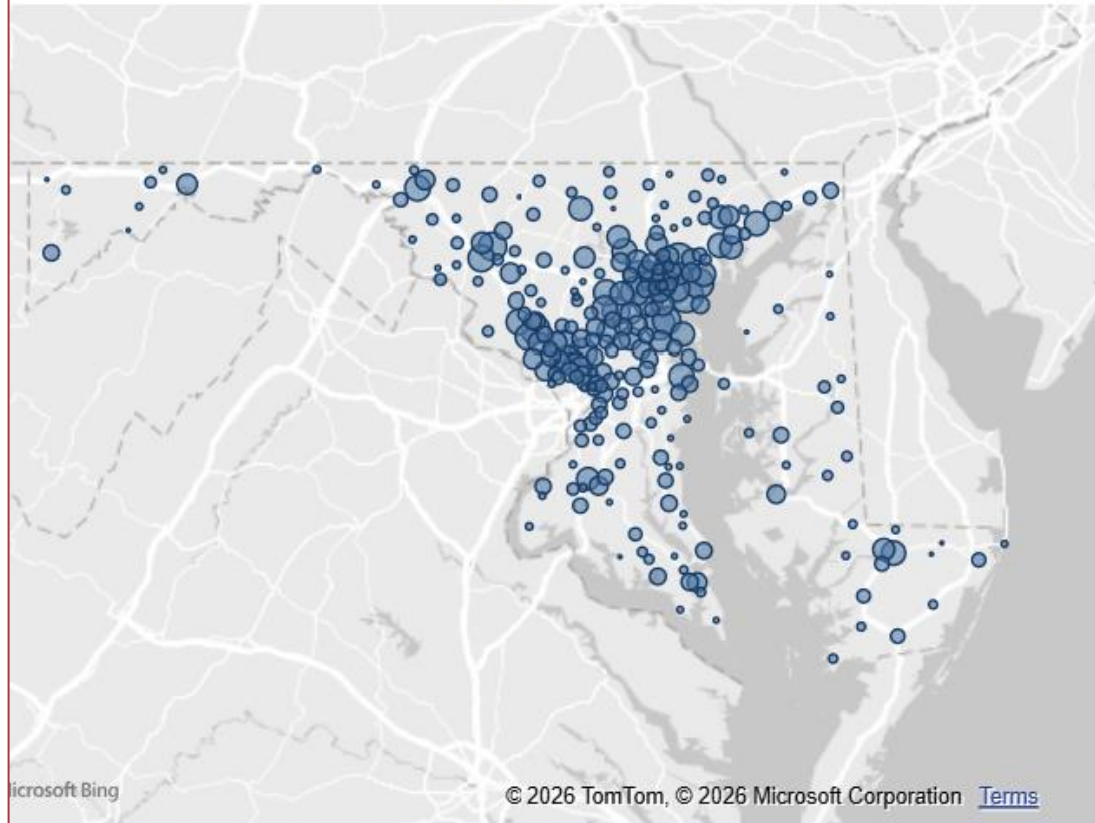
Using Maryland's SLDS to Strengthen and Diversify the Teacher Workforce

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Maryland College Labor Sector and Wage Explorer: Educator Preparation Programs (TCLaWE)

Maryland College Labor Sector and Wage Explorer: Educator Preparation Programs

Figure 1: Distribution Across Maryland Public Schools
Subsequent Fall



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Credential

All

Program Licensure

All

Program Category

All

No filters selected

NOTE: The second set of filters are the characteristics of the individual's wage visibility and will affect only Figure 1.

Period After Completion

Subsequent Fall

School Designation

All

Position Category & Title

All

No filters selected

Maryland College Labor Sector and Wage Explorer: Educator Preparation Programs

All Filters

To generate the table you want, select the desired subpopulations and options from the categories below.
Reminder: Please keep note of the chosen filters; they will **not** carry over when copying tables.

Program

Wage Visibility

Demographics

Period After Completion

Subsequent Fall

Source of Wage Record

All

Local Education Agency

All

Position Category & Title

All

School Designation

All

Labor Sector

All

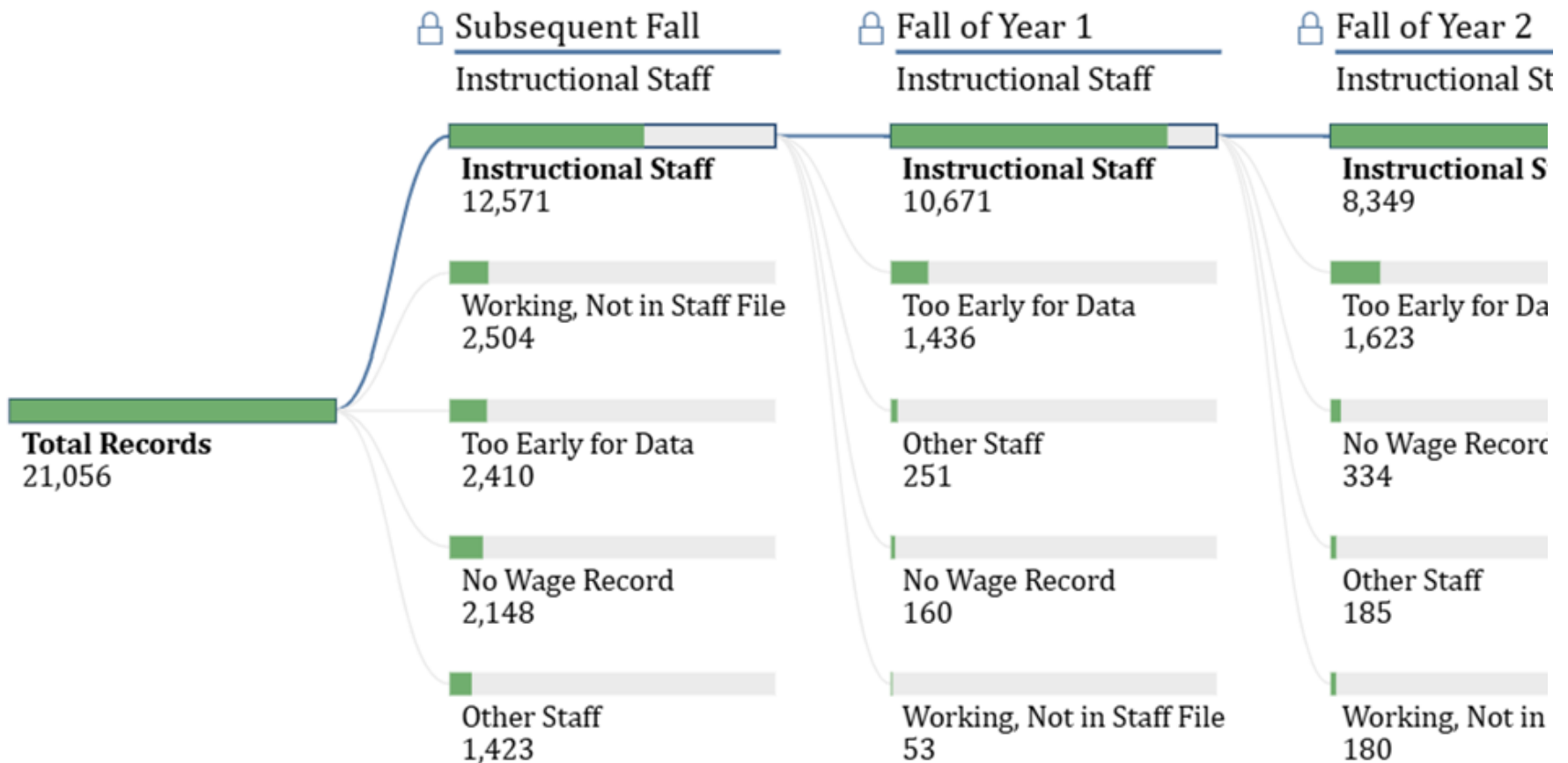
Table 2: Educator Preparation Program Completion and Wage Visibility

Period: Subsequent Fall

| Information Collection Year | Completion | | Wage Visibility | |
|--------------------------------|---------------|--------------------------|-----------------|-----------------------|
| | Total Records | Total Records (Distinct) | Total Records | Median Quarterly Wage |
| 2018 | 2,808 | 2,755 | 2,395 | \$14,799 |
| 2019 | 2,788 | 2,717 | 2,374 | \$15,038 |
| 2020 | 2,981 | 2,890 | 2,470 | \$15,135 |
| 2021 | 3,083 | 2,958 | 2,596 | \$14,867 |
| 2022 | 2,832 | 2,641 | 2,322 | \$14,557 |
| 2023 | 2,724 | 2,526 | 2,232 | \$14,910 |
| 2024 | 2,386 | 2,154 | 1,853 | \$15,160 |
| 2025 | 2,619 | 2,415 | 258 | \$16,466 |
| Total | 22,221 | 21,056 | 16,498 | \$14,957 |

Maryland College Labor Sector and Wage Explorer: Educator Preparation Programs

Figure 2: Educator Workforce Pathway



Questions?

More information

Ross Goldstein
Executive Director
ross.goldstein@maryland.gov

Ann T. Kellogg, Ph.D.
Director of Reporting Services; MHEC
Liaison
ann.kellogg@maryland.gov

Molly B. Abend
Data Management Coordinator;
MSDE Liaison
mollyb.abend@maryland.gov

Angela K. Henneberger, Ph.D.
Research Director;
Associate Research Professor, UMB
angela.henneberger@maryland.gov

<http://mldscenter.maryland.gov>



THANK
YOU