



MLDS CENTER

Maryland Longitudinal Data System

Address 550 West Baltimore Street
Baltimore, MD 21201
Phone 410-706-2085
Email mlds.center@maryland.gov
Website www.MLDSCenter.org

MEMORANDUM

TO: MLDS Governing Board
FROM: Molly B. Abend, Data Management Coordinator
DATE: September 9, 2024
SUBJECT: MLDS Data Gap Analysis 2024

Purpose

The *MLDS Data Gap Analysis 2024* catalogs the data gaps in the MLDS and identifies the reasons, impacts, possible resolutions, and current status of those gaps.

Background

In 2016, the Governor's P-20 Leadership Council requested the MLDS Center provide a comprehensive summary of the known data gaps in the MLDS. As a result, the *MLDS Data Gap Analysis* document is updated annually and incorporates suggestions and recommendations from both the Data Governance Advisory Board and the Research and Policy Advisory Board. The document catalogs the gaps to better help stakeholders understand the limitations of the MLDS and accurately interpret findings from MLDS analyses.

All gaps are aligned to the eight sectors identified in the [MLDS Research Agenda](#):

1. Early Childhood
2. K-12 Education
3. Adult Education
4. Justice Involved
5. Child Welfare
6. Postsecondary Education
7. Other Completions and Credentials
8. Workforce

If the gap does not fall into one of the eight sectors, it is listed as a "General MLDS" gap.

Summary

There are 29 cataloged gaps and 11 resolved gaps. The top three sectors with cataloged gaps are Postsecondary Education, Workforce, and Early Childhood/K-12 Education. Data are available for 21 of the gaps to varying degrees. For 15 of the gaps the Center is exploring options to resolve the gap or are actively working on the resolution identified to resolve the gap. For six of the gaps, there is no identifiable data source. Two of the gaps require change to legislation in order to be resolved.

Priorities

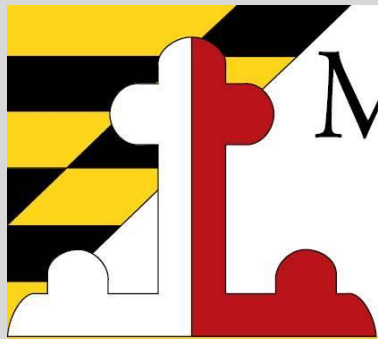
MLDS Center staff prioritized the data gaps that are achievable and/or highly important to accurately analyze and report on student and workforce outcomes over time. The priorities for this year are:

1. Criminal records
2. PK-12 applicants for teacher certification

3. Licensure from Labor, MDH health occupation boards and commissions, and other license granting agencies
4. Specific disability category codes
5. Unemployment applications and benefits
6. Children in need of assistance records (e.g. child protective services, family preservation services)
7. Federal and military employees

Action

Informational.



MLDS CENTER

Maryland Longitudinal
Data System

Better Data • Informed Choices • Improved Results

Data Gap Analysis

September
2024

Maryland Longitudinal Data System Center
550 West Baltimore Street
Baltimore, MD 21201

Wes Moore
Governor

Portia Wu
Secretary of Labor,
Chair, MLDS Governing Board

Ross Goldstein
Executive Director

Contents

Introduction	2
Summary	3
Complete Listing of Data Gaps by Status	4
Priorities	5
Feasibility	6
1. Data available - In-progress	6
2. Data available - Under consideration	6
3. Data available - Unfeasible	6
4. No data available	6
5. Requires Legislative Change	6
Status	6
General MLDS	7
1. Criminal records	7
2. Medical and health records	7
Early Childhood	8
1. Private and Nonpublic PK-12 School Students	8
2. Out-of-State PK-12 Education Data	8
3. PK-12 Supplemental Program Data	9
K-12 Education	9
1. Private and Nonpublic PK-12 School Students	9
2. Homeschooled Students	10
3. Student-level School Climate Data	11
4. Out-of-State PK-12 Education Data	11
5. PK-12 Supplemental Program Data	11
6. Dual Enrollment Courses and Credits	12
7. Specific Disability Category	13
Adult Education	13
1. Workforce Training Data	13
Justice Involved Youth	14
1. Juvenile Services Education Program (JSEP) Data	14
Child Welfare	15
1. Children in need of assistance records	15
Postsecondary Education	15
1. Remedial, Developmental, and/or Co-requisite Assessments	15

MLDS Data Gap Analysis 2024

2. Out-of-State Postsecondary Education Data	16
3. Postsecondary Non-Academic Program Data	16
4. State-Aided Independent out-of-state enrollments 2008-2012	17
5. For-Profit Private Postsecondary Data	17
6. Economic Status Data for Postsecondary Students (Non-FAFSA)	18
7. Postsecondary Faculty and Staff	19
8. College Enrollment Data Spring, Winter, and Summer Terms 2008-2013	19
Other Completions and Credentials	20
1. Licensure from Labor and other license granting agencies	20
2. National and Professional Certifications	20
Workforce	22
1. Standard Occupational Classification (SOC) Codes	22
2. Federal and Military Employees	22
3. Contingent and alternative employment arrangements	23
4. Part-time or full-time employment and number of hours worked	24
5. PK-12 Applicants for Teacher Certification	24
6. Out-of-State workforce data	25
7. Unemployment Applications and Benefits	26
Appendix	27
Resolved Data Gaps	27
1. Required 5-year de-linking of student and workforce records	27
2. North American Industry Classification System (NAICS) Codes	27
3. Early Childhood Education Data	27
4. Removal of workforce records that are not matched to a student record	27
5. Teacher candidates	27
6. Student Discipline Data	28
7. Apprenticeship Data	28
8. Career and Technical Education Data	28
9. Juvenile Delinquency Records	28
10. Socioeconomic Status for PK-12 Students	28
11. Student Education Record Required	29

Introduction

The Maryland Longitudinal Data System (MLDS) Center receives data from multiple sources. Those data are combined to establish a data system that contains detailed information about Maryland students, their educational experiences and outcomes, their interaction with child welfare and juvenile services, their degrees and credentials obtained, and their workforce experiences and outcomes. While the system has extensive information that allows the MLDS Center to conduct meaningful research and reporting to help provide valuable insight for state policymakers, there are gaps in the data provided and information that is not available to the Center. Data gaps result from a variety of issues including such factors as the data is simply not collected, the data is collected but not by one of the Center's current data sharing partners, or the Center is prohibited from collecting the data. The purpose of this document is to catalogue those gaps to better help stakeholders understand the limitations of the MLDS and accurately interpret findings from the MLDS Center analyses.

Each Data Gap listed includes:

1. A description of the **gap**;
2. The **reason** the gap exists;
3. The **impact** of the gap on Center output;
4. A **resolution**;
5. The **feasibility** of the resolution; and
6. The current **status**.

All gaps have been updated to align with the new [MLDS Research Agenda¹](https://mldscenter.maryland.gov/ResearchAgenda.html) approved by the MLDS Governing Board in June 2023. Instead of three sectors, the following eight sectors will be used:

1. Early Childhood Education
2. K-12 Education
3. Adult Education
4. Justice Involved Youth
5. Child Welfare
6. Postsecondary Education
7. Other Completions and Credentials
8. Workforce

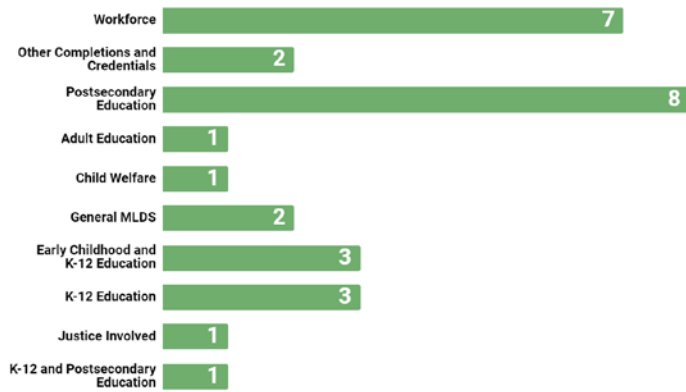
If the gap does not fall into one of the eight sectors, it will be listed as a “General MLDS” gap.

¹ <https://mldscenter.maryland.gov/ResearchAgenda.html>

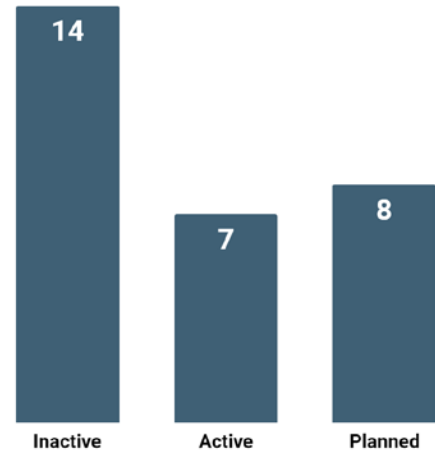
Summary

There are 29 cataloged gaps and the graphs below summarize the gaps by sector, status, and feasibility.

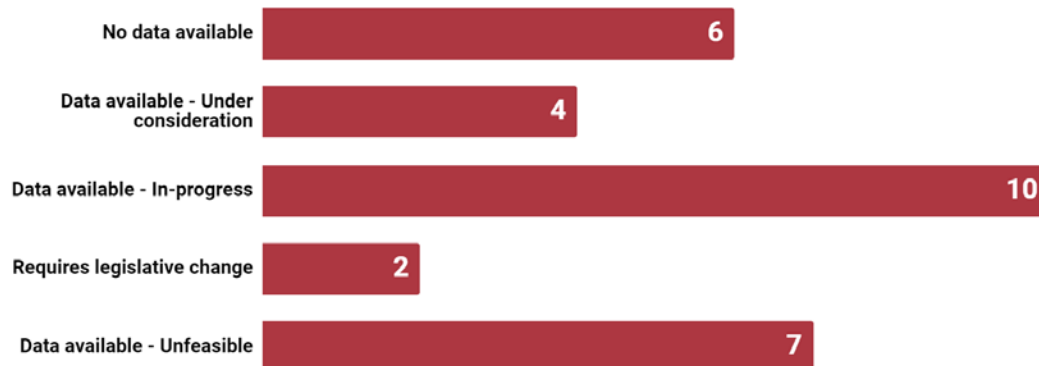
...by Sector



...by Status



...by Feasibility



Complete Listing of Data Gaps by Status

#	Sector	Gap	Feasibility	Status
1	Workforce	Standard Occupational Classification (SOC) Codes	No data available	Inactive
2	Workforce	Federal and Military Employees	Data available - Under consideration	Active
3	Workforce	Contingent and alternative employment arrangements	Data available - In-Progress	Active
4	Other Completions and Credentials	Licensure from Labor and other license granting agencies	Data available - In-progress	Active
5	Workforce	Part-time or full-time employment and number of hours worked	No data available	Inactive
6	Workforce	PK-12 Applicants for Teacher Certification	Data available - Under consideration	Active
7	Workforce	Out-of-State workforce data	Requires legislative change	Inactive
8	Other Completions and Credentials	National and Professional Certifications	Data available - In-progress	Active
9	Workforce	Unemployment Application and Benefits	Data available - In-progress	Planned
10	Postsecondary	Remedial, Developmental, and/or Co-requisite Placement Assessments	Data available - Unfeasible	Inactive
11	Adult Education	Workforce Training Data	Data available - In-progress	Active
12	Postsecondary	Out-of-State Postsecondary Education Data	Data available - Unfeasible	Inactive
13	Postsecondary	Postsecondary Non-Academic Program Data	Data available - Unfeasible	Planned
14	Postsecondary	State Aided Independent out-of-state enrollments 2008-2012	Data available - Unfeasible	Inactive
15	Postsecondary	For-Profit Private Postsecondary Data	Data available - In-progress	Planned
16	Postsecondary	Economic Status Data for Postsecondary Students (Non-FAFSA)	No data available	Inactive
17	Postsecondary	Postsecondary Faculty and Staff	Data available - In-progress	Planned
18	Postsecondary	College Enrollment Data Spring, Winter, and Summer Terms 2008-2013	Data available - Unfeasible	Inactive
19	Child Welfare	Children in need of assistance records	Data available - In-progress	Planned
20	General MLDS	Criminal records	Data available - Under consideration	Planned
21	General MLDS	Medical and health records	Requires legislative change	Inactive
22	Early Childhood and K-12 Education	Private PK-12 School Students	No data available	Inactive

#	Sector	Gap	Feasibility	Status
23	K-12 Education	Homeschooled Students	No data available	Inactive
24	K-12 Education	School-level School Climate Data	Data available - Unfeasible	Inactive
25	Early Childhood and K-12 Education	Out-of-State PK-12 Education Data	No data available	Inactive
26	Early Childhood and K-12 Education	PK-12 Supplemental Program Data	Data available - Unfeasible	Inactive
27	Justice Involved Youth	Juvenile Services Education Program Data	Data available - In-progress	Planned
28	K-12 Education and Postsecondary	Dual Enrollment	Data available - Under consideration	Planned
29	K-12 Education	Specific Disability Category	Data available - In-progress	Active

Priorities

In order to be considered a priority data gap, two criteria must be met: (1) data collection must be achievable, and (2) the data gap must pose significant obstacles to accurately analyzing and reporting on student and workforce outcomes over time. Listed below are the data gaps that Center staff believe should be considered priority data gaps.

1. Criminal Records
2. PK-12 applicants for teacher certification
3. Licensure from Labor, MDH health occupation boards and commissions and other license granting agencies
4. Specific disability category codes
5. Unemployment applications and benefits
6. Children in need of assistance records (child protective services, family preservation services)
7. Federal and military employees

Feasibility

Below are the levels of availability the gaps have as well as a description of what each feasibility status means. Gaps may shift in feasibility over time.

1. Data available - In-progress

This status indicates that the Center has identified a data source, addressed any legal obstacles, and is working to establish agreements to obtain the data. The change may require additional approvals, such as changes to MOUs, inclusion in the Data Inventory, or changes to the Data Collection Calendar.

2. Data available - Under consideration

The data is available at the source, but not currently collected by an MLDS data sharing partner or other state agency. This status indicates the data sharing partner or the source organizations have expressed an interest to provide this data to the Center.

3. Data available - Unfeasible

The data is available at the source, but not collected by an MLDS data sharing partner or other state agency. The collection of the data would require a new data collection by a data sharing partner. This status indicates that it is administratively unfeasible to capture the data.

4. No data available

The data is not available from the source, not collected by an MLDS data sharing partner or other state agency, and the Center has found no examples of the data collected with fidelity in other states.

5. Requires Legislative Change

The data may or may not be available at the source, but the Center is unable to establish an agreement to obtain the data, or consider the collection of the data because state statute prohibits the MLDS from incorporating the data.

Status

Listed below are the various data gap statuses. Prior versions of this document included a “Closed” status, but this did not take into consideration the possibility of a legislative change authorizing a data element that had previously been prohibited. Accordingly, instead of closed, data elements unavailable or legally prohibited are listed as “Inactive”. The “Legislative” status was also added to indicate possible changes may be made based on future legislation.

- **Planned:** “Planned” indicates that Center staff are exploring options to resolve the gap.
- **Active:** “Active” indicates Center staff are actively working on the resolution identified to resolve the gap.
- **Legislative:** “Legislative” indicates that changes in legislation may resolve the gap if passed. Center staff have identified changes in state law (prohibition lifted, amendment passed) or a new law is passed that impact the gap.
- **Resolved:** “Resolved” indicates that the gap has been eliminated by enacting the resolution listed. Data necessary to close the gap is now collected in the MLDS Operational Data Store and/or a policy change has been implemented.
- **Inactive:** “Inactive” indicates that the gap is not currently being addressed, but a resolution may be explored in the future.

General MLDS

1. Criminal records

Gap	Criminal records are not available in the MLDS.
Reason	The MLDS Center does not receive the full population of criminal history records in Maryland.
Impacts	The MLDS Center would be able to provide information to policy makers that would help them better understand the factors that lead to incarceration and whether programs and interventions can help reduce incarceration rates.
Resolution	Work with the Department of Labor and the Division of Correction (DoC) within the Department of Public Safety and Correctional Services to discuss the best approach to provide corrections information. DoC has data on inmates who have been sentenced to a term of 18 months or longer. Individuals who have a lesser term or were sent to a diversionary program would not be included in the data. This gap should be considered as it may limit the ability to fully analyze how student interactions with the criminal justice system impact education and workforce outcomes.
Feasibility	Data available - Under consideration
Status	Planned

2. Medical and health records

Gap	Medical and health records for PK-12 students are not available in the MLDS.
Reason	The MLDS is prohibited by law from including this information under Md. Code, Ed. Art. § 24-701(f)(3)(iv).
Impacts	Students with underlying medical, health, and behavioral problems represent a group of at-risk students for whom educational-based prevention and intervention services may be directed. Better understanding the links between early health indicators and later outcomes would help to direct resources to the students who need them most at important developmental periods. Additionally, when modeling student outcomes, if these data are not included in the model, relationships between predictors of interest (e.g., course taking) and the outcome (e.g., achievement) may be less accurate than if these data were included in the model. Note: With the passage of the Blueprint For Maryland's Future – Implementation, there is a new focus on the impact of social determinants on student outcomes. MLDS is expected to provide research and analyses on this topic, but currently cannot access the necessary data.
Resolution	Revisions to Md. Code, Ed. Art. § 24-701(f)(3)(iv)
Feasibility	Requires legislative change
Status	Inactive

	The MLDS Center provided clarification through Regulation 14.36.05.06 to be adopted at the September 2024 Governing Board meeting. The regulation defines “Medical and health records” as records created by a health care provider for the purpose of providing care and treatment to an individual. “Medical and health records” does not include information about a student that is: (i) Collected by a data partner that provides data to the MLDS under this subtitle; and (ii) Used solely to determine eligibility for or to administer educational services and programs to students.
--	--

Early Childhood

1. Private and Nonpublic PK-12 School Students

Gap	There is no data on private PK-12 school students in the MLDS, and publicly-funded nonpublic student data is limited.
Reason	Maryland private schools voluntarily provide aggregate school enrollment counts ² annually. No student level data is collected from private schools. Without student level data, there is no meaningful data for the MLDS. Additionally, data on students enrolled in publicly-funded nonpublic schools is limited. In the 2023-2024 school year, MSDE reported 890,137 ³ public school students (of which 31,381 are Pre-K) and 138,752 ⁴ nonpublic school students. Students enrolled in publicly-funded nonpublic schools are reported in the September Attendance file only with an entry and exit date; all other data elements on these students are lacking.
Impacts	Some stakeholders believe having private and nonpublic PK-12 data will provide a source of comparison to Maryland public school student outcomes. The requirements for Maryland public school students and Maryland private and nonpublic school students are very different. Much of the data collected on public school students is not available for private or nonpublic school students. This data gap prevents analyses and study findings from being generalized beyond the population of public school students.
Resolution	Work with MSDE and the Research Branch to find public sources of comparable data, if needed for analysis.
Feasibility	No data available
Status	Inactive

2. Out-of-State PK-12 Education Data

Gap	The MLDS does not contain information on out-of-state PK-12 students.
Reason	This data is outside of the scope of the MLDS.

² Maryland State Department of Education. [Nonpublic School Enrollment, State of Maryland, September 30, 2023](#).

³ Maryland State Department of Education. [Maryland Public School Enrollment by Race/Ethnicity and Gender and Number of Schools, September 30, 2023](#).

⁴ Maryland State Department of Education. [Nonpublic School Enrollment, State of Maryland, September 30, 2023](#).

Impacts	This data gap prevents analyses and study findings from being generalized beyond the population of Maryland public school students.
Resolution	Limited data on students who attended out-of-state PK-12 schools is available through MHEC collections as students enroll in higher education.
Feasibility	No data available
Status	Inactive

3. PK-12 Supplemental Program Data

Gap	Local school systems and schools offer a wide array of supplemental educational services, programs, and enrichments for students which lead to positive student outcomes that are not captured in the MLDS data. This may include after school programs, behavioral interventions, and enrichment programs.
Reason	MSDE does not capture this type of information at the state level and it is unclear how robust the collection is of this information at the local school system level.
Impacts	Program participation is likely a confounder in analyses. Because we do not know which students participate in programs, analyses are biased to the degree that program participation is related to the predictor and outcome variables. For example, in an analysis examining the relationship between student disadvantage and long-term outcomes, students participating in enrichment activities may have better long term outcomes. If disadvantaged students disproportionately participate in enrichment activities, by not controlling for program participation, analyses are likely under-estimating the relationship between poverty and long-term outcomes (i.e., some of the relationship would actually be ameliorated due to program participation).
Resolution	Look for information from publicly available sources that would provide context as needed. Additionally, external data may be linked to the MLDS through the external data procedure to evaluate a specific PK-12 program.
Feasibility	Data Available - Unfeasible; not at a large scale collection. This data may be added as external data to support a project or program evaluation on one or more specific supplemental programs.
Status	Inactive

K-12 Education

1. Private and Nonpublic PK-12 School Students

Gap	There is no data on private PK-12 school students in the MLDS, and publicly-funded nonpublic student data is limited.
-----	---

Reason	Maryland private schools voluntarily provide aggregate school enrollment counts ⁵ annually. No student level data is collected from private schools. Without student level data, there is no meaningful data for the MLDS. Additionally, data on students enrolled in publicly-funded nonpublic schools is limited. In the 2023-2024 school year, MSDE reported 890,137 ⁶ public school students (of which 31,381 are Pre-K) and 138,752 ⁷ nonpublic school students. Students enrolled in publicly-funded nonpublic schools are reported in the September Attendance file only with an entry and exit date; all other data elements on these students are lacking.
Impacts	Some stakeholders believe having private and nonpublic PK-12 data will provide a source of comparison to Maryland public school student outcomes. The requirements for Maryland public school students and Maryland private and nonpublic school students are very different. Much of the data collected on public school students is not available for private or nonpublic school students. This data gap prevents analyses and study findings from being generalized beyond the population of public school students.
Resolution	Work with MSDE and the Research Branch to find public sources of comparable data, if needed for analysis.
Feasibility	No data available
Status	Inactive

2. Homeschooled Students

Gap	There is no data on homeschooled students in the MLDS.
Reason	Homeschool students register with their local school system which verifies compliance and provides instructional supervision. This data is not collected at the student level by MSDE. Data is only reported aggregately by each LEA, which does not provide meaningful data for the MLDS.
Impacts	Some stakeholders believe having data on homeschooled students will provide a source of comparison to Maryland public school student outcomes. The requirements for Maryland public school students and Maryland homeschooled students are very different. Much of the data collected on public school students is not available for homeschooled students. This data gap prevents analyses and study findings from being generalized beyond the population of public school students.
Resolution	Work with MSDE and the Research Branch to find public sources of comparable data, if needed for analysis.
Feasibility	No data available
Status	Inactive

⁵ Maryland State Department of Education. [Nonpublic School Enrollment, State of Maryland, September 30, 2023](#).

⁶ Maryland State Department of Education. [Maryland Public School Enrollment by Race/Ethnicity and Gender and Number of Schools, September 30, 2023](#).

⁷ Maryland State Department of Education. [Nonpublic School Enrollment, State of Maryland, September 30, 2023](#).

3. Student-level School Climate Data

Gap	There is no student-level data on PK-12 school climate data included in the MLDS.
Reason	These data have not been collected by schools or MSDE at the student level.
Impacts	Student-level school climate provides important qualitative information from students, parents, and teachers about their schools. Research has shown that differences in schools account for differences in student outcomes. Understanding the climate of a school can help explain the differences in student outcomes between schools.
Resolution	The Maryland Every Student Succeeds Act (ESSA) Consolidated State Plan includes school climate surveys. MSDE piloted a school survey in 2018 and fully administered in 2019. However, data are reported at the school level on the Maryland School Report Card ⁸ website.
Feasibility	Data available - Unfeasible
Status	Inactive

4. Out-of-State PK-12 Education Data

Gap	The MLDS does not contain information on out-of-state PK-12 students.
Reason	This data is outside of the scope of the MLDS.
Impacts	This data gap prevents analyses and study findings from being generalized beyond the population of Maryland public school students.
Resolution	Limited data on students who attended out-of-state PK-12 schools is available through MHEC collections as students enroll in higher education.
Feasibility	No data available
Status	Inactive

5. PK-12 Supplemental Program Data

Gap	Local school systems and schools offer a wide array of supplemental educational services, programs, and enrichments for students which lead to positive student outcomes that are not captured in the MLDS data. This may include after school programs, behavioral interventions, and enrichment programs.
Reason	MSDE does not capture this type of information at the state level and it is unclear how robust the collection is of this information at the local school system level.
Impacts	Program participation is likely a confounder in analyses. Because we do not know which students participate in programs, analyses are biased to the degree that program participation is related to the predictor and outcome variables. For example, in an

⁸ <https://reportcard.msde.maryland.gov/>

	analysis examining the relationship between student disadvantage and long-term outcomes, students participating in enrichment activities may have better long term outcomes. If disadvantaged students disproportionately participate in enrichment activities, by not controlling for program participation, analyses are likely under-estimating the relationship between poverty and long-term outcomes (i.e., some of the relationship would actually be ameliorated due to program participation).
Resolution	Look for information from publicly available sources that would provide context as needed. Additionally, external data may be linked to the MLDS through the external data procedure to evaluate a specific PK-12 program.
Feasibility	Data Available - Unfeasible; not at a large scale collection. This data may be added as external data to support a project or program evaluation on one or more specific supplemental programs.
Status	Inactive

6. Dual Enrollment Courses and Credits

Gap	The MLDS Center does not receive comprehensive data on dual enrollment courses and credits and how they apply to high school credit and post-graduation credit in college.
Reason	<p>The MLDS Center receives some data from MSDE on students who are dually enrolled through a partnership agreement with their local education agency, but does not receive data on students who are engaged in a dual enrollment program on their own initiative. MHEC collects data on students who are still in high school and enrolled in credit and noncredit courses while in high school (often called dual enrollment) and collects data on students enrolled in dedicated early/middle college programs. MSDE has data on how these courses and credits counted toward high school graduation requirements but does not have data on how these courses and credits apply to post-high school graduation college enrollment. MHEC has data on credit completion but does not have data on how the courses and credits are applied to high school graduation or how they are applied as transfer credit when the high school student enrolls in college.</p> <p>Neither agency has data on the funding students received to cover the costs for dual enrollment courses and credits.</p>
Impacts	The College and Career Readiness and College Completion Act (CCR-CCA) (Md. Code, Ed. Art. §18-14A-01) defines dual enrollment as a student who is dually enrolled in: (a) A secondary school in the State; and (b) An institution of higher education in the State. The MLDS Center does not have the data necessary to fully report on dual enrollment as defined by CCR-CCA. This impacts the MLDS Center's ability to support certain Blueprint goals particularly if the reporting requirement is focused on dual credit (courses taken in high school that count in high school graduation and college enrollment) rather than dual enrollment. Additionally these data are needed to support the discussions between MSDE and MHEC for establishing goals for early access college that align to the Moore-Miller state plan.

Resolution	Work with MSDE and MHEC on receiving more detailed dual enrollment course and credit data. Review final definitions from the Blueprint for Maryland's Future to determine exact gaps. Review goal established by MSDE-MHEC for early college access.
Feasibility	Data available - Under Consideration
Status	Planned

7. Specific Disability Category

Gap	Specific disability category data for PK-12 students are not available in the MLDS.
Reason	The MLDS is prohibited by law from including medical and health records under Md. Code, Ed. Art. § 24-701(f)(3)(i). It was unclear how medical and health records were defined and whether or not specific disability categories should be included as student data.
Impacts	Students with disabilities are an important group of students who often receive targeted supports and services. Also, these students are often a common subgroup when disaggregating large student datasets. Adding the specific disability category to the MLDS will provide a more comprehensive understanding of this group and better support targeted policy decisions.
Resolution	House Bill 320 of 2023 changes the definition of "student data" to include student disability data by specific disability category. Accordingly, this bill establishes the General Assembly's intent that student disability data, including disability category, is permissible and would not be considered a prohibited medical or health record. Further, MLDS Center Regulations clarify that "Medical and health records" does not include information about a student that is: (i) Collected by a data partner that provides data to the MLDS under this subtitle; and (ii) Used solely to determine eligibility for or to administer educational services and programs to students.
Feasibility	Data available - In-Progress
Status	Active MSDE is working on the process to validate and submit specific disability category data to the MLDS.

Adult Education

1. Workforce Training Data

Gap	Data on Workforce Training Postsecondary Courses for all types of institutions of higher education are not available in the MLDS.
Reason	Unit record data on students completing workforce training sequences are collected by MHEC from community colleges. Unit record data on students completing course sequences that exclusively include courses for students with intellectual and developmental disabilities or to serve students with English-as-Second Language, and unit

	<p>record data on students completing courses for life enrichment or life skills are not collected by MHEC as they are not tied to workforce outcomes.</p> <p>Effective in 2023 MHEC developed a workforce training collection tied to course taking at community colleges. This collection was piloted in early 2024 with the first full collection scheduled in fall 2024.</p>
Impacts	People access educational opportunities throughout their lifetime for a variety of reasons. The absence of non-credit coursework limits MLDS ability to report on occupational training and retraining, technical education, and vulnerable populations such as students with intellectual and developmental disabilities.
Resolution	MHEC piloted a workforce training collection for community colleges to support its workforce sequence grant and have added it as an established data collection. Those data are be provided to the Center on an annual basis. MHEC will be developing a data collection related to student finances for students pursuing workforce training courses and has plans to expand these data collections to four-year institutions.
Feasibility	Data available - In-Progress
Status	Active

Justice Involved Youth

1. Juvenile Services Education Program (JSEP) Data

Gap	While unit record data on youth receiving services in Department of Juvenile Services (DJS) detention and/or residential facilities have been added to the MLDS, their education records from participation in the Juvenile Services Education Program (JSEP) have not.
Reason	The MLDS Center began discussions to collect this data when it was housed at MSDE, but in 2021 SB 497 was passed transitioning the JSEP to DJS. The data is not currently available in the MLDS.
Impacts	Educational records received from MSDE do not include educational records for students in detention and residential facilities served by JSEP. This prevents analysts and researchers from linking educational data and outcomes for this population.
Resolution	Work with DJS to determine what data is available on the JSEP.
Feasibility	Data Available – In-progress
Status	Active Currently working with DJS to understand the best route to get their data.

Child Welfare

1. Children in need of assistance records

Gap	Children in need of assistance (CINA) records for PK-12 students are not available in the MLDS. A “Child in need of assistance” means a child who requires court intervention because: (1) The child has been abused, has been neglected, has a developmental disability, or has a mental disorder; and (2) The child’s parents, guardian, or custodian are unable or unwilling to give proper care and attention to the child and the child’s needs. This is defined in Md. Code, Courts and Judicial Proceedings § 3-801(g).
Reason	This gap has been partially addressed through the data sharing agreement with the Maryland Department of Human Services to receive child welfare data. The MLDS Center now receives out-of-home placement services data, but child protective services data and family preservation services data have not yet been added to the MLDS.
Impacts	Information on children in need of assistance is an important variable in understanding student outcomes. When modeling student outcomes, if these data are not included in the model, relationships between predictors of interest (e.g., course taking) and the outcome (e.g., achievement) may be less accurate than if these data were included in the model. Additionally, students involved in juvenile services represent an important at-risk student group.
Resolution	Continue to work with DJS to identify and add child protective services data and family preservation services data.
Feasibility	Data Available - In-Progress
Status	Planned HB 711 was proposed during the 2020 legislative session and would have required the MLDS Center to add unit record placement data from State-sponsored out-of-home care. Amendments were made to HB 711 and the bill was voted out of committee, however due to the early end date of the legislative session the bill was not passed. The bill was introduced again in the 2021 legislative session as HB 854 and was signed by the Governor, taking effect October 1, 2021. Additionally, in 2022 HB 763 removes the restriction for the MLDS Center to receive CINA and Criminal History data.

Postsecondary Education

1. Remedial, Developmental, and/or Co-requisite Assessments

Gap	The MLDS does not contain information on the placement assessments students take at some institutions upon entering higher education. These tests determine students’ placement in coursework. These assessments may include AccuPlacer, transcript reviews, or other assessment measures.
Reason	Placement assessment results are maintained by the institution issuing the exam. MLDS agency partners do not collect these data.

Impacts	The lack of data on assessment results restricts MLDS Center's ability to provide more in-depth analysis of educational outcomes, by limiting the data available to measure academic preparedness prior to matriculation. This directly impacts several of the research questions on the MLDS Center Research Agenda. The requirement to take remedial, developmental, or co-requisite courses likely adds to students' costs and time to degree, and likely is associated with lower likelihood of college degree attainment.
Resolution	The assessments vary by institution and are not uniform. Remedial education is not offered at all IHEs. Some IHEs offer developmental studies or co-requisite courses rather than remedial education.
Feasibility	Data available - Unfeasible/ No Data Available. This data may be added as external data to support a project or program evaluation of on one or more specific remedial programs.
Status	Inactive

2. Out-of-State Postsecondary Education Data

Gap	Out-of-state postsecondary education data are limited to enrollments and degrees awarded to students who exited from a Maryland public high school for the five years after exiting. The out-of-state postsecondary data does not provide information on GPA, course enrollment, or credit accumulation.
Reason	Out-of-state postsecondary data are provided from the National Student Clearinghouse through a contract with MSDE. The data from the Clearinghouse are only available for students who exited from a Maryland public high school.
Impacts	This limits the Center's ability to make comparisons between students who went to college in-state and out-of-state on key college variables, including GPA. Additionally, we are unable to control for these variables when looking at outcomes across groups, because the variables are only present for one group. Furthermore, the Center lacks the ability to track individuals who did not attend a Maryland public high school but attended a Maryland college/university and also attended an out-of-state college/university, either before or after Maryland enrollment. This limits our ability to estimate the effects of precursors to and consequences of Maryland higher education.
Resolution	Explore the possibility of MHEC or the MLDS Center entering into a contract with the National Student Clearinghouse.
Feasibility	Data available - Unfeasible
Status	Inactive

3. Postsecondary Non-Academic Program Data

Gap	Postsecondary institutions offer a wide array of educational opportunities for students that are not captured in the MLDS data. This includes summer enrichment and pre-enrollment programs, and programs to support transfer students.
-----	---

Reason	MHEC does not collect data on enrichment programs as the programs are widely varied and participation by students is typically optional. It is at the discretion of each institution to determine when and if an enrichment or pre-enrollment program will be offered and the qualifications for participation. Further, the programs are routinely modified or launched ad-hoc for one semester only.
Impacts	Program participation is likely a confounder in analyses. Because we do not know which students participate in programs, analyses are biased to the degree that program participation is related to the predictor and outcome variables. For example, in an analysis examining the relationship between college enrollment and long-term outcomes, students participating in certain programs geared toward improving long-term outcomes may have better long-term outcomes. By not controlling for program participation, analyses are likely over-estimating the relationship between college enrollment and long-term outcomes (i.e., some of the relationship would actually be due to program participation).
Resolution	The MLDS Center could collect data directly from a college if the research questions warrant. Alternatively, the college may provide the data to the MLDS Center if they are interested in having an enrichment program evaluated.
Feasibility	Data available - Unfeasible
Status	Planned

4. State-Aided Independent out-of-state enrollments 2008-2012

Gap	MLDS Center does not have unit record data for students who completed high school out-of-state and enrolled in Maryland State-Aided Independent institutions prior to 2012.
Reason	State-Aided Independent institutions did not provide unit record data on students enrolling from out-of-state high schools to MHEC prior to 2012. Only aggregate data were provided to MHEC.
Impacts	This data gap involves a sizeable population because State-Aided Independent institutions enroll large numbers of students that went to high school out-of-state. State-Aided Independent institutions are often excluded from analysis, or analyses are limited to years after 2012, due to incomplete records, thus limiting generalizability.
Resolution	MHEC does not have the data and does not have any plans to collect the data. MLDS could collect data from each institution.
Feasibility	Data available - Unfeasible
Status	Inactive

5. For-Profit Private Postsecondary Data

Gap	MLDS Center does not receive the same amount of unit record data on Maryland colleges classified as For-Profit Private institutions (Private Career Schools or PCS).
-----	--

Reason	MHEC requires PCS institutions to submit data via part of the MAC2 collection. For other collections they complete MHEC surveys that provide aggregate data and some limited unit record data to support accreditation reporting.
Impacts	Enrollment in PCS institutions constitutes less than 2% of all Maryland postsecondary degree-seeking enrollments. Analysts and researchers are unable to evaluate the role that these institutions play in supporting students' educational and workforce trajectories.
Resolution	MHEC would need to continue to expand MAC2 data collection PCS institutions to be able to provide comparable unit record data on PCS institutions to MLDS Center.
Feasibility	Data available - In-progress
Status	Planned Effective in 2022, MHEC began collecting enrollment (fall only), degree and financial aid data on students attending Private colleges and universities. These data have been shared with MLDS.

6. Economic Status Data for Postsecondary Students (Non-FAFSA)

Gap	Economic status data for postsecondary students is limited to household financial data provided on student financial aid applications (approximately 70% of all enrollees). Data include adjusted gross income, parents' educational level, and expected family contribution. These data are limited to those who completed a FAFSA and had financial aid disbursed; the data do not include students who did not apply for aid, applied for aid but declined awards or who did not require the FAFSA to receive aid. These undergraduate and graduate students could include both students from high economic backgrounds who do not need or expect to be granted aid, as well as students from low economic backgrounds who are likely eligible for aid but do not apply or decline offers of aid. Furthermore, FAFSA data have use restrictions so that the data that are provided can only be used in research questions related to the administration of Title IV aid programs. Accordingly, even if the FAFSA was more complete it cannot be used as a proxy for SES in the same way as FARMS.
Reason	MHEC does not collect financial data on students that do not receive some type of financial aid (federal, state or institutional) or data that are external to the FAFSA. Use restrictions are due to federal law.
Impacts	Economic status has been correlated with an individual's skill development, academic achievement, work and life outcomes, and overall psychological and behavioral well-being. ⁹ Economic data can inform provide additional context to inform policies at all levels of the education system. ¹⁰

⁹ National Forum on Education Statistics. (2015). [Forum Guide to Alternative Measures of Socioeconomic Status in Education Data Systems](#). (NFES 2015-158). U.S. Department of Education. Washington, DC: National Center for Education Statistics.

¹⁰ American Psychological Association (APA). Education and Socioeconomic Status Fact Sheet. Retrieved February 2015 from <http://www.apa.org/pi/ses/resources/publications/factsheet-education.aspx>.

Resolution	Explore solutions from other SLDS.
Feasibility	No data available
Status	Inactive

7. Postsecondary Faculty and Staff

Gap	The MLDS does not receive unit record information on people employed in Maryland institutions of higher education. The Integrated Postsecondary Education Data System ¹¹ provides limited aggregate data on staff.
Reason	MHEC collects information on faculty and staff but has not provided the data to MLDS as there is not currently a question included on the research agenda that would require this data. Some data on faculty will be provided to the MLDS as part of the MHEC's data collection.
Impacts	The teacher-student link is an important part of an educational system. The ability to measure and control for the relationships between teachers and students provides more nuanced information on student outcomes.
Resolution	Review the MLDS Research Agenda. Work with MHEC to define the parameters necessary for MHEC to provide this data to the MLDS.
Feasibility	Data available - In-progress
Status	Planned

8. College Enrollment Data Spring, Winter, and Summer Terms 2008-2013

Gap	The MLDS Center does not have unit record data for students who enrolled in a Maryland college in the Spring, Winter, or Summer Terms in years 2008-2013.
Reason	Institutions did not provide unit record data to MHEC on students enrolling in the Spring, Winter, or Summer Terms in years 2008-2013. MHEC's Enrollment Information System (EIS) collection was a fall-only collection until 2013.
Impacts	Students may opt to enroll in a term other than the Fall. These students are excluded from enrollment data for multiple years, resulting in a gap in the data. This gap means that analyses conducted with data prior to 2013 have limited generalizability beyond fall-only enrollees. Analyses and studies seeking to generalize to all Maryland college students are limited to 2013 and subsequent years.
Resolution	MHEC does not have the data and does not plan to collect the data. The MLDS Center could collect data from each institution. However, collecting data from prior time periods is problematic as the data from earlier periods no longer represent the academic outcomes contemporaneous to the enrollment term. The data are no longer point-in-time once the time period has passed.

¹¹ <https://nces.ed.gov/ipeds/>

Feasibility	Data available - Unfeasible
Status	Inactive

Other Completions and Credentials

1. Licensure from Labor and other license granting agencies

Gap	Professional licenses from Labor or other license granting state agencies such as the Maryland Department of Health are not included in the MLDS.
Reason	MLDS does not receive credential or licensure information from Labor, nor is that data part of the Data Inventory or data sharing agreements with MLDS agency partners. Other licensing information would include health professional licensing in Maryland , or Maryland Department of Agriculture . Additional research is needed to compile all the licensing and credentialing agencies in Maryland.
Impacts	License and credential attainment is considered by many sources to be an educational outcome especially for students engaged in Career and Technical education programs. For students leaving Maryland public high schools and postsecondary institutions, license and credential attainment are positive educational outcomes that can inform the workforce opportunities for Maryland students.
Resolution	There are a large number of state agencies that grant licensure. The Center will begin incorporating this data as specific needs are identified.
Feasibility	Data available - In-progress
Status	Active Law passed in 2021 that fixes legal and procedural issues with the 2018 Career Preparation Expansion Act to allow data to be collected directly by the MLDS Center. The MLDS Center is continuing to finalize an MOU with all 22 Maryland health care boards and commissions. The Board of Nursing is in the process of providing the first dataset to the MLDS and the MLDS Center has also been working closely with the Board of Physicians. The MLDS Center has started discussions with Labor on receiving these data.

2. National and Professional Certifications

Gap	The MLDS does not contain national, professional, or industry certifications for people educated or employed in Maryland.
Reason	This data is not captured by MLDS agency partners. The information is maintained by businesses or professional organizations and not captured in a way that is easily accessible.
Impacts	Certifications are an important component in understanding education and workforce outcomes. This also impacts the MLDS Center's ability to support the Blueprint for Maryland's Future's goal of 45% of graduates earning an industry recognized credential.

Resolution	Explore the sources for available data and research solutions from other SLDS, including the Certification Data Exchange Project . The MLDS Center signed an MOU with Microsoft/Certiport to receive and incorporate Microsoft IT certification data. Other examples of certifications could come from COMPTIA, Oracle, and Adobe.
Feasibility	Data available - In-Progress
Status	Active Microsoft/Certiport data was added to the Data Inventory in March 2022 and the data has been loaded into the MLDS. Other certification data sources are being explored.

Workforce

1. Standard Occupational Classification (SOC) Codes

Gap	MLDS does not receive Standard Occupational Classification (SOC) codes from any source. SOC codes indicate the employee's occupation whereas North American Industry Classification System (NAICS) codes, which the MLDS does receive, provide the industry of the company for which the employee works.
Reason	While several states do require employers to report employees' SOC codes (Alaska, Indiana, Louisiana, South Carolina, Washington, and West Virginia ¹²), they are not collected by Maryland's Department of Labor.
Impacts	To understand workforce outcomes for students, analysts and researchers need to know the student's occupation. Without SOC codes, researchers are left to make assumptions. For example, a computer science major working for a fast-food restaurant (NAICS code 722513) might be assumed not to be working in an occupation for which he or she trained. However, that student could be the IT manager for the restaurant, in charge of supporting and maintaining its IT infrastructure. Similarly, it is assumed that a computer science major working for a large IT Tech firm is employed in his or her field of training when in fact the student could be an administrative assistant.
Resolution	Explore ways to gather information on workers' occupations. HB1244/CH963: Workforce Needs Analysis – Current and Emerging requires MHEC and Labor to jointly look at labor market supply and demand. College majors are being cross-walked to SOC codes. However, the gap remains in that the SOC code is not associated with the UI wage record.
Feasibility	No data available
Status	Inactive Continue discussions with MHEC and Labor on ways to receive SOC codes.

2. Federal and Military Employees

Gap	Federal employment including military employees are not included in the workforce data.
Reason	Federal and military employees do not participate in the UI system and are therefore not part of the data provided to the MLDS.
Impacts	Maryland ranked fourth among the states in federal government employment in 2018 with 144,963 non-military federal jobs in 2018, according to information from the Bureau of Labor Statistics. On a per capita basis, the state ranks first with 240 federal jobs per 10,000 residents and these jobs pay better in Maryland than in any other state. The average annual wage of a federal job in Maryland is \$105,797, which is 27% higher than the national average. ¹³ The lack of federal wage information leaves an incomplete picture

¹² <https://www.patriotsoftware.com/blog/payroll/soc-codes-state-reporting/>

¹³ Maryland State Department of Commerce. *Rankings and Statistics, Rankings, Workforce*. Retrieved April 2020 from <http://commerce.maryland.gov/about/rankings-and-statistics>.

	of employment - especially considering that government jobs are often STEM and higher salary jobs.
Resolution	<p>As of January 2018, the Federal Employment Data Exchange System (FEDES) has been temporarily suspended while the Employment and Training Administration (ETA) reassesses the feasibility of FEDES¹⁴. The MLDS Center can explore ways to receive data through the State Wage Interstate System (SWIS) Clearinghouse. Although the SWIS repository contains UI data on all individuals with UI wages in a state, it can only be used to extract wage data on Workforce Innovation and Opportunity Act (WIOA) participants. The MLDS may explore if the use of the system could be expanded to obtain wage data on non-WIOA individuals.</p> <p>This gap has been partially addressed through the data sharing agreement with the Maryland Comptroller to receive income wage information from tax filings. Specifically, the Center receives aggregate wages of contract employees who receive a 1099 income statement. However, there are instances where the work of a self-employed or contract employee will not result in a 1099 and therefore those wages will not be known by the Center.</p>
Feasibility	Data available – Under consideration
Status	<p>Active</p> <p>As of 2019, the MLDS Center and the Comptroller have been permitted to establish a data sharing arrangement for research purposes. Specifically, the Center provides the Comptroller with specified student information and the Comptroller matches the student information and provides aggregated data from the matched information on the average amount of wages earned. The use of this data can provide insight into students who are in the labor force but not found in the UI wage data.</p> <p>Other states like Ohio have engaged West Point in receiving data on those in the Army and National Guard. Based on the outcome of their work, Maryland may consider contacting West Point and gathering similar unit level record information.</p>

3. Contingent and alternative employment arrangements

Gap	Contingent workers are people who do not expect their jobs to last or who reported that their jobs are temporary. These workers may also be referred to as freelance. Alternative employment arrangements include people employed as independent contractors, on-call workers, temporary help agency workers, and workers provided by contract firms. ¹⁵
Reason	Contingent and alternative workers do not participate in the UI system and are therefore not part of the data in the MLDS.

¹⁴ U.S. Department of Labor, Employment and Training Administration (ETA); Federal Employee Data Exchange System. Retrieved February 2018 from <https://www.doleta.gov/performance/fedes.cfm>.

¹⁵ U.S. Department of Labor, Bureau of Labor Statistics. *Labor force characteristics*. Retrieved February 2018 from <https://www.bls.gov/cps/lfcharacteristics.htm#contingent>.

Impacts	In 2005 contingent and alternative employment accounted for up to 4 percent of all workers. ¹⁶ More recent estimates show these types of employment increasing ^{17,18} The lack of information on independent contractors and self-employed workers leaves an incomplete picture of employment outcomes for Maryland workers.
Resolution	This gap has been partially addressed through the data sharing agreement with the Maryland Comptroller to receive income wage information from tax filings. Specifically, the Center receives aggregate wages of contract employees who receive a 1099 income statement. However, there are instances where the work of a self-employed or contract employee will not result in a 1099 and therefore those wages will not be known by the Center.
Feasibility	Data available - In-progress
Status	Active Given some of the limitations discussed above, the Center will continue to explore other options for addressing this gap.

4. Part-time or full-time employment and number of hours worked

Gap	The wage information provided by UI data does not indicate the number of hours worked or whether the employee was employed full or part-time.
Reason	UI data only provides the wages earned for the entire quarter.
Impacts	Knowing whether wages are part-time or full-time would allow more meaningful comparison of workforce outcomes.
Resolution	None
Feasibility	No data available - look at other states
Status	Inactive

5. PK-12 Applicants for Teacher Certification

Gap	Certain information about applicants for PK-12 educator certification are not included in the MLDS. This includes background information, certificated teachers who did not take up teaching, the number of denied applications, and PRAXIS results.
Reason	The MSDE teacher certification data system captures approvals only and does not include denied applications. Teacher candidates apply through local education agencies and not directly through MSDE. Information in the MSDE Staffing file provides information on

¹⁶ U.S. Department of Labor, Bureau of Labor Statistics. *Career Outlook: Working in a gig economy*.

Retrieved February 2018 from <https://www.bls.gov/careeroutlook/2016/article/what-is-the-gig-economy.htm>.

¹⁷ U.S. Department of Commerce, U.S. Census Bureau. *More Than 380,000 Nonemployer Businesses Added to the U.S. Economy, U.S. Census Bureau Reports*. Retrieved February 2018 from <https://www.census.gov/newsroom/press-releases/2013/cb13-99.html>.

¹⁸ Noguchi, Yuki. (2018, January 22). *Freelanced: The Rise of the Contract Workforce*. NPR. Retrieved February 2018 from <https://www.npr.org/2018/01/22/578825135/rise-of-the-contract-workers-work-is-different-now>

	currently employed staff within local education agencies, but does not include all teachers certified to teach in Maryland. Data from colleges' teacher preparation programs give limited insight into certification because only some, but not all, colleges require certification as a condition to graduate from a teaching program.
Impacts	Understanding teacher certification is necessary to understand the current teacher pipeline in Maryland. Without the background on all teacher certification applicants this limits the ability to report on where/what program(s) Maryland teachers are educated and limits the understanding of various outcomes from Maryland Approved Programs and out-of-state programs.
Resolution	Explore the feasibility of capturing this data from public sources. Some IHEs have PRAXIS data from ETS and could consider providing this to the MLDS Center. MSDE has implemented a new teacher certification management system and the Center is working with MSDE to determine what the new system can capture and report some of the data elements identified as necessary by the Governing Board. MSDE is also working on developing the Maryland Educator Requirement, Retention, and Diversity Dashboard to gain a better understanding of new and prospective teachers in Maryland. Additionally, the MLDS Center could consider receiving certification data directly from ETS and the National Board for Professional Teaching Standards.
Feasibility	Data available - Under consideration
Status	Active At the MLDS Governing Board direction, the MLDS Center conducted a feasibility study on collecting data on applicants for teacher certification. Teacher candidates apply through the LEA and not directly through MSDE. Therefore, the MSDE certification system only contains teachers in the pipeline who received certification and does not include denied applications. The MLDS Center is also exploring the availability and possibility of obtaining data from ETS to help close this gap.

6. Out-of-State workforce data

Gap	MLDS only receives wage data for people who are employed in Maryland.
Reason	MLDS only has access to Maryland UI records. There are interstate programs that are designed to exchange workforce data to allow states to continue to analyze student outcomes even if the student leaves the state. However, these interstate programs require re-disclosure of data which is prohibited by State law.
Impacts	Maryland is closely situated to other states and the District of Columbia. Movement across state lines is commonplace. Information on the movement of students across state lines for employment can assist the Center in answering policy questions related to "brain-drain" and workforce retention.
Resolution	The Department of Labor's Wage Record Interchange System (WRIS or WRIS II) operations ceased on December 31, 2019. As of January 1, 2020 all queries related to wage data for all applicable programs are processed through the State Wage Interstate System (SWIS) Clearinghouse . Although the SWIS repository contains UI data on all individuals with UI wages in a state, it can only be used to extract wage data on

	Workforce Innovation and Opportunity Act (WIOA) participants. The MLDS may explore if the use of the system could be expanded to obtain wage data on non-WIOA individuals. The MLDS may also explore opportunities with other SLDS, such as the Multistate Longitudinal Data Exchange . Either option would require changes to state statute, revised data sharing agreements, approval by the MLDS Governing Board, and inclusion of the data elements in the Data Inventory.
Feasibility	Requires legislative change
Status	Inactive

7. Unemployment Applications and Benefits

Gap	The data provided by Labor does not include information on when individuals file for unemployment or receive unemployment benefits. Currently, if an individual is not included in a quarter of UI wage data, we do not know if they are out of state, in the federal workforce (or other excluded sector), or unemployed.
Reason	These data are not included in the data transfers from Labor to the MLDS Center.
Impacts	Knowing whether individuals are filing and receiving unemployment benefits would help the Center to better understand the population of individuals who are not found in the Maryland UI wage data. The Center would be able to examine unemployment as a key outcome for students, helping the State better understand the education-related predictors of unemployment. Additionally, having these data would help the Center to better understand workforce participation and wages by providing an additional group of non-missing individuals (unemployed individuals could be added to the denominator for workforce participation and wage calculations). These data will become increasingly important with the additional unemployment rate due to COVID-19.
Resolution	Explore the data available from the Maryland Department of Labor's Division of Unemployment Insurance (dllr.state.md.us/employment/unemployment.shtml).
Feasibility	Data available - In-Progress
Status	Planned The MLDS Center and Labor plan to meet and discuss what unemployment data may be available.

Appendix

Resolved Data Gaps

1. Required 5-year de-linking of student and workforce records

Gap	A student record must be de-linked from a workforce record five years after the student's last enrollment in a Maryland educational institution.
Resolution	Revisions to Ed. Art., § 24-702(c), Annotated Code of Maryland effective July 2017 that changes the limit from 5 to 20 years.

2. North American Industry Classification System (NAICS) Codes

Gap	NAICS (North American Industry Classification System) codes, used to determine the industry of each employer in the UI database, are missing in the MLDS.
Resolution	NAICS codes provided by Labor have been completely and consistently loaded into the MLDS. MLDS analysis shows that 99.2% of employers in the System have a NAICS code.

3. Early Childhood Education Data

Gap	The Division of Early Childhood Development (DECD) at MSDE implemented the Kindergarten Readiness Assessment (KRA) in 2016. The MLDS does not contain this assessment data.
Resolution	Data elements related to the KRA were approved for inclusion by the MLDS Governing Board in December 2016.

4. Removal of workforce records that are not matched to a student record

Gap	MLDS must remove all workforce records that are not matched to a student record within 90 days after receiving the workforce record from Labor. This leaves a gap of a person's workforce history that may exist prior to or concurrent to education records.
Resolution	Labor now includes an annual data file to the MLDS that includes the combined records for all four quarters of a calendar year. This change is reflected in the MLDS Data Collections Calendar.
Status	Resolved

5. Teacher candidates

Gap	Maryland Approved Program Completers are not clearly identified in the MLDS.
-----	--

Resolution	MHEC revised how it collects data on Maryland Approved Program Completers. The new collection was piloted in 2018 and fully deployed in 2019. As of 2023-2024, Maryland community colleges that offer alternative education preparation programs (MAAPP) will now participate in MAPCS and include MAAPP students in the EIS data collection.
Status	Resolved

6. Student Discipline Data

Gap	Student discipline data for PK-12 students is not available in the MLDS.
Resolution	House Bill 704 - Student Data and Governing Board was passed in the 2019 legislative session and removed the restriction against including student discipline data records as “student data” (Revisions to Md. Code, Ed. Art. § 24-701(f)(3)(iv))
Status	Resolved

7. Apprenticeship Data

Gap	Apprenticeship data is currently not in the MLDS.
Resolution	The MLDS Center engaged in discussions with Labor on the availability of the apprenticeship data. Apprenticeship data elements were approved during the June 2019 MLDS Center Governing Board meeting. The MLDS Center received the first data file in February 2020.
Status	Resolved

8. Career and Technical Education Data

Gap	Career and Technical Education concentrator data for Maryland’s K12 public school students is not currently included in the Data Inventory.
Resolution	CTE Concentrators are included in the Maryland Every Student Succeeds Act (ESSA) Consolidated State Plan . As of 2018, CTE Concentrator data is now collected in MSDE’s High School Data Collection.
Status	Resolved

9. Juvenile Delinquency Records

Gap	Juvenile delinquency records for PK-12 students are not available in the MLDS.
Resolution	Revisions to Md. Code, Ed. Art. § 24-701(f)(3)(iv) were made to allow the inclusion of this information. As of 2021, DJS data are loaded to the MLDS.
Status	Resolved

10. Socioeconomic Status for PK-12 Students

Gap	The MLDS does not contain a reliable and consistent measure of students’ socioeconomic status.
-----	--

Resolution	MSDE now provides the MLDS Center with each student's Geolocation ID, which includes census tract and block number. The MLDS Center received the first data file in 2023.
Status	Resolved

11. Student Education Record Required

Gap	<p>The MLDS must remove all workforce wage records that are not matched to a student education record. This results in two related gaps:</p> <ol style="list-style-type: none"> 1. As new collections with education data from prior years are added to the MLDS, there may be a gap in a person's workforce history. 2. Lack of workforce data for Maryland's workforce population who have not attended a Maryland public school or college/university since 2007-2008.
Resolution	The new Data Sharing Agreement with Labor eliminated the restriction to remove all workforce wage records that are not matched to a student education record.
Status	Resolved