# MLDS CENTER
## Maryland Longitudinal Data System

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

Substantive Changes to the

# MLDS Data Inventory

March 2022

# Contents

# Overview

The Maryland Longitudinal Data System (MLDS) is Maryland's central repository for comprehensive data from all levels of education and into the State's workforce. The MLDS Governing Board is required to create an inventory of individual student and workforce data proposed to be maintained in the system (Md. Ed. Art. §24-704(g)(6)). Additionally, the data inventory serves to inform the public about the contents of the MLDS database. This document provides a comprehensive summary of data elements proposed to be maintained, or removed from the System.

# Process

The development of the Data Inventory is a collaborative process between Labor, MSDE and MHEC, and the MLDS Data Governance Advisory Board. The MLDS Data Governance Advisory Board annually reviews the Data Inventory and identifies what data elements to propose for inclusion or remove from the System. All data must be relevant to answering one of the questions in the Research Agenda or generally identified as necessary for evaluating federal or State supported education programs. Data elements identified for inclusion or removal in the System are presented to the Governing Board for approval. Once approved, the requirements are developed with the agency and included in the data collection calendar.

# Accessing the Data Inventory

As of December 2016, the MLDS Data Inventory is available online through the MLDS Center website. This change allows the inventory to be more dynamic, by presenting the inventory in a way that may be organized according to the user's needs.

# Changes to the Data Inventory

As a result of publishing the Data Inventory in a dynamic format, this document will only include substantive changes for each of the domains. Substantive changes are inclusions or removals of data elements in the Data Inventory.

Administrative changes are made annually and include the following:
- Clarification to the database in which the data element is maintained (i.e. ODS or MDM)
- Corrections and consistency in the CEDS Global ID for the Data Element
- Consistency in reporting the Element Name

# Student Data

State law (Education Article §24-701, Annotated Code of Maryland) defines student data to mean data relating to student performance. The law also lists specific data elements not considered student data. As of the 2019 legislative session, House Bill 704 authorizes the Center to include discipline data and juvenile delinquency records. By removing the restriction on these specific data elements, student data now includes:
- State and national assessments;
- Course-taking and completion;

- Grade point average;
- Remediation;
- Retention;
- Degree, diploma, or credential attainment;
- Enrollment;
- Demographic data;
- Juvenile delinquency records; and
- Elementary and secondary school disciplinary records.

The law continues to prohibit the Center from collecting data on students from criminal and Child In Need of Assistance records and medical and health records.

# Workforce Data

State law (Education Article §24-701, Annotated Code of Maryland) defines workforce data as data relating to:

- Employment status;
- Wage information;
- Geographic location of employment; and
- Employer information.

# Understanding the Fields in the Data Inventory

**Approval Status** – identifies the Governing Board approval status for the Domain, Entity, or Element.

- *Approved* – The element had been approved for inclusion in the MLDS by the MLDS Governing Board.
- *Proposed* – The element has been proposed for inclusion and is pending review by the MLDS Governing Board for collection by the MLDS Center.
- *Temporary* – The external data element has been approved for inclusion in the MLDS by the MLDS Governing Board.  Temporary data will be listed as "Temporary – until mm-dd-yyyy".

**Agency** – entity that provided the data element to the MLDS.  Agencies are only those who share data that are used for Center output including research, reporting, and data requests.  Current agencies providing data include: the Maryland State Department of Education (MSDE), Maryland Higher Education Commission (MHEC), Maryland Department of Labor (Labor), and Maryland Department of Juvenile Services (DJS).

**Approval Date** – date that the Governing Board approved the inclusion of the Data Element to be maintained in the System.

**Availability** – the earliest date that the Date Element is available to the MLDS.

**CEDS Global ID** – is the Common Education Data Standards unique identifier for the data element. Data elements in the MLDS database are mapped to the Common Education Data Standards (CEDS Version 10) when possible. CEDS represents a national, collaborative effort to develop voluntary, common data standards across the P-20W pipeline and provides nationally recognized naming conventions and definitions. Where data cannot be mapped to CEDS 10 standards, alternate domain, entity, and element names are provided, if applicable.

**Database** – an indication of the location of the data element within the MLDS. Data elements are either in the Operational Data Store (ODS) or the Master Data Management (MDM) database. The MDM database contains confidential and sensitive information on student and workers and is restricted to specified authorized staff of the MLDS Center. The ODS contains sensitive, de-identified information on students and workers and is restricted to authorized staff of the MLDS Center.

**Description** – a description of the Data Element that provides additional information related to how the data element is collected, used, or defined in the System.

**Domain/Sector** – Domains indicate the sectors that are part of the MLDS. The Data Inventory contains domains/sectors related to the MLDS partner agencies and other external entities that provide student and workforce data directly to the MLDS through a memorandum of understanding. MLDS partners include: Maryland State Department of Education (MSDE), Maryland Higher Education Commission (MHEC), Maryland Department of Labor (Labor), and Maryland Department of Juvenile Services (DJS). The Data Inventory also contains publicly available data or data provided through a memorandum of understanding with an external entity. Data from external sources, such as the Motor Vehicle Administration (MVA) and U.S. Census Bureau, are used to enhance the data received from internal sources, and provide additional context to the data in the System.

Domains/sectors include:
- Workforce,
- Postsecondary,
- K12,
- Early Learning,
- Juvenile Delinquency,
- Adult Education,
- Child Welfare,
- Credentials, and
- External Data.

**Element Name** – describes the given name for a data element provided to the MLDS.  This may be the name used by the partner agency, or a standard name used by CEDS.  Note: The same element name may appear multiple times, as the MLDS receives the same data element from multiple sources.

**Entity** – Entities represent persons, places, events, objects or concepts about which the data is collected or shared. The Entities in the MLDS Data Inventory are:

- Address
- AE Student
- Assessments
- Authentication and Authorization
- EL Child
- EL Organization
- EL Staff
- Financial Aid
- Institutional Characteristics
- K12 Class/Section
- K12 Course
- K12 Organizations
- K12 School
- K12 Staff
- K12 Student
- LEA
- NA
- PS Institution
- PS Student
- Quarterly Employment
- Tuition
- W Employer
- W Person

**Data Usage** – provides an indication of the status of the data element within the MLDS.  The data element is either available for use in research or only used by internal IT staff for identity resolution.

**Source** – indicates the origin of the data for the specific Domain/Sector. This may be the name of the data collection administered by the agency or the table name. The source is specific to the agency/entity providing the data to the MLDS.

# K-12

K-12 domain data is provided to the MLDS from the Maryland State Department of Education (MSDE).

## Proposed Sources - None

There are no proposed K-12 data elements at this time.

## Proposed Removals -None

There are no removals of K-12 data elements at this time.

# Workforce

Workforce domain data is provided to the MLDS from the Department of Labor (Labor).

## Proposed Sources - None

There are no proposed workforce data elements at this time.

## Proposed Removals - None

There are no removals of workforce data elements at this time.

# Postsecondary

Postsecondary domain data is mainly provided to the MLDS from the Maryland Higher Education Commission (MHEC).  In some cases, data is provided by MSDE.

## Proposed Sources - None

There are no proposed postsecondary data elements at this time.

## Proposed Removals - None

There are no removals of postsecondary data elements at this time.

# Early Learning

Early Learning domain data is provided to the MLDS from the Maryland State Department of Education (MSDE).

## Proposed Sources - None

There are no proposed early learning data elements at this time.

## Proposed Removals - None

There are no removals of early learning data elements at this time.

# Juvenile Delinquency

Juvenile delinquency domain data is provided to the MLDS from the Department of Juvenile Services (DJS).

## Proposed Sources

### Juvenile Delinquency Records

The Department of Juvenile Services captures administrative data on youth who are involved in the juvenile justice system in Maryland.  Three proposed additions will aid in identifying whether a youth had an interaction with DJS prior to the start of MLDS data in 2008.  The data elements for the inclusion in the Data Inventory are listed below.

| CEDS Global ID | Sector | Element Name | Approval Status | Availability | Source | Database |
|---|---|---|---|---|---|---|
| NA | Juvenile Delinquency | First Complaint Date | Proposed | 2008 | Juvenile Delinquency Records | ODS |
| NA | Juvenile Delinquency | First Probation Disposition Date | Proposed | 2008 | Juvenile Delinquency Records | ODS |
| NA | Juvenile Delinquency | First Commitment Disposition Date | Proposed | 2008 | Juvenile Delinquency Records | ODS |

## Proposed Removals - None

There are no removals of juvenile delinquency data elements at this time.

# Adult Education

Adult Education domain data is provided to the MLDS from the Department of Labor (Labor).

## Proposed Sources - None

There are no proposed adult education data elements at this time.

## Proposed Removals - None

There are no removals of adult education data elements at this time.

# Child Welfare

Child Welfare domain data is provided to the MLDS from the Maryland Social Services Administration within the Department of Human Services.

## Proposed Sources

### Child Welfare Data

Legislation passed during the 2021 Legislative Session changed the definition of student data to include child welfare data.  Child welfare data includes data relating to a child's experience with the child protective services, family preservation services, and state-sponsored out-of-home services.  The MLDS Center is phasing in the child welfare data, beginning with out-of-home services data (this sector of child welfare data was chosen because the MLDS Center has a reporting requirement to fulfill on the experience of former children in out-of-home placements and how out-of-home placement affected participation in higher education (see Ed. Art. § 24-703.1 Annotated Code of Maryland) .  The out-of-home services data elements for the inclusion in the Data Inventory are listed below.

| CEDS Global ID | Sector | Element Name | Approval Status | Availability | Source | Database |
|---|---|---|---|---|---|---|
| 001071 | Child Welfare | Person ID | Proposed | 2008 | Child Welfare Data | MDM |
| 000115 | Child Welfare | First Name | Proposed | 2008 | Child Welfare Data | MDM |
| 000206 | Child Welfare | Preferred Name | Proposed | 2008 | Child Welfare Data | MDM |
| 000184 | Child Welfare | Middle Name | Proposed | 2008 | Child Welfare Data | MDM |
| 000172 | Child Welfare | Last Name | Proposed | 2008 | Child Welfare Data | MDM |
| 000121 | Child Welfare | Generational Code or Suffix | Proposed | 2008 | Child Welfare Data | MDM |
| 000033 | Child Welfare | Date of Birth | Proposed | 2008 | Child Welfare Data | MDM |
| 000255 | Child Welfare | Gender | Proposed | 2008 | Child Welfare Data | ODS |
| 000016 | Child Welfare | American Indian or Alaska Native | Proposed | 2008 | Child Welfare Data | ODS |
| 000020 | Child Welfare | Asian | Proposed | 2008 | Child Welfare Data | ODS |
| 000034 | Child Welfare | Black or African American | Proposed | 2008 | Child Welfare Data | ODS |
| 000192 | Child Welfare | Native Hawaiian or Other Pacific Islander | Proposed | 2008 | Child Welfare Data | ODS |
| 000301 | Child Welfare | White | Proposed | 2008 | Child Welfare Data | ODS |
| 000144 | Child Welfare | Hispanic/Latino Ethnicity | Proposed | 2008 | Child Welfare Data | ODS |
| 001071 | Child Welfare | Social Security Number (SSN) | Proposed | 2008 | Child Welfare Data | MDM |
| 000010 | Child Welfare | Address Type | Proposed | 2008 | Child Welfare Data | ODS |
| 000190 | Child Welfare | County of Residence | Proposed | 2008 | Child Welfare Data | ODS |

| CEDS Global ID | Sector | Element Name | Approval Status | Availability | Source | Database |
|---|---|---|---|---|---|---|
| 000191 | Child Welfare | School Name | Proposed | 2008 | Child Welfare Data | ODS |
| 001069 | Child Welfare | School ID | Proposed | 2008 | Child Welfare Data | ODS |
| NA | Child Welfare | Change of School Indicator | Proposed | 2008 | Child Welfare Data | ODS |
| 001071 | Child Welfare | State Assigned Student ID (SASID) | Proposed | 2008 | Child Welfare Data | MDM |
| 000190 | Child Welfare | Jurisdiction of Authority | Proposed | 2008 | Child Welfare Data | ODS |
| NA | Child Welfare | Region of Authority | Proposed | 2008 | Child Welfare Data | ODS |
| 000190 | Child Welfare | Jurisdiction of Placement | Proposed | 2008 | Child Welfare Data | ODS |
| NA | Child Welfare | Region of Placement | Proposed | 2008 | Child Welfare Data | ODS |
| NA | Child Welfare | Out of Home Services Type | Proposed | 2008 | Child Welfare Data | ODS |
| NA | Child Welfare | Removal Reason | Proposed | 2008 | Child Welfare Data | ODS |
| NA | Child Welfare | Removal ID | Proposed | 2008 | Child Welfare Data | MDM |
| NA | Child Welfare | Case ID | Proposed | 2008 | Child Welfare Data | MDM |
| NA | Child Welfare | Removal Date | Proposed | 2008 | Child Welfare Data | ODS |
| NA | Child Welfare | Return Date | Proposed | 2008 | Child Welfare Data | ODS |
| NA | Child Welfare | Return Reason | Proposed | 2008 | Child Welfare Data | ODS |
| NA | Child Welfare | Placement ID | Proposed | 2008 | Child Welfare Data | MDM |
| NA | Child Welfare | Macro Placement Type | Proposed | 2008 | Child Welfare Data | ODS |
| NA | Child Welfare | Family Placement Type | Proposed | 2008 | Child Welfare Data | ODS |
| NA | Child Welfare | Placement Type | Proposed | 2008 | Child Welfare Data | ODS |
| NA | Child Welfare | Placement Start Date | Proposed | 2008 | Child Welfare Data | ODS |
| NA | Child Welfare | Placement End Date | Proposed | 2008 | Child Welfare Data | ODS |
| NA | Child Welfare | Placement Count | Proposed | 2008 | Child Welfare Data | ODS |
| NA | Child Welfare | Removal Count | Proposed | 2008 | Child Welfare Data | ODS |

# Proposed Removals - None

There are no removals of child welfare data elements at this time.

# Credentials

Data in the Credentials domain contains data from:

- Microsoft/Certiport

The data contain information on a resource that defines a competency or qualification, achievement, personal or organizational quality, experience, attribute, or aspect of an identity typically used to indicate suitability.

# Proposed Sources

## Microsoft Certification Data

The Microsoft certification data contains Microsoft certification testing results of Maryland students. Certiport is the service used by Microsoft to provide its industry certification testing. The data elements for the inclusion in the Data Inventory are listed below.

| CEDS Global ID | Sector | Element Name | Approval Status | Availability | Source | Database |
|---|---|---|---|---|---|---|
| 001572 | Credentials | Microsoft Student ID | Proposed | 2013 | Microsoft Certification Data | MDM |
| 001572 | Credentials | Certiport Student Username | Proposed | 2013 | Microsoft Certification Data | MDM |
| 001071 | Credentials | State Assigned Student ID (SASID) | Proposed | 2013 | Microsoft Certification Data | MDM |
| 000172 | Credentials | Last Name | Proposed | 2013 | Microsoft Certification Data | MDM |
| 000115 | Credentials | First Name | Proposed | 2013 | Microsoft Certification Data | MDM |
| 000184 | Credentials | Middle Name | Proposed | 2013 | Microsoft Certification Data | MDM |
| 000033 | Credentials | Date of Birth | Proposed | 2013 | Microsoft Certification Data | MDM |
| 000255 | Credentials | Gender | Proposed | 2013 | Microsoft Certification Data | ODS |
| 000893 | Credentials | Certification/Program Name | Proposed | 2013 | Microsoft Certification Data | ODS |
| NA | Credentials | Test Center ID | Proposed | 2013 | Microsoft Certification Data | ODS |
| NA | Credentials | Test Center Name | Proposed | 2013 | Microsoft Certification Data | ODS |
| NA | Credentials | Test Center Zip Code | Proposed | 2013 | Microsoft Certification Data | ODS |
| 001067 | Credentials | Exam Reference Number | Proposed | 2013 | Microsoft Certification Data | ODS |
| 000365 | Credentials | Exam Name | Proposed | 2013 | Microsoft Certification Data | ODS |

| CEDS Global ID | Sector | Element Name | Approval Status | Availability | Source | Database |
|---|---|---|---|---|---|---|
| NA | Credentials | Test Language | Proposed | 2013 | Microsoft Certification Data | ODS |
| NA | Credentials | Test Score | Proposed | 2013 | Microsoft Certification Data | ODS |
| NA | Credentials | Test Date | Proposed | 2013 | Microsoft Certification Data | ODS |
| NA | Credentials | Pass/Fail/Incomplete Indicator | Proposed | 2013 | Microsoft Certification Data | ODS |

## Proposed Removals - None

There are no removals of credentials data elements at this time.

# External Data

External data is acquired by the MLDS from:

- U.S. Census Bureau (Census); and
- Maryland Department of Transportation, Motor Vehicle Administration (MVA).

This data is used to authenticate the identity of a person and is used internally by MLDSC staff.

As of June 2020, external data from an individual or entity requesting the inclusion and use of external data for a report or research project is allowed as a permanent or temporary source of data. In these cases, external data are defined as follows:

- External data means data that are not part of the Center data and are being provided for a unique study or program evaluation. External data are student or worker unit record data as defined by Education Article § 24-701(f) and (g), Annotated Code of Maryland.
- External data does not include aggregate (non-individual) level data that are used in conjunction with Center data (i.e. IPEDS data or school climate reports are not external data).

## Proposed Sources - None

There are not proposed external data elements at this time.

## Proposed Removals - None

There are no removals of external data elements at this time.

# Supporting Information For more information on the MLDS Center please visit the MLDS Center website at mldscenter.maryland.gov.

For additional information on CEDS 7.1 Data Standards visit ceds.ed.gov.
CEDS 101 describes what the CEDS standard is, why it is needed, and the parts of the CEDS standard.

# Contributors and Change History

| Date | Description/Reason for change | Authors/Contributors | Version |
|---|---|---|---|
| 07/25/2012 | Initial Draft | John Bruns | 1.0 |
| 09/1/2012 | Revision of content, addition of tables | John Bruns, Rob London | 1.0 |
| 10/2/2013 | Revision of content, addition of person, organization data elements; mapping to CEDS workforce elements added | John Bruns | 2.0 |
| 10/29/2013 | Added CEDS 4.0 details and data elements planned for the MLDS Master Data Management system | John Bruns | 2.0 |
| 10/31/2013 | Review and update | Chandra Haislet | 2.0 |
| 11/1/2013 | Updates to sections 2.0-5.0 | Ross Goldstein | 2.1 |
| 11/1/2013 | Inactive CEDS 4.0 elements removed from Appendix B | John Bruns | 2.2 |
| 11/15/2013 | Active and Approved elements added to Appendix B and C; reserved elements removed | John Bruns | 2.3 |
| 11/20/2013 | Removed Appendices related to elements by policy question and system source; added active and Approved elements; denoted elements not mapped to CEDS 4.0 | John Bruns | 2.4 |
| 11/25/2013 | Defined Approved elements as those approved by agencies for submission; removed Approved elements not approved | John Bruns | 2.5 |
| 12/13/2013 | All "Approved" data elements in Version 2.5 marked as active following MLDS Board approval | John Bruns | 2.6 |
| 1/4/2014 | Initial Draft of CEDS Elements | John Bruns (MSDE) | 3.1 |
| 1/31/2014 | Research Request of CEDS Elements | Mike Woolley (UMB) | 3.1 |
| 2/28/2014 | Availability of Data Alignment – K12 | Janice Johnson (MSDE) | 3.2 |
| 2/28/2014 | Availability of Data Alignment – Workforce | Donni Turner (DLLR) | 3.2 |
| 2/28/2014 | Availability of Data Alignment – Postsecondary | Andrew Nichols (MHEC) | 3.2 |
| 3/13/2014 | Approved Items for Inventory | Chandra Haislet (MLDS Center) | 3.3 |
| 5/28/2014 | Availability of Data Alignment – Postsecondary | Jon Enriquez (MHEC) | 3.4 |
| 6/2/2014 | Approved Items for Inventory (Data Gab) | Chandra Haislet (MLDS Center) | 3.5 |

| Date | Description/Reason for change | Authors/Contributors | Version |
|------|-------------------------------|----------------------|---------|
| 6/6/2014 | Availability of Data Alignment – Early Learning | Phil Koshkin (ECE) | 3.6 |
| 6/6/2014 | Additional Postsecondary Data | Jon Enriquez (MHEC) | 3.7 |
| 6/9/2014 | Availability of Data Alignment – Workforce | Donni Turner (DLLR) | 3.8 |
| 12/8/2014 | Availability of Data Alignment – Governing Board Meeting 12/16/2014 | Laia Tiderman (MLDS Center) | 4.0 |
| 12/18/2014 | Proposed Data Elements Approved by the Governing Board 12/16/2014 | Laia Tiderman (MLDS Center) | 4.1 |
| 11/10/15 | Inclusion of Data Elements approved in previous versions (MHEC and DLLR) Inclusion of MVA Data Elements for approval by the MLDS Governing Board | Laia Tiderman (MLDS Center) | 4.2 |
| 12/8/2015 | Revisions by MHEC to Postsecondary Data Elements | Parris Jackson | 4.3 |
| 12/9/2015 | Final Revisions prior to presentation at the MLDS Governing Board | Laia Tiderman | 4.5 |
| 12/15/2015 | Final with approval from Governing Board | Laia Tiderman | 4.5 |
| 10/13/2015 | Revisions for Data GAB 10/19/2016 | Laia Tiderman | 4.7 |
| 11/1/2016 | Published Data Inventory on MLDS Website Revised document to include substantive changes Included definitions for all fields included in online Data Inventory | Laia Tiderman | 5.0 |
| 11/21/2016 | Changes to proposed workforce sources and elements | Laia Tiderman | 5.1 |
| 12/2/2016 | Updates to *Overview*, inclusion of *Process*, *Student Data* and *Workforce Data* definitions, updates to *Understanding* the Fields in the Data Inventory | Laia Tiderman | 5.2 |
| 5/16/2017 | Proposed and Removed data elements for 2017 June Governing Board Meeting | Laia Tiderman | 6.0 |
| 5/24/2018 | Proposed removal of IPEDS Data and Inclusion of Publicly Available Aggregate Data; Annual updates for 2018 June Governing Board Meeting | Laia Tiderman | 7.0 |
| 6/14/2018 | Changes requested during 2018 June Governing Board Meeting | Laia Tiderman | 7.5 |
| 11/29/2018 | Additions to PK12 data in alignment with changes to data collections made by MSDE | Laia Tiderman | 8.0 |
| 05/21/2019 | Additions to Workforce data due to the new Apprenticeship Program data collection from DLLR; Annual updates for 2019 June Governing Board Meeting | Molly Abend | 9.0 |

| Date | Description/Reason for change | Authors/Contributors | Version |
|------|-------------------------------|----------------------|---------|
| 09/03/2019 | Additions to PK12 data from Discipline data and Gifted and Talented Indicator. Workforce additions to LACES. | Molly Abend | 9.1 |
| 11/22/2019 | Census element additions to PK12 data. Postsecondary additions and removals to MAPCS and DIS. Changed CEDS 6.0 to 7.1 | Molly Abend | 9.2 |
| 06/01/2020 | Updated field definitions to match website language.  Added Early Learning and Adult Education as a domain/sector.  Added Juvenile Delinquency as a domain/sector and proposed data element additions to Juvenile Delinquency data. | Molly Abend | 10.0 |
| 09/03/2020 | Proposed data elements for the 2020 September Governing Board Meeting. Added a "Temporary" field as an Approval Status option.  Added External Data as a domain/sector and included more detail to the external data definition. | Molly Abend | 10.1 |
| 03/05/2021 | Accountability School data element included in the Data Inventory.  Did not need approval; informational only. | Molly Abend | 11.0 |
| 05/26/2021 | Proposed data elements for the 2021 June Governing Board Meeting. | Molly Abend | 11.1 |
| 03/11/2022 | Added Child Welfare and Credentials as domains/sectors. Proposed data elements for the 2022 March Governing Board Meeting. Changed CEDS 7.1 to 10 | Molly Abend | 12.0 |