



MLDS CENTER

Maryland Longitudinal Data System

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MEMORANDUM

TO: MLDS Governing Board
FROM: Molly B. Abend, Data Management Coordinator
DATE: December 9, 2019
SUBJECT: MLDS 2019 Data Inventory

Purpose

The purpose of this agenda item is to provide information to the Governing Board on the proposed changes to the MLDS 2019 Data Inventory for Governing Board approval at the December Governing Board Meeting.

Data Inventory

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.

Summary of Proposed Additions

A. PK12: Data Matching

House Bill 1206 - Data Matching was passed in the 2019 legislative session and requires county boards of education to convert student home addresses into a U.S. Census Bureau tract or block number and then provide that information to MSDE. MSDE will in turn provide these data to the MLDS Center. The proposed data elements for inclusion are listed below.

1. Student Census Tract
2. Student Census Block
3. School Census Tract
4. School Census Block

B. Postsecondary: Classification of Instructional Programs Code

The Maryland Higher Education Commission (MHEC) is adding a Classification of Instructional Program (CIP) Code field to the Maryland Approved Program Completer System (MAPCS) data collection to capture the instructional program area of the student. The code reported is the one associated with the National Higher Education General Information Survey code in the MHEC Academic Program Inventory. The following data element is being added to the 2019 MAPCS collection: Add - CIP Code

Summary of Proposed Removals

A. Postsecondary: DIS-MAPCS Match Flag

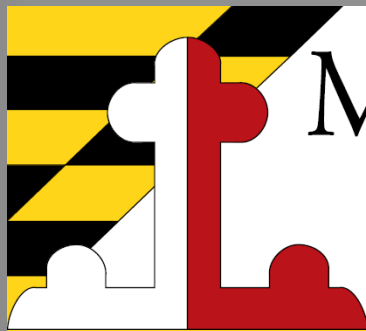
The Maryland Higher Education Commission (MHEC) previously collected a flag that indicates whether or not the Maryland Approved Program Completer System (MAPCS) data are associated with Degree Information System (DIS) data that were reported for the same student from the same institution for the aligned collection year (e.g. DIS 2018 and MAPCS 2018). This flag is no longer collected by MHEC and is proposed for removal. Remove - DIS-MAPCS Match Flag

B. Postsecondary: Reverse Transfer Flag

The Maryland Higher Education Commission (MHEC) collects a flag (reverse transfer) that indicates when a community college awards a degree to a student who previously attended a four-year institution. The Maryland Longitudinal Data System (MLDS) Center was informed by the Maryland Higher Education Commission (MHEC) that conflicting definitions have been operationalized for the Reverse Transfer Flag data element in the Degree Information System (DIS) data collection. The MLDS Center has decided to remove this data element from the data inventory as data from other collections can be used to identify reverse transfer students. This flag is proposed for removal. Remove - Reverse Transfer Flag

Action

We request the Governing Board approve the additions and removals to the MLDS Data Inventory – December 2019.



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Better Data • Informed Choices • Improved Results

Substantive Changes to
the

MLDS Data Inventory

December 2019

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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 DoL, 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;

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- 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.

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 Data 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 7.1) 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 7.1 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.

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Data Inventory

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 – Domains indicate the sectors that are part of the MLDS. The Data Inventory contains both internal and external domains. Internal domains relate to the MLDS partner agencies 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), and Maryland Department of Labor (DoL). External domains include publicly available data or data provided through a memorandum of understanding with the external entity. Data from external sources are used to enhance the data received from internal sources, and provide additional context to the data in the System.

Internal domains include:

- Workforce,
- Postsecondary,
- PK12.

External Domains include:

- U.S. Census Bureau (Census), and
- Motor Vehicle Administration (MVA).

Element Name – describes the data element provided to the MLDS. These are attributes of the Entity. This may be the name used by the partner agency, or a standard name used by CEDS.

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

Load Status – provides an indication of the status of the data element within the MLDS.

- **Active** data elements are loaded into the System and are currently in use.
- **Inactive** data elements were approved for inclusion in the MLDS by the Governing Board, but are not currently loaded into the MLDS or have not yet been provided to the MLDS from the source agency.
- **Removed** data elements that have been eliminated from the MLDS even though they were approved by the Governing Board for use.
- **Obsolete** data elements were approved for collection but are no longer available from the source. Data remains active in the System for the years the data element was available.

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

PK12

PK12 domain data is provided to the MLDS from the Maryland State Department of Education (MSDE).

Proposed Sources

Census

House Bill 1206 - Data Matching was passed in the 2019 legislative session and requires county boards of education to convert student home addresses into a U.S. Census Bureau tract or block number and then provide that information to MSDE. MSDE will in turn provide these data to the MLDS Center. The proposed data elements for inclusion are listed below.

| CEDS Global ID | Entity | Element Name | Approval Status | Availability | Source | Database |
|---------------------------|---------------|----------------------|----------------------------|---------------------|---------------|-----------------|
| NA | K12 Student | Student Census Tract | Proposed | 2008 | Census | ODS |
| NA | K12 Student | Student Census Block | Proposed | 2008 | Census | ODS |
| 001179 | K12 Student | School Census Tract | Proposed | 2008 | Census | ODS |
| NA | K12 Student | School Census Block | Proposed | 2008 | Census | ODS |

Proposed Removals - None

There are no removals of PK12 data elements at this time.

Workforce

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

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.

Postsecondary

Postsecondary domain data is provided to the MLDS from the Maryland Higher Education Commission (MHEC).

Proposed Sources

Maryland Approved Program Completer System

The Maryland Higher Education Commission (MHEC) is adding a Classification of Instructional Program (CIP) code field to the Maryland Approved Program Completer System (MAPCS) data collection to capture the instructional program area of the student. The code reported is the one associated with the

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National Higher Education General Information Survey code in the MHEC Academic Program Inventory. The following data element is proposed for inclusion in the MLDS Data Inventory:

| CEDS Global ID | Entity | Element Name | Approval Status | Availability | Source | Database |
|----------------|---------------|--------------|-----------------|--------------|--------|----------|
| 000043 | Postsecondary | CIP Code | Proposed | 2019 | MAPCS | ODS |

Proposed Removals

The Maryland Higher Education Commission (MHEC) previously collected a flag that indicates whether or not the Maryland Approved Program Completer System (MAPCS) data are associated with Degree Information System (DIS) data that were reported for the same student from the same institution for the aligned collection year (e.g. DIS 2018 and MAPCS 2018). This flag is no longer collected by MHEC and is proposed for removal.

The Maryland Higher Education Commission (MHEC) collects a flag (reverse transfer) that indicates when a community college awards a degree to a student who previously attended a four-year institution. The MLDS Center was informed by MHEC that conflicting definitions have been operationalized for the Reverse Transfer Flag data element in the Degree Information System (DIS) data collection. The MLDS Center has decided to remove this data element from the data inventory as data from other collections can be used to identify reverse transfer students. The following data elements are recommended for removal from the MLDS Data Inventory.

| CEDS Global ID | Entity | Element Name | Approval Status | Availability | Source | Database |
|----------------|---------------|-----------------------|-----------------|--------------|--------|----------|
| NA | Postsecondary | DIS-MAPCS Match Flag | Approved | 2018 | MAPCS | ODS |
| NA | Postsecondary | Reverse Transfer Flag | Approved | 2014 | DIS | ODS |

External Domains

External domain data is acquired by the MLDS from:

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

Proposed Sources - None

There are no proposed external data sources 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 |

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| Date | Description/Reason for change | Authors/Contributors | Version |
|------------|--|-------------------------------|---------|
| 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 |
| 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 <i>Overview</i> , inclusion of <i>Process</i> , <i>Student Data</i> and <i>Workforce Data</i> definitions, updates to <i>Understanding the Fields</i> 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 |

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| Date | Description/Reason for change | Authors/Contributors | Version |
|------------|---|----------------------|---------|
| 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 |
| 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 |