



Maryland Higher Education Commission

Maryland Annual Collection Revisions

March 2013

PILOT – MAC2 Revision Guidelines

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MAC2 Pilot Submission Instructions Maryland Annual Collection Revisions

March 2013

Introduction

The Maryland Higher Education Commission (MHEC) has revised the Maryland Annual Collection (MAC), the core series of public data collections from Maryland postsecondary institutions. Data collected through the MAC allows MHEC to produce financial, research, and policy reports on critical higher education topics.

The purpose for the revision of the MAC is threefold:

- Improve the quality, efficiency, and flexibility of MHEC's data collection, analysis, and reporting processes;
- Develop a modernized data collection system and infrastructure that will meet the technical needs of the Maryland Longitudinal Data System and current expectations for data availability and use; and
- Reduce the number of ad hoc data requests and collections by improving MHEC's capacity to answer pressing research and policy questions.

MHEC convened a workgroup comprised of researchers from a range of Maryland postsecondary institutions as well as institutional organizations such as the Maryland Association of Community Colleges (MACC), the Maryland Independent College and University Association (MICUA), and the University System of Maryland (USM). This workgroup aided in the completion of three goals:

- Development of a new collection system and structure,
- Determination of the timing and frequency of component collections,
- Identification of data elements that will be needed to address existing data initiatives and answer current and potential policy questions, and
- Determination of definitions for new and revised data elements.

MHEC is grateful to the members of the workgroup for their assistance in identifying and addressing the challenges and obstacles associated with the revision. The efforts of the workgroup led to substantial improvements in collection activities. A MAC Revision Report was released that describes:

- An overview of the new component collections,
- A revised calendar of collections,
- A timetable for implementation of the component collections,
- Summary file layouts identifying the elements to be included in each collection, and
- A discussion of future actions.

The revised MAC will include additional data in four major categories.

- Year-round scope,
- Additional biographical information,
- Data on course completion and credit accumulation,
- More participating institutions.

Pilot and MAC2 Revision Information

Thank you for beginning the process of reengineering your data collection systems to meet the requirements of MAC2 revisions developed by MHEC in collaboration with the MAC2 workgroup. This is a monumental effort for your campus as well as the Commission. Massive changes have been made and as we work together to support one another towards our common goals of increased data, improved data quality, and greater data flexibility for research and reporting purposes, we can achieve success. The objective of the pilot process is to collect student information from at least two institutions of each postsecondary segment to test for table structures, data quality and validity based on revised collection periods, modified secure data file transfers and enhanced editing processes. With staffing shortages, limited and over-extended IT resources, this project will be challenging. As institutions are building files, system development is still underway for MHEC. As we proceed, please be mindful that this is a pilot process for testing purposes. To communicate concerns, as always, your feedback is really important and appreciated. Please address all comments to macrevision@mhec.state.md.us.

Pilot institutions

Pilot participants must confirm participation to Parris Jackson at pjackson@mhec.state.md.us. A new unique Pilot User-ID will be assigned. ****When you have a test file ready, please send an email to macrevision@mhec.state.md.us with the subject indicating, “**Pilot Test File Ready for AAAA System**” where AAAA is the system acronym. While our file submission development is underway, notification of test files is an important part of the process.

Pilot File Submissions 2011-12

Institutions who are participating in the pilot process are requested to submit files using previous collection data from 2011-2012. MHEC will validate pilot submissions with previously submitted data for the same time period. There has been apprehension with committing to the number of file submissions required to fulfill all revised collection systems. If your institution has the resources to build all files, please submit them. However, if your institution is only able to manage submitting a select few, at a minimum, one of the files must be the Enrollment Data file. The enrollment file validates all others and must accompany any of the other combination of files submitted. The Course Information and Student Registration Data files must accompany one another, along with the enrollment file. Piloting the Financial Aid and Employee Data files are optional. These file formats remain on an annual basis and the layouts had minimal changes. As a pilot institution, please include in the confirmation message to Parris Jackson, the files you intend to submit. Please submit an email to macrevision@mhec.state.md.us with the subject, “Pilot File Submission Ready for AAAA System” where AAAA is the system acronym.

MAC2 for 2013-14

The MAC2 revisions will be implemented for the upcoming 2013-14 collection. This document is for institutions that plan to pilot as well as institutions preparing for the implementation of MAC2 revisions in the fall. *** **Please note: The Degree Information System (DIS) submission due August 2, 2013 will remain under the old annual format. This will be the last annual file submitted for DIS.**

1. Brief Description of Each New and Revised Collection System

Component Name	Frequency of Collection and Due Dates	Types of Elements Included	Projected Analytical Uses
Enrollment Information System (EIS)	Twice a year (Summer-Fall: November 15 Winter-Spring: April 15)	Identification and demographics, undergraduate admissions criteria (high school data, test scores, etc.), registered course hours.	Number of students enrolled, characteristics of students enrolled; institutional characteristics including volume of enrollment and characteristics of students; ensuring equal access to higher education; relationship between entry characteristics and undergraduate student success. (IPEDS: Fall Enrollment, Graduation Rates)
Degree Information System (DIS)	Twice a year (Summer-Fall: March 1 Winter-Spring: August 2)	Information on earned credentials, including date, level of credential, discipline, and completed credit hours.	Degrees awarded; student completions; time to degree and educational effectiveness; contributions to a qualified workforce, especially in fields critical to the State such as STEM. (IPEDS: Completions, Graduation Rates)
Course Information System (CIS)	Twice a year (Summer-Fall: March 1 Winter-Spring: August 15)	Institutional course catalog elements such as type of credits awarded, instructor information, mode of instructional delivery.	Credit completion and student progress; college readiness and other predictors of success in college; remedial coursework and its connection to credit-bearing coursework; achievement gap among racial and ethnic groups; availability of distance education, effects of distance education on access and success; relationship between faculty characteristics (e.g. adjunct status, degrees held) and student outcomes.
Student Registration System (SRS)	Twice a year (Summer-Fall: March 1 Winter-Spring: August 15)	Student course registration and course completion information.	
End of Term System (EOTS)	Twice a year (Summer-Fall: March 1 Winter-Spring: August 2)	Information on academic progress and credits completed during term.	Credit completion and degree progress; academic performance; college readiness; preparation of community college graduates for additional study.
External Credit System (ECS)	Twice a year (Summer-Fall: March 1 Winter-Spring: August 2)	Credits awarded for work at other institution(s).	Ability of students to receive credit for previous work; credit granted for other types of experiences including study abroad, credit-by-examination, AP and IB, etc; characteristics of postsecondary transfers, especially from community colleges to public four-year institutions; enrollment patterns of transfer students.
Financial Aid Information System (FAIS)	Once a year (November 15)	Type and amount of financial aid disbursed, from State, federal, institutional, and private sources; number of financial aid recipients; economic data on applicants for financial aid.	Affordability of higher education, relationship between financial aid and affordability, relationship between financial aid and degree completion and other student outcomes.
Employee Data System (EDS)	Once a year (November 15)	Information on employees including principal occupation, full and part time status, salary, and earned degrees.	Volume and characteristics of the workforce at colleges and universities; quality of workforce; diversity of workforce. (IPEDS: Human Resources)

2. Data Collection File Layout Specifications

The MAC2 File Layout Specifications are available at

<http://data.mhec.state.md.us/MAC2Pilot/MAC2%20DataLayouts%20FINAL%20DRAFT%2003262013.pdf>

where the revised layouts have been color-coded to denote that a data element is NEW, REVISED or the SAME.

YELLOW	Data Element is NEW
BLUE	Data Element existed but was REVISED
WHITE	Data Element is the SAME

SYSTEM Column

There is a SYSTEM COLUMN on each layout that indicates the source of the element. If the data element is NEW the system indicates MAC2, if the element is REVISED the system column will identify the originating system from which the element comes from, and finally when the element is the SAME, again, the originating system is noted.

NEW/REVISED/SAME Column

This column corresponds to the color indicating whether the element is new, revised or the same.

FIELD LENGTH & FIELD TYPE Columns

These columns indicate the maximum length for a data element and the type of field type, whether it is character, numeric or alphanumeric.

DATA ELEMENT Column

This column identifies Data Element field names. These are the names that must be used in HEADER RECORD #2 as comma separated column headings. Each Data Element has a corresponding Data Dictionary reference that defines the element, identifies the format, coding, associated systems and other helpful comments.

DATA DICTIONARY REFERENCE Column

This column displays the Data Dictionary “DD<number>” reference assigned to each Data Element. Each element has a reference included in the NEW and REVISED Data Element Definitions for the Revised MAC2 System document. This document only contains NEW and REVISED Elements. Elements that have stayed the SAME were not included but remain in the original MAC Data Dictionary.

DATA DICTIONARY PAGE # Column

The data dictionary page number column is important because the data element “DD” reference numbers are not consecutive in the data dictionary. Therefore, having the page number will help locate each data elements quickly. For those elements that stayed the SAME, the page number column is blank.

DATA ELEMENT DESCRIPTION

A brief description of the data element is noted. In some cases, codes are defined in this column as well. Full Descriptions for the NEW and REVISED data elements are located in the abbreviated version of the MAC2 Data Dictionary.

3. Data Element Definitions for the MAC2 System

This abbreviated data dictionary located at

<http://data.mhec.state.md.us/MAC2Pilot/MAC2%20New%20Data%20Definitions%20FINAL%20DRAFT%2003222013.pdf> contains the Data Dictionary “DD<number>” reference assigned to each NEW (Yellow) and REVISED (Blue) Data Element in the associated file layouts. Each element has a unique reference. Data elements that stayed the SAME (White) in the layouts are not included in this document but remain in the original MAC Data Dictionary. Updated copies will be available on MHEC’s Data web site when changes are made.

4. Collection Frequency and Term Indicators

Collection frequency has increased to two times a year and therefore two files must be submitted for each collection system (except for FAIS and EDS which remain on an annual basis). During this pilot process, two files for each system will be requested for data from the previous reporting year (2011-2012). Two terms comprise a single collection. Collection File A contains data collection for the Summer/Fall terms while Collection File B contains data collected for Winter/Spring. Please be sure to use the proper term identifiers in each file as indicated below.

Collection File A	Summer/Fall July 1 st – December 31 st (2011) - Pilot Summer Term Identifier = 4 Fall Term Identifier = 1
Collection File B	Winter/Spring January 1 st – June 30 th (2012) - Pilot Winter Term Identifier = 2 Spring Term Identifier = 3

5. Data Collection File Format (.csv)

All data collection files must be in Comma Separated Value (.csv) format. The first row of each submitted file must be header records, described below.

Header Record #1

Header Record #1 must include column headings for each field. Please use the matching Data Element names as column headings as shown on the file specification layout. The headings must be comma separated.

Pilot Data Files

Institutions who are submitting pilot files are requested to submit data using previous year collection data from 2011-2012. MHEC will validate pilot submissions with previously submitted data for the same time period. Please review the Pilot file submissions chart below.

Timing for Pilot File Submissions

Please Submit Pilot Test Files by June 1, 2013

Revised Collection System	Pilot Reporting Requirements
Enrollment Information System (EIS) contains One Record per Student per Term	<u>Submit two Files:</u> File A – Summer Term/ Fall Term (2011) as of November 15, 2011 File B – Winter Term/Spring Term (2012) as of March 15, 2012 Be sure to use proper Collection Term Numeric Identifiers
Degree Information System (DIS) contains One Record per Degree per Major	<u>Submit two Files:</u> File A – Winter Term/Spring Term (2011) as of August 2, 2011 File B – Summer Term/ Fall Term (2012) as of March 1, 2012 Be sure to use proper Collection Term Numeric Identifiers
Course Information System (CIS) contains One Record per Course per Section	<u>Submit two Files:</u> File A – Winter Term/Spring Term (2011) as of August 15, 2011 File B – Summer Term/ Fall Term (2012) as of March 15, 2012 Be sure to use proper Collection Term Numeric Identifiers
Student Registration System (SRS) contains One Record per Undergraduate Student per Course per Term	<u>Submit two Files:</u> File A – Winter Term/Spring Term (2011) as of August 15, 2011 File B – Summer Term/ Fall Term (2012) as of March 15, 2012 Be sure to use proper Collection Term Numeric Identifiers
End-of-Term System (EOTS) contains One Record per Student per Term	<u>Submit two Files:</u> File A – Winter Term/Spring Term (2011) as of August 2, 2011 File B – Summer Term/ Fall Term (2012) as of March 1, 2012 Be sure to use proper Collection Term Numeric Identifiers
External Credit System (ECS) contains One Record per Undergraduate Student per Source of Credit per Term	<u>Submit two Files:</u> File A – Winter Term/Spring Term (2011) as of August 2, 2011 File B – Summer Term/ Fall Term (2012) as of March 1, 2012 Be sure to use proper Collection Term Numeric Identifiers
Financial Aid Information System (FAIS) (Optional)	Report July 1, 2011 thru June 30, 2012 (optional)
Employee Data System (EDS) (Optional)	Report as of January 15, 2013 (optional)

Appendix A

Time Period for **Pilot 2011-2012** Data File Submissions w/ Header Information

	Collection A Summer - Term 4 - 2011 Fall - Term 1 - 2011						Collection B Winter - Term 2 - 2012 Spring - Spring 3 - 2012					
System	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
Enrollment Information System (EIS)					November 15th Summer Fall (EISSF2011A)					April 15th Winter Spring (EISWS2012B)		
Degree Information System (DIS)		August 2nd Winter Spring (DISWS2011A)							March 1st Summer Fall (DISSF2012B)			
End-of-Term System (EOTS)		August 2nd Winter Spring (EOTWS2011A)							March 1st Summer Fall (EOTSF2012B)			
Course Information System (CIS)		August 15th Winter Spring (CISWS2011A)							March 15th Summer Fall (CISSF2012B)			
Student Registration System (SRS)		August 15th Winter Spring (SRSWS2011A)							March 15th Summer Fall (SRSSF2012B)			
External Credit System (ECS)		August 2nd Winter Spring (ECSWS2011A)							March 1st Summer Fall (ECSSF2012B)			
Financial Aid Information System (FAIS)					November 15th Annual (FAIAN2011A)							
Employee Data System (EDS)					November 15th Annual (EDSAN2011A)							

Appendix B

Timing for Upcoming 2013-14 Data File Submissions w/Header Information

	Collection A Summer - Term 4 - 2013 Fall - Term 1 - 2013						Collection B Winter - Term 2 - 2014 Spring - Spring 3 - 2014					
System	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
Enrollment Information System (EIS)					November 15th Summer Fall (EISSF2013A)					April 15th Winter Spring (EISWS2014B)		
Degree Information System (DIS)		August 2nd Winter Spring <small>(Old Annual Format)</small>							March 1st Summer Fall (DISSF2014B)			
End-of-Term System (EOTS)		August 2nd Winter Spring (EOTWS2013A)							March 1st Summer Fall (EOTSF2014B)			
Course Information System (CIS)		August 15th Winter Spring (CISWS2013A)							March 15th Summer Fall (CISSF2014B)			
Student Registration System (SRS)		August 15th Winter Spring (SRSWS2013A)							March 15th Summer Fall (SRSSF2014B)			
External Credit System (ECS)		August 2nd Winter Spring (ECSWS2013A)							March 1st Summer Fall (ECSSF2014B)			
Financial Aid Information System (FAIS)					November 15th Annual (FAIAN2013A)							
Employee Data System (EDS)					November 15th Annual (EDSAN2013A)							

