



**MARYLAND APPROVED PROGRAM COMPLETER SYSTEM
(MAPCS)**

DRAFT

**GENERAL INSTRUCTIONS FOR THE COMPLETION OF
THE UNIT RECORD SUBMISSION**

FOR HIGHER EDUCATION INSTITUTIONS

May 2018

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Introduction

This draft data collection manual serves as guidelines and instructions for institutional researchers and their institutions' education program partners in collecting and reporting data on students who complete Maryland Approved Professional Education programs at Maryland's colleges and universities. Ideally, the material provided addresses questions and concerns of those who report the data (institutional researchers) to the Maryland Higher Education Commission (MHEC) and those who gather it (often teacher education programs). Please use them to aid in collaboration across campus.

Purpose of System

The purpose of the new annual collection, the Maryland Approved Program Completer System (MAPCS), is to identify students who complete a Maryland State Approved Professional Education Program. Any student (degree-seeking or non-degree seeking) who completes a Maryland State Approved Professional Education Program will be included. This collection centralizes data collected and aims to help answer questions of interest to institutions and the State regarding Maryland approved teacher program completion.

Teacher production in Maryland has been a focus of State attention for a number of years. In response, MHEC began collecting data on students completing teacher education programs in the state as a part of the revised data collections implemented in 2013-2014. With these changes, data on students completing teacher education programs were collected under two separate collections: the Non-Degree Teacher Candidate System (NTS) annual file and the Degree Information System (DIS) annual file. Analysis of the data across both collections revealed that improvements to the annual collections were needed, including clearer instructions to ensure that the data collected were accurate and complete.

Toward that end, the Commission convened an inter-segmental workgroup to identify the issues that were most pressing regarding the data collection and to create an annual collection to capture data on all students who complete Maryland Approved Professional Education. Through the efforts of this workgroup, a decision was made to revise and rename the NTS data collection to better capture the necessary data. In addition, the recommendation was made to no longer use data elements in the DIS file for students completing teacher education degree programs.

In this document, you will find details regarding file submission requirements, key data definitions, Frequently Asked Questions and appendices with sample file formats and the list of institutions required to submit MAPCS.

Institutions Required to Report

Currently, MSDE has approved professional educator certification programs at 23 colleges and universities in Maryland (see Appendix 3 of the guidelines for the list of colleges and universities). These institutions, therefore, are required to provide the Maryland Higher Education Commission, through the MAPCS collection, data on students who complete a Maryland State Approved Professional Education Program.

Requirements for Data Submissions

1. Reporting Period

MAPCS is an annual, from September 1st to August 31st of each year.

2. Submission Due Date

The student-based unit record data submission is due to MHEC on or before December 1st of each year.

3. Selection Criteria

Any student (degree-seeking or non-degree seeking) who completes a Maryland State Approved Professional Education Program within the reporting cycle will be included in the collection. This includes advanced level program completers as well as those completing initial teacher preparation.

a. Who to Include

Degree-seeking students: For students that are degree-seeking at an institution, report any Maryland Approved Program Completion(s) as of the end of the collection period. Only report students in MAPCS that have completed all requirements for a Maryland State Approved Professional Education Program. Use the MAPCS-DIS Match Flag to indicate whether the student record appears in MAPCS and has a record in that year's DIS collection. Once a student graduates, if he/she returns to complete additional Maryland State Approved Professional Education Programs, follow the "Non-Degree" reporting instructions.

Non-degree students: For students who are non-degree-seeking at an institution, report each Maryland State Approved Professional Education Program completion as it occurs. Specifically, if a student completes a program BUT is still in progress for another program, report only the completed program.

b. Who to Exclude

Degree-seeking students: Do not report students in MAPCS prior to graduation. If a student is ready to graduate, but will not complete the program requirements by graduation, then report the student as a graduate in DIS, but not as a completer in MAPCS.

Non-degree students: Do not report students who are in progress to completing a program even though a concurrent program may have been completed.

4. Number of Records per Student:

There should be one record per student per program completion code. There can be multiple records for the same student if the student completes more than one program within the submission year.

Each MAPCS record shows the most direct relationship between student and program completion codes and allows the extraction to be purely on a program level (if needed).

Each record will contain collection information, institution information, student information and program completion information related to MAPCS program completion codes. Each code has a unique corresponding **4-digit** code (see Program Completion Codes in Appendix 2 and [DD144](#)). These codes reflect the Title II Licensure Codes maintained by ETS, with additional codes for the advanced programs (e.g., audiology, gifted and talented).

5. General Data Format

Institutions must report comma separated value (.csv) files for MAPCS unit record data. Please see the MAPCS Record layout under MAC2 Specifications located at <http://data.mhec.state.md.us/MAC2SYS/MAC2FILELayoutsMAPCSEDTITS.pdf>.

6. Submission of Data

This is a Pilot Year for MAPCS. Upload the file using the Commission’s Data Web Site. Log on credentials will be provided by MHEC. This is the most secure and only method for the MAPCS data submission. The URL is <http://data.mhec.state.md.us>. Under the “Secure File Transfer” heading, select the “MAC2 Unit Record” option which requires a user-id and password. Select the proper header record and be sure your file has a .csv extension for a successful upload. Files with any other extension, such as zipped files (.zip), will not upload successfully. Select Official upload and the on-line form also serves as your official Institutional Certification and Specification form. For this pilot year there will not be an edit report associated with the uploaded file. The comment area should be used to document special circumstances or explanations.

Data Definitions

Data definitions can be found either through the [MHEC Data Cookbook](#) or the [Maryland Annual Collection Documentation webpage](#). When using the File Specifications page, scroll through the file specifications list to find MAPCS. Embedded links to the File Layout, Edit Chart, and Header Record can be found there.

All definitions for the collection are included below. Some of the definitions The definitions highlighted below have been identified by the workgroup as being particularly important to explain, clarify, or further describe for those institutional representatives assisting in preparing the MAPCS file.

1. **Collection Term** – Functional Definition: The period of collection of the data to distinguish different types and time periods.
Note: For this collection, please select “8” (annual MAPCS year spanning from September 1 to August 31 of each year). It is important to select this option (versus 9, the alternative annual value) because it distinguishes the data collection cycle as falling between September 1 and August 31.
2. **Collection Year** – The year used to identify data collected. 4 digits.

3. **OPEID (FICE+2)** – A unique federal identification code for each institution that uses the federal OPE identification number. It usually has the old FICE code as the first 6 digits of an 8 digit number with a “00” as the last 2 digits.
4. **Sub-Campus Code** – A code that allows a breakdown within institution or is used to classify students into groups. Usually an institution defined data element for its own needs. Can be blank.
5. **Identification Number** – This field is used to uniquely identify each student enrolled. Institutions should supply the student’s SSN or Individual Taxpayer’s Identification Number (ITIN). Only when an SSN or ITIN is not available then an institution-assigned student number should be used. If an assigned number is used, it should be 9-digit numeric (not all zeros “000000000”) and always remain unique for the student at the assigning institution. Do not use special characters, such as “@” when assigning identification numbers. The Commission will replace the student number with a scrambled, encrypted identification number. This scrambled number will contain 7 alpha-numeric characters with 2 blank fields at the end. The Commission will maintain and control the data files on secured servers. The servers are located behind a firewall and accessible only within the Commission’s local private network. Access to the data is limited to staff who require access for Commission work.
6. **Identification Number Type** – An indicator that determines whether the identification number is based upon a valid social security number, ITIN or an institution assigned substitute number in lieu of SSN.

- 1 = valid social security number
- 2 = assigned identification number
- 3 = ITIN

7. **Local Campus ID** – A unique institution Identifier for the use of the institution to cross reference individual students. This field should not be blank. Blank is not valid.
8. **State Assigned Student Identifier** – A unique state assigned student identifier (SASID) assigned exclusively by the Maryland State Department of Education (MSDE). This SASID is important so that Maryland will have the ability to identify each individual student within the Maryland educational system. This field may be blank if not assigned 10 digits.
9. **Gender** – Indicate the gender of the student as recorded by your institution using the following codes. Individuals missing this information must be assigned a gender. Field must not be blank.

- 1 = Male
- 2 = Female
- 3 = Unknown, male assigned
- 4 = Unknown, female assigned

10. US Citizenship – The identification of whether a student or employee is a U.S. citizen or not (non-resident alien). The determination of U.S. citizen requires the use of a “group” concept that includes several types of individuals including U.S. citizens, U.S. nationals, resident aliens and other eligible non-citizens.

1 = U.S. citizenship group consisting of U.S. citizens, U.S. nationals, resident aliens and other eligible non-citizens

2 = non-resident alien (also known as foreign)

There is no allowance for unknown citizenship.

11. Hispanic/Latino Ethnicity – The identification of whether a student or employee is of Hispanic or Latino ethnicity.

Y = yes to Hispanic or Latino origin

N = no to Hispanic or Latino origin

blank = not answered or declared

12. White – The student’s response to the White question of the multi-race question of the 1997 two-question format. The data can be directly from the student response (preferred method), an institution mapping of the old 1977 standard or possibly by observer declaration depending upon the data and the institutions procedures.

1 = White race category

blank = not answered or declared

13. Black/African American – The student’s response to the Race-Black/African American question of the multi-race question of the 1997 two-question format. The data can be directly from the student response (preferred method), an institution mapping of the old 1977 standard or possibly by observer declaration depending upon the data and the institutions procedures.

2 = Black/African American race category

blank = not answered or declared

14. Asian – The student’s response to the Race-Asian question of the multi-race question of the 1997 two-question format. The data can be directly from the student response (preferred method), an institution mapping of the old 1977 standard or possibly by observer declaration depending upon the data and the institutions procedures.

3 = Race-Asian race category

blank = not answered or declared

15. American Indian/Native Alaskan – The student’s response to the Race- American Indian/Alaskan Native question of the multi-race question of the 1997 two-question format. The data can be directly from the student response (preferred method), an institution mapping of the old 1977 standard or possibly by observer declaration depending upon the data and the institutions procedures.

4 = American Indian/Alaskan Native race category
blank = not answered or declared

- 16. Native Hawaiian/Pacific Islander** – The student’s response to the Race- Native Hawaiian/Pacific Islander question of the multi-race question of the 1997 two-question format. The data can be directly from the student response (preferred method), an institution mapping of the old 1977 standard or possibly by observer declaration depending upon the data and the institutions procedures.

5 = Native Hawaiian/Pacific Islander category
blank = not answered or declared

- 17. Entry Term** – Functional Definition: Term of initial enrollment at institution as a degree-seeking student.
Note: Despite the definition’s reference to “degree-seeking,” this field for the MAPCS collection should capture the student’s term of initial enrollment for the current degree or non-degree program. For students who graduated from an institution and re-enrolled please select the term of re-enrollment into the program the student is currently completing.
- 18. Entry Year** – Functional Definition: Calendar year of initial enrollment at institution as a degree-seeking student.
Note: Despite the definition’s reference to “degree-seeking,” this field for the MAPCS collection should capture the student’s year of initial enrollment for the current degree or non-degree program. For students who graduated from an institution and re-enrolled, please select the year of re-enrollment into the program the student is currently completing.
- 19. Degree Date** – Functional Definition: Calendar Date in which the degree was conferred or the program was completed (if no degree conferred).
Note: Despite the use of the word “degree,” this field is intended to capture data on degree- and non-degree seeking program completers. Use the date field to provide the completion date or degree date, as appropriate.
- 20. Degree Sought** – Functional Definition: The student's most recent status in pursuing a formal award indicating either the level of degree being sought or non-degree seeking.
Note: Despite the use of the word “degree,” this field is intended to capture data on program completers regardless of the type of program completed. Select the code from the list in the Data Cookbook that corresponds to the completion type. For example, use 40 if the student completed a bachelor's degree program or 87 if the student completed a non-degree program at the graduate level.
- 21. Birthdate** – An individual's date of birth (e.g. May 1, 1988) as designated on legal birth registration or certificate.

- 22. Program Completion Code** – Functional Definition: Identifies the Maryland State Approved Professional Education program completed by each student.
Note: These codes reflect the Title II Licensure Codes maintained by ETS, with additional codes for the advanced programs (e.g., audiology, gifted and talented). Each code is four digits. Should a student have more than one program completion code, please provide one row of data per program the student completed. For example, if the student completes a combined program (e.g., Health and Physical Education), use one code per record for each program.

These codes are maintained by MHEC. Use the code “9999” for instances where the program completion code is not in the list. Please contact MHEC at mac2help.mhec@maryland.gov to report a valid completion code to be added, as the codes will be updated each year.

- 23. Geographic Origin** - Functional Definition: The county (for Maryland residents) or state which is the student's permanent residence at the time of application. For students who graduated from an institution and re-enrolled, please select the geographic origin of re-enrollment into the program the student is currently completing.

Note: Please capture the county or state which is the student’s permanent residence at the time of application to the current program. For degree-seeking students, this would be at the time of application to the institution. For non-degree seeking students, this would be at the time of application to the program he/she is currently enrolled and completing.

- 24. Residency Code** – Functional Definition: Indicates whether or not the student is a current resident of Maryland.

Note: The residency code should reflect the current residency (state resident or not) of the student. For students who graduated from an institution and re-enrolled, please select the Residency Code of re-enrollment into the program the student is currently completing.

- 25. DIS-MAPCS Match Flag** – Functional Definition: A flag that indicates whether or not the MAPCS data is associated with a DIS record that was reported for the same student from the same institution for the aligned collection year (e.g., DIS 2018 and MAPCS 2018). Should a student have more than one program completion code, this flag should be used for each entry.

Note: Since blank is not valid, please use the indicated codes in the definition/file format to indicate whether the MAPCS record appears in the corresponding DIS file or not (“1” indicates included; “2” indicates not included).

The DIS cycle runs from July 1 to June 30 of each year but the MAPCS cycle runs from September 1 to August 31. For cases where the program completer earns a degree after the corresponding DIS file collection closes (e.g. August 15, 2018), include the record in MAPCS but use the code “2” for the Match Flag because the record IS NOT in the 2018 DIS file.

26. Military Status – The military status of the student.

- 1 = Active duty member of any of the US Uniform Forces
- 2 = Veteran or former active duty member of any of the US Uniformed Forces
- 3 = Reserve duty member of any of the US Armed Forces, including the National Guard
- 4 = Spouse or dependent child of an active, reserve, or former member of the US Uniformed Forces
- 5 = None of the above, Blank not valid

Frequently asked questions

1. *Is the DIS-MAPCS match flag intended to indicate if the student is in any previously submitted DIS file?*

No, the DIS-MAPCS match flag indicates a relationship between the record in the MAPCS file and a record in the DIS file from the same year of submission. Because blank is not valid, every entry will either have a 1 (Record contains MAPCS data and is matched to a record in the corresponding DIS year submission) or a 2 (Record contains MAPCS data and is NOT record in the corresponding DIS year submission).

2. *What if I don't find a program code that aligns with the list of codes provided by MHEC?*

In an instance of not finding an appropriate code, please use the “other” code (9999). Please also contact MHEC at mac2help.mhec@maryland.gov to report a valid completion code to be added, as the codes will be updated each year.

3. *How should I enter a program code if the student is completing more than one program?*

The data provided to MHEC should reflect one row of data per program a student is completing. Therefore, you may provide a row for each program, using the correct code for each.

If a student completed dual certification in two areas, the data should reflect one record per area completed (one record for each program completion code). For example, if the student completes a combined program (e.g., Health and Physical Education) use one code per record for each program.

**Appendix 1
Sample Data Submissions**

Field#	Data Element Name	Sample Data Set #1	Sample Data Set #2
1	Collection Term	8	8
2	Collection Year	2018	2018
3	OPEID(FICE + 2)	206500	209900
4	Sub-Campus Code		
5	Identification Number (SSN)	224883366	125789529
6	Identification Number Type	1	1
7	Local Campus Student ID	ABCD1234	333R
8	SASID		1257895291
9	Gender	2	1
10	US Citizenship	1	1
11	Hispanic/Latino Ethnicity	Y	N
12	White	1	
13	Black/African American		2
14	Asian		
15	American Indian/ Native Alaskan		
16	Native Hawaiian/ Pac. Is.		5
17	Entry Term	1	3
18	Entry Year	2015	2014
19	Degree Date	20180822	20180601
20	Degree Sought	87	40
21	Birthdate	19860101	19970228
22	Program Completion Code	1234	1303
23	Geographic Origin	131	210
24	Residency Code	2	1
25	DIS-MAPCS Match Flag	2	1
26	Military Status	5	5

Sample rows of data (see above)

Sample Data Set #1

8,2018,206500,,22488336,1,ABCD1234,,2,1,Y,1,,,,,1,2015,87,1986010,1234,131,2,2,5

Sample Data Set #2

8,2018,209900,125789529,1333R,1257895291,1,1,N,,2,,,5,3,2014,40,19970228,1303,210,1,1,5

Appendix 2
Program Completion Codes

Program Completion Codes	Area and Level
0517	Administration
0300	Agriculture
1561	American Sign Language
1580	Arabic PreK-12
1303	Art PreK-12
0412	Audiology
1213	Biology Grades 7-12
1305	Business Education Grades 7-12
1214	Chemistry Grades 7-12
1581	Chinese PreK-12
1250	Computer Science Gr 7-12
0335	Dance Grades K-12
0104	Early Childhood Education PreK-3
1215	Earth Science Grades 7-12
1230	Economics Grades 7-12
0105	Elementary Education Gr 1-6
1242	English Grades 7-12
1560	Environmental Education PreK-12
0249	ESOL Grades PreK-12
1312	Family and Consumer Sciences Grades 7-12
1200	French Grades PreK-12
1231	Geography Grades 7-12
1203	German Grades PreK-12
1557	Gifted and Talented
1568	Guidance Counselor
1311	Health PreK-12
1232	History Grades 7-12
1582	Italian PreK-12
1583	Japanese PreK-12
1584	Latin PreK-12
0421	Library Media Specialist
1309	Marketing Ed Grades 7-12
1534	Mathematics Instructional Leader PreK-6
1244	Mathematics Grades 7-12
1331	Middle School Ed: English Language Arts 4-9
1332	Middle School Ed: Mathematics 4-9
1338	Middle School Ed: Science 4-9
1339	Middle School Ed: Social Studies 4-9
1316	Music Grades PreK-12
1319	Physical Education Grades PreK-12

1222	Physical Science Grades 7-12
1223	Physics Grades 7-12
1237	Political Science Grades 7-12
1210	Portuguese PreK-12
0324	Professional and Technical Education 7-12
1233	Psychology Grades 7-12
0321	Reading Specialist
1207	Russian PreK-12
0428	School Psychologist
0527	School Superintendent
1234	Social Studies Grades 7-12
1236	Sociology Grades 7-12
1205	Spanish Grades PreK-12
0340	Special Ed-Sev and Profoundly Disabled
0343	Special Education - Generic- Gr 6-Adult
0342	Special Education - Generic-Gr 1-8
0341	Special Education - Generic-Infant-Gr3
0385	Special Education-Hearing Impaired
0387	Special Education-Visually Impaired
1323	Speech Communication
0420	Speech Pathology
1734	STEM Instructional Leader PreK-6
1313	Technology Education Grades 7-12
1241	Theater Grades 7-12
1586	Turkish PreK-12
9999	Program Completion Code not Listed

Appendix 3
Maryland State Approved Professional Education Programs
(per the [Maryland State Department of Education](#))

FOUR-YEAR PUBLIC INSTITUTIONS

Bowie State University
Coppin State University
Frostburg State University
Salisbury University
Towson University
University of Maryland, Baltimore County
University of Maryland, College Park
University of Maryland Eastern Shore
University of Maryland University College
Morgan State University
St. Mary's College of Maryland

STATE-AIDED INDEPENDENT INSTITUTIONS

Goucher College
Hood College
Johns Hopkins University¹
Loyola University Maryland
Maryland Institute College of Art
McDaniel College
Mount St. Mary's University
Notre Dame of Maryland University
Stevenson University
Washington Adventist University
Washington College

¹ The Maryland State Department of Education lists Johns Hopkins University and the Peabody Institute at Johns Hopkins University as two separate programs among the 23 approved programs; for MHEC's data collection purposes, Johns Hopkins University provides data for both institutions.