Transfer Student System

(TSS)

(Includes Cumulative Errata Sheet and Special 2010 Reporting Revision Addendum)

Transfer Student System (TSS)

Addendum for the 2010 Reporting Revisions

(covers changes during the collection years of 2011)

February, 2009

Summary of changes:

In the past data collection standards allowed individuals to be identified in only one racial category. The federal government has developed new ethnic and racial categories to provide a more accurate picture of the nation's diversity. The new categories enable individuals to be identified in both ethnicity and race. They also allow more than one race to be identified. The new race/ethnicity standards that are required in 2011 and since TSS process requires 5 prior cohort years of data prior years of data must be converted or mapped and submitted in 2011.

This addendum provides specific instructions for the TSS system including a revised file format and data dictionary changes. It was recommended by the State-wide workgroup that the schedule for 2010 reporting revisions be oriented around the federally mandatory academic year of AY 2010-2011. Since TSS collects data for the prior academic year 2010-2011, a fully modified TSS file containing the new fields will be required in **November of 2011**.

For additional clarification see the 2010 Reporting Revisions Statewide Workgroup Final Recommendations located at: https://data.mhec.state.md.us/MACInfo/Final%202010%20Workgroup%20Recommendations.pdf

Collection Year 2011 –

Additional 7 New Fields to be reported in collection year 2011
US Citizenship, ethnicity and race (positions 64 – 70) are collected in seven new fields. Each student record has an indicator for US citizenship, Hispanic/Latino ethnic origin and self declaration of five race categories.

- **US Citizenship**   **(position 64) DD24**
- **Hispanic/Latino Ethnicity**   **(position 65) DD25**
- **White**   **(position 66) DD26.1**
- **Black/African American**   **(position 67) DD26.2**
- **Asian**   **(position 68) DD26.3**
- **American Indian/Alaskan Native**   **(position 69) DD26.4**
- **Native Hawaiian/Pacific Islander**   **(position 70) DD26.5**

Transfer Student System (TSS) File Version 2 Specification Format 1
as supplied by 4 year institution.

Record Position	Field Length	Data Element	Data Dictionary Reference	Description	MAC Year Required
1-4	4	Collection Year	DD1	Collection cycle year submitted e.g. "1992"	
5	1	Collection Period	DD2	Always = "9" for annual	
6-11	6	FICE Code	DD3	Unique Federal identification number	
12	1	Sub-campus Code	DD4	Code for institution use for multi-campus or organization identification	
13-21	9	Identification Number	DD5	Social Security Number or alternative identifier or Individual Taxpayer Identification Number (ITIN)	
22	1	Identification Number Type	DD6	Code "blank" if the identification number is a Real SSN or ITIN. Code "2" to indicate that the identifier is NOT a real SSN or ITIN.	
23	1	Race/Ethnicity (1997 Standard)	DD20	The 1977 standards for single category race/ethnicity. Required through 2009 collection and reported if available after 2010 and beyond	
24	1	Gender	DD21	Student gender or assigned if unknown	
25-28	4	Birth Year	DD22	Four digit year of birth	
29-30	2	Degree Sought	DD30	Standard codes to identify degree level being sought or non-degree seeking, see TSS manual for details	
31-36	6	Program Taxonomy	DD31	MHEC taxonomy for the student's most recent program area	
37-38	2	Reserved		Blanks	
39-41	3	Spring Credit Hours Earned	DD43	Credit hours earned in spring Semester of current reporting year, in format 7.0 = "070"	
42-45	4	Cumulative Native Credit Hours Earned	DD44	Current credit hours completed at reporting institution, in format 62.5 = "0625"	
46-48	3	Cumulative GPA	DD52	Current grade point average as defined by institution, in format 3.52 = "352"	
49-52	4	Bachelor's Graduation Year	DD60	Four digit calendar year	
53-58	6	FICE (sending institution)	DD3	FICE Code for the community college identified as sending institution when the student defined as transfer entrant	
59-62	4	Transfer Student Entrant Year	DD61	Four digit calendar year student first entered as transfer	
63	1	Transfer Student Entrant Semester	DD62	Semester code when student first entered as transfer	
64	**1**	**US Citizenship**	**DD24**	**Identifies whether student is in the U.S. Citizenship Group or not**	**2011**
65	**1**	**Hispanic Latino Ethnicity (1997 Standard)**	**DD25**	**Identifies whether student is of Hispanic or Latino origin under 1997 standards**	**2011**
66	**1**	**White (1997 Standard)**	**DD26.1**	**Multi-race identification for indicator under 1997 standards**	**2011**
67	**1**	**Black/African American (1997 Standard)**	**DD26.2**	**Multi-race identification for indicator under 1997 standards**	**2011**
68	**1**	**Asian (1997 Standard)**	**DD26.3**	**Multi-race identification for indicator under 1997 standards**	**2011**
69	**1**	**American Indian/Alaska Native (1997 Standard)**	**DD26.4**	**Multi-race identification for indicator under 1997 standards**	**2011**
70	**1**	**Native Hawaiian or Other Pacific Islander**	**DD26.5**	**Multi-race identification for indicator under 1997 standards**	**2011**
71-101	31	Reserved for DIS data		Always blank	

**Transfer Student System (TSS) File Version 2 Specification Format 2
(as supplied to Community Colleges with matching DIS information)**

Record Position	Field Length	Data Element	Data Dictionary Reference	Description
71-101	*31*	*DIS Degree Data*		*Matching ID records TSS and DIS Information*
71-76	6	FICE Code of Other 4-Year Institution	DD3	FICE from DIS
77-80	4	Bachelors Year - at Other 4-Year Institution	DD60	Bachelor year from DIS
81-86	6	Program Taxonomy - at Other 4-Year Institution	DD31	Degree program from DIS
87-88	2	Degree Month – at 2-Year Public Institution	See TSS Manual	Degree month from DIS
89-90	2	Degree Year – at 2-Year Public Institution	See TSS Manual	Degree year from DIS
91-92	2	Degree – at 2-Year Public Institution	DD30	1=Lower Division Certification or 2=Associate Degree from DIS
93-98	6	Program Taxonomy – at 2-Year Public Institution	DD31	Degree Program taxonomy from DIS
99-101	3	Grade Point Average - at 2-Year Public Institution	DD52	Grade Point Average must be greater than 0.00 and less than or equal to 4.00 from DIS

Four-year public institutions submit a record their transferees from each particular two-year sending institution using the **Transfer Student System (TSS) File Version 2 Specification Format 1** where positions 1 through 70 are completed and edited by the four-year public institutions.

The Commission incorporates graduation information from other 4-year public colleges/institutions by adding the Degree Information System (DIS) data into these TSS records, positions 71 through 101. This degree information is used to provide statewide analysis of the graduation rate for transfer cohorts and includes any respective cohort's graduation information found at any other 4-year public institution.

- ## 2011 Transfer Student Data Submissions

The record format for TSS is modified to accept the **new standard** in the **2011 submission**. The institution will map old data to the new using the same technique as prescribed for below. The following table shows the transition for each community college transfer cohort and how TSS reporting will be done.

TSS submission year	AY 2005 2006	AY 2006 2007	AY 2007 2008	AY 2008 2009	AY 2009 2010	AY 2010 2011	AY 2011 2012	AY 2012 2013	AY 2013 2014	AY 2014 2015
2010	Old	Old	Old	Old	Old					
2011		Map	Map	Map	Map	New				
2012			Map	Map	Map	New	New			
2013				Map	Map	New	New	New		
2014					Map	New	New	New	New	
2015						New	New	New	New	New

In this table, the following definitions apply:
- Old – 1977 race/ethnicity standards
- Map – mapped from 1977 race/ethnicity and reported under 1997 standards
- New – 1997 race/ethnicity standards

These reporting requirements for TSS require the data for the cohort indicated as mapped above to be converted from the 1977 aggregate standards to the individual two question 1997 standards. The following table provides guidance on the methodology to do this mapping.

1977 Aggregate Standards	U.S. Citizen Category	1997 Ethnicity	1997 Race Fields marked Yes
Black or African American	Yes	No	Black or African American
American Indian or Alaskan native	Yes	No	American Indian or Alaskan native
White	Yes	No	White
Asian/Pacific Islander	Yes	No	Asian
Hispanic	Yes	Yes	None (all blank)
Foreign (Non-resident alien)	No	None (blank)	None (all blank)
Unknown/Other	Yes	None (blank)	None (all blank)

Data Dictionary changes:

ELEMENT TITLE:
Race/Ethnicity (1977 Standard)

DEFINITION: Federal 1977 categories used to describe groups to which individuals identify with, or belong in the eyes of the community. The categories do not denote scientific definitions of anthropological origins. A person may be counted in only one group. Resident aliens (holders of Form I-551/155), noncitizens who have been lawfully admitted for permanent residence are to be reported in the appropriate racial/ethnic categories along with United States citizens.

THESE CATEGORIES ARE NO LONGER DETERMINED FOR ALL STUDENTS OR EMPLOYEES AFTER THE 2010 REVISIONS. ALL REPORTING WHICH IS BASED ON THE AY 2010-2011 AND LATER USES THE NEW 1997 STANDARDS ON PAGES 26-26.5. THIS DATA IS CONTINUED TO BE SUBMITTED FOR STUDENTS WHO ENROLLED PRIOR TO 2010 AND REPORTED UNDER 1977 STANDARD.

FORMAT: numeric - 1 digit
CODES:

       0 = Unknown
       1 = Black (African American), non-hispanic
       2 = American Indian or Alaskan Native
       3 = Asian/Pacific Islander
       4 = Hispanic
       5 = White, non-hispanic
       6 = Foreign (in EDS 6 = All Other)
       7 = All Other (in EDS 7 not used)

COMMENTS: In EDS prior to 2010 reporting, US Citizenship is used to determine foreign employees. See 2010 Reporting Revisions Recommendations document for more information.

RELATED TO: US Citizenship

GLOSSARY: UNKNOWN, BLACK, NON-HISPANIC (1977), ASIAN (1977), HISPANIC (1977), WHITE, NON-HISPANIC (1977), FOREIGN (1997), ALL OTHER (1997), NATIVE AMERICAN, AFRICAN AMERICAN, AMERICAN INDIAN OR ALASKAN NATIVE (1977)

SYSTEMS: EIS,TSS,HGS,DIS,EDS,AGGR,RTN,FAIS

SYSNAME: RACE

DOCUMENTED: 1/10/77 Revised: 1/30/09

                                             -DD20-

ELEMENT TITLE:

US Citizenship

DEFINITION: The identification of whether a student or employee is a U.S. citizen or not (nonresident 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.

FORMAT: numeric - 1 digit

CODES: 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)

COMMENTS: There is no allowance for unknown US Citizenship.
See 2010 Reporting Revisions Recommendations document for more information.

RELATED TO: RACE/ETHNICITY (1977), MULTI-RACE (1997),
ETHNICITY (1997)

GLOSSARY: U.S. CITIZENSHIP GROUP, RESIDENT ALIEN,
U.S. NATIONAL, NONRESIDENT ALIEN

SYSTEMS: EIS,HGS,AGGR,RTN,EDS,TSS,DIS,FAIS

SYSNAME: CITIZEN

DOCUMENTED: 1/10/77 Revised: 1/30/09

-DD24-

ELEMENT TITLE:

Hispanic Latino Ethnicity (1997 Standard)

DEFINITION: The identification of whether a student or employee is of Hispanic or Latino ethnicity.

FORMAT: alphanumeric – 1 character

CODES: Y = yes to Hispanic or Latino origin
N = no to Hispanic or Latino origin
blank = not answered or declared

COMMENTS: See 2010 Reporting Revisions Recommendations document for more information.

RELATED TO: Race/Ethnicity (1997), multi-race (1997), US Citizenship

GLOSSARY: HISPANIC (1997), LATINO

SYSTEMS: EIS,HGS,AGGR,RTN,EDS,TSS,DIS,FAIS

SYSNAME: HISPANIC

DOCUMENTED: 1/30/09 Revised:

ELEMENT TITLE:

Multi-race for 1997 Standard

DEFINITION: The student's multi-race responses to the 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.

FORMAT: alphanumeric - 5 character array may be all blank

CODES: The coding is the same in each of the race fields in the array.
Y = yes to the specific race category
blank = not answered or declared

COMMENTS: There is no unknown coding. If the array is blank for all fields the students race is considered to be unknown.
Each individual race field is defined on the pages for:
- White
- Black or African American
- Asian
- American Indian or Alaska Native
- Native Hawaiian or Pacific Islander

See 2010 Reporting Revisions Recommendations document for more information.

RELATED TO: US Citizenship, Ethnicity (1997)

GLOSSARY: WHITE, BLACK (1997), AFRICAN AMERICAN,
ASIAN (1997), AMERICAN INDIAN/ALASKA NATIVE (1997), NATIVE HAWAIIAN/
PACIFIC ISLANDER (1997)

SYSTEMS: EIS,DIS,HGS,TSS,EDS,FAIS

SYSNAME: RACEALL

DOCUMENTED: 1/30/09   Revised:

-DD26-

ELEMENT TITLE:

White (1997 Standard)

DEFINITION: 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.

FORMAT: alphanumeric - 1 character may be blank

CODES: Y = yes to the White race category
blank = not answered or declared

COMMENTS: Only for the one single White race category.
See 2010 Reporting Revisions Recommendations document for more information.

RELATED TO: Multi-race for 1997 Standard, US Citizenship, Ethnicity (1997)

GLOSSARY: WHITE (1997)

SYSTEMS: EIS,DIS,HGS,TSS,EDS,FAIS

SYSNAME: RWHITE

DOCUMENTED: 1/30/09   Revised:

-DD26.1-

ELEMENT TITLE:

Black/African American (1997 Standard)

DEFINITION: The student's response to the 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.

FORMAT: alphanumeric - 1 character may be blank

CODES: Y = yes to the Black/African American race category
                  blank = not answered or declared

COMMENTS: Only for the one single Black/African American race category.   See 2010 Reporting Revisions Recommendations document for more information.

RELATED TO: Multi-race for 1997 Standard, US Citizenship, Ethnicity (1997)

GLOSSARY: BLACK (1997), AFRICAN AMERICAN

SYSTEMS: EIS,DIS,HGS,TSS,EDS,FAIS

SYSNAME: RBLACK

DOCUMENTED: 1/30/09   Revised:

-DD26.2-

ELEMENT TITLE:

Asian (1997 Standard)

DEFINITION: The student's response to the 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.

FORMAT: alphanumeric - 1 character may be blank

CODES: Y = yes to the Asian race category
blank = not answered or declared

COMMENTS: Only for the one single Asian race
category.   See 2010 Reporting Revisions Recommendations
document for more information.

RELATED TO: Multi-race for 1997 Standard, US Citizenship, Ethnicity (1997)

GLOSSARY: ASIAN (1997)

SYSTEMS: EIS,DIS,HGS,TSS,EDS,FAIS

SYSNAME: RASIAN

DOCUMENTED: 1/30/09   Revised:

-DD26.3-

ELEMENT TITLE:

American Indian/Alaskan Native (1997 Standard)

DEFINITION: The student's response to the 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.

FORMAT: alphanumeric - 1 character may be blank

CODES: Y = yes to the American Indian/Alaskan Native race category
blank = not answered or declared

COMMENTS: Only for the one single American Indian/Alaskan Native category.   See 2010 Reporting Revisions Recommendations document for more information.

RELATED TO: Multi-race for 1997 Standard, US Citizenship, Ethnicity (1997)

GLOSSARY: AMERICAN INDIAN/ALASKAN NATIVE (1997)

SYSTEMS: EIS,DIS,HGS,TSS,EDS,FAIS

SYSNAME: RAIAN

DOCUMENTED: 1/30/09   Revised:

-DD26.4-

ELEMENT TITLE:

Native Hawaiian/Pacific Islander (1997 Standard)

DEFINITION: The student's response to the 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.

FORMAT: alphanumeric - 1 character may be blank

CODES: Y = yes to the Native Hawaiian/Pacific Islander category
                        blank = not answered or declared

COMMENTS: Only for the one single Native Hawaiian/Pacific Islander
                        category.   See 2010 Reporting Revisions Recommendations
                        document for more information.

RELATED TO: Multi-race for 1997 Standard, US Citizenship, Ethnicity (1997)

GLOSSARY: NATIVE HAWAIIAN/PACIFIC ISLANDER (1997)

SYSTEMS: EIS,DIS,HGS,TSS,EDS,FAIS

SYSNAME: RNHPI

DOCUMENTED: 1/30/09   Revised:

-DD26.5-

Update History

The following table lists the update history of printings of this document, together with the respective relapse dates for each edition. The software version indicates the release version of the software product at the time the document was issued. Do not expect a one-to-one correspondence between releases and document editions.

Updates Number	Date	Software Release
Original	May 1992	#1
#1	May 1993	#1.5
#2	February 2009	#2

TABLE OF CONTENTS

I. Executive Summary

This manual discusses the automated data collection systems used by the Maryland Higher Education Commission in collecting data about students and employees in Maryland's postsecondary education institutions. These systems collect student enrollment degree information and employee information from an institution. Data for each student or employee (based on SSN) is submitted by each institution on computer tapes to the Commission. The procedures, standards, and data element definitions for this data collection are contained within each system manual.

A. Objective

The objective is the collection of student information from all public postsecondary education institutions in Maryland and all independent collegiate institutions which fall under the State aid to independent institutions program. Employee information is collected from public institutions only. These data elements are the basis of information systems that are compatible with the Federal postsecondary education reporting structure, meet the planning and research objectives of the Maryland Higher Education Commission, allow accountability assessment, and provide information for the Maryland Student Outcomes and Achievement Report (SOAR).

B. Description

The unit-record data collection requires five systems:

- Enrollment Information System (EIS)
- High School Graduate System (HGS)
- Transfer Student System (TSS)
- Degree Information System (DIS)
- Employee Data System (EDS)

Each of these systems contain one record for each reported student. The files contain three types of information.

- Identification Information
- Demographic Information
- Detail Information

The first two types of information are common to all files. The third type is specific to each file's definition and purpose. All three types are explained in the manual for each system.

C. Major Use of Data

- To collect, maintain, and report information on the students enrolled in and graduating from Maryland postsecondary education institutions.

- To provide the Maryland General Assembly with timely and accurate reports of the status of higher education in the State in support of statewide policy decisions.

- To provide data to guide the Commission in making decisions on new program approvals and program discontinuance.

- To provide the supporting data necessary to evaluate the potential impact of Commission policies.

- To analyze the performance of selected groups of students within the Maryland postsecondary education system.

- To analyze the long-term effect of policies within the Maryland system of higher education.

- To maintain the Cohort Tracking System, a longitudinal database of students in the Maryland education collegiate system.

- To report to the U.S. Department of Education the enrollment and degrees conferred data that is annually requested.

- To provide to the U.S. Office of Civil Rights statistical reports and satisfy other data requests.

- To report to the U.S. Equal Employment Opportunity Commission the Higher Education Staff Information (EEO-6) survey.

D. Data Access

The aggregated data reports derived from the student unit-record data systems are considered to be public information. The Commission, however, treats the individual data records as "personally identifiable" and protects these records in accordance with legal requirements and other established policies (see Section II). Institutional researchers and boards are encouraged to utilize these data systems for studies of institutions and/or higher education in Maryland within the limitations set forth in Section II.

E. Benefits

The student unit-record data systems provide valuable benefits by permitting tabulations that are not possible with aggregate data. The common definitions and linkages across the files in the system also produce a more comprehensive and comparable picture of higher education.

Other benefits are:

- The same source of data is used for Institutional studies, Federal reports, and State studies and reports produced by the Commission.

- Flexibility of the information collected enables the Commission to be more responsive to new policy questions and issues. Aggregate data is specific, single-result oriented while unit-record data is multiple-use oriented.

- The ability to link diverse files permits a report or analysis to be understood within the total postsecondary education context.

- Common data definitions provide for file and field consistency. All institutions use the same basis for categorizing each student. The reports are less susceptible to subjective interpretations of definitions and allow comparative analyses among various student groups.

- Error correction is simplified since the inclusion of a student identification number allows a record with an error to be updated. This is preferable to an operating procedure of replacing the whole file when an error is identified.

- The production of trend reports and student profiles by subgroups is possible due to the inclusion of the necessary data elements and a student identification number.

- The consolidation of multiple data requests into primary file requests alleviates some of the data collection burden placed on institutions.

II. Statewide Overview

A. Maryland Higher Education Commission

The Maryland Higher Education Commission is the central policy and coordinating board for higher education in the state of Maryland. The duties and powers of the Commission apply to all state-supported institutions of higher education, including all independent postsecondary education institutions in the State, supported in whole or part by state funds and all community colleges. The governing boards and institutions of the system of higher education in Maryland are obligated to conform to the policies set by the Commission within the authorities delegated to it in statute.

The Commission is responsible for educational policy and issues in the following areas:

- Finance
- Capital construction
- Long range planning
- Program approval, review, reduction, and discontinuance
- Systemwide planning
- Accountability
- State financial aid programs

B. Office of Information Systems

The Office of Information Systems is the component of the Commission that is responsible for data collection and data systems reporting, regarding such areas as student enrollment; formal awards; and employee data. If it fails in its collection task, Information Systems cannot provide relevant information and analyses. These data issues affect its performance:

- value of data
- accuracy of data
- completeness of data
- consistency of data
- timeliness of data

Therefore, it has the following goals:

- To respond to the information needs of the Maryland educational community, in particular to those of the Commission, in a professional and timely manner.

- To achieve simplicity in data collection and reporting procedures that results in high quality data and places a minimum burden upon the reporting institutions.

- To effect the optimum utilization of available resources: Commission staff, institutional and governing board staff, and other state agencies.

C. System Design

The concept of unit-record reporting systems was developed to achieve higher quality data, single data source for each type of data, greater analytical flexibility, and reduction in institutional reporting burdens.

There are four files collected which can be interlinked via the student's identification number:

- Enrollment Information System (EIS)
- High School Graduate System (HGS)
- Transfer Student System (TSS)
- Degree Information System (DIS)

The Enrollment Information System (EIS) is collected as a snapshot of the fall term each year during fall term. It is used to provide:

- data for federal reports; and
- information to assess the current academic year.

The High School Graduate System (HGS) is collected at the end of the academic year and represents an annualized performance summary of the first year of their enrollment. This system provides:

- support for longitudinal studies through cohort based tracing (such as retention, graduation rates, etc.);

- comprehensive information on the progress of high school graduates in their first year of college;

- support for longitudinal based studies; and

- complete information for the SOAR feedback to secondary education officials.

The Transfer Student System (TSS) is collected at the end of the academic year and provides data on students who transferred to 4-year colleges from community colleges. This system was developed to provide:

- feedback information to community colleges on the performance of their students after transferring to 4-year college; and

- support for longitudinal based studies.

The Degree Information System (DIS) is collected at the end of the fiscal year to provide complete data on all formal awards made during the previous year.   This system provides:

- formal award data as a outcome measure;
- complete information on an annualized basis; and
- support for longitudinal studies.

D. System Responsibilities

The responsibility for ensuring the accuracy of the data and the readability of the tapes is primarily that of the institution. Tapes with errors, and tapes that cannot be read may be returned to the institution for correction with appropriate written feedback.

The Commission provides two editing programs for each system. An institution must use these programs for error checking before submitting the tapes. The exception edit identifies all errors when checking against file specifications and provides some basic summaries. The second program is the consistency check which compares the data submitted in the previous year to the current file. This check identifies potential problems for key data elements in the file by flagging percent change differences that exceed threshold values.

AUTOMATED COLLECTION SYSTEMS
INSTITUTIONAL REPORTING COMPONENT DESIGN
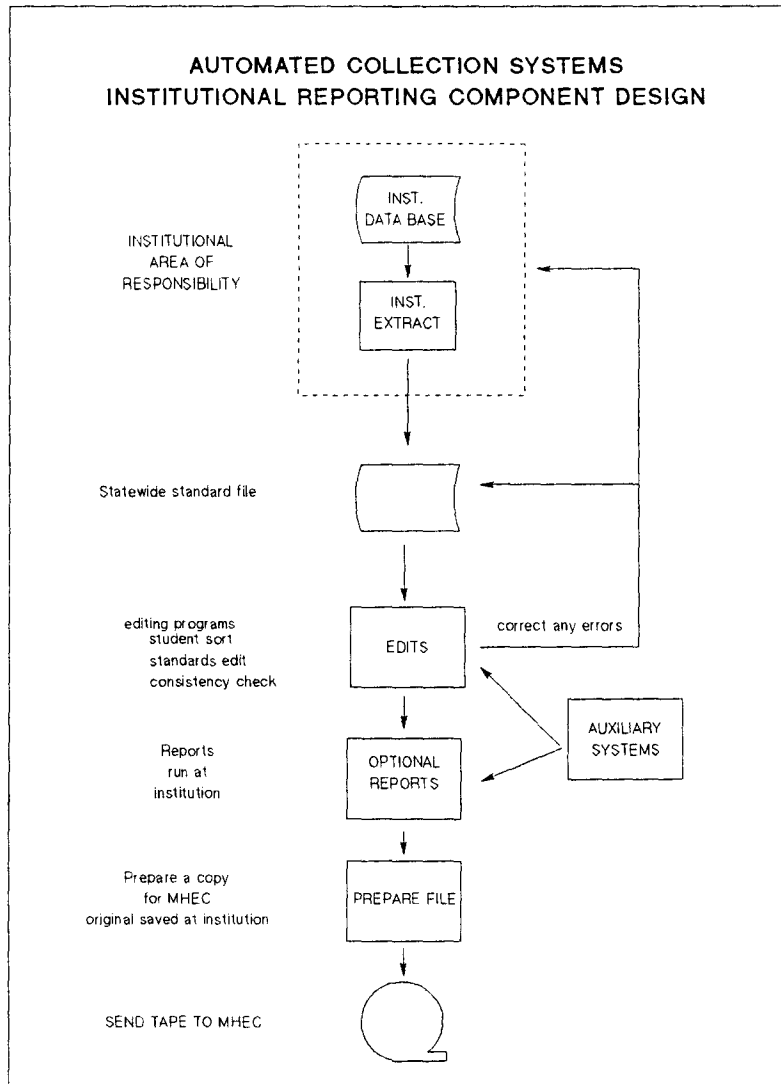
Additionally, the Commission provides a set of reporting programs with each system. These programs are run using the

edited file (i.e. has been checked and corrected through the two editing programs) that will be forwarded to the Commission. These programs provide a set of standard Commission reports and several federal facsimile reports. Institutions should run these reports prior to sending the file to the Commission. Their output should be reviewed to insure data correctness and usability. Once the above steps are completed, the file should then be sent to the Commission with the tape specification form (Appendix C). The due dates for each system are published annually in the collection package schedule.
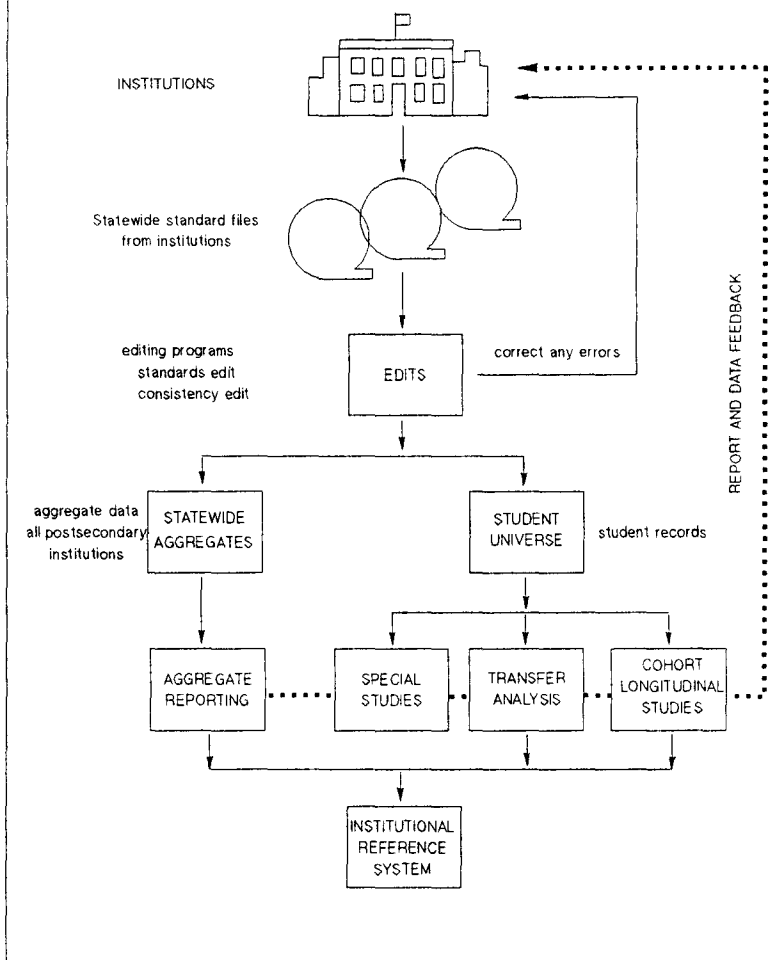
The Commission processes the tape files in the same manner as the institutions. Both an exception edit and consistency check very similar to the institution version are run at the Commission. If errors or data consistency problems are found, the institution will be contacted for error resolution.

The following procedures regarding error resolution are in effect:

1. Corrections should be submitted in writing, signed, and dated. At the Commission's discretion, telephone corrections may be accepted. Phone conversations will be used to resolve minor problems but institutions with major problems will be handled in writing.

2. All corrections are related to an individual student record or group of records. No aggregate number on a report may be adjusted.

3. Cut-off date for corrections is calculated from the file due date, not from the date of submission.

4. There will be no corrections to any data files for prior reporting cycles. The error resolution/verification period is the appropriate time for an institution to settle any inconsistencies. A file may be resubmitted for the previous year but this re-submission must be pre-approved by Commission staff and be substantiated by significant rationale.

The error resolution/verification phase ranges from four weeks to two months, depending on the Commission's correction cut-off date. It is mandatory that the institution respond within this predetermined period. The cut-off date is determined for each collection cycle and institutions are notified of this cut-off at the time error resolution starts.

AUTOMATED COLLECTION SYSTEMS
COMMISSION PROCESSING COMPONENT DESIGN

INSTITUTIONS

Statewide standard files
from institutions

editing programs
standards edit
consistency edit

EDITS

correct any errors

REPORT AND DATA FEEDBACK

aggregate data
all postsecondary
institutions

STATEWIDE
AGGREGATES

STUDENT
UNIVERSE

student records

AGGREGATE
REPORTING

SPECIAL
STUDIES

TRANSFER
ANALYSIS

COHORT
LONGITUDINAL
STUDIES

INSTITUTIONAL
REFERENCE
SYSTEM

The tape submission (signed by the institution) certifies the data and authorizes the Commission to use the data for state and federal reporting, Commission needs (including research), and legislative analysis. The Commission reserves the right to resolve any non-corrected errors on the file should the institution fail to do so. The Commission has the responsibility of notifying the institution that these changes were made to the file. The corrected file is then locked and no further updates can be made to the file. Institutions may request a copy of the final file from the Commission. It is at this point that the data is processed into longitudinal study files and statewide aggregate files.

III. Policy Concerning the Privacy of Personally-identifiable
     Records

   A. Statutory Requirements

        The Commission regularly collects, in accordance with its
   legal responsibilities, information on students and employees of
   Maryland institutions of postsecondary education. This
   information is often collected on an aggregated or summary basis,
   but data on individuals may be collected from student records for
   the purpose of constructing aggregated or summary reports on
   given topics. This data on individuals is further used in
   evaluating and auditing of state-supported programs.

        The Commission is granted this collection authority under
   Title II of the Education Articles of the Annotated Code of
   Maryland. Specifically, Section 11-105 (f) provides:

        (f) Information; research; inspections, evaluations;
        assessment of and recommendations for funding. - The
        Commission:
             (1) May secure, compile, and evaluate information on
             any matter within its authority, in the format it
             requires, from any person, agency, or institution
             subject to its authority;
             (2) May engage in research, data compilation, and
             publication of reports concerning postsecondary
             education in the State;
             (3) Through its representatives, may visit at any
             reasonable times and make reasonable inspections of any
             institution of postsecondary education subject to its
             authority.

        The pertinent federal statute is the Buckley Amendment,
   federal statute 20 U.S.C. Section 1232g, that protects the rights
   of students to insist that their educational records be kept
   confidential. An amendment in 1979 states that:

        (5) Nothing in this section shall be construed to
        prohibit State and local educational officials from
        having access to student or other records which may be
        necessary in connection with the audit and evaluation
        of any federally or State-supported education program
        or in connection with the enforcement of the Federal
        legal requirements which relate to any such program,
        subject to the conditions specified in the proviso in
        paragraph (3). (20 U.S.C. Section 1232g(b) (5))

   The proviso referred to in the above paragraph is:

        Provided, That except when collection of personally
        identifiable information is specifically authorized by
        Federal law, any data collected by such officials shall
        be protected in a manner which will not permit the
        personal identification of students and their parents

by other than those officials, and such personally identifiable data shall be destroyed when no longer needed for such audit, evaluation, and enforcement of Federal legal requirements.

In collecting and maintaining this data, the Commission must follow the relevant state and federal statutes to protect and keep confidential the data collected of individuals. Title 6 Part III (Access to Public Records) of the State Government Articles of the Annotated Code of Maryland requires that an annual report be filed on the Commission's "personal records" and identifies procedures for access to public records.

The provisions of the Buckley Amendment are usually interpreted to allow data on individuals to be collected from student records by a state agency for the purpose of constructing aggregated or summary reports, as long as students are still provided the same protections regarding their rights to privacy as are provided by the institutions providing the data.

B. Commission Policy

The following policy has been adopted by the Commission to guarantee the protections of individuals.

APPENDIX A

SBHE Policy Concerning the Privacy of Student Records
Maintained by the Board

(Adopted by SBHE, May 1977)

The Board regularly collects, in accordance with its legal responsibilities, information on students enrolled in Maryland institutions of postsecondary education. This information is often collected on an aggregated or summary basis, but data on individuals may be collected from student records for the purpose of constructing aggregated or summary reports on given topics. With respect to these individual student records:

1. Any personally-identifiable information will consist only of items required for legitimate reports and studies of the Board; specific description of the data possessed by the Board will be provided upon request. Inquiries should be addressed to the Board's offices in Annapolis.

2. Any student, or parent of a student under 18 years of age, may upon application to the Board's offices at 16 Francis Street, Annapolis, Maryland 21401, inspect, review, or seek correction of any records of that student maintained by the Board. The Board will provide copies of such records for a fee equal to the actual reproduction or computer processing costs.

3. The Board will maintain a record of disclosures of personally-identifiable information made from the education records of a student, and will permit a student, or parent of a student under 18 yeas of age, to inspect that record.

4. If, after an application to correct records is made, and a hearing held thereon, the Board decides that the information contained in its records is not inaccurate, misleading, or otherwise in violation of a student's rights, the Board will inform the student, or parent of a student under 18 years of age, of the right to place in the student's education records a statement commenting upon the information contained in the records, or setting forth any reasons for disagreement with the Board's decision.

5. Copies of this policy will be published annually and will be provided upon request to interested individuals, in accordance with (HEW) Regulation 45 C.F.R. 99.6.

Note: The above policy was developed in consultation with the Attorney General's Office to fulfill requirements of U. S. Title 45, Part 99: "Privacy Rights of Parents and Students." This policy is based upon current regulations and may be changed to meet future legal requirements.

C. Commission Procedures

In addition to the above policy, the Commission staff has established additional measures to guarantee the protection of individuals.

1. Personally-identifiable student and employee record information collected from institutions of higher education except those for State scholarship programs will be maintained using only an encrypted number at the Commission. This encryption insures personal records are not available for direct access from computer files.

2. The encryption of the identifying number will be performed at the institution. This insures the protection of personally-identifiable data at all times after data is released by the institution.

IV. Transfer Student System

A. Objective

The Transfer Student System (TSS) will collect academic performance data for community college transfer students at 4-year institutions.

B. Description

This system was developed by the Commission in 1991 with the advice of a technical steering committee comprised of segment and institution representatives. It was designed to meet (a) the data needs for community college transfer student feedback component of the Student Outcomes and Achievement Report (SOAR) and (b) special studies requiring student unit record based data. The system is scheduled for its first collection from public institutions in 1992 for academic year 1991-92.

The Student Outcomes and Achievement Report (SOAR) will provide feedback to Maryland community colleges on the academic performance of their transfer students for a five year period at Maryland colleges and universities. The Transfer Student System will be implemented to collect data from 4-year colleges on those students transferred from a Maryland community college to a Maryland 4-year institution at any time in the preceding five year period. The data collected will be combined on a statewide basis. After processing by the Commission, summary reports and individual student records will be forwarded to each community college for their students who transferred.

C. Selection Criteria

Data will be collected for the reporting period on all undergraduate students who have transferred in the last five academic years. All students who were entrants to 4-year institutions as transfer students from Maryland public community colleges during the preceding five academic years should be included. Once a student is defined as a transfer entrant in an academic year, he/she will continue to be reported for five years regardless of current undergraduate enrollment status. Data on enrollment as a graduate student should not be provided during the five-year tracking period. Starting with the 1991-92 academic year, a transfer entrant is defined as having transferred 12 credit hours to the 4-year institution and started at any time during the academic year. These transferred 12 credit hours should be from the community college indicated as the sending institution but can be from any institution when only available this way. Prior to the 1991-92 academic year, institutional definitions of transfer entrants vary. Institutions will provide to the Commission these various definitions for inclusion into system documentation. Students should be included even if they:

- Enrolled in any off-campus center or branches.

- Exclusively audited classes.

- Exclusively attended remedial courses.

- Attended any semester in reporting year regardless of outcome.

Students are to be <u>excluded</u> from this submission if they are:

- Transferring from a college other than a Maryland community college.

- Defined as transferring from a community college with less than 12 credit hours (starting AY 1991-92) accepted by the reporting 4-year institution.

- Already known to have received a bachelor's degree from any institution.

- Studying abroad where enrollment at the institution is only an administrative record and the fee is nominal.

- Enrolled exclusively in non-credit continuing education courses.

An example of a student reporting is given below in Section E. System Design.

D. Collection Requirements

This data collection will be due each October 1 as a part of the MHEC Annual Collection package. Data will be collected at this time on the prior academic year's reporting period. The data will be provided on tape to the Commission from every public institution in Maryland starting in 1992 for the 1991-1992 academic year. Independents will be required to participate in future collections.

Each time a tape is submitted it must be accompanied with a completed "Institutional Certification and Specification Form for Automated Submission" (see Appendix C). This form provides the institution with the preferred tape specifications as well as a mechanism to transmit the actual tape creation specifications to the Commission. More importantly, this form is used by the institution to certify the data submitted. The individual signing the certification should be authorized to do so by the institution. This individual is responsible for the review of outputs from the edits and any optional system reports to ensure that the data being submitted is correct.

E. System Design

The system provides academic performance data on each community college student who transfers to a 4-year institution with at least 12 credit hours. This is accomplished by the

development of a standard reporting format and definitions for this data. The following is the format for data required on the tape for each student:

Transfer Student System (TSS) Record Description

Data Element	Description	Length	Position	Data Dict page reference
Collection Year	collection cycle year submitted e.g. "1992"	4	1-4	DD1
Collection Period	always = "9" for annual	1	5	DD2
FICE	federal code number for reporting institution	6	6-11	DD3
Sub-campus Code	code for institution use for multi-campus or organizational identification	1	12	DD4
Identification Number	student's social security number on institution copy and encrypted number on tape submitted	9	13-21	DD5
Identification Number Type	code to indicate whether an actual SSN or an institution assigned student number was used	1	22	DD6
Race/Ethnicity	standard codes for ethnic categories	1	23	DD20
Gender	standard codes for male, female and assigned unknowns	1	24	DD21
Birth Year	four digit year of birth	4	25-28	DD22
Degree Sought	standard codes to identify degree level being sought or non-degree seeking, see discussion after example	2	29-30	DD30
Program Taxonomy	MHEC taxonomy for the student's most recent program area, last two positions are always	8	31-38	DD31

	blank and for expansion, see discussion after example			
Spring Credit Hours Earned	credit hours earned in spring semester of <u>current reporting year</u>, in format 7.0 = "070"	3	39-41	DD43
Cumulative Native Credit Hours Earned	current credit hours completed at reporting institution, in format 62.5 = "0625"	4	42-45	DD44
Cumulative GPA	student's current grade point average as defined by institution, in format 3.52 = "352"	3	46-48	DD52
Bachelor's Grad- uation Year	four digit calendar year	4	49-52	DD60
FICE (<u>sending institution</u>)	FICE code for the community college identified as sending institution when the student defined as transfer entrant	6	53-58	DD3
Transfer Student Entrant Year	four digit calendar year student first entered as transfer	4	59-62	DD61
Transfer Student Entrant Semester	semester code when student first entered as transfer	1	63	DD62
Filler	for expansion, always blank	37	64-100	

Elements in the TSS which have a relationship are Cumulative GPA and Cumulative Native Credit Hours Earned. The acceptable combinations and their meanings as related to certain student enrollment conditions are indicated in this table.

Cumulative Native Credit Hours

Cumulative GPA	0	>0
blank	exclusively remedial exclusively auditor withdrew all courses	exclusively pass (P) in pass/fail courses
0	failed all credit courses	exclusively pass/fail courses
>0	INVALID	typical enrollment

In order to clarify reporting requirements, the following example of reporting is provided. A 44 year old white woman transferred into UMCP from Montgomery College-Rockville in the Fall semester of 1991. She initially enrolled in the Sociology program. In UMCP, during academic year (AY) 1991-92, she earned 20 credit hours (5 in Spring semester); in AY 1992-93 she did not enroll; in AY 1993-94, she earned 30 credit hours (15 in Spring); and in AY 1994-95, she earned 15 credit hours (0 in Spring). She then earned a total of 65 credit hours at the end of the Fall semester, AY 1994-95. She graduated in the Spring semester of academic year 1994-95 with a GPA of 2.36 in the Psychology program.

Data Collection Year

Data Element	92	93	94	95	96
Coll. Year	1992	1993	1994	1995	1996
Coll. Period	9	9	9	9	9
FICE Rec. Inst.	002013	002103	002103	002103	002103
Sub-Campus	-	-	-	-	-
Id. Number	38H1878--	38H1878--	38H1878--	38H1878--	38H1878--
Id. Type	-	-	-	-	-
Race	5	5	5	5	5
Gender	2	2	2	2	2
Birth Year	1946	1946	1946	1946	1946
Prog. Tax.	220801	220801	220801	200101	200101
Spring Credit Hrs.	5	0	15	0	0
Cum. Credit Hours	20	20	50	65	65
Cum. GPA	233	233	229	236	236
Grad. Year	----	----	----	1995	1995
FICE Send. Inst.	002082	002082	002082	002082	002082
Ent. Year	1991	1991	1991	1991	1991
Ent. Semester	2	2	2	2	2

Note: in above example, "-" means a blank and is shown for illustration purposes only. Do not fill fields with "-".

Even though this student graduated in the 1994-95 academic year, the data is repeated unchanged in the 1996 collection for the 1995-96 academic year. This repeating is necessary to maintain tracking of a fixed cohort for each entrant year over the five year reporting period. It should be noted that this student would not be found in the 1997 collection as the five year reporting period will have elapsed.

The system is designed to collect data on all transfer entrants to each 4-year institution over the preceding five year period. The reliance on the reporting institution as the basic data source can cause duplication in reporting. This happens when a student is not a traditional transfer who moves from a community college to a 4-year institution one time to complete his/her educational needs. Students whose enrollment moves back and forth from a community college to 4-year institutions could be duplicated as transfer entrant by each different 4-year

institution in which the student enrolls. The following example
explains this situation. A student has the following enrollment
pattern: enrolled at PGCC for AY 1989-90; transferred to UMCP in
AY 1990-91; went to AACC for AY 1991-92; then transferred to UMBC
in AY 1992-93; and remained enrolled at UMBC in AY 1993-94 and AY
1994-95 when he/she graduated with a Bachelor's degree. Assuming
the student earned 12 credit hours each year, this student could
be reported as transfer entrants and traced by both UMCP and UMBC
as shown below.

                                  Collection Years

                  90   91   92   93   94   95   96   97

Where enrolled? PGCC   UMCP   AACC   UMBC   UMBC   UMBC   -   -
UMCP   -   T   X   X   X   X   -   -
UMBC   -   -   -   T   C   G   X   X

        Note: in this example, "-" means not reported
                                  "T" reporting as transfer entrant
                                  "X" reported with cumulative
                                       credit hours and GPA unchanged
                                       showing enrollment stop
                                  "C" reported with data changes
                                       showing continuing enrollment
                                  "G" reported as graduated

        A transfer student is not reported and traced twice when
he/she re-enrolls at the same 4-year institution. This occurs
when a student, after attending a community college and
transferring to a 4-year institution, moves back to a community
college for a period but then returns to the same 4-year
institution. In this case, the student is traced as a transfer
entrant only one time by the receiving 4-year institution. The
first time a student is defined as a transfer entrant remains
constant in the reporting for every year for the five year
period.

        In the case when a student may receive his/her bachelor's
degree and returns to attend again in the same reporting period,
the degree sought and taxonomy fields should reflect the
bachelor's degree not any enrollment after it. In subsequent
years (reporting periods) after receiving bachelor's degree,
these two fields may reflect the current enrollment at the
four-year institution.

        The Commission provides a software distribution package to
each institution for this system. The package consists of two
components, processing and reporting (discussed in next section).
The processing component consists of four software programs. The
four programs and their major functions are:

XTSSXTR   -   extraction model   This program is provided only
                                  as a template for the
                                  extraction program. This is
                                  the only program that must be

written by the institution to access its data environment, do code conversions, and produce the TSS standard format file.

XTSSEDT   -   standard edit   The basic edit of the institution produced tape compared to the statewide TSS standards are performed by this program. A report for each student record in error is produced.

XTSSCON   -   consistency check   The current tape submission is compared to the previous year's submission. A report comparing the two submissions for consistency is produced.

XTSSTRF   -   tape preparation   This is a utility program which encrypts the SSN of students for subsequent transmission to the Commission. It can also be run to decode the SSN.

The XTSSEDT and XTSSCON are important programs that an institution must run to verify acceptable data quality. The edit reports from these two programs should be reviewed by the appropriate institution personnel who can assess data accuracy.

In order to meet the tape submission requirements, the institution is required to run only the processing components of the system to extract, edit, and prepare the file for submission to the Commission. This set of programs will provide the minimum level of data quality control required.

F.   Institutional Reports

The Commission distributed software package provides several optional reporting programs. The programs provide institutions with the information on the students being submitted for three major purposes. First, the reports can be used to further assure that the data being submitted is correct. Secondly, the reports provide basic information for institution reporting needs. Third, the reports provide additional details from which further analysis can be made of statewide summaries. These optional reports are for institution use and should not be sent to the Commission

There is one optional report for the Transfer Student System. This report provides the ability to the institution to examine the performance of public community college transfer students at their institution. The report's major function is:

XTSSREP   -   performance report   This program provides a detail analysis of community

college transfer students and
their academic performance.
A report consisting of a set
of tables is produced for
each of the entrant year and
semester cohort for the five
year tracking period.

It is recommended that this program be utilized by the
institution to support both detailed and case level analysis of
the performance indicators used by the feedback data. Public
community colleges are encouraged to contact your institution for
further information or questions on the indicators provided by
your institution.

G. Audit

The Commission does not routinely audit the TSS data
submission. The Commission staff reserves the right to audit
this data upon request to the institution. Because routine
audits are not used, the institution must take extra care in the
editing and review of the data.

V. Institution Procedures

A. Software Installation

The software installation for the TSS system requires six steps to be performed by data processing personnel at the institution. It is suggested that staff skilled in installing COBOL software packages, reading foreign tapes, and using system utilities to sort and print files be involved in this installation. The complete installation process (except for the writing of the extraction program) should be expected to take skilled staff 2-3 days. The TSS steps are:

1. account setup;
2. installation/update tape loading;
3. software modification;
4. installation of one auxiliary system;
5. run command setup; and
6. software test.

The installation of the auxiliary system (Institutional Academic Program Inventory) is necessary to fully operate and maintain the TSS system. A separate manual is available for this system.

1. Account Setup

The institution should establish a single account (or directory unit) on its computer system for all MHEC distributed software. The use of this account will simplify procedures to maintain software provided by MHEC, provide organization to separate MHEC software, allow a place for the retention of files submitted to the Commission and permit implementation of installation security measures on both software and data files. It is suggested that within this account structure each Commission system be identified separately.

All files loaded onto the system can be renamed to meet institutional standards. The table in the next section can be completed to provide a cross reference to internal file names.

2. Installation/update Tape Loading

The TSS system is supplied on an open-reel computer tape in two different ways. If your institution has never received and installed TSS, you will receive an install tape. The complete instructions for the initial installation of TSS are contained in this manual. The second way TSS is supplied is through an update tape. This method is used to provide updates to your institution where TSS was previously installed. Each update tape contains only those system components that need to be modified. The update tape will upgrade the TSS system from the previous release to the current one. The update tape is described in the release update instructions that accompany the tape. These update

instructions combined with the current manual provide the necessary information to update TSS.

The TSS install tape provides multiple files containing the source software, test files, and sample outputs. The following is a list of files on the tape, the file number and file characteristics. A fill-in blank is provided to enter the file names used at the institution.

File Number	File Name – Contents Software Version		Record Length	Number Records	Your Assigned File Name
1	XTSSXTR	extract model prg 04/15/92	80	415	_____
3	XTSSSRT	student sort prg 06/01/92	80	117	_____
5	XTSSEDT	standards edit prg 05/01/93	80	2289	_____
7	XTSSCON	consistency chk prg 05/01/93	80	2751	_____
9	XTSSREP	performance rpt prg 05/01/93	80	1426	_____
11	XTSSTRF	tape transfer prg 04/15/92	80	564	_____
13	TTSSBAD	edit test file	100	63	_____
15	TTSSPRV	previous test file	100	62	_____
17	TTSSD	test file	100	62	_____
19	TTSSEDT	edit test sample	132	358	_____
21	TTSSCON	consistency test sample	132	254	_____
23	TTSSREP	performance test sample	132	144	_____

The install tape is 1600 BPI, unlabelled, 9-track, open reel and contains multiple files. Each file is written on the installation tape twice, first in ASCII and then repeated in EBCDIC. **All ASCII files are odd numbered and EBCDIC files are even numbered.** File numbers shown above are for ASCII files. All files are fixed length and fixed block with a blocking factor of 1 (block size = physical block length = record length). The first six files on the tape contain source code for COBOL (ANSI-74) programs. The next three files (7-9) are test files containing data in TSS test format. The last three (files 10-12) are sample outputs from runs of the test files through programs and can be used to verify installed software. These files are 132 in length and do not contain pagination (carriage) control.

Each of the tape files should be copied using your system's standard file copy utility for foreign tapes. Contents of files can also be checked with a system utility after loading. If you have any problems reading the tape, please contact the Office of Information Systems of the Maryland Higher Education Commission.

3. Software Modification

The COBOL programs provided by MHEC, except for the extract model, must have installation specific modifications made to source code and then compiled/linked at the institution's computer facility by programmer support staff. The COBOL programs are ANSI-74 standard level and designed to be as portable as possible. If the procedures given here are followed and the program will not compile or execute properly, please call the MHEC Office of Information Systems for assistance.

The extract model is the only COBOL program that <u>MUST BE WRITTEN</u> by the institution's programmer support staff. The program on the tape, XTSSSXTR, is not a complete program and is provided to the institution only as an aid to its programming effort. Because of the varying hardware platforms and variety of student systems in operation at Maryland colleges and universities, the knowledge to extract specific data resides within each institution. It is this expertise that the institution and staff must provide to implement this system at its site. The extraction program must be developed to meet the Commission's system design format and collection requirements (see section IV. E and IV. C of this manual, respectively). These should be reviewed carefully by the institution staff prior to development of an extraction program. The overall objective is to extract the previous year's standard performance data. This data provides a mechanism to assess the success of academic preparation by community colleges.

There are several steps for programming staff to follow to install (compile/link) each of the other six pre-written programs:

1. You should <u>not</u> resequence the program statement numbers during its installation. Updates and patches will be supplied using the original MHEC numbers.

2. Any changes needed in the IDENTIFICATION DIVISION for your installation can be made. It is suggested that you supplement existing program lines and not replace them.

3. The OBJECT-COMPUTER paragraph of the ENVIRONMENT DIVISION can be changed as necessary for your installation.

4. The SPECIAL-NAMES paragraph of the ENVIRONMENT DIVISION contains the printer control for a new page. The function name TOP can be changed, if needed, to your system's proper name for advancing to the top of a new page.

5. In the FILE-CONTROL paragraph of the ENVIRONMENT DIVISION, the SELECT clause must be changed as necessary for your installation. Depending on your

system, file parameters can be placed within the SELECT clause, the FD (or SD) paragraph of the FILE SECTION or in your system command language. File parameters are given in the run command setup section later in this manual.

6. The FD (or SD) paragraphs of the DATA DIVISION FILE SECTION can be changed as necessary for your system. Any requirements for BLOCK CONTAINS, RECORDING MODE, LABEL or other institution specific clauses should be placed here.

7. In some institutions (typically IBM@), the files used for print output (FD LPRNT-FILE) must have additional changes made to this FD paragraph of the FILE SELECTION. First, change the RECORD CONTAINS to 133 CHARACTERS. Next, add a one-byte filler after the 01 LPRNT-REC statement. The resulting changed FD would appear as:

```
01  LPRNT-REC.
    02  FILLER     PIC X.
    02  PRINT-REC  PIC X(132).
```

8. There is a part of WORKING-STORAGE section identified as INSTALLATION DATA. This area must have several required changes made as well as some optional institution specific ones. Programs will not operate correctly at your institution unless these changes are made. The data names and changes are as follows:

MARGIN-TOP	set to number of blank lines needed at top of page
MAX-LINES-PAGE	set to the maximum number of lines per page
INSTALLATION-NAME	enter and center your college's name
INSTALLATION-FICE	set to your college's FICE (see DD3)
INSTALLATION-SECTOR	set to describe your college as 1=public, 2=private
INSTALLATION-COLLEGE-TYPE	set to describe your college as 2=2-year, 4=4-year

4. Installation of Auxiliary Systems

The TSS system requires the presence of an auxiliary system. This system is the institution program inventory which

is your institution's part of the MHEC academic program
inventory. This is used to edit program data supplied in the
standard record and to obtain your institution's program titles
for edit and reporting software. This program inventory system
also contains a testing version of the program inventory file.
This test version is used for all software tests in step 6.

This auxiliary system must be installed according to its
system manual. A report program is provided as part of this
system to allow institutions access to this data.

Once all software tests have been completed, the run setup
commands must be altered to have all programs that access the
program inventory use the actual program inventory file provided
by MHEC. This reference to the actual file is then kept as part
of the permanent run commands for the installed system.

5. Run Command Setup

In order to test the software and prepare for running the
system each year, this section provides the proper setup
information and running requirements to set up the necessary
command language on your system. There are seven basic command
sets, one for each program in the system. Each set of commands
requires a program execution command and a file reference command
for each file used by the program. Sort work files may require
additional file commands for additional temporary work files.
The print files would normally be directed to your spooled
printer. They are all 133 characters in length, including the
carriage control position. These command sequences can be
combined into fewer steps depending on the needs and preferences
of your college. The following table provides the setup
information for all files (default SELECT assign name) used by
each program. The MHEC file name used by the program is listed
along with space for you to provide your institution assigned
file name. You must provide other system requirements on file
reference commands.

Program/File	Description	Input/ Output	File Size	Record Length
YOUR XTSSXTR	your extraction			
INSTDB _____	your student DB	input	?	?
TSSXT _____	standard TSS	output	12000	100
XTSSSRT	student sort			
TSSXT _____	unsorted TSS	input	12000	100
TSS _____	sorted TSS	output	12000	100
TSSSORT _____	sort work	I/O	12000	100
XTSSEDT	standards edit			
TSS _____	sorted TSS	input	12000	100
PRINTER _____	edit report	print	unlimited	133
IPINV _____	program inventory	input	500	80

XTSSCON		consistency check			
TSS	_____	edited TSS	input	12000	100
TSSPREV	_____	previous TSS	input	12000	100
PRINTER	_____	consistency rpt.	print	unlimited	133
IPINV	_____	program inventory	input	500	80
TSSSORT	_____	sort work	I/O	12000	100
XTSSREP		performance report			
TSS	_____	edited TSS	input	12000	100
PRINTER	_____	performance rpt.	print	unlimited	133
IPINV	_____	program inventory	input	500	80
TSSSORT	_____	sort work	I/O	12000	100
XTSSTRF		transfer program			
TSS	_____	edited TSS	input	12000	100
TSSMHEC	_____	MHEC file	output	12000	100

In the above table, defaults are given for certain file sizes. Your institution's TSS file may be smaller than the default and 12000 can be changed to a more appropriate number. The printer files are 132 characters in length plus one additional character for carriage control.

The student sort can be replaced by a system sort utility. If a utility is used, the TSS file must be sorted in ascending order on Identification Number (SSN) field in positions 13-21.

The file created by the transfer program should be sent to MHEC on tape. This file should be discarded after tape load. The edited TSS should be saved at your institution as it will be needed in the next year's process to do consistency check and for institution running of the optional report.

6. Software Test

Once the software has been compiled and the command setup is completed, the software can be tested using files on the install tape. The output generated by using the furnished test files can be compared to the test samples provided. The test samples do not have carriage control and therefore will not show pagination when printed. When comparing your output to the test sample ignore pagination. These test output files were generated at MHEC using the same test files provided on the installation tape.

The following table shows the run command setup for performing the testing step.

Software Testing Setup

Program/File	MHEC File Name for Testing	Your Assigned File Name	Comparison File Name for Output
XTSSEDT			
TSS	TTSSBAD		_____

```
        PRINTER         output created    _____          TTSSEDT
        IPINV           TIPTEST           _____

XTSSCON
        TSS             TTSSD             _____
        TSSPREV         TTSSPRV           _____
        PRINTER         output created    _____          TTSSCON
        IPINV           TIPTEST           _____
        TSSSORT         work file         _____

XTSSREP
        TSS             TTSSD             _____
        PRINTER         output created    _____          TTSSREP
        IPINV           TIPTEST           _____
        TSSSORT         work file         _____
```
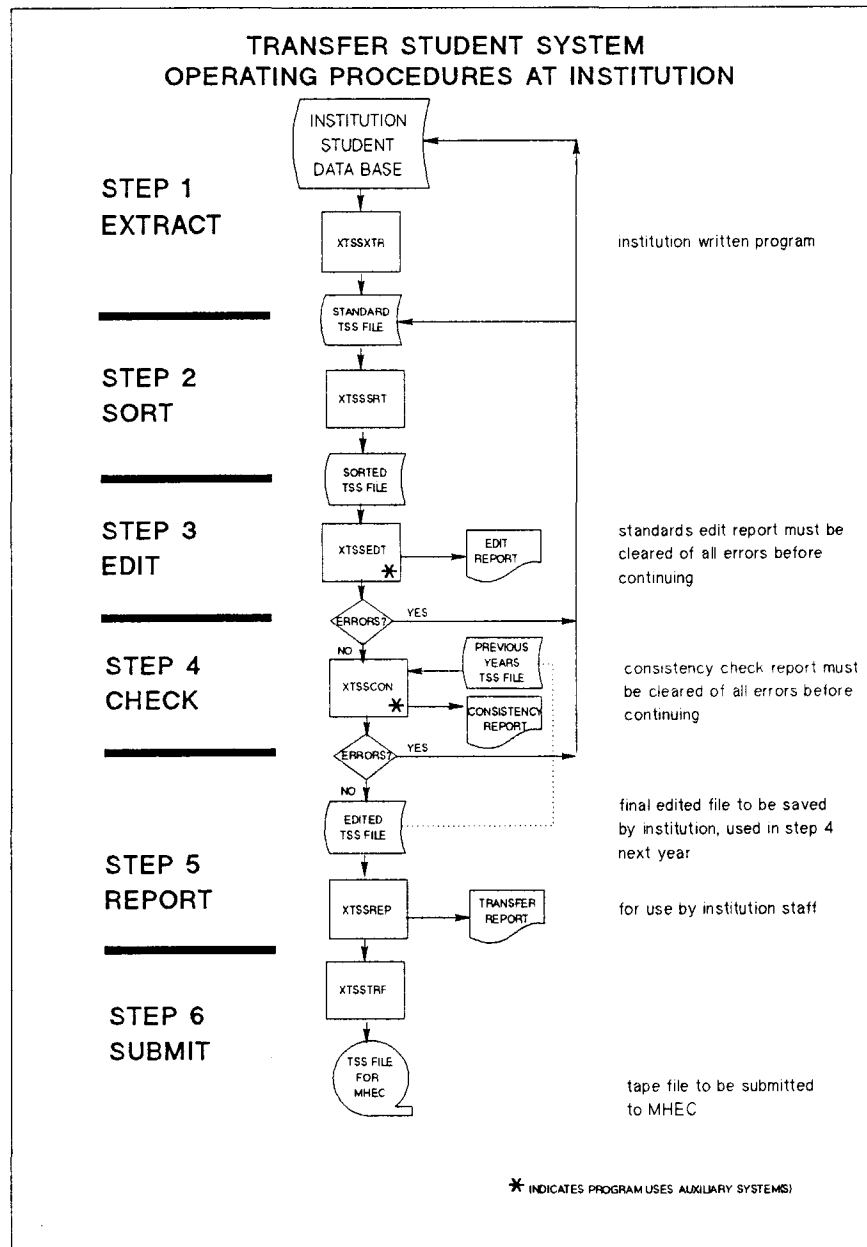
There are three test files provided with TSS. In order to
properly run these tests, the programs tested must use the test
version, TIPTEST, of the institution program inventory file
instead of the actual institution program inventory. The first,
TTSSBAD, contains a TSS file with erroneous records. It should
be used to test the edit, XTSSEDT, and the output created
compared to printed TTSSEDT file. The test files TTSSPRV
(previous year TSS file) and TTSSD (current year edited file)
should be used as input to the consistency check, XTSSCON. The
output from this run should be compared to the test sample file
TTSSCON. The TSS test file, TTSSD, should be used to test the
performance report, XTSSREP, and the output compared to the test
sample TTSSREP. If any of these comparisons show differences in
the output besides pagination, please call the MHEC Office of
Information Systems for assistance.

    Remember to change any testing commands to point to
production files after testing is complete.

B. Operating Procedures

    The overall operation of the system starts with yearly
extraction of the TSS data at the end of an institution's
academic year (usually June or July). It is completed when the
tape is created and submitted to MHEC. The optional reports can
be run at any time depending on institution needs.

(figure next page)

TRANSFER STUDENT SYSTEM OPERATING PROCEDURES AT INSTITUTION

```
                          ┌──────────────┐
                          │ INSTITUTION  │◄─────────────┐
                          │  STUDENT     │              │
  STEP 1                  │  DATA BASE   │              │
  EXTRACT                 └──────────────┘              │
                               │                        │
                          ┌────▼────┐                   │
                          │ XTSSXTR │         institution written program
                          └────┬────┘                   │
                               │                        │
                          ┌────▼────┐                   │
  ─────────               │ STANDARD│◄──────────────────┘
                          │ TSS FILE│
  STEP 2                  └────┬────┘
  SORT                        │
                          ┌────▼────┐
                          │ XTSSSRT │
                          └────┬────┘
                               │
                          ┌────▼────┐
  ─────────               │ SORTED  │
                          │ TSS FILE│
  STEP 3                  └────┬────┘        standards edit report must be
  EDIT                    ┌────▼────┐  ┌──────┐  cleared of all errors before
                          │ XTSSEDT │─►│ EDIT │  continuing
                          │    *    │  │REPORT│
                          └────┬────┘  └──────┘
                          ◄ERRORS?► YES ──────────────►
                               │ NO
  ─────────                    │        ┌─────────┐
                               │        │PREVIOUS │
  STEP 4                  ┌────▼────┐   │ YEARS   │   consistency check report must
  CHECK                   │ XTSSCON │◄──│TSS FILE │   be cleared of all errors before
                          │    *    │   └─────────┘   continuing
                          └────┬────┘─►┌──────────┐
                          ◄ERRORS?► YES│CONSISTENCY│──►
                               │ NO    │ REPORT   │
  ─────────               ┌────▼────┐  └──────────┘   final edited file to be saved
                          │ EDITED  │................  by institution, used in step 4
                          │ TSS FILE│                  next year
  STEP 5                  └────┬────┘
  REPORT                  ┌────▼────┐  ┌────────┐    for use by institution staff
                          │ XTSSREP │─►│TRANSFER│
                          └────┬────┘  │ REPORT │
                               │       └────────┘
  ─────────               ┌────▼────┐
                          │ XTSSTRF │
  STEP 6                  └────┬────┘
  SUBMIT                  ┌────▼────┐
                          │ TSS FILE│         tape file to be submitted
                          │  FOR    │         to MHEC
                          │  MHEC   │
                          └─────────┘
```

✱ INDICATES PROGRAM USES AUXILIARY SYSTEM(S)

Step 1   EXTRACT

The extract program, which is the only program required to be written by the institution's programming staff, must be run at the end of each academic year. The academic year is defined by the institution but usually ends after the spring semester. This means that the extract program must be run each year in the June/July period. All students who were entrants to 4-year institutions as transfer students from Maryland public community colleges during the preceding five academic years should be included. Once a student is defined as a transfer entrant, he/she will continue to be reported for five years regardless of current enrollment status. The extract program will access the institution's student data base, extract the prior year's data

for this five-year transfer entrant pool, put this data into
standard TSS format and save this standard TSS file.

While the remaining steps can be run at any time prior to
submission of the data tape to the Commission, the extract must
be run at the appropriate time each year to obtain the correct
data and required time period.

Step 2   SORT

The next step is to process the standard TSS file produced
by the extract by sorting of file into identification number
order. This can be done by using the program provided or a
system utility sort. If using a utility sort, the sort is on
positions 13-21 in ascending order. This sorted file should be
saved for the next step. The input file can be deleted or saved
depending on institution's needs.

Step 3   EDIT

The sorted file is then used as input into the standards
edit program. This program will edit the sorted TSS file to the
system standards in this manual. It produces an edit report
which should be reviewed by appropriate institution personnel
responsible for the data being submitted. The edit report
produced is in two parts: unit record edit and frequency
distribution checks on basic data. The unit record part will
indicate each record in error. This report shows several items
for each erroneous record: record number in file, the
identification number, type of error, data field in error and the
error condition. The type of error is either WARNING or FATAL.
WARNING means the data is suspicious but not necessarily
incorrect. These errors should be checked for validity. The
FATAL errors are unacceptable and must be corrected in the file.
DO NOT PROCEED PAST EDIT STEP UNTIL ALL ERRORS AND DATA
FREQUENCIES HAVE BEEN REVIEWED AND CORRECTED WHEN NECESSARY. The
TSS file can be corrected by institution's use of either a system
text editor to correct extracted standard TSS file or by
correcting the institution's data base and rerunning the extract.

Step 4   CHECK

Once all errors have been resolved, the consistency check
program can be run on the file that has passed the EDIT step. In
order to function completely, this program requires both the
current and prior year's (saved by institution) TSS files. Since
for the first year there is no prior year's data, the program
reports only one current year's data and cannot provide
consistency checks to prior year's submission. The consistency
report must be reviewed by appropriate institution staff
responsible for the data being submitted. Any errors, whether
displayed by program or found in the institution review, must be
corrected and the process restarted in the same manner as the
EDIT step.

Upon completion of this step, the institution will have the edited TSS file ready for submission to MHEC (or to your segmental coordinator). **IT IS THIS FILE THAT SHOULD BE PERMANENTLY SAVED BY THE INSTITUTION.** It will be required for next year's consistency check (step 4), as backup to allow tape resubmission, and for the optional report programs in steps 5 and 6.

Step 5 REPORT

The report from the XTSSREP program provides detail information on the performance of each entrant year and semester transfer student cohort as of the end of the current reporting period. The final edited file is used by this program to produce the report. The report is a set of 4 pages of tables which provides the most current information on several performance indicators by each transfer cohort.

This report can also be used to check for errors that would not appear until data is analyzed and presented in detail breakdowns.

Step 6 SUBMIT

The final step in the system is the submission of a tape containing the TSS data to MHEC. The transfer program reads the final edited file and produces a copy of the institution's saved version with encrypted identification numbers. This encrypted file should be loaded on tape using the tape submission form requirements in Appendix C. The tape and the completed submission sheet must be sent together to MHEC. The tape submission form must be certified by the appropriate institution staff responsible for the data being submitted. This certification represents the institution's responsibility for the data.

VI. Appendices

Appendix A
Data Dictionary

Data Dictionary Contents

ELEMENT TITLE:

Collection Year

DEFINITION: A collection cycle year (e.g. 1992) for data collected. The collection cycle year is the calendar year used to identify the data collection and is based on annual collection schedule.

FORMAT: numeric - 4 digits

CODES:

COMMENTS: Use the collection cycle year. For example, in the 1992 collection cycle data is collected

EIS - snapshot of 1992 fall semester

TSS - annual collection for 91-92 academic yr.

DIS - annual collection for 91-92 academic yr.

HGS - annual collection for 91-92 academic yr.

Some systems may use only 2 digit year, check system manual.

RELATED TO: Collection Period

GLOSSARY:

SYSTEMS: TSS,HGS,EIS,DIS,EDS,AGGR

SYSNAME: COLYR

DOCUMENTED: 1/10/77 Revised:

ELEMENT TITLE:

Collection Period

DEFINITION: The period of collection of the data to distinguish different types and time periods.

FORMAT: numeric - 1 digit

CODES: 1 = fall snapshot
                9 = annual (academic year)

COMMENTS: Fall snapshot freeze date is determined by the institution. This date must be after the end of the institution's official drop-add period for fall semester.

                Annual period is for academic year which includes summer, fall and spring enrollment cycle.

                EIS uses a 2 digit number "01".

GLOSSARY: academic year

RELATED TO:

SYSTEMS: TSS,HGS,EIS

SYSNAME: COLPD

DOCUMENTED: 1/10/77 Revised: 5/20/91

ELEMENT TITLE:

FICE

DEFINITION: A unique federal identification code for each institution. These are assigned by the U.S. Department of Education.

FORMAT: numeric - 6 digits

CODES: uses the Federal Interagency Committee on Education code for institutions see next page

COMMENTS:

RELATED TO:

GLOSSARY:

SYSTEMS: EIS,TSS,HGS,DIS,IPINV,EDS

SYSNAME: FICE

DOCUMENTED: 1/10/77 Revised: 5/10/93

FICE

002057	Allegany Community College
002058	Anne Arundel Community College
002061	Baltimore City Community College
031007	Carroll Community College
002063	Catonsville Community College
008308	Cecil Community College
002064	Charles County Community College
004650	Chesapeake College
009935	Dundalk Community College
002070	Essex Community College
002071	Frederick Community College
010014	Garrett Community College
002074	Hagerstown Junior College
002075	Harford Community College
008175	Howard Community College
002082	Montgomery College - Rockville
002081	Montgomery College - Takoma Park
029074	Montgomery College - Germantown
006911	Montgomery College - Central Admin.
002089	Prince George's Community College
020739	Wor-Wic Community College
002062	Bowie State University
002068	Coppin State College
002072	Frostburg State University
002091	Salisbury State University
002099	Towson State University
002102	University of Baltimore
002104	Univ. of MD - Baltimore City
002105	Univ. of MD - Baltimore County
002103	Univ. of MD - College Park
002106	Univ. of MD - Eastern Shore
011644	Univ. of MD - University College
007959	Univ. of MD - System Administration
002083	Morgan State University
002095	St. Mary's College of Maryland
002060	Baltimore Hebrew University

FICE

023148	Baltimore Int'l Culinary College
001436	Capitol College
002067	Columbia Union College
029192	Eastern Christian College
002073	Goucher College
007662	Hagerstown Business College
*	Harry Lundeberg School Seamanship
002076	Hood College
002077	Johns Hopkins University
002078	Loyola College
021551	Maryland College of Art & Design
002080	Maryland Institute College of Art
002086	Mount St. Mary's College
002087	Ner Israel Rabbinical College
002065	College of Notre Dame of Maryland
902077	Peabody Institute of the JHU
*	Potomac College-
002092	St. John's College
002096	St. Mary's Seminary and University
021279	Sojourner-Douglass College
025784	*Traditional Acupuncture Institute
002107	Villa Julie College
001462	Washington Bible College
002108	Washington College
010065	Washington Theological Union
002109	Western Maryland College

* means no federal FICE assigned

ELEMENT TITLE:

Sub-campus Code

DEFINITION: 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.

FORMAT: alphanumeric - 1 character

CODES: blank = not used
any letter or number = institution (or MHEC) assigned code

COMMENTS: When necessary, MHEC may require certain institutional breakdown and use of this field.

RELATED TO:

GLOSSARY:

SYSTEMS: EIS,TSS,HGS,DIS,EDS

SYSNAME: SUBCAMP

DOCUMENTED: 1/10/77 Revised: 4/10/92

ELEMENT TITLE:

Identification Number

DEFINITION: An encrypted version of the student's (or employee's) social security
number using the MHEC encryption technique as provided by the
institution. When actual SSN is not known, an encrypted version of an
institution assigned 9-digit identification will be present.

FORMAT: alphanumeric - 9 characters

CODES: encrypted version is 7 alpha-numeric characters with 2 blanks at end of
field

COMMENTS: If assigned number is used, it should always remain unique for student at
assigning institution. The Identification Number Type must be set to
"2" in this case.

EDS allows use of employee numbers that are not SSNs as long as the
number remains constant for the employee every year.

Some follow-up studies may use a student number that is not SSN based
(bachelor's survey at independents).

RELATED TO: Identification Number Type

GLOSSARY:

SYSTEMS: EIS,TSS,HGS,EDS,DIS,RTN

SYSNAME: IDN

DOCUMENTED: 1/10/77 Revised:

ELEMENT TITLE:

Identification Number Type

DEFINITION: An indicator that determines whether the identification number is based upon a valid social security number or an institution assigned substitute number in lieu of SSN.

FORMAT: numeric - 1 digit - blank valid

CODES: blank = valid social security number
2 = assigned identification number

COMMENTS: Present in EIS and DIS but with additional code of 1 and 3 which also mean the same as blank.

RELATED TO: Identification Number

GLOSSARY:

SYSTEMS: TSS,HGS,EIS,DIS

SYSNAME: IDT

DOCUMENTED: 1/10/77 Revised: 9/1/95

ELEMENT TITLE:

Race/Ethnicity

DEFINITION:

Categories used to describe groups to which individuals belong, identify with, or belong in the eyes of the community. The categories do not denote scientific definitions of anthropological origins. A person may be counted in only one group.

Resident aliens (holders of Form I-551/155), noncitizens who have been lawfully admitted for permanent residence are to be reported in the appropriate racial/ethnic categories along with United States citizens.

FORMAT:

numeric - 1 digit

CODES:

0 = Unknown
1 = African American (Black)
2 = Native American (Indian)
3 = Asian
4 = Hispanic
5 = White
6 = Foreign (in EDS 6 = All Other)
7 = All Other (in EDS 7 not used)

COMMENTS:

In EDS, citizenship is used to determine foreign employees.

RELATED TO:

Citizenship (EDS)

GLOSSARY:

UNKNOWN, BLACK, INDIAN, ASIAN, HISPANIC, WHITE, FOREIGN, ALL OTHER, NATIVE AMERICAN, AFRICAN AMERICAN

SYSTEMS:

EIS,TSS,HGS,DIS,EDS,AGGR,RTN

SYSNAME:

RACE

DOCUMENTED:

1/10/77 Revised: 4/20/92

ELEMENT TITLE:

Gender

DEFINITION:　　　The gender of student as recorded by the institution. Individuals missing this information must be assigned a gender.

FORMAT:　　　numeric - 1 digit

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

COMMENTS:　　　Students missing gender should be assigned evenly between codes 3 and 4 by the institution.

RELATED TO:

GLOSSARY:

SYSTEMS:　　　EIS,TSS,HGS,DIS,EDS,RTN,AGGR

SYSNAME:　　　SEX

DOCUMENTED:　　1/10/77 Revised:

MARYLAND HIGHER EDUCATION COMMISSION
DATA DICTIONARY

ELEMENT TITLE:

Birth Year

DEFINITION: An individual's year of birth (e.g. 1940) as designated on legal birth registration or certificate.

FORMAT: numeric - 4 digits - blank valid

CODES: blank = unknown

COMMENTS: collection year - birth year = individual's age

RELATED TO: Birth Year Qualifier (AGGR)

GLOSSARY:

SYSTEMS: EIS,TSS,EDS,RTN,AGGR

SYSNAME: BIRTHYR

DOCUMENTED: 1/10/77 Revised: 3/5/91

ELEMENT TITLE:

Degree Sought

DEFINITION: The student's most recent status in pursuing a formal award indicating either the level of degree being sought or non-degree seeking. This is the 2009 standard.

FORMAT: numeric - 2 digit

CODES:
- 00 = unknown
- 01 = private career school diploma/certificate undergraduate
- 10 = lower division certificate
- 20 = associate
- 30 = upper division certificate
- 40 = bachelors
- 47 = non-degree undergraduate
- 50 = post-baccalaureate certificate
- 60 = masters
- 70 = certificate of advanced study
- 81 = doctorate research/scholarship
- 85 = doctorate professional practice
- 86 = doctorate other
- 87 = non-degree graduate first-professional
- 90 = first-professional
- 95 = first-professional certificate
- 97 = non-degree first-professional
- 99 = multi-major (DIS only)

COMMENTS: This code used in degree sought varies between different MHEC reporting systems prior to 2009. Please review the system manual to determine correct coding or refer to DD30.1.

RELATED TO: Program Taxonomy code, together make up academic program code

GLOSSARY: FORMAL AWARD, NON-DEGREE SEEKING, DEGREE SEEKING, ASSOCIATE, BACHELORS, FIRST-PROFESSIONAL, LOWER DIVISION CERTIFICATE, UPPER DIVISION CERTIFICATE, POST-BACCALAUREATE CERTIFICATE, CERTIFICATE OF ADVANCED STUDY, DOCTORATE RESEARCH/SCHOLARSHIP, DOCTORATE PROFESSIONAL PRACTICE, DOCTORATE OTHER, PRIVATE CAREER SCHOOL/DIPLOMA/CERTIFICATE

SYSTEMS: EIS, DIS, FAIS, HGS,TSS

SYSNAME: DEGREE

DOCUMENTED: 1/10/77 Revised: 1/30/09

Comparison of the degree sought field coding up to the 2009 collection which is prior to the 2010 revisions starting in 2009.

Degree Sought	OLD EIS from inst. prior 09	OLD DIS from inst. prior 09	TSS and HGS from inst. unchanged	NEW for all starting in 2009
Unknown	00	00	00	00
Lower Division Certificate	01	01	10	10
Associate	02	02	20	20
Upper Division Certificate	07	07	30	30
Bachelors	03	03	40	40
Non-Degree undergrad	10	n/a	47	47
Post-Baccalaureate Certificate	08	08	50	50
Masters	04	04	60	60
Certificate of Advance Study	12	09	n/a	70
Doctorate (OLD single category)	05	05	n/a	n/a
Doctorate (research and scholarship)	n/a	n/a	n/a	81
Doctorate (professional practice)	n/a	n/a	n/a	85
Doctorate (other)	n/a	n/a	n/a	86
Non-degree graduate	11	n/a	n/a	87
First-Professional	06	06	n/a	n/a
First-Professional Certificate	09	10	n/a	n/a
Non-degree first-professional	n/a	n/a	n/a	n/a
Multiple majors	n/a	99	n/a	99

ELEMENT TITLE:

Program Taxonomy

DEFINITION: The MHEC taxonomy for the most recent instructional program area of the student.

FORMAT: alphanumeric - 8 digits

CODES: published periodically in the Academic Programs at Maryland Colleges and Universities or contact MHEC for current listing

909901-- = undeclared, undecided or unknown

COMMENTS: Special reporting category exemptions to the academic program code inventory may be granted in writing by MHEC.

The taxonomy is based upon the HEGIS classification system with Maryland's unique alterations.

First two digits are called the major discipline (MAJORDS). The first four digits are called the discipline (DISCPLN).

The program taxonomy code is 8 characters. Older systems (such as EIS and DIS) use only the first 6 characters. This is possible since the last two (positions 7 and 8 of code) are currently always blank and are for future expansion.

RELATED TO: Degree Sought, together make up the academic program code

GLOSSARY:

SYSTEMS: EIS,TSS,HGS,DIS,RTN,PINV,IPINV,EDS,AGGR

SYSNAME: PROGRAM

DOCUMENTED: 5/7/80 Revised: 3/31/95

Program Taxonomy

Major Disciplines
  Disciplines

SECTION I - *Conventional Academic Subdivisions of Knowledge and Training*

Code starts with

01   AGRICULTURE and NATURAL RESOURCES
        0101   AGRICULTURE, GENERAL
        0102   AGRONOMY
        0103   SOILS SCIENCE
        0104   ANIMAL SCIENCE
        0105   DAIRY SCIENCE
        0106   POULTRY SCIENCE
        0107   FISH, GAME, AND WILDLIFE MANAGEMENT
        0108   HORTICULTURE
        0109   ORNAMENTAL HORTICULTURE
        0110   AGRICULTURAL AND FARM MANAGEMENT
        0111   AGRICULTURAL ECONOMICS
        0112   AGRICULTURAL BUSINESS
        0113   FOOD SCIENCE AND TECHNOLOGY
        0114   FORESTRY
        0115   NATURAL RESOURCES MANAGEMENT
        0116   AGRICULTURE AND FORESTRY TECHNOLOGIES
        0117   RANGE MANAGEMENT
        0199   OTHER, AGRICULTURE AND NATURAL SCIENCES
02   ARCHITECTURE and ENVIRONMENTAL DESIGN
        0201   ENVIRONMENTAL DESIGN, GENERAL
        0202   ARCHITECTURE
        0203   INTERIOR DESIGN
        0204   LANDSCAPE ARCHITECTURE
        0205   URBAN ARCHITECTURE
        0206   CITY, COMMUNITY, AND REGIONAL PLANNING
        0299   OTHER, ARCHITECTURE AND ENVIRONMENTAL DESIGN
03   AREA STUDIES
        0301   ASIAN STUDIES, GENERAL
        0302   EAST ASIAN STUDIES
        0303   SOUTH ASIAN STUDIES
        0304   SOUTHEAST ASIAN STUDIES
        0305   AFRICAN STUDIES
        0306   ISLAMIC STUDIES
        0307   RUSSIAN AND SLAVIC STUDIES
        0308   LATIN AMERICAN STUDIES
        0309   MIDDLE EASTERN STUDIES
        0310   EUROPEAN STUDIES, GENERAL
        0311   EASTERN EUROPEAN STUDIES
        0312   WEST EUROPEAN STUDIES
        0313   AMERICAN STUDIES

0314 PACIFIC AREA STUDIES
0399 OTHER, AREA STUDIES
04 BIOLOGICAL SCIENCES
0401 BIOLOGY, GENERAL
0402 BOTANY, GENERAL
0403 BACTERIOLOGY
0404 PLANT PATHOLOGY
0405 PLANT PHARMACOLOGY
0406 PLANT PHYSIOLOGY
0407 ZOOLOGY, GENERAL
0408 PATHOLOGY, HUMAN AND ANIMAL
0409 PHARMACOLOGY, HUMAN AND ANIMAL
0410 PHYSIOLOGY, HUMAN AND ANIMAL
0411 MICROBIOLOGY
0412 ANATOMY
0413 HISTOLOGY
0414 BIOCHEMISTRY
0415 BIOPHYSICS
0416 MOLECULAR BIOLOGY
0417 CELL BIOLOGY
0418 MARINE BIOLOGY
0419 BIOMETRICS AND BIOSTATISTICS
0420 ECOLOGY
0421 ENTOMOLOGY
0422 GENETICS
0423 RADIOBIOLOGY
0424 NUTRITION, SCIENTIFIC
0425 NEUROSCIENCES
0426 TOXICOLOGY
0427 EMBRYOLOGY
0499 OTHER, BIOLOGICAL SCIENCES
05 BUSINESS and MANAGEMENT
0501 BUSINESS AND COMMERCE, GENERAL
0502 ACCOUNTING
0503 BUSINESS STATISTICS
0504 BANKING AND FINANCE
0505 INVESTMENTS AND SECURITIES
0506 BUSINESS MANAGEMENT AND ADMINISTRATION
0507 OPERATIONS RESEARCH
0508 HOTEL AND RESTAURANT MANAGEMENT
0509 MARKETING AND PURCHASING
0510 TRANSPORTATION AND PUBLIC UTILITIES
0511 REAL ESTATE
0512 INSURANCE
0513 INTERNATIONAL BUSINESS
0514 SECRETARIAL STUDIES
0515 PERSONNEL MANAGEMENT

0516 LABOR AND INDUSTRIAL RELATIONS
0517 BUSINESS ECONOMICS
0599 OTHER, BUSINESS AND MANAGEMENT
06 COMMUNICATIONS
0601 COMMUNICATIONS, GENERAL
0602 JOURNALISM
0603 RADIO.TELEVISION
0604 ADVERTISING
0605 COMMUNICATION MEDIA
0699 OTHER, COMMUNICATIONS
07 COMPUTER and INFORMATION SCIENCES
0701 COMPUTER AND INFORMATION SCIENCES, GENERAL
0702 INFORMATION SCIENCES AND SYSTEMS
0703 DATA PROCESSING
0704 COMPUTER PROGRAMMING
0705 SYSTEMS ANALYSIS
0799 OTHER, COMPUTER AND INFORMATION SYSTEMS
08 EDUCATION
0801 EDUCATION, GENERAL
0802 ELEMENTARY EDUCATION, GENERAL
0803 SECONDARY EDUCATION, GENERAL
0804 JUNIOR HIGH SCHOOL EDUCATION
0805 HIGHER EDUCATION, GENERAL
0806 JUNIOR AND COMMUNITY COLLEGE EDUCATION
0807 ADULT AND CONTINUING EDUCATION
0808 SPECIAL EDUCATION, GENERAL
0809 ADMINISTRATION OF SPECIAL EDUCATION
0810 EDUCATION OF THE MENTALLY RETARDED
0811 EDUCATION OF THE GIFTED
0812 EDUCATION OF THE DEAF
0813 EDUCATION OF THE CULTURALLY DISADVANTAGED
0814 EDUCATION OF THE VISUALLY HANDICAPPED
0815 SPEECH CORRECTION
0816 EDUCATION OF THE EMOTIONALLY DISTURBED
0817 REMEDIAL EDUCATION
0818 SPECIAL LEARNING DISABILITIES
0819 EDUCATION OF THE PHYSICALLY HANDICAPPED
0820 EDUCATION OF THE MULTIPLE HANDICAPPED
0821 SOCIAL FOUNDATIONS
0822 EDUCATIONAL PSYCHOLOGY
0823 PRE-ELEMENTARY EDUCATION
0824 EDUCATIONAL STATISTICS AND RESEARCH
0825 EDUCATIONAL TESTING, EVAL AND MEASUREMENT
0826 STUDENT PERSONNEL
0827 EDUCATIONAL ADMINISTRATION
0828 EDUCATIONAL SUPERVISION
0829 CURRICULUM AND INSTRUCTION

0830 READING EDUCATION
0831 ART EDUCATION
0832 MUSIC EDUCATION
0833 MATHEMATICS EDUCATION
0834 SCIENCE EDUCATION
0835 PHYSICAL EDUCATION
0836 DRIVER AND SAFETY EDUCATION
0837 HEALTH EDUCATION
0838 BUSINESS, COMMERCE, AND DISTRIBUTIVE EDUC
0839 INDUSTRIAL ARTS, VOCATIONAL, AND TECH EDUC
0899 OTHER, EDUCATION

09   ENGINEERING
0901 ENGINEERING, GENERAL
0902 AEROSPACE, AERONAUTICAL AND ASTRONAUT ENG
0903 AGRICULTURAL ENGINEERING
0904 ARCHITECTURAL ENGINEERING
0905 BIOENGINEERING AND BIOMEDICAL ENGINEERING
0906 CHEMICAL ENGINEERING
0907 PETROLEUM ENGINEERING
0908 CIVIL, CONSTRUCTION, AND TRANSPORTATION ENG
0909 ELECTRICAL, ELECTRONICS,AND COMMUNICATIONS
0910 MECHANICAL ENGINEERING
0911 GEOLOGICAL ENGINEERING
0912 GEOPHYSICAL ENGINEERING
0913 INDUSTRIAL AND MANAGEMENT ENGINEERING
0914 METALLURGICAL ENGINEERING
0915 MATERIALS ENGINEERING
0916 CERAMIC ENGINEERING
0917 TEXTILE ENGINEERING
0918 MINING AND MINERAL ENGINEERING
0919 ENGINEERING PHYSICS
0920 NUCLEAR ENGINEERING
0921 ENGINEERING MECHANICS
0922 ENVIRONMENTAL AND SANITARY ENGINEERING
0923 NAVAL ARCHITECTURE AND MARINE ENGINEERING
0924 OCEAN ENGINEERING
0925 ENGINEERING TECHNOLOGIES
0999 OTHER, ENGINEERING

10   FINE and APPLIED ARTS
1001 FINE ARTS, GENERAL
1002 ART
1003 ART HISTORY AND APPRECIATION
1004 MUSIC PERFORMING AND COMPOSITION
1005 MUSIC ARTS
1006 MUSIC HISTORY AND APPRECIATION
1007 DRAMATIC ARTS
1008 DANCE

         1009 APPLIED DESIGN
         1010 CINEMATOGRAPHY
         1011 PHOTOGRAPHY
         1099 OTHER, FINE AND APPLIED ARTS
11   FOREIGN LANGUAGES
         1101 FOREIGN LANGUAGES, GENERAL
         1102 FRENCH
         1103 GERMAN
         1104 ITALIAN
         1105 SPANISH
         1106 RUSSIAN
         1107 CHINESE
         1108 JAPANESE
         1109 LATIN
         1110 GREEK, CLASSICAL
         1111 HEBREW
         1112 ARABIC
         1113 INDIAN (ASIATIC)
         1114 SCANDINAVIAN LANGUAGES
         1115 SLAVIC LANGUAGES
         1116 AFRICAN LANGUAGES
         1199 OTHER, FOREIGN LANGUAGES
12   HEALTH PROFESSIONS
         1201 HEALTH PROFESSIONS, GENERAL
         1202 HOSPITAL AND HEALTH CARE ADMINISTRATION
         1203 NURSING
         1204 DENTISTRY, DDS OR DMD DEGREE
         1205 DENTAL SPECIALTIES
         1206 MEDICINE, MD DEGREE
         1207 MEDICAL SPECIALTIES
         1208 OCCUPATIONAL THERAPY
         1209 OPTOMETRY
         1210 OSTEOPATHIC MEDICINE, DO DEGREE
         1211 PHARMACY
         1212 PHYSICAL THERAPY
         1213 DENTAL HYGIENE
         1214 PUBLIC HEALTH
         1215 MEDICAL RECORD LIBRARIANSHIP
         1216 PODIATRY OR PODIATRIC MEDICINE
         1217 BIOMEDICAL COMMUNICATION
         1218 VETERINARY MEDICINE
         1219 VETERINARY MEDICINE SPECIALTIES
         1220 SPEECH PATHOLOGY AND AUDIOLOGY
         1221 CHIROPRACTIC
         1222 CLINICAL SOCIAL WORK
         1223 MEDICAL LABORATORY TECHNOLOGIES
         1224 DENTAL TECHNOLOGIES

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        1225  RADIOLOGIC TECHNOLOGIES
        1299  OTHER, HEALTH PROFESSIONS
13      HOME ECONOMICS
        1301  HOME ECONOMICS, GENERAL
        1302  HOME DECORATION AND HOME EQUIPMENT
        1303  CLOTHING AND TEXTILE
        1304  CONSUMER ECONOMICS AND HOME MANAGEMENT
        1305  FAMILY RELATIONS AND CHILD DEVELOPMENT
        1306  FOODS AND NUTRITION
        1307  INSTITUTIONAL MANAGEMENT AND CAFETERIA MGT
        1399  OTHER, HOME ECONOMICS
14      LAW
        1401  LAW, GENERAL
        1499  OTHER, LAW
15      LETTERS
        1501  ENGLISH, GENERAL
        1502  LITERATURE, ENGLISH
        1503  COMPARATIVE LITERATURE
        1504  CLASSICS
        1505  LINGUISTICS
        1506  SPEECH, DEBATE, AND FORENSIC SCIENCE
        1507  CREATIVE WRITING
        1508  TEACHING ENGLISH AS FOREIGN LANGUAGE
        1509  PHILOSOPHY
        1510  RELIGIOUS STUDIES
        1599  OTHER, LETTERS
16      LIBRARY SCIENCE
        1601  LIBRARY SCIENCE, GENERAL
        1699  OTHER, LIBRARY SCIENCE
17      MATHEMATICS
        1701  MATHEMATICS, GENERAL
        1702  STATISTICS, MATHEMATICAL AND THEORETICAL
        1703  APPLIED MATHEMATICS
        1799  OTHER, MATHEMATICS
18      MILITARY SCIENCES
        1801  MILITARY SCIENCE
        1802  NAVAL SCIENCE
        1803  AEROSPACE SCIENCE
        1899  OTHER, MILITARY SCIENCE
19      PHYSICAL SCIENCES
        1901  PHYSICAL SCIENCES, GENERAL
        1902  PHYSICS, GENERAL
        1903  MOLECULAR PHYSICS
        1904  NUCLEAR PHYSICS
        1905  CHEMISTRY, GENERAL
        1906  INORGANIC CHEMISTRY
        1907  ORGANIC CHEMISTRY
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1908 PHYSICAL CHEMISTRY
1909 ANALYTICAL CHEMISTRY
1910 PHARMACEUTICAL CHEMISTRY
1911 ASTRONOMY
1912 ASTROPHYSICS
1913 ATMOSPHERIC SCIENCES AND METEOROLOGY
1914 GEOLOGY
1915 GEOCHEMISTRY
1916 GEOPHYSICS AND SEISMOLOGY
1917 EARTH SCIENCES, GENERAL
1918 PALEONTOLOGY
1919 OCEANOGRAPHY
1920 METALLURGY
1999 OTHER, PHYSICAL SCIENCES

20 PSYCHOLOGY
2001 PSYCHOLOGY, GENERAL
2002 EXPERIMENTAL PSYCHOLOGY
2003 CLINICAL PSYCHOLOGY
2004 PSYCHOLOGY FOR COUNSELING
2005 SOCIAL PSYCHOLOGY
2006 PSYCHOMETRICS
2007 STATISTICS IN PSYCHOLOGY
2008 INDUSTRIAL PSYCHOLOGY
2009 DEVELOPMENTAL PSYCHOLOGY
2010 PHYSIOLOGICAL PSYCHOLOGY
2099 OTHER, PSYCHOLOGY

21 PUBLIC AFFAIRS and SERVICES
2101 COMMUNITY SERVICES, GENERAL
2012 PUBLIC ADMINISTRATION
2103 PARKS AND RECREATION MANAGEMENT
2104 SOCIAL WORK AND HELPING SERVICES
2105 LAW ENFORCEMENT AND CORRECTIONS
2106 INTERNATIONAL PUBLIC SERVICE
2199 OTHER, PUBLIC AFFAIRS AND SERVICES

22 SOCIAL SCIENCES
2201 SOCIAL SCIENCES, GENERAL
2202 ANTHROPOLOGY
2203 ARCHAEOLOGY
2204 ECONOMICS
2205 HISTORY
2206 GEOGRAPHY
2207 POLITICAL SCIENCE AND GOVERNMENT
2208 SOCIOLOGY
2209 CRIMINOLOGY
2210 INTERNATIONAL RELATIONS
2211 AFRO-AMERICAN STUDIES
2212 AMERICAN INDIAN CULTURAL STUDIES

2213 MEXICAN-AMERICAN CULTURAL STUDIES
2214 URBAN STUDIES
2215 DEMOGRAPHY
2299 OTHER, SOCIAL SCIENCES

23 THEOLOGY
2301 THEOLOGICAL PROFESSIONS, GENERAL
2302 RELIGIOUS MUSIC
2304 RELIGIOUS EDUCATION
2399 OTHER, THEOLOGY

49 INTERDISCIPLINARY STUDIES and COMMUNITY COLLEGE TRANSFER PROGRAMS
4901 GENERAL LIBERAL ARTS AND SCIENCES
4902 BIOLOGICAL AND PHYSICAL SCIENCES
4903 HUMANITIES AND SOCIAL SCIENCES
4904 ENGINEERING AND OTHER DISCIPLINES
4910 ARTS AND SCIENCES TRANSFER
4920 BIOLOGICAL SCIENCES TRANSFER
4930 HUMANITIES AND SOCIAL SCIENCE TRANSFER
4940 ENGINEERING TRANSFER
4950 GENERAL STUDIES TRANSFER
4960 TEACHER EDUCATION TRANSFER
4970 BUSINESS ADMINISTRATION TRANSFER
4980 COMPUTER SCIENCE TRANSFER
4999 OTHER, INTERDISCIPLINARY/TRANSFER STUDIES

SECTION II -Technological and Occupational Specialties Related to Curriculums
Leading to Associate Degrees and Lower Division Certificates

Code starts with

50   BUSINESS and COMMERCE TECHNOLOGIES
    5001   BUSINESS AND COMMERCE TECHNOLOGIES, GENERAL
    5002   ACCOUNTING TECHNOLOGIES
    5003   BANKING AND FINANCE TECHNOLOGIES
    5004   MARKETING, DISTRIB, PURCH, BUSINESS TECH
    5005   SECRETARIAL TECHNOLOGIES
    5006   PERSONAL SERVICE TECHNOLOGIES
    5007   PHOTOGRAPHY TECHNOLOGIES
    5008   COMMUNICATIONS AND BROADCASTING TECHNOLOGIES
    5009   PRINTING AND LITHOGRAPHY TECHNOLOGIES
    5010   HOTEL AND RESTAURANT MANAGEMENT TECHNOLOGIES
    5011   TRANSPORTATION AND PUBLIC UTIL TECHNOLOGIES
    5012   APPLIED ARTS, GRAPHIC ARTS, FINE ARTS TECH
    5099   OTHER, BUSINESS AND COMMERCE TECHNOLOGIES

51   DATA PROCESSING TECHNOLOGIES
    5101   DATA PROCESSING TECHNOLOGIES, GENERAL
    5102   KEY PUNCH OPERATOR AND OTHER INPUT PREP
    5103   COMPUTER PROGRAMMER TECHNOLOGIES
    5104   COMPUTER OPERATOR AND PERIPHERAL EQUIPMENT
    5105   DATA PROCESSING EQUIPMENT MAINTENANCE
    5199   OTHER, DATA PROCESSING TECHNOLOGIES

52   HEALTH SERVICES and PARAMEDICAL TECHNOLOGIES
    5201   HEALTH SERVICES ASSISTANT
    5202   DENTAL ASSISTANT TECHNOLOGIES
    5203   DENTAL HYGIENE TECHNOLOGIES
    5204   DENTAL LABORATORY TECHNOLOGIES
    5205   MEDICAL OR BIOLOGICAL LABORATORY ASSISTANCE
    5206   ANIMAL LABORATORY ASSISTANT TECHNOLOGIES
    5207   RADIOLOGIC TECHNOLOGIES
    5208   NURSING, RN
    5209   NURSING, PRACTICAL
    5210   OCCUPATIONAL THERAPY TECHNOLOGIES
    5211   SURGICAL TECHNOLOGIES
    5212   OPTICAL TECHNOLOGIES
    5213   MEDICAL RECORD TECHNOLOGIES
    5214   MEDICAL ASSISTANT AND MEDICAL OFFICE ASSIST
    5215   INHALATION THERAPY TECHNOLOGIES
    5216   PSYCHIATRIC TECHNOLOGIES
    5217   ELECTRO DIAGNOSTIC TECHNOLOGIES
    5218   INSTITUTIONAL MGT TECH, (REST HOME, ETC)
    5219   PHYSICAL THERAPY TECHNOLOGIES
    5299   OTHER, HEALTH SERVICES AND PARAMEDICAL TECH

53   MECHANICAL and ENGINEERING TECHNOLOGIES
     5301 MECHANICAL AND ENGINEERING TECH, GENERAL
     5302 AERONAUTICAL AND AVIATION TECHNOLOGIES
     5303 ENGINEERING GRAPHICS
     5304 ARCHITECTURAL DRAFTING TECHNOLOGIES
     5305 CHEMICAL TECHNOLOGIES
     5306 AUTOMOTIVE TECHNOLOGIES
     5307 DIESEL TECHNOLOGIES
     5308 WELDING TECHNOLOGIES
     5309 CIVIL TECHNOLOGIES
     5310 ELECTRONICS AND MACHINE TECHNOLOGIES
     5311 ELECTROMECHANICAL TECHNOLOGIES
     5312 INDUSTRIAL TECHNOLOGIES
     5313 TEXTILE TECHNOLOGIES
     5314 INSTRUMENTATION TECHNOLOGIES
     5315 MECHANICAL TECHNOLOGIES
     5316 NUCLEAR TECHNOLOGIES
     5317 CONSTRUCTION AND BUILDING TECHNOLOGIES
     5399 OTHER, MECHANICAL AND ENGINEERING TECH

54   NATURAL SCIENCE TECHNOLOGIES
     5401 NATURAL SCIENCE TECHNOLOGIES, GENERAL
     5402 AGRICULTURE TECHNOLOGIES
     5403 FORESTRY AND WILDLIFE TECHNOLOGIES
     5404 FOOD SERVICES TECHNOLOGIES
     5405 HOME ECONOMICS TECHNOLOGIES
     5406 MARINE AND OCEANOGRAPHIC TECHNOLOGIES
     5407 LABORATORY TECHNOLOGIES, GENERAL
     5408 SANITATION AND PUB HEALTH INSPECTION TECH
     5499 OTHER, NATURAL SCIENCE TECHNOLOGIES

55   PUBLIC SERVICE RELATED TECHNOLOGIES
     5501 PUBLIC SERVICE TECHNOLOGIES, GENERAL
     5502 BIBLE STUDY OR RELIGION-RELATED OCCUPATIONS
     5503 EDUCATION TECHNOLOGIES
     5504 LIBRARY ASSISTANT TECHNOLOGIES
     5505 POLICE, LAW ENFORCEMENT, CORRECTIONS TECH
     5506 RECREATION AND SOCIAL WORK RELATED TECH
     5507 FIRE CONTROL TECHNOLOGY
     5508 PUBLIC ADMINISTRATION AND MANAGEMENT TECH
     5599 OTHER, PUBLIC SERVICE RELATED TECHNOLOGIES

56   DIRECTED TECHNOLOGY
     5601 DIRECTED TECHNOLOGY

SECTION III - *Miscellaneous*

Code starts with

90   UNDECLARED, UNDECIDED, OR UNKNOWN
     9099 UNDECIDED, UNDECLARED, UNKNOWN

ELEMENT TITLE:

Spring Credit Hours Earned

DEFINITION: The number of credit hours completed during the spring semester of the collection period at a grade level satisfactory for degree requirements.

FORMAT: numeric - 3 digits - implied decimal 99V9

CODES:

COMMENTS: In the TSS, this is for the spring of the reporting year. Only the first time (first year) a transfer entrant is reported can this data be used with cumulative native credit hours earned to provide spring/fall semester breakdown.

RELATED TO: Spring Credit Hours Attempted

GLOSSARY: CREDIT HOURS

SYSTEMS: TSS

SYSNAME: SCRHRE

DOCUMENTED: 3/5/91 Revised: 6/23/92

ELEMENT TITLE:

Cumulative Native Credit Hours Earned

DEFINITION: The current number of credit hours completed in credit courses at the
reporting institution (excluding transfer credits) as of the collection
period at a grade level satisfactory for degree requirements.

FORMAT: numeric - 4 digits - implied decimal 999V9

CODES: minimum value zero

COMMENTS: These are only those credit hours earned at reporting institution.
Transfer credit hours, regardless of their status, should not be included.
Remedial courses should not be included.

RELATED TO: Fall Credit Hours Attempted, Fall Student Level, First-Time Flag

GLOSSARY: CREDIT HOURS, CREDIT COURSE

SYSTEMS: TSS,HGS

SYSNAME: CNCRHRE

DOCUMENTED: 6/3/91 Revised: 4/10/92

MARYLAND HIGHER EDUCATION COMMISSION
DATA DICTIONARY

ELEMENT TITLE:

Cumulative Grade Point Average

DEFINITION: The student's grade point average (as defined by the institution) as of the end of the collection period.

FORMAT: numeric - 3 digits - implied decimal 9V99, blank valid

CODES: blank = not applicable

COMMENTS: Based upon a four-point system. Cumulative Grade Point Average is blank when the student has none available (e.g. taken only remedial courses, taken only pass/fail courses, had all incompletes, exclusively auditors or withdrawn from all courses). If the field is zero-filled, this is interpreted to mean the student has a zero cumulative GPA (i.e. failed all courses attempted).

RELATED TO: Cumulative Native Credit Hours Earned

GLOSSARY:

SYSTEMS: TSS,HGS

SYSNAME: CUMGPA

DOCUMENTED: 3/5/91 Revised: 5/01/93

ELEMENT TITLE:

Bachelor's Graduation Year

DEFINITION: The calendar year used to indicate when a student has graduated from a 4-year institution and received a Bachelor's degree.

FORMAT: numeric - 4 digits, blanks valid

CODES: 4 digit year = graduation calendar year
blank = not graduated

COMMENTS:

RELATED TO:

GLOSSARY:

SYSTEMS: TSS

SYSNAME: BACHYR

DOCUMENTED: 8/20/91 Revised:

ELEMENT TITLE:

Transfer Student Entrant Year

DEFINITION: The calendar year when a transfer student was admitted as an entrant to the 4-year institution.

FORMAT: numeric - 4 digits

CODES: 4 digit year

COMMENTS:

RELATED TO: Transfer Student Entrant Semester

GLOSSARY:

SYSTEMS: TSS

SYSNAME: TENTERYR

DOCUMENTED: 8/9/91 Revised:

ELEMENT TITLE:

Transfer Student Entrant Semester

DEFINITION: The semester when a transfer student was admitted as an entrant to the 4-year institution.

FORMAT: numeric - 1 digit

CODES: blank = unknown
1 = summer (preceding fall associated with fall in same academic year)
2 = fall
3 = spring

COMMENTS:

RELATED TO: Transfer Student Entrant Year

GLOSSARY:

SYSTEMS: TSS

SYSNAME: TENTERSM

DOCUMENTED: 8/20/91 Revised: _

Appendix B

Glossary

For definitions of terms please refer to the Maryland Annual Data Collection Glossary available online at   http://data.mhec.state.md.us/macinfo/glossary.pdf

Appendix C
Tape Submission Form

MARYLAND HIGHER EDUCATION COMMISSION

INSTITUTIONAL CERTIFICATION AND SPECIFICATION FORM FOR AUTOMATED SUBMISSION

INSTRUCTIONS - The institution should complete this form and forward to either the Commission or your segmental coordinator. It is important that all information be completed and this form accompany the file to insure accurate transfer of data.

SUBMISSION DATE ____ / ____ / ____   FOR INSTITUTION _____

CERTIFICATION

Attached is the file submission for the system indicated below in the standard MHEC record format and prepared in accordance with MHEC instructions and data definitions.

Name _____

Title _____

Phone _____

I certify that the information submitted on this file is correct and true to the best of my knowledge

Signature _____

System Submitted (check only one and supply all information)

	Freeze Date[1]	Number of Records on File
___ Enrollment Information System (EIS)	___ / ___ / ___	_____ students
___ Degree Information System (DIS)	N/A	_____ students
___ Employee Data System (EDS)	___ / ___ / ___	_____ employees
___ High School Graduate System (HGS)	N/A	_____ students
___ Transfer Student System (TSS)	N/A	_____ students
___ Workforce Data System (WDS) (for community colleges: credit ___ and/or non-credit ___)	N/A	_____ students

[1]Freeze Date is the "as of" for the data on file

FILE SPECIFICATION

Type of Software and computer used: _____

Circle appropriate specifications for file transfer:

Options	Character Format	File Format	File Transmittal
Preferred	ASCII	Text*	Diskette **or** Email Attachment (should be zipped and passworded)
Other		Access (WDS only) Excel (WDS only)	

*text is fixed format, non-delimited, MS-DOS file

Circle appropriate specifications for open reel tape, if using:

Options	Label on Tape	Character Format	Tape Format	Density	Record Size (characters)	Block Size (physical length in characters)
Preferred	Unlabeled	ASCII	9-track	6250 BPI	100	100
Other Options	ANSI IBM	EBCDIC		1600 BPI	Other, Specify	1000, 4000 Other, Specify

INSTRUCTIONS

In order to allow institutions flexibility to submit files in different formats, the use of this form allows for an accurate and complete transfer of information to the Commission. The use of this form eliminates missing or incorrect specifications that cause both confusion and extra work. It also reduces the possibility of loss of data or misinterpretation.

A cover letter in lieu of this certification form can be used as an alternative. If you email your file this certification is still required. Please be sure to include all of the information contained on this form.

SPECIAL PUBLIC SEGMENT COORDINATOR INSTRUCTIONS

The UMS can submit certifications by either the institutions or the segment. The freeze date for enrollment and employee submissions (day when snapshot of students or employees was taken to create the file) must be included for each institution.

Each institution (or organizational) reporting unit must be in a separate physical file. In the past, we have had problems in trying to separate the institution from one large file due to bad institution coding or file specifications.

MHEC90CS (revised 8/01)