

Functional Requirements
2013
Minnesota Graduation Rates

Four-Year Graduation Rate for the Class of 2013

Five-year Graduation Rate for the Class of 2012

Six-Year Graduation Rate for the Class of 2011

Overview

This document describes the graduation rate calculations using the Exclusion-Adjusted Cohort Graduation Indicator (EACGI) methodology as applied in Minnesota. There are three calculations: The first results in the Four-Year Graduation Rate, the second results in the Five-Year Graduation Rate, and the third results in the Six-Year Graduation Rate. The calculations use data from the Minnesota Automated Reporting Student System (MARSS) and other Minnesota Department of Education sources.

The calculations are dependent on the last reported enrollment record for each student and the corresponding ending status of the record. To determine the final ending status for each student, the MARSS Status End Code is used. A complete listing of these codes and their definitions is found in Appendix A – MARSS Status End Codes.

Additionally, the MARSS State Aid Category (reflecting why the student is attending) is part of the selection process. For example, students who are primarily enrolled in a nonpublic school, but attend a public school for specific class are not included in the calculations. A complete listing of these codes and their definitions is found in Appendix B – MARSS State Aid Categories.

High school rates are determined using the school last reporting the student in the state. District rates are determined using the district last reporting the student in the state. District rates are computed separately from the school rates and are not simply an average of the school rates within the district. **Beginning in 2013 (and recalculated for the district rates from 2003 through 2012), school classifications 70 through 79 (the care/treatment/correctional facilities) are not included in the district rates.**

High schools and districts that have at least one senior enrolled over October 1 during the school year are assigned a graduation rate as long as they have **10 or more students** in the cohort.

For public downloadable files and documents:

Choose 'Student' under Student Data – then select 'Graduation Rate' as the category

<http://education.state.mn.us/MDEAnalytics/Data.jsp>

For secure reports:

Choose 'Graduation Rate Roster Download' under MDE Secure Reports

<http://education.state.mn.us/MDEAnalytics/Data.jsp>

Other references to graduation rate computations can be found at:

User's Guide to Computing High School Graduation Rates, Volume 1: Review of Current and Proposed Graduation Indicators <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2006604>

User's Guide to Computing High School Graduation Rates, Volume 2: Technical Evaluation of Proxy Graduation Indicators <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2006605>

No Child Left Behind - High School Graduation Rate

Non-Regulatory Guidance December 22, 2008

<http://www.ed.gov/policy/elsec/guid/hsgrguidance.pdf>

No Child Left Behind Act of 2001

<http://www.ed.gov/policy/elsec/leg/esea02/107-110.pdf>

Four-Year Graduation Rate

Summary

The Four-Year Graduation Rate is a four-year, on-time graduation rate based on a cohort of first time ninth grade students plus transfers into the cohort within the four year period minus transfers out of the cohort within the four year period. This rate is similar to, but not the same as, the National Governors Association (NGA) Graduation Rate. The NGA Rate allows more time for Special Education students and recent immigrants to graduate.

Student Record Selection

A. Initial selection of records

To construct the cohort, specific MARSS records are first selected which will comprise the universe of all possible records that need to be evaluated. When creating the universe of records, some records are excluded (such as records in error or where the student is attending elsewhere but still reported in the MARSS system).

Initially, the computation selects all student records from MARSS End of Year data reported in Grades 9, 10, 11 or 12.

Exclude from this selection those records where:

- MARSS Status = 1 (the record is in error)
- School Classification = 45 (the student attends elsewhere)
- State Aid Category = 14, 16, 17, 18, 28, 46, 52 (the student attends elsewhere)
- State Aid Category = 25 (only found prior to 2004 designating adult students)
- State Aid Category = 98 (students from the prior year who are designated as summer graduates, summer dropouts or summer transfers). These records are excluded in this initial selection since the reported grade during the summer may not be part of the cohort.

A complete list of State Aid Categories can be found in Appendix B: MARSS State Aid Category Definitions.

B. Setting the Cohort Graduation Year

To ensure a student is included in only one cohort, the computation evaluates all enrollment records for students reported at any time since the 1996/1997 school year in grades 9, 10, 11 or 12. The earliest year the student was reported in one of these grades is recorded as the 'Earliest Year Served'. Then the grade of the student for that year is recorded as the 'Earliest Grade Served'. For students who were served in two grades in a single year, the lower grade is used.

The Cohort Graduation Year is then set by evaluating the 'Earliest Year Served' compared to the 'Earliest Grade Served'. Student records with the 'Earliest Grade Served' as Grade 9 are

expected to graduate within 4 years; students in Grade 10 within 3 years, students in Grade 11 within 2 years and students in Grade 12 within 1 year.

From this set of data, each student belongs to a single cohort expecting to graduate in a specific year. For each Graduation Rate calculation, only those student records belonging to a specific Cohort Graduation Year are used.

For example, the Four-Year Graduation Rate for 2010 used:

- 69,938 students first served in Grade 9 in the 2006/2007 school year,
- 2599 students first served in Grade 10 in the 2007/2008 school year,
- 2359 students first served in Grade 11 in the 2008/2009 school year and
- 1860 students first served in Grade 12 in 2009/2010 school year.

C. Creating the full enrollment history for students represented in the cohort

All MARSS enrollment records are then collected for any student in the specific Cohort Graduation Year. The full enrollment history for the student is needed to determine the ending result for the student. For example: when a student is promoted from grade 9 to grade 10 at the semester, the grade 10 record is needed to complete the full enrollment history for the student. In this selection process, summer graduate, dropout and transfer records (State Aid Category 98) are included for the students in the cohort.

When matching student records, two enrollment records are considered from the same student when the records share the same State Student Identification number (SSID). In most cases the SSID is the same as the MARSS number. In some cases, the MARSS number or student identifiers may have changed for a single student over time. Use of the SSID enables these records representing the same student to be linked together. Use of the SSID also prevents linking records where a single MARSS number was inadvertently assigned to two different students.

In rare instances, some students in the cohort may not have a valid SSID. To collect the full enrollment history for these students, the MARSS number is used with additional checks against the student identifiers.

Create the full enrollment history by collecting:

- Any grade 06-12 MARSS enrollment record with a matching SSID represented in the initial selection for the Cohort Graduation Year being computed
- For those without a valid SSID, collect any grade 6-12 MARSS enrollment record with a matching MARSS number.

Exclude from this selection those records where:

- MARSS Status = 1 (the record is in error)
- School Classification = 45 (the student attends elsewhere)
- State Aid Category = 14, 16, 17, 18, 28, 46, 52 (the student attends elsewhere)
- State Aid Category = 25 (only found prior to 2004 designating adult students)

D. Additional records from the following summer - Graduates

The Four-Year Graduation Rate also allows for graduate records from the following summer to be included for students in this existing cohort. This data is reported the following year and is found in the MARSS Fall submission. Since districts may report these summer graduates at any time during the year, the records are limited to those with status end dates on or before September 15 to ensure service was only provided during the summer.

Add to the group any matching student record from the following summer found in the MARSS Fall submission where:

- Status Begin Date is on or after June 1 of Year 4
- Status End Date between June 1 and September 15 of Year 4
- Status End Code = 08 (Graduate)

Exclude from this selection those records where:

- MARSS Status = 1 (record in error)
- School Classification = 45 (the student attends elsewhere).

E. Resulting set of records

The resulting set of data represents the entire enrollment history for all students represented in the initial cohort (the universe of possible records). This set of data is then evaluated to determine the ending status for each student - adjusting for transfers out of the cohort.

F. Minimum amount of time in a qualifying cohort grade

There is no longer a minimum amount of time in a qualifying cohort grade. Students first served in grades 9-12 automatically join a specific cohort, regardless of how long the service was provided.

G. Removing mismatched records

In the final resulting set of data, there still exist a few cases where a student did not have a validated SSID and the single MARSS number is apparently assigned to two different students. If both of these students are part of the cohort being measured, anomalous results are obtained when determining the last record and the resulting status end code. When detected, the programming removes these records from the cohort.

- Remove from the group all records without a valid SSID that share a single MARSS Number where at least one of the records in the cohort grades (09, 10, 11, 12) has a different birth date and different initials from another.

H. Determining the last reported status for each student in the group

Once the universe of student records is established, the computation steps through each student's enrollment history to determine the last reported status. The records are placed in order (from the earliest to the latest) for each student based on:

- Fiscal Year
- Status End Date
- Status End Code (descending order – applies to dual-enrolled students)
- Internal record number (used as a tie-breaker when all other elements are equal)

The computation sets an End of Enrollment History flag on the last record found to designate it as the specific record to use in the computations. The school and district designated on the End of Enrollment History record is the school and district used in the computational summaries.

I. Service provided after graduation

In rare cases, there are some students who were served after graduation within the same year. This appeared when 'dual-enrolled' students attended an Alternative Program that briefly continued after the student was reported by the High School as graduating. In such cases, the computation resets the End of Enrollment History flag to the record with the graduation indicator.

- Determine which records are marked as graduating but are not considered the last record.
- Determine if any of these students have a matching record within the same fiscal year that is marked as the last record.
- If so, set the End of Enrollment History flag to 'N' on that record and set it to 'Y' on the corresponding graduation record.

Later in the computations, the programming seeks out conditions where students were reported as graduating but were subsequently served in a following year (after September 15). These students are considered as 'continuing enrollment' students and are not designated as graduates for the current year analysis.

- Set the ending status to C- Continued Enrollment for students marked as graduating if a linked record with a MARSS Status End Date after September 15 is found in the following year's FALL submission.
- Exclude FALL records with State Aid Category 98
- Exclude FALL records with local errors (MARSS Status = 1)

J. Designation of final ending classification

For those students who remain in the cohort, there are five possible classifications for each record designated as the End of Enrollment History record.

1. Graduate
2. Dropout
3. Continuing education into following year
4. Ending status unknown
5. Stopped (unable to attend school or transferred out of MN public school)

1. Graduate

These students were reported as graduating from a MN public school and were not served in a following year. If they were served in the following year, the computation classifies the students as Continuing. The computation designates records as Graduates where:

- The Status End Code = 08
(Status End Code = 09 was eliminated as a valid code in 2008. It also indicated the student was a graduate. Longitudinal analysis using graduate data from 2007 or earlier should include Status End Code 09 when determining graduates).

2. Dropout

These students were reported as dropping out of a MN public school and did not return. The computation designates these students as Dropouts where:

- The Status End Code = 06, 07, 14, 15, 16, 17, 18, 19, 31, 32, 33, 34, 35 or 37

3. Continuing

These students were reported in Year 4 as neither dropping out nor graduating from the cohort. The students are anticipated to continue enrollment into the following year. The computation designates these students as Continuing where:

- The Status End Code = 01, 02, 04, 12, 20, 21, 22, 23, 24, 25, 26, 27, 36, 40, 41, 42, 50 or 99 AND
- The End of Enrollment History record is from Year 4

4. Ending Status Unknown

These students were reported in Years, 1, 2, or 3 as neither dropping out nor graduating from the cohort. The students were anticipated to return by Year 4 but were not reported in Year 4. The computation designates these students as Unknowns where:

- The Status End Code = 01, 02, 04, 12, 20, 21, 22, 23, 24, 25, 26, 27, 40, 41, 42, 50 or 99 AND
- The End of Enrollment History record is from Year 1, Year 2 or Year 3

5. Stopped

These students transferred out of a Minnesota public school and did not return, died, or were committed to a correctional institution providing instruction culminating in a regular diploma. The Four-Year Graduation Rate does not include these students in either the numerator or the denominator. The computation designated these students as Stopped where:

- The Status End Code = 03, 05, 11, 13 OR
- District Type = 60 (correctional facility)

K. Setting demographics on student records

Because there are multiple records for a student, demographic characteristics may be reported differently over time by different districts. Ethnicity and Gender are taken from the most recent enrollment record. The broader categories of LEP, Special Education and Free/Reduced Priced Meals are taken from when the student first joined the cohort. This minimizes the effect of students leaving these categories as they progress through high school. The demographics for a student are defined as follows:

- Gender: The gender (Male or Female) is determined from the record that is designated as the *End of Enrollment History* record.
- Ethnicity: The Race/Ethnic category (American Indian, Asian, Hispanic, Black or White) is determined from the record that is designated as the *End of Enrollment History* record.
- Limited English Proficient: LEP status set to 'Y' if the student was designated as LEP at any time in the fiscal year in which he or she first joined the cohort.
- Special Education: Special Education status is set to 'Y' if the student was designated as Special Education at any time in the fiscal year in which he or she first joined the cohort. (MARSS Special Education Evaluation Status = 4, 6 or 9).
- Free/Reduced Priced Meals: FRP status is set to 'Y' if the student was designated as eligible for Free/Reduced Priced meals at any time in the fiscal year in which he or she first joined the cohort. (MARSS Economic Indicator Code = 1, 2, 4 or 5).

General Formula for the Four-Year Graduation Rate

Once the cohort is established, the computation uses the End of Enrollment History record and evaluates the final ending status using the last school and district reporting the student.

The computation determines the count of graduates in the cohort divided by the total number in the cohort.

Count of On-Time Graduates in Year 4

First-time entering ninth graders in Year 1
plus transfers into the cohort in Years 2, 3, and 4
minus transfers out of the cohort in Years 1, 2, 3, and 4

Numerator:

Count those records designated as the End of Enrollment History record where the status final ending status = Graduate

Denominator:

Count those records designated as the End of Enrollment History record where the status final ending status = Graduate, Dropout, Continuing, or Unknown

Five-Year Graduation Rate

Summary

The Five-Year Graduation Rate is similar to the Four-Year Graduation Rate, but allows a fifth year to be included to determine if students graduated within four or five years. Generally, the computation selects the same cohort of students as the Four-Year Graduation Rate (first time ninth grade students plus transfers in minus transfer out) reported in four specific years (Year 1, Year 2, Year 3, and Year 4). It then determines if these students graduated in Year 4 or in Year 5.

Student Record Selection

A. Initial selection of records

The initial cohort for the Five-Year Graduation Rate is constructed in the same way as the Four-Year Graduation Rate.

B. Setting the Cohort Graduation Year

The Cohort Graduation Year is set in the same manner as the Four-Year Graduation Rate. The Five-Year Graduation Rate simply selects students who were expected to graduate the previous year. For example, for the 2010 Five-Year Graduation Rate, the computation selects students who were in the Cohort Graduation Year of 2009 and determines if they graduated in 2009 or 2010.

C. Creating the full enrollment history for students represented in the cohort

The full enrollment history is constructed in the same manner as the Four-Year Graduation Rate.

D. Additional records from the following summer - Graduates

Additional records from the following summer are added in the same way as the Four-Year Graduation Rate, but the Five-Year rate uses the summer following Year 5.

All other record selection processes (steps E through K) are the same for the Five-Year Graduation Rate as they are for the Four-Year Graduation Rate.

General Formula for the Five-Year Graduation Rate

Once the cohort is established, the computation uses the End of Enrollment History record and evaluates the final ending status using the last school and district reporting the student.

The computation determines the count of graduates in the cohort divided by the total number in the cohort.

Count of On-Time Graduates in Year 4 or Year 5

First-time entering ninth graders in Year 1
plus transfers into the cohort in Years 2, 3, 4 and 5
minus transfers out of the cohort in Years 1, 2, 3, 4 and 5

Numerator:

Count those records designated as the End of Enrollment History record where the status final ending status = Graduate

Denominator:

Count those records designated as the End of Enrollment History record where the status final ending status = Graduate, Dropout, Continuing, or Unknown

Six-Year Graduation Rate

Summary

The Six-Year Graduation Rate is similar to the Four-Year Graduation Rate, but allows a fifth and sixth year to be included to determine if students graduated within four or five or six years. Generally, the computation selects the same cohort of students as the Four-Year Graduation Rate (first time ninth grade students plus transfers in minus transfer out) reported in four specific years (Year 1, Year 2, Year 3, and Year 4). It then determines if these students graduated in Year 4 or in Year 5 or Year 6.

Student Record Selection

A. Initial selection of records

The initial cohort for the Six-Year Graduation Rate is constructed in the same way as the Four-Year Graduation Rate.

B. Setting the Cohort Graduation Year

The Cohort Graduation Year is set in the same manner as the Four-Year Graduation Rate. The Six-Year Graduation Rate simply selects students who were expected to graduate two years ago. For example, for the 2010 Six-Year Graduation Rate, the computation selects students who were in the Cohort Graduation Year of 2008 and determines if they graduated in 2008, 2009 or 2010.

C. Creating the full enrollment history for students represented in the cohort

The full enrollment history is constructed in the same manner as the Four-Year Graduation Rate.

D. Additional records from the following summer - Graduates

Additional records from the following summer are added in the same way as the Four-Year Graduation Rate, but the Six-Year rate uses the summer following Year 6.

All other record selection processes (steps E through K) are the same for the Six-Year Graduation Rate as they are for the Four-Year Graduation Rate.

General Formula for the Six-Year Graduation Rate

Once the cohort is established, the computation uses the End of Enrollment History record and evaluates the final ending status using the last school and district reporting the student.

The computation determines the count of graduates in the cohort divided by the total number in the cohort.

$$\frac{\text{Count of On-Time Graduates in Year 4 or Year 5 or Year 6}}{\text{First-time entering ninth graders in Year 1}}$$

$$\frac{\text{plus transfers into the cohort in Years 2, 3, 4, 5 and 6}}{\text{minus transfers out of the cohort in Years 1, 2, 3, 4, 5 and 6}}$$
Numerator:

Count those records designated as the End of Enrollment History record where the status final ending status = Graduate

Denominator:

Count those records designated as the End of Enrollment History record where the status final ending status = Graduate, Dropout, Continuing, or Unknown

Appendix A: MARSS Status End Code Definitions

Full definitions of the MARSS Status End Codes can be found on the web at:

http://education.state.mn.us/MDE/Accountability_Programs/Program_Finance/MARSS_Student_Accounting/MARSS_Instruction_Manual/Data_Elements-Definitions/index.html

- 01 - Change in students' grade level.
- 02 - Transferred to another public school in the same district.
- 03 - Transferred to an approved nonpublic school.
- 04 - Students moved outside of the district.
- 05 - Students moved outside of the state or country.
- *06 - Students left school after reaching compulsory attendance age without written election
- *07 - Students left school after reaching compulsory attendance age with written election.
- 08 - Students graduated.
- 09 - Students graduated after meeting IEP/IFSP requirements
(no longer a valid code – last used in the 2006/2007 school year)
- 10 – Received a Certificate of Completion
(no longer a valid code – last used in 1996/1997 school year)
- 11 - Died.
- 12 - Students excused from attending school for a physical or mental disability;
does not include treatment centers if instruction is provided.
- 13 - Students committed to a correctional facility.
- *14 - Students withdrawn after 15 consecutive days absence - expected back.
- *15 - Students left school because of marriage.
- *16 - Students were expelled and did not return to school during the year.
- *17 - Students leave school due to pregnancy.
- *18 - Students withdrew, no transcript requested, or
transferred to a non-approved nonpublic school.
- * 19 Enlisted-Armed Services
(no longer a valid code – last used in 2005/2006 school year)
- 20 - Students transferred to another district or state but did not move.
- 21 - Early Childhood withdrawal; IEP, IFSP or IIP objectives were met.
- 22 - Students withdrew to enter a care and/or treatment program; instruction is provided.
- 23 - Kindergarten withdrawal, expected back next year.
- 24 - Withdrew to Receive Homebound Services.
- 25 – EC (early childhood) students evaluated only.
- 26 – EC students withdrawn by parents.
- 27 – EC students that transition at age three.
- *31 - Students left school for social reasons.
- *32 - Students left school for financial reasons.
- *33 - Students left school for family environment reasons.
- *34 - Students left school for reasons unknown.
- *35 - Students left school after attaining age 21 and did not graduate.

MARSS status end codes continued

- 36 - Students enrolled in a postsecondary institution (baccalaureate credit) without receiving a high school diploma.
- *37 - Students left school to attend a GED program or withdrew after taking the GED Exam.
- 40 - End-of-year, students were enrolled the last day of school.
- 41 - Students dropped out of school during the current school year but re-enrolled somewhere by the following October 1.
- 42 - Students met the district's graduation requirements but did not pass one of the required basic standards tests.
- 50 - Students special education data has changed
- 99 - Students enrollment status has changed necessitating the closing of one status record and the opening of a new one.

**Dropout Codes*

Appendix B: MARSS State Aid Category Definitions

Full definitions of the MARSS State Aid Categories can be found on the web at:

http://education.state.mn.us/MDE/Accountability_Programs/Program_Finance/MARSS_Student_Accounting/MARSS_Instruction_Manual/Data_Elements-Definitions/index.html

- 00 - Regular; resident enrolled at the resident district
- 01 - Enrollment Options/Open
- 02 - Foreign Exchange
- 03 - Graduation Incentives
- 04 - Enrollment Choice for 11th and 12th Grade Students
- 05 - Inter-district Cooperative Agreement
- 06 - Cooperative Facilities
- 07 - Homeless ((No longer valid - last used in 2001/2002 school year)
- 08 - Charter School
- 10 - Joint Powers Cooperatives for Special Education and/or Secondary Vocational Programs
- 11 - Parent Initiated Agreements Between School Boards
- 12 - Grandfather Clause/40 Acre Law (No longer valid - last used in 1996/1997 school year)
- 13 - State Board Approved (No longer valid - last used in 1996/1997 school year)
- 14 - Enrollment in another State
- 15 - Non-Minnesota resident, tuition paid by entity in another state or country
- 16 – Shared-Time Aid is paid to the resident district
- 17 – Shared-Time Aid paid to the serving district
- 18 – Shared-Time - Parent/guardian pays
- 19 - Tuition Agreement with Resident District
- 20 - Tuition Agreement with Parent/Guardian,
- 21 - Ineligible Nonresident Student.
- 22 - Residents
- 24 - Early Graduate
- 25 – Adult (No longer valid - last used in 2002/2003 school year)
- 26 - Contract Alternative School/Graduation Incentives,
- 27 - Temporary Placement for Non-handicapped Students for Care and Treatment
- 28 - Resident student attending a nonpublic school through either an IEP/IFSP/IIIP or for care and treatment.
- 34 - TRIBAL CONTRACT/GRANT meeting criteria
- 35 - TRIBAL CONTRACT/GRANT not meeting criteria
- 41 – Early Childhood Screening - Screening by school district.
- 42 – Early Childhood Screening - Child & Teen Checkups/EPSTD
- 43 – Early Childhood Screening – Head Start.
- 44 – Early Childhood Screening - Private Provider
- 45 – Early Childhood Screening - Conscientious Objector
- 46 – Extended School Year
- 51 – SD to MN Reciprocity
- 52 – MN to SD Reciprocity
- 97 – Students displaced due to natural disaster (Flood / Hurricane)
- 98 - Summer Graduate, Late Graduate or Dropout.