

# The Cohort Graduation Rate

Michigan Department of Education  
Office of Educational Assessment and Accountability

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## Michigan Graduation Rates

- Michigan has used the same methodology to report graduation rates since 1989
- Michigan is now using a “cohort method” of reporting Graduation Rates
- The “cohort method” follows students across their high school careers
- The “cohort method” will report graduation rates for each student group that can be reliably measured



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## NCLB Graduation Rate

- NCLB requires that AYP include a graduation rate based on the percentage of students that
  - Receive a REGULAR high school diploma
  - In the STANDARD number of years
- AYP (including a graduation rate) is required for ALL schools



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## Cohort Graduation Rate

- “Class of 2007” were first time ninth graders in fall 2003:

$$\frac{\text{Number of 2007 graduates}}{\text{Number of first time ninth graders in fall 2003 adjusted for transfers in and transfers out}}$$



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## Dropout Rate

$$\frac{\text{Number of Reported Dropped and not transferred + Number Missing and not Graduated}}{\text{Number of first time ninth graders in fall 2003 adjusted for transfers in and transfers out}}$$



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## Graduation Rates for 2007-08 AYP

- The Graduation/Dropout Review and Comment Application from CEPI provides the graduation rates used for AYP for the class of 2008
- The application will open in late winter or early spring of 2009



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## AYP and Graduation Rate

- The AYP target graduation rate will remain at 80%
- Improvement in the graduation rate will substitute for meeting the target using “safe harbor”



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## Subgroup Rates

- Subgroup analysis of Attendance and the Graduation Rate are only used for AYP if the Safe Harbor is used for Achievement in ELA or in Math for that Subgroup



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## New Federal Regulations

- Published October, 2008
- Requires that four-year on-time grad rate be published
- Allow 5 and 6 year grad rates for AYP
  - Must be approved for AYP in Workbook
- Require that transfers be tracked during 5<sup>th</sup> and 6<sup>th</sup> year if used for AYP



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## Cohort Graduation Rates

- Class of 2007 four year on-time
  - Fall 2003 first-time ninth graders
  - Reported four-year rate in summer 2008
  - Will report five-year rate in spring 2009
- Class of 2008 four year on-time
  - Fall 2003 first-time ninth graders
  - Will report four-year rate in spring 2009



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## Three Ways to Make AYP

- 2008 cohort (2004 9<sup>th</sup> graders) four-year grad rate  $\geq$  79.5%
- 2008 cohort four-year grad rate is greater (safe harbor) than the 2007 cohort four-year grad rate
- 2007 cohort (2003 9<sup>th</sup> graders) five-year grad rate  $\geq$  79.5%



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## Clean-up for GAD

- Exit Records
  - Graduation Rate Records
  - Out-of-State
  - Nonpublic or home school
- Cohort Change
- Accountability Repoint
- Help Ticket
- Outlier Audit



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## Overview of Michigan's New Four-Year Cohort Graduation and Dropout Rates

The release of graduation rates for the class of 2007 marks the first time that Michigan has used a four-year cohort graduation rate. In order to comply with the *No Child Left Behind (NCLB) Act of 2001*, Michigan is moving to an accountability system in which a graduation rate includes only "on-time" graduates who earn regular diplomas within four years of entering high school. This new calculation meets the guidelines provided by the National Governors Association (NGA) Graduation Counts Compact for calculation of such rates. As more and more states implement the NGA standard, state-to-state comparisons will become more meaningful.

The change to this more accurate formula for the calculation of 2007 graduation rates is possible because school districts have been tracking the enrollment of individual students since those students first enrolled in the 9th grade in the 2003-2004 school year and reporting that data to the Center for Educational Performance and Information (CEPI). The gathering of this information at a statewide level allows CEPI to help districts adjust enrollments to reflect "transfers in" and "transfers out" of the district, as well as students who exit from the public education system itself, over the course of four years. Use of a more accurate formula will mean that some schools and districts in Michigan will see a change in their graduation rates.

### Four-Year Cohort Graduation Rate

The total number of students who were identified as first-time 9th graders in the 2003-2004 school year formed the initial 2007 cohort, since they would be expected to graduate on time in 2007. Students who transferred into the state, district, or building at any time during the four-year cohort period were added to the initial group. For students who moved within the public schools, student records were updated to reflect the correct district and building location. These students were considered "transfers out" of the district/building they left and "transfers in" to the district/building they entered. Students who exited the public school system entirely (out of state, to non-public school, or home school) or became deceased at any time during the four-year cohort period are considered "exempt" and removed from the cohort.

To calculate the four-year cohort graduation and dropout rates after transfers are accounted for, students are placed into one of four categories:

1. On-track graduated- completed high school with a regular diploma in four years or less
2. Other completer- earned a General Educational Development (GED) certificate, other certificate, or reached special education maximum age
3. Off-track (graduated & continuing)- completed high school with a regular diploma in more than four years, or did not complete high school in four years and are still continuing in school
4. Dropout- left high school permanently at any time during the four-year cohort period, or whose whereabouts are unknown

A student is counted toward the graduation rate of the final building or district that the student attended during the four-year cohort period. "On-track graduated" is counted as the numerator and divided by the total count of all status categories. The total of the status categories is the 2007 Cohort Total.

$$\frac{\text{On-Track Graduated}}{\text{2007 Cohort Total}}$$

## Reading the graduation report

The 2007 four-year cohort graduation rate report includes data for the state, every district, and every building from which students graduate, and is divided into ten columns. The columns include:

**Table 1**

<b>Column Name</b>	<b>Column Definitions</b>
District/Building Name (Code)	This is the alphabetical listing, beginning with local education agencies (LEAs), and then public school academies (PSAs), of the districts and buildings included in the report. The district-level data are identified in shaded rows. The buildings that comprise the district appear below the district name. Building names appear in non-shaded rows with a slight indentation.
First Time 9th Grade in Fall 2003	Total number of students who were identified as first-time 9th graders in fall 2003, which was the group of students who initially formulated the 2007 cohort.
(+) Transfers In	Total number of students who transferred into the state, district, or building at any time during the four-year cohort period and remained there.
(-) Transfers Out & Exempt	Total number of students who transferred out of the district, building, or public school system (out of state, to non-public school, or home-school) at any time during the four-year cohort period and did not return. Deceased students are also exempt.
2007 Cohort	Total number of students in the 2007 cohort for the state, for each district, and for each building after adjustments were made for transfers in, transfers out, and exempt students.
On-Track Graduated	Total number of students in the 2007 cohort who completed high school with a regular diploma in four years or less.
Dropout (Reported & MER)	Total number of students who left high school permanently at any time during the four-year cohort period, or whose whereabouts are unknown (MER; missing expected records).
Off-Track (Graduated & Continuing)	Total number of students who completed high school with a regular diploma in more than four years, or did not complete high school in four years and are still continuing in school.
Other Completer (GED, etc.)	Total number of students who earned a GED, other certificate, or reached special education maximum age.
Graduation Rate	The percentage, calculated as On-Track Graduated over 2007 Cohort, of the total number of students in the 2007 cohort who completed high school with a regular diploma in four years or less.

For many districts, the building totals do not sum to the district total. Buildings which educate students who have been ordered by the court to attend are not included in the district's rate, only the building's rate. Students must also be present for at least 2 count dates (the September and February days that schools report attendance to the state for funding purposes) in order to be counted in a building rate. A student who is present for just one count date is only included in the district rate. Students who are claimed in a district, but were not present for any count days are only included in the state rate.

It should also be noted that a cell containing "< 10" indicates there were more than 0 and less than 10 total students in the cohort or status at the building for two count days or the district for one count day.

## Four-Year Cohort Dropout Rate

**There is no national standard for calculating four-year cohort dropout rates.** Michigan has chosen to maintain consistency by using the cohort methodology recommended by NGA to calculate this rate as well. A building or district's dropout rate is not equivalent to subtracting the graduation rate from 100% because that method counts students who are an "other completer" or "off-track continuing" as dropouts.

The four-year cohort dropout rate is calculated using this formula:

$$\frac{\text{Dropouts}}{\text{2007 Cohort Total}}$$

## Reading the dropout report

The dropout report includes data for the state, every district, and every building in which students are enrolled sometime during the cohort period, and is divided into six columns. As with the graduation rate report, some building totals will not sum to the district total as the result of court ordered facilities and count dates. The columns include:

**Table 2**

<b>Column Name</b>	<b>Column Definitions</b>
District/Building Name (Code)	This is the alphabetical listing, beginning with local education agencies (LEAs), then intermediate school districts (ISDs), and then public school academies (PSAs), of the districts and buildings included in the report. The district-level data are identified in shaded rows. The buildings that comprise the district appear below the district name. Building names appear in non-shaded rows with a slight indentation.
Grades and Settings	These are the grades <u>currently</u> being offered in the building as reported to CEPI in the School Code Master database. These grades do not necessarily match the grades offered to students in the 2007 cohort when they were in this building. Grade ranges are indicated by the number equivalent and the settings are categorized as: <ol style="list-style-type: none"> <li>a. Alt. = alternative education</li> <li>b. Spec = special education</li> <li>c. AE = adult education</li> </ol>
2007 Cohort Total	Total number of students in the 2007 cohort for the state, for each district, and for each building after adjustments were made for transfers in, transfers out, and exempt students.
Dropouts (Reported & MER)	Total number of students who left high school permanently at any time during the four-year cohort period, or whose whereabouts are unknown (MER; missing expected records).
# of High School Grades in School or District	Total number of years a building educated a cohort of students at the end of year 2007.
Dropout Rate	This is the percentage, calculated as Dropouts over 2007 Cohort Total, of the total number of students in the 2007 cohort who left high school permanently at any time during the four-year cohort period, or whose whereabouts are unknown (MER; missing expected records).



## **Michigan's Four-Year Cohort Graduation and Dropout Rates Frequently Asked Questions**

### **1. How are the 2007 Four-Year Cohort Graduation Rates calculated?**

The new 2007 four-year cohort graduation rate is calculated by tracking individual students who first enrolled in ninth grade during the 2003-2004 school year (assigned to the 2007 cohort), and graduated four years later with a regular diploma. It accounts for students who transfer in and out of the district, who leave school permanently, who leave school during one school year and return in another, and for students who are retained in a grade but stay in school and graduate later than their original classmates.

### **2. How is the new four-year cohort graduation methodology different than what the state used previously?**

Previously, graduation rates were determined by using an "estimated" rate derived by multiplying the four graduating class retention rates together in a single year. Class retention rates were determined by taking one graduation class (grade) at a time and dividing the fall enrollment by the previous fall's enrollment. This average rate was then multiplied by 100 to get the graduation rate percentage. Basically, this formula utilized one year of data to derive a four-year estimated rate.

The four-year cohort formula (described in question #1) provides a more accurate rate to assist schools and districts in targeting education policies to assist greater numbers of students to succeed in school and earn a diploma. In addition, this calculation aligns with the guidelines provided by the National Governors Association (NGA) Graduation Counts Compact and complies with the requirements of the No Child Left Behind Act of 2001.

### **3. How are the 2007 Four-Year Cohort Dropout Rates calculated?**

There is no national standard for calculating four-year cohort dropout rates. Michigan has chosen to maintain consistency by using the graduation cohort methodology recommended by NGA to calculate this rate as well.

The new 2007 four-year cohort dropout rate is calculated by tracking individual students who first enrolled in ninth grade during the 2003-2004 school year (assigned to the 2007 cohort), and left high school permanently at any time during the four-year cohort period prior to completion or who whereabouts are unknown.

### **4. How is the new dropout methodology different than what the state used previously?**

Previously, dropout rates were the percentage of unaccounted-for students at the secondary level for a school year. It was derived by subtracting the secondary school's/facility's total retention rate from 100 percent. Class retention rates were determined by taking one graduation class (grade) at a time and dividing the fall enrollment by the previous fall's enrollment.

## **5. Why did Michigan change the graduation and dropout rate formulas?**

In 2001, Congress adopted the No Child Left Behind Act (NCLB) which requires states to use a graduation rate that tracks only “on-time” graduates who receive regular diplomas. To help states meet this goal, the National Governors Association (NGA) convened a task force help states develop a way to measure high school graduation rates. All 50 governors committed to adopting this methodology to track graduation rates in their states.

Although neither NCLB nor the NGA requires a change in the dropout rate calculation, Michigan created this new dropout rate for consistency with the use of the new four-year cohort graduation rate. Like the new four-year cohort graduation rate, this formula provides a more accurate rate to assist schools, districts, and intermediate school districts in targeting education policies to help students succeed in school and earn a diploma.

## **6. Why are some dropout rates higher than what has been previously reported?**

By using a four-year cohort dropout rate, we are totaling dropout events that occur over a four year period, rather than just a one year period as the previous rate reported. In addition, by tracking individual students as they progress through high school, we are better able to determine exactly what happened to that student. The new rates do not necessarily mean that a school has experienced an increase in dropouts, only that the rate depicts a more accurate measure over a longer timeframe than was previously reported.

## **7. Why are some graduation rates lower than what has been previously reported?**

The use of a more accurate formula may mean that some schools and districts in Michigan see a change in their graduation rate. This does not necessarily mean that more or fewer students are graduating from high school, only that the rates depict a more accurate picture than what was previously reported.

A number of changes in the new formula potentially impact a building or district’s rate. The new graduation rate counts only students who completed a regular diploma in four years as on-time graduates; alternative high schools are included in the district calculation for the first time; and both the graduation and dropout rates more accurately account for transfers-in and transfers-out of the district.

## **8. Why does the graduation rate only count students who graduate in four years?**

In 2001, Congress adopted the No Child Left Behind Act (NCLB) which requires states to use a graduation rate that counts only graduates who receive a regular diploma in four years or less as successful graduates. Beginning next year, a five-year graduation rate will also be available for the Class of 2007 for those students who required additional time to complete. These students will be considered graduates in that rate.

## **9. How are special education students counted in the four-year cohort graduation formula?**

Many students receiving special education services graduate in their original four-year cohort, with the help of support services provided by the district. Students whose learning or other disabilities cause them to need more time to complete the Michigan Merit Curriculum may have requested a one-year extension from the Michigan Department of Education Office of Special Education and Early Intervention Services. These extensions were allowed on a case-by-case basis. Students in the 2007 cohort receiving this one-year extension were moved into the 2008 cohort and are not reflected in the 2007 cohort status categories.

## **10. Which students are not counted in the graduation rate (exempt)?**

The only students classified as “exempt” from counting in the graduation rates are students who transferred out of the public school system (out of state, to non-public school, or home-school) or are deceased.

## **11. Why do school’s graduation and dropout rates not add up to 100%?**

A dropout rate is not equivalent to subtracting the graduation rate from 100% because that method counts students who are “other completers” or “off-track continuing” as dropouts. Other completers are students who earned a GED, certificate, or reached special education maximum age. Students with an off-track continuing cohort status are those who did not complete high school in four years and are still continuing in school. In 2008, a five-year graduation rate will also be available for those students in the 2007 cohort who required additional time to complete.

## **12. Why do some building rates not sum up to the district rates, or some district rates not sum up to the state rates?**

There are two calculation rules that may result in building rates not summing to district rates, and district rates not summing to state rates:

1. Court Ordered Facilities: Buildings that educate students who have been ordered by the court to attend are not included in the district’s rate, only the building’s rate.
2. “Count Dates”: Michigan collects data on students twice a year on “count dates” (one day in September and one in February) for the purposes of calculating state school aid payments and required state and federal reporting. Students attending on count day are reported as continuing in the district during a fall or spring submission. Accommodations are made for students who do attend school but were absent on count day (e.g., if children have an excused absence on count day, they must return within 30 school days, if an unexcused absence occurs, students must return in 10 school days, etc.). In order to ensure that the graduation rate calculation aligns with the MDE’s full academic year requirement outlined in the Consolidated State Application Accountability Workbook, students must be in attendance in a building for at least two consecutive count dates to be included in that building’s calculation. Students must be in attendance at a district for at least one count date to be included in a district’s calculations. Students who are claimed in a district, but were not present for any count days are only included in the state rate.

## **13. Is the new rigorous curriculum impacting the graduation and dropout rates being reported?**

No, this data is from students who graduated in June 2007. They were not required to take the Michigan Merit Curriculum.

## **14. If a student drops out of high school, is every high school that student attended held accountable?**

No, accountability is assigned to only one school or district. The entity that reported the terminating exit status of the student is held accountable. If multiple entities report a student in a collection, the entity reporting the greater proportion of full-time equated (FTE) membership is accountable. Finally, if accountability still cannot be determined from multiple records, the entity that last had accountability retains accountability.

**15. What if a school mistakenly reported a student in the wrong category?**

A Graduation/Dropout Review and Comment Application (GAD) was provided for district staff members to review and request changes to graduation and dropout information on individual students. During the spring of 2008, districts' authorized users accessed the GAD to view their cohort members and requested: 1) changes to their exit statuses; 2) individual fifth-year extensions; and 3) linking of multiple students' unique identification codes (UICs). Intermediate school district auditors, Michigan Department of Education staff members and Center for Educational Performance and Information staff members approved or denied these requested changes based on evidence provided by districts.

**16. How do you know districts are not inflating their data to report more positive numbers?**

Each public school student in Michigan is assigned a unique identification code (UIC). This UIC is used by districts when submitting data to the state. The grade-to-grade progression, exit statuses, and transferring into and out of districts from students is tracked using the UIC. If a school or district were to report a student as transferred out to another district, the other district should then be reporting that student with the same UIC in their subsequent collection. If that same student is not reported by the new district, this student has missing expected records and the original district is held accountable for the dropout.

In addition, any change to a student record requested by a school district once the data had been reported had to be approved by an ISD auditor. For example, if a school asked to change a student reported previously as a dropout to a transfer out of state, the school had to provide evidence of that student's enrollment in the new district. Without sufficient evidence, a school's request for a student change was not approved.

**17. Will the new graduation and dropout rates be available by subgroups?**

Yes, CEPI will publish graduation and dropout rates by subgroup including race/ethnicity, gender, special education, migrant, economically disadvantaged and limited English proficiency. In addition, for the first time, rates will be available for race/ethnicity by gender. This information will be available on CEPI's website at [www.michigan.gov/cepi](http://www.michigan.gov/cepi).