# 4-Year Cohort Graduation Rate Overview

pennsylvania
DEPARTMENT OF EDUCATION

NOTE: **This document is intended to serve as a reminder and guide. It is not meant to supersede any official instruction or guidance from USDE, PDE or any other governing body.**

Federal law requires Pennsylvania, and all other states, to transition to a new calculation method for determining high school graduation rates.

Beginning in 2012, using graduation data from the Classes of 2010 and 2011, the "4-Year Cohort Graduation Rate" calculation will replace the "4-Year Leaver Graduation Rate" calculation. The new methodology will be used to determine high school and district Adequate Yearly Progress (AYP) status for all students and for every measurable subgroup.

The "cohort" calculation method generates a different rate than the "leaver rate calculation" currently in use. The cohort calculation is almost always a lower percentage of graduates based on a different calculation methodology. It is important for stakeholders to understand, and to be able to communicate, why the publicly-reported numbers may look different even though there is no fundamental or underlying change in a school's circumstances. The difference is the result of the method used to calculate the rate.

The new methodology provides a more uniform and precise measure of the high school graduation rate – one which can then be used for comparison with other states. **Accurate data from the LEA and charter schools is key to successful implementation.**

Improved data collection, reporting and analysis that links data systems from preschool through postsecondary education will allow for a more accurate picture upon which to base decisions at the district, school and student levels. The methodology will improve our understanding of the characteristics of the students who do not earn regular high school diplomas, or who take longer than four years to graduate.

The 4-Year Cohort Graduation Rate will help inform efforts to ensure all Pennsylvania students are prepared for postsecondary education and the workforce. Below, PDE has summarized information and listed resources to assist LEAs and charter schools in understanding the 4-Year Cohort Graduation Rate, the use of the rate for accountability purposes, and the transition steps to fully reporting and utilizing the new graduation calculation.

**1. Current Pennsylvania Graduation Calculation - "4-Year Leaver Graduation Rate":**
Pennsylvania currently employs a "leaver" formula to determine graduation rates. This formula compares the number of students who graduate in a particular year to the number of students who graduate plus the number of students who have dropped out of the LEA/charter school in

each of the previous four years. *The leaver calculation does not track the status of individual students nor does it account for students who transfer in and out of a school or district.*

*4-Year Leaver Graduation Rate:*
[(Number of Graduates for year 4) / (Number of Graduates for year 4 + Grade 12 dropouts for year 4 + Grade 11 dropouts from year 3 + Grade 10 dropouts from year 2 + Grade 9 dropouts from year 1)] x 100

**2. Future Pennsylvania Graduation Calculation- "4-Year Cohort Graduation Rate":**
In 2005, Governor Rendell, along with all 49 of his state governor colleagues, made a commitment to voluntarily implement a common formula for calculating their state's high school graduation rate by signing the National Governors Association (NGA) Graduation Counts Compact. The Compact contained four commitments:

1. To use a common, four-year adjusted cohort graduation rate formula;
2. To build state data collection and reporting capacity;
3. To develop additional student outcome indicators; and
4. To report annually on their progress toward meeting these commitments.

The NGA cohort graduation rate is the number of students who graduate in a given year with a regular diploma divided by the number of high school students who entered four years earlier with adjustment each year for students who transfer in and out. *This formula is a more precise way to measure the graduation rate than the current "leaver" rate.*

*4-Year Cohort Graduation Rate:*
(Number of on-time graduates in 2010) / [(Number of first-time entering 9th grade students in 2006) + (Number of transfers to the class of 2010) – (# of transfers out of the class of 2010)] x 100

**3. US Department of Education Regulations:**
In December 2008, the USDE issued regulations and guidelines to implement a high school graduation rate calculation that is very similar to the NGA cohort rate that all states had already committed to report with the class of 2010. However, the new regulations included additional requirements:

a. States use the cohort graduation calculation for accountability purposes in August 2012.
b. Graduation rates to be disaggregated to ensure accountability for each NCLB subgroup (special education students, English language learners, economically disadvantaged students, and racial subgroups).
c. States only count students who graduate in *four* years in the 4-year cohort graduation rate, and to give more weight in their accountability system to the 4-year graduation rate.
    1) This means that "[a] student who graduates in more than four years is counted as a non-graduate in the four-year graduation rate"[1] and will not be included in the numerator of the four-year graduation rate.

[1] US Department of Education High School Graduation Rate Non-Regulatory Guidance, December 2008.

2) USDE does, however, allow states to apply for the use of "extended-year" cohort graduation rates that would account for students who may need additional time to meet their graduation requirements. Pennsylvania is planning to apply to USDE for the use of extended graduation rates (i.e. 5-year and 6-year rates) for accountability purposes. It is important to note, however, that USDE requires states to design accountability systems that give more weight to four-year graduation rates than extended-year graduation rates.

d. **Pennsylvania has modified its graduation rate goal and targets for the 2009-10 AYP Reporting Year.** USDE will no longer allow for "any improvement" as an acceptable target for a state's graduation rate. Therefore, the 2009-10 and 2010-11 AYP graduation rate calculation will include:
    a. Data from the previous year calculated using the Leaver Rate (i.e. 2009-10 AYP determinations will be based on 2008-09 "4-year Leaver Graduation Rate" data)
    b. Target is 82.5%, or a 10% increase based on the difference between the 2007-08 graduation rate and 85%. (i.e. if 07-08 grad rate was 70%, grad rate must increase to 71.5% in 08-09 since 85-70 = 15 x 10% = 1.5)

e. **Pennsylvania to revisit graduation goals and targets for the 2011-2012 AYP reporting year to ensure compliance with the new USDE regulations.** Pennsylvania is currently analyzing LEA/charter school data to determine goals and targets that ensure the greatest accountability while taking into account the many factors that affect high school graduation rates.
    a. Data will still be lagged. AYP determinations will be based on the 2010-11 4-Year Cohort Graduation Rate data as compared to the 2009-10 4-Year Cohort Graduation Rate data
    b. Graduation rates will be disaggregated for all subgroups
    c. Targets and goals will have to demonstrate "continuous and substantial" improvement from the previous year
    d. States may develop targets and goals for extended-year graduation rates (5-year cohort and 6-year cohort rates)

**4. Importance of PIMS data:**

The cohort graduation rate is calculated using data from the Pennsylvania Information Management System (PIMS) that is reported to PDE by all LEAs/charter schools. **Accurate PIMS data is crucial to ensuring that your LEA/charter school cohort graduation rate is correct.**

Accurate PIMS data is also imperative to Pennsylvania identifying the most appropriate goal and targets to include in the new graduation rate accountability system for 2011-2012 AYP Reporting Year.

PDE's analysis of LEA/charter school PIMS data shows that there are still many errors that will negatively affect LEA and charter school 4-Year Cohort Graduation Rates. To assist LEAs and charter schools in verifying the accuracy of PIMS data, PDE has provided each LEA/charter school with a report identifying those high school students for whom there is missing or

conflicting enrollment data. The Data Quality Office at PDE is overseeing the effort to ensure accurate data of LEA/charter school graduates.

**5. Timeline of Pennsylvania transition to the new 4-year cohort graduation rate:**

By September 30, 2010: LEAs and charter schools submit graduation data via PIMS for the 2009-2010 school year

December 2010: Publicly report (on the PDE Website) 4-year cohort graduation rates

- For all public schools and districts including comprehensive CTCs and charter schools which graduate students from 12th grade.
- The four-year cohort graduation rate for each LEA/charter school all-student group and student subgroups will be posted on PDE's website.

November 2011: Report Pennsylvania's four-year cohort graduation rate using 2009-2010 graduate data on the District and School Report Cards for *informational purposes* only. The 4-year leaver rate will continue to be used for AYP purposes in 2010 and 2011.

January 2012: Pennsylvania must submit its proposed graduation accountability system (including state graduation goal and targets) to USDE for the 2011-2012 AYP Reporting Year.

September 2012/ (2011-12 AYP Reporting Year): Pennsylvania must employ the cohort graduation rate for determining AYP based on school year 2011-2012 assessment results and 2010-2011 graduation data.

**Additional resources:**

USDE Final Graduation Rate Regulations

USDE Guidance on Cohort Graduation Rate

National Governors Association Graduation ComPennsylvaniact

NGA Graduation Best Practices Center