

COMPLETE COLLEGE AMERICA

Complete College America and the National Governors Association Common College Completion Metrics Technical Guide

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Note: Technical guide may be periodically updated to reflect improvements to the instructions as states collect data and work through the metrics

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Introduction

This *Technical Guide* describes the concepts, data elements and definitions supporting the National Governors Association's *Complete to Compete: Common College Completion Metrics*. The goal of this guide is to increase consistency and commonality across states in reporting benchmark data and measuring future progress. These metrics are intended to be publicly reported by the state with data collected from all **public postsecondary institutions** in the state.

Data Collection and Common Metrics Reporting

States with unit record systems may use their system- or state-level data to construct the metrics for reporting purposes.

States without complete or any unit record systems may collect these data by requesting them from the colleges and universities in a way that allows for aggregation at the state level and used in constructing the metrics. These states should begin the process of adding the additional data elements to their unit record systems as soon as possible.

All states are encouraged to supplement their data through the National Student Clearinghouse (to provide more accuracy in respect to transfer students within the state).

Origination, Purpose, and Guiding Principles

On July 27-28, 2009, Complete College America, the National Center for Higher Education Management Systems (NCHEMS), and the State Higher Education Executive Officers (SHEEO) hosted a Data/Metrics Convening in Denver, Colorado to discuss a common core set of metrics in the area of college completion. A list of organizations represented at this convening is included in Attachment A. In May 2010, the National Governors Association convened a group state and national experts to further refine the metrics. A list of organizations represented at this convening is included in Attachment B. The metrics contained within this *Technical Guide* reflect the major conclusions reached at these two convenings. The National Governors Association 2010-11 Chair's initiative, *Complete to Compete*, recommends that all states collect and report data on the measures contained within this *Technical Guide*. More information about the metrics can be found in the companion report, *Complete to Compete: Common College Completion Metrics*.

As a basis for the collective work, individuals strongly endorsed the following statement of purpose. The purpose of the metrics is to:

- **Inform** - help policymakers and the general public understand how students (particularly historically underserved, low-income, and minority young adults), institutions of higher education, and the state are doing on college completion;

- **Analyze** - help policymakers and institutions of higher education identify specific challenges and opportunities for improvement;
- **Show Progress** - establish a fair baseline and show progress over time; and
- **Hold Accountable** - hold students, institutions of higher education, and the state accountable to the general public and to policymakers investing taxpayer dollars in higher education.

Additionally, the initial working group identified a set of guiding principles to contextualize, prioritize, and guide the implementation of the metrics. These principles are:

1. The data on which the metrics are based must be collected uniformly, allowing for comparisons across states and, whenever possible, across institutions of higher education.
2. The metrics should be capable of being disaggregated by subpopulations (by age, race, gender, income) and by the value or type of degree or credential, in order to continuously assess the equity of postsecondary opportunity.
3. The initial set of metrics should be capable of being constructed from readily available data. While data systems should improve over time, the urgent need to improve college completion necessitates utilizing currently available data to measure progress.
4. The quantity of metrics implemented should be carefully balanced to reflect a focus on data that connect most clearly to completion rates.
5. The metrics should help to identify barriers to student achievement and provide guidance as to actions that might be taken to improve student success. This means that progression (intermediate) as well as outcome (completion) metrics should be included. It also means that metrics should be disaggregated by and allow for comparison among institutions of higher education.
6. Priority should be placed on measuring improvement over time.
7. The metrics should be transparent and publicly reported.
8. The metrics should be constructed in a manner that minimizes the potential for unintended negative consequences.

Outcomes, Progress, and Context

The common metrics are organized in three categories:

1. Outcome Metrics;
2. Progress Metrics; and
3. Context Metrics.

The Outcome Metrics quantify the end-product of the educational process, mainly the completion of an academic program, and additionally for community colleges, the successful transfer of students to a baccalaureate campus.

The Progress Metrics measure student progress from semester-to-semester or year-to-year toward the completion of an academic program. Such metrics allow institutions of higher education the ability to track student progression in a way that allows for early intervention and support to increase the likelihood of a successful completion or transfer outcome.

The Context Metrics tell the broader story of how the state is doing on college completion. These metrics allow state policymakers to understand both college completion outcomes relative to growth in enrollment and the overall effectiveness of their higher education system in increasing educational attainment of the state's citizens.

Significantly increasing college completion will require closing the gaps in success rates for low-income and minority students, and ensuring the success of targeted sub-groups such as adults, transfer students, part-time students, and students who required remedial education. The metrics should also facilitate measuring progress on a state's specific postsecondary goals, such as increasing the number of graduates in STEM or health fields. To understand and track improvement, outcome and progression metrics must be disaggregated by race/ethnicity, gender, income (Pell Grant recipients), age group, student attendance status, transfer versus native-to-the-institution students, degree type, and discipline. States also may wish to flag within their data systems those students who graduated from high schools within the state ("in-state" students).

For all of these metrics, the standard rule of non-disclosure of personally identifiable information applies. States and institutions should not publicly report disaggregated data that pertain to a sample size (N) of 10 or fewer students.

OUTCOME METRICS

Outcome Metric 1: Degree Production

Purpose: To determine how many undergraduate degrees and certificates the state's system of postsecondary education and its public colleges and universities are awarding annually, and to measure change over time.

Definition: Annual number of certificates of one year or greater in length¹, associate degrees, and bachelor's degrees awarded; disaggregated by age group, gender, race/ethnicity, Pell status (at any time), remedial status (at any time), transfer/first-time students, and discipline.

See Definitions of Data Elements and Disaggregation Categories on page 19 for more information on the disaggregation specified throughout this guide.

Notes on Collection and Reporting:

For data collection in 2010, the recommended baseline year is Academic Year 2007-08 followed by annual reporting in each subsequent year.

Degree production should be reported for the state and for each public institution of higher education within the state as appropriate. Each type of award should be reported and displayed individually as well as in a cumulative total.

Data should be unduplicated at the institution or state level to show only the highest degree earned by a student in a given year. This metric is not a calculation of cohort survival rate.

Outcome Metric 2: Graduation Rates

Purpose: To determine the rate at which students graduate from a public institution of higher education.

Definition: Number and percentage of entering undergraduate students who graduate from a degree or certificate program within 100%, 150%, and 200% of program time. Disaggregated by degree/credential type, and by race/ethnicity, gender, age group, Pell status (at time of entry), and remedial status (at time of entry).

1. Associate Degrees:

- a. First-time, full-time associate degree-seeking students

¹ The criterion of one year or greater pertains to the difficulty in establishing a consistent definition of quality or content for very short-term certificates. While states may wish to collect and report information on certificates of less than one year in length that are awarded in the state, they should attempt to assess the value those certificates have in helping them reach their overall educational attainment and workforce development goals.

Numerator: Number of students in cohort (denominator) who earn an award in 2 years for 100% time, in 3 years for 150% time, and in 4 years for 200% time (each timeframe should be reported separately).

Denominator: Number of first-time associate degree-seeking students entering in the fall semester of the given year, whose attendance status at entry is full-time.

b. First-time, part-time associate degree-seeking students

Numerator: Number of students in cohort (denominator) who earn an award in 2 years for 100% time, in 3 years for 150% time, and in 4 years for 200% time (each timeframe should be reported separately).

Denominator: Number of first-time associate degree-seeking students entering in the fall semester of a given year whose attendance status at entry is part-time.

c. Transfer at entry associate degree-seeking students

Numerator: Number of students in cohort (denominator) who earn an award in 2 years for 100% time, in 3 years for 150% time, and in 4 years for 200% time (each timeframe should be reported separately).

Denominator: Number of associate degree-seeking students entering in the fall semester of a given year who enter with or without some college credits after attending another institution of higher education (excludes students entering with only AP or dual enrollment credits).

2. Bachelor's Degree:

a. First-time, full-time bachelor's degree-seeking students

Numerator: Number of students in cohort (denominator) who earn an award in 4 years for 100% time, in 6 years for 150% time, and in 8 years for 200% time (each timeframe should be reported separately).

Denominator: Number of first-time bachelor's degree-seeking students entering in the fall semester of a given year whose attendance status at entry is full-time.

b. First-time, part-time bachelor's degree-seeking students

Numerator: Number of students in cohort (denominator) who earn an award in 4 years for 100% time, in 6 years for 150% time, and in 8 years for 200% time (each timeframe should be reported separately).

Denominator: Number of first-time bachelor's degree-seeking students entering in the fall semester of a given year whose attendance status at entry is part-time.

c. Transfer at entry bachelor's degree-seeking students

Numerator: Number of students in cohort (denominator) who earn an award in 4 years for 100% time, in 6 years for 150% time, and in 8 years for 200% time (each timeframe should be reported separately).

Denominator: Number of bachelor's degree-seeking students entering in the fall semester of a given year who enter with or without credits after attending another institution of higher education (excludes students entering with only AP or dual enrollment credits).

3. Certificates (of at least 1 year in program length):

a. First-time, full-time certificate-seeking students

Numerator: Number of students in cohort (denominator) who earn an award in 100%, 150%, and 200% of the expected (full-time) program length (each timeframe should be reported separately).

Denominator: Number of first-time, full-time certificate-seeking students entering in the fall semester of a given year.

b. First-time, part-time certificate-seeking students

Numerator: Number of students in cohort (denominator) who earn an award in 100%, 150%, and 200% of the expected (full-time) program length (each timeframe should be reported separately).

Denominator: Number of first-time, part-time certificate-seeking students entering in the fall semester of a given year.

Notes on Collection and Reporting:

For data collection in 2010, recommended years to use for baseline are as follows:

1. Associate Degree-Seeking Cohorts – Baseline

- a. First-time, full-time cohort identified in fall semester 2004; 100% time by August 31, 2006; 150% time by August 31, 2007; and 200% time by August 31, 2008.
- b. First-time, part-time cohort identified in the fall semester 2004; 100% time by August 31, 2006; 150% time by August 31, 2007; and 200% time by August 31, 2008.
- c. Transfer at entry cohort identified in fall semester 2004; 100% time by August 31, 2006; 150% time by August 31, 2007; and 200% time by August 31, 2008.

For all three cohorts, the next entering cohort begins with entry in fall semester 2005.

2. Bachelor's Degree-Seeking Cohorts – Baseline

- a. First-time, full-time cohort identified in fall semester 2002; 100% time by August 31, 2006; 150% time by August 31, 2008; 200% time by August 31, 2010.
- b. First-time, part-time cohort identified in the fall semester 2002; 100% time by August 31, 2006; 150% time by August 31, 2008; 200% time by August 31, 2010.
- c. Transfer at entry cohort identified in the fall semester 2002; 100% time by August 31, 2006; 150% time by August 31, 2008; 200% time by August 31, 2010.

For all three cohorts, the next entering cohort begins with entry in fall semester 2003.

3. Certificate-Seeking Cohorts - Baseline

- a. Both the first-time, full-time cohort and the first-time, part-time cohort identified in the fall semester 2005; 100% time by August 31, 2007; 150% time by August 31, 2008; 200% time by August 31, 2010.

For both cohorts, the next entering cohort begins with entry in the fall semester 2006.

Graduation rates should be produced for the state and for each public institution of higher education within the state as appropriate. Institutions that award both associate and bachelor's degrees can report graduation rates for each cohort separately. For a public institution of higher education graduation rate, the award must have been completed at that specific institution to be counted in the numerator. For graduation rates at the state level, the award can be counted in the numerator regardless of where that student started and completed as long as it was an in-state institution (for states with longitudinal databases that allow for such tracking of students and/or states that use the National Student Clearinghouse).

Each timeframe (100%, 150%, and 200%) should be reported and displayed individually for each respective student type (first-time full-time, first-time part-time, and transfer at time of entry) for each type of award (Associate degree, Bachelor's degree, and Certificate). The timeframes (100%, 150%, and 200%) are defined by program length.

For the certificate-seeking cohort, the cohort includes students seeking a certificate that is at least one year but less than two years in program length and students seeking a certificate that is two years or greater in programs length. As such, the timeframes (100%, 150%, and 200%) are based on completion of a certificate that is two years or greater in program length.

Attendance status of student (full-time, part-time, transfer) is defined at time of entry. "Transfer at entry" is defined as a student who previously attended a postsecondary institution (with or without credit and who may or may not have a degree award). Undergraduate students entering the institution directly from high school who earned dual credit or Advanced Placement credit or any other type of college credit while enrolled in high school should not be considered a transfer student at entry.

Students identified as "transfer at entry" include both part-time and full-time students.

Data should be unduplicated at the state level.

Optional Methods to Supplement the Graduation Rate Metrics

1) Attendance Status: Recognizing that many institutions serve large numbers of students whose attendance status may change over the course of their enrollment, an additional graduation rate calculation (following the same calculation methodology and baseline cohort years) that includes all students regardless of full or part-time enrollment may be useful to supplement the above graduation rate metrics.

2) 12-Month Enrollment vs. Fall Semester Entry (Program vs. Academic Year): Recognizing that many colleges, especially community colleges, increasingly enroll students throughout the year or have non-traditional academic calendars, states may wish to make a provision for institutions to adopt a 12-month enrollment method of identifying graduation rate cohorts. Institutions currently have this option for identifying their Graduation Rate Survey (GRS) cohorts for reporting IPEDS (referred to as “program year” reporting as opposed to “academic year” reporting).

Outcome Metric 3: Transfer Out (for community colleges only)

Purpose: To determine the proportion of students successfully transferring from two-year institutions of higher education to four-year institutions of higher education.

Definition: Annual number and percentage of students who transfer from a two-year campus to a four-year campus by race/ethnicity, gender, age group, Pell status (at time of entry), and remedial status (at time of entry).

Numerator: Number of students from the cohort (denominator) who enroll at a four-year public institution of higher education.

Denominator: Number of entering students in two-year public institutions of higher education in the fall semester of a specified year.

Notes on Collection and Reporting:

For data collection in 2010, the recommended years to use for baseline are as follows:

- a. First-time, full-time cohort identified in fall semester 2004 and followed annually until August 31, 2008.
- b. First-time, part-time cohort identified in the fall semester 2004 and followed annually until August 31, 2008.
- c. Transfer at entry cohort identified in fall semester 2004 and followed annually until August 31, 2008.

For all three cohorts, the next entering cohort begins with entry in the fall semester 2005.

Notes on Collection and Reporting:

The transfer-out metric should be produced for the state and for each public two-year institution of higher education in the state. Many institutions do not have the ability to determine what type of institution (if any) students enroll in after transferring out of their institution. Therefore, in most states this metric will need to be supplied by systems or by the state for institutions using either a student-unit record system or the National Student Clearinghouse.

Optional Disaggregation to Supplement the Transfer Out Metric: States/institutions may identify specific policy goals for which it would be necessary to disaggregate the transfer-out data by a threshold of credits or credentials earned prior to transfer (i.e., the percentage of students who transfer having earned fewer than 30 credits, more than 30 credits, after receiving an associate degree, etc.).

Outcomes Metric 4: Credits and Time to Degree

Purpose: To determine the average length of time in years and number of credits to complete a certificate or undergraduate degree by student entry status, race/ethnicity, gender, age groups, Pell status (at any time), remedial status (at any time), and discipline.

Definitions: Time to degree. Average length of time in years a student takes to complete an associate degree, a bachelor's degree, or a certificate of one year or greater normal program time. Start with the degrees/certificates awarded in a specified year and determine how many total years and months elapsed from the first date of entry to the date of completion. Partial years should be expressed as a decimal. Average the number of years across students and report by degree type.

Credits to degree. Average number of credits a student has accumulated when they earn an associate degree, a bachelor's degree, or a certificate of one year or greater. Start with the degrees/certificates awarded in a specified year and determine the total number of credit hours each student completed since first enrolling. Average the number of credit hours across students and report by degree type.

Years to Collect/Report: The baseline year is certificates and degrees awarded in Academic Year 2007-08 followed by annual reporting in each subsequent year.

Notes on Collection and Reporting:

The metric should be produced for the state and each public institution of higher education within the state. For calculating the metrics for each institution, only include elapsed time and accumulated credits that the student was enrolled in/completed at that specific institution. At the state-level, include all time and credits accrued beginning with the student's initial post-high school enrollment in a postsecondary education institution.

Student status (full-time, part-time, transfer) is identified at time of entry to the public institution of higher education.

For this metric, student race/ethnicity should be based upon data reported at the time of completion (as opposed to at entry to conform to the new IPEDS race/ethnicity codes).

PROGRESS METRICS

Progress Metric 1: Enrollment in Remedial Education

Purpose: To determine the proportion of undergraduate students who enroll in remedial coursework at public institutions of higher education.

Definition: Annual number and percentage of entering first-time undergraduate students who enroll in remedial math, English/reading, or both math and English/reading courses; by race/ethnicity, gender, age groups, Pell status (at time of entry).

1. Remedial Math Only:

Numerator: Number and percent of students from the cohort (denominator) who enrolled in a remedial math course (but not a remedial English/reading course) during the first academic year.

Denominator: All first-time degree or certificate-seeking students entering in the fall semester of the specified year.

2. Remedial English/Reading Only:

Numerator: Number and percent of students from the cohort (denominator) who enrolled in a remedial English/reading course (but not a remedial math course) during the first academic year.

Denominator: All first-time degree or certificate-seeking students entering in the fall semester of the specified year.

3. Both Remedial Math and English:

Numerator: Number and percent of students from the cohort (denominator) who enrolled in a remedial English/reading and a remedial math course during the first academic year.

Denominator: All first-time degree or certificate-seeking students entering in the fall semester of the specified year.

Progress Metric 2: Success in Remedial Education

Purpose: To determine the proportion of undergraduate students who complete remedial education and go on to complete college-level coursework in the same subject within two academic years.

Definition: Annual number and percentage of entering first-time undergraduate students who complete² remedial education courses in math, English/reading, or both and complete a college-level course in the same subject; by race/ethnicity, gender, age groups, Pell status (at time of entry).

1. Remedial Math Only:

Numerator: Number and percent of remedial students (denominator) who complete all required courses in remedial math and the first college-level math course within two academic years.

Denominator: All first-time degree or certificate-seeking students enrolled in remedial math course(s) during the first academic year.

2. Remedial English/Reading Only:

Numerator: Number and percent of remedial students (denominator) who complete all required courses in remedial English/reading and the first college-level English/reading course within two academic years.

Denominator: All first-time degree or certificate-seeking students enrolled in remedial English/reading course(s) during the first academic year.

3. Both Remedial Math and English:

Numerator: Number and percent of remedial students (denominator) who complete all required courses in remedial English/reading and math and the first college-level English/reading and math courses within two academic years.

Denominator: All first-time degree or certificate-seeking students enrolled in both remedial English/reading and math course(s) during the first academic year.

Notes on Collection and Reporting:

For data collection in 2010, both Progress Metric 1 and Progress Metric 2 use the same cohort. The recommended years to use for the baseline are as follows:

² "Complete" means passing or earning a credit for the course. Institutions should determine what counts as successful completion of a course (i.e., a mark of "pass" for a pass/fail course; a grade of C or better, etc.).

1. For two-year institutions of higher education, the baseline is established with the first-time entry students in the fall semester 2006. These students are followed through August 31, 2008 to determine the numerator.

A new cohort is established in each subsequent year of the baseline (the next one is identified in the fall semester 2007) with the timeframe for completing the remedial course and the college-level course(s) in the same subject area(s) being within two academic years.

2. For four-year institutions of higher education, the baseline is established with the first-time entry students in the fall semester 2006. These students are followed through August 31, 2008 to determine the numerator.

A new cohort is established in each subsequent year of the baseline (the next one is identified in the fall semester 2007) with the timeframe for completing the remedial course and the college-level course(s) in the same subject area(s) being within two academic years.

The metric should be produced for each public institution of higher education within the state, and aggregated at the state level for each sector (two-year institutions and four-year institutions).

Both full-time and part-time students should be included.

Data should be unduplicated at the state level.

Disaggregation of Other Metrics by Remedial Status: Remedial course-taking functions both as a metric in itself and as a disaggregation category (see Definitions of Data Elements and Disaggregation Categories for more information). The remedial education metrics refer to enrollment in remedial courses during the period being reported on (i.e., 2007-08 academic year), while the remedial status disaggregation category refers to whether students took a least one remedial course at time of entry or at any time during their postsecondary enrollment depending upon the specific metric.

Progress Metric 3: Success in Gateway (First-Year) College Courses

Purpose: To determine the proportion of undergraduate students completing entry, college-level math and English courses within the first two academic years at public institutions of higher education.

Definition: Annual number and percentage of entering first-time degree or certificate-seeking undergraduate students who complete entry college-level math and English courses within the first two consecutive academic years; by race/ethnicity, gender, age groups, Pell status (at time of entry), and remedial status (at time of entry).

Numerator: Number of students from cohort (denominator) who complete at least one entry college-level (non-remedial or developmental course) math and at least one English course within the first two consecutive academic years.

Denominator: Number of first-time degree or certificate-seeking undergraduate students enrolling in the fall semester of a specified year.

Years to Collect/Report:

1. For two-year institutions of higher education, the baseline is established with the first-time entry students in the fall semester 2006. These students are followed through August 31, 2008 to determine the numerator.

A new cohort is established in each subsequent year of the baseline (the next one is identified in the fall semester 2007) with the timeframe for completing the college-level course(s) in the same subject area(s) being within two academic years after entry into the institution.

2. For four-year institutions of higher education, the baseline is established with the first-time entry students in the fall semester 2006. These students are followed through August 31, 2008 to determine the numerator.

A new cohort is established in each subsequent year of the baseline (the next one is identified in the fall semester 2008) with the timeframe for completing college-level course(s) in the same subject area(s) being within two academic years after entry into the institution.

Notes on Collection and Reporting:

The metric should be produced for each public institution of higher education within the state and at the state level.

Data for the metric should be collected in such a way that allows for isolation of looking at the number and percentage of: 1) students completing an entry college-level course in math regardless of completing an entry college-level course in English; and 2) students completing an entry college-level course in English regardless of completing an entry college-level course in math.

Both full-time and part-time students should be included.

Data should be unduplicated at the state level.

Progress Metric 4: Credit Accumulation

Purpose: To determine the proportion of undergraduate students making steady academic progress during one academic year at public institutions of higher education.

Definition: Number and percentage of first-time degree or certificate-seeking undergraduate students completing 24 credit hours (for full-time students) or 12 credit hours (for part-time students) within their first academic year by student entry status, race/ethnicity, gender, age groups, Pell status (at entry), and remedial status (at time of entry).

1. Full-time Students:

Numerator: Number of students from cohort (denominator) completing 24 credit hours within one academic year after entry.

Denominator: Number of first-time, full-time degree or certificate-seeking undergraduate students entering in the fall semester of the specified year.

2. Part-time Students

Numerator: Number of students from cohort (denominator) completing 12 credit hours within one academic year of entry.

Denominator: Number of first-time, part-time degree or certificate-seeking undergraduate students entering in the fall semester of the specified year.

Years to Collect/Report: The baseline is established with the first-time entering students in the fall semester 2006.

A new cohort is established in each subsequent year of the baseline (the next one is identified in the fall semester 2007).

Notes on Collection and Reporting:

The metric should be produced for each public institution of higher education within the state and at the state level.

Student status (full-time, part-time) is identified at time of entry to the institution of higher education.

Data should be unduplicated at the state level.

Progress Metric 5: Retention Rates

Purpose: To determine the rate at which undergraduate students return to a public institution of higher education from fall-to-spring and fall-to-fall.

Definition: Number and percentage of entering degree or certificate-seeking undergraduate students enrolling from fall-to-spring and fall-to-fall at an institution of higher education by student entry status, race/ethnicity, gender, age groups, Pell status (at time of entry), and remedial status (at time of entry).

Numerator: Number of students in cohort (denominator) enrolling in the next consecutive spring and the next consecutive fall semester.

Denominator: Number of entering first-time degree or certificate-seeking undergraduate students enrolling in the fall semester of a specified academic year.

Years to Collect/Report:

1. First-Time, Full-time Students at Time of Entry:

For two-year public institutions of higher education, the baseline is established with the first-time entering students in the fall semester 2004. These students are followed and reported on annually for four years.

For four-year public institutions of higher education, the baseline is established with the first-time entering students in the fall semester 2002. These students are followed for eight years.

A new cohort is established in each subsequent year of the baseline (the next cohort is identified in the fall semester 2005 for two-year institutions; and in the fall semester 2003 for four-year institutions).

2. First-Time, Part-time Students at Time of Entry:

For two-year public institutions of higher education, the baseline is established with the first-time entering students in the fall semester 2004. These students are followed and reported on annually for four years.

For four-year public institutions of higher education, the baseline is established with the first-time entering students in the fall semester 2002. These students are followed for eight years.

A new cohort is established in each subsequent year of the baseline (the next cohort is identified in the fall semester 2005 for two-year institutions; and in the fall semester 2003 for four-year institutions).

3. Transfer Students at Time of Entry:

For two-year public institutions of higher education, the baseline is established with the entering transfer students in the fall semester 2004. These students are followed and reported on annually for four years.

For four-year public institutions of higher education, the baseline is established with the entering transfer students in the fall semester 2002. These students are followed for eight years.

A new cohort is established in each subsequent year of the baseline (the next cohort is identified in the fall semester 2005 for two-year institutions; and in the fall semester 2003 for four-year institutions).

Notes on Collection and Reporting:

The metric should be produced for the state and each public institution of higher education within the state. For a public institution of higher education retention rate, the student must be retained at that specific institution to be counted in the numerator. For retention rates at the state level, the student can be counted in the numerator regardless of where that student started (for states with longitudinal databases that allow for such tracking of students and/or states that use the National Student Clearinghouse).

For institutions using a quarterly academic calendar, the fall-to-spring semester retention rate should be operationalized as fall quarter to following spring quarter (skipping the winter quarter).

Student status (full-time, part-time, transfer) is identified at time of entry to the public institution of higher education.

Data should be unduplicated at state level.

Progress Metric 6: Course Completion

Purpose: To determine the proportion of attempted credit hours being completed by undergraduate students at public institutions of higher education.

Definition: Percentage of credit hours completed out of those attempted by entering degree or certificate-seeking undergraduate students, by semester and annually, by student entry status, race/ethnicity, gender, age groups, Pell status (at time of entry), and remedial status (at time of entry).

Numerator: Number of credit hours awarded to undergraduate students at the end of a specified semester or academic year.

Denominator: Number of credit hours degree or certificate-seeking undergraduate students enrolled in during the same specified semester or academic year.

Years to Collect/Report: The baseline year is students entering in the fall semester 2007 followed by annual reporting in each subsequent year.

Notes on Collection and Reporting:

The metric should be produced for the state and each public institution of higher education within the state.

Student status (full-time, part-time, transfer) is identified at time of entry to the institution of higher education.

CONTEXT METRICS

These metrics are calculated at the state level from annual degree production and overall enrollment or state population data. As aggregate state metrics, they help to inform state policymakers of the overall effectiveness of the state's higher education system, and help to place the outcome and progress measures in context.

Enrollment

Purpose: To determine the number of students enrolling at institutions of public higher education and to measure changes in enrollment over time, overall, and for specific subgroups.

Definition: Annual unduplicated number of students enrolled over a 12-month period at public institutions of higher education, disaggregated by attendance status at entry (full-time or part-time), race/ethnicity, gender, age, and Pell recipient status at entry. Enrollment should be reported for each public institution, and aggregated by sector and by certificate-seeking, associate degree-seeking, bachelor's degree-seeking, and undetermined or courses-only.

Years to Collect/Report: The baseline year is Academic Year 2007-08 (for both the numerator and denominator) followed by annual reporting in each subsequent year.

Notes on Collection and Reporting:

The metric should be produced for the state and for each institution of higher education in the state.

Completion Ratio

Purpose: To determine the proportion of certificates (of at least one year in expected length) and undergraduate degrees awarded relative to undergraduate student enrollment at public institutions of higher education.

Definition: Annual ratio of undergraduate degrees and certificates (of at least one year in expected length) awarded per 100 full-time equivalent (FTE) undergraduate students (at the state level, disaggregated by race/ethnicity, gender, and degree type).

Numerator: Number of undergraduate degrees and certificates (of at least one year in program length) awarded in a specified year.

Denominator: Number of full-time equivalent (FTE) undergraduate students in the same year.

Years to Collect/Report: The baseline year is Academic Year 2007-08 (for both the numerator and denominator) followed by annual reporting in each subsequent year.

Notes on Collection and Reporting:

The metric should be produced for the state and for each institution of higher education in the state.

Full-time, part-time, and transfer students should be included.

At the state and institution level, the data should be collected in a manner that allows for the metric to be calculated and reported by specific race/ethnicity and gender by specific degree type (certificates, associate and bachelor's degrees).

This metric is not a calculation of cohort survival rate.

Market Penetration

Purpose: To determine the proportion of certificates (of at least one year in program length) and undergraduate degrees awarded at public institutions of higher education relative to the young adult age cohort for a state.

Definition: Annual ratio of undergraduate degrees and certificates (of at least one year in program length) awarded relative to the state's population aged 18-24 years old with a high school diploma.

Numerator: Number of undergraduate degrees and certificates (of at least one year in program length) awarded in a specified year.

Denominator: Number of state's population aged 18-24 years old with a high school diploma.

Years to Collect/Report: The baseline year is Academic Year 2007-08 (for both the numerator and denominator) followed by annual reporting in each subsequent year.

Notes on Collection and Reporting:

The metric should be produced at the state level.

Full-time, part-time, and transfer students should be included.

The data should be collected in a manner that allows for the metric to be calculated and reported by race/ethnicity, gender, and specific degree type (certificates, associate, and bachelor's degrees).

The source for the denominator should be data from the American Community Survey (ACS) as collected by the U.S. Census Bureau.

This metric is not a calculation of cohort survival rate.

Definitions of Data Elements and Disaggregation Categories

(Special note on disaggregation: For all metrics, the standard rule of non-disclosure of personally identifiable information applies. States and institutions should not publicly report disaggregated data that pertain to a sample size (N) of 10 or fewer students.)

Academic year

An academic year includes a summer, fall, winter, and spring term but not necessarily in that order.

Age groups

Date of birth as reported by student in the following age bands:

- Enroll directly from high school (or 18-19 if a state's K-12 and postsecondary data systems are not linked);
- Age 25 and older; and,
- Other (not directly from high school or 25 and older)

Awards

Associate degree

An award (associate of arts or associate of science) that normally requires at least 2 but less than 4 years of full-time equivalent college work.

Bachelor's degree

An award (baccalaureate or equivalent degree, as determined by the Secretary, U.S. Department of Education) that normally requires at least 4 but not more than 5 years of full-time equivalent college-level work. This includes all bachelor's degrees conferred in a 5-year cooperative (work-study) program. A cooperative plan provides for alternate class attendance and employment in business, industry, or government; thus, it allows students to combine actual work experience with their college studies. Also includes bachelor's degrees in which the normal 4 years of work are completed in 3 years.

Certificate (at least one academic year in program length)

An award that requires completion of an organized program of study at the postsecondary level (below the baccalaureate degree) in at least one full-time equivalent academic years, or designed for completion in at least 30 semester or trimester credit hours, or in at least 45 quarter credit hours, or in at least 900 contact or clock hours, by a student enrolled full time.

Credit

Credit hour

A unit of measure representing the equivalent of an hour (50 minutes) of instruction per week over the entire term. It is applied toward the total number of credit hours needed for completing the requirements of a degree, diploma, certificate, or other formal award.

Credit hour (attempted)

The total number of student credit hours attempted in a specified academic term.

Credit hour (completed)

The total number of credits earned in a specified academic term.

Degree/certificate-seeking students

Students enrolled in courses for credit and recognized by the institution as seeking a degree, certificate, or other formal award. High school students enrolled in postsecondary courses for credit are not considered degree/certificate-seeking.

Discipline

The following degree categories are based on the two-digit Classification of Instruction Programs (CIP) codes defined by the National Center for Education Statistics. When providing data by discipline, aggregate up to the subcategory and report by subcategory (i.e., Education, Arts & Humanities, etc) as follows:

Education

13 Education

Arts and Humanities

5 Area, ethnic, cultural, and gender studies
16 Foreign languages, literatures, and linguistics
23 English language and literature/letters
24 Liberal arts and sciences, general studies and humanities
30 Multi/interdisciplinary studies
38 Philosophy and religious studies
39 Theology and religious vocations
50 Visual and performing arts
54 History

Social and Behavioral Sciences and Human Services

19 Family and consumer sciences/human sciences
25 Library science
31 Parks, recreation, leisure, and fitness studies
42 Psychology
44 Public administration and social service professions
45 Social sciences

Science, Technology, Engineering, and Math (STEM)

1 Agriculture, agriculture operations, and related sciences.
3 Natural resources and conservation
4 Architecture and related services
11 Computer and information sciences and support services.
14 Engineering
15 Engineering technologies/technicians
26 Biological and biomedical sciences
27 Mathematics and statistics
29 Military technologies

- 40 Physical sciences
- 41 Science technologies/technicians

Business and Communication

- 9 Communication, journalism, and related programs
- 10 Communications technologies/technicians and support services
- 52 Business, management, marketing, and related support services

Health

- 51 Health professions and related clinical sciences

Trades

- 12 Personal and culinary services
- 22 Legal Professions and Studies
- 43 Security and protective services

- 46 Construction trades
- 47 Mechanic and repair technologies/technicians
- 48 Precision production
- 49 Transportation and materials moving

First-time student (undergraduate)

A student who has no prior postsecondary experience (except as noted below) attending any institution for the first time at the undergraduate level. This includes students enrolled in academic or occupational programs. It also includes students enrolled in the fall term who attended college for the first time in the prior summer term, and students who entered with advanced standing (college credits earned before graduation from high school).

First-year college course (also referred to as college-level or gateway college course)

The first credit-bearing college course in English or math that applies to course requirements for a certificate or degree.

Full-time equivalent student (FTE)

The preferred FTE calculation is the IPEDS definition based on instructional activity. The number of FTE students is calculated based on the credit and/or contact hours reported by the institution on the IPEDS 12-month enrollment (E12) component and the institution's calendar system, as reported on the Institutional Characteristics (IC) component. For institutions with continuous enrollment programs, FTE is determined by dividing the number of contact hours attempted by 900.

For institutions that do not have credit or contact hour information from which to generate the instructional-based FTE, the default FTE calculation should be as follows:

$$\text{Full-time annual unduplicated headcount} + \frac{\text{Part-time annual unduplicated headcount}}{3}$$

Gender

Sex (male or female or unknown) reported by the student.

Graduation rate

This rate follows closely the rate required of institutions for disclosure and/or reporting purposes under Student Right-to-Know Act. This rate is calculated as the total number of completers within 100%, 150%, and 200% of normal time divided by the cohort.

Institution of higher education

Two-year institution (also referred to as community college)

A postsecondary institution that offers programs of at least 2 but less than 4 years' duration. Those institutions that historically have offered and awarded programs of at least 2 years, but recently have added programs of 4 years should be included as long as the majority of degrees awarded still are for programs of at least two years but less than four years duration. Includes occupational and vocational schools with programs of at least 1800 hours and academic institutions with programs of less than 4 years. Does not include bachelor's degree-granting institutions where the baccalaureate program can be completed in 3 years.

Four-year institution

A postsecondary institution that offers programs of at least 4 years duration or one that offers programs at or above the baccalaureate level. Does not include institutions that historically have offered and awarded programs of 2 years or less, but now offer programs of 4 years, if the majority of the degrees awarded still are for programs of at least two years but less than four years duration.

Pell recipient

Undergraduate postsecondary student who qualifies and receives grant assistance through the Higher Education Act of 1965, Title IV, Part A, Subpart I, as amended.

Pell recipient at entry

An undergraduate student is considered a Pell recipient at entry if the student received a Pell grant within the first year of entry at a given institution of higher education.

Pell recipient at any time

An undergraduate student is considered a Pell recipient at any time if the student received a Pell grant at any time during the student's undergraduate tenure.

Race/ethnicity

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. They are used to categorize U.S. citizens, resident aliens, and other eligible non-citizens.

Note about race/ethnicity data codes: For the graduation rate, retention, and other metrics that track a cohort of students, most states will use the old race/ethnicity codes to reflect what was reported at student's time of entry (i.e., 2002 or 2004 for the baseline years). For time and credits-to-degree, states should collect data using the new codes for students at their time of completion (i.e., 2007-08 for the baseline year). For all other measures, institutions should use the codes that align with the way other data for that year are being collected and reported for the IPEDS enrollment survey (i.e., states do not need to use the new codes until required to do so for IPEDS reporting).

New Categories (1997 OMB)

A new methodology was developed in 1997 by OMB to be used in reporting race/ethnicity. Individuals are asked to first designate ethnicity as:

Hispanic or Latino or
Not Hispanic or Latino

Second, individuals are asked to indicate one or more races that apply among the following:

American Indian or Alaska Native
Asian
Black or African American
Native Hawaiian or Other Pacific Islander
White

Hispanic or Latino (new definition)

A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race.

American Indian or Alaska Native (new definition)

A person having origins in any of the original peoples of North and South America (including Central America) who maintains cultural identification through tribal affiliation or community attachment.

Asian (new definition)

A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian Subcontinent, including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.

Black or African American (new definition)

A person having origins in any of the black racial groups of Africa.

Native Hawaiian or Other Pacific Islander (new definition)

A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

White (new definition)

A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.

Remedial courses

Instructional courses (also called developmental education) designed for students deficient in the general competencies necessary for a regular postsecondary curriculum and educational setting.

Remedial status (at time of entry)

Remedial status at time of entry as a disaggregation category is determined by whether the student enrolled in a remedial course within the first year of entry at a given institution of higher education

Remedial status (at any time)

Remedial status at any time as a disaggregation category is determined by whether a student enrolled in a remedial course in any subject at any time during their enrollment in postsecondary institutions.

Retention rate

(Fall-to-spring)

A measure of the rate at which students persist in their educational program at an institution, expressed as a percentage. For four-year institutions, this is the percentage of first-time bachelors (or equivalent) degree-seeking undergraduates from the previous fall who are again enrolled in the consecutive spring semester (or, for institutions on a quarter-based academic calendar, the following spring quarter). For all other institutions this is the percentage of first-time degree/certificate-seeking students from the previous fall who either re-enrolled or successfully completed their program by the following spring term.

(Fall-to-fall)

A measure of the rate at which students persist in their educational program at an institution, expressed as a percentage. For four-year institutions, this is the percentage of first-time bachelors (or equivalent) degree-seeking undergraduates from the previous fall who are again enrolled in the current fall. For all other institutions this is the percentage of first-time degree/certificate-seeking students from the previous fall who either re-enrolled or successfully completed their program by the current fall.

Student Status

Full-time student

Undergraduate—A student enrolled for 12 or more semester credits, or 12 or more quarter credits, or 24 or more contact hours a week each term.

Part-time student

Undergraduate—A student enrolled for either less than 12 semester or quarter credits, or less than 24 contact hours a week each term.

Transfer at entry

A student entering the reporting institution for the first time but known to have previously attended a postsecondary institution. The student may transfer in with or without credit and/or a degree award.

Undergraduate

A student enrolled in a 4- or 5-year bachelor's degree program, an associate degree program, a vocational or technical program, or a certificate program below the baccalaureate.

Appendix A

The following list represents participants from the Data/Metrics Convening of July 27-28, 2009 in Denver, Colorado. The convening was hosted by Complete College America, the National Center for Higher Education Management Systems (NCHEMS), and the State Higher Education Executive Officers (SHEEO) to discuss a common core set of metrics in the area of college completion.

Brenda Albright
Franklin Education Group

Jim Applegate
Lumina Foundation for Education

Sally Askman
The M Company, Inc.

Chris Baldwin
Jobs for the Future

Brian Bosworth
Futureworks

J.B. Buxton
Education Innovations Group, LLC

Tony Carnevale
Center on Education and the Workforce
Georgetown University

Kristin Conklin
HCM Strategists, LLC

Greg Darnieder
US Department of Education

Gordon Davies
Former State Higher Education Executive
Officer, Kentucky and Virginia

Tom Dawson
Bill & Melinda Gates Foundation

Jennifer Engle
Education Trust

Matt Gianneschi
Governor's Office of Policy & Initiatives
State of Colorado

Barbara Gombach
Carnegie Corporation of New York

Jan Ignash
Washington Higher Education Coordinating
Board

Davis Jenkins
Community College Research Center, Teachers
College, Columbia University

Dennis Jones
National Center for Higher Education
Management Systems

Stan Jones
Complete College America

Richard Kazis
Jobs for the Future

Patrick Kelly
National Center for Higher Education
Management Systems

David Longanecker
Western Interstate Commission for Higher
Education

Charles McGrew
Data Quality Campaign

Thomas Mortenson
Postsecondary Education OPPORTUNITY

Jeannie Oakes
Ford Foundation

Cheryl Orr
Complete College America

Raymund Paredes
Texas Higher Education Coordinating Board

Hilary Pennington
Bill & Melinda Gates Foundation

Richard Petrick
Ohio Board of Regents

David Prince
Washington State Board for Community &
Technical Colleges

Richard Reeves
National Student Clearinghouse

Jan Somerville
National Association of System Heads

Jeff Stanley
State Higher Education Executive Officers

Tom Sugar
Complete College America

Jane Wellman
Delta Cost Project

Keith Witham
Complete College America

Josh Wyner
Complete College America

Tom Weko (attending by conference call)
National Center for Education Statistics

Appendix B

The following list represents participants from the National Governors Association (NGA) Common College Completion Metrics Work Group of May 13, 2010 in Washington, D.C. The convening was hosted to discuss a common core set of metrics in the area of college completion that serve as one component of the 2010-11 NGA Chair's initiative—***Complete to Compete***.

Rob Anderson
West Virginia Higher Education Policy
Commission

Mike Baumgartner,
Illinois Board of Higher Education

Patrick Crane
Office of the Governor
State of West Virginia

Kristin Conklin
HCM Strategists

Kevin Dougherty
Teachers College
Columbia University

Jennifer Engle
Education Trust

Charles "Chip" Hatcher
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Stan Jones
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Jorge Klor de Alva
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Rich Petrick
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Jeff Stanley
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