

## **Connecticut Public Policy Framework for Higher Education**

*This framework was approved by the Higher Education Coordinating Council on November 29, 2012, pursuant to Section 10a-6b of the Connecticut General Statutes.*

*Members of the Higher Education Coordinating Council:*

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Philip Austin, Board of Regents for Higher Education, Interim President  
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Lawrence McHugh, University of Connecticut Board of Trustees, Chair  
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Stefan Pryor, Commissioner of Education  
Lewis Robinson, Board of Regents for Higher Education, Chair*

### **Preface**

This framework is intended to articulate Connecticut's statewide vision and goals for attaining higher levels of educational attainment of our state's residents.

Achieving this vision will require partnerships with other state and local agencies and organizations.

## **Connecticut Public Policy Framework for Higher Education**

### *Vision*

A continually increasing share of Connecticut's population will have the high quality post-secondary education that enables them to achieve their life and career goals and makes Connecticut a place of engaged, globally competitive communities.

### *Goals*

Five goals follow from this vision:

#### **College Readiness**

Prepare more high school graduates, GED graduates, and adults to enter college prepared for college-level work.

#### **Student Success**

Graduate more people with the knowledge and skills to achieve their life and career goals.

#### **Affordability and Sustainability**

Maximize access to higher education for students from all economic backgrounds

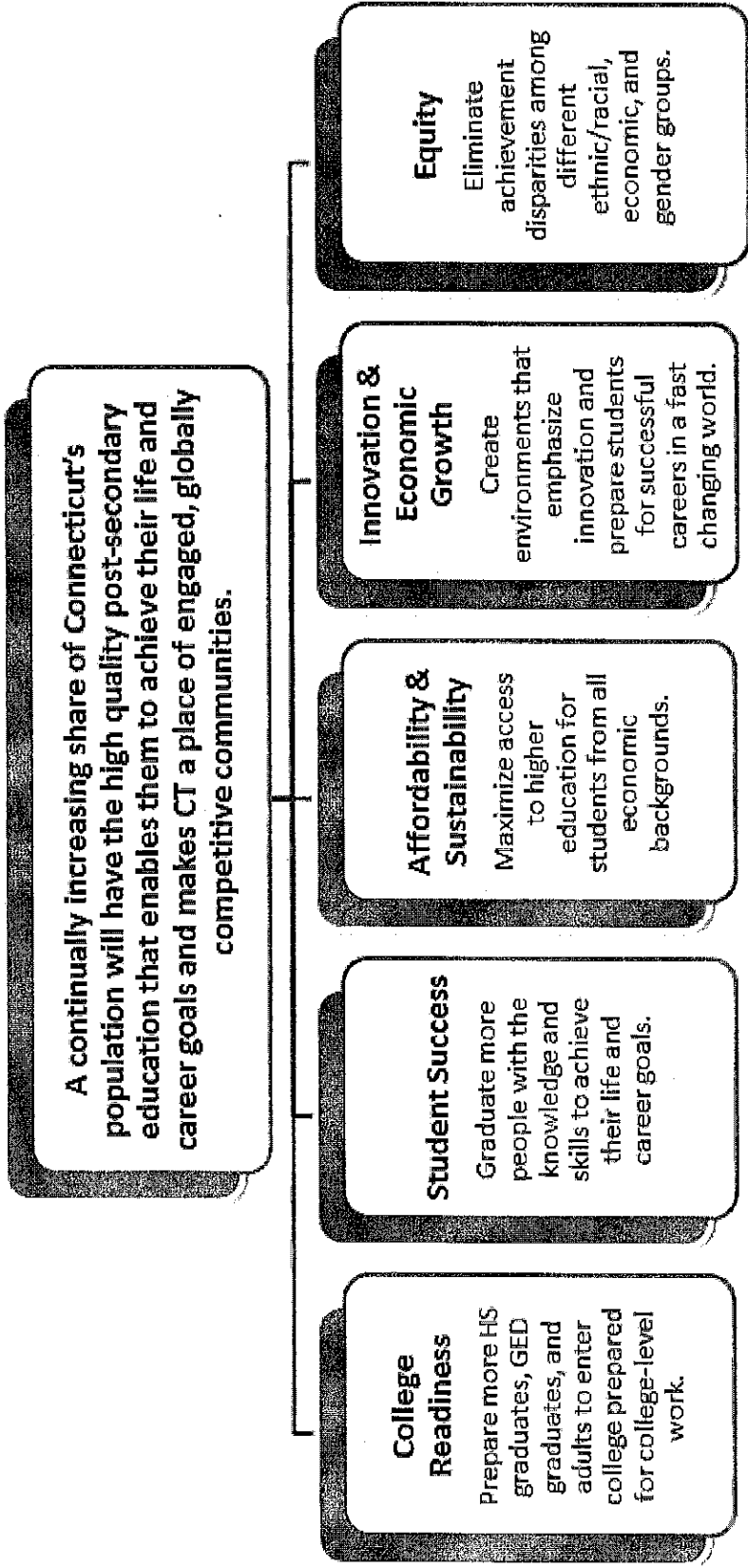
#### **Innovation and Economic Growth**

Create environments that emphasize innovation and prepare students for successful careers in a fast changing world.

#### **Equity**

Eliminate achievement disparities among different ethnic/racial, economic, and gender groups.

# Connecticut Public Policy Framework for Higher Education



**Vision**

A continually increasing share of Connecticut's population will have the high quality post-secondary education that enables them to achieve their life and career goals and makes Connecticut a place of engaged, globally competitive communities.

*Indicators*

- Connecticut adults, 25-44 holding associate's degree and above (Census, state-level)
- Median household income (Census, state-level)
- Voter participation (Census, state-level)
- State Domestic Product per capita (US Bureau of Economic Analysis, state-level)
- Enrollment per capita, 18-44 (Statewide, Sector, Institutions)

**College Readiness**

Prepare more HS graduates, GED graduates, and adults to enter college prepared for college-level work.

*Indicators*

- Percent of high school graduates identified as "college-ready" (Statewide, Sector, Institution)
- College-going rates of public high school graduates (Statewide)
- Percent completing college-level English and math courses within 2 years (Statewide, Sector, Institution)
- Percent on track to completing on-time: FT student completing 24 credits in 1st academic year; PT student completing 12 credits in 1st academic year (Statewide, Sector, Institution)

**Student Success**

Graduate more people with the knowledge and skills to achieve their life and career goals.

*Indicators*

- Completions per 100 FTE student by level (Sector, Institution)
- Graduation rate of full-time, first-time students in 150% of normal time; community colleges only will include transfers out (Sector, Institution)
- Employment and earnings after graduation (Sector, Institution)
- Time and credits to degree/certificate (Sector, Institution)
- Transfers from 2-year to 4-year institutions per 100 FTE (Community Colleges only, Institution)

NOTE: Learning outcomes are an important element that should be understood more fully; however, at this time, there is no reliable, agreed-upon method for evaluating these.

**Affordability and Sustainability**

Maximize access to higher education for students from all economic backgrounds

*Indicators*

- Tuition and fees as % of median household income (Sector, Institution)
- Percent of undergraduates receiving federal loan aid (Sector, Institution)
- State and local appropriations per completion and per 100 FTE (Sector, Institution)
- Education and related expenses per completion and per FTE enrollment (Sector, Institution)
- Instructional expenditures as a percent of Education & Related spending (Sector, Institution)

## **Innovation and Economic Growth**

Create environments that emphasize innovation and prepare students for successful careers in a fast changing world.

### *Indicators*

- Completions in fields with high workforce demand: STEM, health, education (Sector, Institution)
- External research funding per full-time faculty (Sector, Institution)
- Patents per 100K workers (Statewide)
- Percent of students enrolled in distance education courses exclusively/some but not all (Sector, Institution)

NOTE: Success in program innovation becomes evident in the other indicators. Innovation is intended to be evolving, which may not best be quantified with a stagnant measure. However, further investigation into how other states may be measuring this is warranted.

## **Equity**

Eliminate achievement disparities among different ethnic/racial, economic, and gender groups.

### *Indicators*

Disaggregate indicators in other goal areas by race/ethnicity, low v. non-low-income, and gender where available.

## Technical Appendix

The purpose of the technical appendix is to specify data sources, calculation methods, and other necessary description to allow for the calculation of accountability indicators. Indicators in almost all instances can be calculated using publicly available data.

Unless stated otherwise, the report will present six years of data when available to allow for calculation of a five-year change. State comparisons will focus on states similar to Connecticut, with a focus on Massachusetts, Maryland, New Jersey, New York, and Pennsylvania, although other states may be included where appropriate. Institutional comparisons will be made in reference to a comparison group of similar institutions; comparisons will typically reference a group median, relevant percentile comparison, and/or best in group.

### *Vision 1: Connecticut adults, 25-44 holding associate's degree and above*

**Source:**

U.S. Census Bureau, 2011 American Community Survey 1-Year Estimates (Table B15001)

**Calculation:**

The numerator is the sum of individuals in the state, ages 25-44, whose highest educational level is an associate's degree, a bachelor's degree, and a graduate degree; the denominator is the total population in the state, ages 25-44.

**Reporting format:**

The report will provide a raw percentage as well as a comparison to other states.

### *Vision 2: Median household income (Census, state-level)*

**Source:**

U.S. Census Bureau, American Community Survey, 1-year Estimates (Table S1903)

**Calculation:**

Medians are calculated in the table.

**Reporting format:**

The report will provide a raw percentage as well as a comparison to other states.

### *Vision 3: Voter participation (Census, state-level)*

**Source:**

U.S. Census Bureau, Current Population Survey, November 2012. General elections in presidential years only.

**Calculation:**

Percentages are calculated in the table.

**Reporting format:**

The report will provide a raw percentage as well as a comparison to other states.

### *Vision 4: State Domestic Product per capita (US Bureau of Economic Analysis, state-level)*

Source:

U.S. Bureau of Economic Analysis, Real GDP by state (millions of chained 2005 dollars)  
U.S. Census Bureau Annual Estimates of the Population for the United States, Regions, States, and Puerto Rico: July 1, 2011 (NST-EST2011-01).

Calculation:

The numerator is the real GDP of state in chained 2005 dollars. The denominator is the July 1 population estimate.

Reporting format:

The report will provide dollar amount as well as a comparison to other states.

*Vision 5: Enrollment per capita, 18-44 (Statewide, Sector, Institutions)*

Source:

U.S. Dept. of Education, IPEDS Fall Enrollment Survey (EF)  
U.S. Census Bureau, July 1 intercensal estimates by age (Table series NST-EST2011-01)

Calculation:

The numerator is fall headcount enrollment in all sectors, including private institutions. The denominator is the July 1 population estimate of persons aged 18-44 years. [TBD a breakdown of graduate and undergraduate enrollments]

Reporting format:

The report will provide a per capita amount as well as a comparison to other states. [TBD a sector breakdown]

*Goal 1.1 Percent of high school graduates identified as "college-ready" (Statewide, Sector, Institution)*

Source:

Smarter Balanced Assessments (beginning in Fall 2016)  
Proxy for earlier years: percent of SAT takers scoring 1550 or higher<sup>1</sup>  
Institutional report, to be collected for fall 2013.

Calculation:

The numerator is the number of students graduating from high school in the spring and entering college in the fall who score a combined Math, Critical Reading, and Writing score of 1550 (out of 2400); the denominator is all students graduating from high school in the spring and entering college in the fall who have all three SAT scores.

Reporting format:

The state report will compare Connecticut to other states  
Institution reports will provide institutional figures over time. Benchmarks will not be available.

*Goal 1.2 College-going rates of public high school graduates (Statewide)*

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<sup>1</sup> <http://media.collegeboard.com/homeOrg/content/pdf/sat-report-college-career-readiness-2012.pdf>

Source:

U.S. Department of Education, IPEDS Fall Enrollment Survey; high school graduates data source (including private schools) TBD. [Digest of Education Statistics Table 238 contains obvious undercounts of CT HS graduates: [http://nces.ed.gov/programs/digest/d12/tables/dt12\\_238.asp](http://nces.ed.gov/programs/digest/d12/tables/dt12_238.asp)]

Calculation:

The numerator is the number of students completing HS in the past 12 months in Connecticut enrolling in an institution in the IPEDS universe; the denominator is the total number of public and private high school graduates in the state.

Reporting format:

The report will provide percentage for Connecticut as well as a comparison to other states.

*Goal 1.3 Percent completing college-level English and math courses within 2 years (Statewide, Sector, Institution)*

Source:

Institutional reporting to Complete College America, Progress Metric 3: First-time entry students completing at least one entry, college-level math and English Course within two academic years of entry

Calculation:

The numerator is the number of first-time degree or certificate-seeking undergraduate students entering in fall semesters who complete entry college-level math and English courses within the first two consecutive academic years; the denominator is the number of first-time degree or certificate-seeking undergraduate students entering in a fall semester.

Reporting format:

The report will compare Connecticut data (by sector) to other participating CCA states. Institution data will be reported compared to other CT institutions in their sector

*Goal 1.4 Percent on track to completing on-time: FT student completing 24 credits in 1st academic year; PT student completing 12 credits in 1st academic year (Statewide, Sector, Institution)*

Source:

Institutional reporting to Complete College America, Progress Metric 4: Full-time, first-time students completing 24 credit hours within their first academic year; part-time, first-time students completing 12 credit hours within their first academic year

Calculation:

The numerator is the number of full-time first time students in the fall full-time GRS cohort who completed 24 credit hours before the following fall; the denominator is the students in the fall full-time GRS cohort. The numerator is the number of part-time first time students in the fall full-time GRS cohort who completed 12 credit hours before the following fall; the denominator is the students in the fall part-time GRS cohort.

Reporting format:

The report will compare Connecticut data (by sector) to other participating CCA states. Institution data will be reported compared to other CT institutions in their sector

*Goal 2.1 Completions per 100 FTE student by level (Sector, Institution)*

Source:

U.S. Dept. of Education IPEDS Completions Survey and IPEDS Fall Enrollment Survey

Calculation:

For undergraduates, the numerator is calculated as the sum of associates and bachelor's degree completions plus one third of total undergraduate certificate completions; the denominator is calculated using the National Center for Education Statistics fall headcount formula<sup>2</sup> for undergraduate degree- or certificate-seeking students only from two years prior.

For graduates, the numerator is calculated as the sum of master's and doctoral degree (all types) completions plus one third of total postbaccalaureate and post-master's completions; the denominator is calculated using the NCES fall headcount formula for all graduate students from two years prior (degree- or certificate-seeking graduate students are not reported through IPEDS).

Reporting format:

Data are not comparable across sectors and should be so noted. The state report will present data by sector. Institutional reports will compare performance relative to the comparison group.

*Goal 2.2 Graduation rate of full-time, first-time students in 150% of normal time; community colleges only will include transfers out (Sector, Institution)*

Source:

U.S. Dept. of Education IPEDS Graduation Rate Survey

Calculation:

For four-year institutions, the numerator is the number of students from the adjusted cohort of first-time full-time degree or certificate seeking students who completed their program within 150% of normal time; the denominator is the adjusted cohort. The resulting metric is the 150% completion rate reported to IPEDS.

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<sup>2</sup> The fall headcount formula for full-time equivalent enrollment is used by the Delta Cost Project. It is necessary to use in order to disaggregate by equity categories. The number of FTE students is calculated based on fall student headcounts as reported by the institution on the IPEDS Enrollment (EF) component (Part A). The full-time equivalent (headcount) of the institution's part-time enrollment is estimated by multiplying the factors noted below times the part-time headcount. These are then added to the full-time enrollment headcounts to obtain an FTE for all students enrolled in the fall. This formula is used to produce an FTE that is used annually in the Digest of Education Statistics.

Part-time undergraduate enrollment

Public 4-year (.403543)

Private (not-for-profit and for-profit) 4-year (.392857)

Public 2-year and <2-year (.335737)

All other institutions (.397058)

Part-time first-professional enrollment

Public 4-year (.600000)

Private (not-for-profit and for-profit) 4-year (.545454)

Part-time graduate enrollment

Public 4-year (.361702)

Private (not-for-profit and for-profit) 4-year (.382059)

<http://nces.ed.gov/ipeds/glossary/index.asp?id=854>



For two-year institutions, the numerator is the number of students from the adjusted cohort of first-time full-time degree or certificate seeking students who completed their program within 200% of normal time; the denominator is the adjusted cohort. The resulting metric is the 200% completion rate reported to IPEDS.

Reporting format:

Data are not comparable across sectors and should be so noted. The state report will present data by sector. Institutional reports will compare performance relative to the comparison group.

Reporting format:

### *Goal 2.3 Employment and earnings after graduation*

Source:

Matching of unit-records of completers to unemployment insurance (UI) records maintained by the Connecticut Department of Labor.

Calculation:

To be determined.

Reporting format:

To be determined. Data are likely not comparable across sectors or majors.

### *Goal 2.4 Time and credits to degree/certificate (Sector, Institution)*

Source:

Institutional reporting to Complete College America, Outcomes Metric 4: Average number of years to degree and average number of credits earned

Calculation:

See Complete College America Technical Appendix.

Reporting format:

The report will compare Connecticut data (by sector) to other participating CCA states. Institution data will be reported compared to other CT institutions in their sector. Certificate completions and Associate's degree completions will be reported for community colleges only. Bachelor's degrees only will be reported for 4-year institutions. Data for full-time and part-time student entrants will be disaggregated.

### *Goal 2.5 Transfers from 2-year to 4-year institutions per 100 FTE (Community Colleges only, Institution)*

Source:

Community college institutional research database and National Student Clearinghouse.

Calculation:

The numerator is the number of students found enrolled in a 4-year institution who were enrolled in a community college in the previous year and did not complete a certificate or degree (completions

are captured in Goal 2.1). The denominator is calculated using the National Center for Education Statistics fall headcount formula for undergraduate students enrolled in the previous year.

Reporting format:

Benchmark data will not be available. The report will present data for all twelve community colleges, and may juxtapose this metric with goal 2.1

*Goal 3.1 Tuition and fees as % of median household income (Sector, Institution)*

Source:

U.S. Dept. of Education IPEDS Institutional Characteristics Survey for tuition and required fees and the U.S. Census American Community Survey 1-year estimates for median household income

Calculation

The numerator is the sum of tuition and required fees. The denominator is the median household income reported in the American Community Survey; the most recent year will be estimated based on a reasonable economic indicator. Sector averages will be calculated as unweighted institutional averages without reference to enrollment.

Reporting format:

The state report will present data by sector. Institutional reports will compare performance relative to the comparison group.

*Goal 3.2 Percent of undergraduates receiving federal loan aid (Sector, Institution)*

Source:

U.S. Dept. of Education IPEDS Student Financial Aid Survey

Calculation

The numerator is the number of undergraduates receiving federal loan aid. The denominator is the number of undergraduates enrolled in the fall semester (the financial aid cohort).

Reporting format:

The state report will present data by sector. Institutional reports will compare performance relative to the comparison group.

*Goal 3.3 State and local appropriations per completion and per 100 FTE (Sector, Institution)*

Source:

U.S. Dept. of Education IPEDS Finance Survey and Fall Enrollment Survey

Calculation:

The numerator is the sum of state appropriations and local appropriations reported on the IPEDS finance survey (which should match institutions' audited general purpose financial statements). The FTE enrollment denominator is calculated using the National Center for Education Statistics fall headcount formula for all students for the same fiscal year; the completions denominator is the sum of all degree and certificate completions for the same fiscal year. Sector averages will be weighted. (A future iteration of this calculation might weight certificate completions).

Reporting format:

The state report will present data by sector. Institutional reports will compare performance relative to the comparison group.

*Goal 3.4 Education and related expenses per completion and per FTE enrollment (Sector, Institution)*

Source:

U.S. Dept. of Education IPEDS Finance Survey and Fall Enrollment Survey

Calculation:

The calculation for the numerator uses the methodology established by the Delta Cost Project:

Education & related expenses = instruction + student services +  
(education\_share\*(academic support + institution support + operation/maintenance))

Where:

Education\_share = (instruction + student services) / (instruction + student services +  
research + public service)<sup>3</sup>

Amounts allocated for depreciation, interest, and operations & maintenance are backed out of totals.

The FTE enrollment denominator is calculated using the National Center for Education Statistics fall headcount formula for all students for the same fiscal year; the completions denominator is the sum of all degree and certificate completions for the same fiscal year. (A future iteration of this calculation might weight certificate completions). Sector averages will be weighted for enrollment.

Reporting format:

The state report will present data by sector. Institutional reports will compare performance relative to the comparison group.

*Goal 3.5 Instructional expenditures as a percent of Education & Related spending (Sector, Institution)*

Source:

U.S. Dept. of Education IPEDS Finance Survey and Fall Enrollment Survey

Calculation:

The numerator is the reported amount of expenditure on instruction (less depreciation, interest, and operations & maintenance)

The calculation for the denominator uses the methodology established by the Delta Cost Project:

Education & related expenses = instruction + student services +  
(education\_share\*(academic support + institution support + operation/maintenance))

Where:

Education\_share = (instruction + student services) / (instruction + student services +  
research + public service)

Amounts allocated for depreciation, interest, and operations & maintenance are backed out of totals. Sector averages will be weighted.

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<sup>3</sup> [http://www.deltacostproject.org/resources/pdf/issuebrief\\_02.pdf](http://www.deltacostproject.org/resources/pdf/issuebrief_02.pdf)

*Goal 4.1 Completions in fields with high workforce demand: STEM, health, education (Sector, Institution)*

Source:

U.S. Dept. of Education IPEDS Completions Survey

Calculation:

The sum of completions at all award levels in specific 2-digit classification of instructional program (CIP) code series:

Science, Technology, Engineering & Math (STEM):

01	Agriculture, Agriculture Operations, And Related Sciences
03	Natural Resources And Conservation
04	Architecture And Related Services
11	Computer And Information Sciences And Support Services
14	Engineering
15	Engineering Technologies And Engineering-Related Fields
26	Biological And Biomedical Sciences
27	Mathematics And Statistics
28	Military Science, Leadership And Operational Art
29	Military Technologies And Applied Sciences
40	Physical Sciences
41	Science Technologies/Technicians
48	Precision Production

Health

51	Health Professions And Related Programs
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Education

I3	Education
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A future iteration of this indicator would identify an appropriate denominator.

Reporting format:

The state report will present data by sector. Institutional reports will compare performance relative to the comparison group.

*Goal 4.2 External research funding per full-time faculty (Sector, Institution)*

Source:

National Science Foundation Survey of Research and Development Expenditures at Universities and Colleges and U.S. Dept. of Education IPEDS Human Resources Survey

Calculation:

The numerator is R&D expenditures (all fields) as reported on the NSF Survey of Research and Development Expenditures at Universities and Colleges. The denominator is the total number of full-time faculty at the institutions as reported on the IPEDS HR survey for the same fiscal year.

Reporting format:

The state report will present data by sector. Institutional reports will compare performance relative to the comparison group.

*Goal 4.3 Patents per 100K workers (Statewide)*

Source:

U.S. Patent and Trademark Office, General Patent Statistics Report

Calculation:

To be determined

Reporting format:

To be determined

*Goal 4.4 Percent of students enrolled in distance education courses exclusively/some but not all (Sector, Institution)*

Source:

U.S. Dept. of Education IPEDS Fall Enrollment Survey

Calculation:

The numerator is the sum of students reported on the fall enrollment survey as enrolled exclusively in distance education and enrolled in some but not all distance education. The denominator is all students. Sector averages will not be weighted.

Reporting format:

The state report will present data by sector. Institutional reports will compare performance relative to the comparison group.

*Goal 5.1 Disaggregate indicators in other goal areas by race/ethnicity*

Race/ethnicity categories:

When cell sizes are sufficient for meaningful and reliable comparisons, indicators will be disaggregated by the following race/ethnicity categories

- American Indian or Alaskan Native
- Asian, plus Native Hawaiian or Other Pacific Islander
- African American or Black
- Hispanic or Latino
- White

The following categories may also be included if relevant:

- Two or More
- Non-Resident Alien
- Race/Ethnicity Unknown

Indicators for disaggregation by race/ethnicity:

- Vision 1
- Vision 5
- Goal 1.1

- Goal 1.3
- Goal 1.4
- Goal 2.1
- Goal 2.2
- Goal 2.4
- Goal 2.5
- Goal 4.1

*Goal 5.2 Disaggregate indicators in other goal areas by low income v. non-low income*

Income indicator:

Pell grant recipients will serve as a proxy for low income, although this indicator is available for only a limited number of data sources:

Indicators for disaggregation by income:

- Goal 1.3
- Goal 1.4
- Goal 1.3
- Goal 1.4

*Goal 5.3 Disaggregate indicators in other goal areas by gender*

Indicators for disaggregation by gender:

- Vision 1
- Vision 5
- Goal 1.1
- Goal 1.3
- Goal 1.4
- Goal 2.1
- Goal 2.2
- Goal 2.4
- Goal 2.5
- Goal 4.1