# Aspen Prize for Community College Excellence

## Round 1 Eligibility Model (2023)

### **Executive Summary**

Round 1 of the Aspen Prize for Community College Excellence process is designed to select 150+ public two-year institutions (out of 982 potential candidates) as eligible to apply for the Round 2 selection process. The model was developed by the National Center for Higher Education Management Systems (NCHEMS), in consultation with the Aspen Prize's Data and Metrics Advisory Panel, and uses publicly available data from the National Center for Education Statistics' Integrated Postsecondary Education Data System (IPEDS) and the U.S. Census Bureau. This document provides details of the analytic model developed to determine the top 150+ institutions. Specific calculations for each metric in the model are available in the appendix.

The model is based on institutional performance in three general areas: (1) retention, completion, and transfer, (2) improvement in performance over time, and (3) equity, defined as performance outcomes for underrepresented minorities and low-income students. Subject to modifications described in this document, each of these general categories was equally weighted in the baseline model, with each accounting for one-third of the overall score. Adjustments to the measures were made in the analytic model (where possible) to control for institutions with unusual percentages of part-time and underrepresented minority student enrollment in order not to penalize institutions that serve disproportionately large populations of these students. Also, the model assesses both absolute levels of performance and gains over time, and it contains adjustments designed to give credit to institutions that have made significant improvements in performance outcomes over time. For institutions that have shown significant improvement, greater weight is applied to the improvement in outcomes, while for institutions that have high but relatively constant outcomes, greater weight is shifted to the absolute levels of performance. Finally, in order to produce a representative set of institutions with respect to mission, size, and percent of minority students served, the top overall performers were selected within each quartile of "percent vocational/technical credentials awarded," "unduplicated annual enrollment" and "percent minority enrollment." Additionally, to ensure that there was not disproportionate representation of institutions from certain states, no more than half of the institutions in each state were included in the top 150+ (exceptions are made for states with a performer in the top 150 overall who would otherwise miss selection due to this rule. In this cycle, one institution from South Dakota and one institution from Wisconsin were added back in).

#### **Model Measures**

The following metrics were used to determine which colleges are considered eligible to apply for Round 2 of the Aspen Prize. Each is derived from publicly available data. The "weights" given to each metric in the Round I selection were developed in consultation with the Data and Metrics Advisory Panel.

<sup>&</sup>lt;sup>1</sup> A list of the DMAP members is available on the Prize website: <u>www.AspenCCPrize.com</u>.

#### Performance

- 1. **First-Year Retention Rates**. Defined as the percentage of first-time full- and part-time students in the fall semester who are enrolled the following fall semester. Those who complete a certificate or degree within the first year are also counted as "retained." An average of the three most recent years was used to account for fluctuations in reported annual data particularly at smaller colleges. First-Year Retention Rates are assigned a performance weight of 11.1% within the model (Source: NCES, IPEDS Enrollment Survey)
- 2. Graduation Rates, 150% of Normal Program Time. Defined as the percentage of first-time, full-time, degree-seeking students in the fall semester that complete any formal award (certificate or associate degree) within 150% of normal program time or transfer out to another institution within three years. An average of the three most recent years was used to account for fluctuations in reported annual data particularly at smaller colleges. Graduation Rates are coupled with Full-Time Outcomes in the model, each receiving half of the 11.1% performance weight assigned (Source: NCES, IPEDS Graduation Rate Survey)
- 3. Full-Time Outcomes. Defined as the percentage of first-time and non-first-time, full-time degree/certificate seeking students in the fall semester that complete any formal award (certificate or Associate degree) within 8 years. An average of the three most recent years was used to account for fluctuations in reported annual data particularly at smaller colleges. Full-Time Outcomes are coupled with Graduation Rates in the model, each receiving half of the 11.1% performance weight assigned (Source: NCES, IPEDS Outcome Measures Survey)
  - Note: The weight applied to the graduation rate/full-time outcomes rate in the model has varying influence on the overall result, depending on the percentage of first-time degree/certificate-seeking students who are full-time. Institutions with high percentages of full-time first-time students (75<sup>th</sup> percentile or higher) get the full weight applied. For those that have smaller percentages of full-time first-time students, more weight is shifted to the retention and credentials awarded per 100 FTE students measures equally (described above and below).
- 4. **Completers per 100 Full-Time Equivalent Students**. The number of students who earn credentials of one-year or longer in length per 100 full-time equivalent students. Because associate degrees are typically twice the length in duration of certificates, associate degrees are given twice the weight of other credentials in the calculation. An average of the three most recent years was used to account for fluctuations in reported annual data particularly at smaller colleges. Awards per 100 FTES is coupled with Part-Time Outcomes in the model, each receiving half of the 11.1% performance weight assigned (Sources: NCES, IPEDS Completions and Enrollment Surveys)
- 5. Part-Time Outcomes. Defined as the percentage of first-time and non-first-time, part-time degree/certificate seeking students in the fall semester that complete any formal award (certificate or Associate degree) within 8 years. An average of the three most recent years was used to account for fluctuations in reported annual data particularly at smaller colleges. Part-Time Outcomes are coupled with Completers per 100 FTES in the model, each receiving half of the 11.1% performance weight assigned (Source: NCES, IPEDS Outcome Measures Survey).

#### **Change Over Time**

6. Annual Change in Retention Rates, Graduation Rate, Full-Time Outcomes, Completers per 100 Full-Time Equivalent Students, and Part-Time Outcomes.

The most recent 5 years of data were used for retention rates, graduation rates, full-time outcomes, completers per 100 FTE students, and part-time outcomes. For each of the five performance

metrics, a linear regression line was fit to the annual data and the slope of the regression line was used to determine the overall increase or decrease in performance over time. This is in contrast to the methodology that has been used in past cycles, where if an institution improved a percentage point or more from one year to the next, it was given a value of 1. If it held within + or – one percentage point it was given a value of 0. If it declined by a percentage point or more from one year to the next, it was given a value of -1. With this methodology, three performance metrics, and 5 years of data, the maximum value an institution could earn was 12 and minimum was -12. With the revised methodology, a more precise measure/scale of improvement can be obtained over time for the 5 performance metrics (full-time and part-time outcome measures are new additions this cycle). The slope of the five regression lines were added together to create a final change score for change over time, weighted accordingly as previously outlined in the Performance section (retention weight = 1, full-time graduation and full-time outcomes each receive 1/2 weight, and completers per 100 FTES and part-time outcomes each receive 1/2 weight).

The 1/3 weight given to "change over time" kicks in only for institutions that improved overall with a positive final change score. If an institution did not improve (with aggregate scores of 0 or less) the entire 1/3 weight gets shifted to the performance category. The 1/3 weight is also sensitive to those that improved. If an institution has the highest aggregate score in the pool for improvement, it is given the entire 1/3 weight to change over time. A score of half that maximum yields 1/2 of the 1/3 weight, and so on.

Institutions who no longer report retention rates were given retention scores equivalent to their performance on the other performance metrics (an equivalent percentile score, i.e. the weight of the retention score was completely shifted to the other performance metrics).

#### Equity

- 7. **Graduation Rate for Underrepresented Minority Students.** Defined as the percentage of first-time, full-time, degree-seeking minority students in the fall semester that complete any formal award (certificate or associate degree) within three years. Underrepresented minority was defined, using the race codes within the IPEDS data set, as Hispanic, African-American, and Native American. This approach was used rather than the "gaps" between whites and minorities because a small gap could yield a high score for the metric even if the actual graduation rate was low for all students. An average of the three most recent years was used to capture fluctuation over time.
- 8. Completers per 100 Full-Time Equivalent Students for Underrepresented Minority Students.

  Defined as the number of minority students who earn credentials of one-year in length or higher per 100 full-time equivalent minority students. Since associate degrees are typically twice the length in duration of certificates, associate degrees were given twice the weight of other credentials in the calculation. An average of the three most recent years was used to capture fluctuation over time. (Sources: NCES, IPEDS Completions and Enrollment Surveys)
- 9. **Graduation Rate for Low Income Students.** Defined as the percentage of first-time, full-time, degree/certificate-seeking undergraduate students in the fall semester who received a Pell Grant that complete any formal award (certificate or associate degree) within 150% of normal program time.

**Low-Income Service Area or the Share of Students Receiving a Pell Grant.** Defined as either the median family income of the institution's Public Use Microdata Area (PUMA) or the share of all undergraduate students receiving a Pell Grant in the latest available award year. Since community

colleges tend to draw large percentages of their students from the areas in which they are located, it is reasonable to assume a high correlation between the income levels of students and the income levels of the residents in the college's local area. The PUMA areas defined by the Census Bureau contain roughly 100,000 to 150,000 residents. They are, in most cases, a better unit of analysis than county because they more accurately represent the demographic characteristics of the communities the institutions serve. A more standard proxy for income is to use percent Pell Grant recipients, but NCHEMS and the DMAP group recognized that percent Pell may be not always be the best approximation of the actual financial need of community college students. Many community college students who are eligible for Pell Grants never apply; use of Pell Grants may therefore underrepresent the percentage of low-income students attending community colleges. However, the opposite may also hold true: Institutions located within more affluent areas, such as those in densely populated cities, may nonetheless serve a high proportion of low-income students as demonstrated by a high share of Pell recipients. A combination of service area income and percent Pell was thus used to provide the most accurate representation of the income characteristics of the college's service population. If the median family income for an institution's service area was relatively lower than its share of Pell recipients, median family income was used for this metric. But if an institution's share of Pell recipients suggested that a higher proportion of low-income students are served than the median income of the service area would otherwise imply, percent Pell was used. (Sources: NCES, IPEDS Student Financial Aid Survey, U.S. Census Bureau, 2019 American Community Survey)

As for the *graduation rate* and *completers per 100 FTE students* metrics for minority students, a "sliding scale" was applied to the equity measures. Institutions with high percentages of underrepresented minority students (50<sup>th</sup> percentile or higher) received the full weight applied to the two equity measures. For those institutions with lower percentages of full-time minority students, more weight was shifted to the equity metrics for low income students.

### **The Model Dashboard**

Below is the actual "dashboard" of the model. The final weights for each measure are shown.

### Measures for Round One Selection of Institutions

Category	Measure	Weighting Value
	First-Year Retention Rate	11.1%
Performance	Graduation Rate (150% of normal program time), Full-Time Outcomes (8 years)	11.1%
	Completers per 100 FTE Students, Part-Time Outcomes (8 years)	11.1%
Change Over Time	First-Year Retention, Graduation Rates (150% of normal program time), and Completers per 100 FTE Students	33.3%
Equity: Rates for	Graduation Rate (150% of normal program time)	8.3%
Minorities*	Completers per 100 FTE Students	8.3%
Equity: Rates for Low- Income	Graduation Rate of Pell Recipients (150% of normal program time) and either Median Family Income of Service Area or Percent Pell (Equal Weights 8.325%)	16.7%
	Total (Must Equal 100%)	100.0%

<sup>\*</sup>Minorities include African-Americans, Hispanics, and Native Americans. Full equity weights are applied to institutions with the highest percent minority enrolled (top 25%). Otherwise, more weight is placed on the rates for low income students and varies with the percent minority enrolled.

#### **Data and Measures Used to Ensure Adequate Institutional Representation**

The following data/metrics were examined to ensure that the selection process did not disproportionately advantage specific types of colleges — e.g., small rural colleges, colleges with technical missions, or colleges with largely full-time student bodies. To test for adequate representation, NCHEMS ranked the colleges using each proposed model and then placed institutions into quartiles for each of the measures described below.

- Institution Size. Total annual unduplicated student headcount. (Source: NCES, IPEDS Enrollment Survey)
- Percent Part-Time. The percentage of part-time enrollment in the fall semester. (Source: NCES, IPEDS Enrollment Survey)
- **Percent Non-Traditional Enrollment**. The percentage of students enrolled in the fall semester aged 25 and older. (Source: NCES, IPEDS Enrollment Survey)
- **Percent Minority**. Percentage of students enrolled in the Academic Year that is African-American, Hispanic, or Native American. (Source: NCES, IPEDS Enrollment Survey)
- **Geographic Location**. The options provided in IPEDS are city, suburb, town, and rural. (Source: NCES, IPEDS Institutional Characteristics Survey)
- Vocational/Technical Mission. Defined by the percentage of credentials and degrees awarded in technical fields. Previous research has shown that "technical" colleges tend to have much higher retention and completion rates because of the nature of the student body (mostly full-time), the terminal nature of many of the awards (i.e. students are less likely to transfer prior to degree completion), and the more direct path to completion (i.e. students are more likely to be enrolled to acquire specific skills and credentials for direct job placement). Adjustments in this category resulted in increased representation of other types of colleges. (Source: NCES, IPEDS Completions Survey)
- **Number of Degree Programs.** The number of 2-digit CIP categories for which the college awards undergraduate credentials. This category was used to ensure representation of colleges that ranged from relatively few programs to a comprehensive array of programs.

In addition, state representation was considered by analyzing the proportion of each state's community colleges represented in the top 152. This was examined to ensure that policies, demographics and other characteristics unique to each state did not have a disproportionately large impact on the inclusion of institutions in the eligible list.

When the proposed model resulted in representation of over 50 percent of institutions in any one quartile on the metrics above, NCHEMS and the DMAP Committee considered whether a potential bias existed in the model and whether to adjust the model to account for that bias. And, when the proposed model resulted in more than half of a state's institutions being represented in the eligible pool, the DMAP Committee considered making an adjustment.

#### **Model Adjustments**

Once the final model was created, three adjustments were applied in order to produce a representative set of high-performing institutions with respect to mission and size. First, the top 60 overall performers were selected within each quartile of "percent vocational/technical credentials awarded", generating an initial list of 240 institutions. Second, the top 30 performing institutions were selected within each quartile of "unduplicated annual enrollment." These two steps generated a list of 120 high-performing institutions. A third step was added to ensure that large, minority serving institutions were appropriately represented in the model. Of the remaining colleges (after steps one and two), the 30 overall best performing institutions within the top two quartiles of percent minority and size (unduplicated annual headcount) were selected. In addition, based on demonstrated exceptional performance in the 2019 Prize cycle completion, learning, equity, and labor market outcomes, all 2019 Prize finalists were considered eligible to apply for the 2021 Aspen Prize. Two institutions would not have otherwise qualified through the round 1 eligibility model this year. They were added after running the full model to prevent them from displacing any qualifying institutions.

In the end, the best performing 152 institutions – with respect to the measures and the weights applied above – were colleges that represented the full range of diversity and richness in the sector, from vocational to technical mission, small to large in size, and commitment to high levels of access and success for low-income and minority students. With general agreement among DMAP members, a final adjustment was made to allow no more than half of the institutions in each state to appear in the final list of 152 eligible institutions. In this case, the institutions were ranked by state on the above metrics and the bottom half of the state's colleges were excluded. This adjustment impacted institutions in Florida, South Dakota, and Wisconsin (an exception was made for one institution in South Dakota and one institution in Wisconsin where these institutions would have missed selection due to the state rule but who scored within the top 150 of all institutions).

### **Characteristics of the 152 Eligible Institutions**

The table below displays the characteristics of the final 152 institutions that are eligible for the round two selection process. The final list of 152 institutions is available at <a href="www.AspenCCPrize.com">www.AspenCCPrize.com</a>.

U.S. Quartile	Size: Annual Headcount	Percent Part-Time	Percent Non- Traditional Age	Percent Minority	Percent Voc Tech Awards	Number of CIP-2 Programs with Credentials	Associates Degrees as % of All Awards
Lowest	19.7%	33.6%	23.0%	27.6%	33.6%	15.8%	35.5%
Next Lowest	19.7%	21.1%	28.3%	19.7%	15.8%	25.0%	28.3%
Medium	28.9%	23.0%	31.6%	26.3%	17.8%	23.7%	19.7%
Highest	31.6%	22.4%	17.1%	26.3%	32.9%	35.5%	16.4%

The detailed calculations for each of the measures in the model are included in the appendix below.

# Appendix

# Measures Used for Selection/Eligibility

Measures	Definitions/Calculations	Sources
First-Year Retention Rate (3 years combined)	Percent of fall first-time (full-time and part-time students combined) returning the following fall semester. The measure combines the most recent three years of data (Fall 2017, Fall 2018, and Fall 2019). Calculation: ((Still enrolled or completed Fall 2017, 2018, and 2019) / (total first-time fall 2016, 2017, and 2018)) * 100. For the change over time analysis, the most recent five years of data are used and rates are calculated in the same way for each individual year (Fall 2015, Fall 2016, Fall 2017, Fall 2018, and Fall 2019). Index scores based on the institutional average. Calculation: (institution rate) / (average rate of all Aspen institutions) * 100.	NCES, IPEDS 2015, 2016, 2017, 2018, and 2019 Fall Enrollment Surveys - Files ef2015d_rv, ef2016d_rv, ef2017d_rv, and ef2018d_rv Final Release Data Files, ef2019d provisional data file.
Graduation Rate (3 years combined)	Percent of fall first-time full-time degree/certificate-seeking undergraduates completing any formal award within 150% of normal program time or transferring out to another institution within 3 years. The measure combines the most recent three years available (2017, 2018, 2019). Calculation: (Completers of any formal award within 150% of normal program time + transferouts by summer 2017, 2018 and 2019) / (fall 2014, 2015, and 2016 cohorts of first-time full-time undergraduates seeking any formal award) * 100. For institutions offering Bachelor's programs, cohort years are fall 2011, 2012, and 2013. For the change over time analysis, the most recent five years of data are used and rates are calculated in the same way for each individual year (2015, 2016, 2017, 2018, and 2019). Index scores based on the institutional average. Calculation: (institution rate) / (average rate of all Aspen institutions) * 100.	NCES, IPEDS 2015, 2016, 2017, 2018, and 2019 Graduation Rate Surveys - Files gr2015_rv, gr2016_rv, gr2017_rv, and gr2018_rv Final Release Data Files, gr2019 provisional release data file.

Full-Time Outcomes	Percent of first-time and non-first-time, full-time	NCES, IPEDS 2015,
(3 years combined)	degree/certificate-seeking undergraduates completing	2016, 2017, 2018,
	any formal award with 8 years. The measure combines	and 2019 Outcome
	the most recent three years available (2017, 2018, and	Measures Surveys -
	2019). Calculation: (Completers of any formal award	Files om2015_rv,
	within 8 years by summer 2017, 2018, and 2019) /	om2016_rv,
	(2009-10, 2010-11, and 2011-12 full-year cohorts of	om2017_rv, and
	first-time and non-first-time, full-time undergraduates	om2018_rv Final
	seeking any formal award)*100. For the change over	Release Data Files,
	time analysis, the most recent five years of data are	om2019 Provisional
	used and rates are calculated in the same way for each	Release Data File.
	individual year (2015, 2016, 2017, 2018, and 2019).	
	Index scores are based on the institutional average.	
	Calculation: (institution rate) / (average rate of all	
	Aspen institutions) * 100.	
Undergraduate	Undergraduate completers of certificates of at least	NCES, IPEDS
Credentials	one year, Associate Degrees, and Bachelor's Degrees	Academic Year
Awarded per 100	per 100 full-time equivalent undergraduates. The	2015-16, 2016-17,
FTE Undergraduate	measure combines the most recent three academic	2017-18, 2018-19,
Students (3 years	years of data (2017-18, 2018-19, and 2019-20).	and 2019-20
combined)	Calculation: ((undergraduate completers of awards of	Completions and
	at least one year in length) in 2017-18, 2018-19, and	Enrollment Surveys -
	2019-20) / (credit hour generated annual	Completions Files
	undergraduate FTE enrollment 2017-18, 2018-19,	c2016_c_rv,
	2019-20)) * 100. For the change over time analysis, the	c2017_c_rv,
	most recent five years of data are used and rates are	c2018_c_rv,
	calculated in the same way for each individual	c2019_c_r Final
	academic year (2015-16, 2016-17, 2017-18, 2018-19,	Release Data Files,
	and 2019-20). Index scores based on the institutional	c2020_c Provisional
	average. Calculation: (institution rate) / (average rate	Release Data File.
	of all Aspen institutions) * 100.	Enrollment Files
		efia2016_rv,
		efia2017_rv,
		efia2018_rv,
		efia2019_rv Final
		Release Data Files,
		and efia2020
		Provisional Release
		Data File.

Part-Time Outcomes (3 years combined)	Percent of first-time and non-first-time, part-time degree/certificate-seeking undergraduates completing any formal award with 8 years. The measure combines the most recent three years available (2017, 2018, and 2019). Calculation: (Completers of any formal award within 8 years by summer 2017, 2018, and 2019) / (2009-10, 2010-11, and 2011-12 full-year cohorts of first-time and non-first-time, part-time undergraduates seeking any formal award)*100. For the change over time analysis, the most recent five years of data are used and rates are calculated in the same way for each individual year (2015, 2016, 2017, 2018, and 2019). Index scores are based on the institutional average. Calculation: (institution rate) / (average rate of all	NCES, IPEDS 2015, 2016, 2017, 2018, and 2019 Outcome Measures Surveys - Files om2015_rv, om2016_rv, om2017_rv, and om2018_rv Final Release Data Files, om2019 Provisional Release Data File.
Change Over Time (Most recent 5 years): Retention Rates, Graduation Rates, Full-Time Outcomes, Completers per 100 FTE Students, and Part-Time Outcomes.	Aspen institutions) * 100.  A Weight Index is calculated for each metric based on the slope of the regression line through the most recent five years of data. The regression slopes across all five metrics are aggregated to get a final Weight Index, weighting for each metric consistent with performance weighting used within the model (retention = 1, graduation rates and full-time outcomes each = 1/2, and completers per 100 FTES and part-time outcomes each = 1/2 for a total weight of 3). A weight index of 0 is assigned an index score of 100. The maximum observed weight index is assigned an index score equal to the average of the three best index scores across all performance and equity metrics and the minimum observed weight index is assigned a final index score equal to the average of the three lowest index scores across all performance and equity metrics. Index scores for weight indexes falling between 0 and the maximum are scaled linearly against the maximum, and index scores for weight indexes falling between 0 and the minimum are scaled linearly against the minimum.	See above sources for Retention Rates, Graduation Rates, Full-Time Outcomes, Completers per 100 FTE Students, and Part-Time Outcomes.
Minority Graduation Rate (3 years combined)	Same graduation rate calculation described above for the combination of Blacks, Hispanics, and Native Americans for 2017, 2018, and 2019. Index scores based on the institutional average. Calculation: (institution rate) / (average rate of all Aspen institutions) * 100.	NCES, IPEDS 2015, 2016, and 2017 Graduation Rate Surveys - Files gr2017_rv, gr2018_rv Final Release Files, and gr2019 Provisional Data File.

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Minority Completers	Same calculation described above for the combination	NCES, IPEDS
per 100 FTE	of Blacks, Hispanics, and Native Americans for the	Completions and
Minority	combination of academic years 2016-17, 2017-18, and	Enrollment Surveys -
Undergraduate	2018-19. Note that FTE by race is not available from	Files c2017_c_rv,
Students (3 Years	IPEDS. FTE by race is calculated by applying the Fall	c2018_c_rv, and
combined).	full-time to part-time ratio (combine Fall 2016, Fall	c2019_c_rv Final
	2017, and Fall 2018) to the academic year unduplicated	Release Data Files,
	headcount (combine academic years 2016-17, 2017-18,	effy2017_rv,
	and 2018-19) to get estimated full-time and part-time	effy2018_rv, and
	enrollment, then calculating estimated FTE as full-time	effy2019_rv Final
	+ 1/3 part-time. Calculation: (Fall full-time) / (Fall full-	Release Data Files,
	time + Fall part-time) * (Academic Year Unduplicated	ef2016a_rv and
	Headcount) + 1/3*(Fall part-time) / (Fall full-time + Fall	ef2017a_rv Final
	part-time) * (Academic Year Unduplicated Headcount).	Release Data Files,
		ef2019a Provisional
		Release Data File.
Pell Graduation Rate	Graduation rates for Pell Grant recipients 2019, 150%	NCES IPEDS
	of normal time to complete any award - cohort year	Graduation Rate
	2013 (IPEDS 4-year institutions) and cohort year 2016	Survey, File
	(IPEDS less-than-4-year institutions). Index scores	GR2019_PELL_SSL
	based on the institutional average. Calculation:	Provisional Release
	(institution rate) / (average rate of all Aspen	Data File.
	institutions) * 100.	

Index Scores Used in the Model to Normalize the Measures			
Measures with Index Scores	Calculation		
First-Year Retention Rate	(Institutional Value) / (Aspen Colleges Average)*100		
Graduation Rate (150% of normal program time)	(Institutional Value) / (Aspen Colleges Average)*100		
Full-Time Outcomes (8 years)	(Institutional Value) / (Aspen Colleges Average)*100		
Completers per 100 FTE Students	(Institutional Value) / (Aspen Colleges Average)*100		
Part-Time Outcomes (8 years)	(Institutional Value) / (Aspen Colleges Average)*100		
Change Over Time	See Definition/Calculation Above		
Minority Graduation Rate (150% of normal program time)	(Institutional Value) / (Aspen Colleges Average)*100		
Minority Completers per 100 FTE Students	(Institutional Value) / (Aspen Colleges Average)*100		
Pell Graduation Rate (150% of normal program time)	(Institutional Value) / (Aspen Colleges Average)*100		

# Measures Used to Gauge Institutional Representation

Measures	Definitions/Calculations	Sources
Carnegie Classification	2015 and 2018 Basic Carnegie Classification (IPEDS variables c15basic, c18basic). See the Table below for detailed reference.	NCES IPEDS Institutional Characteristics Survey - File hd2020 (Provisional Release)
Size: Annual Unduplicated Headcount	Total unduplicated headcount enrollment, 2019-20.	NCES IPEDS Enrollment Survey - File effy2020 (Provisional Release)
Percent Part-Time	Percentage of all students enrolled part-time in fall 2019.	NCES IPEDS Enrollment Survey - File ef2019_a (Provisional Release)
Percent Non-Traditional Age (25 and Older)	Percentage of undergraduates enrolled in the fall of 2019 who are 25 years of age and older (calculated on known age counts - exclude unknown age from denominator).	NCES IPEDS Enrollment Survey - File ef2019b (Provisional Release) - Reporting Mandatory in Odd Years Only
Percent Minority	Percentage of undergraduates enrolled in AY 2019-20 who are Black Non-Hispanic, Hispanic, or Native American/Alaska Native.	NCES IPEDS Enrollment Survey - File effy2020 (Provisional Release)
Location	College is located in a city, suburb, town, or rural area (IPEDS variable locale - Degree of urbanization (Urban-centric locale)).	NCES IPEDS Institutional Characteristics Survey - File hd2020 Provisional Release
Pell Graduation Rate	Graduation rates for Pell Grant recipients 2019, 150% of normal time to complete any award - cohort year 2013 (IPEDS 4-year) and cohort year 2016 (IPEDS less-than-4-year) institutions	NCES IPEDS Graduation Rate Survey, File GR2019_PELL_SSL (Provisional Release)
Percent Technical Awards	Percent of undergraduate credentials awarded in 2019-20 in fields other than arts, sciences, and business. See table below for specific fields included (shaded rows).	NCES IPEDS Completions Survey; File c2020_a (Provisional Release)
Number of CIP-2 Programs with Credentials	Number of undergraduate CIP-2 categories with awards in 2019-20 (Any CIP-2 with awards given at only one or multiple award levels counts as 1 program).	NCES IPEDS Completions Survey; File c2020_a (Provisional Release)

# Basic Carnegie Classifications (2015 Classification)

Code	Description	
-2	Not applicable, not in Carnegie universe (not accredited or nondegree-granting)	
1	Associate's Colleges: High Transfer-High Traditional	
2	Associate's Colleges: High Transfer-Mixed Traditional/Nontraditional	
3	Associate's Colleges: High Transfer-High Nontraditional	
4	Associate's Colleges: Mixed Transfer/Career & Technical-High Traditional	
5	Associate's Colleges: Mixed Transfer/Career & Technical-Mixed Traditional/Nontraditional	
6	Associate's Colleges: Mixed Transfer/Career & Technical-High Nontraditional	
7	Associate's Colleges: High Career & Technical-High Traditional	
8	Associate's Colleges: High Career & Technical-Mixed Traditional/Nontraditional	
9	Associate's Colleges: High Career & Technical-High Nontraditional	
10	Special Focus Two-Year: Health Professions	
11	Special Focus Two-Year: Technical Professions	
12	Special Focus Two-Year: Arts & Design	
13	Special Focus Two-Year: Other Fields	
14	Baccalaureate/Associate's Colleges: Associate's Dominant	
15	Doctoral Universities: Highest Research Activity	
16	Doctoral Universities: Higher Research Activity	
17	Doctoral Universities: Moderate Research Activity	
18	Master's Colleges & Universities: Larger Programs	
19	Master's Colleges & Universities: Medium Programs	
20	Master's Colleges & Universities: Small Programs	
21	Baccalaureate Colleges: Arts & Sciences Focus	
22	Baccalaureate Colleges: Diverse Fields	
23	Baccalaureate/Associate's Colleges: Mixed Baccalaureate/Associate's	
24	Special Focus Four-Year: Faith-Related Institutions	
25	Special Focus Four-Year: Medical Schools & Centers	
26	Special Focus Four-Year: Other Health Professions Schools	
27	Special Focus Four-Year: Engineering Schools	
28	Special Focus Four-Year: Other Technology-Related Schools	
29	Special Focus Four-Year: Business & Management Schools	
30	Special Focus Four-Year: Arts, Music & Design Schools	
31	Special Focus Four-Year: Law Schools	
32	Special Focus Four-Year: Other Special Focus Institutions	
33	Tribal Colleges	

# Basic Carnegie Classifications (2018 Classification)

Code	Description	
-2	Not applicable, not in Carnegie universe (not accredited or nondegree-granting)	
1	Associate's Colleges: High Transfer-High Traditional	
2	Associate's Colleges: High Transfer-Mixed Traditional/Nontraditional	
3	Associate's Colleges: High Transfer-High Nontraditional	
4	Associate's Colleges: Mixed Transfer/Vocational & Technical-High Traditional	
5	Associate's Colleges: Mixed Transfer/Vocational & Technical-Mixed Traditional/Nontraditional	
6	Associate's Colleges: Mixed Transfer/Vocational & Technical-High Nontraditional	
7	Associate's Colleges: High Vocational & Technical-High Traditional	
8	Associate's Colleges: High Vocational & Technical-Mixed Traditional/Nontraditional	
9	Associate's Colleges: High Vocational & Technical-High Nontraditional	
10	Special Focus Two-Year: Health Professions	
11	Special Focus Two-Year: Technical Professions	
12	Special Focus Two-Year: Arts & Design	
13	Special Focus Two-Year: Other Fields	
14	Baccalaureate/Associate's Colleges: Associate's Dominant	
15	Doctoral Universities: Very High Research Activity	
16	Doctoral Universities: High Research Activity	
17	Doctoral/Professional Universities	
18	Master's Colleges & Universities: Larger Programs	
19	Master's Colleges & Universities: Medium Programs	
20	Master's Colleges & Universities: Small Programs	
21	Baccalaureate Colleges: Arts & Sciences Focus	
22	Baccalaureate Colleges: Diverse Fields	
23	Baccalaureate/Associate's Colleges: Mixed Baccalaureate/Associate's	
24	Special Focus Four-Year: Faith-Related Institutions	
25	Special Focus Four-Year: Medical Schools & Centers	
26	Special Focus Four-Year: Other Health Professions Schools	
27	Special Focus Four-Year: Engineering Schools	
28	Special Focus Four-Year: Other Technology-Related Schools	
29	Special Focus Four-Year: Business & Management Schools	
30	Special Focus Four-Year: Arts, Music & Design Schools	
31	Special Focus Four-Year: Law Schools	
32	Special Focus Four-Year: Other Special Focus Institutions	
33	Tribal Colleges	

### CIP 2010: List By Program Area (2-Digit CIP)

CIP-2	CIP-2 Description	2-Year Degree Groupings
01	AGRICULTURE, AGRICULTURE OPERATIONS, AND RELATED SCIENCES.	Arts and Sciences
03	NATURAL RESOURCES AND CONSERVATION	Technical
04	ARCHITECTURE AND RELATED SERVICES	Technical
05	AREA, ETHNIC, CULTURAL, AND GENDER STUDIES	Arts and Sciences
09	COMMUNICATION, JOURNALISM, AND RELATED PROGRAMS	Service
10	COMMUNICATIONS TECHNOLOGIES/TECHNICIANS AND SUPPORT SERVICES	Technical
11	COMPUTER AND INFORMATION SCIENCES AND SUPPORT SERVICES.	Arts and Sciences
12	PERSONAL AND CULINARY SERVICES	Service
13	EDUCATION	Service
14	ENGINEERING.	Technical
15	ENGINEERING TECHNOLOGIES/TECHNICIANS	Technical
16	FOREIGN LANGUAGES, LITERATURES, AND LINGUISTICS	Arts and Sciences
19	FAMILY AND CONSUMER SCIENCES/HUMAN SCIENCES	Service
22	LEGAL PROFESSIONS AND STUDIES	Service
23	ENGLISH LANGUAGE AND LITERATURE/LETTERS	Arts and Sciences
24	LIBERAL ARTS AND SCIENCES, GENERAL STUDIES AND HUMANITIES	Arts and Sciences
25	LIBRARY SCIENCE	Arts and Sciences
26	BIOLOGICAL AND BIOMEDICAL SCIENCES	Arts and Sciences
27	MATHEMATICS AND STATISTICS	Arts and Sciences
29	MILITARY TECHNOLOGIES	Technical
30	MULTI/INTERDISCIPLINARY STUDIES	Arts and Sciences
31	PARKS, RECREATION, LEISURE, AND FITNESS STUDIES	Service
38	PHILOSOPHY AND RELIGIOUS STUDIES	Arts and Sciences
39	THEOLOGY AND RELIGIOUS VOCATIONS	Arts and Sciences
40	PHYSICAL SCIENCES	Arts and Sciences
41	SCIENCE TECHNOLOGIES/TECHNICIANS	Technical
42	PSYCHOLOGY	Arts and Sciences
43	SECURITY AND PROTECTIVE SERVICES	Service
44	PUBLIC ADMINISTRATION AND SOCIAL SERVICE PROFESSIONS	Service
45	SOCIAL SCIENCES	Arts and Sciences
46	CONSTRUCTION TRADES	Trade
47	MECHANIC AND REPAIR TECHNOLOGIES/TECHNICIANS	Trade
48	PRECISION PRODUCTION	Trade
49	TRANSPORTATION AND MATERIALS MOVING	Trade
50	VISUAL AND PERFORMING ARTS	Arts and Sciences
51	HEALTH PROFESSIONS AND RELATED CLINICAL SCIENCES	Health Sciences
52	BUSINESS, MANAGEMENT, MARKETING, AND RELATED SUPPORT SERVICES	Business
54	HISTORY	Arts and Sciences