

FINAL REPORT TO THE
WEST VIRGINIA
SELECT COMMITTEE ON
OUTCOMES-BASED
FUNDING MODELS IN
HIGHER EDUCATION

DRAFT

November 27, 2012

Final Report to the West Virginia Select Committee on Outcomes-Based Funding Models in Higher Education

Report Background

Senate Bill 436 and Select Committee on Outcomes-Based Funding Models in Higher Education

During the 2012 legislative session, the West Virginia Legislature passed Senate Bill 436, which directs the Joint Committee on Government and Finance to create a select committee charged with making a specific and detailed analysis of outcomes-based funding models used in higher education and providing recommendations to the Legislature on incorporating these models into the state's financing policy.

Specifically, the legislation charged the committee to report with recommendations on implementing a state-level financing plan, which includes:

- A review of existing outcomes-based funding models for institutions and systems of higher education;
- Identification of the top three to five public policy objectives that are to be the focus of the financing policy;
- A review of outcomes-based funding models in other states, including whether these policies have succeeded in influencing institutional and system behavior;
- Recommendations on how to balance the need of institutions for stability with the demands of the state for services as identified in Vision 2020 and the public policy agenda;
- Recommendations on methods to develop a workable balance between addressing the well-being of institutions and the success of students; and
- An analysis of the impact of different models on institutions with widely differing missions, including recommendations on selecting and implementing the appropriate model for each type of institution specifically noting the impact of selected models on community and technical colleges, baccalaureate colleges and regional universities, and research universities.

Non-committee partners

The committee worked with HCM Strategists, LLC¹ (HCM) and the West Virginia Higher Education Policy Commission (HEPC) to guide the development of recommendations and analysis aligned with the committee's charge.

HCM's work was supported through West Virginia's membership in the College Productivity Strategy Labs network funded by Lumina Foundation. This support included non-partisan project management, facilitation of meetings with key stakeholders, expertise in the research and understanding of other state outcomes-based funding models, review of analyses prepared by the HEPC, and production of this final report with recommendations, as guided by the committee and outlined in Senate Bill 436.

¹ HCM Strategists, LLC (HCM) is a public policy and advocacy consulting firm founded in 2008.

HEPC worked with the committee and HCM to coordinate meetings with key stakeholders, respond to legislative data queries and produce data analysis of various outcomes-based funding model options in line with the policy recommendations of the committee.

Process

This report is the culmination of a seven-month process that included monthly meetings of the committee, ongoing consultations with system leaders and institution presidents continued data and formula option analysis.

Initial meetings of the committee focused on understanding West Virginia higher education attainment needs and the establishment of primary policy objectives to guide the state's higher education funding policy. These meetings included a review of the research and best practice considerations for outcomes-based funding models, including examples from other states, and a review of prior formula recommendations from HEPC and the West Virginia Community and Technical College System (CTCS) and examples of outcomes-based funding models in other states. The committee also benefitted from the state's membership in the Southern Regional Education Board (SREB) and the Lumina College Productivity Strategy Labs. Dr. Cheryl Blanco of the SREB presented the organization's recommendations to policymakers and institutions for development and implementation of outcomes-based funding policies. WV HEPC staff participated in a Strategy Labs performance funding site visit with peers from 13 other states that are in the process of developing, implementing and sustaining outcomes-based funding policies in their respective states.

The policy objectives established a foundational understanding of outcomes-based funding models and design principles. Subsequent meetings of the committee focused on a review of potential metrics aligned to the state priorities, formula model options, impacts on various institutions, and considerations for potential implementation of an outcomes-based funding policy.

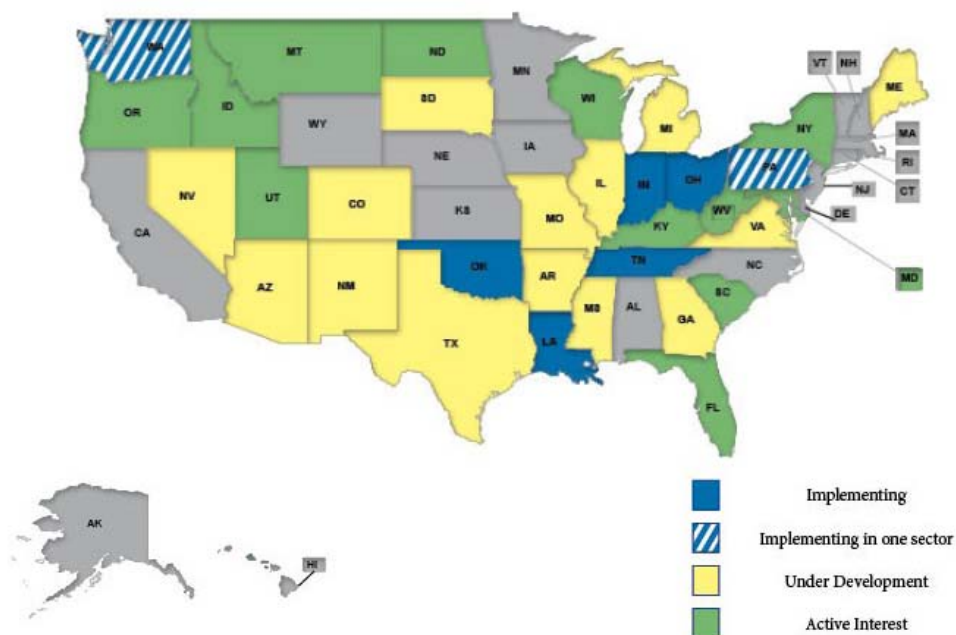
The remainder of this report addresses specific report elements requested in Senate Bill 436, including the recommendations, considerations and next steps for incorporating an outcomes-based funding model into West Virginia's higher education finance plan.

Background of Outcomes-Based Funding for Higher Education

Increasing numbers of state policymakers are turning to the prospect of outcomes-based funding as a leverage point to align the state's financial investment in higher education with the state's higher education goals and priorities. These policymakers see a strategic disconnect between the state's current higher education needs of increased completion and attainment and the traditional funding methods for colleges and universities—typically an enrollment-based allocation (a defined dollar amount per student enrolled at the beginning of the semester) or a historic-based allocation (prior institutional allocation, plus or minus a certain percentage based on the current year's budget context). As a result of this disconnect, approximately 33 states are currently implementing, developing or considering outcomes-based funding policies that align some portion of the state's higher education

investment with the state’s higher education goals and policy priorities.² Outcomes-based funding can be a powerful tool to promote improvement, refocus institutional priorities, and increase efficiency.

Graphic: Status of Outcomes-Based Funding Policies, as of November 2012



Outcomes-based funding (also referred to as performance-based funding) is not a recent policy development in higher education—an analysis of state adoption of these funding policies found that 26 states adopted some form of outcomes-based funding between 1979 and 2007. However, several of these earlier models were abandoned because of flaws in development, design, or implementation. Research into the effectiveness and sustainability of these funding models has informed the development of more recent models in several states. Further, the lessons and research from these earlier models has framed a general consensus among higher education policy experts about foundational development, design and implementation considerations of outcomes-based funding policies. Lumina Foundation through its *Four Steps to Finishing First* policy agenda as well others have published research-informed analyses of these early models and how states can ensure new outcomes-based funding policies address the shortfalls. (See Appendix A for a bibliography of outcomes-based funding publications, research and reports).

Informed by Research: Foundational Design Considerations for Outcomes-Based Funding

² Productivity Strategy Labs and NCSL state performance-based funding tracking

As noted above, there have been many studies regarding the development, implementation, and revision of outcomes-based funding policies for higher education. These analyses shed light on some of the major concerns, policy and political implications, and successes of outcomes-based funding formulas, which have guided the advancement and refinement of more recent outcomes-based funding models.

The section below details several foundational design considerations, grounded in the lessons informed by research of earlier models and the advancements incorporated into more recent outcomes-based funding models.

Design Consideration #1: Define the state's higher education goals to guide funding priorities.

- *Informed by research:* Research shows that aligning funding with statewide priorities can lead to greater scrutiny of effectiveness of campus programs and services and promote better alignment between campus planning, budgeting, and performance.³ However, several of the earlier outcomes-based funding models were not clearly linked to a definitive goal or well-defined policy priorities and objectives for the state's investment in higher education. As such, the funding policy was trying to be all things to all priorities, sending mixed and often misaligned signals to institutions.
- *Advancements:* More recent state developments in outcomes-based funding policies have been anchored around an overall goal and related policy priorities for higher education. **Tennessee's** outcomes-based formula is grounded in the priorities and principles outlined by the Complete College Tennessee Act of 2010.⁴ **Indiana's** model is framed by the policy priorities and attainment needs of the state, as further articulated in the state's higher education strategic plan.⁵ This critical advancement recognizes that to properly align a state's investment in higher education with the state's priorities, agreement on the state's goals for higher education must come first.

Design Consideration #2: Keep it simple, with limited, clearly defined and measurable metrics.

- *Informed by research:* Likely a direct result of the lack of a well-articulated goal and policy priorities to guide the funding model, earlier models were often weighed down with too many outcomes-based metrics. These metrics complicated the funding system, and in many cases the metrics were not easily understood or lacked reliable data.⁶
- *Advancements:* With higher education policy and attainment goals articulated, states are able to design simple and relatively easy to understand models that incorporate limited, well-defined outcomes-based metrics.

Design Consideration #3: Promote mission differentiation and protect against mission creep.

- *Informed by research:* State goals and priorities should be the framework around which the outcomes-based model is built. Metrics by which institutions are measured should be limited

³ Joseph Burke and Associates, *Funding Public Colleges and Universities for Performance* (Albany: Rockefeller Institute Press, 2002).

⁴ Information on the Complete College Tennessee Act of 2010 can be found at http://tn.gov/thec/complete_college_tn/ccta_summary.html.

⁵ Information on the Indiana Higher Education Strategic Plan, Reaching Higher Achieving more can be found at: <http://www.in.gov/che/2349.htm>

⁶ Kevin J. Dougherty, Rebecca Natow, Rachel Hare, and Blanca Vega, "The Political Origins of State-Level Performance Funding for Higher Education: The Cases of Florida, Illinois, Missouri, South Carolina, Tennessee, and Washington", *Community College Research Center*, (2011) <http://ccrc.tc.columbia.edu/Publication.asp?UID=819>

and clear. However, it is also important that models recognize a *system* of higher education and the specific mission or role that each type of institution within that system plays in advancing the state toward its higher education goals and priorities. Many early models treated all institutions the same, promoting mission creep or putting certain institutions at an immediate disadvantage regardless of actual performance.

- *Advancements:* States with more recent outcomes-based funding models have recognized the need to maintain a clear focus on advancing state priorities and goals. However, these models also provide opportunity for all institutions to succeed and contribute to the state’s overall higher education objectives through their respective institutional missions. States such as **Illinois, Tennessee, and Indiana** have addressed mission differentiation by applying unique metrics and/or weighting the application of those metrics differently based on institution type. **Ohio** established three different formulae (and separate allocations of funding) for its three types of institutions—main campus (research), regional (comprehensive), and two-year.

Design Consideration #4: Provide extra incentive for the success of certain student populations.

- *Informed by research:* Unless explicitly accounted for, outcomes-based funding models that reward success (i.e., graduation rates) could have the unintended consequence of rewarding colleges that have better prepared students or provide incentive for colleges to make admissions criteria more restrictive.⁷ These unintended consequences not only close doors to certain students but ultimately harm the state’s ability to achieve its goals as the success of these student populations is often essential for the state to meet its attainment goals.
- *Advancements:* Recently, states have addressed this issue in a combination of ways, such as rewarding student progress including remedial coursework, credit accumulation, or other key benchmarks toward completion.⁸ These metrics, referred to as “momentum points,” are based on research conducted by Community College Research Center for the Washington Board of Technical and Community Colleges. They represent key points that lead to greater persistence and success, irrespective of student background characteristics—social and academic.⁹ This research has been used to inform the development of outcomes-based funding policies and associated metrics in several states, including **Arkansas, Ohio, Tennessee, Illinois, Indiana, Nevada, Tennessee, and Washington**. States also have added extra weight or incentive to institutions for the progress and degree completion of student populations whose success is essential to the state meeting its attainment goals but who typically enter college less prepared. These populations often include low-income, academically at-risk, and adult students. Additionally, states have shifted from the use of rates (e.g. persistence rates, graduation rates) to the use of counts. This approach helps protect against incentive to restrict access to less prepared students while still ensuring that each institution is rewarded based on its contribution to the state’s overall goal.

⁷ Dougherty, et al., 2011

⁸ Nancy Shulock, “Concerns About Performance-based Funding, and Ways that States are Addressing these Concerns,” *Institute for Higher Education Policy and Research*, (May, 2011) http://www.csus.edu/ihelp/PDFs/B_performance%20funding_05-11.pdf

⁹ For more information on Milestone and Momentum Point research see: <http://ccrc.tc.columbia.edu/Publication.asp?UID=570>

The impact of outcomes-based funding—research and state experience

The design considerations articulated in this report are a direct result of research and analysis conducted on earlier funding models that linked dollars to performance outcomes. This earlier research sought to understand the impacts of outcomes-based funding on institutional behavior and student outcomes. States such as Ohio, Pennsylvania, and Washington have documented increased outcomes correlated with performance funding policies.

- Ohio: Ohio’s Success Challenge Program, part of a group of performance funding programs, was found to have reduced median time to degree for in-state bachelor’s degree graduates and increase by nearly 10 percent the number of in-state bachelor’s graduates earning their degree in between 1999 and 2006. (from [“Ohio Experience with Outcomes-Based Funding”](#))
- Pennsylvania: Since 2002, the state has documented a nearly 10-point increase in overall four-year graduation rates, including increases of 6 and 9 points for African American and Hispanic students and a jump in persistence rates, especially for Hispanic students, who saw a 15-point persistence improvement. All while institutions increased enrollment by nearly 20 percent. (data provided by [Pennsylvania System of Higher Education](#))
- Washington: A review of Washington’s Student Achievement Initiative found increases for the number of students reaching key benchmarks in nearly every measured area. This includes basic skills attainment, persistence and completion. (from [Washington State Board of Community and Technical Colleges](#)).

While these impacts are encouraging, it is difficult to attribute them directly to the funding policies. Perhaps more important is research that indicates aligning funding with statewide priorities can lead to greater scrutiny of effectiveness of campus programs and services, promote better alignment between budgeting and performance, and result in a greater focus on student placement and success. These latter results should be the focus for state policymakers and higher education officials as they consider the development and implementation of outcomes-based funding policy. Ultimately, outcomes-based funding is a policy tool meant to align the state’s investment with the state’s priorities to support and encourage other necessary institutional and system reforms (remedial education, student persistence, transfer policies, etc.) that ultimately foster greater student success.

Design Consideration #5: Invest real dollars.

- *Informed by research:* Several analyses into earlier models of outcomes-based funding cite small amounts of funding as an important limiting factor for the intended impacts of the funding policies.¹⁰ These earlier models linked a very small proportion (often 1 or 2 percent) of an institution’s total state allocation to the established outcomes. If the large majority of institution funding remains based in prior allocation models, it will be difficult for the outcomes metrics to drive behavior and produce significant results. Additionally, if the outcomes-based formula is implemented on new money only, this bonus allocation is often the first thing reduced or eliminated in tight budget climates. Both of these scenarios—limited existing dollars or new funding only—ultimately continue the existing disconnect between the state’s higher education policy priorities and its funding policy.
- *Advancements:* Outcomes-based funding is intended to focus institutional attention on key state priorities. More and more policymakers are recognizing the need to make this alignment real and significant. States like **Tennessee, Ohio, Indiana, Arkansas, and Louisiana** have committed to base a significant amount (5 percent or more) of an institution’s state allocation on the

¹⁰ Dougherty, et al., 2011

outcomes-based formula. For example Tennessee's policy drives 100 percent of the state's allocation through its outcomes-based formula for all institutions. Ohio completely replaced its enrollment component of the formula for four-year institutions with course completion and degree completion metrics, and the state bases 5 percent (growing to 25 percent) of community college funding on student progress and outcome metrics.

Design Consideration #7: Protect against large redistribution of funds.

- *Informed by research:* Several earlier models resulted in a large redistribution of funds between institutions. Much of this redistribution was the result of a poorly designed model that did not adequately consider the foundational design elements noted above—especially the use of too many targets and difficult to measure metrics and the lack of attention to mission differentiation.
- *Advancements:* The most important way to protect against large redistributions of funds is to build a formula grounded in clear, measurable metrics and sound data. Today's outcomes-based models typically strike this careful balance of being clearly grounded in the state's higher education goals and priorities yet intricate enough to allow each type of institution to improve and show advancement toward goals. Additionally, some states are employing multi-year averages (usually three years) to stabilize the data and give institutions time to adjust to the new funding policy, thus phasing-in the full policy over a number of years.

Design Consideration #8: Engage institutions in the formula development.

- *Informed by research:* Multi-state research of outcomes-based funding policies has demonstrated that a lack of institutional engagement and support led to program failure or abandonment.¹¹ Some of these earlier models were developed by legislators and policymakers with limited institutional engagement or consultation.
- *Advancements:* A key development in more recent outcomes-based funding policies is the use of guiding legislation or strategic planning to establish parameters that an outcomes-based policy must address but which delegates the actual formula development to an entity that often includes higher education system and institution representation. Consistent elements of this guiding legislation include: statement of the state's higher education goals, establishment of the state's higher education policy priorities, priority populations (e.g. low-income, adult), recognition of mission differentiation, amount/percentage of allocation based on outcomes, and timeline for development and implementation (including phase-in parameters). **Arkansas, Illinois, Nevada, Tennessee, and Texas** provide good examples of states that established legislative parameters and delegated specific formula details to a development committee.

West Virginia and Outcomes-Based Funding: Work of the Select Committee

The foundational design considerations above served as the basis for the conversations and development process the committee undertook from May-November 2012. As such, the foundational design considerations inform the final recommendations, further considerations, and next steps put forward in this section of the report.

¹¹ Dougherty, et al, 2011.

1. Establishing the Baseline: Key data points, trends and themes from prior work

To establish a contextual framework to guide the development of goals, priorities, and principles for higher education and an outcomes-based funding policy, the committee reviewed key higher education attainment data and trends. The committee also considered the work of relevant prior legislation and policy documents.

Data as context

The committee considered the following data:

- *Attainment Rates:* West Virginia is facing a skills gap that will require a significant increase in the number of higher education credentials being produced by the state's colleges and universities. **By 2018, 49 percent of all jobs in the state will require some postsecondary education or training, translating to 20,000 additional postsecondary credentials by 2018.**¹² Yet, West Virginia currently ranks 48th in the nation for the percentage of adults aged 25 and older that have a college associate degree or higher (29.9 percent).¹³ The state has made strides in educating the younger portion of this population with an increase in the education level between younger and older workers.¹⁴ However, to reach the benchmark of 20,000 additional credentials by 2018 will require between 4 and 5 percent annual growth in the credentials and degrees awarded by institutions each year.¹⁵

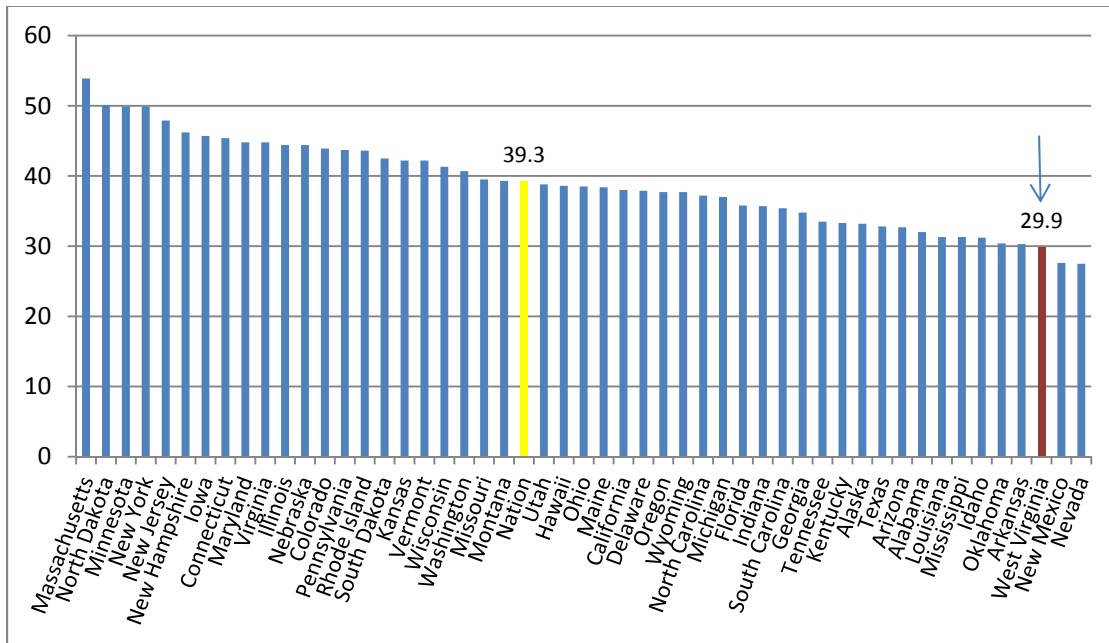
¹² Tony Carnevale, Nicole Smith and Jeff Strohl, "Help Wanted: Projections of Jobs and Education Requirements through 2018," *Georgetown Center on Education and the Workforce*, (June 2010), <http://www9.georgetown.edu/grad/gppi/hpi/cew/pdfs/State-LevelAnalysis-web.pdf>

¹³ NCHEMS Higher Education Information, www.higheredinfo.org

¹⁴ WV College Completion Task Force

¹⁵ Calculations provided by WV HEPC

Figure 1: College Attainment: Percent of population age 25 and older with an associate degree or higher



Source: NCHES Higher Education Information, www.higheredinfo.org

- Enrollment:** West Virginia has done a good job increasing access and enrolling students. Enrollment between 2007 and 2011 increased by 18 percent at West Virginia’s community colleges and 6 percent at West Virginia’s four-year institutions.¹⁶ The state is above the national average for both the percent of the population aged 18-24 enrolled in postsecondary education (40.8 percent) and the percent of the adult population, aged 25-49 enrolled (8.8 percent).¹⁷
- Adult students:** The adult population (age 25 and older) will be essential for the state to meet its attainment goals. First, the number of high school graduates is predicted to decline over the next several years, translating into fewer traditional age college-going students.¹⁸ Second, projections show that nearly 72 percent of the workers that will be in the state’s workforce in 2025 are already in the state’s workforce. Additionally, nearly 20 percent of the working age adults have some college but no degree.¹⁹ However, data show that very few of students age 25 or older that enroll in college actually ever earn a credential.²⁰ Further, between 2004 and 2009 the state had a 9 percent decrease in the number of credentials awarded to adults age 25 and older.²¹

¹⁶ WV HEPC Data Portal

¹⁷ WV College Completion Task Force

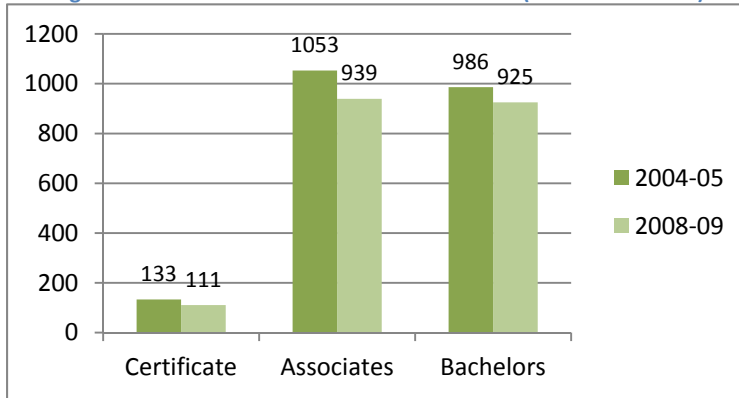
¹⁸ SREB Fact Book 2010

¹⁹ Completion Task Force

²⁰ Complete College America, http://www.completecollege.org/docs/West_Virginia.pdf

²¹ WVHEPC, CCA and SHEEO data reporting workbook, version 5. (provided by WVHEPC)

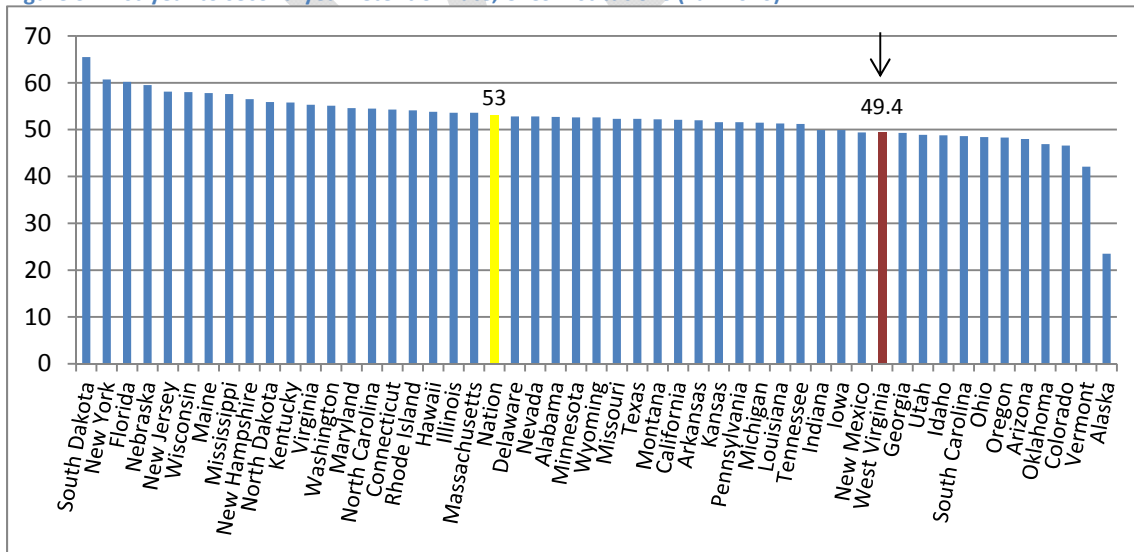
Figure 2: Decline in Adult Credentials Awarded (2004-05-2008-09)



Source 1: Data provided by WV HEPC “CCA-SHEEO Data Reporting-Workbook, v. 5”

- Retention and Persistence:* West Virginia is below the national average for the persistence of students at both two-and-four year institutions. In 2010, less than half (49.4 percent) of students enrolled at two-year institutions in 2009 returned for a second year. At four-year institutions just over two-thirds (68 percent) of students from the prior year returned for a second year.²² Additionally, for two-year institutions only 35 percent of full-time students and 37 percent of part-time students earn the expected amount of first year credits.²³ At four-year institutions, 67 percent of full-time students and 35 percent of part-time students earn the expected number of credits in their first year.²⁴

Figure 3: First-year to second-year retention rate, CTCS Institutions (Fall 2010)



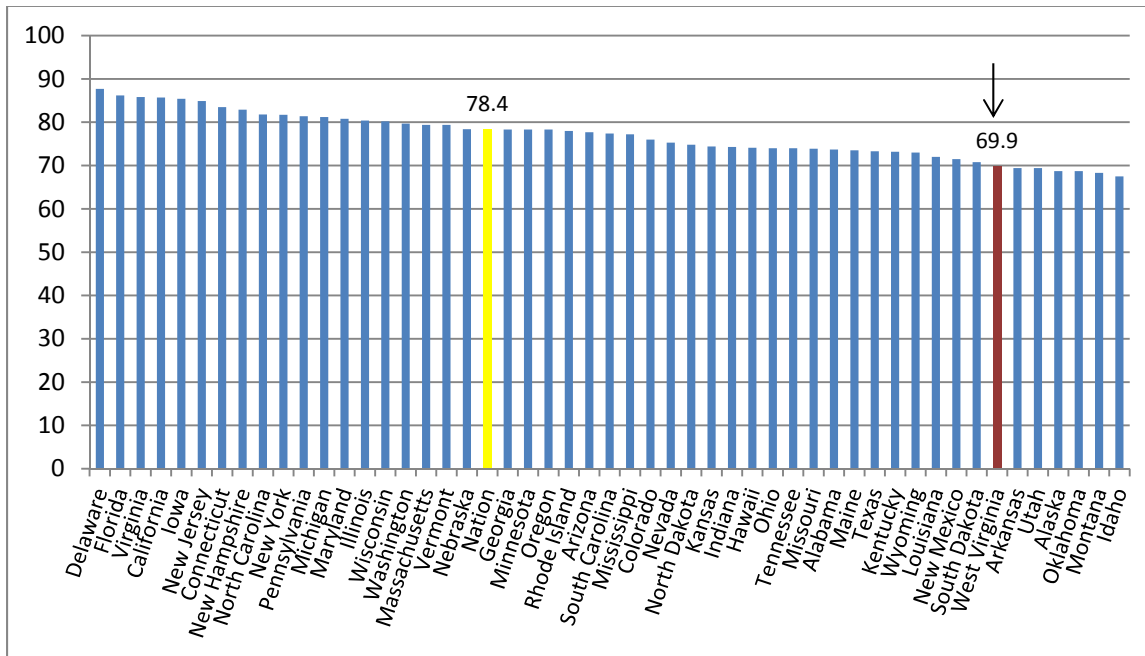
Source: NCHEMS Higher Education Information, www.higheredinfo.org

²² NCHEMS, Higher Education Information, www.higheredinfo.org

²³ Expected first-credits for is considered 24 for full-time students and 12 for part-time students

²⁴ Complete College America, ibid and West Virginia Higher Education Policy Commission.

Figure 4: First-year to second-year retention rates, HEPC institutions (Fall 2010)

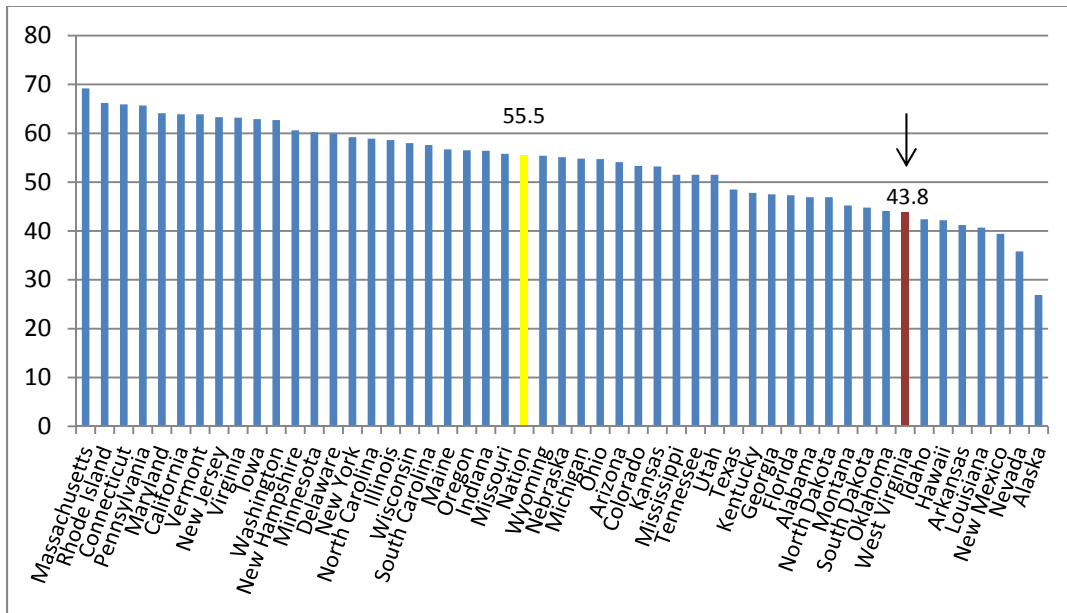


Source: NCHEMS Higher Education Information, www.higheredinfo.org

- **Completion:** The six-year graduation rate of West Virginia’s four-year institutions is 43.8 percent, below the national average of 55.5 percent. At the state’s community colleges 23.3 percent of students will graduate within three-years, below the national average of 29.2 percent.²⁵

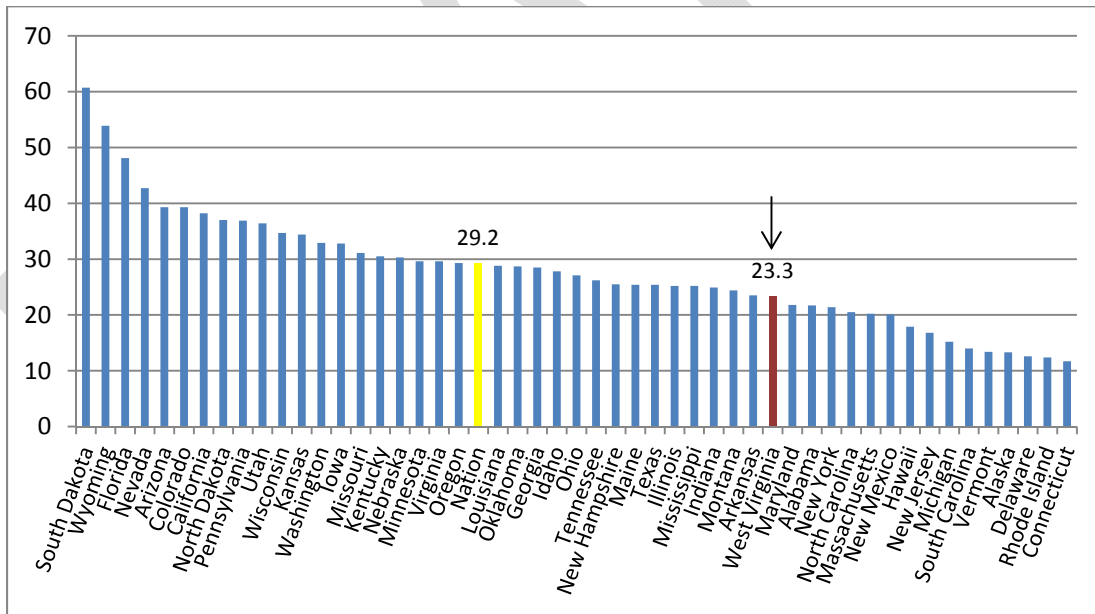
²⁵ NCHEMS Higher Education Information, *ibid.* Note, NCHEMS uses data reported to IPEDS for its analysis. For this particular data element, data collected by WVHEPC shows a slight difference in the data with a 48.5 percent six-year graduation rate reported by institutions to WVHEPC.

Figure 5: Six-year graduation rates at public four-year institutions (2009)



Source: NCHES Higher Education Information, www.higheredinfo.org

Figure 6: Three-year graduation rates (associate's degrees) at public 2-year institutions (2009)



Source: NCHES Higher Education Information, www.higheredinfo.org

- *Time-to-degree*: In 2009, full-time graduates at West Virginia's four-year institutions took an average of 4.9 years to earn their degree; part-time students took an average of 7 years. For

community college students, full-time students took an average of 4.4 years to graduate with an associate's degree; part-time students took an average of 6.1 years to earn their associates.²⁶

- *Developmental Education*: Students requiring developmental education is a major barrier to completion. Only 13 percent of associate-degree seeking students who need developmental education earn a degree within four years. This is less than half the rate of those students that do not require remediation.²⁷

A note about student preparation and higher education outcomes-based funding.

There is a frequent refrain that higher education cannot do better without better prepared students. This conversation came up early-on in the committee's work. The committee acknowledged the role that both K-12 and higher education will play in allowing the state to fully meet its economic and workforce needs. Ultimately, however, this committee's work would remain focused on the state's priorities for higher education and incentivizing reform to the barriers that exist once students enter postsecondary education (such as delivery of developmental education, student progression and time-to-degree). Further, outcomes-based funding could provide incentive for closer collaboration between K-12 and higher education, with more clearly articulated expectations and pathways for student transition.

Prior legislation and policy documents as context

The committee's development process included review and consideration of several prior legislative and policy documents that have offered goals, policy objectives, and strategies for West Virginia higher education. These documents included:

- Senate Bill 595 (2008)²⁸
- West Virginia Higher Education Policy Commission Master Plan (2007-2012)²⁹
- *Financing West Virginia's Future: A Funding Model for Higher Education* (WVHEPC, 2010/11)³⁰
- *Meeting the Challenge: 2010-15*. West Virginia Community and Technical Colleges System Master Plan³¹
- West Virginia Community and Technical Colleges System Funding Proposal (2009)³²
- *Educating West Virginia is Everyone's Business: West Virginia College Completion Task Force Report* (2012)³³

²⁶ Complete College America, *ibid*.

²⁷ West Virginia College Completion Task Force Report

²⁸ <http://legiscan.com/gaits/view/595>

²⁹ https://www.wvhepc.org/Master%20Plan/master%20plan_11.15.07.pdf

³⁰ <http://wvhepcnew.wvnet.edu/pdf/WVHEPC%20Funding%20Formula%20FINAL.pdf>

³¹ http://www.wvup.edu/Planning/Target_2010-2015_Master_Plan_FINAL.pdf

³² http://dctadvisors.com/DCT_Advisors/Finance_files/CCTCE%20Series%202%20-%20Finance.pdf

³³ <https://www.wvhepc.org/resources/Educating%20West%20Virginia%20is%20Everyone%E2%80%99s%20Business%20Report%20from%20the%20West%20Virginia%20College%20Completion%20Task%20Force.pdf>

Several themes emerged from review of this prior work.

- *No consistent, overall statewide goal:* Nearly all of the documents recognized a general need to increase higher education degree production and attainment rates, but the documents did not offer a consistent, overall statewide goal for higher education attainment. The West Virginia College Completion Task Force Report and the CTCS Master Plan were the only two documents which identified specific numbers or attainment goals.³⁴
- *Consistency on major policy priorities:* Though there was some variation, the documents did reflect a general consistency on several major higher education policy priorities for the state, including:
 - Increased completion
 - Affordability/Productivity (Pell students, on-time degree completion)
 - Adult students
 - Developmental education reform
 - Student progression/credit accumulation
 - High Needs Fields, e.g. STEM
 - Transfer
 - Research

In addition to using these common themes to help frame the conversation, the committee and its partners explicitly considered relevant elements of the CTCS and HEPC funding proposals throughout the development process.

2. A Framework for Outcomes-Based Funding in West Virginia

With the data and prior work as a framing context for the conversation, the committee moved to establish goals and priorities for state higher education that would then guide the development of specific recommendations for incorporating an outcomes-based funding model in the state's higher education funding plan.

Establishing Goals and Priorities for West Virginia Higher Education

The committee adopted a goal for West Virginia Higher Education to produce 20,000 additional degrees by 2018. The committee also expressed an interest for West Virginia's HEPC and CTCS leadership to further analyze this number and provide a better understanding of how the state should meet this goal, and what each sector's expected contribution will be, in alignment with the state's projected economic and workforce needs.

³⁴The Completion Task Force report called for 20,000 additional degrees/certificates by 2018. The CTCS master plan articulated a goal of 16,000 new certificate/associates holders by 2015.

The committee also articulated the policy priorities for higher education that are necessary to achieve the attainment goal. These priorities are:

- Student success (Completion)
- Student progression and persistence (including developmental education)
- Affordability and productivity (including on-time completion/time-to-degree)
- Institution differentiation (e.g. research and job placement/workforce training)
- Priority populations of adult and low-income students
- Priority credentials for Science, Technology, Engineering and Mathematics (STEM)

For the identified priority populations and credentials, the committee would like continued evaluation of how to best align these categories with the needs of the state. Specifically for priority credentials, there was an expressed need to more clearly define the specific STEM fields that are needed and to identify any needs beyond those captured in the STEM definition.

Guiding Parameters Established by Committee

The establishment of a higher education goal and related priorities was a significant step for the committee's work. The committee was then able to direct a general framework for how to align the state's investment with these priorities and begin analysis of potential funding options for the state. This framework included the following parameters:

- **Establish two separate formulae;** one for the two-year sector and one for the four-year sector. This would serve as the primary way to ensure the policy was sensitive to the differing missions of these institutions with the most appropriate model and metrics applied respectively.
- **Limit the number of metrics used to measure the established priorities, with some differentiation across sectors.** The committee took to heart the foundational principle of keeping the formulae simple with a limited number of metrics anchored in the state's attainment goal and policy priorities. The committee also recognized that the metrics provide another option to further differentiate across sectors and ensure the formula provides opportunity for institutions to succeed.
- **Conduct analysis on reallocation of a portion of the state's existing higher education budget through outcomes-based formulae.** The combination of the state facing a potential budget shortfall and recognition that the state's investment in higher education should be aligned to the state's priorities led the committee to request initial analysis based on a reallocation of existing (base allocation) dollars.

Initial Options and Analysis for Outcomes-Based Funding

Directed by the committee's established policy priorities and formula parameters, HEPC and HCM worked with Rich Petrick, former chief financial officer at the Ohio Board of Regents, to develop initial formula options, and analysis was conducted using the committee's established priorities and framework considerations along with feedback offered by institutions. This analysis was used to advance

the committee’s work toward final recommendations and next steps for incorporating an outcomes-based funding component into the state’s higher education finance policy.

The general approach included the development of two separate formulae, one for CTCS institutions and one for HEPC institutions. Each formula was developed on a “points” system that multiplies the outcomes metric (number of students or degrees in priority categories) by a weight that considers institution mission, student progression toward degree completion, and contribution to state priorities. The weights include the identified priority populations (adult and Pell), priority credentials (STEM) and increased weight for higher degrees achieved.

The allocation of points across metrics and as a basis for the distribution of funds is determined by each institutions proportional contribution to the overall totals. This approach balances two priorities: 1) that access remains an institutional focus; and 2) that institutions not improving or earning a low share of total contribution will not be rewarded for this lower performance.

The sections below provide a general illustration and description of the metrics, weights and impact. Appendix F provides more detailed definitions and charts.

- a) *Outcomes Metrics*: Based upon the established policy priorities of the committee and a desire to link the identified metrics to the mission and students served by the different sectors, the following metrics were identified.

CTCS Outcome Metrics	
Policy Priority	Metrics
Student Success	<i>Credential Completion</i> : # of certificates and associate degrees awarded
Student Progression	<i>Developmental education success</i> : # of students passing remedial classes in math or English and number of those students who then pass a college level course in the same subject within one year.
	<i>Momentum Points (credit accumulation)</i> : # of degree-seeking students that have achieved certain credit thresholds by the end of an academic year – 15, 30 and 45.
Productivity/Affordability	<i>On-time degree completion</i> : # of students that earn an associate’s degree on-time (2-years) or within one-year of on-time (3-years).

HEPC Outcome Metrics	
Policy Priority	Metrics
Student Success	<i>Degree Completion</i> : # of associate, bachelors, masters and doctoral degrees awarded.
Student Progression	<i>Transfer-in</i> : # of students enrolling in a HEPC institution that were previously enrolled at a CTCS institution.
	<i>Momentum Points (credit accumulation)</i> : # of degree-seeking students that have achieved certain credit thresholds by the end of an academic year – 30, 60 and 90.
Productivity/Affordability	<i>On-time degree completion</i> : # of students that earn a bachelor’s degree on-time (4-years) or within one-year of on-time (5-years).

- b) *Distribution of weights*: The weights were established to acknowledge both the progression of the student toward a degree and the recognition that more institutional resources are invested as students move through the institution, both in terms of upper division courses costing more and the additional cost of student support services, advising, etc. Weights are also designed to acknowledge the importance of state priorities. For example, an undergraduate student completing 15 credit hours in a community college receives a weight of 1.0, whereas an adult student who completes 45 credit hours is weighted at 1.75. Weights may be applied in multiple categories as well. For example, in the HEPC formula, an associate’s degree is weighted at 2.0, while a Pell recipient earning a bachelor’s degree in a STEM field is weighted as 4.25.
- c) *Impact*: To understand the potential impacts of this model, the formulas for both CTCS and HEPC were run at 2 percent and 5 percent of fiscal year 2013 base appropriations. The tables below show the range of impact for CTCS and HEPC institutions at these two funding levels.

Range of Impact of Outcomes-Based Funding for CTCS Institutions		
% of FY 2013 funding allocated through outcomes formula	Largest Institution Decline (from FY 2013 levels)	Largest Institution Increase (from FY 2013 levels)
2 percent	-0.6 percent	+0.9 percent
5 percent	-1.4 percent	+2.1 percent

Range of Impact of Outcomes-Based Funding for HEPC Institutions		
% of FY 2013 funding allocated through outcomes formula	Largest Institution Decline (from FY 2013 levels)	Largest Institution Increase (from FY 2013 levels)
2 percent	-1.1 percent	+0.5 percent
5 percent	-2.8 percent	+2.0 percent

Institutional Reaction and Input

After review of the initial formula development framework and analysis, the committee directed HEPC to consult with institution leaders and gather their feedback. The consultation included separate conference calls with CTCS and HEPC institutions. The summary of this institution input is as follows:

- **Mission differentiation:** Institutions recommended a further refinement of metrics/formula weights to recognize institution mission, particularly within the four-year sector. This included recommended addition of a research metric for HEPC institutions and workforce development for CTCS institutions.
- **Priority credentials:** Institutions wanted to consider a more detailed or inclusive definition for priority credentials, such as health sciences, which are of great need to the state.
- **Priority populations:** The recommendation was made for further consideration and analysis into the correct weighting for the priority populations, particularly Pell-eligible students.
- **In-state vs. out-of-state:** Institutions recommended the formula only include in-state students in the calculations.
- **Full-time enrollment:** Institutions commented that the state should encourage students to enroll full time (15 credits/semester) to increase completion.
- **Level of analysis:** Some institutions requested a dual level of analysis that looks at both year-over-year improvement and benchmarks for success.
- **Quality and Access:** Institutions noted a need to ensure quality and access are maintained. The student population priorities, particularly Pell students, the use of counts rather than percentages, as well as the focus on student progression (momentum points) all help ensure access remains a priority along with success. West Virginia institutions should additionally find ways to measure and report on quality. Some indicators such as job placement and passage rates on licensure exams could be considered.

Aligning West Virginia's Investment with its Priorities: Final Recommendations of the Committee

After several months of research, data review, and consultation with external experts, the committee has embraced the concept of outcomes-based funding. Good finance policy calls for aligning investment of state dollars with the state's higher education goals and policy priorities.

The initial model framework and development outlined above was intended as a starting point based on the prior months of committee discussion and feedback received from initial institution consultations regarding the established goals, priorities, and potential metrics. The committee recognizes there are several remaining technical considerations, informed by the input of institutions that need to be addressed in a final outcomes-based funding formula.

The final development and implementation of an outcomes-based model will require continued direction of state policymakers to ensure the outcomes-based funding policy remains focused on

attainment of the state's goals and policy priorities. Successful and sustained outcomes-based funding will also require the continued consultation and input of institutions.

The committee recommends the 2013 Legislature commit to incorporating an outcomes-based funding formula into the state's higher education finance policy, starting in 2014. This policy should include allocation of a proportion of the state's existing investment in higher education on the basis of outcomes in addition to allocation of any new state investment in higher education. Using the goals, priorities and framework established through the work of the committee and put forward in this report, the committee recommends that legislation be adopted to direct the final development of the outcomes-based funding formula that will be implemented in 2014. Based on the work of the committee as articulated in this report, the legislation should clearly articulate:

- **The state's goals and priorities for higher education.** The committee recommends the Legislature adopt the goal of 20,000 additional credentials and degrees by 2018 along with the policy, student population and credential priorities necessary for the state to reach its attainment goal:
 - Student success (completion)
 - Student progression and persistence (including developmental education)
 - Affordability and productivity (including on-time completion/time-to-degree)
 - Institution differentiation (e.g. research and job placement/workforce training)
 - Priority populations of adult and low-income students; and
 - Priority credentials, starting with Science, Technology, Engineering, and Mathematics (STEM)
- **The framework for the final outcomes-based funding model.** The initial analysis conducted by HEPC shall be the starting framework for the final model, which must maintain:
 - Two distinct formulae; one for CTCS institutions and one for HEPC institutions.
 - Simplicity, with limited metrics aligned to the state's established higher education attainment goals and priorities; and
 - Recognition of varying institutional missions, student progression, priority populations, and priority credentials through refinement of weights.
- **Amount of existing state funding allocated on outcomes:** The committee recommends the Legislature commit to allocating 25 percent of the state's existing allocation to institutions on the basis of outcomes by fiscal year 2019. Allocation to each institution will be based on the proportional share of the outcomes identified.
- **Implementation timeline of outcomes-based funding policy:** Fiscal year 2014 will serve as a pilot year for the state's higher education outcomes-based funding policy. Beginning in fiscal year 2015, 5 percent of the state's existing investment in higher education should be distributed to institutions on the basis of the identified outcome metrics and formula. Each year thereafter, the amount of funding based on outcomes will increase by 5 percent, up to a total of 25 percent of the state's base allocation to institutions by fiscal year 2019.
- **Cumulative impact:** In addition to allocation of existing dollars on the basis of outcomes, West Virginia should commit to distributing any future new investment in higher education through

the outcomes-based formula. This cumulative approach has been adopted in other states, such as Indiana, and serves to ensure that the state's higher education finance policy underscores the state's higher education priorities.

- **Institutional Accountability:** To ensure accuracy in the data reported by institutions and used in the outcomes-based funding formula, the state should incorporate a quality control and accountability mechanism that includes an audit of data reporting.
- **Establishment of an outcomes-based funding formula rule finalization committee.** To finalize the details of an outcomes-based funding model for West Virginia higher education, a formula rule finalization committee should be established. This committee should include representatives from the Legislature, CTCS institutions, and HEPC institutions. Among other details necessary to finalize the outcomes-based funding formulae the committee should specifically consider the following questions in terms of the initial formula development conducted by HEPC as directed by the committee:
 - *Metrics and mission differentiation:* Keeping in mind the parameters of a simple formula with limited and clearly defined metrics, are there other metrics that should be included to better align the formula with the state's established priorities and the need to recognize institutional mission differentiation? Specifically, can the formula include metrics within the institution mission priority, such as research (HEPC) and dual enrollment, job placement, and workforce development (CTCS)? Should CTCS institutions be given credit for **transfer** of students (with at least 15 credits) to HEPC institutions?
 - *Distribution of weights:* Does the distribution of weights both within and across categories most accurately represent the priorities of the state and the mission of the institutions? Are the weights given to the high priority populations enough to encourage the success of these students?
 - *STEM vs. High Needs:* Can the state more accurately define STEM and other high-needs fields to better reflect the economic and workforce needs of West Virginia?
 - *Equity component for CTCS:* An analysis of the current enrollment data and state allocations within the CTCS system revealed fairly significant equity gaps (state funding per full-time equivalent (FTE) ranges from a high of nearly \$6,000/FTE to a low of \$1,600/FTE). Should the formula include an equity component, phased-in over time, to the CTCS formula that would bring currently under-funding institutions to 90 percent of the state average funding per FTE student? Should this calculation be based on in-state only or on all FTE students?
- **Deadline for final recommendations.** The formula finalization committee's final recommendations should be delivered to the Legislature no later than June 15, 2013.

Appendices:

Appendix A: List of Publications (mini-bibliography)

Appendix B: Chart of State Models

Appendix C: Formula Mock-Up Definitions, Details and Impacts

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APPENDICES

Appendix A: Report Bibliography

Bibliography of Outcomes-Based Funding Research, Reports and Publications

- Blanco, C. (2012). *Outcomes based funding*. Atlanta, GA: Southern Regional Education Board. Retrieved from http://publications.sreb.org/2012/Outcomes_Based_Funding.pdf
- Complete College America. *Shift to performance funding*. Washington, DC. Retrieved from <http://www.completecollege.org/docs/CCA%20Essential%20Steps%20Shift%20to%20Performance%20Funding.pdf>
- Dougherty, K., Natow, R., Bork, R. H., Reddy, V., & Jones, S. (2010). *Performance funding origins and demise*. New York, NY: Columbia University, Teachers College, Community College Research Center. Retrieved from <http://ccrc.tc.columbia.edu/Collection.asp?cid=9>
- Fingerhut, E. & Kazis, R. (2012). *Tying funding to community college outcomes: Models, tools, and recommendations for states*. Boston, MA: Jobs for the Future. Retrieved from http://www.jff.org/sites/default/files/PerformanceBasedFunding_Ohio_ExSumm_032612.pdf
- Harnisch, T. L. (2011). *Performance-based funding: A re-emerging strategy in public higher education financing*. Washington, DC: American Association of State Colleges and Universities. Retrieved from http://www.congressweb.com/aascu/docfiles/Performance_Funding_AASCU_June2011.pdf
- Miao, K. (2012). *Performance-based funding of higher education*. Washington, DC: Center for American Progress. Retrieved from http://www.americanprogress.org/wp-content/uploads/issues/2012/08/pdf/performance_funding.pdf
- National Center for Higher Education Management Systems. (2011). *Performance funding: From idea to action*. Boulder, CO. Retrieved from <http://www.nchems.org/pubs/docs/Performance%20Funding%20121411.pdf>
- National Council of State Legislatures. (2012). *Performance funding for higher education*. Retrieved from <http://www.ncsl.org/issues-research/educ/performance-funding.aspx>
- Shulock, N. (2011). *Concerns about performance-based funding and ways that states are addressing concerns*. Washington, DC: Institute for Higher Education Leadership & Policy. Retrieved from http://www.csus.edu/ihelp/PDFs/B_performance%20funding_05-11.pdf

OVERVIEW OF SELECTED STATE OUTCOMES BASED FUNDING MODELS

STATE	YEAR	STATE GOAL/ PRIORITIES	INSTITUTION ENGAGEMENT	FORMULA METRICS	MISSION DIFFERENTIATION	PRIORITY POPULATIONS AND DEGREES	AMOUNT OF FUNDING	PHASE-IN/ STABILITY	REFERENCE DOCUMENTS
AR	2013-14	Double number of degrees awarded by 2025. Meet state's economic and workforce needs. Support a system of higher education that reduces redundancy and recognizes unique institutional missions. Maintain/increase quality of instruction including remedial education.	Legislation provided framework, including priorities, amount of funding and timeline of development/ implementation. AR Board of Regents and Department of Higher Education worked with institutions to develop formula details.	<p>Includes mandatory and optional measures (# of optional measures for each institutions is TBD).</p> <p><i>Four-year institutions:</i></p> <p><u>Mandatory:</u> Bachelor's credentials; total credentials (certificates and up); STEM credentials; Progression.</p> <p><u>Optional:</u> Course completion; high demand credentials; minority student credentials; nontraditional (adult) student credentials; remedial student credentials; transfer student credentials; patents; expenditure of federal awards; new company start ups.</p> <p><i>Two-year institutions:</i></p> <p><u>Mandatory:</u> Course completion (remedial and non-remedial); progression; Credential completion (certificates of proficiency; technical certificates; associate's degrees; completion rate).</p> <p><u>Optional:</u> STEM credentials; high demand credentials; workforce training credentials; transfers; adult credentials; minority credentials; employment.</p>	Different metrics between two- and four-year sectors and optional metrics institutions may select to align with mission	Optional metrics include minority, adult and remedial education students. Percentage of Pell students receiving credentials is a compensatory measure for four year institutions. Number of low-income and underprepared students relative to enrollment is compensatory measure for two-year institutions	5 percent of institution base funding in 2013-14; increasing by 5 percent each year to 25 percent in 2018-19.	Yes. 5% annual phase-in	SB 766 (2011) Arkansas 2025
IL	2013	60X25: 60 percent of population with credential by 2025. IL Public Agenda for College and Career Success: Increase attainment to meet best performing states; affordability; increase credentials to meet workforce demands; integrate assessts to meet economic needs of state.	Legislation provided framework including priorities, development and implementation timeline. Did not include amount of funding. Establishment of a Performance Funding Steering Committee. Membership included Lt. Governor, state legislators; higher education leaders; faculty; Board of Education members; business leaders	<p>Four-year institutions: Degrees awarded (bachelors; masters; doctoral); undergraduate degrees/FTE; education and general spending/completion; research and public service expenditures.</p> <p>Two-year institutions: certificate and degree completion; transfer; remedial education; momentum points (12 credit hours; 24 credit hours; adult education and literacy gains).</p>	Four-year metrics weighted differently based on Carengie Classification of institution.	Low-income, adult, black and hispanic students; STEM credentials (all weighted at extra 40%)	Less than 1%; considering higher levels in future years	Small amount will have very limited impact (no gain greater than 0.1%; no loss greater than 0.05%)	HB 1503 (2011) Illinois Board of Higher Education

IN	2007; revisions in 2013	Reaching Higher, Achieving More Strategic Plan for Higher Education: Increase attainment to 60 percent by 2025 (45 percent by 2018); Double number of degrees produced by 2025 (from 60,000 currently to 120,000); Increase on-time graduation.	2011 legislation called for research and recommendations for revisions to current formula to better account for mission differentiation and meet needs of state. IN Commission for Higher Education underwent review of other state models; consulted institutions on metrics; made recommendations for revisions to guide 2013-15 budget recommendations	Revised metrics for 2013-15 budget (% allocation within model) Degree Completion (30%): certificates, associate's, bachelor's, masters and doctoral; At-risk degree completion (15%); Pell-eligible; High-impact degree completion (10%); STEM (4-year institutions only), Student Persistence (15%); 15, 30, 45 credits for two-year institutions; Remediation success two-year institutions only; on-time graduation rate (25%); institution defined productivity metric (5%)	Variation in metrics applied to different types of institutions	Low-income (Pell eligible); STEM degrees	Currently 5%; expectation to increase to 6% in 2014 and 7% in 2015.	Three-year rolling average of data; institutional increases	Performance Formula Metrics
NV	2015 (with legislative approval)	Complete College America Nevada: Significantly increase number of college graduates by 2020 - an additional 1,064 degrees annually.	Legislation in 2011 created interim committee to study funding of higher education and examine if NV institutions should be funded based on defined outcome goals. Representation included higher education leaders; business sector; legislators and governors office.	<p><i>4-year University Metrics:</i> Degree Completion (Bachelor's, Master's and Doctoral); Research Expenditures; Transfers-in (w/a associate's degree); awards per 100 FTE.</p> <p><i>4-year college metrics:</i> Degree completion (bachelor's degree); gateway course completers; transfers-in (w/a transferable associate's degree); awards per 100 FTE;</p> <p><i>Community Colleges:</i> Certificate and degree completion (associate's and bachelors'); transfers to 4-year institution (w/24 credits or associate's degree; awards per 100 FTE; gateway course completers.</p>	Metrics differ across sectors (within same priority categories); and some variation of weights w/in sectors	Low-income (pell eligible) and minority students; STEM and Allied Health certificates and degrees. Apply to degree/certificate completion metrics only.	Committee recommended: 5 percent in FY 2015; increase to 20 percent by FY 2018 (5 percent intervals).	Four-year phase-in	SB 374 (2011) Recommendations of the Subcommittee
OH	2009	Ohio Strategic Plan for Higher Education (2008) called for increasing attainment rate of its citizens. Increase number of graduates by 20 percent by 2017.	Ohio Board of Regents led the development of Ohio's policy, included representation of instiution leaders.	<p><i>University Main Campuses:</i> Course (70%) and degree (10%) completions weighted by cost of program. At-risk students and certain STEM fields have higher weight. Maintains funding for graduate and medical education (20%) (distributed through performance-based indicators).</p> <p><i>University Regional Campuses:</i> course completions (90%); degree completions (10%).</p> <p><i>Community Colleges:</i> Student Success Points (developmental education success; 15, 30, 45 credit hours; transfers out (w/at least 15 credit hours)</p>	Three separate formula	At-risk students: academic (ACT score of 17 or less in math or English or participation in developmental education courses) or financial (expected family contribution of \$2,190 or less for federal student financial.	100 percent of instructional allocation (former enrollment-based allocation) for four-year institutions; 5 percent for community colleges.	Stop-loss provision: campuses do not lose more than 1 percent of prior year funding each year. Phased-out over four-years	AEI report

TN	2011	Complete College Tennessee Act of 2010 (CCTA) called for increased educational attainment and development of a master plan that addresses this need through: increased degree production; alignment with economic and workforce needs; and a system of higher education that reduces redundancy and recognizes role of each institutions mission. Goal: 26,000 additional undergraduate degrees by 2015.	CCTA required state to develop an outcomes based funding model aligned to state's higher education priorities and master plan. Formula Review Committee developed formula details. FRC included legislative representatives; Board of Regents and Higher Education Commission representation; instituon leaders; outside consultants	<p><i>4-year metrics:</i> student progression (24, 48, 72 credit hours); degree completion (bachelor's, master's, doctoral); research grant funding; degrees per 100 FTE; graduation rate.</p> <p><i>2-year metrics:</i> student progression (12, 24, 36 credit hours); remediation success; completion (certificates and associate's degrees); transfers out (w/at least 12 credit hours); job placement; workforce training; dual enrollment; awards/100 FTE</p>	Metrics differ across sectors (within same priority categories); weights at 4-year institutions vary based on Carnegie Classification; weights at 2-year institutions vary based on metrics priority to institution mission	Adult and low-income priority (40% premium); STEM	100 percent of state allocation.	4-year phase in. Design and weighting of formula also results in stability.	CCTA THEC Outcomes-Based Formula resources
TX	2013 (with legislative approval)	<i>Closing the Gaps by 2015</i> establishes, among other goals, a goal to increase by 50 percent number of degrees and certificates awarded.	Legislation (HB 9, 2011) provided guiding framework for priorities and parameters. Formula development delegated to THECB and two formula advisory committees (four-year and two-year) with institutional representation.	<p><i>Community College metrics:</i> "Momentum Points": Remedial Education; gateway courses; Credit accumulation (15, 30, core curriculum completion); Completion (associate degree, certificate, apprenticeship); transfers out to 4-year institutions (minimum 15 credit hours completed)</p> <p><i>Four-year institutions metrics:</i> Degree completion (bachelor's); time-to-degree; degrees/100 FTE; persistence (30, 60, 90 credit hours completed);</p>	Different metrics between sectors. Four-year model also includes cost-to-degree factor (uses cost-based weights to compensate for varying costs for different degree programs)	<i>Community Colleges:</i> use of momentum points <i>Universities:</i> pell receiptient; GED; adult student priority. STEM	10 percent of state base funding	Three-year rolling average of data	HB 9 THECB Funding Recommendations
WA	2009	Washington State Board for Community and Technical Colleges (CTC) System Direction has three main goals: meet state's economic and workforce demands; increase student success; and leverage innovation for smarter delivery.	Student Achievement Initiative was developed as one strategy to help CTC meet objectives of system direction. Developed with institutions and research from Columbia University Community College Research Center.	Student Success Points: Building toward college-level skills (basic skills gains, passing pre-college writing or math); retention (earning 15 or 30 college credits); math (passing necessary college math courses); completion (certificate, apprenticeship, associate's degree)	N/A applies to 2-year sector only	Momentum points	Less than 5% (\$3.5 million over two-years)	Bonus allocation	WA SBCTC Student Achievement Initiative

Appendix C: Formula Mock-Up, Details and Definitions

I. West Virginia Community and Technical College System

Proposed Metrics and Weights

Developmental Education Success				Momentum Points									Degree Completion							On-Time Graduation		
# of students that enrolled in and successfully completed developmental education		# of students successfully completing a college-level gateway course w/in two years of completing developmental education		# of undergraduate degree-seeking students who successfully complete 15-29CH			# of undergraduate degree-seeking students who successfully complete 30-44CH			# of undergraduate degree-seeking students who successfully complete 45-59CH			# of 1 year certificates conferred				# of Associate's Degrees conferred			Associate's Degree Earners		
Math	English	Math	English	Total	Adults	Pell	Total	Adults	Pell	Total	Adults	Pell	Total	Adults	Pell	In STEM Field	Total	Adults	Pell	In STEM Field	# completing degree in 2 years	# completing degree in 3 years
1.00	1.00	1.50	1.50	1.00	1.25	1.25	1.25	1.50	1.50	1.50	1.75	1.75	2.00	2.25	2.25	3.00	3.00	3.25	3.25	4.00	4.00	3.25

Appendix C: Formula Mock-Up, Details and Definitions

CTCS Draft Funding Formula - WEIGHTED											
	Developmental Education Success		Momentum Points		Degree Completion		On-time Completion		Totals		
	Developmental Success Points	Share of Developmental Success Points	Momentum Points	Share of Points	Degree Completion Points	Share of Points	On-Time Completion Points	Share of Points	Total points	Share of total points	Share of System FTE
Blue Ridge Community and Technical College	420.83	7.78%	2,146.50	12.51%	1,430.33	14.05%	168.25	12.25%	4,165.92	12.21%	10.23%
Bridgemont Community and Technical College	206.33	3.82%	548.00	3.19%	482.75	4.74%	125.25	9.12%	1,362.33	3.99%	3.66%
Eastern WV Community and Technical College	140.67	2.60%	445.33	2.60%	232.17	2.28%	20.25	1.47%	838.42	2.46%	2.22%
Kanawha Valley CTC	513.67	9.50%	1,394.00	8.12%	1,034.67	10.16%	103.67	7.55%	3,046.00	8.93%	7.19%
Mountwest Community and Technical College	689.83	12.76%	1,843.17	10.74%	1,226.25	12.04%	151.58	11.03%	3,910.83	11.46%	10.94%
New River Community and Technical College	720.00	13.31%	2,022.00	11.78%	552.75	5.43%	93.67	6.82%	3,388.42	9.93%	11.89%
Pierpont Community and Technical College	583.17	10.78%	2,068.50	12.05%	1,166.33	11.45%	214.67	15.63%	4,032.67	11.82%	12.59%
Southern WV Community and Technical College	729.00	13.48%	1,686.08	9.83%	791.83	7.78%	178.00	12.96%	3,384.92	9.92%	10.28%
WV Northern Community College	631.33	11.67%	2,328.75	13.57%	1,317.33	12.94%	102.42	7.46%	4,379.83	12.83%	12.37%
WVU at Parkersburg	773.17	14.30%	2,677.58	15.60%	1,949.08	19.14%	216.00	15.72%	5,615.83	16.46%	18.63%
Total	5,408.00	100.00%	17,159.92	100.00%	10,183.50	100.00%	1,373.75	100.00%	34,125.17	100.00%	100.00%
Points by Category	15.8%		50.3%		29.8%		4.0%		100.00%		

Numbers are three year averages (2009-10, 2010-11, 2011-12)

Appendix C: Formula Mock-Up, Details and Definitions

CTCS Possible Funding Schemes		On basis of shares of total points 5% of base	% <i>Change</i> <i>from</i> <i>FY13</i>	On basis of shares of total points 2% of base	% <i>Change</i> <i>from</i> <i>FY13</i>
		\$3,223,927		\$1,289,571	
	FY13 State Appropriations	\$0		\$0	
Blue Ridge Community and Technical College	\$5,138,415	\$ 5,275,063	2.7%	\$5,193,074	1.1%
Bridgemont Community and Technical College	\$3,973,597	\$ 3,903,622	-1.8%	\$3,945,607	-0.7%
Eastern WV Community and Technical College	\$2,100,509	\$ 2,074,692	-1.2%	\$2,090,182	-0.5%
Kanawha Valley CTC	\$4,125,664	\$ 4,207,147	2.0%	\$4,158,257	0.8%
Mountwest Community and Technical College	\$6,352,577	\$ 6,404,419	0.8%	\$6,373,314	0.3%
New River Community and Technical College	\$6,305,522	\$ 6,310,362	0.1%	\$6,307,458	0.0%
Pierpont Community and Technical College	\$8,443,703	\$ 8,402,498	-0.5%	\$8,427,221	-0.2%
Southern WV Community and Technical College	\$9,228,731	\$ 9,087,080	-1.5%	\$9,172,070	-0.6%
WV Northern Community College	\$7,893,643	\$ 7,912,739	0.2%	\$7,901,282	0.1%
WVU at Parkersburg	\$10,916,188	\$ 10,900,927	-0.1%	\$10,910,083	-0.1%
Total	\$64,478,549	\$ 64,478,549	0.0%	\$64,478,549	0.0%

Appendix C: Formula Mock-Up, Details and Definitions

II. Higher Education Policy Commission Institutions

Proposed Metrics and Weights

HEPC Metrics & Weights	Developmental Education Success				Momentum Points								Degree Completion										On-Time Graduation			Transfer							
	# of students that enrolled in and successfully completed developmental education		# of students successfully completing a college-level gateway course w/in two years of completing developmental education		# of undergraduate degree-seeking students who successfully complete 30-59CH			# of undergraduate degree-seeking students who successfully complete 60-89CH			# of undergraduate degree-seeking students who successfully complete 90-119CH		Momentum Points	Share of MP Points	# of Associate's Degrees Conferred				# of Bachelor's Degrees Conferred				# of master's degrees conferred		# of doctoral degrees conferred		Degree Completion Points	Share of Degree Completion Points	Bachelor's Degrees	On-Time Degree Points	Share of On-Time Points	Transfer in from CTCS institution	
	Math	English	Math	English	Total	Adults	Pell	Total	Adults	Pell	Total	Adults	Pell			Total	Adults	Pell	In STEM Field	Total	Adults	Pell	In STEM Field	Total	Adults	Pell	In STEM Field			# earned in 4 years	# earned in 5 years		
Progressive weight	1.00	1.00	1.50	1.50	1.00	1.25	1.25	1.25	1.50	1.50	1.50	1.75	1.75			2.00	2.25	2.25	3.00	3.00	3.25	3.25	4.00	3.50	4.50	4.00	5.00			4.00	3.25		2.00

Appendix C: Formula Mock-Up, Details and Definitions

HEPC Draft Funding Formula - WEIGHTED												
	Developmental Education Success		Momentum Points		Degree Completion		On-time Completion		Transfer		Totals	
	Developmental Success Points	Share of Developmental Success Points	Momentum Points	Share of Points	Degree Completion Points	Share of Points	On-Time Completion Points	Share of Points	Transfer Points	Share of Points	Total points	Share of total points
Bluefield State College	461.33	11.15%	1,742.75	3.79%	1,070.50	2.53%	229.33	1.11%	144.67	5.75%	3,648.58	3.16%
Concord University	509.00	12.30%	2,100.17	4.57%	1,325.83	3.13%	945.75	4.58%	37.33	1.48%	4,918.08	4.25%
Fairmont State University	454.00	10.97%	3,805.92	8.28%	2,671.25	6.32%	890.75	4.31%	728.67	28.95%	8,550.58	7.40%
Glenville State College	406.00	9.81%	1,001.17	2.18%	613.42	1.45%	346.33	1.68%	24.67	0.98%	2,391.58	2.07%
Marshall University	625.67	15.12%	8,226.17	17.89%	8,631.33	20.41%	3,174.33	15.36%	733.33	29.13%	21,390.83	18.50%
Potomac State College of WVU	754.67	18.24%	1,201.17	2.61%	489.67	1.16%	-	0.00%	20.67	0.82%	2,466.17	2.13%
Shepherd University	-	0.00%	3,297.67	7.17%	2,285.33	5.40%	1,274.83	6.17%	182.00	7.23%	7,039.83	6.09%
West Liberty University	414.67	10.02%	2,012.83	4.38%	1,327.92	3.14%	710.83	3.44%	178.67	7.10%	4,644.92	4.02%
West Virginia State University	300.67	7.27%	2,692.33	5.86%	1,266.67	2.99%	208.92	1.01%	120.67	4.79%	4,589.25	3.97%
West Virginia University	27.17	0.66%	19,080.92	41.50%	22,081.33	52.20%	12,680.92	61.37%	226.67	9.00%	54,097.00	46.80%
West Virginia University Institute of Technology	185.00	4.47%	821.75	1.79%	536.67	1.27%	201.00	0.97%	120.00	4.77%	1,864.42	1.61%
Total	4,138.17	100.00%	45,982.83	100.00%	42,299.92	100.00%	20,663.00	100.00%	2517.33	100.00%	115,601.25	100.00%
Points by Category	3.58%		39.78%		36.59%		17.87%		2.18%		100.00%	

Appendix C: Formula Mock-Up, Details and Definitions

		On basis of shares of total points 5% of base	% <i>Change from FY13</i>	On basis of shares of total points 2% of base
HEPC Possible funding schemes		\$13,081,812		\$5,232,725
	FY13 State Appropriations	\$0		\$0
Bluefield State College	\$6,593,442	\$ 6,676,655	1.3%	\$6,626,727
Concord University	\$10,206,804	\$ 10,253,010	0.5%	\$10,225,286
Fairmont State University	\$17,880,671	\$ 17,954,249	0.4%	\$17,910,102
Glenville State College	\$7,206,804	\$ 7,117,103	-1.2%	\$7,170,924
Marshall University	\$54,751,921	\$ 54,434,981	-0.6%	\$54,625,145
Potomac State College of WVU	\$4,690,189	\$ 4,734,759	1.0%	\$4,708,017
Shepherd University	\$11,228,474	\$ 11,463,701	2.1%	\$11,322,565
West Liberty University	\$9,322,524	\$ 9,382,032	0.6%	\$9,346,327
West Virginia State University	\$13,612,389	\$ 13,451,104	-1.2%	\$13,547,875
West Virginia University	\$116,675,384	\$ 116,963,407	0.2%	\$116,790,593
West Virginia University Institute of Technology	\$9,467,640	\$ 9,205,241	-2.8%	\$9,362,681
Total	\$261,636,242	\$ 261,636,242		\$261,636,242

WV DRAFT Funding Formula Definitions

- Developmental Education Success: Number of students passing all (or any?) remedial classes in math or English and number of those students that then pass a college level course in the same subject within two years. Weight of 1.5 applied to all those completing a college level course.
 - English includes English, writing and reading courses.
 - NOTE: We track college level course by looking at students who take a credit bearing in the same CIP code as the developmental.
 - QUESTIONS: Are remedial students completing ANY or ALL? Does the population in the passing college class after remedial include only those that PASSED remedial or any that TOOK a remedial?
- Momentum points: # of degree-seeking students that have achieved certain credit thresholds by the end of an academic year. Three year average from 2009-10, 2010-11, 2011-12.
 - HEPC momentum points are 30-59 (1.0), 60-89 (1.25), and 90-119 (1.5) with additional .25 per category added for adults and Pell recipients.
 - CTCS momentum points are 15-29 (1.0), 30-44 (1.25), and 45-59 (1.5) with additional .25 per category added for adults and Pell recipients.
 - NOTE: By only including degree-seeking students, enrollment numbers are skewed for some institutions, especially Blue Ridge CTC where 56% of students are non-degree seeking
- Degree Completion: # of degrees conferred by total, by adults (at graduation), by Pell students (anytime), and STEM (can be changed to high need based on input).
 - In CTC formula weights are 2.0 for 1 year certificates and 3.0 for associate's degrees. 0.25 additional weight for adults and Pell, 1.0 additional weight for STEM.
 - In HEPC formula, weights are 2.0 for associate's degree, 3.0 for bachelor's degree, 3.5 for master's degree and 4.0 for doctoral degree. There is a .25 additional weight for adults and Pell students at the associate's degree and bachelor's degree level. There is a 1.0 additional weight for STEM degrees at all levels.
 - NOTE: STEM category is more inclusive (includes category 4) than Data Portal
 - NOTE: This is # of degrees earned, not # of students earning degrees. A concern is that institutions will game this down the line.
- On- Time Graduation: Number of degrees earned on-time or within 1 year of on-time
 - In CTC formula, students who earn an associate's degree in 2 years are weighted at 4.0 (1.0 more than any degree earner). Students who earn an associate's degree in 3 years are weighted at 3.25 (same weight as adult or Pell).
 - In the HEPC formula, students who earn a bachelor's degree in four years are weighted at 4.0 (1.0 more than any degree earner). Students who earn a bachelor's degree in 5 years are weighted at 3.25 (same weight as adult or Pell).
- Transfer: # of students enrolling in a HEPC institution that were previously enrolled at a CTCS institution (ever).
 - NOTE: Top and bottom 3% were eliminated to prevent skewing of data, leaving a population of students that transferred in 7-120 credits.
 - NOTE: HEPC only factor
 - NOTE: Current data is only 2011 transfers