DRIVING BETTER *Outcomes:*

Fiscal Year 2019 State Status & Typology Update Scott Boelscher Senior Associate, HCM Strategists

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Introduction:

he 2015 report "Driving Better Outcomes: Typology and Principles to Inform Outcomes-Based Funding Models," released by HCM Strategists, established a comprehensive typology of outcomes-based funding (OBF) models and a state-by-state classification of funding systems according to the typology.

Updates to the report in 2016 and 2018 provided an enhanced typology informed by continued engagement with state policymakers and promising practices, a state-by-state assessment of components and funding distributions, a detailed breakdown of overall funding by sector for five states with advanced OBF models in place, and an examination of OBF policies by sector.

This report updates this information for OBF policies being implemented in FY 2019. Changes in state funding systems are highlighted, including an overview of OBF models being implemented and states where OBF models have been developed or initiatives are underway. This report also includes additional information about formula metrics, including metrics meant to provide incentives for underrepresented students to succeed.

Considerations For OBF Typology

The classification system outlined below is used to assign each sector's FY 2019 OBF model a "type" according to its level of sophistication and adherence to promising practices. The following critical areas have been identified and are included in the typology:

- · Established completion or attainment goals are linked to the model;
- Recurring base funding is distributed;
- A significant level of funding is distributed;
- Total degree/credential completion is prioritized;
- · Institution mission is reflected through varying weights, scales or metrics;
- The funding structure is formula-driven to ensure incentives for continuous improvement;
- · Success of underrepresented students is prioritized; and
- Funding is sustained over consecutive years.

These typology characteristics reflect commonly articulated and research-informed design and implementation principles and together enable a broad analysis of OBF policies. (See Appendix A for more information on design and implementation principles that can guide development of robust OBF policies.)

Typology of State OBF Policies

In the 2015 and 2016 reports, states were assigned a classification based on aggregated sector information. In the 2018 report and this updated report, each sector that is implementing an OBF model in a state will be assigned a type. This allows for a more detailed analysis and recognition of model differences within a state. The typology of sector OBF policies outlines the escalating level of significance and sophistication of funding policies, ranging from Type I to Type IV systems.

Type I systems are rudimentary in nature, may be pilot efforts that do not have significant levels of funding, are likely to share features with earlier performance-funding models, do not reflect the need to increase the success of underserved student populations, and minimally link the sector's finance policy with completion and attainment goals. Type II and III systems represent increasing degrees of development and adherence to promising practices. Type IV systems are the most robust and reflect strong alignment between the state's completion and attainment agenda and finance policy. Type IV systems include significant and stable funding, reflect institutional missions, prioritize degree/credential completion, include continuous incentives for improvement, and promote the success of underrepresented students.

TYPICAL CHARACTERISTICS

NOTE: Some states may meet most but not all criteria. States that do not meet all criteria for a particular type are assigned a lower type.

TYPE I	 State/sector may have completion/attainment goals and related priorities Model reliant on new funding only Low level of state funding (under 5 percent), based on sector analysis Institutional mission not reflected through varied weights, scaling or metrics Total, volume-based, degree/credential completion metric not included Outcomes for underrepresented students not prioritized Target/recapture approach likely May not yet have been sustained for two or more consecutive fiscal years
TYPE II	 State/sector may have completion/attainment goals and related priorities <i>Recurring dollars/base funding at least a portion of funding source</i> Low level of state funding (under 5 percent), based on sector analysis Institutional mission not reflected through varied weights, scaling or metrics <i>Total, volume-based, degree/credential completion metric included</i> Outcomes for underrepresented students may be prioritized Target/recapture approach likely May not yet have been sustained for two or more consecutive fiscal years

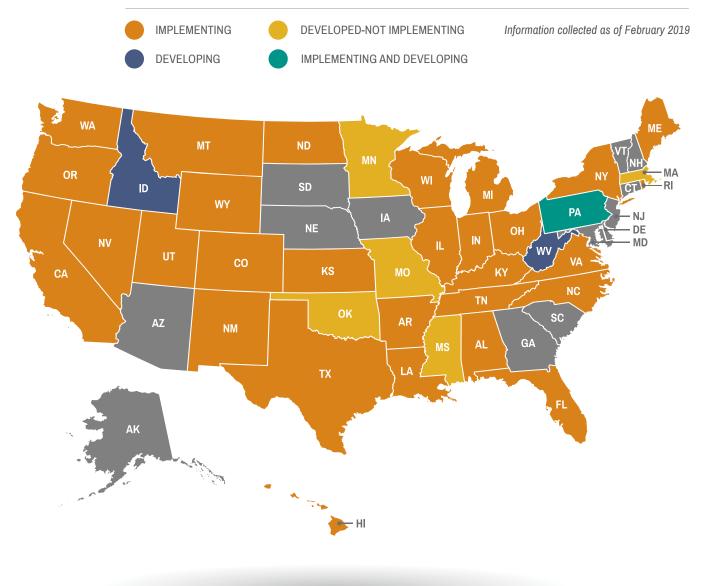
TYPE III	 State/sector has completion/attainment goals and related priorities Recurring dollars/base funding at least a portion of funding source Moderate level of state funding (5 to 24.9 percent), based on sector analysis Institutional mission reflected through varied weights, scaling or metrics Total, volume-based, degree/credential completion metric included Outcomes for underrepresented students prioritized May not be formula-driven Not sustained for two or more consecutive fiscal years
ΤΥΡΕ ΙΛ	 State/sector has completion/attainment goals and related priorities Recurring dollars/base funding at least a portion of funding source <i>High level of state funding (above 25 percent), based on sector analysis</i> Institutional mission reflected through varied weights, scaling or metrics Total, volume-based, degree/credential completion metric included Outcomes for underrepresented students prioritized <i>Formula-driven/provides incentives for continuous improvement</i> <i>Sustained for two or more consecutive fiscal years</i>

Status of OBF in the States

For FY 2019, 32 states (60 percent) are implementing (30 states) and/or developing (three states) OBF policies in at least one sector, with great variance in the critical elements included in the typology and reflected in the associated design and implementation principles. One state is both implementing and developing an OBF policy. In addition, five states have developed OBF policies but are not implementing them in FY 2019.

The maps that follow depict state policies as of February 2019 according to OBF implementation status. Figure 1 shows which states have implemented (i.e., allocated funding to) OBF in at least one sector, which states are developing an outcomes-based funding formula in at least one sector, and which states have developed OBF policies but are not implementing them in FY 2019. Figure 2 highlights states that are implementing OBF in the two-year sector by type. Figure 3 shows states that are implementing OBF in the figures, states were classified by type according to what is currently known about their plans; in some instances, a lower type assignment in Tables 1 and 2 may reflect a lack of information rather than a weak or underdeveloped policy. Some states also plan to start with more limited participation and functionality, with the intent to expand and refine over time.

FIGURE 1. OUTCOMES-BASED FUNDING IN STATES IN FY 2019



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FIGURE 2. STATES IMPLEMENTING OBF IN FY 2019, BY TYPE: TWO-YEAR SECTOR

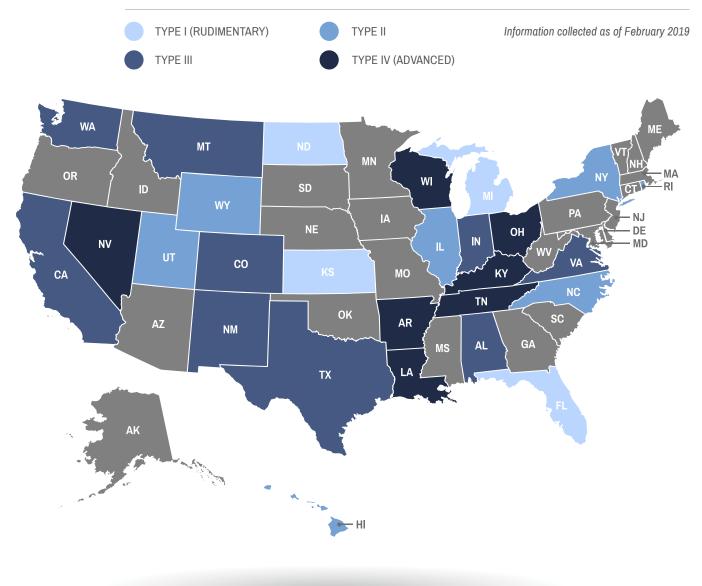
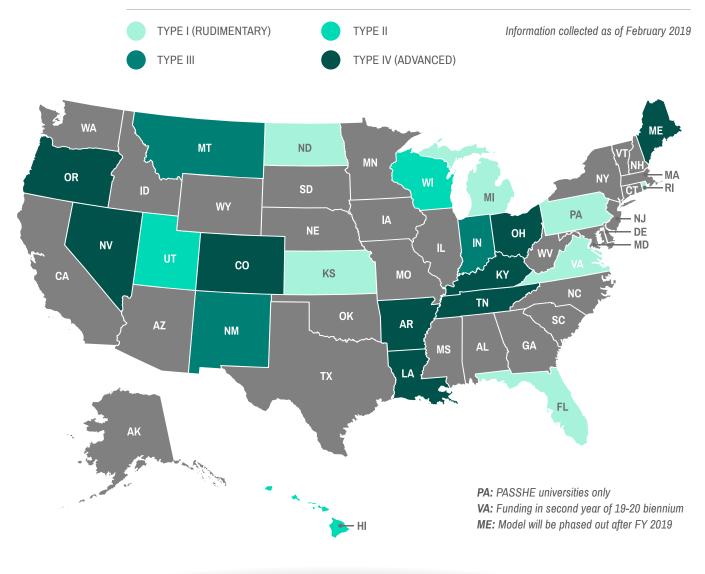


FIGURE 3. STATES IMPLEMENTING OBF IN FY 2019, BY TYPE: FOUR-YEAR SECTOR



OBF Typology By Sector

The following section provides detailed state OBF typology information on a by-sector basis. Only those sectors in a state currently implementing OBF are included in the matrix. There is great variation in funding model designs between sectors. High-level differences are captured below. The data tables include information on key model characteristics, including funding type and levels, whether the model prioritizes the success of underrepresented students, sustainability of the model, and whether the OBF model is formula-driven or a target/recapture system.

TABLE 1. OBF TYPOLOGY BY STATE: TWO-YEAR SECTORS IMPLEMENTING IN FY 2019

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State	FY2019-Status	F1 201	A Sector Alls Status	FY 201	A TYPE Dy Sector Linker	to competende to sol	ts Funding	evel Reflect	s Institutional	estes Creater	italet udet susespiration ucessister	seen une seen of the seen of t
AL	Implementing		Developing	N/A	Yes	Recurring	Moderate	Yes	Yes	Yes	No	Formula
AR	Implementing	IV	Implementing & Developing	Ш	Yes	Base/Recurring	High	Yes	Yes	Yes	Yes	Formula
CA	Implementing		Developing	N/A	Yes	Base/Recurring	Moderate	Yes	Yes	Yes	No	Formula
CO	Implementing	111	Implementing	Ш	Yes	Base/Recurring	Moderate	Yes	Yes	Yes	Yes	Formula
FL	Implementing	- I	Implementing	- I	Yes	Base/Recurring	Moderate	No	No	Yes	Yes	Target/Recapture
HI	Implementing	Ш	Implementing	Ш	Yes	Base/Recurring	Low	Yes	Yes	Yes	Yes	Target/Recapture
IL	Implementing	Ш	Implementing	Ш	Yes	Base/Recurring	Low	No	Yes	Yes	Yes	Formula
IN	Implementing	111	Implementing		Yes	Base/Recurring	Moderate	Yes	Yes	Yes	Yes	Formula
KS	Implementing	- I	N/A	N/A	Yes	New	Low	Yes	Partial	Partial	No	Target/Recapture
KY	Implementing	IV	Implementing	Ш	Yes	Base/Recurring	High	Yes	Yes	Yes	Yes	Formula
LA	Implementing	IV	Implementing	IV	Yes	Base/Recurring	High	Yes	Yes	Yes	Yes	Formula
MI	Implementing	I	Implementing	- I	Yes	New	Low	Yes	Yes	No	Yes	Formula
MT	Implementing		Implementing	Ш	Yes	Base/Recurring	Moderate	Yes	Yes	Yes	Yes	Formula
NC	Implementing	Ш	Implementing	11	No	Base/Recurring	Low	No	Yes	Yes	Yes	Formula
ND	Implementing	- I	Implementing	- I	Yes	Base/Recurring	High	No	No	No	Yes	Formula
NM	Implementing	111	Implementing	Ш	Yes	Base/Recurring	Moderate	Yes	Yes	Yes	Yes	Formula
NV	Implementing	IV	Implementing	IV	Yes	Base/Recurring	High	Yes	Yes	Yes	Yes	Formula
NY	Implementing	Ш	Implementing	Ш	No	Base/Recurring	Low	No	Yes	Yes	Yes	Formula
OH	Implementing	IV	Implementing	IV	Yes	Base/Recurring	High	Yes	Yes	Yes	Yes	Formula
RI	Implementing	Ш	Developing	N/A	Yes	Base/Recurring	Moderate	Yes	Yes	No	No	Target/Recapture
TN	Implementing	IV	Implementing	IV	Yes	Base/Recurring	High	Yes	Yes	Yes	Yes	Formula
TX	Implementing		Implementing	111	Yes	Base/Recurring	Moderate	Yes	Yes	Yes	Yes	Formula
UT	Implementing	Ш	Implementing & Developing	II	Yes	Base/Recurring	Low	Yes	Yes	Yes	Yes	Target/Recapture
VA	Implementing		Implementing	111	Yes	Base/Recurring	Moderate	Yes	Yes	Yes	Yes	Formula
WA	Implementing		Implementing	Ш	Yes	Base/Recurring	Moderate	Yes	Yes	Yes	Yes	Formula
WI-Tech	Implementing	IV	Implementing	IV	Yes	Base/Recurring	High	Yes	Yes	Yes	Yes	Formula
WY ⁴	Implementing	Ш	N/A	N/A	Yes	Base/Recurring	Moderate	Yes	Yes	No	Yes	Formula

TABLE NOTES:

1. Low (0-4.99%); Moderate (5-24.99%); High (25%+).

- 2. Only volume-based degree and credential completion metrics are included. Rate-based degree and credential completion metrics are not represented in the table.
- 3. Underrepresented student premiums and metrics tied solely to enrollment are not represented in the table.
- 4. Wyoming's OBF model was not listed in the FY 2018 Driving Better Outcomes Report.

Enterno Transferra Juropessing of the Tagestreet and the Goals FY 2019 Type FY 2018 THP8 FY 2018 Statt FY201955att FundingLove Underreptes letion Sustainab SION ര State Refle Total Link IV Ш AR Implementing Implementing Yes Base/Recurring High Yes Yes Yes Yes Formula & Developing IV IV CO Implementing Implementing Yes Base/Recurring High Yes Formula Yes Yes Yes FL Implementing L Implementing L Yes Base/Recurring Moderate Yes Partial Partial Yes Target/Recapture HI Ш Ш Base/Recurring Target/Recapture Implementing Implementing Yes I ow Yes Yes Yes Yes IN Ш Ш Implementing Implementing Yes Base/Recurring Moderate Yes Yes Yes Yes Formula Target/Recapture KS Implementing L N/A N/A Yes New Low Yes Partial Partial No ΚY Ш Implementing IV Implementing Yes Base/Recurring High Yes Yes Yes Formula Yes LA Implementing IV Implementing IV Yes Base/Recurring Yes Yes Yes Formula High Yes ME IV IV Yes Base/Recurring High Yes⁶ Formula Implementing Implementing Yes Yes Yes MI Implementing L Implementing L Yes New Low Yes Yes No Yes Formula Ш MT Implementing Ш Implementing Yes Base/Recurring Moderate Yes Yes Yes Yes Formula L L ND Implementing Implementing Base/Recurring High Formula Yes No No No Yes Implementing Ш Implementing Ш Yes Base/Recurring Moderate Yes Yes Yes Yes Formula NM NV Implementing IV Implementing IV Yes Base/Recurring High Yes Yes Yes Yes Formula OH Implementing IV Implementing IV Yes Base/Recurring High Yes Yes Yes Formula Yes Yes OR IV IV Base/Recurring Implementing Implementing Yes High Yes Yes Yes Formula L Ш PA Implementing Implementing Yes Base/Recurring Moderate Yes No Yes Yes Target/Recapture & Developing RI Implementing L Developing N/A Yes Base/Recurring Moderate Yes Partial Yes No Target/Recapture ΤN Implementing IV Implementing IV Yes **Base/Recurring** High Yes Yes Yes Yes Formula UT Implementing Ш Implementing Ш Base/Recurring Target/Recapture Yes I ow Yes Yes Yes Yes & Developing VA Implementing L N/A N/A Yes New⁵ Low Yes No No No Target/Recapture WI Implementing Ш N/A N/A Yes Base/Recurring Yes Yes Yes No Formula Low

TABLE 2. TYPOLOGY BY STATE: FOUR-YEAR SECTORS IMPLEMENTING IN FY 2019

TABLE NOTES:

1. Low (0-4.99%); Moderate (5-24.99%); High (25%+).

Only volume-based degree and credential completion metrics are included. Rate-based degree and credential completion metrics are not represented in the table.

3. Underrepresented student premiums and metrics tied solely to enrollment are not represented in the table.

6. Will discontinue model after FY 2019.

5. Funding in second year of 2019-2020 biennium.

Metrics Commonly Used in OBF Models

States incorporate a variety of metrics in their OBF systems depending on specific state and sector priorities. In advanced OBF models, these priorities and the aligned funding models are derived from a broader articulated completion and/or attainment goal. These metrics are most often incorporated as either a count or a rate. Examples of common metrics are detailed in the table below. Also included is a classification of common metrics by sector in models implemented in FY 2019.

TABLE 3. COMMON METRICS IN OBF MODELS

TYPE OF MEASURE	EXAMF	PLES
Course Completion	· Earned student credit hours	· Dual-enrollment completers
Progression	Students reaching earned credit hour benchmarks	 Retained students Gateway course completers Developmental education success
Completion	· Certificate completers	· Degree completers
Transfers	· Transfers out of students	· Success of students transferring in to institution
Efficiency	 Rate-based metrics Graduation/completion rates Retention rates 	 Degrees and certificates per FTE Time to degree Credits at completion
Workforce	 Non-credit workforce training Job placement/continuing education Wages of graduates 	 Licensures/certifications Apprenticeships
Research/Public Service	· Research expenditures	· Public service expenditures
Cost/Affordability	 Core expense ratio Faculty to administrator salary ratio Average cost to student 	 Debt of graduates Tuition and fees as a percent of statewide median family income
Priority Fields	· STEM+H degrees/certificates	· High-demand fields
Priority Populations	 Traditionally underserved minority students Low-income students Adult students 	 Academically underprepared students First-generation students Veterans
Other	 Closing access gaps Faculty diversity General education assessment Student and employer satisfaction surveys 	 Program accreditation Percent of online courses offered Other

States	Course note	ion progression	Kota Detree	a transferts	Efficiency	Workforce	Cost Atorda	ality Prior Pioks	Priority use	ion icess Other
AL		Х	X			(Х	Х	
AR		Х	Х	Х	Х		Х	Х	Х	
CA	Х	Х	Х	Х		Х			Х	
CO	Х	Х	Х		Х			Х	Х	
FL					Х	Х			Х	
HI			Х	Х	Х			Х	Х	
IL		Х	Х	Х					Х	
IN		Х	Х		Х				Х	Х
KS	Partial	Partial	Partial	Partial	Х	Partial		Partial	Partial	Х
KY	Х	Х	Х	Х	Х			Х	Х	
LA	Х	Х	Х	Х	Х	Х		Х	Х	Х
MI	Х		Х		Х		Х	Х		Х
MT	Х	Х	Х		Х				Х	
NV	Х	Х	Х	Х	Х			Х	Х	
NM	Х	Х	Х					Х	Х	
NY		Х	Х	Х	Х	Х			Х	Х
NC		Х	Х	Х	Х	Х			Х	Х
ND	Х									
OH	Х	Х	Х	Х				Х	Х	
RI			Х		Х			Х		Х
TN		Х	Х	Х	Х	Х			Х	Х
TX		Х	Х	Х				Х	Х	
UT			Х	Х	Х			Х	Х	
VA		Х	Х	Х					Х	
WA		Х	Х			Х		Х	Х	
WI-Tech	Х	Х	Х		Х	Х		Х	Х	Х
WY	Х		Х							

TABLE 4. OBF METRICS BY STATE: TWO-YEAR SECTOR

NOTE: A metric is labeled "Partial" if it is only included for some institutions.

States	Coursenable	etion progession	total page	ast fraises	Efficience	Research	Service Northorce	costatori	ability priority field	ids Priority of	ation structure other
	C2 C2	Pt	10.00.0	50 Alta	/	40.60	WC	Co bi.			00
AR		Х	Х	Х	Х	Х		Х	Х	Х	
CO	Х	Х	Х		Х				Х	Х	
FL			Partial		Х		Х	Х	Х	Partial	Х
HI			Х	Х	Х				Partial	Х	
IN		Х	Х		Х				Х	Х	
KS	Partial		Partial		Х	Partial			Partial	Partial	Х
KY	Х	Х	Х		Х				Х	Х	
LA	Х	Х	Х	Х	Х	Х	Х		Х	Х	
ME		Х	Х	Х		Partial		Х	Х	Х	
MI			Х		Х	Х		Х	Х		
MT	Partial		Х		Х	Partial				Х	
ND	Х										
NM	Х	Parital	Х			Partial			Х	Х	
NV	Х	Partial	Х	Х	Х	Partial			Х	Х	
OH	Х		Х			Х			Х	Х	
OR	Х		Х						Х	Х	
PA					Х				Partial	Х	Х
RI			Partial		Х	Partial			Х	Х	Х
TN		Х	Х		Х	Х				Х	Х
UT			Х		Х	Partial			Х	Х	
VA									Х		
WI		Х	Х	Х	Х	Х		Х	Х	Х	Х

TABLE 5. OBF METRICS BY STATE: FOUR-YEAR SECTOR

NOTE: A metric is labeled "Partial" if it is only included for some institutions.

Metrics Used to Prioritize the Success of Traditionally Underrepresented Students

Well-developed OBF models include factors that promote the success of traditionally underrepresented student populations, such as minority students, low-income students, adult students and academically underprepared students. These populations are often prioritized in models to counteract the concern that OBF may introduce incentives to restrict access, to recognize that underrepresented students may require more resources to educate, and to acknowledge that the success of these populations is needed for states to meet state attainment and completion goals and workforce needs. These populations are most often prioritized through separate metrics or through additional "bonus points" for existing metrics.¹ For example, a baccalaureate degree earned by a low-income student may be counted as 1.5 baccalaureate degrees. More research is needed to inform the best methods for weighting and incorporating these metrics. The following tables list populations prioritized in current OBF models. Only metrics linked to success (e.g., completion, progression, transfer) are included. Metrics tied solely to enrollment are not reflected in the table. If a population is only prioritized for some institutions in a sector, it is labeled as "Partial." Definitions and weightings vary between states.

TABLE 6. SUCCESS OF UNDERREPRESENTED POPULATIONS PRIORITIZED IN OBF MODELS: TWO-YEAR SECTOR

/		ntedents	/ /		15		ion	an		/ /
States	Underson the second	Low Student	Academical	Negated Joents Joents Adult Stud	veterans	fiist-canat	Native Haw	alle Disabled	Incarcerate	d Dislocated
AL	X	X		Х	([
AR	Х	Х	Х	Х						
CA		Х								
CO		Х								
FL		Х								
HI		Х					Х			
IL		Х	Х							
IN		Х	Х							
KS	Partial		Partial		Partial					
KY	Х	Х	Х							
LA		Х	Х	Х						
MI										
MT	Х	Х	Х	Х	Х					
NV	Х	Х								
NM		Х								
NY		Х			Х			Х		
NC			Х							
ND										
OH	Х	Х	Х	Х						
RI										
TN		Х	Х	Х						
ΤX			Х							
UT		Х								
VA	Х	Х	Х			Х				
WA	Х	Х	Х							
WI-Tech	Х	Х		Х	Х			Х	Х	Х
WY										

NOTE: A metric is labeled as "Partial" if it is only included for some institutions.

TABLE 7. SUCCESS OF UNDERREPRESENTED POPULATIONS PRIORITIZED IN OBF MODELS: FOUR-YEAR SECTOR

	Underentesting St	dents Lowncome	Academically Acade	ed Adul Students	Velenie	FITS GENERATOR	Ruta Students	Naite Handlerts
states	Unowin	LowStur	Acoundstut	Adu	Veter	First	Rute	Natistud
AR	X	X	Х	X	(
CO		Х						
FL	Partial							
HI		Х						Х
IN		Х						
KS	Partial							
KY	Х	Х						
LA		Х	Х	Х				
ME				Х				
MI								
MT	Х	Х		Х	Х			
NV	Х	Х						
NM		Х						
ND								
OH	Х	Х	Х	Х		Х		
OR	Х	Х			Х		Х	
PA		Х						
RI	Partial	Partial				Partial		
TN		Х		Х				
UT		Х						
VA								
WI		Х						

NOTE: A metric is labeled as "Partial" if it is only included for some institutions.

States Increasing Focus on OBF Policies

Between FY 2018 and FY 2019, several states either implemented new OBF models or increased the sophistication of their existing models. Each state includes varying levels of best practices within its outcomesbased funding model, but each has increased its focus on aligning state funding policy with completion and attainment goals. An overview of each state is provided below.

TWO-YEAR SECTOR ONLY

Alabama and California began to implement models in FY 2019. Both models reflect many of the design principles highlighted in this report. Specific details about development and implementation of each model follows.

• Alabama: Not Implementing to Type III

The Alabama Community College System began using an outcomes-based funding model in FY
 2019. The model consists of completion and progression metrics with premiums for traditionally
 underrepresented students. The model contains a 2 percent stop-loss in FY 2019 to assist with phase-in.

California: Not Implementing to Type III

- The California Community College System began using a newly developed Student Centered Funding Formula in FY 2019. The formula consists of three components: a Base Allocation determined by district enrollments, a Supplemental Allocation based on the number of low-income students in a district, and a Student Success Allocation based on various student progress and outcome metrics achieved. Districts will be held harmless to their 2017-2018 total revenue plus COLA for three years as part of formula transition.

FOUR-YEAR SECTOR ONLY

Virginia and Wisconsin adopted funding models for their four-year institutions in FY 2019. While Wisconsin's funding model reflects several key design components, Virginia's policy is more reflective of earlier performance funding models.

• Virginia: Not Implementing to Type I

 The FY 2019-2020 budget will allocate additional funding to universities in the second year of the biennium, contingent on each university meeting specific degree production targets. Targets exist for data and science technology awards, science and engineering awards, health care awards and education awards. Targets vary by institution.

Wisconsin: Not Implementing to Type II

 A newly developed outcomes-based funding formula was used to distribute \$26.3 million in state appropriations to institutions in the University of Wisconsin System in FY 2019. The formula consists of metrics related to four goals: growing and ensuring student access, improving and excelling at student progress and completion, expanding contributions to the workforce, and enhancing operational efficiency and effectiveness.

COMBINED TWO- AND FOUR-YEAR SECTOR

In addition to sector specific activity in states, Kansas, Kentucky New Mexico and Rhode Island, adopted new OBF models or increased the sophistication of existing models that apply to both two- and four-year institutions in FY 2019. As detailed below, these states vary in the alignment of the policies to best practice design principles.

Kansas: Not Implementing to Type I

 The Kansas Board of Regents has established performance agreements with the state universities and community and technical colleges. Institutions must achieve compliance with the performance agreements in order to receive new state funding. The performance agreements allocated funding in FY 2019 for the first time since FY 2013.

• Kentucky: Type III to Type IV

- An outcomes-based funding model was developed for Kentucky universities and community colleges for use in FY 2018. The enacted 2016-2018 Budget of the Commonwealth (HB 303) mandated that

5 percent of campus operating budgets was to be allocated through the model. Senate Bill 153 (2017) then directed the creation of new university and community-college funding models based on student success, course completion and other components. These new models are first being utilized in FY 2019. The Council on Postsecondary Education will implement the new models, which are to include stop-loss and hold-harmless provisions through 2021.

• New Mexico: Type II to Type III

- The share of state operating funds distributed through New Mexico's outcomes-based funding model was below 5 percent in FY 2018 but increased to 5.9 percent in FY 2019.

• Rhode Island: Not Implementing to Type I (Four-Year) and Type II (Two-Year)

- The Performance Fund Incentive Act of 2016 required the state's postsecondary institutions (Community College of Rhode Island, Rhode Island College and the University of Rhode Island) to report annually on progress in the areas of improving graduation rates, increasing completions in high-demand, high-wage fields, and advancing mission-specific initiatives. According to the Act, any additional state funding appropriated beyond the base amount for FY 2016 is subject to performance. If institutions demonstrate progress toward performance targets, they receive the additional state funds without condition. If performance is not achieved, distribution of funds is contingent upon a plan for improving performance. Funding began being distributed through these performance funding mechanisms in FY 2019.

States With OBF Policies in Development

Three states are in the process of developing OBF models. Efforts vary in form and scope, from those originating with state legislatures to those undertaken by coordinating boards. These efforts continue the trend of using OBF models to more closely align state funding systems with the state's completion and attainment goals.

• Idaho

- The State Board of Education voted on Oct. 18, 2018, to include in its FY 2020 budget request outcomes-based funding models for the state universities, colleges and career technical education institutions. The models are based on the production of academic and technical degrees and certificates. Additional premiums are added for certificates and degrees that are determined to address high-demand job needs in Idaho, low-income students, and on-time completion of a degree or certificate. Despite the board's approval, the request for outcomes-based funding was not recommended by the governor for inclusion in the FY 2020 budget.

West Virginia

Per a legislative directive, the West Virginia Higher Education Policy Commission developed a
proposed Student-Focused Funding Formula for the two-year and four-year institutions. Components
of the proposed formula include weighted credit-hour production, progression metrics, and degrees

awarded. Additional credit is awarded for students in high-risk populations. As of February 2019, there is not a plan for implementing the proposed funding formula.

• Pennsylvania

 Pennsylvania has implemented outcomes-based funding for its four-year institutions in the Pennsylvania State System of Higher Education for many years. Beginning in FY 2019, a transitional performance funding model is being used. Use of the transitional model will allow the system time to develop a new performance funding program more in line with the anticipated system redesign. The transitional model includes five equally weighted measures: percentage of total fall students who are non-majority, second-year retention rate of first-time/full-time bachelor's degree-seeking students, undergraduate degrees per 100 FTE, closing the first-time freshman achievement gaps for Pell grant recipients, and one university-designed measure.

States Previously Represented in Typology

Six states have developed outcomes-based funding policies but are not included in this FY 2019 review. These states may still have a funding model in place but did not use it to allocate funding to institutions in FY 2019.

Illinois: Four-Year

- The FY 2019 state budget did not include funds for the university performance funding model.

Massachusetts: Two-Year and Four-Year

- No FY 2019 funding was distributed through the previously developed university and communitycollege performance funding models.

Minnesota: Two-Year and Four-Year

- The FY 2018-2019 biennial budget did not include funding for either the University of Minnesota or Minnesota State performance fund programs.

Missouri: Two-year and Four-Year

- No funding was allocated for the Missouri performance model in FY 2019.

Mississippi: Four-Year

- The Mississippi Institutions of Higher Learning developed an outcomes-based funding formula for the state universities in 2013 but has not implemented the model since FY 2015.

Oklahoma Two-Year and Four-Year

 The Oklahoma State Regents for Higher Education approved and adopted a performance funding model in 2012 for use in the allocation of any new state appropriations. The model has not been implemented since FY 2014. There is noteworthy variance among the funding levels of state and sector outcomes-based funding policies. The following analysis examines the amount of state institutional support that is allocated through broad categories of funding. These categories include course completion, progression and degree completion, efficiency, and mission-focused components. Components of formulas not related to outcomes are categorized as Non-OBF. This includes metrics only tied to enrollment of students. The analysis is shown for states with outcomes-based funding models in place in both two-year and four-year sectors, as well as separately for two-year and four-year sectors. States are organized in descending order according to the percentage of appropriations allocated using an outcomes-based funding model. The typology designation of the OBF models, as outlined in Table 1 and Table 2, appears in parentheses.

CHART 1. OBF AS A PERCENTAGE OF FY 2019 STATE INSTITUTIONAL SUPPORT FOR STATES WITH OBF IN TWO-YEAR AND FOUR-YEAR SECTORS

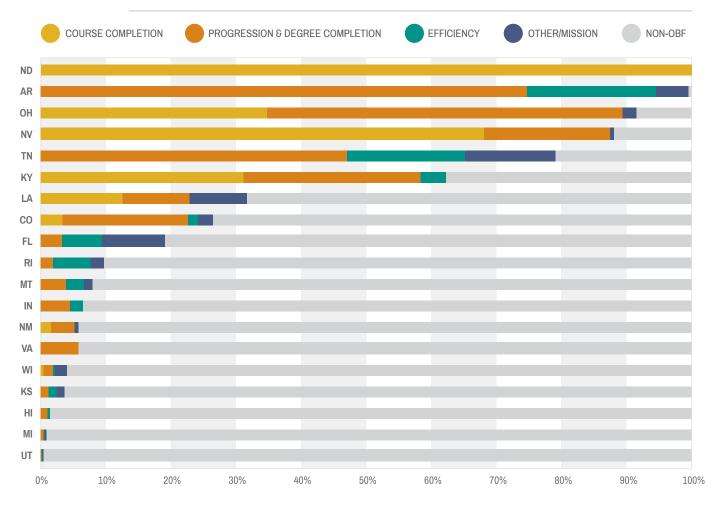


CHART NOTES:

Course Completion includes completed credit hours and dual credit completion.

Progression and Degree Completion includes degree and certificate completion, transfers, and progression metrics. Efficiency includes rate-based metrics.

Other/Mission includes research, workforce, affordability, quality, and other metrics.

AR: Hold harmless in FY 2019 to assist with phase-in.

CO: Through FY 2019-20, the appropriation for a governing board may not increase or decrease by a percentage that exceeds five percentage points of the average for all the governing boards.

KY: Hold harmless in FY 2019 to assist with phase-in.

ND: Four percent stop-loss in FY 2019.

VA Two-Year: The net shortfall in a college's total budget is capped at no more than one percent as part of transition agreement.

VA Four-Year: Performance Funds to be distributed in second year of 19-20 biennium.

CHART 2. OBF AS A PERCENTAGE OF FY 2019 STATE INSTITUTIONAL SUPPORT: TWO-YEAR SECTORS

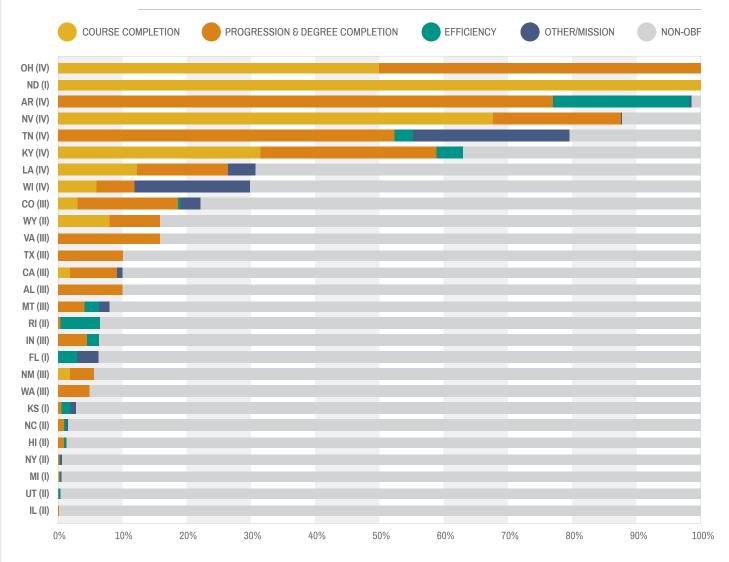


CHART NOTES:

Course Completion includes completed credit hours and dual credit completion.

Progression and Degree Completion includes degree and certificate completion, transfers, and progression metrics. Efficiency includes rate-based metrics.

Other/Mission includes research, workforce, affordability, quality, and other metrics.

- AL: Two percent stop-loss in FY 2019 to assist with phase-in.
- **AR:** Hold harmless in FY 2019 to assist with phase-in.
- CA: Districts will be held harmless to their 2017-18 total revenue plus COLA for three years as part of formula transition.
- CO: Through FY 2019-20, the appropriation for a governing board may not increase or decrease by a percentage that exceeds
- five percentage points of the average for all the governing boards.
- KY: Hold harmless in FY 2019 to assist with phase-in.
- ND: Four percent stop-loss in FY 2019.
- VA: The net shortfall in a college's total budget is capped at no more than one percent as part of transition agreement.

CHART 3. OBF AS A PERCENTAGE OF FY 2019 STATE INSTITUTIONAL SUPPORT: FOUR-YEAR SECTORS

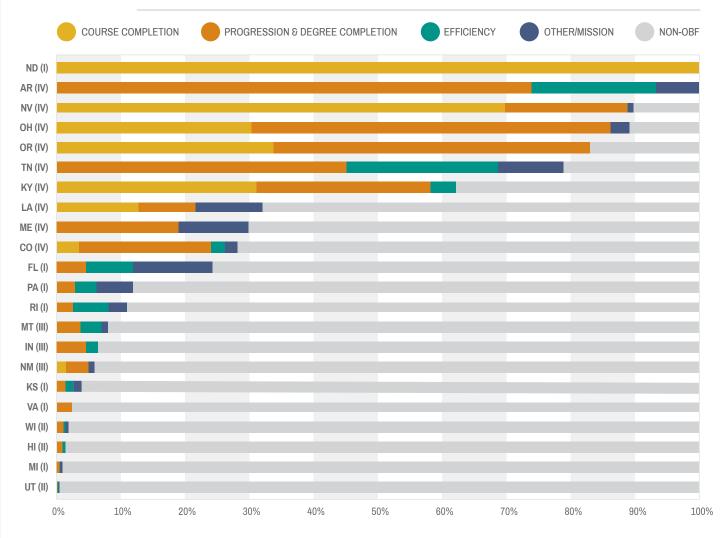


CHART NOTES:

Course Completion includes completed credit hours and dual credit completion.

Progression and Degree Completion includes degree and certificate completion, transfers, and progression metrics. Efficiency includes rate-based metrics.

Other/Mission includes research, workforce, affordability, quality, and other metrics.

AR: Hold harmless in FY 2019 to assist with phase-in.

CO: Through FY 2019-20, the appropriation for a governing board may not increase or decrease by a percentage that exceeds five percentage points of the average for all the governing boards.

- KY: Hold harmless in FY 2019 to assist with phase-in.
- ND: Four percent stop-loss in FY 2019.

VA: Performance Funds to be distributed in second year of 19-20 biennium.

OBF in Context of Other Revenue Sources in FY 2019

Outcomes formulas do not exist in a vacuum, but stand alongside other sources of funding. Those other sources—e.g. tuition and fees, federal research grants, private fundraising—may support institutional strategies that are compatible with outcomes funding, but may also work in ways that are unrelated or even in opposition to the goals of outcomes funding. To understand how outcomes funding might affect institutions' and students' choices and outcomes, it is important to consider the context of other major revenue sources. In this regard, no two states are the same, and each has created a very different fiscal environment for institutions and students.

OBF AND CORE FUNDING

Tuition and fee revenue, which is essentially a form of enrollment-based funding, is now the most significant source of support for instruction in most states. Alongside state appropriations, tuition is considered part of the "core" funding that supports institutions' instructional mission. Public institutions vary widely in how much of their core funding comes from the state and how much comes from tuition, so the size of a state's investment in outcomes funding should be evaluated relative not just to other state sources but also relative to institutions' tuition revenue.

The following analysis of outcomes funding in the context of core revenue in six states shows how OBF stacks up when tuition is included alongside other state support. Table 8 shows how core revenue streams support the twoyear sectors in Colorado, Indiana, Ohio, Tennessee and Texas (which has a significant OBF model only for twoyear colleges). These states were selected because each has an OBF model in place. Table 9 shows a similar analysis for four-year institutions, with Oregon (which has a significant OBF model only for four-year colleges) substituted in place of Texas.

	ENROLLMENT-DRIVEN FUNDING		PROGRESS AND C DRIVEN FUNDING	OMPLETION	OTHER OUTCOME- DRIVEN FUNDING	OTHER / UNKNOWN BASIS FOR FUNDING
State	Net Tuition (Excludes Financial Aid)	Enrollment Formula Funding	Progress (Momentum Points, Credit Hour Thresholds, etc.)	Degree and Certificate Completions	Other Outcomes (Job placement, course completion, efficiency/ quality metrics, etc.)	Other State and Local Appropriations
TN	52%	5%	10%	15%	8%	9%
ОН	34%	0%	14%	9%	23%	20%
IN	33%	0%	0%	4%	0%	62%
IN*	33%	0%	2%	49%	3%	12%
ТХ	47%	35%	3%	1%	0%	14%
CO	55%	30%	2%	7%	0%	6%

TABLE 8. TWO-YEAR INSTITUTION CORE FUNDING: SELECT STATES WITH OUTCOMES-BASED FUNDING

*Indiana formula long-term effect, if consistently implemented over time.

	ENROLLMENT-DRIVEN FUNDING		PROGRESS AND C DRIVEN FUNDING	OMPLETION	OTHER OUTCOME- DRIVEN FUNDING	OTHER/ UNKNOWN BASIS FOR FUNDING
State	Tuition and Fees	Enrollment Formula Funding	Progress (Momentum Points, Credit Hour Thresholds, etc.)	Degree and Certificate Completions	Other Outcomes (Job placement, course completion, efficiency/ quality metrics, etc.)	Other State and Local Appropriations
TN	66%	0%	3%	13%	12%	7%
OH	70%	4%	0%	15%	11%	0%
IN	63%	0%	0%	1%	1%	35%
IN*	63%	0%	1%	18%	12%	6%
OR	74%	1%	0%	12%	8%	6%
CO	84%	8%	0%	3%	0%	4%

TABLE 9. FOUR-YEAR INSTITUTION CORE FUNDING: SELECT STATES WITH OUTCOMES-BASED FUNDING

*Indiana formula long-term effect, if consistently implemented over time.

This analysis shows how, even in states that have nearly or entirely eliminated enrollment funding, there is still more funding for enrollment than for progress and degree completion when tuition is included. At least in the short term, degree and certificate outcomes account for a maximum of 18 percent of core funding, with progress accounting for a maximum of 14 percent. Especially in the four-year sector, where tuition rates are higher, tuition revenue substantially outpaces all outcomes revenue.

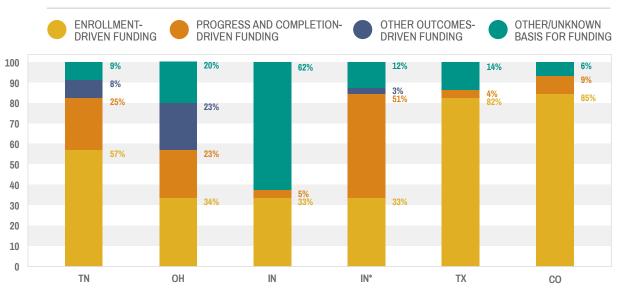


CHART 4. TWO-YEAR INSTITUTION CORE FUNDING: SELECT STATES WITH OUTCOMES-BASED FUNDING

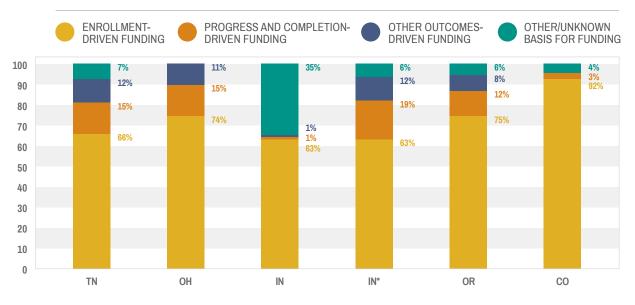


CHART 5. FOUR-YEAR INSTITUTION CORE FUNDING: SELECT STATES WITH OUTCOMES-BASED FUNDING

INDIANA, TENNESSEE AND THE CHALLENGES OF COMPARING FUNDING SYSTEMS

Indiana is shown twice in this analysis because the way its formula works in the short term differs from how it works in the long term. In the short term — each budget year — the state sets aside a small percentage of total institutional funding for outcomes. Unlike the other states, however, it allocates this amount based not on the total outcomes produced but on the incremental change. So where other states may have small changes in how a larger amount of funding is allocated, Indiana can have large changes in a small amount of funding. Also, unlike other states, it adds the amount allocated to an institution's long-term base, so a change in outcomes in one year has an effect on future years' funding as well. As a result, in the long term, if the state consistently uses this approach, the entire "base" will be allocated using the formula. In the numbers noted with an asterisk, Indiana would end up with a much larger share of funding allocated by outcomes than other states, but only over the course of many years.

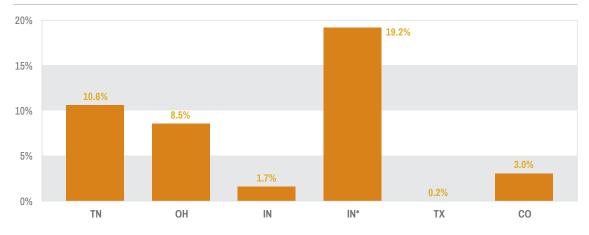
Tennessee, to cite the state that allocates the most funding based on short-term outcomes, reallocates most of the "base" every year using a three-year average of institutions' total outcomes. The three-year average provides some stability in year-to-year funding levels by spreading the impact of a change in outcomes over three funding cycles.

The result in both states is a system that balances the need for short-term financial stability against the longterm goal of allocating significant funding by outcomes. Both states end up distributing more than others based on outcomes while providing protection against wild swings in year-to-year institutional funding. They get to that point, however, by very different mechanisms.

WEIGHTING

The additional weight given to low-income or at-risk students in outcomes funding formulas should also be set alongside the total amount of core funding. A funding system built primarily on tuition and fees is biased from the outset toward more affluent students, a bias that the weight may help to counter. Weights can also compensate for the often higher costs of serving underprepared or "at-risk" students who need more instructional and support resources to succeed. Charts 6 and 7 show how much of total core funding (including enrollment, outcomes and other core state funds) is allocated in the form of these incremental "weights" on priority student populations. Priority populations are defined differently in different states, but can include racial/ethnic minorities, low-income students, adult students, veterans, or other groups a state wants to prioritize for funding and student success. Academically underprepared students can also be targeted. In Tennessee's case, they are included as a priority population receiving a separate weight. In Ohio, Indiana and Texas two-year sectors, funding for progress in remedial/developmental education is also added to the "weight" in Chart 6, since it works in a similar fashion.





*Indiana formula long-term effect, if consistently implemented over time.

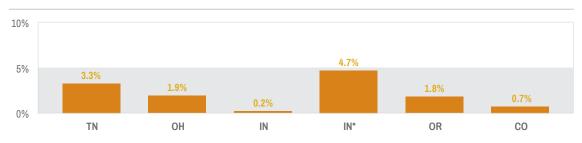


CHART 7. FOUR-YEAR INSTITUTION CORE FUNDING: PERCENT BASED ON PRIORITY POPULATIONS (E.G. LOW-INCOME OR AT-RISK)

*Indiana formula long-term effect, if consistently implemented over time.

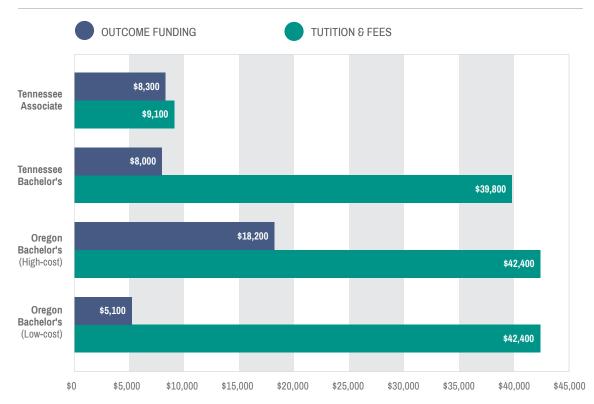
Again, especially in four-year sectors where tuition and fee revenue predominates, even a significant weight for priority or hard-to-serve students (in Tennessee) ends up allocating a relatively small share of total revenue.

DOLLARS PER OUTCOME AND FORMULA TRANSPARENCY

Another way to look at revenue in context is to estimate the net revenue produced by enrolling or graduating one student. Unfortunately, most state formulas make this relatively difficult to assess, but Oregon and Tennessee demonstrate two different ways states can provide more transparency around how their formulas work. Oregon estimates the value of a single degree for examples of low- and high-cost fields in its *Public University Budget Report Summary 2017-18*. Tennessee's value per degree can be calculated by dividing the unweighted average number of degrees awarded in the last three years into the amount allocated for bachelor's and associate degrees in the FY 2019 budget.

In Chart 8, the values associated with one undergraduate degree are compared to the approximate value of two years (for associate) or four years (for bachelor's) of tuition and fees at the 2018-2019 state average rate in the College Board's *Trends in College Pricing*.

CHART 8. TUITION AND FEE REVENUE COMPARED TO OUTCOME FUNDING REVENUE IN OREGON AND TENNESSEE



The numbers in Chart 8 are not precise, given the many variables involved, but show roughly how amounts associated with outcomes compare to revenue generated through tuition and fees. They also leave out other ways a student might affect the formula—through credit hours in Oregon's model, for example, or progress benchmarks in Tennessee's. In both states, however, degrees have a relatively large weight. Note that of the four examples, the value of an associate degree in Tennessee is relatively high compared to the tuition revenue generated, since community colleges generally have lower tuition and degrees are two years instead of four. As states look to Tennessee for its example with free community college through "Tennessee Promise", they should understand that this is only one component of a two-part finance system. The other is the state's commitment to allocate appropriations based on how many of those students succeed. Other states should not assume that they could get the same results without both components in place.

OTHER FUNDING

While the preceding analysis focuses on "core" funding, policymakers should also keep in mind the much broader picture of institutional revenue and what types of activities and outcomes are supported. At the state level, this would include capital funding for institutions and financial aid for students, but would also extend to federal and private contract and grant funding, philanthropy, auxiliary enterprises (e.g., housing, foodservice) and hospital revenues. Each of these potential revenue sources can support different kinds of institutional strategies and business decisions.

Appendix A: Design and Implementation Principles

Analysis of early and contemporary performance funding policies has yielded a number of design and implementation considerations to guide states in developing and/or updating their OBF models. Many of the current policies reflect these recommendations, which are described below along with their research underpinnings. As previously noted, the typology presented in this paper is derived from these design and implementation principles. Following them can inform the development of strong OBF policies.

DESIGN PRINCIPLES

1. Communicate leadership commitment to pursue specific statewide priorities regardless of a state's funding situation and establish consensus around goals.

State leadership must be firmly committed to and clearly articulate statewide priorities, such as a goal to increase the percentage of residents who complete a postsecondary degree. The commitment must be maintained regardless of the state's funding situation; if budget cuts are necessary, the outcomes-based funding formula should still be used to allocate some portion of dollars to institutions.

Securing agreement around a bipartisan, statewide "public agenda" that is targeted to the state's needs and its residents—not just postsecondary institutions—before developing an OBF policy will help ensure its sustainability. Seeking stakeholder input will help to ensure broad support and technical accuracy in building an OBF model.

Link to 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.^{III} Several of the earlier performance funding models were not clearly linked to a definitive goal, focused on completion or connected to well-defined policy priorities and objectives for the state's investment in higher education.¹ The funding policy was trying to be all things to all priorities, sending mixed and often misaligned signals to institutions. In addition, many early models did not engage institutions in the planning or design of funding models.^{IIII} As a result, there was a perception that the funding model used inappropriate measures and did not accurately reflect the mission of institutions toward achieving state goals.

Tennessee's efforts are a good illustration of this evolution. The state's early efforts at performance-based funding were limited in their effectiveness in part because they lacked a specific goal and broader agenda that encapsulated the funding model and other policies.^{iv} The adoption of the Complete College Tennessee Act in 2010 provided the broader strategic objectives and goals for the state's system of higher education, and therefore the framework for how the state's funding should be allocated.

^{1.} For example, early performance funding models in many states (such as Kentucky, Louisiana and South Carolina) had a mix of measures focused on inputs, processes and outcomes. Many of the metrics were difficult to define and consistently measure. Examples include global perspective in academic programs (Kentucky); review of gender issues (Kentucky); use of technology in student learning (Kentucky); best practices in administration (Louisiana); faculty activity (Louisiana); approval of mission statement (South Carolina); quality of faculty (South Carolina); and quality of entering students (South Carolina). Kentucky and Louisiana have since implemented new outcomes-based funding models. South Carolina has discontinued use of its performance funding model.

Associated Typology Criterion: This design principle is directly associated with the typology criterion that the funding model is linked to established completion or attainment goals and related priorities.

2. Make funding meaningful and secure.

The share of institutional funding devoted to OBF must be large enough to garner attention, shape priorities, influence actions and substantially fund the activities need to produce the outcomes desired. Research has not informed a precise amount or percentage of funding to be allocated on outcomes. However, as the intent is to align the state's finance policy with the state's policy priorities, as was done with enrollment-driven policies, it would hold that a similar approach should be taken with outcomes-based funding policies. This is especially an issue when the allocation model is solely reliant on new funding. The less the allocation model is tied to outcomes, the less the state's finance policy is aligned with its completion priorities and needs. This is a particular issue when the allocation model is solely reliant on new funding. These new-funding-only models have significant challenges in sustainability and reflect limited alignment of state postsecondary investments with state attainment needs. In addition, if the outcomes-based formula is implemented with new money only, this bonus allocation is often the first thing reduced or eliminated in tight budget climates. Building OBF into institutions' recurring allocations promotes sustainability and ensures that the policy intent does not languish while waiting for new funding that may never materialize.

Link to Research: Several analyses of earlier performance funding models cite small amounts of funding as an important limiting factor for the intended effects of the funding policies.^v These earlier models linked a very small proportion (often 1 or 2 percent) of an institution's total state allocation to the established measures. If the large majority of institution funding remains based in prior allocation models, it will be difficult for the measures to drive behavior and produce significant results. In fact, as quoted by Dougherty and Reddy (2013), institutional leaders indicated that they felt these models were merely symbolic and did little to change behavior beyond data collection and analysis.^{vi}

Evidence of the effects of sustaining policies over time appear in several studies. One national study looked at bachelor's degrees conferred in states with performance funding policies. Another focused on the implementation and effects in the state of Washington, where community colleges adopted new policies. Both showed no significant results from the policies in early years of implementation but showed significant positive impacts on the number of degrees conferred after the policies had been sustained over multiple years.^{vii} Further, studies conducted in Tennessee, Indiana and Ohio by Research for Action indicate that outcomesbased funding policies affected student outcomes. For example, though it accounts for less than 10 percent of the support the state provides to institutions, Indiana's outcomesbased funding policy has been sustained over multiple years, including times of budget cuts.^{viii} This clear commitment and sustainability provides incentives for institutions to focus target strategies that increase outcomes reflected in the formula. These findings suggest that, if given sufficient time for implementation, the more immediate institutional responses to financial incentives translate into longer-term student outcomes.

Associated Typology Criteria: This design principle corresponds with the typology criteria on utilizing recurring funding, ensuring a significant level of funding and sustaining funding for the model over consecutive years.

3. Identify limited, measurable metrics.

Outcomes-based funding must be clearly tied to the state's goals and priorities and include metrics identified at the outset that are easily measured and available; otherwise, the system may be compromised or lose credibility. Metrics that are ambiguous, easy to game or inconsistently reported should not be included. For instance, metrics should emphasize the volume of graduates versus graduation rates, as rates are easier to game.^{ix} The OBF formula should track a limited number of metrics, or risk diluting the focus on key priorities. States should consider metrics that are aligned with student success, workforce needs (such as priority degree fields and job placements), the success of underserved populations and outcomes for which there is not already a built-in source of funding.^x

Link to Research: Early performance funding models were often weighed down with too many metrics. In many cases, the metrics were not easily understood or quantifiable and lacked reliable, consistently collected data.^{xi} In addition, many models included measures focused more on inputs or processes than student progression and outcomes.^{xii} Examples include metrics such as curricula offered to achieve a mission; adoption of a strategic plan; inclusion of a global/international perspective into academic programs; and use of best management practices.^{xiii} Collectively, this resulted in complicated funding systems and burdensome data collection requirements.

Associated Typology Criteria: This design principle is associated with two typology components: addressing institutional mission through varying weights, scales or metrics, and the inclusion of degree/credential completion as a primary metric. In addition, a funding model derived from a state completion or attainment goal and associated priorities will limit the metrics included to those aligned with the articulated goals.

4. Include all institutions and allow for differentiation.

All institutions contribute to meeting a state's postsecondary goals and should be included in the OBF model. However, metrics should allow for differences in institutional mission, student population and other characteristics. Some OBF models apply a few metrics across institutions, while adopting other unique metrics and weighting them differently across types of institutions. Other states weight metrics according to institution type. In some states, separate formulas have been developed for the different sectors, often with common categories of metrics but different operational definitions (e.g. degree levels, course completion milestones and mission-aligned metrics such as research for the four-year sector and job placement for community colleges). Many OBF models employ multiple strategies to ensure mission-aligned outcomes-based funding policies.

Link to Research: Some states have models focused on one institutional sector—for instance, a state's community colleges—leaving other institutions free of funding accountability. Early models that did include all public institutions failed to adequately distinguish metrics across sectors. This promoted mission creep or put certain institutions at an immediate disadvantage.^{xiv}

Associated Typology Criterion: This design principle is directly reflected in addressing institutional mission through varying weights, scales or metrics. Using OBF to allocate funding to all sectors and institutions is no

longer part of the typology criteria, as the current criterion examines sector-level models. However, the inclusion of both two-year and four-year sectors is still considered a best practice.

5. Prioritize the success of underserved populations.

Many states include separate metrics for, or give extra weight to, graduating academically underprepared, low-income, adult or underrepresented students in their OBF models. This guards against incentives to restrict access (by enrolling only those students most likely to succeed and with the fewest risk factors) in order to boost completion rates. The success of students from underserved populations is critical to meeting states' workforce needs. The models in place in leading states, such as Oregon, Ohio and Tennessee, reflect premiums or a focus on certain student populations, such as low-income, adult, underrepresented minority and academically at-risk students. More research is needed to determine the optimal method for incorporating these metrics into OBF models. After five years of implementation, Tennessee increased the premium applied from a flat rate of 40 percent to a premium of up to 120 percent for students falling into the three identified populations: adult, low-income and at-risk.

A recent report by the Center for Law and Social Policy analyzes the various equity measures and applications that states incorporate into their funding models. Some key recommendations in their analysis include ensuring that the weighting or bonus measures are sufficient to offset incentives to increase selectivity as a way of increasing outcomes, and ensuring that these measures are mandatory and not optional for institutions.^{xv} Further, well-designed funding models limit use of metrics that rely on rates, which can be increased by restricting who is let in and do not necessarily reflect progress toward increased attainment. The use of rates in a model runs counter to the underlying need for the state to not only expand access to students but support the increased success of all students. A recent OBF Equity Toolkit developed by Research for Action details, among other things, strategies states and institutions can use to support the closing of equity gaps during OBF implementation. Examples include aligning strategic plans and goals, building staff and data capacity, identifying and dismantling unnecessary barriers to success, and improving advising and communication with students.^{xvi}

Link to Research: Unless explicitly accounted for, outcomes-based funding models that reward success could have the unintended consequence of rewarding colleges that have better-prepared students or providing an incentive for colleges to make admissions criteria more restrictive. If explicit focus and priority is not placed on supporting the success of high-need students, these models could encourage colleges to restrict admissions to less well-prepared or low-income students to boost graduation rates or other formula measures.^{xvii}

In Tennessee, evidence indicates that the funding policy is having positive effects on students across a range of outcomes. The research indicates some improvement in outcomes for Pell students and students of color, though the results are weaker. The findings reinforce the need for states to drive dollars based on outcomes, but also the necessity to direct money in ways that ensure more equitable results for all students.^{xviii} Other recent studies suggest that premiums for underrepresented students may help counteract incentives to reduce access for these students.^{xix}

Associated Typology Criterion: This design principle is directly associated with the typology criterion of prioritizing the success of underrepresented students.

6. Use a formula-driven funding structure instead of preset targets and goals.

Formula-driven models use a structured set of rules to distribute funding. There are many versions. For example, a model may award a certain dollar amount for each additional outcome produced, or a model may allocate funding toward institutions that produce a larger share of outcomes relative to other institutions. The key distinction is that formula-driven models do not use preset targets or goals for the metrics. Targets and goals are extremely difficult to appropriately set. Properly setting a target or goal requires a vast amount of information about institutions' current and future operations and resources. Furthermore, targets and goals cannot account for future circumstances that are outside of institutions' control. For example, unforeseen economic changes may have large effects on student enrollment. In practice, the targets and goals end up being too ambitious or not ambitious enough. Furthermore, targets and goals do not provide a continuous incentive for improvement. For example, if an institution's goal is to produce 100 additional degrees, there would be no incentive from the model to produce the 101st degree.

Link to Research: Research indicates that the structure of early performance funding models was part of the reason the policy was not sustained — citing arbitrary or inconsistent measures and targets, lack of focus on continuous or sustained improvement, and an uncertainty created by the "all or nothing" approach of target-based allocations.^{xx} In other words, target-based approaches often establish benchmarks that don't require institutions to stretch or continuously improve in order to succeed. Or they take a punitive nature that can have dramatic effects on certain institutions. A formula-based allocation that proportionally distributes resources ensures all institutions can benefit from the funding model and encourages continuous improvement and sustained investments. An example of a poorly-designed target is the University Access Rate metric in the performance funding model for Florida's universities. The goal for achieving maximum excellence points for this metric is set at 42 percent of undergraduates receiving a Pell grant. This does not reward institutions with significantly higher numbers of Pell students, nor does it financially support institutions to continue to expand access to this population.

Associated Typology Criterion: This design principle is directly associated with the typology criterion of Formula-Driven funding structure and providing incentives for continuous improvement.

7. Reward progress and short-term success milestones.

Rewarding short-term success milestones encourages interim progress and eases the transition to OBF. Because such interim measures should not detract from the longer-term outcomes sought, the progress measures may be weighted in a way that prioritizes the completion outcomes.

Link to Research: Including student progress and shorter-term milestones is another common way for states to address the needs of underserved and/or underprepared students. These metrics, often referred to as "momentum points," are based on research conducted by the 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 or academic.^{xxi}

Associated Typology Criteria: While the typology does not directly reflect this principle, it is related to how a state's funding model derives from completion or attainment goals and priorities. For example, increased

completion will require institutions to be more successful in getting students to complete remedial needs, into and through first college-level math and English, and to achieve key credit milestones. Differentiation of metrics and weights by sector is also connected to this principle, as progress and short-term milestones are well aligned to the mission of community colleges and, in many cases, comprehensive four-year institutions.

IMPLEMENTATION PRINCIPLES

1. Phase in transition to OBF.

To prevent large, disruptive shifts in funding, the impact of new funding models should be calibrated to allow institutions time to adjust to new expectations. Paying close attention to the design principles noted above, which include multiyear averages to stabilize the data, is the first step toward ensuring a predictable model. Upon implementation, states have also used a stop-loss or other calibration method, such as phasing in the percentage of the formula based on outcomes.

Link to Research: Institutional capacity to respond to newly articulated expectations varies widely.^{xxii} This is particularly true when states make significant changes to how institutions receive their recurring or core general allocation dollars.

Associated Typology Criteria: This implementation principle is not directly reflected in the typology as it is influenced by the various design principles described above. In many cases, the current low or moderate level of state funding associated with outcomes is a reflection of this principle, as the allocation through outcomes will increase over time. In states such as Tennessee and Ohio, where significant levels of general appropriation funding are allocated through outcomes, various methods were employed (weighting structure/formula design, calibration, stop-loss, data stability) to ensure that the model's impact is phased in and does not result in large shifts of dollars year-to-year.

2. Continuously improve data.

Any funding model is necessarily limited by the measures that can be appropriately included—those that are clear, measurable and consistently collected. Given that state data systems are in different stages of development in terms of types and quality of data available, there should be ongoing and continuous improvement to data systems. This will allow states to incorporate measures that are currently limited but important to the state's overall goals, such as certificates (and other credentials) and job placement.

Link to Research: Policymakers and institutional stakeholders have raised concerns that the operational measures available to include in outcomes-based funding models are limited and have noted the challenges of including strong indicators for certain desirable educational outcomes.^{xxiii} In many states, however, the presence of an outcomes-based funding model has spurred collection and reporting of new data elements.^{xxiv}

Associated Typology Criterion: This implementation principle is not currently reflected in the typology. However, it is closely linked to the goals and priority criterion, as the funding model will (appropriately) be limited

by the data available. Efforts to improve data collection can help states refine models to more closely reflect ultimate goals and priorities, such as certificates and job placement.

3. Evaluate and adjust.

New funding systems are not likely to be perfect on the first attempt. There may be gaps or opportunities for unwanted "gaming" that only emerge with experience. In addition to supporting independent research to evaluate qualitative and quantitative impacts of OBF, states should carefully monitor and evaluate their policies. When data and experience warrant, adjustments should be made to the model, phasing in larger changes over time. In several states, the stakeholders who initially developed the OBF models meet periodically to discuss progress and enhancements.

Link to Research: Research indicates that early funding models produced a range of unintended effects that were left unevaluated and unaddressed.^{xxv} Working to mitigate and respond to these concerns is an important and ongoing process, true of any funding model.

Associated Typology Criterion: This implementation principle is not directly reflected in the typology but represents a larger, overarching principle that should be part of any state policy — finance or other. As with all policies, states should examine OBF models to understand, at a minimum, their effectiveness and continued alignment with state goals and priorities.

Appendix B: Considerations For Evaluating OBF Policies

As illustrated in the best practices and design principles listed above, research on previous outcomes and performance-based funding models has been important for informing the development of new policies and improvement of existing policies. What makes this research useful to policymakers is the attention paid to understanding and reflecting specific state policy contexts and formula details. Further research is crucial for informing development of funding policies that advance state goals, particularly student success and equity. Below are some considerations for evaluating funding policies that may help ensure that research is relevant to state policymakers and provides insights into varying impacts across different design and implementation features.

RECOGNIZE AND ACCOUNT FOR DIFFERENCES IN OBF POLICES

Like nearly all other policies, outcomes-based funding is not a monolithic policy but a policy approach under which great variation exists between state policies and even between sectors within a state. Significant differences exist around funding levels, metrics, prioritization of underrepresented students, differentiation by institution type and mission, methodology, and the amount of time the model has been sustained. Many OBF models still being used are more similar to the early performance funding policies that do not align with best practices. Any evaluation of OBF polices would be improved by identifying and accounting for these differences.

USE DATA THAT ALIGN WITH THE OUTCOMES IN THE OBF POLICIES

Not all outcome data used in OBF models matches the data from the Integrated Postsecondary Education Data System (IPEDS), the most common data source used for research on OBF polices. For example, some state OBF policies only include outcomes earned by resident students. However, IPEDS data do not differentiate outcomes such as degrees and certificates earned by residency status of the student. Also, in some states, metrics may not have been reported to IPEDS until the OBF model was implemented. This may make it appear as if increases in outcomes could be the result of the model, when in fact the increases were due to improved data reporting. In both cases, using only IPEDS data may lead the study to draw erroneous conclusions, positive or negative.

In addition, the definitions for metrics in OBF models may not match the definitions used in the IPEDS collection. Certificates are one example. Many states include certificate production as an OBF metric. However, there is much variance in how states define certificates in their OBF models. Some states include certificates for all fields, while other states only include technical or high-demand certificates. Other states only include certificates as well. In a recent research brief, Research for Action identified several issues with exclusively using IPEDS data when examining OBF effects on certificate production. Among these are the following:

- IPEDS classifications of short and long-term certificates do not align with OBF policy classifications;
- IPEDS only includes total certificates awarded by an institution. But some OBF formulas do not recognize and/ or discount multiple certificates earned within one reporting year by the same student;

- IPEDS does not include consistent data on student subgroups typically included in OBF formulas; and
- IPEDS makes it optional for institutions to report certificates earned with fewer than 12 credits that are
 approved at the institution or regional level, but many do report these data in their IPEDS surveys.xxvi

There are many advantages to using IPEDS as a data source; however the limitations of the data should be acknowledged and addressed, particularly when it deviates from the actual outcomes data used in funding models. Research for Action recommends, when possible, incorporating data sources such as State Longitudinal Data Systems and workforce data to improve the accuracy of the research.

CAREFULLY DESCRIBE THE DETAILS OF OBF POLICIES

A good OBF study needs to accurately represent the model components, metrics, weightings, priority populations, goals and implementation details of the policies. Not doing so could lead to erroneous conclusions. For example, some states do not include graduation rates in their models. Instead, the models are linked to increasing educational attainment levels and only include volume-based metrics. From the state's perspective, increasing the total number of graduates at the expense of slightly lower graduation rates may be considered a desirable outcome. A study that examines the effects of the model solely on graduation rates or degrees per FTE may miss this important context.

Studies should also take into account the quantity of tuition and fee revenue that supports an enrollment-based model. A state where 50 percent of state funding is outcomes-based, but only 10 percent of institutional funding comes from the state, is comparable to a state where 10 percent of funding is outcomes-based and 50 percent of funding comes from the state.

Additionally, it should be recognized that OBF models are not static. There are frequent revisions and gaps in implementation that should be accounted for. The State Share of Instruction (SSI) model that allocates state appropriations to the Ohio community colleges is one example of an OBF model that has been significantly revised since the original model was adopted in 2009 to the SSI model commonly referenced today (and first implemented in FY 2015).^{xxvii}

 Primarily based on enrollment (cost weighted) Success Points introduced in FY 2011 5% of FY 2011 calculation 7.5% of FY 2012 calculation 10% of FY 2013 calculation Success Points included: Demodial/Developmental serves success
 - 5% of FY 2011 calculation - 7.5% of FY 2012 calculation - 10% of FY 2013 calculation • Success Points included:
 7.5% of FY 2012 calculation 10% of FY 2013 calculation Success Points included:
Demedial/Developmental source avecage
 Remedial/Developmental course success Students earning 15 and 30 credit hours of college-level coursework Students transferring to four-year universities with 15 credit hours Students earning an associate degree
 Associate degrees accounted for 0.50% of the total calculation in FY 2011, 0.7 in FY 2012, and 0.97% in FY 2013
• Stop-loss (99% to 96%)
50% Enrollment (cost weighted)
25% Course Completion (cost weighted)
25% Success Points
- Associate degrees accounted for 2.6% of the total calculation
Stop-loss (97%)
Significantly revised to increase focus on student success
50% Course Completion (cost weighted)
25% Completion Milestones (cost weighted)
 Students earning associate degrees Students earning certificates of 30+ hours
 Weighted one-half of associate degrees
- Students transferring to four-year universities with 12 credit hours
 Weighted one-fourth of associate degrees
25% Success Points (revised)
- 12/24/36 earned credit-hour benchmarks
 Developmental Math/English completion and subsequent enrollment in a college level Math/English course
 Premiums are given for outcomes earned by students in access categories Adult
2 X00 00 1 %
- Low-income
- Underrepresented minority
 Academically underprepared (beginning in FY 2016) No stop-loss

As illustrated in the chart above, though they share the same name, the revised model is very different from earlier versions. Research studies should account for these differences to fully understand the effects of funding models on student outcomes as well as institutional response.

THOROUGHLY ENGAGE STATE POLICYMAKERS, INSTITUTIONS, OTHER STAKEHOLDERS

For any policy, there is significant contextual knowledge that may not be apparent to those examining the policy from afar. This also holds true for OBF polices. Any examination of these polices would be improved by thoroughly engaging state policymakers, institution representatives and other stakeholders. Questions to ask could include:

- Is this study accurately identifying the components of the model?
- Does the data source being used in the study align with the data used in the model?
- Was the goal of the model to increase student success, and/or is the model intended to support other goals and priorities?
- Were there other polices being implemented concurrent with OBF implementation that should be accounted for?
- Is the timing of model implementation understood? Has sufficient time passed to allow stakeholders to adjust behaviors?

Appendix C: State Policy Summative Charts

ALABAMA		
Sectors Implementing OBF in FY 2019	Two-Year	
Linked to Attainment/Completion Goal	Yes	
Base/Recurring or New Funding	Base/Recurring	
SECTOR-LEVEL OBF ANALYSIS		
	Four-Year	Two-Year
Formula Type	N/A	III
Funding Level	N/A	Moderate
Reflects Institutional Mission	N/A	Yes
Includes Total Degree/Credential Completion	N/A	Yes
Underrepresented Student Success Prioritized	N/A	Yes
Implementing for Two or More Years	N/A	No
Formula-Driven or Target/ Recapture	N/A	Formula

ARKANSAS		
Sectors Implementing OBF in FY 2019	Four-Year and Two-Year	
Linked to Attainment/Completion Goal	Yes	
Base/Recurring or New Funding	Base/Recurring	
SECTOR-LEVEL OBF ANALYSIS		
	Four-Year	Two-Year
Formula Type	IV	IV
Funding Level	High	High
Reflects Institutional Mission	Yes	Yes
Includes Total Degree/Credential Completion	Yes	Yes
Underrepresented Student Success Prioritized	Yes	Yes
Implementing for Two or More Years	Yes	Yes
Formula-Driven or Target/ Recapture	Formula	Formula

CALIFORNIA		
Sectors Implementing OBF in FY 2019	Two-Year	
Linked to Attainment/Completion Goal	Yes	
Base/Recurring or New Funding	Base/Recurring	
SECTOR-LEVEL OBF ANALYSIS		
	Four-Year	Two-Year
Formula Type	N/A	III
Funding Level	N/A	Moderate
Reflects Institutional Mission	N/A	Yes
Includes Total Degree/Credential Completion	N/A	Yes
Underrepresented Student Success Prioritized	N/A	Yes
Implementing for Two or More Years	N/A	No
Formula-Driven or Target/ Recapture	N/A	Formula

COLORADO		
Sectors Implementing OBF in FY 2019	Four-Year and Two-Year	
Linked to Attainment/Completion Goal	Yes	
Base/Recurring or New Funding	Base/Recurring	
SECTOR-LEVEL OBF ANALYSIS		
	Four-Year	Two-Year
Formula Type	IV	III
Funding Level	High	Moderate
Reflects Institutional Mission	Yes	Yes
Includes Total Degree/Credential Completion	Yes	Yes
Underrepresented Student Success Prioritized	Yes	Yes
Implementing for Two or More Years	Yes	Yes
Formula-Driven or Target/ Recapture	Formula	Formula

FLORIDA		
Sectors Implementing OBF in FY 2019	Four-Year and Two-Year	
Linked to Attainment/Completion Goal	Yes	
Base/Recurring or New Funding	Base/Recurring	
SECTOR-LEVEL OBF ANALYSIS		
	Four-Year	Two-Year
Formula Type	1	I
Funding Level	Moderate	Moderate
Reflects Institutional Mission	Yes	No
Includes Total Degree/Credential Completion	Partial	No
Underrepresented Student Success Prioritized	Partial	Yes
Implementing for Two or More Years	Yes	Yes
Formula-Driven or Target/ Recapture	Target/Recapture	Target/Recapture

HAWAII		
Sectors Implementing OBF in FY 2019	Four-Year and Two-Year	
Linked to Attainment/Completion Goal	Yes	
Base/Recurring or New Funding	Base/Recurring	
SECTOR-LEVEL OBF ANALYSIS		
	Four-Year	Two-Year
Formula Type	II	II
Funding Level	Low	Low
Reflects Institutional Mission	Yes	Yes
Includes Total Degree/Credential Completion	Yes	Yes
Underrepresented Student Success Prioritized	Yes	Yes
Implementing for Two or More Years	Yes	Yes
Formula-Driven or Target/ Recapture	Target/Recapture	Target/Recapture

ILLINOIS		
Sectors Implementing OBF in FY 2019	Two-Year	
Linked to Attainment/Completion Goal	Yes	
Base/Recurring or New Funding	Base/Recurring	
SECTOR-LEVEL OBF ANALYSIS		
	Four-Year	Two-Year
Formula Type	N/A	II
Funding Level	N/A	Low
Reflects Institutional Mission	N/A	No
Includes Total Degree/Credential Completion	N/A	Yes
Underrepresented Student Success Prioritized	N/A	Yes
Implementing for Two or More Years	N/A	Yes
Formula-Driven or Target/ Recapture	N/A	Formula

INDIANA		
Sectors Implementing OBF in FY 2019	Four-Year and Two-Year	
Linked to Attainment/Completion Goal	Yes	
Base/Recurring or New Funding	Base/Recurring	
SECTOR-LEVEL OBF ANALYSIS		
	Four-Year	Two-Year
Formula Type	III	III
Funding Level	Moderate	Moderate
Reflects Institutional Mission	Yes	Yes
Includes Total Degree/Credential Completion	Yes	Yes
Underrepresented Student Success Prioritized	Yes	Yes
Implementing for Two or More Years	Yes	Yes
Formula-Driven or Target/ Recapture	Formula	Formula

KANSAS		
Sectors Implementing OBF in FY 2019	Four-Year and Two-Year	
Linked to Attainment/Completion Goal	Yes	
Base/Recurring or New Funding	New	
SECTOR-LEVEL OBF ANALYSIS		
	Four-Year	Two-Year
Formula Type	1	I
Funding Level	Low	Low
Reflects Institutional Mission	Yes	Yes
Includes Total Degree/Credential Completion	Partial	Partial
Underrepresented Student Success Prioritized	Partial	Partial
Implementing for Two or More Years	No	No
Formula-Driven or Target/ Recapture	Target/Recapture	Target/Recapture

KENTUCKY		
Sectors Implementing OBF in FY 2019	Four-Year and Two-Year	
Linked to Attainment/Completion Goal	Yes	
Base/Recurring or New Funding	Base/Recurring	
SECTOR-LEVEL OBF ANALYSIS		
	Four-Year	Two-Year
Formula Type	IV	IV
Funding Level	High	High
Reflects Institutional Mission	Yes	Yes
Includes Total Degree/Credential Completion	Yes	Yes
Underrepresented Student Success Prioritized	Yes	Yes
Implementing for Two or More Years	Yes	Yes
Formula-Driven or Target/ Recapture	Formula	Formula

LOUISIANA		
Sectors Implementing OBF in FY 2019	Four-Year and Two-Year	
Linked to Attainment/Completion Goal	Yes	
Base/Recurring or New Funding	Base/Recurring	
SECTOR-LEVEL OBF ANALYSIS		
	Four-Year	Two-Year
Formula Type	IV	IV
Funding Level	High	High
Reflects Institutional Mission	Yes	Yes
Includes Total Degree/Credential Completion	Yes	Yes
Underrepresented Student Success Prioritized	Yes	Yes
Implementing for Two or More Years	Yes	Yes
Formula-Driven or Target/ Recapture	Formula	Formula

MAINE		
Sectors Implementing OBF in FY 2019	Four-Year	
Linked to Attainment/Completion Goal	Yes	
Base/Recurring or New Funding	Base/Recurring	
SECTOR-LEVEL OBF ANALYSIS		
	Four-Year	Two-Year
Formula Type	IV	N/A
Funding Level	High	N/A
Reflects Institutional Mission	Yes	N/A
Includes Total Degree/Credential Completion	Yes	N/A
Underrepresented Student Success Prioritized	Yes	N/A
Implementing for Two or More Years	Yes	Yes
Formula-Driven or Target/ Recapture	Formula	N/A

MICHIGAN		
Sectors Implementing OBF in FY 2019	Four-Year and Two-Year	
Linked to Attainment/Completion Goal	Yes	
Base/Recurring or New Funding	New	
SECTOR-LEVEL OBF ANALYSIS		
	Four-Year	Two-Year
Formula Type	1	I
Funding Level	Low	Low
Reflects Institutional Mission	Yes	Yes
Includes Total Degree/Credential Completion	Yes	Yes
Underrepresented Student Success Prioritized	No	No
Implementing for Two or More Years	Yes	Yes
Formula-Driven or Target/ Recapture	Formula	Formula

MONTANA		
Sectors Implementing OBF in FY 2019	Four-Year and Two-Year	
Linked to Attainment/Completion Goal	Yes	
Base/Recurring or New Funding	Base/Recurring	
SECTOR-LEVEL OBF ANALYSIS		
	Four-Year	Two-Year
Formula Type	III	III
Funding Level	Moderate	Moderate
Reflects Institutional Mission	Yes	Yes
Includes Total Degree/Credential Completion	Yes	Yes
Underrepresented Student Success Prioritized	Yes	Yes
Implementing for Two or More Years	Yes	Yes
Formula-Driven or Target/ Recapture	Formula	Formula

NEVADA		
Sectors Implementing OBF in FY 2019	Four-Year and Two-Year	
Linked to Attainment/Completion Goal	Yes	
Base/Recurring or New Funding	Base/Recurring	
SECTOR-LEVEL OBF ANALYSIS		
	Four-Year	Two-Year
Formula Type	IV	IV
Funding Level	High	High
Reflects Institutional Mission	Yes	Yes
Includes Total Degree/Credential Completion	Yes	Yes
Underrepresented Student Success Prioritized	Yes	Yes
Implementing for Two or More Years	Yes	Yes
Formula-Driven or Target/ Recapture	Formula	Formula

NEW MEXICO		
Sectors Implementing OBF in FY 2019	Four-Year and Two-Year	
Linked to Attainment/Completion Goal	Yes	
Base/Recurring or New Funding	Base/Recurring	
SECTOR-LEVEL OBF ANALYSIS		
	Four-Year	Two-Year
Formula Type	III	III
Funding Level	Moderate	Moderate
Reflects Institutional Mission	Yes	Yes
Includes Total Degree/Credential Completion	Yes	Yes
Underrepresented Student Success Prioritized	Yes	Yes
Implementing for Two or More Years	Yes	Yes
Formula-Driven or Target/ Recapture	Formula	Formula

NEW YORK		
Sectors Implementing OBF in FY 2019	Two-Year	
Linked to Attainment/Completion Goal	No	
Base/Recurring or New Funding	Base/Recurring	
SECTOR-LEVEL OBF ANALYSIS		
	Four-Year	Two-Year
Formula Type	N/A	II
Funding Level	N/A	Low
Reflects Institutional Mission	N/A	No
Includes Total Degree/Credential Completion	N/A	Yes
Underrepresented Student Success Prioritized	N/A	Yes
Implementing for Two or More Years	N/A	Yes
Formula-Driven or Target/ Recapture	N/A	Formula

NORTH CAROLINA		
Sectors Implementing OBF in FY 2019	Two-Year	
Linked to Attainment/Completion Goal	No	
Base/Recurring or New Funding	Base/Recurring	
SECTOR-LEVEL OBF ANALYSIS		
	Four-Year	Two-Year
Formula Type	N/A	II
Funding Level	N/A	Low
Reflects Institutional Mission	N/A	No
Includes Total Degree/Credential Completion	N/A	Yes
Underrepresented Student Success Prioritized	N/A	Yes
Implementing for Two or More Years	N/A	Yes
Formula-Driven or Target/ Recapture	N/A	Formula

NORTH DAKOTA		
Sectors Implementing OBF in FY 2019	Four-Year and Two-Year	
Linked to Attainment/Completion Goal	Yes	
Base/Recurring or New Funding	Base/Recurring	
SECTOR-LEVEL OBF ANALYSIS		
	Four-Year	Two-Year
Formula Type	1	I
Funding Level	High	High
Reflects Institutional Mission	No	No
Includes Total Degree/Credential Completion	No	No
Underrepresented Student Success Prioritized	No	No
Implementing for Two or More Years	Yes	Yes
Formula-Driven or Target/ Recapture	Formula	Formula

ОНЮ		
Sectors Implementing OBF in FY 2019	Four-Year and Two-Year	
Linked to Attainment/Completion Goal	Yes	
Base/Recurring or New Funding	Base/Recurring	
SECTOR-LEVEL OBF ANALYSIS		
	Four-Year	Two-Year
Formula Type	IV	IV
Funding Level	High	High
Reflects Institutional Mission	Yes	Yes
Includes Total Degree/Credential Completion	Yes	Yes
Underrepresented Student Success Prioritized	Yes	Yes
Implementing for Two or More Years	Yes	Yes
Formula-Driven or Target/ Recapture	Formula	Formula

OREGON		
Sectors Implementing OBF in FY 2019	Four-Year	
Linked to Attainment/Completion Goal	Yes	
Base/Recurring or New Funding	Base/Recurring	
SECTOR-LEVEL OBF ANALYSIS		
	Four-Year	Two-Year
Formula Type	IV	N/A
Funding Level	High	N/A
Reflects Institutional Mission	Yes	N/A
Includes Total Degree/Credential Completion	Yes	N/A
Underrepresented Student Success Prioritized	Yes	N/A
Implementing for Two or More Years	Yes	N/A
Formula-Driven or Target/ Recapture	Formula	N/A

PENNSYLVANIA		
Sectors Implementing OBF in FY 2019	Four-Year (PASSHE only)	
Linked to Attainment/Completion Goal	Yes	
Base/Recurring or New Funding	Base/Recurring	
SECTOR-LEVEL OBF ANALYSIS		
	Four-Year	Two-Year
Formula Type	1	N/A
Funding Level	Moderate	N/A
Reflects Institutional Mission	Yes	N/A
Includes Total Degree/Credential Completion	No	N/A
Underrepresented Student Success Prioritized	Yes	N/A
Implementing for Two or More Years	Yes	N/A
Formula-Driven or Target/ Recapture	Target/Recapture	N/A

RHODE ISLAND		
Sectors Implementing OBF in FY 2019	Four-Year and Two-Year	
Linked to Attainment/Completion Goal	Yes	
Base/Recurring or New Funding	Base/Recurring	
SECTOR-LEVEL OBF ANALYSIS		
	Four-Year	Two-Year
Formula Type	1	II
Funding Level	Moderate	Moderate
Reflects Institutional Mission	Yes	Yes
Includes Total Degree/Credential Completion	Partial	Yes
Underrepresented Student Success Prioritized	Yes	No
Implementing for Two or More Years	No	No
Formula-Driven or Target/ Recapture	Target/Recapture	Target/Recapture

TENNESSEE		
Sectors Implementing OBF in FY 2019	Four-Year and Two-Year	
Linked to Attainment/Completion Goal	Yes	
Base/Recurring or New Funding	Base/Recurring	
SECTOR-LEVEL OBF ANALYSIS		
	Four-Year	Two-Year
Formula Type	IV	IV
Funding Level	High	High
Reflects Institutional Mission	Yes	Yes
Includes Total Degree/Credential Completion	Yes	Yes
Underrepresented Student Success Prioritized	Yes	Yes
Implementing for Two or More Years	Yes	Yes
Formula-Driven or Target/ Recapture	Formula	Formula

TEXAS		
Sectors Implementing OBF in FY 2019	Two-Year	
Linked to Attainment/Completion Goal	Yes	
Base/Recurring or New Funding	Recurring	
SECTOR-LEVEL OBF ANALYSIS		
	Four-Year	Two-Year
Formula Type	N/A	III
Funding Level	N/A	Moderate
Reflects Institutional Mission	N/A	Yes
Includes Total Degree/Credential Completion	N/A	Yes
Underrepresented Student Success Prioritized	N/A	Yes
Implementing for Two or More Years	N/A	Yes
Formula-Driven or Target/ Recapture	N/A	Formula

UTAH		
Sectors Implementing OBF in FY 2019	Four-Year and Two-Year	
Linked to Attainment/Completion Goal	Yes	
Base/Recurring or New Funding	Base/Recurring	
SECTOR-LEVEL OBF ANALYSIS		
	Four-Year	Two-Year
Formula Type	II	II
Funding Level	Low	Low
Reflects Institutional Mission	Yes	Yes
Includes Total Degree/Credential Completion	Yes	Yes
Underrepresented Student Success Prioritized	Yes	Yes
Implementing for Two or More Years	Yes	Yes
Formula-Driven or Target/ Recapture	Target/Recapture	Target/Recapture

VIRGINIA		
Sectors Implementing OBF in FY 2019	Four-Year and Two-Year	
Linked to Attainment/Completion Goal	Yes	
SECTOR-LEVEL OBF ANALYSIS		
	Four-Year	Two-Year
Formula Type	1	Ш
Base/Recurring or New Funding	New	Base/Recurring
Funding Level	Low	Moderate
Reflects Institutional Mission	Yes	Yes
Includes Total Degree/Credential Completion	No	Yes
Underrepresented Student Success Prioritized	No	Yes
Implementing for Two or More Years	No	Yes
Formula-Driven or Target/ Recapture	Target/Recapture	Formula

WASHINGTON		
Sectors Implementing OBF in FY 2019	Two-Year	
Linked to Attainment/Completion Goal	Yes	
Base/Recurring or New Funding	Base/Recurring	
SECTOR-LEVEL OBF ANALYSIS		
	Four-Year	Two-Year
Formula Type	N/A	III
Funding Level	N/A	Moderate
Reflects Institutional Mission	N/A	Yes
Includes Total Degree/Credential Completion	N/A	Yes
Underrepresented Student Success Prioritized	N/A	Yes
Implementing for Two or More Years	N/A	Yes
Formula-Driven or Target/ Recapture	N/A	Formula

WISCONSIN		
Sectors Implementing OBF in FY 2019	Four-Year and Technical Colleges	
Linked to Attainment/Completion Goal	Yes	
Base/Recurring or New Funding	Base/Recurring	
SECTOR-LEVEL OBF ANALYSIS		
	Four-Year	Technical
Formula Type	Ш	IV
Funding Level	Low	High
Reflects Institutional Mission	Yes	Yes
Includes Total Degree/Credential Completion	Yes	Yes
Underrepresented Student Success Prioritized	Yes	Yes
Implementing for Two or More Years	No	Yes
Formula-Driven or Target/ Recapture	Formula	Formula

WYOMING		
Sectors Implementing OBF in FY 2019	Two-Year	
Linked to Attainment/Completion Goal	Yes	
Base/Recurring or New Funding	Base/Recurring	
SECTOR-LEVEL OBF ANALYSIS		
	Four-Year	Two-Year
Formula Type	N/A	II
Funding Level	N/A	Moderate
Reflects Institutional Mission	N/A	Yes
Includes Total Degree/Credential Completion	N/A	Yes
Underrepresented Student Success Prioritized	N/A	No
Implementing for Two or More Years	N/A	Yes
Formula-Driven or Target/ Recapture	N/A	Formula

Appendix D: Sources

FOOTNOTES AND REFERENCES

Alabama

The Alabama Community College System began using an outcomes-based funding model in FY 2019. The model contains a 2 percent stop-loss in FY 2019 to assist with phase-in.

Information at:

→ http://alisondb.legislature.state.al.us/ALISON/SearchableInstruments/2018RS/PrintFiles/HB175-enr.pdf

Arkansas

Arkansas is implementing outcomes-based funding at both its two-year and four-year institutions. The Arkansas Department of Higher Education began using a newly developed Productivity Funding Formula in FY 2019.

Information at:

 \rightarrow https://static.ark.org/eeuploads/adhe/Productivity_Funding_Formula_Tech_Defs_-_05092017.pdf

California

The California Community College System began using its newly developed Student Centered Funding Formula in FY 2019. Districts will be held harmless to their 2017-2018 total revenue plus COLA for three years as part of formula transition.

Information at:

→ http://extranet.cccco.edu/Divisions/FinanceFacilities/StudentCenteredFundingFormula.aspx

Colorado

Colorado is implementing outcomes-based funding at both its two-year and four-year institutions.

Information at:

- → https://highered.colorado.gov/CCHE/Meetings/2017/oct/CCHE-Budget-Approval-Presentation.pdf
- → https://highered.colorado.gov/Publications/General/1319/default.html

Florida

Florida is implementing outcomes-based funding at both the Florida College System and the State University System of Florida.

Information at:

- → https://www.floridacollegesystem.com/resources/publications/performance_funding_model_2018-19.aspx (two-year)
- → https://www.flbog.edu/board/office/budget/performance_funding.php (four-year)

Hawaii

Hawaii is implementing outcomes-based funding at both its two-year and four-year institutions.

Information at:

→ https://blog.hawaii.edu/hawaiigradinitiative/performance-funding-model/ (page 8)

Idaho

The State Board of Education voted on Oct. 18, 2018, to adopt an outcomes-based funding model for the board's FY 2020 budget request. The board's request for outcomes-based funding was not recommended by the governor.

Information at:

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→ https://boardofed.idaho.gov/meetings/board/archive/2018/1017-1818/08BAHR-FINANCE.
pdf?cache=1551359714167
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Illinois

Illinois is implementing outcomes-based funding at its two-year institutions.

Information at:

→ http://www.ilga.gov/legislation/publicacts/100/PDF/100-0586.pdf (page 487)

Indiana

Indiana is implementing outcomes-based funding at both its two-year and four-year institutions.

Information at:

→ https://www.in.gov/che/3148.htm

Kansas

The Kansas Board of Regents has established performance agreements with the state universities and community and technical colleges. Institutions must achieve compliance with the performance agreements to receive new state funding. The performance agreements allocated funding in FY 2019 for the first time since FY 2013.

Information at:

Kentucky

Kentucky is implementing outcomes-based funding at both its two-year and four-year institutions.

Information at:

→ http://cpe.ky.gov/ourwork/performancefunding.html

Louisiana

Louisiana is implementing outcomes-based funding at both its two-year and four-year institutions.

Information at:

→ https://regents.la.gov/divisions/finance-facilities/outcomes-based-funding-formula/

Maine

The University of Maine System is implementing outcomes-based funding. The system plans to phase out the OBF model, with FY 2019 being the last year.

Information at:

- → https://thinkmissionexcellence.maine.edu/wp-content/uploads/2013/06/Final-Draft-OBF-Report-Jan-2013.pdf
- → https://thinkmissionexcellence.maine.edu/unified-finance/

Michigan

Michigan is implementing outcomes-based funding at both its two-year and four-year institutions.

Information at:

→ http://www.senate.michigan.gov/sfa/Publications/HiEdApprops/HiEdApprops_MostRecent.pdf (four-year)

→ http://www.senate.michigan.gov/sfa/Departments/HighlightSheet/HIccl_web.pdf (two-year)

[→] https://www.kansasregents.org/resources/PDF/Academic_Affairs/Academic_Affairs_Reports/Website_ AY_2017_to_AY_2019_Perf_Agreements.pdf

Montana

Montana is implementing outcomes-based funding at both its two-year and four-year institutions.

Information at:

→ https://mus.edu/data/performancefunding/default.asp

Nevada

Nevada is implementing outcomes-based funding at both its two-year and four-year institutions.

Information at:

→ https://nshe.nevada.edu/initiatives/formula-funding-study/

New Mexico

New Mexico is implementing outcomes-based funding at both its two-year and four-year institutions.

Information at:

→ http://www.hed.state.nm.us/researchers/funding-technical-committee.aspx

New York

New York is implementing the Job Linkage Incentive Fund for community colleges in CUNY and SUNY.

Information at:

- → https://www.suny.edu/about/leadership/board-of-trustees/meetings/webcastdocs/6%20-%20Job%20 Linkage%20Incentive%20Funding%20Program%20Summary.pdf
- → http://public.leginfo.state.ny.us/navigate.cgi?NVDTO: (search for "S7503D"; then search for "job linkage")

North Carolina

North Carolina is implementing outcomes-based funding at its two-year institutions.

Information at:

→ https://www.nccommunitycolleges.edu/sites/default/files/basic-pages/finance-operations/0. budgetpackagetext_1_collegeprint.pdf

North Dakota

North Dakota is implementing outcomes-based funding at both its two-year and four-year institutions.

Information at:

- → https://www.legis.nd.gov/assembly/63-2013/documents/13-0272-08000.pdf#page=3
- → https://www.legis.nd.gov/assembly/65-2017/documents/17-0511-06000.pdf

Ohio

Ohio is implementing outcomes-based funding at both its two-year and four-year institutions.

Information at:

→ https://www.ohiohighered.org/node/933

Oregon

Oregon is implementing outcomes-based funding at its four-year institutions.

Information at:

→ https://www.oregon.gov/highered/institutions-programs/postsecondary-finance-capital/Pages/universityfunding-model.aspx

Pennsylvania

Pennsylvania is implementing outcomes-based funding at its four-year institutions in the Pennsylvania State System of Higher Education (PASSHE). Beginning with FY 2019, a transitional performance funding model is being used. Use of the transitional model allows the system time to develop a new performance funding program more in line with the anticipated system redesign.

Information at:

→ http://www.passhe.edu/inside/BOG/BOG%20Agendas/07-12-2018%20Agenda.pdf

Rhode Island

Rhode Island is implementing outcomes-based funding at both its two-year and four-year institutions.

Information at:

→ https://www.riopc.edu/page/performance_funding/

Tennessee

Tennessee is implementing outcomes-based funding at both its two-year and four-year institutions.

Information at:

→ https://www.tn.gov/thec/bureaus/finance-and-administration/fiscal-policy/redirect-fiscal-policy/outcomesbased-funding-formula-resources/redirect-outcomes-based-funding-formula-resources/2015-20-outcomesbased-funding-formula.html

Texas

Texas is implementing outcomes-based funding at its two-year institutions.

Information at:

→ https://tacc.org/sites/default/files/documents/2018-08/performance_based_funding_for_community_ colleges.pdf

Utah

Utah is implementing a revised outcomes-based funding at its two-year and four-year institutions beginning in FY 2019.

Information at:

→ https://le.utah.gov/interim/2017/pdf/00004475.pdf

Virginia

Virginia is implementing outcomes-based funding at its two-year institutions and began implementing performance agreements at its four-year institutions in FY 2019.

Information at:

- → http://trcenter.vccs.edu/data/ (two-year)
- → https://budget.lis.virginia.gov/bill/2018/2/HB5002/Enrolled/ (four-year)

Washington

Washington is implementing outcomes-based funding at its two-year institutions.

Information at:

→ https://www.sbctc.edu/about/agency/initiatives-projects/student-achievement-initiative.aspx

West Virginia

Per a legislative request, the West Virginia Higher Education Policy Commission developed a proposed Student-Focused Funding Formula for two-year and four-year institutions. The proposed funding formula is not being implemented.

Information at:

→ http://www.wvhepc.edu/resources/reports-and-publications/

Wisconsin

Wisconsin is implementing outcomes-based funding at its technical colleges and began using an outcomesbased funding model for the University of Wisconsin System in FY 2019.

Information at:

- → http://www.wtcsystem.edu/initiatives/performance-funding (technical colleges)
- → https://www.wisconsin.edu/regents/download/meeting_materials/2017/december/Education-Committee-Materials----December-2017.pdf (UWS)

Wyoming

Wyoming is implementing outcomes-based funding at its two-year institutions.

Information at:

→ https://communitycolleges.wy.edu/initiatives/fundinginitiative/

Endnotes

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^{ix} Dennis P. Jones, "*Performance Funding: From Idea to Action*," National Center for Higher Education Management Systems (2011): 4.

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