West Virginia Higher Education Policy Commission Student Success Funding Model Analysis

The West Virginia Higher Education Policy Commission requested support from Lumina Strategy Labs to conduct an independent review of the proposed funding formula presented to the Commission on March 23, 2018. Lumina Strategy Labs provides content expertise and technical assistance support to state leaders and policymakers on policies designed to increase higher education attainment. HCM Strategists, which supports the management and content development for Strategy Labs, has engaged with several states during the development and implementation of outcomes-based funding models.

This report is intended to provide summative analysis of the proposed university funding model, specifically the model’s alignment to recognized outcomes-based funding best practices and to the state’s master plan goals and priorities. The summary also provides recommendations for how the model approach could be strengthened to enhance this alignment and incorporate research and state practice-informed principles around the design and implementation of funding models intended to support key strategic priorities and student success.

Assessment of the Proposed Model Relative to Recognized Best Practices

In recent years, more states have begun using outcomes-based funding (OBF) models as a way to promote student success and align funding with state goals and priorities. HCM Strategists produces an annual report that establishes a comprehensive typology of OBF models and a state-by-state classification of funding systems informed by research and engagement with state policymakers.\(^1\) Reflected in this typology report as well as the Lumina State Policy Agenda, there are a set of common principles and design approaches that help to enhance these models’ alignment between funding and goals to increase student attainment and equity.\(^2\) These include:

- Established completion or attainment goals are linked to the model;
- Recurring base funding is distributed and is sustained over consecutive years;
- A significant level of funding is distributed;

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1. Driving Better Outcomes: Fiscal Year 2018 State Status & Typology Update  

2. Lumina State Policy Agenda: 2017-20  
• Limited, measurable metrics are used, with degree/credential completion being prioritized;
• Institution mission is reflected though varying weights, scales or metrics;
• The funding structure is formula-driven to ensure incentives for continuous improvement;
• Success of underrepresented students is prioritized; and
• The model is stable, both in year-to-year fluctuations and during initial implementation

This section analyzes the proposed funding model relative to these common principles and places the model elements into two categories:
1) Elements aligned to best practices;
2) Elements not aligned or partially aligned with best practices

Proposed Model Elements Aligned with Best Practices

• Established completion or attainment goals are linked to the model
  o **Rationale:** 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. 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 focus development and ensure the model’s sustainability.
  o **Model Status:** Aligned. The goals of the model are closely linked to those in the HEPC master plan: Access, success, and impact. Additionally, the model’s focus on student success, through both progression and degree production metrics, is aligned with the state’s recently established goal to have 60 percent of the state’s workforce with a formal education credential beyond high school by the year 2030.

• Recurring base funding is distributed and is sustained over consecutive years
  o **Rationale:** Models that are based only on new funding have significant challenges in sustainability and reflect limited alignment of state postsecondary investments with state attainment needs. 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.

- **Model Status**: Aligned. The model distributes base funding and any new funding. This ensures the funding policy will be sustained in future years.

- A significant level of funding is distributed
  - **Rationale**: The share of institutional funding devoted to OBF must be large enough to garner attention, shape priorities and influence actions. Research has shown positive effects on student success from models that distribute as low as five percent of state operating funding, though model structure and metrics must be considered when determining a sufficient funding amount. 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. The less the allocation model is tied to outcomes, the less the state’s finance policy is aligned with its completion priorities and needs.

  - **Model Status**: Aligned. The model distributes all state funding, less special purpose appropriations, based on access, success, and impact metrics. This is above the five percent threshold identified in the rationale, and is in line with some of the more robust funding models used by other states.

- Limited, measurable metrics are used, with degree/credential completion being prioritized
  - **Rationale**: OBF models 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.
Furthermore, the model should track a limited number of metrics, or risk diluting the focus on key priorities.

- **Model Status**: Aligned. The model uses relatively few metrics and they are all aligned with the three goals of access, success, and impact. Additionally, volume-based metrics are used instead of rate-based metrics and degree/credential completion is given significant weight.

- The funding structure is formula-driven to ensure incentives for continuous improvement
  - **Rationale**: Formula-driven models use a structured set of rules to distribute funding. There are many versions. 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 pre-set targets or goals. 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 recessions or expansions may have large effects on student enrollment. In practice, the targets and goals end up being too ambitious or not ambitious enough. Additionally, 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 is no incentive to produce the 101st degree.

  - **Model Status**: Aligned. The model is formula-driven. It does not use pre-set targets and goals. Instead it distributes funding based on each institution’s share of outcomes produced. This methodology provides continuous incentives for improvement.

- Success of underrepresented students is prioritized
  - **Rationale**: Extra weight for outcomes earned by underrepresented students (e.g. academically underprepared, low-income, adult or underrepresented students) guards against the unintended consequence of restricting access by enrolling
only those students most likely to succeed. Additionally, the success of students from underserved populations is critical to meeting states’ workforce needs.

- **Model Status**: Aligned. The model provides a 1.5 multiple as a premium for high-risk populations. These populations include economically disadvantaged, non-traditional (adult) students, academically underprepared students, and racial and ethnic minority students. The 1.5 premium is in line with the magnitude of premiums used in other state models.

### Proposed Model Elements Not Aligned or Partially Aligned with Best Practices

- Institution mission is reflected though varying weights, scales or metrics
  - **Rationale**: Models should account for differences in institutional mission, student population and other characteristics. This helps to guard against mission creep and ensures that some institutions are not at an initial disadvantage compared to other institutions with missions more aligned with model metrics. Some OBF models apply a few metrics across institutions, while adopting other unique metrics and weighting them differently across types of institutions.

- **Model Status**: Partially aligned. The model differentiates among institutions in two ways. First, West Virginia University, Marshall University, and West Virginia State University have an additional research institution weight applied across all measures. This is to recognize their higher cost of instruction and also to account for their research. Second, special purpose funding, for activities not directly related to the instructional mission of institutions, is excluded from the model. Mission differentiation could be enhanced by adding a separate metric for external (non-state funded) research and public service expenditures and also by varying the weights of the funding pools based on mission. For example, institutions with more of an access mission could have a higher weight on access or success metrics and a lower weight on impact metrics. Additionally, any other funding that is similar to special purpose funding in that it doesn’t directly relate to the
core mission of an institution, such as funding for medical and dental schools, should be excluded.

- The model is stable, both in year-to-year fluctuations and during initial implementation
  - **Rationale:** 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. Upon implementation, states have also used a stop-loss or other calibration methods, such as phasing in the percentage of the formula based on outcomes.
  - **Model Status:** Partially aligned. The model uses a three-year average of data to increase stability and an extended hold-harmless to phase-in the model. Additionally, the metrics used in the model are not be expected to fluctuate greatly. There would, however, be large shifts in funding in the first year of implementation, absent the hold harmless. Glenville State would lose over 17 percent of state funding compared to FY18 levels, West Virginia University would lose almost 9 percent, and West Virginia Institute of Technology would lose over 44 percent. These large changes in funding may still occur when the hold harmless is removed. To assist with a smooth implementation and to not disadvantage any institution based on performance data produced before the model was implemented, the model could be calibrated so the initial year’s calculation equals current funding levels. Any future changes in funding would then be a result of the relative change in outcomes among institutions. Alternatively, institutions showing initial funding decreases could be appropriated additional funds so they would not lose funding due to implementation.

**Assessment of the Proposed Model Relative to Master Plan Goals**

This section analyzes the proposed funding model relative to the goals of the master plan, “Leading the Way” adopted by the Higher Education Policy Commission in 2013. The master plan set as an objective the solidifying of higher education as a means to success for West Virginians and as an economic catalyst for the state. The plan is oriented around three priority areas intended to address, in various ways, this objective. The priority areas include:
- **Access**: Increase access to postsecondary education for both traditional and non-traditional aged West Virginians.

- **Success**: Increase the number of students at system institutions completing quality academic programs.

- **Impact**: Increase the impact public colleges and universities have on West Virginia through production of graduates ready to contribute to the workforce and the community, provision of needed services, and research and development activities that advance the state’s economy.

Each priority area is supplemented by several supporting goals. This section examines these goals and places them into three general groups –

1) Goals Aligned with the Proposed Model or Those That Can be Enhanced Through Revisions Aligned to Best-Practice Principles;
2) Goals Not Directly Aligned with the Proposed Model or Those That Can be Enhanced Through Revisions Aligned to Best-Practice Principles;
3) Goals Not Supported by the Proposed Model and Not Recommended for Formal Inclusion as a Component of the Model:

It is important to note that no funding model can or should try to support all goals of the state’s higher education system. When formulas are designed to respond to multiple goals they become overly burdensome, complicated and unproductive in achieving broader objectives and priorities. Well-designed funding models address the broader goals for higher education while allowing institutions to respond in ways that best serve their student populations and enhance their mission.

**Goals Aligned with the Proposed Model or Those That Can be Enhanced Through Revisions Aligned to Best-Practice Principles**

- **Access**: Increase overall enrollment and in important target populations
  - **Model Status**: Aligned. The model provides a significant incentive for increasing enrollment by allocating 70 percent of funding based on the courses attempted by West Virginia resident students. Furthermore, target populations are incentivized through additional weighting for economically disadvantaged students, academically underprepared students, adult students, and underserved racial/ethnic minority students.
West Virginia Proposed University Funding Formula Analysis

- **Access**: Increase the percentage of West Virginia high school graduates continuing on to higher education
  - **Model Status**: Aligned. The model promotes the recruitment of West Virginia high school graduates by including metrics directly aligned with enrollment (enrolled credit hours) and correlated with enrollment (progression and student success) and only recognizing resident students for most metrics.

- **Success**: Increase the number of students making progress toward on-time completion
  - **Model Status**: Aligned. The model directly recognizes the need to increase on-time completion through the 30, 60, and 90 credit hour momentum milestones. Students are only able to achieve these milestones on-time if they complete at least 15 credit hours per semester.

- **Success**: Improve the outcomes of students requiring developmental education
  - **Model Status**: Aligned. Academically under-prepared students are identified as a high-risk population in the model. Credit hours attempted, momentum milestones reached, and degrees earned by these students are multiplied by 1.5.

- **Impact**: Increase the number of degrees awarded annually at the undergraduate and graduate levels overall and in needed areas
  - **Model Status**: Aligned. The model allocates 25 percent of funding based on degrees awarded, weighted by high-risk population and high-demand field factors.

**Goals Not Directly Aligned with the Proposed Model or Those That Can be Enhanced Through Revisions Aligned to Best-Practice Principles**

- **Success**: Increase the overall retention rate of students and in important target populations
  - **Model Status**: Partially aligned. While retention rate is not a metric in the model, the 30, 60, and 90 credit hour momentum milestones incentivize progression and
retention of students. However, this metric only applies to first-time, full-time students. Part-time students should be accounted for by making the time-limit for reaching each milestone open ended. Institutions will still have the incentive to progress students quickly, in order for the funding associated with the metrics to be gained as soon as possible. Additionally, adjusting the access category to measure completed credit hours instead of enrolled credit hours would provide an additional incentive for credit accumulation and thus improve student retention.

- **Impact:** Institutions will address regional economic needs through developing and promoting pathways to the West Virginia workforce for students and recent graduates
  - **Model Status:** Not aligned. The model does not include metrics directly related to job placement. Many funding models do incorporate job placement metrics; however, data availability is frequently a challenge.

- **Impact:** Increase research and development activities which contribute to West Virginia’s economic growth
  - **Model Status:** Partially aligned. Research institutions receive additional weighting for access and success outcomes produced, however, there is no metric in the model specifically for research and development activities. Total external (non-state) research expenditures are often incorporated into funding models to promote research goals and to better differentiate the model between institutions with varied missions.

- **Impact:** Decrease the federal student loan cohort default rate at system institutions
  - **Model Status:** Not aligned. Currently, the model does not include metrics associated with student debt. Several states do include metrics in their models related to cost and affordability. These could be incorporated into the West Virginia model if it is determined that the data is verifiable and if it is determined institutions can directly affect the measure.
Goals Not Supported by the Proposed Model and Not Recommended for Formal Inclusion as a Component of the Model:

- **Success**: Increase the overall four- and six-year graduation rates of students and in important target populations
  - **Model Status**: Not aligned and not recommended. Graduation rates are not included in the model. In general, rate-based metrics should be excluded from outcomes-based models in favor of volume-based metrics. Rate-based metrics could have the unintended consequence of restricting access to only the best prepared students.

- All goals related to the reporting of planning efforts are recommended to remain excluded from the funding model. These include:
  - **Access**: Institutions will provide a plan for a comprehensive, collaborative access effort and report on the outcomes of this effort.
  - **Access**: Institutions will provide their comprehensive financial aid plan that guides institution level financial aid allocation, administration, and outreach and report on the outcomes of this plan.
  - **Success**: Institutions will provide brief summaries of academic program reviews and plans for assurance of student learning.
  - **Success**: Institutions with graduate programs will provide a summary of institutional plans to improve student outcomes and report on these efforts.
  - **Impact**: Institutions will provide a plan for how the institution and its students are engaging with external organizations to solve critical regional civic and/or social issues
Areas of Improvement/Recommendations

Overall, the proposed model is closely aligned with recognized outcomes-based funding model best practices and with the state’s master plan. The model is focused on increased student success in ways not recognized in previous West Virginia funding methodologies.

There are some areas where the model approach could be strengthened to more closely align some parts of the master plan and to incorporate research and state practice-informed principles around the design and implementation of funding models intended to support student success. Below are six recommendations to consider when considering possible changes to the proposed model.

Recommendation 1: Maintain the core principles, metric categories, and high-risk student weights of the model. As currently structured, the model is closely aligned with many recognized best practices as well as many goals of the strategic plan.

Recommendation 2: Ease phase-in and avoid initial large shifts in funding by either calibrating the starting point of the model to current funding levels, or by appropriating additional funds to institutions showing initial funding decreases so they would not lose funding due to implementation.

Recommendation 3: Change the credit hour momentum milestones to incentivize progression of all students, not just first-time, full-time students. Part-time students should be accounted for by making the time-limit for reaching each milestone open ended. Institutions will still have the incentive to progress students quickly, in order for the funding associated with the metrics to be gained as soon as possible.

Recommendation 4: Further incentivize student success by using completed credit hours instead of enrolled credit hours in the access category.

Recommendation 5: Explore the possibility of including workforce and affordability metrics in the model, if the data is verifiable and if it is determined institutions can directly affect the measures.

Recommendation 6: Further account for institution’s missions by excluding medical and dental school funding from model calculations. Also, explore the possibility of adding a metric for external research expenditures and varying
the weights of the access, success, and impact funding pools among institutions with different missions.