



Review of (8-1-17) Revised Funding Formula Draft

Background

This handout provides some initial (very quick and dirty) analysis—including some projected financial impacts, where possible—of the funding formula draft provided by WG3 co-chair Andy Scoggin, as most recently revised (includes new blurb suggested by Ken Kline addressing procedure if there are insufficient dollars in the “degree completion incentive fund” and the Higher Education Stabilization Fund to pay for earned incentives).

Summary of goal and features of proposed funding formula

- Reach 60% goal in 8 years—2025.
- Include certificates, undergraduate, and graduate degrees.
- Increase the current base of all institutions by 2.5% each year, in lieu of line items.
- “Baseline Graduation Rate” (average of three years’ output) becomes trigger for base reductions if output falls below the Baseline number.
- Uniform “Graduation Benchmark” of 2.5% increase (above baseline) is set for all institutions— incentive payments provided for production increases in excess of 2.5%
- Legislation to create “Degree Completion Incentive Fund” (amount TBD). Payouts of \$20K, \$10K, and \$5K for Bachelor, Associate, and Certificate completions, respectively, when output exceeds 2.5%--same amounts apply to base cuts.
- Yet to be specified caps on payments/reductions.
- Unused incentive funds and any funds subtracted from institutions’ base budgets go into HESF.
- Earned—but unfunded—incentive payments can be requested from Legislature in future years.

Analysis and possible points for discussion

- The proposed formula indirectly pursues the 60% population goal. The formula is actually based on the underlying assumption/guesstimate that a 50% increase in output at the institutions will achieve the 60% goal-based goal (state institutions cannot control all the factors that affect the 60% census statistic).
 - The desired 50% increase in output equates to a compound annual rate increase of 5% per year across the system. In other words, current output multiplied by $(1.05)^8 = 1.5$
 - The “2025” date associated with the 8-year goal needs to be clarified. If funding is provided in FY2019, results will not be attributable (in the case of one-year program pipeline production) until the end of FY2019 (i.e., AY2018-19). In other words, the 8 year window may actually go from FY2019 to FY2026. Some program pipelines (e.g.,

Bachelor's degrees) are four years long. While production will ramp up over the 8-year "phase in" period, actual production output resulting from new funding won't be "normal" until the system reaches steady state.

- Implicit assumption is that, once attained after X years, 150% of current rate will be sustained and will achieve 60% goal.
- Types of programs funded: formula mentions inclusion of certificates, undergraduate, and graduate degrees, but:
 - Graduate degrees are not included in incentive mechanism.
 - Details not yet established on how production of degrees/certificates would be "stratified."
 - No mechanism identified for distributing credit for transfer students, badges, industry certificates, verifiable "job outs."
 - Need clarification that payouts are based on number of students who complete, or simply total number of degrees/certificates awarded (students often earn multiple degrees prior to exiting pipeline).
 - Need to state explicitly whether the baseline increases and incentive payments and weighting will also be applied to CTE program completers. CTE completions contribute to the 25-34 year old cohort included in the U.S. Census 60% goal metrics
- Automatic annual 2.5% annual baseline increase proposal:
 - College/University, Community College, and CTE post-secondary annual funding base is roughly \$370M (that is where we derived the "rule of thumb" \$3.7M figure for each 1% increase to the Higher Ed funding base).
 - This leads to an ask to JFAC of approximately \$9.25M additional dollars in FY2019, growing over 8 years to an annual increase of about \$11.0M in the 8th year (2026). This is almost identical to SBOE's previous OBF ask for \$10M in additional ongoing dollars for higher ed except:
 - The SBOE request retained the additional \$10M and \$1M "skin" funds in a pool to be allocated to units based on production.
 - WG3 model appears to increase all current base budgets by 2.5% regardless of past, current, or future production—i.e., does not address "equity" issues.
 - SBOE model added additional dollars to the \$10M ongoing only as number of completers increased (to keep payoffs per degree constant from year to year) or to target/weight specific groups programs.
 - WG3 model requests average of \$10M each and every year, offsetting line item requests. Need to clarify if the automatic 2.5% bump continues for perpetuity or only 8 years. Need to clarify when/if Line Items would ever be requested.
 - Estimated year-one (non-CTE) payoffs to 4-year institutions (2.5% automatic bump only, not counting incentive mechanism—\$9.25M pool):
 - BSU: \$2.4M increase (FY2018 line items = \$2.1M)
 - ISU: \$1.9M increase (FY2018 line items = \$2.0M)

- UI: \$2.3M increase (FY2018 line items = \$1.3M)
- LCSC: \$432K increase (FY2018 line items = \$594K)
- Estimated year-one (non-CTE) payoffs to 2 year institutions (2.5% bump):
 - CSI: \$360K increase (FY2018 line items = \$1.5M)
 - CWI: \$318K increase (FY2018 line items = \$630K)
 - NIC: \$318K increase (FY2018 line items = \$548K)
- The WG3 distribution of the first year's 2.5% base increases (locking in historical allocation shares) should be compared with the SBOE's OBF model which distributed an \$11M pool based on production, as follows (including CTE dollars):

Institution	Share of \$11M Pool	Payout
BSU	36.9%	\$4.05M
ISU	16.9%	\$1.86M
UI	20.1%	\$2.21M
LCSC	8.5%	\$940K
CSI	5.6%	\$620K
CWI	5.7%	\$632K
NIC	5.2%	\$571K
EITC	1.0%	\$113K

- Degree Completion Incentive Funds
 - Objective of WG3 formula incentives (or forfeitures) is to encourage aggressive efforts to increase output. Need to consider if the trigger points for rewards/penalties (based on underlying annually compounded 5% increase) are obtainable:
 - Funding to cover costs of first 2.5% increase in production is not covered by incentive payments—those funds need to come from the annual 2.5% increases in base funding (in lieu of line items) or from continually improving output efficiency, or additional tuition/fees.
 - Payout levels (three tiers--\$20K, \$10K, and \$5K) roughly equate to normal time to complete degrees. Basis/rationale of the amounts needs to be defined (is this the average cost of unweighted programs over their normal duration?).
 - Need to be able to estimate the payouts (or recoupments) for incentive mechanism. For comparison, below are five year production trends from the college/universities and the community colleges, based on their primary emphasis programs (Baccalaureate Degrees for CUs and Assoc. Degrees for CCs).

- BSU Bachelor's Degrees
 - 2011-2012 2,587
 - 2012-2013 2,716 4.9% increase
 - 2013-2014 2,764 1.8% increase
 - 2014-2015 2,971 7.5% increase
 - 2015-2016 2,998 .9% increase
 - Avg. increase over five years: 2.9% increase. This fast-growing institution would have qualified for incentives two out of four years.

- ISU Bachelor's Degrees
 - 2011-2012 1,105
 - 2012-2013 1,117 1.1% increase
 - 2013-2014 1,181 5.7% increase
 - 2014-2015 1,123 4.9% decrease
 - 2015-2016 1,196 6.5% increase
 - Avg. increase over five years: 2.1% increase. Volatile pattern, four year average falls below 2.5% target threshold

- UI Bachelor's Degrees
 - 2011-2012 1,665
 - 2012-2013 1,889 13.5% increase
 - 2013-2014 1,888 0.0 increase
 - 2014-2015 1,767 6.4% decrease
 - 2015-2016 1,687 4.5% decrease
 - Avg. increase over five years: 1.3% increase. One year triggers incentive.

- LCSC Bachelor's Degrees
 - 2011-2012 499
 - 2012-2013 473 5.2% decrease
 - 2013-2014 493 4.2% increase
 - 2014-2015 538 9.1% increase
 - 2015-2016 541 .1% increase
 - Avg. increase over five years: 2.1%. Smaller numbers impact volatility and sustainability of funding.

- CSI Associate Degrees
 - 2011-2012 813
 - 2012-2013 861 5.9% increase
 - 2013-2014 818 5.0% decrease
 - 2014-2015 763 6.7% decrease
 - 2015-2016 853 11.8% increase
 - Avg. increase over five years: 1.2%. Year-to-year swings—volatility would impact effectiveness/sustainability of proposed “incentive” funding stream.
 - CWI Associate Degrees
 - 2011-2012 499
 - 2012-2013 654 31.1% increase
 - 2013-2014 822 25.7 increase
 - 2014-2015 824 .2% increase
 - 2015-2016 903 9.6% increase
 - Avg. increase over five years: 20.2%. Trend reflects continuing “start up” growth of relatively new CC—would dramatically consume incentive funds to disadvantage of other CCs with more stable populations (raw production numbers tell different story than the annual percentage rate increases).
 - NIC Associate Degrees
 - 2011-2012 598
 - 2012-2013 730 22.1% increase
 - 2013-2014 680 6.8% decrease
 - 2014-2015 661 2.8% decrease
 - 2015-2016 729 10.3% increase
 - Avg. increase over five years: 5.5%. Similar pattern above. 2.5% threshold for WG3 model incentive payments would not have provided reliable support for cost of additional students moving through the pipeline over two or three years.
- **Other points to consider** or “blanks” that need to be filled in/discussed:
 - WG3 model compared to Line Items: as shown above, Line Item appropriations (when CTE, CC, and CU dollars are included) are roughly equal or may exceed the \$9.25M (growing to \$11.0M over 8 years) base increases.
 - WG3 model compared to EWA
 - Highest recent EWA request (2012) was for approx. \$8.5M—4-year institutions only—in then-year dollars.

- EWA (when funded) compensated institutions for costs of educating all students in the pipeline (though some didn't eventually complete)
 - WG3 incentives don't kick in until institutions exceed 2.5% rate of increase, regardless of numbers of students in the pipeline
- Small number changes can result in large percentage changes and large payoff differences under WG3 model. For example, a 4-yr institution may have large swings in certificate or Associate degree production, which would entitle it to a large claim over incentive pool, compared to a steadily-performing community college.
- "Seed Money" component for WG3 needs to be defined and sized.
- Consideration should be given to isolating CU, CC, and CTE sub-pools within the incentive fund pool to prevent the "rate-based" skewing effects illustrated above.
- Statutory changes would likely be required for at least three components of the WG3 model.
- Difficult to assess the "skin in the game" aspect of the WG3 model. Each institution receives a 2.5% annual base increase, regardless. No reductions to that base occur unless production falls below the (3-year?) production rate which occurred in past years. Barring a major recession/crisis, the chances of any penalties as the 8-year plan progresses would be small.
- WG3 does not (yet) have a mechanism to reward "progress" other than by final program completion. As with the earlier SBOE model, that could be achieved by distributing payouts as students hit defined credit hour (or program status) milestones en route to the finish line.

Suggested items for further discussion

- Clarify time span and intent of 8-year phase in.
- Flesh out rationale and amounts for the incentive payouts/penalties
- Consider moving to output-based allocation approach for the annual 2.5% "base" increases
- Insulate CUs, CCs, and CTE from unintended cross-over effects
- Incentivize (or at least, don't penalize) differences in the efficiency in the pipelines of different institutions—tying incentives to actual output rather than rates of increase helps in that regard
- Add progress incentives
- Recognize institutional missions and full range of needs elaborated in workforce: provide some funding for badges/certificates of less than one year/graduate degrees, etc.
- Model and test all aspects of the plan elements before presenting to policy-makers for implementation. We may have to live with this for a long time.
- Buy-in by key stakeholders will be elusive if the process and impacts are uncertain or unclear.
- In promoting the WG3 or other OBF models, be careful not to offer it as a panacea for those funding gaps which the models do not address (sustainable funding for salaries/benefits to hold down tuition; sustainable infrastructure funding; adequate financial aid for limited income students/families).