DISCUSSION: OUS 40-40-20 STRATEGY
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PURPOSE OF PAPER

Oregon has set a high goal for educational attainment. That goal is widely cited but little understood. Nor has there been any significant consideration in any forum about intent, meaning, or consequence of the goal. There is no consensus on what the goal means. Taken literally, the goal masks important questions about:

- the exact target to be achieved, especially who and by when
- the trade-offs between quantitative achievement of the goal and other important public policy goals, including equity, regional and demographic diversity, research and public service, and quality of education

The purpose of this paper is to present these issues for discussion. Setting targets and strategies is a matter for policy decision makers. Since the Board retreat in September 2012, several events have caused a refocus of the project to simplify it, to recognize the uncertainty from pending organizational changes, and to take into account limitations of the financial and forecasting models available.

A 40-40-20 strategy by itself is not a mission statement for higher education and any successful strategy must recognize the distinct research and public service missions of university education. Nor is 40-40-20 a plan for financial stability and sustainability—it is an essential part of such a plan, but only a part.

The strategy development process should be iterative and collaborative between the Oregon University System (OUS) and the campuses, particularly when it comes to evaluating alternative means of improving performance and allocating specific targets, presumably through achievement compacts. Proposals for organizational change pending before the OEIB (Oregon Education Investment Board) may change how 40-40-20 is implemented. In view of this, one potential strategy (outlined below) is for the state or System to set an amount it will pay for each degree and leave it to the campuses to manage how they will meet the targets.

PURPOSE OF THE 40-40-20 STRATEGY

The purpose of the OUS 40-40-20 strategy project is to provide an analytical framework and tools for policy-makers to make academic and financial decisions in pursuit of the goal of 40 percent of adult Oregonians holding a 4-year degree. At a policy level, a 40-40-20 strategy needs to answer these questions:
• What trajectory are we on for level of educational achievement by adult Oregonians in 2025 and what is the gap to achieving the 40 percent goal, given demographic forecasts and trends for policy and investment?

• What is the policy and value context, and how do we incorporate important values (e.g., geographic and demographic diversity and equity, graduate education, affordability, etc.)?

• How might targets and investments be allocated among institutions?

Depending on how the last question is answered, either the campuses or the System will have relatively more responsibility for answering:

• What are the key points of leverage for affecting level of achievement (attainment of 40 percent...)?

• What effects, over what time frame, and at what costs might we expect from a variety of policy and investment alternatives?

• Given reasonable prospects for improvements in performance, what additional capacity is required?

The strategy by itself will not dictate OUS or campus decisions but should serve as backdrop and overall framework, namely:

• Allocation of resources including, operating, capital, and strategically targeted appropriations.

• Allocation of degree targets among campuses (achievement compact targets).

• Approval of missions and programs.

• Priorities for pedagogical reform and pipeline initiatives.

• Governance policies and choices that affect degree attainment.

The strategy also should inform the overall state program for education by:

• Making the case for public funding, including affordability.

• Informing the work of the OEIB budget process and legislature in developing their 40-40-20 strategies.

• Making clear that the use of a singular strategy does not incorporate other essential roles of higher education, namely research and public service.
UNDERSTANDING THE GOAL

Defining the goal

Senate Bill 253, adopted in 2011, is explicit in setting a target for 40 percent of adult Oregonians to hold a 4-year-or-more degree by 2025. This sparse specification begs a number of questions about what the target means and how it relates to other state and OUS policies. Taken as an aspirational goal (the Governor has referred to it as a “North Star” – a direction rather than a destination), it requires some fundamental policy decisions. This is important guidance.

All adults, working-age adults, students now in school...?

Whether the goal is taken to be 40 percent of all adults, all working age adults, or some other age cohort makes a difference in, not only in the number of degrees to be held by Oregonians by 2025, but also in the focus of policy and investment toward the goal.

It is important to realize that over time any definition will result in “all adults“ achieving the desired result, with timing being the primary, yet significant difference. Nonetheless, there is reason to believe that the intent behind the goal is to improve Oregon’s economic competitiveness and the economic and civic capabilities of its citizens. Thus, it is reasonable to take the goal to mean all working age Oregonians. There seems to be little question about this.

This still leaves a question about timing and focus of strategies. If the goal is taken literally to mean “all working age adults“ by the year 2025, it will require a massive investment in adult education for the simple reason that so many individuals who will be in the workforce in 13 years are already in the workforce. As a consequence, many believe the focus of 40-40-20 should be on the cohort of those presently in school who will be entering the workforce by 2025.

Beyond the ease of achieving the goal lies a fundamental policy decision. A focus on adult education might be extremely productive from the standpoint of rapidly improving the economic performance of Oregon and Oregonians. In contrast, a “cohort” focus will orient us toward making permanent improvements in educational performance, with deeper and longer-lasting benefits.

It is not clear where or how this decision is made. However, the focus of this project is not on adult education, but rather the performance and capacity of Oregon’s higher education system. While this project does not dismiss the question of adult education, just removes it from the framework of this discussion.

Resident and nonresident degrees

The 40-40-20 goal is silent about whether it is to be met by degrees granted to Oregonians or in part by degree-holders that migrate to Oregon. Looking at the balance of in-migrants and out-migrants, Oregon currently gains about 14,800 4-year degree-holders each year. However, if the
goal of 40-40-20 is developing a high-performing educational system offering access, affordability, and success to Oregon students, there is an argument for ignoring the net gains and losses from migration. Among the reasons, there is little public policy available to shape migration patterns, which varies with economic circumstance.

The issue of enrollment of nonresident students is more hotly contested. For purposes of 40-40-20, one could adopt the view that the state policy is silent about nonresident enrollment as long as all qualified Oregon students have access at affordable prices, including capital for capacity. In other words, once enrollment and degree targets are agreed and met and an affordability standard is in place, there is freedom on campuses to manage enrollment. Indeed, some will argue that without this flexibility there is no way to arrive at a reasonable affordability standard for Oregonians nor to allow universities to pursue excellence. On the other hand, the point at which nonresident enrollment begins to crowd out resident enrollment will no doubt be controversial.

In the end, it seems difficult, more likely fruitless, to debate the value of an Oregon resident who leaves the state after graduation versus someone who pays nonresident tuition and remains in Oregon after graduation.

**So the goal is...**

*For purposes of this project, the goal is to have 40 percent of each new age cohort of Oregonians achieve at least a 4-year degree.*

**The gap to reaching the goal**

With 40 percent as the goal, using degree production for 2011-12, the simple math breaks down as follows¹:

<table>
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<tr>
<th>Description</th>
<th>Quantity</th>
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<tr>
<td>New age cohort each year</td>
<td>50,000</td>
</tr>
<tr>
<td>Degrees needed</td>
<td>20,000</td>
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<tr>
<td>Degrees granted by OUS to Oregonians</td>
<td>12,120</td>
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<tr>
<td>Degrees granted by OHSU to Oregonians</td>
<td>275</td>
</tr>
<tr>
<td>Degrees granted by private universities to Oregonians</td>
<td>≈ 2,400</td>
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<tr>
<td>Additional degrees needed</td>
<td>≈ 5,205</td>
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*Source: OUS, Institutional Research Services*

This simple accounting masks a number of complicating factors but has the virtue of its simplicity. The primary complication is that the number of degrees granted in any one year

¹ This counts 4-year degrees but not graduate degrees. Graduate degrees do not add to the count toward 40-40-20 since they already have an undergraduate degree. The figure for private university degrees is an estimate.
represents many different age cohorts. Nonetheless, with a fairly stable number of new births each year, the numbers work reasonably well over time. This formulation clearly focuses on the flow of students, not what the educational attainment of the adult population looks like in any given year (the so-call “stock”). In the view of this paper, that issue is properly one of the role of adult education, not a technical or definitional one.

A variety of different models have been used to attempt to forecast what it will take to reach the goal. They can produce a fairly wide variation in estimates of the gap depending on the structure of the model and the assumptions built in about demography and performance trends. But, it is worth noting that the most recent modeling done by the National Center for Higher Education Management Systems (NCHEMS), which focuses more on the “stock,” arrives at the same ball-park number of additional degrees needed. Other models that have used census data about individual educational attainment show a wider gap, for reasons not yet fully explored.

While getting a model “right” is ultimately needed, for present purposes it seems more important to agree on an accessible and purpose-driven estimate of the gap as proposed in the document. The proposed framework points much more strongly toward improving performance rather than simply adding capacity.

**Role of private universities**

What role should an OUS strategy envision for private colleges and universities?

By way of background, there are 24 private non-profit 4-year colleges and universities in Oregon. Currently they enroll about 10,000 Oregonians and graduate about 2,400 resident students each year. According to the Oregon Alliance of Independent Colleges and Universities, its post-secondary institutions plan on expanding degree production by adding as many as 1,000 degrees to help bridge the 5,000 shortfall by 2025.

Beyond factoring in the likely degree production of the privates, there are two questions to resolve:

1. If privates should be engaged directly in the strategy, who engages them and how?
2. Are there particular aspects of an overall strategy that the privates may be particularly well-suited to address? For example, some have suggested that some of the privates might play a strong role in adult education.

**Modeling for 40-40-20**

A fully-developed and mature 40-40-20 strategy would make use of a model that, ideally, would help with a number of tasks:

- Estimating a “base case” (no change in policy, investment, or performance trends but with expected demographic changes) for level of educational achievement of
Oregonians by 2025 (and perhaps beyond). This would provide the necessary comparison with the simple flow model proposed above.

- Scenario analysis for performance indicators (“If 6-year graduation rates improve by X-percent, then degrees increase by Y-percent at $Z cost…”).
- Analysis of policy and investment alternatives (“If best practice-Y is adopted at all schools, then…”).
- Estimating costs of inputs and outputs (Marginal cost of adding one more student has what effect on marginal and average cost-per-degree? Marginal cost of expanding program y to x students has what effect on marginal and average cost-per-degree?). Costs include operating and capital costs.
- Estimating levels of achievement within scenarios for key demographic and geographic groupings.
- Showing effects and costs for alternatives for allocation of targets and investments among institutions.

Existing models fall short of this outcome. They are useful for pointing to the big points of leverage (retention, etc.) but are inadequate for comparing costs and timing of alternative programs and strategies. Existing models also do not include campus-level data. The limitations of good cost data at the campus level makes it particularly difficult for the System to develop finely-tuned strategies. The cost and effort to build out the models to achieve what is needed to answer the questions posed above are beyond this project. Nor does it make sense from the state perspective to build an “OUS” model. This is something that should be done by OEIB, and built upon the work so far done by consultants.

The simplified framework outline in this paper, in part, reflects the limitations of models in the present state but also—more importantly—the emerging organizational and budgeting structure of higher education.

THE POLICY CONTEXT: DECISIONS TO MAKE

The straight-forward 40-40-20 goal leaves open questions about who gets degrees, where they live, and the quality and nature of those degrees.

These questions provide the policy context within which 40-40-20 must operate. Some were introduced in the section on “defining the goal” (age cohort, residency, role of private universities). Others reflect important OUS policies and values, and require some specification for how they should be incorporated into a 40-40-20 strategy. For purposes of modeling, the normal method would be to assign additional weights to the values of certain types of degrees; this is always a bit controversial and subject to misinterpretation, but it does force a degree of clarity about goals.
Once an overall framework for allocating 40-40-20 targets is set, the primary work of policy-makers will be to assign proper weights to the factors listed below (and others that may be added).

**Graduate degrees**
The goal is silent on whether any special consideration should be given to graduate degrees.

How should a 40-40-20 strategy include consideration of graduate degrees? Should an overall target be set? How? Should institutional missions be more precise on this score?

**Geographic and regional equity**
Does existing policy provide a basis for “allocating” future degree requirements regionally or institutionally?

**Demographic diversity and underserved populations**
As with “regional equity,” does existing policy provide a basis for assigning weights or values to degrees for defined populations?

**Targeted degrees**
Funding for targeted degrees is now provided directly, making it easier to incorporate these directly into a 40-40-20 strategy.

**Affordability**
For the state’s overall 40-40-20 goal, access and affordability are key. They link directly back to the importance of students in middle and high school having the motivation and belief that college is and should be in their future.

The Shared Responsibility Model, control of tuition, and the set-aside of part of tuition increases for financial aid are the basis of the existing affordability policy for students. However, the missing piece is that a mechanism does not exist to link state enrollment funding, tuition, and shared responsibility together in a way that effectively puts the burden on the legislature to be transparent about the number of degrees it is actually willing to fund. Nor is there any direct link to the actual costs of degrees. Without such a link costs can continue to rise, with tuition and aid both chasing, and access becomes a variable rather than a guarantee or real target.

It is possible to address this in 40-40-20 by way of the weight given to students for whom price and cost are barriers. It is also possible to address, perhaps, through a strategy of paying for degrees (outlined below).
**Quality of degree**

What consideration should be given to quality of degree, however measured? What is the future for moving more toward proficiency assessment for degrees?

Should the idea of “value” of different types of degrees (majors, employability, etc.) be given more consideration?

Should there be some weight for degrees with public service and/or research components in them?

**Allocating targets and improving performance**

Once a target for degrees is set or assumed for the state, how should responsibility be divided among OUS institutions? There is simplicity but no strategic reason for simply scaling up each institution’s existing share of degree production; there are strong reasons for not doing so, primarily that it may be neither the most efficient nor the most equitable. Potential factors to be weighed might include:

- **Fit with mission.** Should missions be more specific about expectations for 40-40-20? Should there be greater differentiation about roles in achieving regional and demographic equity, or carrying responsibility for access and affordability?

- **Efficiency.** Which institutions can provide additional degrees at least cost, including capital investment? Which institutions can contribute effectively and efficiently to the qualitative aspects of 40-40-20 (equity, diversity, high-value degrees, etc.)?

- **Institutional considerations.** If targets for 40-40-20 will affect competitive and financial position of institutions, how should this be factored?

Related to this is where leadership for improving institutional performance resides. That is playing out in large measure through discussions around “shared services” and collaboration. At what level do we understand and act on how much and at what cost might enrollment rates, graduation rates, time-to-degree, etc., improve from:

- Changed pedagogy at universities, including course redesign, use of technology?
- Distance learning and on-line learning?
- Improved performance of “pipeline”?
- Readiness of high school graduates?

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2 By “mission” I here mean the role and identify of the institution within OUS, not just the formal mission statement. This requires, for example, a deeper understanding of what SOU’s role as a regional institution means and what it means for UO to be a “flagship.” It requires good understanding of student and faculty “markets” and competitive situation.
• Transfer from community colleges and among universities, and reverse transfer?
• Completion for adults with some progress?

One possibility…
The situation surrounding 40-40-20 now seems to entail the following:

• First, the lay of the land about where decisions will get made is changing. It appears that the OEIB, the HECC (Higher Education Coordinating Commission) and individual institutional boards will have greater authority over the decisions central to 40-40-20.

• State policy appears to be committed to moving toward paying for degrees as the primary means of funding institutions. This creates an important avenue for pursuing 40-40-20 within the “tight-loose” principle.

• There is wariness at the campuses about a top-down approach to 40-40-20, including wariness about the use of any model to set targets or allocate costs and revenues that does not recognize campus differences.

• The existing models are useful for pointing to the big points of leverage (retention, etc.) but are inadequate for comparing costs and timing of alternative programs and strategies. They also do not include campus-level data. The limitations of good cost data at the campus level makes it particularly difficult for the System develop finely-tuned strategies. The cost and effort to build out the models to achieve what is needed to answer the questions posed above are beyond this project. Nor does it make sense from the state’s perspective to build an “OUS” model. This is something that should be done by the OEIB.

Taking all this into consideration leads to considering an approach that would:

• Anticipate more responsibility at the campus level for responding to a 40-40-20 framework and targets, with OUS in a more “steering” and support role.

• Put the burden on campuses for cost control.

• Put the burden on the state for funding levels to meet degree and affordability goals (ensure that compacts link targets and funding).

• Put the burden for developing a strong performance and cost model at a higher level, namely the OEIB.

A possible 40-40-20 framework
If the state begins paying for degrees, there is a simple approach to a strategy for both 40-40-20 and affordability that does not entail System-level worry about costs or initiatives. (Variations of what follows have been percolating for some time.)

• The state sets an allowable “public burden” cost for undergraduate degree. This represents the total cost to students and the state. Differences in costs for programs or other consideration can be accounted for, as in the Resource Allocation Model (RAM).
• The state sets an amount it will pay for each undergraduate degree, some fraction of total cost.
• The cost to the student is the difference between allowable cost and state payment, using the Shared Responsibility Model.
• For campuses that want a higher cost profile, the burden is on them to provide access at the specified levels using institutional funds.
• The role of the System for 40-40-20 is to:
  – Maintain its core function of mission and program approval, and
  – Specify numbers of degrees needed and relative values and costs for degrees of particular characteristics (rural, minority, targeted).

The logic of this framework for 40-40-20 is that the targets, including extra value for equity, quality, etc., are set and allocated/bargained at the System-level but the burden is on individual institutions to figure out how to meet them. Properly designed, it keeps pressure on campuses to provide access and quality while controlling costs.

For this modified approach, this 40-40-20 strategy project would produce the following:
• Specification of what the target is (no change from original proposal).
• Estimate of “gap” to meet 40-40-20, based on demographic projections (this becomes a more important piece of work and can be done using combination of models).
• Structure the conversation around equity, access and quality issues (how to weight and incorporate them into setting degree targets and funding).
• Underscore the major avenues for improving performance (mostly already known).

The project would not:
• Develop a robust model capable of comparing marginal costs of producing degrees at different institutions or from various programs and initiatives.
• Develop scenarios of the most cost-effective initiatives or programs.

**Issues with framework**

This is a framework that assumes we are moving to devolve to the institutions more responsibility for responding to clear degree targets set by the state. It is not a proposal for undoing the “System.” Most importantly, it would not change responsibility for setting missions, approving programs, or allocating state funding. The basic framework can be developed over time, as it seeks to start simply, rather than solve all complications up front.

The proposal recognizes both the prospect of organizational changes and the limitation of tools and data available for use at this time. Even without the “pay for degrees” framework outlined above, these lead us to keeping the strategy project at the more realistic level proposed.
Finally, it is not clear what framework will be consistent with future direction from the OEIB.

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