



National Center for Higher Education Management Systems

Assessing the Viability of a Program to Allow Certain  
Students to Attend Oregon Community Colleges  
Without Paying Tuition and Fees

Submitted to  
Oregon Higher Education Coordinating Commission

## Introduction

Senate Bill 1524 of the 2014 Regular Session of the Oregon Legislative Assembly requires that the Oregon Higher Education Coordinating Commission (HECC)

“Examine the viability of a program that allows a student who graduated from a high school in this state or who completed grade 12 in compliance with the requirements of ORS 339.035 to attend a community college in this state without paying tuition and fees at the community college for a specified period.”

The statute also stipulated that “when conducting the examination, the commission shall identify and consider:

- (a) The anticipated number of students who will participate in the program;
- (b) The anticipated annual cost of the program and federal, state and other sources of moneys that could be used to pay the costs of the program;
- (c) Current capacity available at community colleges to enroll additional students;
- (d) Potential eligibility criteria for students participating in the program; and
- (e) The possibility of requiring students to first use financial aid available to the students, including federal moneys provided to low-income students for the purpose of paying for post-secondary education.

Through a Request for Proposal (RFP) process (ORPIN-1000-14) the National Center for Higher Education Management Systems (NCHEMS) was selected to provide technical assistance to the Commission with regard to this mandate. This document reports on the work done by NCHEMS in fulfilling its obligations regarding this project.

## Project Activities

In carrying out this project, NCHEMS staff undertook the following activities:

1. Developed the design of an interactive model that allowed investigation of the various scenarios suggested by the legislation.
2. Created the list of data needed to populate the model and undertake the variety of analyses required
3. Met, on July 16, with the Chairman, Executive Director, and other HECC staff to discuss the requirements of the project and NCHEMS’ approach to responding to those requirements. As an outcome of this meeting it was determined that NCHEMS’ obligation was to create an interactive model that would allow HECC staff to investigate alternative scenarios. HECC, not NCHEMS, would judge the viability of a free community college tuition program and make recommendations to the legislature regarding implementation of such a program.
4. Met, on July 17, with staff of HECC and the Department of Community Colleges and Workforce Development (CCWD) to arrange for acquisition of the required data.
5. Met with Senator Hass, the sponsor of the bill, to ensure understanding of his expectations.

6. Compiled the data from CCWD and other sources (mostly databases created by NCHEMS for other Oregon projects). This activity extended from mid-July to early September.
7. Participated, by phone, in the August 13 meeting of HECC's Student Success and Institutional Collaboration Subcommittee and presented a progress report on the project to that Subcommittee.
8. Created the interactive model, calculated the costs associated with different scenarios using the model, and prepared a presentation for use before various policymaking audiences.
9. Presented the results associated with numerous scenarios to the Subcommittee (September 10) and the full HECC (September 11).
10. Presented this same information to the Senate Education and Workforce Development Committee of the Oregon Legislature (September 17).
11. Prepared this brief written document describing the interactive model and the results obtained by running a variety of scenarios using the model.

## The Interactive Model

The model developed by NCHEMS allows benefits of a free community college tuition program to be targeted to various groups of students as determined by the user of the model. The factors that can be varied in determining student eligibility for the program are:

- Elapsed time since high school graduation
  - Recent high school graduates
  - Adults – those who graduated from high school a year or more prior to community college entry
- Intensity of college participation
  - Full-time
  - Part-time
- Duration of eligibility
  - Two years
  - Three years

In regard to this variable, the default values are the current retention values for students in the community College System – 48% first year to second year and 10% second year to third years. These values can be assumed to increase or decrease by the user of the model.

- Participation rates. The model allows use of three levels of assumptions about rates of participation in calculating numbers of students potentially eligible for the program.
  - Conservative – this level assumes that rates of community college participation, by county, are stable at 2013 rates. Only the sizes of underlying populations (high school graduates and numbers of adults (25-44) who have completed high school but not received a college degree) change in scenarios based on this assumption about level of participation.

- Moderate – this level of participation assumes that
  - Participation of students in both 2- and 4-year institutions rises to a level that is halfway between the current statewide average and the highest level of any county in the state.
  - All students representing the increased numbers attend community colleges; none attend four-year institutions.
  - This calculation is applied separately to both high school graduates and adults.
- Aggressive – this level of participation assumes that:
  - Participation of students from all counties in both 2- and 4-year institutions raises to the level of the highest county rate in the state.
  - All students representing the increased numbers attend community colleges; none attend four-year institutions.
  - This calculation is applied separately to both high school graduates and adults.
- The income levels of students enrolling in community colleges. The default values built into the model assume that all new students will have the same income distribution as the community college students who filed a FAFSA in the most recent year, that is:

<\$30,000	67.3%
\$30-48,000	13.6%
\$48-70,000	8.8%
≥\$70,000	10.4%

The model is created in such a way that these assumed values can be changed by the user of the model.

In addition to variations in the populations of students eligible for the program under different sets of assumptions, the model allows investigation of how much funding will be provided to each recipient. Two different approaches to this calculation are available within the model.

- Tuition and fees only. In this calculation the program would cover tuition and fees only, not the other costs of attendance. In addition, the calculations are made in such a way that the program would cover only those portions of students and fees not covered by Pell grants. It should be noted that, under this set of assumptions all program funds would be allocated to students in the upper two income categories.
- Cost of attendance. In this formulation:
  - Cost of attendance is calculated as
    - Tuition and fees – set at current rates
    - Other costs of attendance (room, board, books, transportation, etc.). The default value for these costs is \$12,000 per year, the value assumed for students living at home.

The values for both tuition and other costs of attendance can be altered by the user of the model.

- Calculation of cost of free tuition in this case is based on the shared responsibility model underlying the calculations for the Oregon Opportunity Grant. That is, offsetting costs are:
  - Student contribution – set at \$6,000/year but variable at the discretion of the model user
  - Family contribution using the federal calculation
  - Pell grants
  - Oregon Opportunity Grants – assumed to be \$2,000 per FT recipient and \$1,000 per part time recipient. These amounts are applied to 20% of the eligible recipients to reflect the current proportion of eligible students who actually receive grants. This assumption can be changed at the discretion of the model user.

Under this set of calculations the free community college program would pay the residual after all other contributions are factored in.

Scenarios 5 and 6 presented below represent a variation on the full cost of attendance calculation.

## Results

NCHEMS staff utilized the model to produce the results under a variety of assumptions. The different scenarios and the results obtained in each are presented in this section of the report.

### Scenario 1

This scenario assumes that:

- Eligibility is limited to recent high school graduates.
- All calculations are based on tuition and fees only – the other costs associated with college attendance (room, board, books, etc.) are not factored into the calculations.
- The state program covers only that portion of tuition not covered by federal (Pell) awards.

The results are displayed in Table 1.

		<b>Estimated Cost</b>	<b>No. of Students*</b>
<b>Full-time students - recent high school graduates only</b>			
Conservative	2-Year	8,900,000	7,319
	3-Year	9,500,000	7,813
Moderate	2-Year	10,300,000	9,910
	3-Year	11,000,000	10,580
Aggressive	2-Year	11,700,000	12,502
	3-Year	12,500,000	13,346
<b>All recent high school graduates</b>			
Conservative	2-Year	14,100,000	11,599
	3-Year	15,100,000	12,382
Moderate	2-Year	16,300,000	15,706
	3-Year	17,400,000	16,767
Aggressive	2-Year	18,600,000	19,812
	3-Year	19,800,000	21,151

\*Number meeting eligibility criteria.

### Scenario 2

This scenario assumes that all community college students are eligible – adult non-traditional students as well as recent high school graduates. The other assumptions in Scenario 2 are the same as those in Scenario 1.

The results are displayed in **Error! Reference source not found.**

**Table 2. Scenario 2**

		Estimated Cost	No. of Students*
<b>Full-time students only - recent high school graduates plus adults</b>			
Conservative	2-Year	19,600,000	18,479
	3-Year	20,900,000	19,728
Moderate	2-Year	24,800,000	29,554
	3-Year	26,400,000	31,551
Aggressive	2-Year	30,000,000	40,629
	3-Year	32,000,000	43,375
<b>All students</b>			
Conservative	2-Year	43,800,000	42,514
	3-Year	46,800,000	45,387
Moderate	2-Year	56,400,000	70,121
	3-Year	60,200,000	74,859
Aggressive	2-Year	69,000,000	97,728
	3-Year	73,700,000	104,332

\*Number meeting eligibility criteria

### Scenario 3

This scenario assumes that:

- Eligibility is limited to recent high school graduates.
- All calculations are based on full cost of attendance – tuition and fees plus books, room and board, etc.
- Calculations of program costs follow the shared responsibility model that undergirds the Oregon Opportunity Grant (OOG) program. In this calculation:
  - Cost of attendance is established at an assumed level of \$15,300 (3,400 tuition and fees and 12,000 other costs). Both elements of this calculation can be altered by the user of the model.
  - A student contribution of \$6,000 is deducted. This amount can be changed by the model user.
  - Expected family contribution of (EFC) and Pell awards are deducted.
  - OOG awards (assumed at \$2,000 for 20% of eligible students) are deducted. The \$2,000 amount can be altered by the model user
  - Free community college costs are the residual amount after all deductions from the cost of attendance.

The results are displayed in Table 3.

**Table 3. Scenario 3**

		Estimated Cost	No. of Students*
<b>Full-time students - recent high school graduates only</b>			
Conservative	2-Year	14,800,000	7,319
	3-Year	15,800,000	7,813
Moderate	2-Year	21,100,000	9,910
	3-Year	22,500,000	10,580
Aggressive	2-Year	27,300,000	12,502
	3-Year	29,200,000	13,346
<b>All recent high school graduates</b>			
Conservative	2-Year	24,100,000	11,599
	3-Year	25,800,000	12,382
Moderate	2-Year	34,300,000	15,706
	3-Year	36,700,000	16,767
Aggressive	2-Year	44,600,000	19,812
	3-Year	47,500,000	21,151

\*Number meeting eligibility criteria

**Scenario 4**

This scenario assumes that:

- Eligibility is open to all community college students, recent high school graduates and adults.
- The other assumptions in Scenario 4 are the same as those in Scenario 3.

**Table 4. Scenario 4**

		Estimated Cost	No. of Students*
<b>Full-time students only - recent high school graduates plus adults</b>			
Conservative	2-Year	33,400,000	18,479
	3-Year	35,600,000	19,728
Moderate	2-Year	62,100,000	29,554
	3-Year	66,300,000	31,551
Aggressive	2-Year	90,700,000	40,629
	3-Year	96,900,000	43,375
<b>All students</b>			
Conservative	2-Year	78,800,000	42,514
	3-Year	84,200,000	45,387
Moderate	2-Year	153,800,000	70,121
	3-Year	164,170,000	74,859
Aggressive	2-Year	228,700,000	97,728
	3-Year	244,200,000	104,332

\*Number meeting eligibility criteria

### Scenario 5

This scenario is a blend of scenarios 1 and 3, being based on total cost of attendance, but it changes the order of deductions in such a way that 1) it is clear that the state pays nothing toward expenses other than tuition and fees, and 2) the free community college tuition program pays for all tuition and fees after deductions for OOG and residual amounts of Pell after cost of living expenses are met. The expected family contributions for students whose family income is greater than \$75,000 is so high ( $\approx$ \$23,000) that students in this income category are excluded from the calculation.

The scenario assumes that:

- Eligibility is limited to recent high school graduates.
- All calculations are based on full cost of attendance – tuition and fees plus books, room and board, etc.
- Calculations of program costs generally follow the approach of the shared responsibility model that undergirds the Oregon Opportunity Grant Program. However there is one major difference – the amounts for “other costs” and tuition & fees are treated separately in the calculation. The calculations
  - Start with the “other costs” (the default amount in the model is \$12,000 but that amount can be changed by the user).
  - Student contributions (default is \$6,000 but can be changed by the user), EFC, and Pell amounts are deducted from the “other cost” amounts. Any residual (e.g., if the student, EFC, and Pell amounts together are greater than \$12,000, the residual is used to reduce the cost of tuition to be borne by the state. It is assumed that any residual is Pell money.)
  - OOG funds (assumed at \$2,000 for FT students and \$1,000 for PT students and provided to 20% of the students) are deducted from the residual tuition amount.
  - The balance is the cost to the state of the Free Community College tuition program.

This formulation has several benefits. First, it recognizes the reality that students are confronted with costs beyond tuition that must be covered if they are going to be able to afford to go to college. Second, it keeps the state from diverting secure resources to students who are fully able to pay for college without the assistance of the state and federal governments. Finally, it lets the State of Oregon make the unequivocal statement that, if family income is below \$75,000, the state will ensure that students pay no tuition.

The costs of the program configured as described above are displayed in Table 5.

**Table 5. Scenario 5**

		Estimated Cost	No. of Students*
<b>Full-time students only - recent high school graduates</b>			
Conservative	2-Year	14,537,000	7,319
	3-Year	15,520,000	7,818
Moderate	2-Year	20,769,000	9,910
	3-Year	22,173,000	10,580
Aggressive	2-Year	26,977,000	12,502
	3-Year	28,802,000	13,346

<b>All recent high school graduates</b>			
Conservative	2-Year	23,729,000	11,599
	3-Year	25,333,000	12,382
Moderate	2-Year	33,859,000	15,706
	3-Year	36,143,000	16,767
Aggressive	2-Year	43,995,000	19,812
	3-Year	46,954,000	21,151

\*Number meeting eligibility criteria

### Scenario 6

This scenario assumed that:

- Eligibility is open to all community college students, recent high school graduates, and adults.
- The other assumptions in Scenario 6 are the same as those in Scenario 5.

**Table 6. Scenario 6**

		<b>Estimated Cost</b>	<b>No. of Students*</b>
<b>Full-time students only - recent high school graduates and adults</b>			
Conservative	2-Year	32,039,000	18,479
	3-Year	34,186,000	19,728
Moderate	2-Year	58,418,000	29,554
	3-Year	62,350,000	31,551
Aggressive	2-Year	84,757,000	40,629
	3-Year	90,486,000	43,375
<b>All students</b>			
Conservative	2-Year	75,361,000	42,514
	3-Year	80,450,000	45,387
Moderate	2-Year	143,980,000	70,121
	3-Year	153,703,000	74,859
Aggressive	2-Year	212,589,000	97,728
	3-Year	226,900,000	104,332

\*Number meeting eligibility criteria

## Some Observations

A review of the results produced in the various scenarios leads to the following observations.

1. Results are very sensitive to assumptions about student eligibility. If eligibility is constrained to recent high school graduates, costs are constrained. This is true even under aggressive assumptions about student participation in the program. When eligibility is opened to all community college students, costs escalate substantially – dramatically under aggressive assumptions about student participation.

2. When eligibility is expanded to adults/non-traditional students, the model is very sensitive to assumptions about rates of student participation. The aggressive assumption is undoubtedly unrealistically high, but even under conservative and moderate assumptions, costs escalate rapidly. Costs are constrained considerably if eligibility is confined to full-time students.
3. In the scenarios based on an assumption that the program is focused on tuition only (not cost of attendance), costs are mitigated by deduction of Pell awards before the state program kicks in.

While this feature of program design limits the cost to the state, it also makes the program one that benefits predominantly middle- and upper-class students. Pell awards more than cover tuition for low income students.

## The Dashboard

A screenshot of the dashboard for the model is presented on the following page. The levers on the left allow selection of various combinations of eligibility and assumptions about growth in participation:

1. Intensity
  - Full-time
  - Part-time
2. Student type
  - Recent high school graduates
  - Recent high school graduates plus adult/non-traditional
3. Estimates of projected additional enrollment
  - Conservative
  - Moderate
  - Aggressive

The other factors in the model – assumptions about intensity, retention, costs, and distribution of student family income – can be varied by the user of the model. Restriction of program eligibility to two years is calculated by setting the 150% retention factor to 0%.

Figure 1. NCHEMS Cube Oregon Model

