NORTH DAKOTA LEGISLATIVE COUNCIL

North Dakota Legislative Council
600 East Boulevard Avenue
Bismarck, ND 58505-0360

701.328.2916

lcouncil@nd.gov

www.legis.nd.gov

Presentation by:

Brady Larson
Senior Fiscal Analyst

Higher Education Committee

September 27, 2012
Roughrider Room, State Capitol
Bismarck, North Dakota

OPTIONS TO IMPLEMENT A SUCCESS-BASED HIGHER EDUCATION FUNDING METHOD

NORTH DAKOTA SUCCESS-BASED FUNDING METHOD

- Based on Tennessee higher education funding method

- Funding allocated to institutions based on measured outcomes

- All or a portion of success-based funding can be reallocated each biennium

COMPARISON OF BUDGET COMPONENTS

Component	Current NDUS Funding Method	Success-Based Funding Method
Operations funding	Operations funding appropriated directly to each institution in block grant format	Operations funding appropriated to a pool for block-grant distributions to each institution based on outcomes
System and institution initiatives	Funds appropriated for specific system-wide or institution initiatives or unique campus needs	Funds appropriated for specific system-wide or institution initiatives or unique campus needs
Capital assets	Funding appropriated for extraordinary repairs and specific campus projects	Funding appropriated for extraordinary repairs and specific campus projects

NON-FORMULA UNITS

- Non-formula units are excluded from method due to lack of compatibility with the formula or because of unique programs and services

- Examples of non-formula units may include the University System office and Forest Service

- Non-formula units continue to receive direct appropriations for operations

INSTITUTION OUTCOMES

- Each institution is to be measured based on outcomes specific to each institution

- Outcomes are to be based on institution mission and state priorities

- Each outcome is ranked to provide more weight to outcomes that reflect the priority of the outcome as it relates to the mission of the institution

INSTITUTION OUTCOMES

- Premiums can be used to encourage institutions to serve certain student groups or to encourage response to state needs

- Three-year data averages or other averaging method can be used

- Any measurement can be used as long as consistent and reliable data is available

POTENTIAL SUCCESS-BASED FUNDING OUTCOMES

Two-year institutions

Research institutions
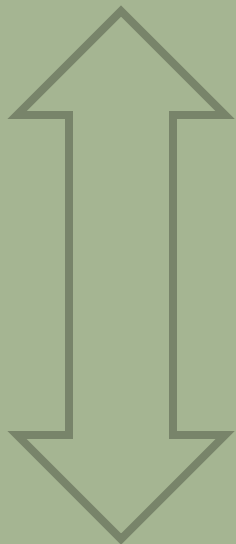
Tennessee Outcomes:

- Certificates awarded
- Job placements
- Workforce training provided
- Remedial education students successfully served
- Associates degrees awarded
- Student credit hour progression
- Successful transfers in/out
- Graduation rate
- Degrees awarded per 100 FTE students
- Bachelor's degrees awarded
- Master's, doctoral, and professional degrees awarded
- Amount of research and grant funding received

OTHER POTENTIAL OUTCOMES OR PREMIUM AWARD MEASURES

- STEM degrees awarded

- Job-placements in high-demand fields

- Graduates retained in North Dakota

- Fall to spring student retention

- Fall to fall student retention

- Employer satisfaction survey results

- Performance on occupational licensing exams

- Cost per degree awarded

- Changes in degree attainment percentages

SUCCESS-BASED FUNDING FORMULA EXAMPLE

Step 1: Identify the outcomes for an institution

Research Institution Example

Outcomes
Students Accumulating 30 hrs
Students Accumulating 60 hrs
Students Accumulating 90 hrs
Transfer to Another Institution
Bachelors Degrees
Masters/Ed Specialist Degrees
Doctoral / Law Degrees
Degrees per 100 FTE
Research and Service
Six-Year Graduation Rate

Two-Year Institution Example

Outcomes
Students Accumulating 15 hrs
Students Accumulating 30 hrs
Students Accumulating 45 hrs
Transfer to Another Institution
Associates Degree
Certificates Awarded
Job Placements
Workforce Training Hours
Remedial Education Success
Awards Per 100 FTE

Progression

Completion

Mission/ Performance

lcouncil@nd.gov
701.328.2916
www.legis.nd.gov

Step 2: Collect data for each of the outcomes

Research Institution

Outcomes	Data
Students Accumulating 30 hrs	2,350
Students Accumulating 60 hrs	2,190
Students Accumulating 90 hrs	1,980
Transfer to Another Institution	56
Bachelors Degrees	1,620
Masters/Ed Specialist Degrees	293
Doctoral / Law Degrees	121
Degrees per 100 FTE	18
Research and Service	$ 90,000,000
Six-Year Graduation Rate	46

Two-Year Institution

Outcomes	Data
Students Accumulating 15 hrs	460
Students Accumulating 30 hrs	420
Students Accumulating 45 hrs	365
Transfer to Another Institution	121
Associates Degree	156
Certificates Awarded	85
Job Placements	190
Workforce Training Hours	14,000
Remedial Education Success	76
Awards Per 100 FTE	25

Step 3: Award premiums for certain outcomes

Outcomes	Data		Premium Awarded		Revised Data
Students Accumulating 30 hrs	2,350	+	102	=	2,452
Students Accumulating 60 hrs	2,190	+	85	=	2,275
Students Accumulating 90 hrs	1,980	+	79	=	2,059
Transfer to Another Institution	56	+		=	56
Bachelors Degrees	1,620	+	60	=	1,680
Masters/Ed Specialist Degrees	293	+		=	293
Doctoral / Law Degrees	121	+		=	121
Degrees per 100 FTE	18	+		=	18
Research and Service	$ 90,000,000	+		=	90,000,000
Six-Year Graduation Rate	46	+		=	46

Example – Of the 1,620 bachelors degrees awarded, 150 were awarded to low-income and adult students. A 40% premium is awarded for these degrees.

150 qualifying students x 40% premium = 60

Step 4: Rescale data for comparability

Research Institution

Outcomes	Revised Data		Scale		Scaled Outcomes
Students Accumulating 30 hrs	2,452	/	0.75	=	3,269
Students Accumulating 60 hrs	2,275	/	0.75	=	3,033
Students Accumulating 90 hrs	2,059	/	0.75	=	2,745
Transfer to Another Institution	56	/	0.75	=	75
Bachelors Degrees	1,680	/	2.00	=	840
Masters/Ed Specialist Degrees	293	/	0.25	=	1,172
Doctoral / Law Degrees	121	/	0.25	=	484
Degrees per 100 FTE	18	/	0.20	=	90
Research and Service	90,000,000	/	50,000.00	=	1,800
Six-Year Graduation Rate	46	/	0.20	=	230

Data can be scaled up or down to make outcomes comparable

Step 4: Rescale data for comparability

Two-Year Institution

Outcomes	Revised Data		Scale		Scaled Outcomes
Students Accumulating 15 hrs	504	/	1.75	=	288
Students Accumulating 30 hrs	459	/	1.75	=	262
Students Accumulating 45 hrs	400	/	1.75	=	229
Transfer to Another Institution	121	/	1.00	=	121
Associates Degree	166	/	1.00	=	166
Certificates Awarded	93	/	1.00	=	93
Job Placements	190	/	1.25	=	152
Workforce Training Hours	14,000	/	50.00	=	280
Remedial Education Success	76	/	0.75	=	101
Awards Per 100 FTE	25	/	0.20	=	125

The scaling can also be used to emphasize certain outcomes

Step 5: Apply a weight to each outcome based on the priority of the outcomes to meet the mission of the institution

Research Institution

Outcomes	Weight
Students Accumulating 30 hrs	2.0%
Students Accumulating 60 hrs	3.0%
Students Accumulating 90 hrs	5.0%
Transfer to Another Institution	3.0%
Bachelors Degrees	15.0%
Masters/Ed Specialist Degrees	18.0%
Doctoral / Law Degrees	14.0%
Degrees per 100 FTE	10.0%
Research and Service	15.0%
Six-Year Graduation Rate	15.0%

Two-Year Institution

Outcomes	Weight
Students Accumulating 15 hrs	6.0%
Students Accumulating 30 hrs	10.0%
Students Accumulating 45 hrs	12.0%
Transfer to Another Institution	15.0%
Associates Degree	15.0%
Certificates Awarded	12.0%
Job Placements	6.0%
Workforce Training Hours	6.0%
Remedial Education Success	10.0%
Awards Per 100 FTE	8.0%

Step 6: Multiply the scaled data times the weighting factor to produce "Weighted Outcomes"

Research Institution

Outcomes	Scaled Outcomes		Weight		Weighted Outcomes
Students Accumulating 30 hrs	3,269	X	2.0%	=	65
Students Accumulating 60 hrs	3,033	X	3.0%	=	91
Students Accumulating 90 hrs	2,745	X	5.0%	=	137
Transfer to Another Institution	75	X	3.0%	=	2
Bachelors Degrees	840	X	15.0%	=	126
Masters/Ed Specialist Degrees	1,172	X	18.0%	=	211
Doctoral / Law Degrees	484	X	14.0%	=	68
Degrees per 100 FTE	90	X	10.0%	=	9
Research and Service	1,800	X	15.0%	=	270
Six-Year Graduation Rate	230	X	15.0%	=	35

Step 6: Multiply the scaled data times the weighting factor to produce "Weighted Outcomes"

Two-Year Institution

Outcomes	Scaled Outcomes		Weight		Weighted Outcomes
Students Accumulating 15 hrs	288	X	6.0%	=	17
Students Accumulating 30 hrs	262	X	10.0%	=	26
Students Accumulating 45 hrs	229	X	12.0%	=	27
Transfer to Another Institution	121	X	15.0%	=	18
Associates Degree	166	X	15.0%	=	25
Certificates Awarded	93	X	12.0%	=	11
Job Placements	152	X	6.0%	=	9
Workforce Training Hours	280	X	6.0%	=	17
Remedial Education Success	101	X	10.0%	=	10
Awards Per 100 FTE	125	X	8.0%	=	10

Step 7: Sum the weighted outcomes

Research Institution

Outcomes	Weighted Outcomes
Students Accumulating 30 hrs	65
Students Accumulating 60 hrs	91
Students Accumulating 90 hrs	137
Transfer to Another Institution	2
Bachelors Degrees	126
Masters/Ed Specialist Degrees	211
Doctoral / Law Degrees	68
Degrees per 100 FTE	9
Research and Service	270
Six-Year Graduation Rate	35
Total	**1,014**

Two-Year Institution

Outcomes	Weighted Outcomes
Students Accumulating 15 hrs	17
Students Accumulating 30 hrs	26
Students Accumulating 45 hrs	27
Transfer to Another Institution	18
Associates Degree	25
Certificates Awarded	11
Job Placements	9
Workforce Training Hours	17
Remedial Education Success	10
Awards Per 100 FTE	10
Total	**170**

Step 8: Multiply the weighted outcomes times a specified funding multiplier

Research Institution

Outcomes	Weighted Outcomes
Students Accumulating 30 hrs	65
Students Accumulating 60 hrs	91
Students Accumulating 90 hrs	137
Transfer to Another Institution	2
Bachelors Degrees	126
Masters/Ed Specialist Degrees	211
Doctoral / Law Degrees	68
Degrees per 100 FTE	9
Research and Service	270
Six-Year Graduation Rate	35
Total	1,014

Success-Based Funding Calculation

Total outcomes	1,014
Funding multiplier	X $85,000
Total funding	$86,190,000

Tennessee uses the Southern Region Education Board average faculty salary for each institution type as a multiplier

Each institution receives a proportional share of funding from the pool if total funding awards for all institutions exceeds available amounts

TOTAL INSTITUTION FUNDING

Research Institution

Success-Based Funding Calculation	
Total outcomes	1,014
Funding multiplier	X $85,000
Total funding	$86,190,000

Total Funding Calculation	
Success-based funding	$86,190,000
Specific initiatives	2,310,000
Capital assets	3,450,000
Total institution funding	$91,950,000

The success-based funding amount is added with initiative funding and capital assets funding to determine total institution funding

OTHER OPTIONS BASED ON TENNESSEE MODEL

- Use separate funding calculation for utilities and equipment

- Adjust funding for state/student share ratio
  - Current NDUS ratios:

Campus	State Share	Student Share
NDSU, UND	60%	40%
MiSU	65%	35%
DSU, MaSU, VCSU	70%	30%
BSC, DCB, LRSC, NDSCS, WSC	75%	25%

OTHER OPTIONS BASED ON TENNESSEE MODEL

- Adjust funding allocation to each institution based on non-resident student enrollment

- Implement separate quality assurance funding model

- Phase model in over several years

QUESTIONS?

Success-Based Funding Example Calculation Worksheet

Research Institution Example

Outcomes	Data		Premium Awarded		Revised Data		Scale		Scaled Outcomes		Weight		Weighted Outcomes
Students Accumulating 30 hrs	2,350	+	102	=	2,452	/	0.75	=	3,269	X	2.0%	=	65
Students Accumulating 60 hrs	2,190	+	85	=	2,275	/	0.75	=	3,033	X	3.0%	=	91
Students Accumulating 90 hrs	1,980	+	79	=	2,059	/	0.75	=	2,745	X	5.0%	=	137
Transfer to Another Institution	56	+		=	56	/	0.75	=	75	X	3.0%	=	2
Bachelors Degrees	1,620	+	60	=	1,680	/	2.00	=	840	X	15.0%	=	126
Masters/Ed Specialist Degrees	293	+		=	293	/	0.25	=	1,172	X	18.0%	=	211
Doctoral / Law Degrees	121	+		=	121	/	0.25	=	484	X	14.0%	=	68
Degrees per 100 FTE	18	+		=	18	/	0.20	=	90	X	10.0%	=	9
Research and Service	$ 90,000,000	+		=	90,000,000	/	50,000.00	=	1,800	X	15.0%	=	270
Six-Year Graduation Rate	46	+		=	46	/	0.20	=	230	X	15.0%	=	35
										Total	100.0%		1,014

Premiums Calculation - Low-income and Adult Students	Number		Premium		Premium Awarded
Students Accumulating 30 hrs	256		40%		102
Students Accumulating 60 hrs	212		40%		85
Students Accumulating 90 hrs	198		40%		79
Bachelors Degrees	150		40%		60

Success-Based Funding Calculation

Total Outcomes	1,014
Funding Multiplier	X $ 85,000
Total Funding	$ 86,190,000

Two-Year Institution Example

Outcomes	Data		Premium Awarded		Revised Data		Scale		Scaled Outcomes		Weight		Weighted Outcomes
Students Accumulating 15 hrs	460	+	44	=	504	/	1.75	=	288	X	6.0%	=	17
Students Accumulating 30 hrs	420	+	39	=	459	/	1.75	=	262	X	10.0%	=	26
Students Accumulating 45 hrs	365	+	35	=	400	/	1.75	=	229	X	12.0%	=	27
Transfer to Another Institution	121	+		=	121	/	1.00	=	121	X	15.0%	=	18
Associates Degree	156	+	10	=	166	/	1.00	=	166	X	15.0%	=	25
Certificates Awarded	85	+	8	=	93	/	1.00	=	93	X	12.0%	=	11
Job Placements	190	+		=	190	/	1.25	=	152	X	6.0%	=	9
Workforce Training Hours	14,000	+		=	14,000	/	50.00	=	280	X	6.0%	=	17
Remedial Education Success	76	+		=	76	/	0.75	=	101	X	10.0%	=	10
Awards Per 100 FTE	25	+		=	25	/	0.20	=	125	X	8.0%	=	10
								Total			100.0%		**170**

Premiums Calculation - Low-income and Adult Students	Number		Premium		Premium Awarded
Students Accumulating 15 hrs	110		40%		44
Students Accumulating 30 hrs	98		40%		39
Students Accumulating 45 hrs	87		40%		35
Associates Degree	25		40%		10
Certificates Awarded	19		40%		8

Success-Based Funding Calculation

Total Outcomes		170
Funding Multiplier	X $	63,000
Total Funding	$	10,710,000