

# Higher Education Funding Formula

**Higher Education  
Funding Committee**

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# 2013 Senate Bill 2200

- NDCC Chapter 15-18.1
  - Paid for actual student credit hours (SCH) successfully completed
    - Rewards students' progress towards graduation / completion
    - Not paid for dropped or failed courses
  - Instructional program factor
  - Credit completion factor
  - Institutional size factor
  - Base funding per SCH
  - Minimum amount payable
  - Legislative intent
  - Legislative study – Higher education funding

# Funding Formula

$$\begin{array}{l} \text{General Fund} \\ \text{Base} \\ \text{Appropriation} \\ \text{Per Institution} \end{array} = \begin{array}{c} \text{Adjusted Student Credit Hour} \\ \text{Weighted Student Credit Hour (WSCH)} \\ \text{(Completed Student Credit Hour X Instructional} \\ \text{Program Factor)} \end{array} \times \text{Institutional Size Factor} \times \text{Credit Completion Factor} \times \begin{array}{l} \text{Base \$\$} \\ \text{Amount} \\ \text{Per Student} \\ \text{Credit Hour} \end{array}$$

# Instructional Program Factor

- Analyzed actual 2009 – 2011 operating costs by institution
- Two main cost drivers:
  - Course discipline clusters – Classification of Instructional Program (CIP) codes
  - Level of instruction
- Developed matrix of relative costs

# Instructional Program Factor Matrix

DISCIPLINE CLUSTERS	STUDENT CREDIT HOUR WEIGHTING MATRIX						WEIGHTED SCH
	ELEMENTS	LOWER DIV	UPPER DIV	PROFESSIONAL	GRADUATE	MD	
Agriculture	09-11 SCH	-	-	-	-	-	-
	Cost Factor	1.9	3.8	5.7	7.6	-	-
	Weighted SCH	-	-	-	-	-	-
Architecture	09-11 SCH	-	-	-	-	-	-
	Cost Factor	1.8	3.6	5.4	7.2	-	-
	Weighted SCH	-	-	-	-	-	-
Aviation	09-11 SCH	-	-	-	-	-	-
	Cost Factor	1.9	3.8	5.7	7.6	-	-
	Weighted SCH	-	-	-	-	-	-
Biological/Physical Science	09-11 SCH	-	-	-	-	-	-
	Cost Factor	1.9	3.8	5.7	7.6	-	-
	Weighted SCH	-	-	-	-	-	-
Business	09-11 SCH	-	-	-	-	-	-
	Cost Factor	1.9	3.8	5.7	7.6	-	-
	Weighted SCH	-	-	-	-	-	-
Career/Tech Education	09-11 SCH	-	-	-	-	-	-
	Cost Factor	2.0	-	-	-	-	-
	Weighted SCH	-	-	-	-	-	-
Education	09-11 SCH	-	-	-	-	-	-
	Cost Factor	1.9	3.8	5.7	7.6	-	-
	Weighted SCH	-	-	-	-	-	-
Engineering	09-11 SCH	-	-	-	-	-	-
	Cost Factor	2.5	5.0	7.5	10.0	-	-
	Weighted SCH	-	-	-	-	-	-
Health Sciences	09-11 SCH	-	-	-	-	-	-
	Cost Factor	3.0	6.0	9.0	12.0	38.0	-
	Weighted SCH	-	-	-	-	-	-
Legal Studies	09-11 SCH	-	-	-	-	-	-
	Cost Factor	3.5	7.0	10.5	14.0	-	-
	Weighted SCH	-	-	-	-	-	-
Remedial	09-11 SCH	-	-	-	-	-	-
	Cost Factor	2.3	-	-	-	-	-
	Weighted SCH	-	-	-	-	-	-
Core Disciplines	09-11 SCH	-	-	-	-	-	-
	Cost Factor	1.0	2.0	3.0	4.0	-	-
	Weighted SCH	-	-	-	-	-	-

Total Completed Student Credit Hrs

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Total Weighted Student Credit Hrs

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# Credit Completion Factor

- Uses 2009 - 2011 completed student credit hours
- Increases as credit volume production decreases
- Efficiencies of scale

Institution	Completed Credit Hours
<b>Dakota College at Bottineau</b>	<b>26,083</b>
<b>Williston State College</b>	<b>29,260</b>
<b>Mayville State University</b>	<b>37,501</b>
<b>Valley City State University</b>	<b>51,713</b>
<b>Lake Region State College</b>	<b>59,858</b>
Dickinson State College	112,746
North Dakota State College of Science	116,059
Minot State University	161,859
Bismarck State College	171,226
University of North Dakota	648,858
North Dakota State University	693,838

Factor	Completed Student Credit Hour
1.00	100,000 +
1.05	95,000 - 99,999
1.10	90,000 - 94,999
1.15	85,000 - 89,999
1.20	80,000 - 84,999
1.25	75,000 - 79,999
1.30	70,000 - 74,999
1.35	65,000 - 69,999
1.40	60,000 - 64,999
<b>1.45</b>	<b>55,000 - 59,999</b>
<b>1.50</b>	<b>50,000 - 54,999</b>
1.55	45,000 - 49,999
1.60	40,000 - 44,999
<b>1.65</b>	<b>35,000 - 39,999</b>
1.70	30,000 - 34,999
<b>1.75</b>	<b>25,000 - 29,999</b>
1.80	20,000 - 24,999
1.85	15,000 - 19,999
1.90	10,000 - 14,999
1.95	5,000 - 9,999
2.00	0 - 4,999

# Institutional Size Factor

- Actual campus square footage to completed student credit hours
- Increases as physical plant size increases

Institution	Ratio
Bismarck State College	1.57
North Dakota State University	1.92
Lake Region State College	2.01
University of North Dakota	2.11
Mayville State University	2.49
Valley City State University	2.50
Dickinson State College	2.53
Minot State University	2.63
Dakota College at Bottineau	2.93
Williston State College	2.97
<b>North Dakota State College of Science</b>	<b>6.67</b>

Ratio	Factor
0 - 4.99	1.0
5.00 and above	1.8

# 2011 -2013 Funding Level

Institution	2011-13 General Fund Operating Appropriation	Adjusted Student Credit Hours (ASCH)	2011-13 Base Rate per ASCH	Equalization Payment	2013 - 15 Equalized Base Budget	Equalized Per ASCH Base - Average Top Two
BSC	\$ 28,045,987	301,144	\$ 93.13	\$ 2,589,392	\$ 30,635,379	\$ 101.73
DCB	\$ 6,605,257	72,210	\$ 91.47	\$ 740,666	\$ 7,345,923	\$ 101.73
LRSC	\$ 9,158,981	114,027	\$ 80.32	\$ 2,440,986	\$ 11,599,967	\$ 101.73
NDSCS	\$ 35,198,921	357,064	\$ 98.58	\$ 1,125,200	\$ 36,324,121	\$ 101.73
WSC	\$ 9,047,486	86,265	\$ 104.88	\$ 0	\$ 9,047,486	\$ 104.88
DSU	\$ 22,792,617	253,455	\$ 89.93	\$ 1,430,077	\$ 24,222,694	\$ 95.57
MASU	\$ 13,134,780	142,172	\$ 92.39	\$ 452,598	\$ 13,587,378	\$ 95.57
MISU	\$ 38,738,594	392,279	\$ 98.75	\$ 0	\$ 38,738,594	\$ 98.75
VCSU	\$ 18,103,060	203,189	\$ 89.09	\$ 1,315,713	\$ 19,418,773	\$ 95.57
NDSU	\$ 127,747,549	2,022,290	\$ 63.17	\$ 6,431,392	\$ 134,178,942	\$ 66.35
UND / Med	\$ 192,617,021	2,903,224	\$ 66.35	\$ 0	\$ 192,617,021	\$ 66.35
<b>TOTALS</b>	<b>\$ 501,190,253</b>			<b>\$ 16,526,024</b>	<b>\$ 517,716,277</b>	

# Base Funding Level

- Institution's base operational appropriation
  - Adjusted SCH multiplied by statutory per SCH dollar amount

Institution	Base Rate per Adjusted SCH
NDSU and UND (including Medical School)	\$66.35
DSU, MaSU and VCSU	\$95.57
MiSU	\$98.75
BSC, DCB, LRSC, NDSCS	\$101.73
WSC	\$104.88

- Minimum amount = 96% of previous fiscal year

# Funding Formula Summary

General Fund Base Appropriation Per Institution	=	Adjusted Student Credit Hour			X	Base \$\$ Amount Per Student Credit Hour
		Weighted Student Credit Hour (WSCH) (Completed Student Credit Hour X Instructional Program Factor)	X	Institutional Size Factor		

# 2013 Senate Bill 2003

- **Base Funding as established in SB2200**
  - Equalized per SCH funding at research universities = \$66.35
  - Regional universities
    - Equalized at average of the top two DSU, MaSU and VCSU = \$95.57
    - MiSU remained at current per SCH = \$98.75
  - Community colleges
    - Equalized at average of the top two BSC, DCB, LRSC and NDSCS = \$101.73
    - WSC remained at current per SCH = \$104.88
- **Total Equity Payments = \$16,526,024**

## 2013 Senate Bill 2003, continued

- **5% Annual Inflationary Adjustment for 2013-2015**
  - Applied equally to all institutions
  - Used for cost-to-continue, operating and utility inflation, as well as salary, retirement contribution, and health insurance premium cost increases
  - Total estimated inflationary costs = \$71,192,429. State's share = \$46,522,948
  - Did not cover entire state share of estimated costs by approximately \$7.00 million
  - **Total Inflationary Adjustment = \$39,475,866**

# 2013 Senate Bill 2003, continued

- **Other Legislative Operating Adjustments**
  - Campus security funding
    - \$743,950 WSC; \$638,631 DSU; \$517,419 MiSU
    - \$100,000 each to BSC, LRSC, NDSCS, MaSU, VCSU, and DCB
  - \$2.50 million to WSC for energy development impact
  - \$2.50 million to MiSU for flood recovery
  - \$1.34 million to UND SoMHS for professional liability insurance and the healthcare workforce initiative
  - \$200,000 to DSU for the Theodore Roosevelt Center
  - \$100,000 to VCSU for the STEM program
  - Transferred \$1.79 million from UND and \$1.34 million from NDSU to consolidate system-wide legal and audit services
  - **Total Other Adjustments = \$6,016,791**

# 2013-2015 Institution Operating Appropriations

Institution	Adjusted Student Credit Hours (ASCH)	Base Rate per SCH	Base Funding Level	5% Annual Inflationary Adjustment	Other Legislative Adjustments	2013-15 General Fund Operating Appropriation
BSC	301,144	\$ 101.73	\$ 30,635,379	\$ 2,335,948	\$ 100,000	\$ 33,071,327
DCB	72,210	\$ 101.73	\$ 7,345,923	\$ 560,127	\$ 100,000	\$ 8,006,050
LRSC	114,027	\$ 101.73	\$ 11,599,967	\$ 884,497	\$ 100,000	\$ 12,584,464
NDSCS	357,064	\$ 101.73	\$ 36,324,121	\$ 2,769,714	\$ 100,000	\$ 39,193,835
WSC	86,265	\$ 104.88	\$ 9,047,486	\$ 689,871	\$ 3,243,950	\$ 12,981,307
DSU	253,455	\$ 95.57	\$ 24,222,694	\$ 1,846,980	\$ 838,631	\$ 26,908,305
MASU	142,172	\$ 95.57	\$ 13,587,378	\$ 1,036,038	\$ 100,000	\$ 14,723,416
MISU	392,279	\$ 98.75	\$ 38,738,594	\$ 2,953,818	\$ 3,017,419	\$ 44,709,831
VCSU	203,189	\$ 95.57	\$ 9,418,773	\$ 1,480,681	\$ 200,000	\$ 21,099,454
NDSU	2,022,290	\$ 66.35	\$ 134,178,942	\$ 10,231,144	\$ (1,336,301)	\$ 143,073,784
UND / Med	2,903,224	\$ 66.35	\$ 192,617,021	\$ 14,687,048	\$ (446,908)	\$ 206,857,161
<b>TOTALS</b>			<b>\$ 517,716,277</b>	<b>\$ 39,475,866</b>	<b>\$ 6,016,791</b>	<b>\$ 563,208,934</b>

## Next Steps

- Institutions report actual completed student credit hours for 2011 – 2013
  - Analyze impact on Instructional Program, Credit Completion, and Institutional Size factors
  - 2015 – 2017 Budget Process

Questions?