

Higher Education Funding Formula

Implementation Status and
Proposed Changes

**Higher Education
Funding Committee**

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2013 Senate Bill 2200

- NDCC Chapter 15-18.2
 - 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 (discipline cluster and level of instruction)
 - Credit completion factor
 - Institutional size factor
 - Base funding per SCH
 - Minimum amount payable

Funding Formula

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		

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
Dakota College at Bottineau	26,083
Williston State College	29,260
Mayville State University	37,501
Valley City State University	51,713
Lake Region State College	59,858
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
1.45	55,000 - 59,999
1.50	50,000 - 54,999
1.55	45,000 - 49,999
1.60	40,000 - 44,999
1.65	35,000 - 39,999
1.70	30,000 - 34,999
1.75	25,000 - 29,999
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 2009 – 2011 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
North Dakota State College of Science	6.67

Ratio	Factor
0 - 4.99	1.0
5.00 and above	1.8

Implementation Process

- Governor asked working group to validate the process
- **Proposed Statutory Changes**
 - No changes to formula factors
 - *NDCC 15-18.2-02* - Rename two Discipline Clusters
 - “Aviation” to “Transportation”
 - “Remedial” to “Basic Skills”
 - *NDCC 15-18.2-05* - Update base funding level to actual appropriation
- **Data Consistency and Reliability**
 - Data extracted by NDUS System Office
 - Instructional program factor
 - Classification of Instructional Program (CIP) code assignment is critical
 - Reviewed every Subject Prefix currently used and assigned CIP code
 - Developed template to be used by all institutions

SCH Report Generation Process

- NDUS extract completed SCH from Connect ND as of 12/31/2013
 - Completed SCH by academic year
 - Only successfully completed SCH
 - Differentiation by Subject Prefix (ACCT: Accounting, EE: Electrical Engineering)
 - Differentiation by Level of Instruction (Lower Division, Upper Division, etc.)

SCH Report Generation Process (cont.)

- Institutions apply CIP Code template
 - Links Subject Prefix to correct CIP Code and Discipline Cluster
- SCH sorted and grouped by CIP Code/discipline cluster and level of instruction, as per NDCC 15-18.2
- Final SCH report includes institution level and system-wide summary schedules

North Dakota University System
2011 - 2013 Completed Student Credit Hour Report Summary
Preliminary

	(A)	(B)	(C)	(D)	(E)	(F)
INSTITUTION	2009 - 2011 ADJUSTED SCH	2011 - 2013 SCH	WEIGHTED SCH (INSTRUCTIONAL PROGRAM FACTOR)	CREDIT COMPLETION FACTOR	INSTITUTIONAL SIZE FACTOR	2011 - 2013 ADJUSTED SCH (D x E x F)
BSC	301,144	162,428	289,484	1.00	1.00	289,484
DCB	72,210	24,378	42,091	1.80	1.00	75,764
LRSC	114,027	63,011	93,189	1.40	1.00	130,465
NDSCS	357,064	124,150	229,050	1.00	1.80	412,290
WSC	86,265	29,887	49,561	1.75	1.00	86,732
DSU	253,455	88,995	203,547	1.15	1.00	234,079
MASU	142,172	41,841	97,475	1.60	1.00	155,960
MISU	392,279	155,878	412,985	1.00	1.00	412,985
VCSU	203,189	57,889	158,202	1.45	1.00	229,393
NDSU	2,022,290	705,549	2,167,389	1.00	1.00	2,167,389
UND	2,903,224	689,290	3,090,436	1.00	1.00	3,090,436
TOTALS	6,847,319	2,143,296	6,833,409	N/A	N/A	7,284,976

**North Dakota University System
2013 - 2015 Base Funding per SCH**

Preliminary

INSTITUTION	(A)	(B)	(C)		(D)	(E)
	Base Funding Level per NDCC 15-18.2-05	5% Annual Inflationary Adjustment per 2013 SB2003 ¹	Other Legislative Adjustments per 2013 SB2003 ²			2013-15 Actual Base Funding per SCH (A + B + C + D)
			Operations	Energy and Flood Impact		
BSC	\$ 101.73	\$ 7.76	\$ 0.33			\$ 109.82
DCB	\$ 101.73	\$ 7.76	\$ 1.38			\$ 110.87
LRSC	\$ 101.73	\$ 7.76	\$ 0.87			\$ 110.36
NDSCS	\$ 101.73	\$ 7.76	\$ 0.28			\$ 109.77
WSC	\$ 104.88	\$ 8.00	\$ 8.62	\$ 28.98		\$ 150.48
DSU	\$ 95.57	\$ 7.29	\$ 2.52			\$ 105.38
MASU	\$ 95.57	\$ 7.29	\$ 0.70			\$ 103.56
MISU	\$ 98.75	\$ 7.53	\$ 1.32	\$ 6.37		\$ 113.97
VCSU	\$ 95.57	\$ 7.29	\$ 0.98			\$ 103.84
NDSU	\$ 66.35	\$ 5.06	\$ (0.66)			\$ 70.75
UND	\$ 66.35	\$ 5.06	\$ (0.16)			\$ 71.25

\1 Inflationary Adjustment provides for: cost to continue prior biennium salary increases; maintenance and repairs; 2013-15 salary, health insurance, and retirement contribution increases; operating expense inflation; utility costs for existing and new buildings.

\2 Other Legislative Adjustments include: \$800,000 professional liability insurance at UND; \$2,500,000 for Campus Safety and Security (BSC, LRSC, WSC, NDSCS, DSU, MaSU, MiSU, VCSU, DCB); reduction of \$3,126,066 from UND and NDSU for legal and audit staff; \$2,500,000 energy impact funding to WSC; \$542,857 Healthcare Workforce Initiative cost to continue at UND; \$100,000 STEM program adjustment VCSU; \$2,500,000 flood recovery efforts at MiSU.

North Dakota University System
2015 - 2017 SCH Formula-Driven Base Budget

Preliminary

	(A)	(B)	(C)	(D)	(E)	(F)
Institution	2013 - 2015 General Fund Base Budget	96% Minimum Funding Level per NDCC 15- 18.2-06	2011 - 2013 Adjusted SCH	2013 - 2015 Base Funding per SCH	Calculated Funding Level (C x D)	2015 - 2017 Base Budget (Higher of E or B)
BSC	\$ 33,071,327	\$ 31,748,474	289,484	\$ 109.82	\$ 31,791,133	\$ 31,791,133
DCB	\$ 8,006,050	\$ 7,685,808	75,764	\$ 110.87	\$ 8,399,933	\$ 8,399,933
LRSC	\$ 12,584,464	\$ 12,081,085	130,465	\$ 110.36	\$ 14,398,073	\$ 14,398,073
NDSCS	\$ 39,193,835	\$ 37,626,082	412,290	\$ 109.77	\$ 45,257,073	\$ 45,257,073
WSC	\$ 12,981,307	\$ 12,462,055	86,732	\$ 150.48	\$ 13,051,394	\$ 13,051,394
DSU	\$ 26,708,305	\$ 25,639,973	234,079	\$ 105.38	\$ 24,667,250	\$ 25,639,973
MASU	\$ 14,723,416	\$ 14,134,479	155,960	\$ 103.56	\$ 16,151,218	\$ 16,151,218
MISU	\$ 44,709,831	\$ 42,921,438	412,985	\$ 113.97	\$ 47,067,900	\$ 47,067,900
VCSU	\$ 21,099,454	\$ 20,255,476	229,393	\$ 103.84	\$ 23,820,159	\$ 23,820,159
NDSU	\$ 143,073,784	\$ 137,350,833	2,167,389	\$ 70.75	\$ 153,342,772	\$ 153,342,772
UND	\$ 206,857,161	\$ 198,582,875	3,090,436	\$ 71.25	\$ 220,193,565	\$ 220,193,565
TOTALS	\$ 563,008,934	\$ 540,488,578	7,284,976	N/A	\$ 598,140,470	\$ 599,113,192

2015 – 2017 Budget Process

○ **SBHE Budget Request Possible Components**

- Operational Budget
 - SCH changes – approximately \$36 million
 - Consider equalization within institutional categories
 - Inflationary Adjustment (salary and benefit increases, utilities, etc.)
 - Program Initiatives
- Capital Budget