South Dakota Board of Regents

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Joint Appropriations Committee Budget Request Hearings

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January 2009

SOUTH DAKOTA BOARD OF REGENTS

2009 LEGISLATIVE SESSION
JOINT APPROPRIATIONS COMMITTEE BUDGET REQUEST HEARINGS
JANUARY 2009

South Dakota Board of Regents

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SOUTH DAKOTA BOARD OF REGENTS
JOINT APPROPRIATIONS COMMITTEE BUDGET REQUEST HEARINGS
JANUARY 2009

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FY2010 Budget Request

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January 2009

SOUTH DAKOTA BOARD OF REGENTS
JOINT APPROPRIATIONS COMMITTEE BUDGET REQUEST HEARINGS
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		Board of Regents' Request				*Governor Recommended*	
Priority		**Base**	**FTE**	**One-Time**	**Savings**	**Base**	**FTE**
1	**Base Budget Maintenance**						
	Utilities Increase	$2,491,252				$1,152,717	
	Financial Support Staff	$538,911	9.0			$0	0.0
	Operating Expense Inflationary Increase	$2,863,959				$0	
	Student Growth Support	$2,356,128				$0	
	SDSBVI - Outreach Consultants	$116,409	2.0			$0	0.0
	Institutional Base Reductions	$0				($500,000)	(1.5)
	Cooperative Extension Service Program Restructure	$0				($1,000,000)	
	South Dakota School for the Deaf Restructure	$0				($2,000,000)	(25.0)
	Subtotal	$8,366,659	11.0			($2,347,283)	(26.5)
2	**Facilities Investment**						
	HEFF Match	$1,638,897				($1,632,999)	
	West River Higher Education Center	$1,228,573				$0	
	Science Facilities Lease Payment	($1,921)				($1,921)	
	Critical Deferred Maintenance Lease Payment	($3,870)				($3,870)	
	ADRDL Lease Payment	$1,087				$1,087	
	Subtotal	$2,862,766				($1,637,703)	
3	**Technology Investment**						
	REED Support						
	Research Technicians and Network Director	$270,979	3.0			$0	0.0
	Equipment and Network Operations Support	$682,945		$258,161		$0	
	Data Center Technical Support	$0				($155,359)	(2.0)
	Subtotal	*$953,924*	*3.0*	*$258,161*		*($155,359)*	(2.0)
	Mobile Computing						
	Network and Equipment Upgrades	$1,015,352			$8,673,932	$0	
	Technical Support Staff	$1,533,918	26.0		$734,459	$0	0.0
	Faculty Development and Retraining	$1,229,899	17.0		$1,584,500	$0	0.0
	Subtotal	*$3,779,169*	*43.0*		*$10,992,891*	*$0*	*0.0*
4	**Research Investment**						
	Human Research Capacity	$2,659,075	16.5	$1,500,000		$0	0.0
5	**SUSEL / DUSEL**						
	Education Outreach	$146,502	1.0			$0	0.0
	SDSM&T - Institute for Professional Education at DUSEL	$203,428	6.0			$0	0.0
	BHSU - SUSEL's Simulated Science Program	$199,868	6.0			$0	0.0
	Subtotal	*$549,798*	*13.0*			*$0*	*0.0*
6	**State Workforce Development**						
	USD - Master of Social Work	$474,500	4.8			$0	0.0
7	**Student Support**						
	SD Opportunity Scholarship			$1,955,841		($468,767)	
	Subtotal General Funds Change	**$19,645,891**	**91.3**	**$3,714,002**	**$10,992,891**	**($4,609,112)**	**(28.50)**
	% Increase of Base Budget	**10.6%**				**-2.49%**	
	Authority Requests	**Base**	**FTE**			**Base**	**FTE**
	HEFF Maintenance & Repair Authority	$261,970				$261,970	
	HEFF Lease Payment Authority	$1,113,881				$1,113,881	
	Other Funds Authority	$17,202,393	46.0			$9,202,393	46.0
	Subtotal Other Authority Request	*$18,578,244*	*46.0*			*$10,578,244*	*46.0*
	Federal Funds Authority	$5,615,000	18.0			$5,615,000	18.0
	TOTAL FEDERAL AND OTHER AUTHORITY	**$24,193,244**	**64.0**			**$16,193,244**	**64.0**

SOUTH DAKOTA BOARD OF REGENTS
JOINT APPROPRIATIONS COMMITTEE BUDGET REQUEST HEARINGS
JANUARY 2009

Change in Governor's FY10 Budget Recommendations

	FTE	General Funds	Federal Authority	Other Authority	Total
FY09 Base	5,565.5	$185,218,896	$118,614,566	$312,873,007	$616,706,469

Governor's Original FY10 Recommended Budget					
1.5% Salary Policy and 2.5% Adjustment to Job Worth		$2,634,038	$729,907	$2,445,225	$5,809,170
Utilities		$1,152,717			$1,152,717
Financial Support Staff	3.0	$213,141			$213,141
Science Facilities Lease Payment Adjustment		($1,921)			($1,921)
Critical Deferred Maintenance Lease Payment Adjustment		($3,870)			($3,870)
ADRDL Lease Payment Adjustment		$1,087			$1,087
HEFF M&R Authority				$261,970	$261,970
HEFF Lease Payment Authority				$1,113,881	$1,113,881
South Dakota Opportunity Scholarship Base Reduction		($468,767)			($468,767)
Expenditure Authority*	64.0		$5,615,000	$9,202,393	$14,817,393
Total Change	67.0	$3,526,425	$6,344,907	$13,023,469	$22,894,801
FY10 Recommendation	5,632.5	$188,745,321	$124,959,473	$325,896,476	$639,601,270

*Includes $8,000,000 reduction in 'other' spending authority for one-time REED purchases.

Governor's Revised FY10 Recommended Budget					
Utilities		$1,152,717			$1,152,717
Institutional Base Reductions	(1.5)	($500,000)			($500,000)
Cooperative Extension Service Program Restructure		($1,000,000)			($1,000,000)
South Dakota School for the Deaf Restructure	(25.0)	($2,000,000)			($2,000,000)
Data Center Technical Support	(2.0)	($155,359)			($155,359)
Science Facilities Lease Payment Adjustment		($1,921)			($1,921)
Critical Deferred Maintenance Lease Payment Adjustment		($3,870)			($3,870)
ADRDL Lease Payment Adjustment		$1,087			$1,087
HEFF Match Reduction		($1,632,999)			($1,632,999)
HEFF M&R Authority				$261,970	$261,970
HEFF Lease Payment Authority				$1,113,881	$1,113,881
South Dakota Opportunity Scholarship Base Reduction		($468,767)			($468,767)
Expenditure Authority*	64.0		$5,615,000	$9,202,393	$14,817,393
Total Change	35.5	($4,609,112)	$5,615,000	$10,578,244	$11,584,132
FY10 Recommendation	5,601.0	$180,609,784	$124,229,566	$323,451,251	$628,290,601

*Includes $8,000,000 reduction in 'other' spending authority for one-time REED purchases.

Change between Governor's Original and Revised Recommended Budgets					
Original FY10 Recommended Budget	5,632.5	$188,745,321	$124,959,473	$325,896,476	$639,601,270
Revised FY10 Recommended Budget	5,601.0	$180,609,784	$124,229,566	$323,451,251	$628,290,601
Change	**(31.5)**	**($8,135,537)**	**($729,907)**	**($2,445,225)**	**($11,310,669)**
Percent Change	**-0.56%**	**-4.31%**	**-0.58%**	**-0.75%**	**-1.77%**

SOUTH DAKOTA BOARD OF REGENTS
JOINT APPROPRIATIONS COMMITTEE BUDGET REQUEST HEARINGS
JANUARY 2009

FY10 Budget Request and Governor's Recommendation
By Fund Source

	General	Federal	Other	FTE	General	Federal	Other	FTE
FY09 Base	$185,218,896	$118,614,566	$312,873,007	5,565.5	$185,218,896	$118,614,566	$312,873,007	5,565.5
	Board's Base Requests				**Governor's Recommendation**			
Utilities Increase	$2,491,252			0.0	$1,152,717			0.0
Financial Support Staff	$538,911			9.0				0.0
OE Inflationary Increase	$2,863,959			0.0				0.0
Student Growth Support	$2,356,128			0.0				0.0
Outreach Vision Consultants	$116,409			2.0				0.0
Institutional Base Reductions	$0			0.0	($500,000)			(1.5)
Cooperative Extension Service Program Restructure	$0			0.0	($1,000,000)			0.0
South Dakota School for the Deaf Restructure	$0			0.0	($2,000,000)			(25.5)
HEFF Match to achieve 2% of M&R Replacement Values	$1,638,897			0.0	($1,632,999)			0.0
West River Higher Education Center	$1,228,573			0.0				0.0
Science Facilities Lease Payment Adjustment	($1,921)			0.0	($1,921)			0.0
Crititcal Deferred Maintenance Lease Payment Adjustment	($3,870)			0.0	($3,870)			0.0
ADRDL Lease Payment Adjustment	$1,087			0.0	$1,087			0.0
REED Research Technicians and Network Director	$270,979			3.0				0.0
REED Equipment and Network Operations Support	$682,945			0.0				0.0
REED Equipment and Network Operations Support - One-Time	$258,161							
REED Data Center Technical Support	$0			0.0	($155,359)			(2.0)
Mobile Computing - Network and Equipment Upgrades	$1,015,352			0.0				0.0
Mobile Computing - Technical Support Staff	$1,533,918			26.0				0.0
Mobile Computing - Faculty Development and Retraining	$1,229,899			17.0				0.0
Human Research Capacity	$2,659,075			16.5				0.0
Human Research Capacity - One-Time	$1,500,000							
Education Outreach	$146,502			1.0				0.0
Simulated Science Program	$199,868			6.0				0.0
Institute for Prof Ed In Deep Underground Sci & Eng	$203,428			6.0				0.0
Master of Social Work	$474,500			4.8				0.0
South Dakota Opportunity Scholarship[2]	$1,955,841				($468,767)			
HEFF Maintenance and Repair Authority			$261,970	0.0			$261,970	0.0
HEFF Lease Payment Authority			$1,113,881	0.0			$1,113,881	0.0
Federal and Other FTE Authority[1]		$5,615,000	$17,202,393	64.0		$5,615,000	$9,202,393	64.0
Total Change	$23,359,893	$5,615,000	$18,578,244	155.3	($4,609,112)	$5,615,000	$10,578,244	35.0
Percentage Increase	12.6%	4.7%	5.9%	2.8%	-2.5%	4.7%	3.4%	0.6%
	General	**Federal**	**Other**	**FTE**	**General**	**Federal**	**Other**	**FTE**
FY10 Request/Recommended	$208,578,789	$124,229,566	$331,451,251	5,721	$180,609,784	$124,229,566	$323,451,251	5,601

(1) Other authority was reduced by $8M related to REED authority no longer needed.
(2) General Fund Base was reduced but need will be met from the Dakota Cement Trust Fund.

South Dakota Board of Regents
Joint Appropriations Committee
Budget Request Hearings

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Base Budget Maintenance

YOUR FUTURE IS HERE. South Dakota Board of Regents

Fiscal Year 2010
Budget Request

Base Budget Maintenance
Utilities Increase

Requested Base General Funds	$2,491,252
Requested FTE	0.0
Governor Recommended	$1,152,717
Governor Recommended FTE	0.0

What is the goal?

The goal is to provide the necessary funding to cover the increase in utility costs for academic facilities from FY09 to FY10.

Why is this important to higher education and the state of South Dakota?

The increased costs to light, heat and cool our facilities continue to eat away at agency budgets. This is especially true for agencies with expansive facilities like the university system and the two special schools. Keeping up with the growing utility budgets will be a major budget issue in the coming session.

Historically, natural gas prices have mirrored oil prices and with oil prices repeatedly setting new average highs across the nation, natural gas prices are expected to follow. Coupled with high prices, increased demand is another major factor in expected price hikes. Michele Farris, South Dakota's statewide energy manager, is indicating an expected price jump of 40% in FY09 and an additional 5% for FY10. For electrical rates, Ms. Farris also expects a 22% increase for FY09 and an additional 13% increase for FY10 based on information she has received from Western Area Power Administration (WAPA).

The Board of Regents system utility budget provides heating fuels, sewer, water and electricity to the two special schools and the academic facilities at the universities. Revenue facilities such as student unions and residential facilities must generate sufficient revenues to pay the utilities.

Over the past few years, the State has recognized that utility cost increases are a significant issue and has addressed the need with periodic increases. The Board's utility budget was increased by $40,000 in FY01, $313,690 in FY02, $647,329 in FY06, $850,609 in FY07, $2,042,163 in FY08, and $302,144 in FY09. The FY10 budget stands at $7,269,781. The increases have primarily been tied to specific rate increases, usually for electricity and natural gas - the two largest components of the budget. Once again, the utility cost increase is a significant issue that must be addressed in order to preserve the instructional budgets at their current level.

What is the financial structure of this request?

With the understanding that utility increases are negatively affecting all State agency budgets, the Bureau of Finance and Management (BFM) has developed a standard procedure for calculating heating fuel and electricity increase requests. The formula considers the State Engineer's expected utility increases for FY09 and FY10 along with the number of heating and cooling degree days in relation to the FY08 usage amounts normalized for weather. Assuming natural gas usage is 90% related to the weather while 60% of electricity usage can be attributed

to the weather, normalizing usage amounts partially eliminates the drastic effect extreme temperatures may have over a single heating or cooling season. This year, weather normalization is a minor factor in the calculation as temperatures in both the summer and winter months were very near the 30 year average for FY08.

Using the methodology prescribed by BFM for determining our request, the utility request for FY10 is $2,491,252, the difference between the budgeted expenditures from FY09 to the FY10 estimated costs in heating fuels and electricity. The FY09 budgeted projections assumed a 10% increase for heating fuels and an 8% increase for electricity. The increases for FY09 were then revised to 40% and 22%! FY10 increases were projected to be 5% for heating fuels and 13% for electricity. While the budget projections seem astonishing, they represent a 45% increase in natural gas and a 35% increase in electricity cost over FY08.

The following table summarizes the components of the request by fiscal year, projection and projection date:

	Natural Gas	Electricity
FY09 Projection in 2007	10%	8%
FY09 Projection in 2008	40%	22%
FY10 Projection in 2008	5%	13%

The following table identifies the request amounts for electricity and heating fuels by campus.

FY10 Request	**BHSU**	**DSU**	**NSU**	**SDSM&T**	**SDSU**	**USD**	**SDSBVI**	**SDSD**	**Total**
Heating Fuels	$84,247	$59,815	$131,600	$179,985	$703,027	$338,617	$15,122	$28,502	$1,550,212
Electricity	$80,939	$28,312	$54,967	$164,598	$353,378	$241,893	$7,712	$18,538	$950,337
Total	**$165,186**	**$88,127**	**$186,567**	**$344,583**	**$1,056,405**	**$580,510**	**$22,834**	**$47,040**	**$2,491,252**

Academic Facility Utility Budget and Expense Summary

The table on the following page shows actual utility expenses and budgets for all Board of Regents academic buildings for FY01 through FY08 and projected utility budgets based on flat usage and the State Engineer's projected rates for FY09 and FY10 as of August of 2008.

Base Budget Maintenance
Utilities Increase

	BHSU	DSU	NSU	SDSM&T	SDSU	USD*	SDSD	SDSBVI	BOR Pool	Total
FY10 Budget	$598,493	$335,867	$656,296	$804,034	$2,616,029	$1,938,191	$149,174	$82,397	$89,299	$7,269,780
FY10 Est. Expenditures	$754,212	$382,980	$783,599	$1,245,446	$4,032,613	$2,736,835	$166,430	$128,148	$89,299	$10,319,562
Utility Surplus/Deficit	($155,719)	($47,113)	($127,303)	($441,412)	($1,416,584)	($798,644)	($17,256)	($45,751)		($3,049,782)
FY09 Budget	$598,493	$335,867	$656,296	$804,034	$2,616,029	$1,938,191	$149,174	$82,397	$89,299	$7,269,780
FY09 Est. Expenditures	$589,026	$294,853	$597,032	$900,863	$2,976,208	$2,156,325	$143,596	$81,108	$89,299	$7,828,310
Utility Surplus/Deficit	$9,467	$41,014	$59,264	($96,829)	($360,179)	($218,134)	$5,578	$1,289		($558,530)
FY08 Budget	$573,313	$321,736	$628,684	$770,206	$2,505,965	$1,856,646	$142,898	$78,930	$89,299	$6,967,677
FY08 Expenditures	$563,846	$280,722	$569,420	$867,035	$2,866,144	$2,074,780	$137,320	$77,641	$89,299	$7,526,207
Utility Surplus/Deficit	$9,467	$41,014	$59,264	($96,829)	($360,179)	($218,134)	$5,578	$1,289		($558,530)
FY07 Budget	$492,739	$180,066	$365,116	$640,635	$1,846,560	$1,143,712	$106,882	$60,505	$89,299	$4,925,514
FY07 Expenditures	$419,030	$282,266	$634,383	$652,506	$2,979,456	$1,715,667	$120,103	$74,168	$89,299	$6,966,878
Utility Surplus/Deficit	$73,709	($102,200)	($269,267)	($11,871)	($1,132,896)	($571,955)	($13,221)	($13,663)		($2,041,364)
FY06 Budget	$486,487	$146,964	$291,732	$548,293	$1,439,636	$931,660	$89,086	$51,748	$89,299	$4,074,905
FY06 Expenditures	$450,917	$261,683	$623,840	$827,010	$2,719,473	$1,654,020	$127,820	$71,113	$89,299	$6,825,175
Utility Surplus/Deficit	$35,570	($114,719)	($332,108)	($278,717)	($1,279,837)	($722,360)	($38,734)	($19,365)		($2,750,270)
FY05 Budget	$474,423	$109,825	$236,373	$513,711	$1,190,351	$691,962	$74,252	$47,380	$89,299	$3,427,576
FY05 Expenditures	$480,845	$245,437	$452,803	$650,964	$2,058,977	$1,326,464	$120,652	$64,666	$89,299	$5,490,107
Utility Surplus/Deficit	($6,422)	($135,612)	($216,430)	($137,253)	($868,626)	($634,502)	($46,400)	($17,286)		($2,062,531)
FY04 Budget	$474,423	$109,825	$236,373	$513,711	$1,190,351	$691,962	$74,252	$47,380	$89,299	$3,427,576
FY04 Expenditures	$434,128	$203,717	$372,112	$577,803	$1,973,508	$1,048,694	$110,028	$52,050	$89,299	$4,861,339
Utility Surplus/Deficit	$40,295	($93,892)	($135,739)	($64,092)	($783,157)	($356,732)	($35,776)	($4,670)		($1,433,763)
FY03 Budget	$474,423	$109,825	$236,373	$513,711	$1,190,351	$691,962	$74,252	$47,380	$89,299	$3,427,576
FY03 Expenditures	$368,784	$204,338	$392,070	$498,740	$1,853,886	$990,840	$102,850	$52,787	$89,299	$4,553,594
Utility Surplus/Deficit	$105,639	($94,513)	($155,697)	$14,971	($663,535)	($298,878)	($28,598)	($5,407)		($1,126,018)
FY02 Budget	$499,158	$119,125	$266,573	$538,775	$1,190,351	$691,962	$74,252	$47,380		$3,427,576
FY02 Expenditures	$342,446	$154,979	$307,746	$453,930	$1,741,337	$849,691	$83,987	$51,157		$3,985,273
Utility Surplus/Deficit	$156,712	($35,854)	($41,173)	$84,845	($550,986)	($157,729)	($9,735)	($3,777)		($557,697)
FY01 Budget	$422,268	$119,125	$266,573	$301,975	$1,190,351	$691,962	$74,252	$47,380		$3,113,886
FY01 Expenditures	$518,110	$170,434	$302,896	$499,559	$1,573,310	$991,866	$111,702	$68,228		$4,236,105
Utility Surplus/Deficit	($95,842)	($51,309)	($36,323)	($197,584)	($382,959)	($299,904)	($37,450)	($20,848)		($1,122,219)

* Starting in FY02, USD uses $191,000 of utility savings to pay the Dakota Dome bond payment; this is reflected in the expenses.

What has changed since the Board's request?

Due to greatly fluctuating utility prices, the Office of the State Engineer revised projections in early November 2008. FY09 heating fuels are expected to increase only 10% instead of the originally projected 40%. The Board of Regents utility request was based on the original 40% increase.

What is the Governor's recommendation?

The Governor is recommending an increase of $1,152,717 for FY10 utility funding.

Base Budget Maintenance
Financial Support Staff

Requested Base General Funds	$539,911
Requested FTE	9.0
Governor Recommended	$0
Governor Recommended FTE	0.0

What is the goal?

The goal of adding financial support staff is to provide the universities and Board Office with the support necessary to effectively operate in a changing environment. Additional resources are imperative to continue to meet the increased demands from State agencies and to provide the necessary resources to produce timely financial information to management and the State.

Why is this important to higher education and the state of South Dakota?

Recent changes in regulations and reporting requirements have added significant workload to already overburdened financial staffs. Because the finance area has inflexible deadlines, adding more work often means pushing off tasks or working longer hours. While often able to absorb requests to changing workloads, the cumulative effect of the current demands is quickly becoming unmanageable and in areas that do not allow room for relaxed deadlines. Although each campus has unique needs, most share common problematic areas that have recently made this demand more identifiable. While many factors persist, the following are recent and major culprits driving the immediate need for increased staff:

- BFM has dictated the requirement to create budgets and manage them at the sub-object level. While this requirement yields no increased productivity for Regental operations, the level of detail demands a substantially greater time commitment. Prior to FY07, the Board did not even provide expense information to the State at the sub-object level. With implementation of Banner, we now provide sub-object expense information as incurred. In addition to developing budgets significantly more detailed, managing and maintaining the budgets also requires vast amounts of additional time. These time demands become clear when dealing with all aspects of budgeting, including budget transfers and realignments. In a simple object level example, the general fund budget would have seven lines per university – salaries, benefits, travel, contractual services, supplies and materials, grants and capital assets. At the sub-object level, that amount is now over 100-300 lines of information. When considering all fund sources the detail is overwhelming. In a department that was shorthanded prior to adding duties, greater demands often produce poor quality work and missed deadlines.

- Statewide financial statements, specifically policy development, enforcement, monitoring, trend analysis, combining statement coordination, and the timely completion of the financial statements has also recently received greater attention. A list of audit findings has indicated that most universities need greater attention in preparation and coordination of the financial statements. In part, some of the comments are a direct result of being understaffed in the finance departments. The recommended changes can't be addressed without additional staffing. The importance of making these changes should not be underestimated as not meeting deadlines and demands jeopardizes the State's bond

rating and federal fund eligibility. The Board of Regents was a major area of concern this past fiscal year and comments have indicated the deadlines could become tighter. A shorter time frame to complete the financial statement process could only be achieved with additional resources.

- SAS 112 establishes standards, responsibilities and guidance for auditors during a financial statement audit engagement for identifying and evaluating a client's internal control over financial reporting. This new standard removes DLA from their support role thus increasing the importance of local oversight of internal controls and financial statement preparation. The institutions must take a more vested role in the work leading up to and in preparation of the financial statements. This shift in duties will further increase the demand for finance staff in all business offices across the Board of Regents.

What is the financial structure of this request?

The Board of Regents is requesting 9.0 FTE and $539,361 in total. Each university, the Medical School, AES/CES and the Board Office would receive 1.0 FTE in this plan.

	Per FTE	9.0 FTE
Salary	$45,000	$405,000
Benefits	$12,379	$111,411
OE	$2,500	$22,500
Total Request	$59,879	$538,911

As mentioned, each university does have similar needs but has outlined a plan for this support staff to give a broader perspective of individual needs.

Black Hills State University

- Attention needs to be paid to the preparation of financial statements throughout the year, making sure that data is entered correctly into Banner to allow the reports to be pulled with accuracy.
- The sub-object detail needed in the budget analysis and the complex links to HR and Finance have increased the time and effort needed in the Budget Office.
- Reporting.
- Additional training.
- Assistance in maintaining two accounting systems as the complexity of our funding and mapping to MSA is difficult and requires a number of entries to keep both in balance.

Dakota State University

- Statewide financial statements are certainly not where they need to be. Even without the changes as a result of SAS 112, we would need additional staff to meet a more reasonable timeline (perhaps CAFR-Comprehensive Annual Financial Report, out by Jan/Feb). Should the CAFR need to be out by fall, we will definitely need more staff, training, expertise, etc.

- With more data available with newer and more robust systems, the demand on the business offices is not less, but rather more. We have more requests for information from the BOR, BFM, LRC, Governor's Office, etc. This is a trend in all of state government, not just the universities.

Northern State University

- Northern has been budgeting at the object level for several years and could continue to manage at that level with existing staff. However, to manage budgets at the sub-object level and possibly at the NACUBO program level will increase the workload to a level that existing staff simply cannot possibly absorb. The existing account structure consists of approximately 60 codes for salaries, labor and benefits and approximately 500 codes for travel, contractual services, supplies, grants and contracts and capital assets. The university has multiple fund sources to manage at the campus level. These fund sources are currently reported on the state accounting system in seven separate Companies. Budgets are now loaded at the sub-object level in five of those companies. In the former environment, for each of those budgeted companies we may have up to seven budget entries (salaries, benefits, travel, contractual services, supplies, grants & subsidies, and capital assets) for a maximum of 35 budget lines. To accommodate the change to sub-object budgeting, for operating expenses alone, the budget entries could number 2000 or more. If budgeting by the nine NACUBO programs is added, the number of potential budget entries could be well over 10,000 lines just for NSU!

- Adding to the enormous amount of effort that this change would require, is the time frame in which the work needs to be completed. In order to prepare accurate financial statements, we need time at the beginning of July to accumulate accrual information for the previous year. Posting the accrual information affects the available budget in grant funds which affects our ability to finalize the operating budget for restricted funds. Final budgets are due by mid July. We believe that by shortening up the accrual period from what it was in the past, we will be able to meet that deadline. However, in the future if we are required to provide budget information at the sub-object level by program meeting that deadline while preserving the accuracy of financial reporting could become problematic and certainly not something that existing staff would be able to accommodate.

- Financial statement preparation is another area that has become much more complex in recent years. It is important that more time be devoted to monitoring internal controls on campus, establishing and reviewing policies and insuring that financial statements are prepared timely and accurately and include proper note disclosure. In addition, the annual NCAA report filed by the institution is a complex document that requires a significant amount of time and effort. This report will now be reviewed every three years by DLA so it is imperative that procedures are in place to insure the accuracy of this report.

- Although it seems that the intent of technology is to improve the work environment, in reality it appears that it only tends to increase the demands for information. As a result,

the increase in technology has only increased existing workloads to a point that can no longer be accommodated by existing staff.

South Dakota School of Mines & Technology

SDSM&T requests an additional FTE for a Senior Accounting Clerk. This request is necessitated by increased monitoring and requests for ever greater detail from the Board of Regents and the State of South Dakota. Fortunately, the Banner system is enabling us to gather more detailed information than ever before. We are, however, still developing the methods to extract that data. We require additional staff to meet the immediate demands during this development stage. Thereafter, the additional FTE will give us the manpower we need to take advantage of the information captured by the HR/FIS system, allowing us to provide a higher level of service with much-needed management reporting and analysis. The duties partially include the following:

- Assistance and backup to the preparation of university and state-wide financial statements, creation of the supporting financial statement detail including financial aid numbers, calculation of scholarship allowance, the Internal Management Report, etc.

- Various upper level accounting functions such as process approvals, create new accounts, calculate equipment use rates, and perform monthly reconciliations on all funds.

South Dakota State University

In addition to the 1.0 FTE request for SDSU Finance Support Staff, there is an additional need of for both AES and CES Finance Support functions. We are finding that these agencies are not adequately equipped to address the increased financial support needs of their users. Adding this additional support would help these agencies address the more specific Finance Support needs for their agencies and end-users. Some of the following duties performed as summarized include:

- The Board of Regents accounting software system (Banner) has necessitated many changes in policies and procedures as Finance processes and functions have changed with the new software. This position would help support development and revision of written policies and procedures for SDSU Finance processes.

- Campus end users continue to struggle with learning and understanding the Banner system. While we continue to work toward improving end user knowledge and understanding through ongoing training, there still is a significant need for support to help end users understand and interpret financial data in the new system. This position would help support and answer end user questions concerning financial data in order to help them better manage their operations.

- As indicated by the FY2007 audit comments, individuals involved with the preparation of external financial reports need more training and support to properly prepare the financial statements on a timely basis. This position would help with the needed training as well as provide additional support for the actual preparation of the external reports.

- SAS 112 requires more campus responsibility and oversight for the accurate preparation of financial statements. This position would help provide required analysis and support to ensure adequate management oversight of financial reporting.

- Sub-object budgeting required by the Bureau of Finance and Management has added significant complexity to budget development, budget transfers, budget reporting, budget monitoring, and budget reconciliation between the Banner system and the State Accounting System budgets. This position would help provide support toward these needs.

University of South Dakota

The University of South Dakota and Sanford School of Medicine currently post budgets at the "object" level. The primary object level categories are salaries, benefits, travel, contractual services, supplies and materials, grants and subsidies, and capital assets. Sub-objects are the detail within an object/major category. There can be over 100 sub-objects within an object as is the case within the supplies and materials category. For example, previously the budget amount was posted for the supplies and materials object, with the change to sub-object budgeting, the budget would be posted by sub-object such as lab supplies, educational supplies, postage, paper, etc., within the supplies and materials object. Posting budgets at the sub-object level significantly increases the information that must be gathered, reviewed, and prepared in the budget development process.

SAS 112 significantly changes what will now be considered a finding in the audit of the financial statements. SAS 112 does not change the scope of the audit, but rather requires greater scrutiny of the internal controls over financial reporting. There has been a change in the definitions of what was termed reportable conditions and material weaknesses. SAS 112 provides modified and new definitions to include: 1) control deficiency, 2) significant deficiency, and 3) material weakness. Previously, material weaknesses and reportable conditions were generally "communicated" during the audit process. The new definitions focus less on materiality, and more on prevention or detection and the potential impact on the financial statements rather than the actual impact on the financial statements.

The new definitions are reported in the form of a written finding and may result in an increase in the number and type of findings in the audit report. With the potential for increased audit findings, there is a potential for adverse audit opinions. Adverse audit opinions could impact the university's ability to attract external funding, negatively impact bond ratings, and the frequency of granting agency audits (e.g. federal audits) which result in significantly heavier workloads. The university wants to avoid negative audit findings.

The new position would be responsible for the following:

- Identify and document the key internal controls that support financial policies, procedures and processes.
- Review the key elements of revenues and expenses and determine areas of greatest risk. Evaluate the internal controls surrounding these key elements and associated processes. Implement control improvements if needed.

- Review balance sheet accounts such as movable equipment, cash, accruals, etc., and document controls. Evaluate the internal controls, and implement improvements if needed.
- Establish a communication plan for our campus, informing key financial and non-financial personnel on the actions being taken to strengthen internal controls.
- Develop and implement an action plan for fiscal year close and timely financial statement preparation.
- Train and prepare key financial personnel on their role in the financial statement preparation.
- Act as a liaison between external auditors and departments.
- Manage and monitor key verifications required by SAS 112 such as evidence of department verification of general ledger activity and payroll expense.

The implementation of the new financial and human resource information system has proven to be a significant improvement over the previous system. However, with the new system, reports that were previously readily available must be developed and delivered. While much of the report writing must be done from an information technology position, the development of the reports starts with the content experts. Successful report development of financial reports will require the involvement of finance employees familiar with the types and variety of reports for effective management of the units of the University of South Dakota and Sanford School of Medicine. To-date, the University of South Dakota and the Sanford School of Medicine rely heavily on raw data manipulation and ad hoc reporting. While functional for central units, it does not address the needs beyond the Finance office, nor is it the most effective means of producing reports. Initially, the new position would be charged with developing the core reports. When those reports are developed and delivered, this position would provide or lead the development of ad hoc reporting requirements.

Board of Regents Executive Director's Office

- The move to sub-object budgeting has added a whole new complexity to the budget development, transfers, maintenance and operating budget reports.
- Need to focus on the statewide financial statements including policy development, enforcement, monitoring, trend analysis and reasonableness tests, preparation and completion of the combing statements.
- SAS 112 removes DLA from their support role and requires more local oversight of internal controls and financial statement preparation.
- Management support for data requests from state agencies.

What is the Governor's recommendation?

The Governor is not recommending any new financial support staff.

Base Budget Maintenance
Operating Expense Inflationary Increase

Requested Base General Funds	$2,863,959
Requested FTE	0.0
Governor Recommended	$0
Governor Recommended FTE	0.0

What is the goal?

The goal is to maintain the purchasing power of general funds provided to the campuses for operating expenses (OE) in order to keep pace with inflationary cost increases in travel, contractual services, supplies and materials and capital assets.

Why is this important to higher education and the state of South Dakota?

When the Board and Legislature agreed to eliminate the instructional formula in FY98 as a funding mechanism and move to the Funding Framework, it was agreed that the value of the base dollars would be preserved through annual adjustments for inflation. The Board has requested appropriations for new initiatives and inflation adjustments since that time. The appropriations have not reflected the impact of inflation on the base dollars. To maintain the purchasing power of appropriated dollars and stabilize budgets, inflation must be recognized as a real cost.

Inflation on Campus

The operating expense budgets of the system are used to purchase non-personnel services items. These dollars are used for purchasing instructional supplies including desks, lab equipment, computers, printers, and any other resources consumed in the classroom, laboratory, library, and other support areas. Student and faculty travel related to faculty development, recruiting, and clinical travel expenses make up a smaller and smaller portion of OE as resources are depleted. Office supplies, including printer toner, paper, forms, calculators and furnishings are part of supplies and materials beyond instructional supplies. Cleaning supplies, building supplies and grounds maintenance materials are included in supplies and materials. Contracted services may include dollars used to pay consultants, leases on copiers, phone service, internet services and so forth. With the realization that inflation does exist and the resulting loss of purchasing power, the campuses have been forced to reduce supply purchases for classes and severely limit opportunities for faculty and staff to attend relevant conferences that are important for networking, staying current in their field, and presenting their publishings and research to other educators and agencies. The state general fund OE budgets of the campuses have been virtually stagnant for the last decade. Unfortunately, the cost of instructional and administrative supplies, library books and technology needs have not stood still.

Library Budgets Stagnant and Decreasing

A major component of OE dollars for the universities are funds used to buy books, periodicals, subscriptions, audio and video materials and more and more electronic databases. While it's documented that library budgets are not keeping pace with inflation, the problem is compounded when publishing costs outpace inflation. In FY08 alone, U.S. periodical costs increased by 8 percent. The result is a reduction in the number and quality of subscriptions, databases and

printed materials. Some printed materials are being replaced by gaining access to electronic databases but the costs of the databases are significant. In a day when efforts are focused on research, one goal should be increasing our library resources. Recently, we have not only failed to grow the library resources, but have been forced to make significant reductions.

Summary

Ten fiscal years have elapsed since the elimination of the instructional formula in FY98. The cumulative inflation effect totals a staggering 27.3% over that time. Most OE cost increases have been pushed onto students or services have been reduced. The campuses have also delayed purchases for needed equipment. The general fund OE inflationary squeeze has had a significant operational impact. Aging equipment, lack of funding for student and faculty travel for training and development, decreasing library materials, and reduced service levels are all a result of the loss in purchasing power on the operations budget.

What is the financial structure of this request?

The Board is requesting $2,863,959 of funding to make the OE budget whole in relation to the FY98 OE general funds. The following table summarizes the effect of inflation on the OE budget and recognizes the appropriated increases for OE maintenance. The second table summarizes the request by fiscal year and includes dollars lost due to compounding inflation. The third table indicates how the distribution by campus was calculated. Utilities are excluded from the OE base as they have been addressed separately in this request and by the legislature.

	Personal Services	Operating Expenses	Totals
FY99 PS Operating Base	$101,766,351		$101,766,351
FY99 OE Operating Base		$15,001,555	$15,001,555
Utilities Budget		($3,073,886)	$116,767,906
OE Base		$11,927,669	
OE Inflation		1.7%	
Maintenance Funding Need		$202,770	
Appropriated Increases for Maintenance:			
State Billings		($107,715)	
Unfunded or (Overfunded) Maintenance Need		$95,055	

FY00 PS Operating Base	$106,947,646		$106,947,646
FY00 OE Operating Base		$14,085,325	$14,085,325
Utilities Budget		($3,073,886)	$121,032,971
OE Base		$11,011,439	
OE Inflation		2.9%	
Maintenance Funding Need		$319,332	
Appropriated Increases for Maintenance:			
		$0	
Unfunded or (Overfunded) Maintenance Need		$319,332	

FY01 PS Operating Base	$113,075,852		$113,075,852
FY01 OE Operating Base		$12,371,273	$12,371,273
Utilities Budget		($3,113,886)	
OE Base		$9,257,387	$125,447,125
Inflation		3.4%	
Maintenance Funding Need		$314,751	
Appropriated Increases for Maintenance:			
Bank Charges		($35,000)	
Unfunded or (Overfunded) Maintenance Need		$279,751	

Base Budget Maintenance
Operating Expense Inflationary Increase

FY02 PS Operating Base (1)	$117,676,977		$117,676,977
FY02 OE Operating Base		$14,005,278	$14,005,278
Utilities Budget		($3,427,576)	$131,682,255
OE Base		$10,577,702	
Inflation		1.8%	
Maintenance Funding Need		$190,399	
Appropriated Increases for Maintenance:			
State Billings		($113,462)	
Special Schools OE		($24,000)	
Unfunded or (Overfunded) Maintenance Need		$52,937	

FY03 PS Operating Base	$124,903,330		$124,903,330
FY03 OE Operating Base		$13,313,450	$13,313,450
Utilities Budget		($3,427,576)	$138,216,780
OE Base		$9,885,874	
Inflation		2.2%	
Maintenance Funding Need		$217,489	
Appropriated Increases for Maintenance:			
		$0	
Unfunded or (Overfunded) Maintenance Need		$217,489	

FY04 PS Operating Base	$128,968,929		$128,968,929
FY04 OE Operating Base		$12,910,510	$12,910,510
Utilities Budget		($3,427,576)	$141,879,439
OE Base		$9,482,934	
Inflation		2.2%	
Maintenance Funding Need		$208,625	
Appropriated Increases for Maintenance:			
State Billings		($158,424)	
Unfunded or (Overfunded) Maintenance Need		$50,201	

FY05 PS Operating Base	$134,699,305		$134,699,305
FY05 OE Operating Base		$14,873,675	$14,873,675
Utilities Budget		(3,427,576)	
SD Opportunity Scholarship		($1,300,000)	$149,572,980
FY05 OE Adjusted Base		$10,146,099	
Inflation		3.0%	
Maintenance Funding Need		$304,383	
Appropriated Increases for Maintenance:			
		$0	
Unfunded or (Overfunded) Maintenance Need		$304,383	

FY06 PS Operating Base	$139,919,577		$139,919,577
FY06 OE Operating Base		$14,240,936	$14,240,936
Utilities Budget		($4,074,905)	
SD Opportunity Scholarship		($113,875)	$154,160,513
FY06 OE Adjusted Base		$10,052,156	
Inflation		3.8%	
Maintenance Funding Need		$381,982	
Appropriated Increases for Maintenance:			
Unfunded or (Overfunded) Maintenance Need		$381,982	

Base Budget Maintenance
Operating Expense Inflationary Increase

FY07 PS Operating Base	$143,409,349		$143,409,349
FY07 OE Operating Base		$19,472,623	$19,472,623
Utilities Budget		($4,925,514)	
SD Opportunity Scholarship		($974,204)	$162,881,972
MED School Contracts Earning Salary Policy		($2,220,944)	
FY07 OE Adjusted Base		$11,351,961	
Inflation		2.60%	
Maintenance Funding Need		$295,151	
Appropriated Increases for Maintenance:			
Library Funding		($482,632)	
Unfunded or (Overfunded) Maintenance Need		($187,481)	

FY08 PS Operating Base	$149,714,354		$149,714,354
FY08 OE Operating Base		$24,714,934	$24,714,934
Utilities Budget		($6,967,677)	
SD Opportunity Scholarship		($2,412,615)	$174,429,288
MED School Contracts Earning Salary Policy		($2,298,887)	
FY08 OE Adjusted Base		$13,035,755	
Inflation		3.70%	
Maintenance Funding Need		$482,323	
Appropriated Increases for Maintenance:			
Unfunded or (Overfunded) Maintenance Need		$482,323	

FY09 PS Operating Base	$155,134,942		$155,134,942
FY09 OE Operating Base		$30,083,954	$30,083,954
Utilities Budget		($7,269,781)	
SD Opportunity Scholarship		($2,412,615)	$185,218,896
Science Facilities		($2,306,300)	
HEFF Match to 2% of M&R Replacement		($1,632,999)	
HEFF Critical M&R Bonding		($437,401)	
MED School Contracts Earning Salary Policy		($2,354,200)	
FY09 OE Adjusted Base		$13,670,658	
Estimated Inflation		5.80%	
Maintenance Funding Need		$792,898	
Appropriated Increases for Maintenance:			
Unfunded or (Overfunded) Maintenance Need		$792,989	

	Unfunded or (Overfunded) Maintenance Need	Inflation	Fiscal Year Inflation	Cumulative Total
FY99	$95,055	NA	NA	$95,055
FY00	$319,332	2.9%	$2,757	$417,144
FY01	$279,751	3.4%	$14,183	$711,077
FY02	$52,937	1.8%	$12,799	$776,814
FY03	$217,489	2.2%	$17,090	$1,011,393
FY04	$50,201	2.2%	$22,251	$1,083,844
FY05	$304,383	3.0%	$32,515	$1,420,743
FY06	$381,982	3.8%	$53,988	$1,856,713
FY07	($187,481)	2.6%	$48,275	$1,717.507
FY08	$482,323	3.7%	$31,880	$2,222,285
FY09	$792,989	5.8% (est.)	$113,531	**$2,863,959**

Base Budget Maintenance
Operating Expense Inflationary Increase

The dollars would be distributed to the institutions based on the FY09 general fund budgets as follows:

	FY09 Budget	% of Total Expenses	Distribution
BHSU	$8,415,041	4.99%	$142,922
DSU	$8,421,577	4.99%	$143,033
NSU	$12,178,014	7.22%	$206,833
SDSM&T	$15,064,058	8.93%	$255,850
SDSU	$46,217,693	27.41%	$784,968
CES	$8,550,701	5.07%	$145,226
AES	$10,806,105	6.41%	$183,533
USD	$34,014,143	20.17%	$577,701
USD - Med School	$18,548,345	11.00%	$315,028
SDSD	$3,725,790	2.21%	$63,279
SDSB&VI	$2,683,922	1.59%	$45,584
			$2,863,959

While the request is based on historical OE budgets, a decision was made to allocate funds using the entire general fund operating budgets. This request was calculated over an eleven year period where operating expenses tend to fluctuate for a variety of reasons. Using the entire operating budget as a distribution method is a more consistent approach.

What is the Governor's recommendation?

No increase was recommended for stabilizing the operating expense fund base.

Base Budget Maintenance
Student Growth Support

Requested Base General Funds	$2,356,128
FTE	0.0
Governor Recommended	$0
Governor Recommended FTE	0.0

What is the goal?

The goal is to provide additional state support to address the enrollment growth over the last ten years.

Why is this important to higher education and the state of South Dakota?

When the formula was eliminated in FY98 it was agreed that we would get inflation on the base operating budget to maintain its value. This has not happened and at the same time we have grown in the number of state-support students served from 20,676 in fall of 1998 to 21,648 in fall of 2007. This is an increase of 972 students for which we have received no additional funding from the state.

If we look at the value of a student in the instructional formula it was around $4,848 per student FTE. Approximately one-half of the formula was supported with tuition dollars while the other half was general funds. If we assume that each student would have generated an additional $2,424 in state funding support, we are now short $2,356,128. These dollars are needed to maintain the instructional budgets of the institutions and maintain quality instruction. When dollars run short in instruction, classes are either cut making it more difficult to get needed classes, or institutions hire part-time instructors or graduate assistants to teach the courses. We currently have 1,450 faculty that are 0.5 FTE or more and another 934 part-time and adjunct faculty. We are better served over the long-term to hire full-time faculty that are committed to scholarship, teaching and hopefully research. We also have better control over content delivery and quality of our courses using permanent faculty. While we have many wonderful instructors that teach part-time, we want to have a good balance.

What is the financial structure of this request?

The dollars should be used where the activity is – instruction. We would propose that the dollars be allocated back to the institutions based on their Program 01 – Instruction budgets. The dollars would be used to replace part-time instructors and adjuncts with full-time faculty members. The following table identifies the allocation of the dollars based on general and tuition dollars in Program 01 Instruction.

	FY09 GF Program 01 Budget	FY09 T&F Program 01 Budget	Combined FY09 Budgets	Percent of Total Budget	Distribution of Request
BHSU	$2,045,492	$5,257,841	$7,303,333	5.7%	$135,369
DSU	$2,756,553	$3,320,348	$6,076,901	4.8%	$112,637
NSU	$4,214,523	$3,708,015	$7,922,538	6.2%	$146,846

Base Budget Maintenance
Student Growth Support

(cont'd.)

	FY09 GF Program 01 Budget	FY09 T&F Program 01 Budget	Combined FY09 Budgets	Percent of Total Budget	Distribution of Request
SDSM&T	$6,918,811	$4,534,229	$11,453,040	9.0%	$212,285
SDSU	$23,817,342	$22,413,933	$46,231,275	36.4%	$856,908
USD	$13,898,713	$12,572,933	$26,471,646	20.8%	$490,659
MED School	$14,249,382	$4,456,065	$18,705,447	14.7%	$346,710
SDSD	$1,641,456	$0	$1,641,456	1.3%	$30,425
SDSBVI	$1,310,392	$0	$1,310,392	1.0%	$24,288
Total			**$127,116,028**	**100.0%**	**$2,356,128**

What is the Governor's recommendation?

No increase is recommended for student growth support in FY10**.**

Base Budget Maintenance
SDSBVI - Outreach Consultants

Requested Base General Funds	$116,409
Requested FTE	2.0
Governor Recommended	$0
Governor Recommended FTE	0.0

What is the goal?

Provide appropriate services to infants and children identified with visual impairments in their homes (Birth-3) and local school districts (3-21). The services provided are those identified to meet the needs of each individual child.

Why is this important to K-12 and South Dakota?

Under the direction of the SD Board of Regents, the South Dakota School for the Blind and Visually Impaired completed an extensive review of current educational services for children and youth with vision loss in South Dakota. A major recommendation by the Outside Consultant and Task Force was to increase the number of outreach vision consultants to better meet the educational needs of children in SD with vision loss. With the exception of Sioux Falls and Rapid City, most children are served in areas where no vision specialist is available. The SD School for the Blind and Visually Impaired provided the only direct link to multi-faceted evaluations, educational strategies, classroom teaching materials, and consultation with experienced professionals who understand the impact of vision loss on education.

Despite medical advances, the number of referrals of children with vision loss continues to climb and the outreach caseload is beyond serviceable limits. Consultants are able to visit some children monthly and many only once per quarter. Since most children have new teachers every year, the consultants often start over with their training each fall.

The service they can provide is limited by large territories and large caseloads. For example one consultant serves 32 children west of the Missouri River, traveling from Pine Ridge to Buffalo to Eagle Butte. The consultants in eastern South Dakota have a smaller territory, but serve 44 and 53 students, nearly twice the recommended caseload.

Early intervention and work with parents and Birth –Three Teams is critical to the development of skills. Children with vision loss benefit from early intervention and strategies designed to meet their unique needs. Babies change so quickly that frequent visits are essential.

To provide a Free Appropriate Public Education as required by law, local districts need to have a vision consultant on their Individual Education Plan (IEP) Teams to ensure that the necessary vision related skills are included in the plans, as well as ensuring access to all academic programs and experiences.

Base Budget Maintenance
SDSBVI - Outreach Consultants

What is the financial structure of this request?

A general fund request of $116,355 includes 2.0 FTE with $74,000 designated for salaries, a benefits expense of $22,409 and OE support of $20,000.

Benefits Summary:

Salary	$74,000
Benefits	$22,409
Travel	$15,000
Supplies & Materials	$3,000
Capital Assets	$2,000
Total	$116,409

What is the Governor's recommendation?

The Governor is not recommending an increase for Outreach Consultants.

South Dakota Board of Regents
Joint Appropriations Committee
Budget Request Hearings

BHSU

DSU

NSU

SDSM&T

SDSU

USD

SDSBVI

SDSD

Facilities Investments

YOUR FUTURE IS HERE. South Dakota Board of Regents

Fiscal Year 2010
Budget Request

Facilities Investment
HEFF Match

Requested Base General Funds	$1,638,897
Requested FTE	0.0
Governor Recommended	$0
Governor Recommended FTE	($1,638,897)

What is the goal?

The goal is to increase the level of funding for state academic facilities for maintenance so they are safe, efficient, comfortable, welcoming and appropriate for a contemporary education. The goal is to reach an annual investment of 2 percent of the building replacement values which is often suggested as the necessary standard to appropriately maintain facilities.

During the 2008 Legislative session, a plan was put in place to reach this goal when the Governor recommended and Legislature approved an amount equal to one-fourth of the current annual maintenance and repair allocation. FY10 is the second year of a four year plan.

Why is this important to higher education and the State of South Dakota?

Public universities in South Dakota have not participated in state funding for maintenance and repair (M&R) projects. Except in only a few limited situations such as the Dakota Dome roof, the Medical School and University Center has there been an investment in public university buildings by the State.

Maintenance and repair needs have been a longstanding issue for the Board of Regents as the current funding level fails to cover those needs. Projects are delayed due to lack of funding, thus creating a growing backlog of deferred maintenance. Deferred maintenance not only leads to additional expense generated by lack of appropriate care, but also jeopardizes the safety of occupants and functionality and usefulness of the facilities. The maintenance and repair backlog for FY10 is nearing $40M.

Traditionally, the funding for M&R comes from two sources: a student fee of $2.60 per credit hour or $78.00 per full-time student, and 20% of tuition paid into the Higher Education Facilities Fund (HEFF) that amounts to $529 per full-time undergraduate student. In FY94, a $1.00 increase in the university support fee was proposed under the premise that the State match the fee increase specifically for funding maintenance and repair. Understanding the need, students supported the plan. In the session of 1993, and for several years thereafter, the Board requested that match from the State as part of its budget. The Board felt compelled to implement the fee without the State match to address the growing backlog of maintenance and repair. Today the fee is $1.48 per credit hour and will generate approximately $936,312 this year for maintenance and repair. During the 2007 Legislative session, $1.12 was added to the student fee to generate a revenue stream to finance a bond issue for $8,590,269 for critical life safety projects. This will require an annual payment of around $670,000.

In FY93, the Board of Regents was able to invest 0.55 percent of the replacement value of the buildings annually. Not considering the FY09 appropriation, the Board has increased this to 1.00

percent of the replacement value which is $720,105,030. The national standard is between 2 percent and 3 percent of replacement value, assuming a 50-year life cycle for buildings and their systems. The annual amount invested in FY93 was $2.2 million; for FY08 it was $7.2 million. Had the Regents simply increased the FY93 HEFF contribution by 3 percent and not added the M&R fee on students, we would be at $3.3 million today.

Currently the Board allocates $6,549,243 for maintenance and repair from the HEFF account. This amount will be increased by 4% in FY10 to the level of $6,811,213. The M&R investment in facilities also grows by any increase in state-support credit hours and the credit hours at University Center. The amounts provided to the institutions are based on a formula that allocates the funds using replacement values and academic square footage. The balance of the HEFF funds are used for capital renewals and replacements and in FY09 the amount allocated for bond indebtedness is $8.9M which is paid to the South Dakota Building Authority in the form of a lease payment. The Board of Regents has more than doubled the commitment to M&R but there remains the need for State participation as it is important to remember that these are State facilities.

In FY09, recognizing the growing need, the State agreed that student fees and HEFF dollars alone would not appropriately fund maintenance and repair needs and instituted a four year plan to increase maintenance and repair funding. Once fully implemented, the Regental system will be annually investing approximately two percent of the building replacement values in maintenance and repair – a significant improvement over available funding just one year ago.

How do other states meet their higher education M&R needs?

The following is representative of how other states address public university M&R needs:

Minnesota: Issues state general obligation bonds every other year.
Nebraska: Uses cigarette taxes and institutional funds for deferred maintenance and state appropriations and institutional funds for renovation and remodeling.
Iowa: Bonding for projects is funded by student fees, revenue streams, and state appropriations.
North Dakota: State general funds are used for academic and administrative buildings.
Wyoming: Specific state appropriations are directed to community colleges and a formula is used for state appropriations to the university system.
Utah: The state annually appropriates a fund equal to 1.1 percent of the replacement value of state-owned buildings, including higher education.
Indiana: Has a state-funded M&R formula that is annually distributed to universities.
New Mexico: Has an annual state-funded distribution based on square footage.
North Carolina: The state allocates M&R funds to the universities each year.
Oregon: Uses state-paid bonds.
Ohio: Uses state bond-backed allocations.

What is the financial structure of this request?

During the 2008 legislative session, the legislature approved a plan to grow HEFF funding to approximately 2% of the replacement value of the academic buildings in the Regental system over a four year period. This was accomplished by appropriating one-fourth of the amount to achieve the 2% goal, or $1,632,199 for FY09. The Board of Regents is requesting that the State

of South Dakota move forward with this plan by appropriating funding for the second year in the four year plan. With the FY10 HEFF funding level of $6,811,213 plus a $1.48 fee per credit hour expected to yield an additional $936,312, FY10 funding would be $7,745,525. Considering an academic building replacement value of $720,105,030, a second year appropriation of $1,638,897 would be required to maintain the goal of achieving the 2% mark over a four year time frame.

What is the Governor's recommendation?

The Governor is not recommending year 2 of the 4-year plan and has reduced the base budget by the $1,632,999, the amount appropriated in FY09. This returns the amount of the state investment in maintaining higher education academic facilities back to zero and leaves the annual investment in facilities at 1%, far below what is needed to have quality, well maintained facilities.

Facilities Investment
West River Higher Education Center

Requested Base General Funds	$1,228,573
Requested FTE	0.0 FTE
Governor Recommended	$0
Governor Recommended FTE	0.0

What is the goal?

The goal is to provide coordinated educational services to students in the west-river area in Rapid City, replacing the activity that was once conducted at Ellsworth Air Force Base and that is now located throughout Rapid City.

Why is this important to higher education and the state of South Dakota?

The South Dakota Regental System has been serving the Rapid City market for nearly 50 years. Black Hills State University (BHSU) has been offering on-site face-to-face courses since the 1950's with a program at Ellsworth Air Force Base (EAFB) that has since expanded to serve the entire Rapid City region. Beginning in 2006, the educational facility at EAFB was converted to a call center; subsequently this facility was no longer available requiring educational programs to be relocated to sites within Rapid City. Dakota State University, Northern State University, South Dakota State University and the University of South Dakota also offer degrees in Rapid City. One educational doctorate, four master's degree programs, twelve bachelor's degree programs, and three associates' programs are available in Rapid City. In addition to degree programs, BHSU offers general education courses, including electives and other coursework in pre-professional, education and teacher certification/renewal and professional/personal growth areas.

The Need

West River South Dakota has a significant need to expand access for its population, especially as it strives to become a more attractive location for knowledge-based industries. West River's proportion of its residents 25 and older who have a bachelor's degree is lower than either the state or national comparisons:

National	26.5%
South Dakota	24.5%
West River	***22.6%***

The following table provides detail for the educational attainment levels of the area's population.

Educational Attainment, Population 25 Years and Over, 2000
Selected South Dakota Counties, Percentage Distribution[1]

Educational Attainment	Meade	Pennington	Lawrence	Custer	Shannon	Fall River	Total
Population 25 years and over	14,816	55,535	13,746	5,099	5,524	5,313	100,033
Less than 9th grade	4.5%	4.0%	4.6%	3.9%	9.3%	6.8%	4.6%
9th to 12th grade, no diploma	7.9%	8.2%	7.9%	7.3%	20.7%	10.8%	8.9%
High school graduate*	33.7%	29.3%	31.7%	33.2%	26.4%	34.4%	30.6%
Some college, no degree	29.5%	25.6%	26.6%	24.9%	23.3%	25.5%	26.2%
Associate degree	7.6%	7.9%	5.2%	6.3%	8.1%	3.4%	7.2%
Bachelor's degree	12.0%	17.0%	16.8%	17.4%	7.5%	12.2%	15.5%
Graduate or professional degree	4.8%	8.0%	7.2%	7.0%	4.6%	7.0%	7.1%
% high school graduate or higher	87.7%	87.8%	87.5%	88.9%	70.0%	82.5%	86.5%
% bachelor's degree or higher	16.8%	25.0%	24.0%	24.4%	12.1%	19.2%	22.6%

* Includes equivalency. Source: US Census Bureau: http://factfinder.census.gov

From this data, several observations can be made about the area's population.

- About 31 percent of the 25 years and older population in the six counties had a high school diploma (including equivalency).
- About 26 percent had some college but no degree. Nationwide, there is increasing public policy attention to this group. Convenient opportunities to complete a degree may help to address shortages of workers in several industries and professions.
- About 7 percent had an associate degree. These people are prospective students in bachelor's degree programs.
- About 7 percent had a graduate or professional degree, below the national average of 9.4 percent.

The simplest approach for enhancing the educational attainment of an area is to focus on those citizens who have demonstrated interest in postsecondary education. In West River 26.2 percent of the over 25-year-old population has attended some college but has not completed a degree. The county detail is offered in the following table. Persons who have some college but no degree, are getting attention nationwide as a source of employees in healthcare, education and business.

Since these students tend to be adults who have families and jobs and who normally are striving to improve their economic life, they are the population that most needs educational opportunities that are convenient—easy access, an identifiable location and a one-stop approach for all needed services.

[1] Students from other counties may enroll in the Education Center, especially in programs that are offered on weekends. These counties are expected to supply most of the students.

Educational Attainment, Population 25 Years and Over, 2000
Number with Some College, No Degree, Selected South Dakota Counties

County	Population 25 years & over	Some college, no degree	Percent
Meade	14,816	4,364	29.5%
Pennington	55,535	14,224	25.6%
Lawrence	13,746	3,661	26.6%
Custer	5,099	1,270	24.9%
Shannon	5,524	1,286	23.3%
Fall River	5,313	1,355	25.5%
Total	100,033	26,160	*26.2%*
South Dakota (2006)	505,237	102,693	20.3%

It is not only today's population that needs these educational services; it is the future of West River. The non-traditional student population pool will grow by 12 percent in the next two decades as outlined in the chart below. Couple this with the national need to increase all bachelor degree persons by more than 20 percent and there is a significant future non-traditional student population in West River that needs to be served.

Projected Population, Age 25 to 44, Selected Counties, 2005 to 2025

			Projected Population					Change	% Change
County	Age	2000	2005	2010	2015	2020	2025	'05 to '25	'05 to '25
Pennington	25-44	25,856	23,720	23,408	24,147	24,494	24,676	956	4.0%
Meade	25-44	7,180	6,981	6,920	7,581	8,809	9,856	2,875	41.2%
Lawrence	25-44	5,536	5,379	5,552	5,998	6,526	6,621	1,242	23.1%
Custer	25-44	1,633	1,378	1,343	1,250	1,291	1,394	16	1.2%
Shannon	25-44	3,193	3,017	3,002	3,074	3,144	3,215	198	6.6%
Fall River	25-44	1,537	1,327	1,198	1,137	1,118	1,079	-248	-18.7%
Total	25-44	44,935	41,802	41,423	43,187	45,382	46,841	5,039	12.1%

SD State Data Center, USD, (2003)

Degrees Offered

The following list identifies degrees currently in Rapid City:

Associate Degrees:

- General Studies – BHSU
- Respiratory Care – DSU
- Nursing – USD

Bachelor Degrees:

- Professional Accountancy – BHSU
- Banking and Financial Services – NSU
- Business Administration – BHSU

- Accounting and Management (minor) – BHSU
- Criminal Justice – USD
- Education Certification – BHSU
- History – BHSU
- Human Services – BHSU
    - With emphasis in Community Service, Probation/Law Enforcement, or Gerontology
- Industrial Technology – BHSU
- Nursing – SDSU
- Political Science – BHSU
- Social Science – BHSU
- Sociology – BHSU

Graduate Degrees:

- Counseling (Master's) – SDSU
- Administrative Studies (Master's) – USD
- Curriculum and Instruction (Master's) – BHSU
- Educational Administration (Master's) – SDSU
- Educational Administration (Doctorate) – USD

Current Enrollments

More than 1,600 students were served in Rapid City during the fall 2007 semester, including nursing students, and both state- and self-support courses. The breakdown by university is provided below.

University	Fall 2007 Enrollments
BHSU	1,081
DSU	5
NSU	7
SDSU	254
USD	329
Total	**1,676**

A total of 17,108 self-support credit hours were delivered during FY07 (summer 2006, fall 2006, and spring 2007), equating to nearly 594 student FTE in the Rapid City area. This area has a rich history of strong enrollments, which certainly may be enhanced with a facility that is dedicated to higher education use.

Current Rapid City Delivery Sites

BHSU currently houses its course sections and support services at multiple sites in Rapid City including the South Dakota School of Mines & Technology (SDSM&T), Western Dakota Technical Institute and the West River Higher Education Center. SDSU and USD also utilize classroom space at SDSM&T for their programs. The following list provides all locations where courses are currently offered in Rapid City.

Current Rapid City Locations

- Rushmore Building
- Western Dakota Technical Institute
- Douglas High School
- Stevens High School
- Central High School
- Valley View Elementary School
- West River Higher Education Center (also the location of administrative offices)
- Regional Health Science Building
- South Dakota School of Mines and Technology
    - Chemical Engineering Building
    - McLaury Building
    - Classroom Building
    - Computer Engineering/Physics/Computer Center
    - King Center
    - Mineral Industries Building

Proposed Space Needs

Additional growth is expected as opportunities expand with consolidated services. BHSU's enrollment plan for Rapid City includes serving an additional 500 students within the next three years. The proposed facility could serve up to 1,170 students in general classrooms during a single class period. The following table provides the total expected space needs using net square feet (NSF) and gross square feet (GSF):

West River Higher Education Center
Program Summary

Function	Size	Quantity	Total NSF
Classrooms			
35 Students	22 NSF per Student	10	7,700
45 Students	22 NSF per Student	16	15,840
100 Students	22 NSF per Student	1	2,200
Computer Lab (30 Students)	26 NSF per station	2	1,560
Administrative Offices			
Director (1)	120 NSF	1	120
Support Services (7)	120 NSF	7	840
Financial Aid (1)	120 NSF	1	120
SDSU (4)	120 NSF	4	480
USD (2)	120 NSF	2	240
Mail/Copy Room	150 NSF	1	100
Faculty Office	100 NSF per faculty	16	1,600
Project Select (2)	100 NSF per faculty	2	200
Reception Area/Security	25' x 40'	1	1,000

Testing Center	600 NSF	1	600
Bookstore	1,365 NSF	1	1,365
Conference Room	Seats 15-20	1	720
Storage Room	12' x 20'	2	480
Counseling Rooms/Offices	10’ x 15’	4	600
Commuting Faculty Office	12’ x 20’	2	480
Student Support Services/ID Card	20' x 10'	1	200
Technical Office/Server Storage	414 NSF	1	414
Shipping & Receiving Office	10’ x 15’	1	150
			37,009

Total Gross Square Feet (Grossing Factor of 46.6%) 54,241
(includes circulation space, restrooms, mechanical, etc.)

New Building Components

The main components of the new educational building are identified below.

Classrooms - A total of 27 classrooms: ten will seat 35 students, sixteen will seat 45 students, and one will seat 100 students. The 100-seat classroom will provide new functionality for large lecture classes, primarily in the general studies area. This area could be constructed to breakdown into smaller classroom settings if necessary. The larger space could also be available as public space for business and industry.

Computer Lab - Two computer labs that will each have 30 high-end workstations.

Administrative Offices – The current administrative offices for BHSU support services, financial aid and SDSU/USD staff are anticipated to be adequate to serve students in the new building.

Faculty Offices – Currently, fourteen faculty members are housed at Western Dakota Technical Institute and the West River Higher Education Center, including Project Select faculty. An additional 2 offices are anticipated for growth for a total of 16 faculty offices in the new building. Such space is needed for faculty to meet with students.

Reception/Security – A general reception and waiting area, including space for two administrative assistants, will be at the entrance to the building to provide a friendly greeting and direction for any student or other constituent that enters the building. Security will also be housed here.

Testing Center – A separate testing center is necessary to administer entrance exams, proficiency exams and other such tools.

Bookstore – A Bookstore facility is necessary to provide textbooks and other supplies for Rapid City students.

Conference Rooms - One small conference room is included for meeting space, including space for students and their families to discuss financial aid, academic or other private issues.

Storage Rooms - Two small storage rooms.

Counseling Rooms/Offices – Four rooms will be available for SDSU's counseling program.

Commuting Faculty Office – Two shared 240 square foot area for faculty that commute from the main Spearfish campus to the Rapid City area to teach will provide a place to prepare for their course or to meet with students.

Student Support Services – ID Card – This area provides a dedicated area for students to obtain their ID card. It allows for secure storage of the camera and other equipment necessary for production of the cards.

Technical Office/Server – This room will house the main network server and an office for a technical support staff.

Shipping & Receiving – This area will be used for shipments of textbooks and other educational supplies.

Parking – A designated parking lot is necessary for this facility.

What is the financial structure of this request?

The initial cost estimate of the new building is approximately $16,000,000 and includes costs for site work, new construction, landscaping, furnishings, technology, security, parking lot, signage, contingencies, fees, inflation and LEED Silver certification. The details of the costs are provided in the following table.

West River Higher Education Center
Cost Estimate

Site Development	
Road/utility extension/site work	$267,000
Parking (500 spaces)	$600,000
Landscaping/sidewalks	$190,000
Total	$1,057,000
Construction Cost	$10,080,000
Construction Contingency (10%)	$1,110,000
Furnishings (5%)	$500,000
Voice/LAN Cabling ($3 per SF)	$150,000
AE Fee (7.5%)	$835,000

Facilities Investment
West River Higher Education Center

LEED	$80,000
Commissioning (1.5%)	$150,000
OSE (2.5%)	$250,000
Testing/Survey	$85,000
Inflation (12%)	$1,700,000
Grand Total	$15,997,000

The request is to bond for a $16.0M facility for 25 years at an estimated 5.5% interest and service the debt with a general fund appropriation in the amount of $1,228,573.

What has changed since the Board's request?

The Board is proposing an alternative funding source for the Center. The Board will utilize HEFF dollars to support debt financing a $13,425,000 facility. The Board will accept other sources of revenue should they become available to build up to a $16.0M facility.

A gift of 12 acres of land was accepted in 2008 for the Center site. The Great Plains Education Foundation has since donated $2,233,755 to purchase and additional 28.32 acres of land. The Board is requesting approval to purchase the land with the gift.

Complete information on the center and the current proposal can be found starting on page 177.

What is the Governor's recommendation?

The Governor is not recommending funding for the West River Higher Education Center.

Facilities Investment
Science Facilities Lease Payment

Requested Base General Funds	($1,921)
Requested FTE	0.0
Governor Recommended	($1,921)
Governor Recommended FTE	0.0

What is the goal?
Make the annual adjustment in the Science Facilities lease payment amount.

Why is this important to higher education and the State of South Dakota?
The 2008 Legislature (HB1085) authorized the South Dakota Building Authority to provide for the construction, reconstruction, renovation and modernization of science facilities and laboratories at the public universities. The legislation appropriated $32.5M in state general funds towards the debt service with the Higher Education Facilities Fund (HEFF) funding $10M of the debt service. The remaining $32M of the debt service to be funded through the M&R component of the University Support Fee (USF), which is paid by the students.

Each year, the Board makes the bond payment to SDBA based on the lease schedule and the appropriation provided by the State.

The agreement at the outset of the bonding was that each year the appropriation would be adjusted according to the lease payment amount.

What is the financial structure of this request?
According to the current lease payment schedule, the general fund portion of the FY10 payment will be $2,304,379, a decrease in funding of $1,921. The following table provides the payment adjustments for the next five fiscal years and the impact it will have on the general fund.

Science Facilities

	General Fund	Differential
FY09	$2,306,300	
FY10	$2,304,379	($1,921)
FY11	$2,306,131	$1,752
FY12	$2,306,260	$129
FY13	$2,304,765	($1,495)
FY14	$2,306,003	$1,238

What is the Governor's recommendation?
The Governor is recommending decreasing the Science facilities lease payment in the amount of $1,921.

Facilities Investment
Critical Deferred Maintenance Lease Payment

Requested Base General Funds	($3,870)
Requested FTE	0.0
Governor Recommended	($3,870)
Governor Recommended FTE	0.0

What is the goal?

Make the annual adjustment in the Critical Deferred Maintenance general funded lease payment amount.

Why is this important to higher education and the State of South Dakota?

The 2007 Legislature (HB1101) authorized the South Dakota Building Authority (SDBA) to provide $8.6M in revenue bonds for critical maintenance and repair of certain academic buildings. The legislature appropriated general funds to the Board of Regents to pay the annual lease payment, which is repaid by the M&R fee revenue dollars. Securing a general fund appropriation provided the Board of Regents the full faith and credit of the State, thus securing a very favorable bond rating.

What is the financial structure of this request?

According to the current lease payment schedule, the FY10 critical deferred maintenance lease payment is $699,271, a decrease of $3,870. The table below provides the payment adjustments for the next five fiscal years and the necessary adjustments in funding.

Critical Deferred Maintenance

	General Fund	Differential
FY09	$703,141.00	
FY10	$699,271.00	($3,870.00)
FY11	$694,969.00	($4,302.00)
FY12	$690,235.00	($4,734.00)
FY13	$685,070.00	($5,165.00)
FY14	$679,474.00	($5,596.00)

What is the Governor's recommendation?

The Governor is recommending decreasing the critical deferred maintenance lease payment in the amount of $3,870.

Facilities Investment
ADRDL Lease Payment

Requested Base General Funds	$1,087
Requested FTE	0.0
Governor Recommended	$1,087
Governor Recommended FTE	0.0

What is the goal?

Make the annual adjustment in the Animal Disease Research & Diagnostic Laboratory (ADRDL) general funded lease payment amount.

Why is this important to higher education and the State of South Dakota?

The 1993 Legislature (HB 1353) granted the South Dakota Building Authority (SDBA) permission to contract for the construction, completion, furnishing, equipping and maintaining of the ADRDL on the SDSU campus in Brookings. The estimated cost of $5.4 million was to be financed through the issuance of revenue bonds. Each year, the Board makes the bond payment to SDBA based on the lease schedule and the appropriation provided by the State.

While the adjustment amount is trivial, the agreement at the outset of the bonding was that each year the appropriation would be adjusted according to the lease payment amount.

What is the financial structure of this request?

According to the current lease payment schedule, the FY10 payment of the Animal Disease Research & Diagnostic Laboratory will be $462,844. The following table provides the remaining payments on this bond issue and the impact it will have on the general fund.

	Payment	Differential
FY09	$461,757	
FY10	$462,844	$1,087
FY11	$462,686	($158)
FY12	$461,263	($1,423)
FY13	$463,496	$2,233
FY14	$459,540	($3,956)

What is the Governor's recommendation?

The Governor is recommending an increase to the ADRDL lease payment in the amount of $1,087.

South Dakota Board of Regents
Joint Appropriations Committee
Budget Request Hearings

BHSU

DSU

NSU

SDSM&T

SDSU

USD

SDSBVI

SDSD

Technology Investments

YOUR FUTURE IS HERE. South Dakota Board of Regents

Fiscal Year 2010
Budget Request

Technology Investment
REED Research Technicians and Network Director

Requested Base General Funds	$270,979
Requested FTE	3.0
Governor Recommended	($155,359)
Governor Recommended FTE	(2.0)

What is the goal?

The goal is to capitalize on the investment made in the Research Education and Economic Development network by providing the necessary support personnel.

Why is this important to higher education and the state of South Dakota?

The state has a made a significant investment in REED and needs to complete the project by providing the funding for the support pieces that were not funded last year.

What is the financial structure of this request?

Technical Support

The productivity of researchers and their ability to compete for and win grant competitions is heavily dependent on the technology infrastructure which supports them. In order to recruit and keep high quality researchers the support mechanisms and resources must be provided.

Being able to support the researchers and to maintain and update the equipment and software will take an expertise that most researchers do not have or are not interested in doing. Our original proposal in 2008 was for four analysts that would bridge the gap between research and computing technology. Our proposal was to locate one staff member at USD, SDSU, SDSM&T and Sioux Falls. These technical/research support analysts would work directly with faculty in modeling and testing theorems, providing the technical expertise that many faculty do not possess in order to take full advantage of the computing power available to them.

Instead of the four research technicians, the FY08 budget included two FTE to work at the REED Data Center in Madison. Unfortunately these support staff are not located where a majority of the state research is taking place. It is believed the two staff members currently recommended in the DSU budget at $155,358 could potentially be located in Brookings and Sioux Falls. This would allow the personnel to provide the technical support needed for the computing cluster if it is ultimately located in Madison and work with researchers at their home location - getting more bang for the buck. Two additional FTE at a cost of $165,362 are still needed, one located at USD and one at SDSM&T.

REED Network Director

BOR will be responsible for working with other states and the I2 community to coordinate research collaborations, to work with BIT on wave allocation and network performance, to work with the campuses on equipment and network infrastructure, to oversee the cluster operation, and to network with the higher education and research community. Our original budget proposal in 2008 included a new position to manage, monitor, and coordinate the REED network with other research and education networks across the country, all of which are managed by higher education entities. The requested position was moved to the BIT budget. The Board still needs

one FTE and $105,617 for the position and supporting OE. The person currently managing the REED project for BOR is our network and security expert, but simply cannot handle all of the REED issues and do his regular job.

A summary of the REED staffing request follows:

	Two Research Technicians	Network Director	Total Request
Salaries	$120,000	$80,000	$200,000
Benefits	$29,162	$17,517	$46,679
Travel	$9,000	$4,500	$13,500
Contractual Services	$1,000	$500	$1,500
Supplies & Materials	$3,000	$1,500	$4,500
Capital Assets	$3,200	$1,600	$4,800
Total	$165,362	$105,617	$270,979
FTE	2.0 FTE	1.0 FTE	3.0 FTE

What has changed since the Board's request?

The 2.0 FTE provided in 2008 have been cut in the revised Governor's recommendation. The Board needs 4.0 research technicians to advance the use of REED and high performance computing with researchers. The Board also needs a network director to manage the network. It is important that we not make a multi-million dollar investment in the network and fail to promote its utilization and properly support it.

What is the Governor's recommendation?

The Governor is not recommending any research technicians or the network director. The Governor has also cut the 2.0 FTE and $155,359 from the base budget. This reduction will mean there are no FTE's within the BOR system to expand support to researchers to assist them with technology and promote use of the REED network.

Technology Investment
REED Equipment and Network Operations Support

Requested Base General Funds	$682,945
Requested One-Time General Funds	$258,161
Requested FTE	3.0
Governor Recommended	$0
Governor Recommended One-Time General Funds	$0
Governor Recommended FTE	0.0

What is the goal?

The goal is to fund outstanding Research Education and Economic Development (REED) network infrastructure equipment and network operations items not currently included in the budget.

Why is this important to higher education and the state of South Dakota?

The state has made a significant investment in REED and needs to complete the project by providing funding for the outstanding cost items.

What is the financial structure of this request?

BIT has identified the following one-time cost items as being outside of the REED approved budget. BOR is requesting funds for these items to complete the project, but has identified possible ways to save some funds in the final recommendation.

Network Research Routers	$374,142
Routers & Core Switches Maintenance	$6,383
Redundant Firewalls	$320,860
Firewall Maintenance	$61,221
Intrusion Detection Maintenance	$107,055
Great Plains Network Subscription	$131,500
Total	$1,001,161

A significant change in state networking will be implemented by REED. It will use the same fiber for all services which we currently get both from BIT and from our research/Internet2 connections. This approach has many advantages in that all network traffic within the state can take advantage of the higher speeds provided by REED. This will eliminate many of the artificial maximums that had to be imposed because of circuit costs. Performance for IT applications and DDN video will improve dramatically. Campuses will also be able to add additional DDN classrooms without additional bandwidth costs. However, our production networks will not have the same degree of redundancy as our current circuit based services. Many of our current production services run over SONET rings which can protect against outages of certain types that the single pair fiber optical network cannot do. The risks are relatively small compared to the benefit and the cost. Providing redundancy at the optical layer is a future consideration based on usage, service experience and cost.

With a few exceptions, today BIT provides the bandwidth for the campus networks. We work with BIT to separate the management of the production network and research network

components. While BIT provides the support for all of our production services (Internet1, DDN, Datatel, Banner, etc.) the BOR provides the support for our regional and national backbone connections (Northern Lights and Internet2). BIT will have visibility of bandwidth usage by everyone connected to REED. The higher network layers (called the IP layer) are where traffic management and feature implementation occurs for the research networks which can continue to be managed by the BOR and still give BIT the management statistics they need. The BOR would like to manage this layer as we do today to accommodate special requests by our regional and national partners. We continue to discuss traffic management and feature implementation in order to simplify our campus networks and still provide the flexibility needed for research collaborations and special features.

The REED network is a significant upgrade to the networking backbone in the state intended to provide competitive speeds and functions for BOR researchers and DUSEL. In order to take advantage of REED the campus networks have had to update their infrastructures. The BOR has made a standard practice of striving for uninterrupted network access which includes redundancy for critical components such as firewalls and separation of traffic with substantially different networking requirements. These are common practices in networking and have been done in SD since the advent of Internet2 connections to South Dakota. Today, high speed research traffic is logically separated from production traffic, such as student information management systems through the use of a research router. Our research routers also allow the BOR to pursue experimental services and grants for networking experimentation that could create significant problems for day to day production traffic such as the Global Environment for Networking Innovations (GENI http://geni.net/). The REED connection to the Great Plains Network (GPN) in Kansas City gives our networking researchers an opportunity to collaborate with other states and would require separate equipment such as routers and other optical networking gear to have direct access to REED should we want to be included in grants like the GPN GENI initiative. REED doesn't change the need for the campuses to continue their current practices it simply makes it more expensive. Therefore, REED should cover the additional expense of keeping the BOR networks at or above their current levels in both speed and capability by paying for the redundant firewalls, research routers and maintenance for these more expensive campus infrastructure components.

Research Routers

For the reason explained above, a research edge router has been operating at each campus and is being upgraded to accommodate REED capacities. The cost of the research routers was $374,142 for major research sites including USD, SDSU, SDSM&T and GEAR. BOR believes that the expense of these routers is directly related to the REED network and the cost of the routers for the main research universities, is easily justified as an expense from the REED budget.

Redundant Firewalls

The Board has always had redundant firewalls to provide adequate security to permit, deny, encrypt, or proxy all computer traffic between different security domains based upon rules and other criteria. The BOR has additional legislated responsibilities for maintaining a high level of continuous security protection typically found at banks (GLB) and hospitals (HIPAA). The cost of the 10G redundant firewall was $320,860 and BOR also believes is an expense that should be covered by the REED budget.

Technology Investment
REED Equipment and Network Operations Support

Maintenance

Maintenance costs for the 10Gig equipment is much greater than our previous equipment. Our maintenance costs related to the REED network equipment have gone up substantially. Today, our annual maintenance costs have increased by $248,081 beyond what was anticipated. BIT has agreed that $73,422 of this amount should be included in the annual maintenance budget for FY10. The remaining amounts relate to maintenance on the research routers, redundant firewalls, and intrusion detection systems. The full on-going costs should be part of the REED budget.

Maintenance Item	Reed Recommended Funded	BOR One-Time Request	BOR Base Request
Routers & Core Switches Maintenance		$6,383	$6,383
Firewall Maintenance		$61,221	$61,221
Intrusion Detection Maintenance		$107,055	$107,055
Ekinops Maintenance	$4,500		$4,500
Security Information Mgmt Maintenance	$68,922		$68,922
Total Request	$73,422	$174,659	$248,081

Great Plains Network (GPN) Subscription

The Great Plains Network subscription connects South Dakota to the Internet2 backbone in Kansas City. Connections to the Internet2 are limited to connections by Internet2 approved organizations such as GPN called Connectors. These Connectors share the costs of maintaining the Internet2 connections and paying the Internet2 fees associated with supporting the Connector. The GPN subscription fee starting in FY09 is the South Dakota portion of the cost sharing ($116,500 for FY09) plus the associated GPN membership dues ($26,000 for FY09) for a total of $142,500.

The GPN subscription fees would replace the costs of the current connection ($157,000) which is $100,000 for OC3 transport to the phone company paid by BIT, and $57,000 paid to Northern Lights by BOR.

Due to scheduling associated with REED network construction, both sets of fees are due in FY09. We are therefore short $116,500 in FY09 on a one-time basis.

Technology Investment
REED Equipment and Network Operations Support

Subscription Costs	**FY08**	**FY09**	**FY10**
Northern Lights	$57,000	$57,000	
Great Plains Network	$26,000	$26,000	$26,000
OC3	$100,000	$100,000	
GPN Subscription Fee		$116,500	$116,500
One-Time Equipment Fee		$15,000	
Total	$183,000	$314,500	$142,500
Funding			
BOR Funds	$83,000	$83,000	$83,000
BIT Funds	$100,000	$100,000	
(Short) or Long	$0	($131,500) One-Time Request	($59,500) Base Request

Network Costs

Last year the network budget was reduced by $375,364 for REED sites that would not be active until FY10. That amount will be needed to fully fund the network operating costs paid to SDN in FY10 as the final sites are brought on-line.

Computing Cluster

The Board's proposal was to buy computing clusters to foster research. The clusters would allow researchers to test theorems, run models, store data and perform research. We believe in order to grow research this resource is needed. The request was for separate clusters at USD, SDSU, SDSM&T and Sioux Falls; these were replaced with a recommendation for a centralized cluster in Madison. As we look for ways to minimize the REED costs, there may be other options, including upgrading the current clusters at USD, SDSU and SDSM&T. We have also visited two computing cluster sites and talked with a national laboratory about the ability to utilize High Performance Clusters for research.

The current budget for the DSU Data Center, which includes $451,000 of necessary upgrades to the data center infrastructure and provides $982,000 for a centralized cluster remains in the budget. No decision has been made at this time if a central cluster is the best or only option.

Having given a cursory look at the current clusters at SDSM&T, USD and SDSU, and with strong convictions from researchers to keep their support structures local, BOR is forwarding another cluster option that would update the three clusters at the university sites. This also works well with where we propose to house the research analysts. The estimated cost of upgrading the clusters is $230,000 per site. The campuses would be responsible for maintaining their data centers and any necessary upgrades, just as they are today. This proposal would cost $690,000 as compared to the $1,433,000 option on the table today for a central cluster. The savings could be used to cover some of the equipment costs not currently budgeted in REED and identified above. It would also allow the new FTE to focus on assisting researchers apply for and expand research grant opportunities since the system administration of the existing clusters is already being done.

Technology Investment
REED Equipment and Network Operations Support

Following is a summary of the request for one-time REED budget support:

Contractual Services:	
Routers & Core Switches Maintenance	$6,383
Firewall Maintenance	$61,221
Intrusion Detection Maintenance	$107,055
Great Plains Network Subscription	$131,500
Subtotal	$306,159
Capital Assets:	
Network Research Routers	$374,142
Redundant Firewalls	$320,860
Computing Cluster Upgrades	$690,000
DSU Data Center Upgrades	($451,000)
Central Cluster	($982,000)
Subtotal	($47,998)
Total One-Time Request	**$258,161**

If the cluster is placed in Madison the budget increase would need to be $1,001,161.

Following is a summary of the REED Base Budget request:

Contractual Services:	
Maintenance	$248,081
Subscription Costs	$59,500
Network Services	$375,364
Total Base Request	**$682,945**

What has changed since the original Board's request?

The Board is still holding over $1.0M in one-time expenses that we believe should be covered by REED. The Board proposes that we eliminate the central cluster and redirect the dollars to upgrade the current clusters at USD, SDSU and SDSM&T. Those resources would then be shared across the BOR system. Any remaining funds from this change would be used to cover REED related expenses. This would eliminate the need for any one-time funding.

BIT has agreed to cover a portion of the maintenance costs in the amount of $79,805, so the base budget needed for maintenance costs is now $168,276. Due to changes to the in and out-of state REED connections, operational savings will eliminate the need for the additional $375,364 at this time. We have been discussing the subscription costs with BIT and believe they will also cover this item.

What is the Governor's recommendation?

The Governor is recommending no one-time or base funds to address the REED costs. The budget needs for the network continue to change as the network equipment is purchased and installed and the sites are brought on-line. The Board will bring forward a special bill to address the base budget needs.

Technology Investments
Mobile Computing - Network and Equipment Upgrades

Requested Base General Funds	$1,015,352
Requested FTE	0.0
Governor Recommended	$0
Governor Recommended FTE	0.0

What is the goal?

The goals of the mobile computing environment are to enhance student connectivity, technology preparedness, and 21st Century learning skills to better position graduates to lead South Dakota into a technology and information rich based economy. This request will enable us to build and maintain the technology environment necessary to support a mobile computing environment initiative.

Why is this important to higher education and the state of South Dakota?

Beginning with the development of Morse Code in the early 1800s, the constraints for producing and then disseminating information have grown to become increasingly transparent. Since that time, technological innovations have continued to emerge as unintended by-products resulting from attempts to answer some of our most basic problems. For example, at the tail end of World War II, the federal government enlisted a team of researchers to develop the Electronic Numerical Integrator and Computer (ENIAC) to perform a series of complex calculations required for firing artillery. After the war, individuals and corporations slowly improved upon this device making it smaller and faster to make personal computing a possibility. Similarly, the Advanced Research Projects Agency Network (ARPANET) was established to allow military scientists working with the Department of Defense to share computer resources, ultimately transforming into what we currently know as the internet as entrepreneurs like Marc Anderson (Netscape) perceived innovative applications for existing tools. Few would debate the revolutionary impact of how innovative applications of modern technology have allowed us to overcome time and distance barriers that had previously hindered how we share our ideas and experiences with others. In this modern era of ubiquitous computing (term developed by Weiser in 1991 to depict the pervasiveness of technology) information resources have become more and more integral in our daily lives, transitioning into educational context ultimately impacting how children learn and interact with others. Leh, Kouba, and Davis (2005) noted that "Learning for a child of the 21st century is much more complex than ever before. Modern technology has been seamlessly infused into the lives of children and their interactions with their surroundings".

One critical issue confronting secondary and post-secondary entities throughout the U.S. is the development of curriculum and infrastructure that fosters technology-based skills necessary for flourishing in a knowledge-based economy. Recent advances in mobile computing have resulted in a combination of a cost efficient and light weight computing. Additionally, wider access to wireless infrastructure has made it more feasible to implement one-to-one or ubiquitous computing on a broader scale. One approach that K-12 entities throughout the country have taken to foster a comprehensive approach to developing technology-based 21st century

skills has been the implementation of laptop/tablet/mobile computing initiatives. As a result, one-to-one computing initiatives have become a common trend across numerous states in an attempt to reduce the effects of the digital divide, increase student achievement, establish common hardware/software standards, reshape/redesign/transform student learning beyond the confines of the traditional school day, and/or increase regional economic development by fostering computer skills necessary in a technology rich environment. Peneul (2006) noted that a significant number of the initiatives have sought to accomplish these objectives by transforming classroom instruction ". . . specifically to make instruction more 'student-centered', that is, more differentiated, problem- or project-based and demanding of higher-order thinking skills" (p. 335). Many of these initiatives have sought to use ubiquitous computing to meet newly established educational technology standards embraced by the International Society for Technology in Education (2007) suggesting potential for using one-to-one computing to enhance: 1) Creativity and innovation; 2) Communication and collaboration; 3) Research and information fluency; 4) Critical thinking, problem solving and decision making; 5) Digital citizenship; and 6) Technology operations and concepts (see Appendix A on page 66 for a more detailed description for each of these skills). This emphasis on enhancing student technology integration has also been an essential feature articulated by the Partnership for 21st Century Skills (an alliance made up of business, governmental and educational leaders) when they identified the six key features for 21st century learning (see Table 1). Each of these key elements embraces the role that advancing technologies will have for the future of education, but unfortunately many of today's classrooms look the same as they did 50 years ago; as isolated entities with limited access to the wealth of available information.

Table 1
Key Elements of 21st Century Learning

Key Elements	***Description***
Emphasize Core Subjects	Emphasis on core subjects with a need to expand curriculum to include computer programming to make students more technologically literate.
Emphasize Learning Skills	Emphasis on enhancing critical thinking skills for applying new knowledge to information analysis, problem solving, and decision making.
Use 21st Century Tools to Develop Learning Skills	Emphasis on information and communication based technologies (computers, networking, audio, video, multimedia resources, etc.) extending creativity managing complexity.
Teach & Learn in 21st Century Context	Emphasis on practical and authentic learning experiences by fostering opportunities for students to work with teachers, other students, and their external environment.
Teach & Learn 21st Century Content	Emphasis on preparing students for expanding global marketplace by infusing global awareness, civic literacy, as well as financial, economic, and business literacy into the curriculum.
Use 21st Century Assessments that Measure 21st Century Skills	Emphasis on authentic learning projects and the use of computer-based assessments and digital scoring systems that can make testing and assessment virtually simultaneous.

South Dakota *Classroom Connections* was envisioned as a part of Governor Round's 2010 Education Initiative to build the 21-century skills (critical thinking, writing, communication and technology literacy) required for South Dakota's future workforce needs. The program began during the 2006-07 school year with 20 pilot school districts using state matching funds to offset

the investments made by the local school district to purchase laptops for all high school students. During its second and third years the program expanded to an additional 36 school districts

resulting in more than 10,800 students across 56 high schools benefiting from the program. Estimates indicate that by the end of the 2007-08 academic year more than 25% of South Dakota High School graduates will come from school districts with student-wide laptops as part of their daily learning experience. As the program continues to expand it is realistic to assume that this will increase to 50% of all high school graduates by 2011.

Within the Regental system, Dakota State University (2004) and South Dakota School of Mines and Technology (2006) have implemented mandatory laptop programs for all students. Beginning with cohorts of entering freshman, students at each of these institutions are required to lease a tablet resulting in a four-year phased timeline for comprehensive implementation (e.g., 2008 for DSU and 2010 for SDSM&T). Additionally, South Dakota State University and the University of South Dakota have received the necessary approval from the Board of Regents to require laptops at the programmatic level as described in Table 2. In addition, there is evidence that personal computers are becoming a common component for almost all students within the Regental system. The six public institutions report that approximately 85% of all students in residence halls have their own computers, with similar representations across the entire student body. These percentages appear to be representative of students at the various University Centers across the state making personal computing an integral part of the educational offerings at all campuses.

Table 2
Institutions/Programs in Regental System with Mandatory Mobile Computing Requirements

Institution	*Number of Students*	*Platform*	*Semester Lease Fee*	*Semester Program Fee*
Dakota State University	1,500	PC/Gateway	$320	$66.70 [a]
SD School of Mines & Technology	1,800	PC/Gateway	$373	**
South Dakota State University				
Interior Design	52	Macintosh	**	$65
Nursing	637	PC/Gateway	**	$65
Biology/Microbiology	500	Both Mac/PC	**	$65
Landscape Architecture	50	PC/Gateway	**	$65
Graphic Design	80	Macintosh	**	$65
Mass Communications	80	Macintosh	**	$65
University of South Dakota				
Nursing	550	PC/Gateway	**	$66.70
Physician Assistants	50	PC/Gateway	**	$66.70
Fine Arts/Graphic Arts	20	Macintosh	**	$66.70
System Total	***5,319***			

[a] *Semester program fee is assessed to students who request an opt-out of the lease program resulting in a per semester support fee.*

Recommendation

Projections suggest that a seamless wireless infrastructure will be a basic expectation for students entering post-secondary institutions within the next five years. When coupled with the fact that an increasing number of students are bringing laptops or mobile computing devices to campus is the expectation that the devices are used as an essential component of the formal and informal

learning contexts. As a result, the Board of Regents seeks to establish a comprehensive mobile computing environment, whereby all students will be expected to purchase common mobile computing devices by 2012. Two distinct phases are proposed to meet this target date for system integration. In the first phase, Academic Affairs personnel have worked to identify 50% of their programs/enrollments to integrate mobile computing in the curriculum (see Appendix B on page 67). Phase one would occur during Fall 2009 where students in the identified disciplines will be notified about the specifications that will be required. Faculty in these programs would be notified of the established implementation period and receive the necessary tools and training to coincide with student programmatic requirements for upper level courses. Phase two would expand the mobile computing requirement to all remaining programs/disciplines within the system in year three (Fall 2011) of the initiative for all content based courses in those fields, with the expectation that expansion would continue into general education curriculum across the system by Spring 2012. Specialty labs will need to be maintained to support certain disciplines with expensive software requirements or unique computing needs such as Macintosh computers.

As South Dakota higher education moves to a system-wide mobile computing environment, we must be mindful of the goals and understand that the computer in and of itself will not accomplish these goals. There is much that must be accomplished to ready ourselves for such an environment to insure its success and what we must be prepared to do into the future to sustain it. The decision to move to a system-wide mobile computing environment is not one that should be made lightly without appropriate consideration and planning given to a significant number of variables that will, in the end, determine the success of such an initiative:

- ✓ Faculty preparedness and appropriate integration of the technology into the curriculum
- ✓ A technology environment ready and capable of supporting the academic and student demands
- ✓ Financial consideration for students and the ability of all students to afford the technology without limiting access to higher education
- ✓ Develop a plan for non-traditional students and part-time students to be successful in this environment
- ✓ Ability to sustain the technology environment that the initiative will demand and to keep it current and moving forward
- ✓ Be mindful of our competition and the market from which we recruit students

What is the financial structure of this request?

As a critical first step in the development of the mobile computing environment, significant investment in campus infrastructure will be necessary. Specifically, the financial implications for a mobile computing environment throughout the Regental System rests upon the expectation that each campus's infrastructure will be wireless and capable of handling the significant volume of student and faculty usage. Wireless infrastructure must allow for seamless access extending to classrooms, open areas and residence facilities and must be in place before the first cohorts of students are required to purchase mobile devices for the curriculum. The wireless network infrastructure should be built around the existing wired network featuring high speed connections that support curriculum delivery and campus internet connection. Faculty will need to have the appropriate computing device that the students will also be expected to use. All of this

infrastructure will need to be supported by technical staff. Campuses will need to address infrastructure needs in three key areas: facilities, faculty computers and campus support staff.

Facilities

Establishing a mobile computing environment extends beyond the creation of a comprehensive wireless network at each campus. Various classroom upgrades are necessary to accommodate students who require access to wired network ports, power sources and classroom furniture that promotes student connectivity. For instance, wireless access points are capable of providing seamless access when students are not required to access similar content simultaneously. Aside from the complications that often emerge with simultaneous online access for various courses, modifications are also necessary for the basic structure of the traditional classroom to accommodate the collaborative environment fostered in mobile computing environments. An initial focus on classroom facilities at DSU and SDSM&T emphasized a transition from individual seats/desks to moveable tables and projection equipment that would better accommodate the various pedagogical approaches to teaching and learning. Additionally, classrooms should include electrical power to prevent battery drain for students with a number of classes back-to-back.

In order to develop reasonable costs to support this proposal, assumptions had to be made about the environment that must be built and the way the program might be implemented. The following are the assumptions that were made:

1. Some labs will need to be maintained for discipline specific software that is too expensive for students to purchase on their own.
2. Some open labs need to be maintained to serve part-time and graduate (those not in a laptop/tablet required program) students.
3. Some labs being eliminated may not be suitable classrooms.
4. 25 students to 1 wireless access point.
5. 20% of classrooms to be hardwired and the rest would need to have wireless access.
6. 1 GB of storage per student and faculty.
7. 50 Kbps additional bandwidth per student and faculty.
8. $50 in additional software per student for locking student laptops/tablets during class.
9. One additional technical support staff per 800 laptops/tablets.
10. One additional Network Support and program administrative support per 100 access points.
11. New furniture will need to be purchased for 20% of the classes that will be hard-wired with port connections. Assumed $438 per seat based on costs recently received for the Sioux Falls facility.
12. Auditorium furniture will need to be replaced with laptop friendly surfaces. Assumed $250 per seat.
13. Assume all classrooms need to have projector, screen and PC.
14. Assume enterprise solution for wireless security and wireless infrastructure management.

15. Did not include campus infrastructure already in place and supported within current campus' budgets.

The costs to accomplish building and maintaining the mobile computing environment for the universities is detailed in the matrix starting on page 50. The one-time cost is estimated at $7,423,008 and the on-going cost is estimated at $1,002,358. These are the costs to build the environment and to maintain it. They do not include any replacement costs for current infrastructure. Any costs not appropriated would have to be assessed to students through a fee to support the mobile computing environment. This fee would be on top of the cost of buying their laptop/tablet computer.

Special Schools Infrastructure

The assumptions used for the School for the Deaf and the School for the Blind and Visually Impaired were different than the above assumptions. The focus at the schools is to provide a wireless environment in the classrooms and throughout the school to best serve each individual student, work with other staff throughout the facility, and work with Local Education Agencies in the most efficient manner. Students will be provided laptop access and individual training in the technology labs and depending on their need and ability may have a laptop assigned to them. The estimated network/equipment upgrades to provide wireless throughout the facilities and to upgrade classrooms to smart classrooms is $44,524, with on-going costs of $12,994. The cost of providing laptop computers to each of the faculty members and to some students is also part of the need and is addressed under "Faculty Computers".

Faculty Computers

The latest inventory through the end of 2007 of student lab computers, faculty and administrative computers showed a total of 8,732 computers are currently in use within the system, and 23% of the computers have reached the end of their four year life-expectancy. This is much better than the 2006 inventory that showed we had 8,746 computers and 42.8% of them had reached the end of their useful life. This improvement was due to a one-time appropriation of $1.3M in FY2008 to replace outdated computers.

Computer Inventory

	2003 & Older	2004	2005	2006	2007	Totals	% Outdated
Students	464	496	605	656	1260	3,481	13.3%
Faculty	195	248	264	455	498	1,660	11.7%
Staff/General	1360	384	580	639	628	3,591	37.9%
Totals	2019	1128	1449	1750	2386	8,732	23.1%

If we exclude the 1,052 computers bought with the $1.3M provided on a one-time basis in July of 2007, we see that the system has purchased 1,415 computers per year on average over the last four years. This investment amounts to $1,698,000 ($1,200 average cost) annually. In order to maintain all computers on a 4-year replacement cycle the universities would need to purchase

2,183 computers per year or spend approximately $2,619,600 per year. As one can see, current funding falls far short, around $921,600 annually, of keeping the technology current.

Moving to a laptop program will eliminate the need for most classrooms with computers and general computer labs. Computers will be retained in the libraries and specialty labs where it is cost prohibitive to have students purchase software. At this time it is estimated the universities can reduce the student use computer inventory to about 872 computers (25% of current) instead of the current 3,481 computers. If we eliminate 2,609 student use computers across the system, and buy 349 less computers each year we would save $418,400 each year. This would also allow us to replace student use computers on a 4-year replacement cycle.

We currently have about 1,660 computers available for faculty. Inventories for faculty will have to be increased slightly to provide computers to all full-time, part-time and adjunct faculty so they have the device available to them in the classroom. We have 1,410 faculty that are more than 0.5 FTE and another 974 faculty that are part-time or adjuncts. We will need to have an additional 75 computers giving us a computer for every 3 part-time faculty. The faculty computers will need to be turned over every four years to keep up with current technology. Considering the additional computers and putting the inventory on a four-year replacement cycle will cost $694,400 annually (434 computers per year times $1,600 for tablet).

Current Annual Computer Expenditures

	Current Inventory	4 – Year Average Purchase	Annual Expenditure @ $1,200 Avg Cost
Student Computers	3,481	567	$680,400
Faculty Computers	1,660	291	$349,200
Staff Computers	3,591	557	$668,400
Total	8,732	1,415	$1,698,000
Four Year Replacement Cycle Cost			$2,619,600
Annual Replacement Cycle Funding Shortfall			($921,600)

Proposed Annual Computer Expenditures

	Proposed Inventory	4 – Year Average Purchase	Annual Expenditure @ $1,200/$1,600(Fac) Avg Cost
Student Computers	872	218	$261,600
Faculty Computers	1,735	434	$694,400
Staff Computers	3,591	618	$741,600
Total	6,196	1,415	$1,698,000
Four Year Replacement Cycle Cost			$2,032,900
Annual Replacement Cycle Funding Shortfall			($334,900)

The annual investment needed to maintain the new inventory levels on a 4-year replacement cycle will be $2,032,900. This far exceeds the $1,698,000 currently invested annually. The institutions will continue to evaluate the specialty labs and staff computers to see where they can

reduce annual expenses. It is clear that staff and administrative computers will not be replaced on a four year cycle.

If we consider that all of the full-time faculty that are 0.5 FTE or more will need a new tablet as all disciplines transition into the mobile computing initiative through Fall 2011, we will need 1,209 new tablet computers (excluding DSU and SDSM&T faculty that would currently have tablets). We would also need a pool of at least 325 computers that could be shared between the 974 adjunct/part-time faculty teaching within the Regental system. The cost to replace the faculty computers with tablets is estimated at $2,454,400 ($1,600 average cost). Under the proposed changes to inventory, we could purchase an average 434 faculty computers each year out of current funding. Using the $1,600 estimated tablet cost, this would be about $694,400 available each year. We could fund $1,388,800 out of the current budget leaving a need for an influx of $1,065,600 to buy tablets for faculty over the next two years.

Special Schools Computers

The two special schools would also need upgrades to all faculty devices and some devices for students. A total of 88 computers are needed to provide all faculty members with a tablet, to upgrade labs and provide high school students at SDSD with a tablet. The estimated cost of upgrading to tablets would be $140,800. The special schools have the funding to replace the computers as necessary.

Summary of Request

BOR proposes a pay date change to the first of the month from the last day of the month which will result in moving a full months pay for all employees, except for 9 month faculty, into a new budget year. This will result in a one-time savings of $10.9M dollars. BOR proposes this change to support the Mobile Computing Initiative and provide the dollars for the one-time costs associated with the program. The base request represents a state appropriation request.

Summary of Mobile Computing Initiative Costs

	Payroll Savings	Base	FTE
Network Upgrades, Software,			
Classroom Upgrades, Equipment			
Universities	$7,423,008	$1,002,358	
Special Schools	$44,524	$12,994	
Tablet Computers			
Universities	$1,065,600		
Special Schools	$140,800		
Total	$8,673,932	$1,015,352	0.0

What is the Governor's recommendation?

While the Governor supports the Mobile Computing Initiative, he is not recommending any funding for the network and equipment upgrades at this time. The Board is also not moving the pay day to the first of the month so there will be no payroll savings.

(See References and Appendices starting on page 70.)

Technology Investments
Mobile Computing - Network and Equipment Upgrades

Mobile Computing Environment - Network and Equipment Upgrades
August 2008

	COST	BHSU	DSU	NSU	SDSM&T	SDSU	USD	UC	One-Tme Costs	Base Costs
CLASSROOM INFRASTRUCTURE										
Cost to provide electrical and port connection per seat	$269									
40% of classroom seats to be wired		646	720	822	468	1,902	1,168	228		
Cost of electrical and port connections		$173,774	$193,680	$221,118	$125,892	$511,638	$314,192	$61,332	$1,601,626	
Cost of access points	$835									
Number of access points to be added		86	10	99	10	208	148	17		
Cost to add access points		$71,810	$8,350	$82,665	$8,350	$173,680	$123,580	$14,195	$482,630	
Replacement cycle in years for access points	3									
Cost of added access points		$71,810	$8,350	$82,665	$8,350	$173,680	$123,580	$14,195		
Annual replacement cost for access points		$23,937	$2,783	$27,555	$2,783	$57,893	$41,193	$4,732		$160,877
Network & installation for access points	$218									
Number of access points to be added		86	10	99	10	208	148	17		
Cost to network and install access points		$18,748	$2,180	$21,582	$2,180	$45,344	$32,264	$3,706	$126,004	
Cost of 48 Port 10/100/1000 Switches	$7,000									
Number of switches needed		12	1	13	1	29	18	3		
Cost of switches (no maintenance)		$84,000	$7,000	$91,000	$7,000	$203,000	$126,000	$21,000	$539,000	
Replacement cycle in years for port switches	5									
Cost of switches		$84,000	$7,000	$91,000	$7,000	$203,000	$126,000	$21,000		
Annual replacement cost for port switches		$16,800	$1,400	$18,200	$1,400	$40,600	$25,200	$4,200		$107,800
WIRELESS ENTERPRISE INFRASTRUCTURE										
Enterprise Modules - One per 300 access points	$27,600									
Number of enterprise modules needed		1	0	1	0	0	0	0		
Cost of enterprise modules		$27,600	$0	$27,600	$0	$0	$0	$0	$55,200	
On-going maintenance of enterprise modules	7%									
Cost of added enterprise modules		$27,600	$0	$27,600	$0	$0	$0	$0		
Cost to maintain enterprise modules		$1,932	$0	$1,932	$0	$0	$0	$0		$3,864
Replacement cycle in years for enterprise modules	5									
Cost of enterprise modules		$27,600	$0	$27,600	$0	$0	$0	$0		
Annual replacement cost for enterprise modules		$5,520	$0	$5,520	$0	$0	$0	$0		$11,040
Supervisor 720 Blade	$24,000									
Number of Supervisor 720 Blades		0	0	1	0	0	0	0		
Cost of Supervisor 720 Blades		$0	$0	$24,000	$0	$0	$0	$0	$24,000	
Wireless Control Systems Software License	13,000									
Additional WCS Software License (per 500 APs)		1	1	1	1	1	1	1		
Cost of WCS Sotware License		$13,000	$13,000	$13,000	$13,000	$13,000	$13,000	$13,000	$91,000	
Wireless Control Systems Software License Maintenance	7%									
Cost of WCS Software License		$13,000	$13,000	$13,000	$13,000	$13,000	$13,000	$13,000		
Cost of WCS Sotware License Maintenance		$910	$910	$910	$910	$910	$910	$910		$6,370
Wireless Site Survey Hardware/Software	3,000									
Number of Wireless Site Survey Hardware/Software		1	0	1	0	0	1	0		
Cost of Wireless Site Survey Hardware/Software		$3,000	$0	$3,000	$0	$0	$0	$0	$6,000	
WIRELESS SECURITY - CISCO CLEAN ACCESS										
Cisco NAC Appliance 3350 Server - Max 1,500 Users	$25,194									
Number of NAC Appliances per 100 Users		1	1	1	1	1	1	0		
Cost of Cisco NAC Hardware		$25,194	$25,194	$25,194	$25,194	$25,194	$25,194	$0	$151,164	
Replacement cycle in years for NAC Server	5									
Cost of NAC Server		$25,194	$25,194	$25,194	$25,194	$25,194	$25,194	$0		
Annual replacement cost for NAC Servers		$5,039	$5,039	$5,039	$5,039	$5,039	$5,039	$0		$30,233
Cisco Server Software License Cost	$18									
Additional Licenses Needed		1,109	0	0	1,424	1,784	643	0		
Cost of Server Software Licensing		$19,962	$0	$0	$25,632	$32,112	$11,574	$0	$89,280	
Cisco Server Software Maintenance Period	3									
Maintenance Fee of $1,560 for 3 years		$1,560	$0	$0	$1,560	$1,560	$1,560	$0		
Annual Software Maintenance Cost		$1,560	$0	$0	$1,560	$1,560	$1,560	$0		$6,240
CLASSROOM FURNITURE										
Cost of new furniture per seat	$439									
Seats with electrical and ports		324	360	412	432	950	292	0		
Cost to upgrade classroom seating		$142,236	$158,040	$180,868	$189,648	$417,050	$128,188	$0	$1,216,030	
Cost of new furniture per lecture hall seat	$250									
Number of seats to be upgraded		250	250	496	250	2,287	903	0		
Cost to upgrade lecture hall seating		$62,500	$62,500	$124,000	$62,500	$571,750	$225,750	$0	$1,109,000	

Technology Investments
Mobile Computing - Network and Equipment Upgrades

Mobile Computing Environment - Network and Equipment Upgrades
August 2008

	COST	BHSU	DSU	NSU	SDSM&T	SDSU	USD	UC	One-Tme Costs	Base Costs
CLASSROOM EQUIPMENT										
Cost of new projectors	$2,500									
Number of projectors needed		2	10	21	0	57	79	0		
Cost to upgrade classroom projectors		$5,000	$25,000	$52,500	$0	$142,500	$197,500	$0	$422,500	
Replacement Cycle of Projectors	3									
Cost to upgrade classroom projectors		$5,000	$25,000	$52,500	$0	$142,500	$197,500	$0		
On-going Replacement Budget		$1,667	$8,333	$17,500	$0	$47,500	$65,833	$0		$140,833
Cost of new screens	$300									
Number of screens needed		2	0	12	0	57	79	0		
Cost to upgrade classroom screens		$600	$0	$3,600	$0	$17,100	$23,700	$0	$45,000	
Replacement Cycle of Screens	10									
Cost to upgrade classroom screens		600	$0	$3,600	$0	$17,100	$23,700	$0		
On-going Replacement Budget		$60	$0	$360	$0	$1,710	$2,370	$0		$4,500
Cost of computers for classrooms	$1,054									
Number of classroom computers needed		2	0	21	0	57	79	0		
Cost to upgrade classroom computers		$2,108	$0	$22,134	$0	$60,078	$83,266	$0	$167,586	
Replacement Cycle of classroom computers	3									
Cost to upgrade classsroom computers		$2,108	$0	$22,134	$0	$60,078	$83,266	$0		
On-going Replacement Budget		$703	$0	$7,378	$0	$20,026	$27,755	$0		$55,862
STORAGE										
Cost of 1 Gig of Storage	$6									
Number of additional Gigs needed		3,091	0	1,890	2,190	9,668	5,604	480		
Cost to add storage		$18,546	$0	$11,340	$13,140	$58,008	$33,624	$2,880	$137,538	
Replacement Cycle of Storage	4									
Cost to add storage		$18,546	$0	$11,340	$13,140	$58,008	$33,624	$2,880		
On-going Replacement Budget		$4,637	$0	$2,835	$3,285	$14,502	$8,406	$720		$34,385
ADDITIONAL SOFTWARE NEEDED ON LAPTOPS										
Cost of DyKnow or SynchronEyes Software	$50									
Number of licenses needed		2,931	1,600	1,802	2,070	9,040	5,284	462		
Cost of additional software		$146,550	$80,000	$90,100	$103,500	$452,000	$264,200	$23,100	$1,159,450	
Dyno or SynchronEyes Maintenance Cost	20%									
Cost of Additional Software		$146,550	$80,000	$90,100	$103,500	$452,000	$264,200	$23,100		
Annual Software Maintenance Cost		$29,310	$16,000	$18,020	$20,700	$90,400	$52,840	$4,620		$231,890
BANDWIDTH										
Cost of Bandwidth per Mbps	$86									
Additional Mbps Bandwidth Needed at 50kbps per laptop		35	11	9	15	75	55	2		
Cost of additional bandwidth		$36,120	$11,352	$9,288	$15,480	$77,400	$56,760	$2,064		$208,464
One-Time Costs		**$814,628**	**$574,944**	**$993,701**	**$576,036**	**$2,722,454**	**$1,602,032**	**$139,213**	**$7,423,008**	
Base Costs		**$128,193**	**$45,817**	**$114,537**	**$51,157**	**$357,540**	**$287,867**	**$17,246**		**$1,002,357**

Technology Investment
Mobile Computing - Technical Support Staff

Requested Base General Funds	$1,533,918
Requested FTE	26.0
Governor Recommended	$0
Governor Recommended FTE	0.0

What is the goal?

The goals of the mobile computing environment are to enhance student connectivity, technology preparedness, and 21st Century learning skills to better position graduates to lead South Dakota into a technology and information rich based economy. This request will enable us to build and maintain the technology environment necessary to support a mobile computing environment initiative.

Why is this important to higher education and the state of South Dakota?

It is important to be successful with mobile computing as the state, students, and employees will all have a vested interest in the success of the program. With the possibility of a mobile computing device in the hands of each student and faculty member, the expectation will be for support services beyond the technical support to keep the machines operating. Providing technical support for a wireless computing environment includes maintaining and monitoring the wireless network, performing periodic upgrades of hardware and software, providing technical training to faculty and students, troubleshooting problems and repairing faculty and student computers. For example, online testing programs have established more elaborate modeling functions that employ visual, audio, and video stimuli for students as they respond to exam/quiz questions. The potential for signal drop in these testing platforms is likely as students progress through the exam at similar rates. In the nursing program at South Dakota State University, faculty have commonly requested instructional technology staffs to assist with the potential wireless issues students face in the classroom when these types of testing features are employed. A robust and responsive support desk will be needed which will require additional staffing with expanded hours. The number of technical staff needed to support a mobile computing environment will be proportional to the number of students on campus, the number of access points to be maintained, the number of smart classrooms and the number of faculty.

The current mandatory laptop programs provided some guidance on the support infrastructure that will be needed with a system-wide mobile computing requirement. SDSU currently supports 1,399 students in majors required to have laptops. If laptops are required for use in classrooms, repairs must be done immediately, so an inventory of parts and loaner equipment must be maintained on-site as well. SDSU maintains a parts and loaner/demo inventory costing approximately $121,000 and supports the students in major-required laptop programs, plus all additional students who choose to purchase laptops through the eSDSU Laptop Center. Personnel costs run $70,452 for the equivalent of 2 full-time hourly technicians. The School of Mines has added 1.0 FTE to support their laptop program as well as student labor FTE. The 1.0 full-time FTE devoted to provide support for the tablet PCs cost $45,714. SDSM&T expects to add an additional FTE when more students are brought into the program. The School of Mines' goal is to have one spare tablet on hand for every 50 deployed to use for spare parts and loaners.

Technology Investment
Mobile Computing – Technical Support Staff

The number of technical staff needed to support a mobile computing environment will be proportional to the number of laptops on campus, the number of access points to be maintained, the number of smart classrooms and the number of faculty. The current campus-wide programs at DSU and SDSM&T, and the experience at SDSU with several mandated programs, provide us some experience as to the IT support needed for a mobile computing environment initiative. Both DSU and SDSM&T have recognized that they must add additional support staff to better manage and support their programs. With current IT staffing levels already below standards as reported annually in the ECAR survey, the request to add 1.0 FTE technical support staff per 800 laptops is far from generous. To keep the cost down to the state, we have cut the technical support staff in half and replaced them with technology fellows. Technology fellows will be used to support the computer repair and parts shops, assist students in troubleshooting computer problems, and assist with network and access issues. The net result of using technology fellows to replace technical support staff reduced our request for new staffing to one technician per 1,600 laptops! The salary level is $35,000 and cost with benefits is $45,911. The OE support for the new technicians is $2,500 each. The total request for technical support is $677,754.

Technicians Per 1,600 Laptops

	Total Headcount	One FTE Per 800	Assignment of Tech Fellows	Revised Request	Cost at $45,911	OE Support $2,500	Total Request
BHSU	3,892	4.9	12	2.0	$91,822	$5,000	$96,822
DSU	1,293	1.6	4	1.0	$45,911	$2,500	$48,411
NSU	1,814	2.3	6	1.0	$45,911	$2,500	$48,411
SDSM&T	1,887	2.4	6	1.0	$45,911	$2,500	$48,411
SDSU	8,642	10.8	27	5.0	$229,555	$12,500	$242,055
USD	6,400	8.0	20	4.0	$183,644	$10,000	$193,644
	23,928	29.9	75	14.0	$642,754	$35,000	$677,754

Each institution is also requesting additional network FTE to manage the wireless networks. We are requesting one additional network support staff personnel per 100 access points. The salary level is $55,000 and cost with benefits is $68,847. Operating Support for the staff is being requested at a minimal amount of $2,500 per FTE which will be needed to cover training, supplies, computers and travel. The total request is $856,164 for salary, benefits and OE support for 12 FTE.

Technology Investment
Mobile Computing – Technical Support Staff

Network Technicians

	FTE	Cost at $68,847	OE Support $2,500	Total Request
BHSU	2	$137,694	$5,000	$142,694
DSU	1	$68,847	$2,500	$71,347
NSU	1	$68,847	$2,500	$71,347
SDSM&T	1	$68,847	$2,500	$71,347
SDSU	4	$275,388	$10,000	$285,388
USD	3	$206,541	$7,500	$214,041
	12	$826,164	$30,000	$856,164

FY09 One-Time Support

In order to build the environment and get ready for implementation of the Mobile Computing Initiative for Fall 2009, one-half of the new technical staffing needs to be in place starting January 2009 to complete the tremendous amount of preparation that is needed to be successful. Therefore, the staffing request is also being included as a one-time request to reimburse the campuses for FY09 expenses equal to one-half of the positions for 6 months. The staffing hired will be a combination of temporary and permanent staff that will utilize dollars equal to one-half of the permanent staffing request or $734,459.

What is the financial structure of this request?

BOR proposes a pay date change to the first of the month from the last day of the month which will result in moving a full months pay for all employees, except for 9 month faculty, into a new budget year. This will result in a one-time savings of $10.9M dollars. BOR proposes this change to support the Mobile Computing Initiative and provide the dollars for the one-time costs associated with the program. The base request represents a state appropriation request.

The following is a summary of the technical support staff request.

Technical Support Staff	Base	FTE	One-Time
Salaries	$1,150,000	16.0	$575,000
Benefits	$318,918		$159,459
Operating Expenses	$65,000		$0
Total	$1,533,918	16.0	$734,459

What is the Governor's recommendation?

While the Governor supports the Mobile Computing Initiative, he is not recommending any funding for staffing at this time.

Technology Investment
Mobile Computing – Faculty Development and Retraining

Requested Base General Funds	$1,229,899
Requested FTE	17.0
Governor Recommended	$0
Governor Recommended FTE	0.0

What is the goal?

The goals of the mobile computing environment are to enhance student connectivity, technology preparedness, and 21st Century learning skills to better position graduates to lead South Dakota into a technology and information rich based economy. To be successful we must retrain our faculty to utilize the technology to enhance teaching and learning.

Why is this important to higher education and the state of South Dakota?

Today more than 60% of universities report the development of extensive wireless environments to accommodate student connectivity needs (Guess, 2007). Despite this wireless expansion, less than five percent of higher education institutions throughout the United States have implemented a one-to-one or ubiquitous computing initiative (Nagel, 2008). The approximately 200 colleges and universities that have shifted to a ubiquitous computing environment have done so in an attempt to foster more extensive student support services, communication and collaboration between students, and increase technology fluency required for the 21st century workplace. Numerous critiques have been raised about the potential consequences that results from increased student reliance on mobile computing. For instance, Nicholas Carr (2008) recently explored the assumption that search engines and readily available sources of information were decreasing attention spans and our higher order ability to critically evaluate information. The internet by its virtue does not encourage detailed information analysis or sustained attention, rather the internet was designed as a broad depository of information requiring individuals to develop an innovative set of information process skills that were never required in our previous paper based environment. Author and software developer, Jon Udell, noted that "Part of the answer is to develop – and –teach – strategies that enable us to gaze on the information commons in the most effective ways. . . On that front, technology sometimes gives back with one hand what it takes away with the other. " (2008, para 6, 8). For instance technological tools have the ability to supplement our intellectual abilities by automating more lower level intellectual skills and allowing for a stronger emphasis higher order thinking (Swan, Hooft, Kratcoski, & Schenker, 2007).

Ubiquitous computing has the potential to transform existing learning environments and produce positive influences on a combination of both direct and indirect student learning outcomes. Many policy makers have been critical of mobile computing initiatives, arguing that an increase in technology based expenditures should produce noticeable increases in student learning outcomes through high stakes testing. When examining early research on the impact of laptop initiatives (see Penuel et al., 2001 for a comprehensive review), little empirical evidence existed to determine the success of such programs. However, much of this stemmed from the methodological approaches employed by researchers and the fact that significant pedagogical

changes required additional time to take effect on student performance (Penuel, et al., 2006). To date, a handful of investigations have demonstrated an increase in standardized scores (Honey & Henriquez, 2000; Robinson, 2003; Stevenson, 1998) after a ubiquitous computing environment was established within K-12 settings. However researchers also contend that there is not a consistent parallel between laptop use and the specific cognitive-based skills measured on existing standardized tests. As 21st century learning emphasizes the ability to use various forms of technology such as multi-media to present ideas, such skills have little value on traditional state-wide or proficiency examinations. Ubiquitous computing has been shown to have a positive effect on student writing skills (Gulek & Demirtas, 2005; Light, McDermott, & Honey, 2002; Mouza, 2008; Penuel, 2006; Rockman, 2003; Russell et al., 2004; Silvernail & Lane, 2004; Vahey & Crawford, 2002) that stem from how mobile computing allows for greater peer editing, prewriting and graphic organization (Warschauer, 2008). Yet, high stakes testing is time sensitive, completed with pencil and paper, resulting from prompts with limited context or authentic learning potential, with no access to widely available sources of information that require access to newly developed information literacy skills.

Ubiquitous computing should be envisioned as a resource that does more than increase student test scores, and embraced because of the less tangible and measurable skills that results from a more collaborative learning process. Research on ubiquitous computing programs have observed an increase in ***student collaboration*** among peers (Norris & Soloway, 2004; Robertson, Calder, Fung, Jones, O'Shea, & Lambrechts, 1996; Roschelle & Pea, 2002; Swan et al., 2007; Zurita & Nussbaum, 2004) and teachers (Mouza, 2008), ***broader utilization*** of computers across curriculum (Russell, Bebell & Higgins, 2004). The collaborative environment that technology helps to promote has breathtaking possibility to influence innovation that can enhance future organizational output and economic growth. For instance, as classmates at Harvard in the early 1970s, Bill Gates and Paul Allen formed *Microsoft* after collaborating on projects outside their coursework to develop the first software system for the Altair 8080 microcomputer. Similarly, what is currently known as *Facebook* was envisioned when Mark Zuckerburg collaborated with fellow Harvard students to create an online student directory that is now worth an estimated 15 billion dollars. Research has also found ubiquitous computing to ***increase student comfort*** with multiple software applications for accessing and organizing information (Lowther, Ross, & Morrison, 2003), performance on computer proficiency exams and ***media literacy scores*** (Hill, Reeves, Grant, Wang, & Han, 2002; North Carolina Department of Public Instruction, 1999; Rockman, 2003 Schaumburg, 2001), as well as increased ***student motivation*** (Educause Center for Applied Research, 2007; Light, McDermott, & Honey, 2002; Mouza, 2008; Newhouse& Rennie, 2001; Russell, Bebell, & Higgins, 2004; Swann et al., 2006; Trimmel & Bachmann, 2004; Vahey & Crawford, 2002; Zucker & McGhee, 2005) ***engagement*** (Light, McDermott, & Honey, 2002; Russell, Bebell, & Higgins, 2004; Swan et al., 2007; Zucker & McGhee, 2005) resulting in longer attention spans.

More important than the learning outcomes noted above is the impact these experiences are having on student learning styles. Teachers become learning facilitators rather than distributors of information (McClintock, 1999), whereby they are engaging in more class discussion, supervision of activities, and dialoguing with students and less time on classroom management and individual seat work. Faculty have been found to employ a greater use of small groups (Swan et al., 2007) because instructors have found it easier to manage small group interaction,

with a stronger reliance on simulations (Colella, 2000) and projects (Honey & Henriquez, 2000). With such pedagogical changes students have obtained greater access to extensive sets of educational resources (Gaynor & Fraser, 2003; Mitchell Institute, 2004), resulting in increased organizational skills and independent learning (Zucker & McGhee, 2005) confidence (Russell, Bebell & Higgens, 2004), as well as creative tendencies and positive attitudes toward school (Mouza, 2008). For instance Warschauer (2008) observed dramatic changes in the pedagogical approaches teachers employed when teaching reading in ubiquitous computing environments. Teacher use of "scaffolding" allowed students to engage difficult textual material by supplementing with multimedia available on the internet that provided background information in relation to simply reading material. Findings from this investigation also noted that "epistemic engagement" resulting from collaborative work by students as they sought to jointly establish meaning within the text that had customarily been an individual learning function.

As student learning styles have assimilated to a technology-rich environment, post-secondary institutions are presented with two valuable opportunities. First, the integration of one-to-one computing into existing curriculum helps to ensure a comprehensive pedagogical approach to teaching with technology. Second, and more importantly, is the potential to explore how course redesign/transformation could be successfully achieved in disciplines where faculty are encouraged to rethink how advancing technologies could be used to escape the confines of the traditional classroom structure (e.g., 25 students meeting three times a week for 15 weeks). The National Center for Academic Transformation (NCAT) has worked successfully with a number of colleges, universities, and states to target collaborate course redesign where all faculty are invested in transforming how a course is delivered. These redesign efforts have aided in improving quality by helping to ensure similar learning experiences by students throughout a system. The potential for collaboration between faculty teaching in similar programs/disciplines within and across institutions is further enhanced in a system where faculty have worked in partnership to establish common course numbers, titles, and learning objectives. Establishing an environment with unlimited connectivity provides a foundation for enhancing student technological fluency, while affording educational entities in South Dakota additional opportunities to reshape the teaching and learning process. Thus, to ensure the most efficient use of state resources, the South Dakota Regental system continues to plan for a comprehensive roadmap for a collaborative approach to one-to-one computing for public higher education. The goal is to start on the infrastructure and training in FY10 and complete a mobile computing environment by 2012 to foster the 21st century skills necessary to propel the state forward in the current knowledge-based economy.

Faculty Development and Retraining

While it's tempting to consider a mandatory notebook/tablet initiative a technical undertaking, we must bear in mind our goal is to enhance academic programs. The infrastructure we develop and the classroom management behaviors embraced by faculty will greatly impact the success of a mandatory notebook/tablet program. Research suggests that students are much more adaptive to institutional/discipline selection of mobile computing tools, however faculty require additional development time to start the course transformation process necessary in this new environment. It has been clearly noted that faculty are at various levels of readiness when it comes to integrating mobile computing resources into their courses, warranting a phase approach that would allow campus personnel to target infrastructure expansion that would meet student needs.

Faculty Preparation: Personnel involved in the Classroom Connections, as well as Dakota State University and South Dakota School of Mines and Technology tablet initiatives, note a three-year transition before complete integration occurs. Once faculty are provided access to the mobile computing tools, time is required for further exploration and gradual integration into course activities, discussion, assignments, and broad pedagogical approaches. Just as faculty teaching a course for the first time are likely to experience a trial and error process with their approach to the course, a similar process occurs as faculty are asked to re-design and transform their existing course offerings. Once wireless access is available, the first semester should be approached as a critical part of the preparation period for faculty. Providing faculty with initial training on the common features of a mobile device, establishing classroom management procedures, and exposure to faculty in their own discipline across the system are important first steps to foster a seamless transition for all involved. If institutions were to target all disciplines to transition into the mobile computing initiative before Fall 2011, a total of 2,384 faculty (includes full time faculty and adjunct/term/part-time faculty teaching within the Regental system) would require introductory level training. Approximately $100 per faculty member would be required to address training costs (training personnel, resource development, consultant fees), with an additional $400 devoted to faculty stipends for initial training. An estimated $1,212,000 would be required in one-time funding to address anticipated training and development costs (see table 1).

Table 1
Projected Faculty Development Costs

Institution	*.5 FTE or More Faculty*	*Total Faculty*	*Campus Training Costs*	*Faculty Stipends*	*Total*
BHSU	125	259	$25,900	$103,600	$129,500
DSU	89	144	$14,400	$57,600	$72,000
NSU	88	161	$16,100	$64,400	$80,500
SDSM&T	112	162	$16,200	$64,800	$81,000
SDSBVI	20	20	$2,000	$8,000	$10,000
SDSD	20	20	$2,000	$8,000	$10,000
SDSU	596	995	$99,500	$398,000	$497,500
USD	400	663	$66,300	$265,200	$331,500
Total	***1,450***	***2,384***	***$242,400***	***$969,600***	***$1,212,000***

Course Redesign and Transformation: System level implementation of the mobile computing initiative should also have anticipated expectations beyond successful integration into the classroom environment. Organizations like the National Center for Academic Transformation have emphasized how colleges and universities can improve student learning outcomes and enhance efficiency through the redesign of instructional approaches. Their efforts have traditionally focused on courses with large enrollments where faculty workload is reduced through automation of routine instructional tasks and procedures. From 2002-2004 faculty in the Regental system explored the potential implications for using technology for course redesign purposes through a series of Governor Rounds Technology Grants. These grants produced a number of positive discipline level course redesign efforts for large lecture sections. However, the long-term impact from these projects was minimized by the lack of consistent funding and continued incentive for faculty. A programmatic approach to mobile computing throughout the

Regental system provides new opportunities for faculty across common disciplines to begin to further explore how the confines of the traditional classroom can be re-envisioned or changed to alter the 25 student, 45 hours of face-to-face instruction that has become the norm throughout higher education. To facilitate these discussions, funding should be allocated to encourage faculty throughout the system in common disciplines to explore and then implement opportunities for course redesign using mobile computing technology. To establish an expectation for course redesign and transformation, a pool of redesign funding in the amount of $372,500 would be needed to encourage discipline-wide course redesign during the first phase of the mobile computing initiative. Discipline teams would be asked to submit proposals to a system review team that would award funding to cover travel expenses, developmental costs, release time and modest stipends.

One potential pitfall related to successful integration is establishing a long-term faculty development program that encourages faculty integration of mobile computing into the curriculum as well as discipline level collaboration. Although the Board of Regents can provide faculty support and resources for initial training and development for faculty, there is a need to provide faculty at each institution with ongoing support to aid in long-term integration of new and advancing technologies and resources into the curriculum. For instance, through the Classroom Connections project, the Department of Education provided initial teacher training, and numerous school districts have then continued those efforts by hiring technology integrationists who are asked to provide ongoing assistance to teachers during class or prep-time. These integrationists serve a valuable role in promoting new and innovative approaches to employing mobile computing resources inside and outside the classroom. Successful models employed within the Classroom Connections project, and at Dakota State University and South Dakota School of Mines and Technology have benefited from allowing faculty to share their unique applications ranging from course assignments, classroom management and peer collaborations. For instance, the Multimedia Educational Resource for Learning and Online Teaching (MERLOT) has served as a portal that provides discipline, institutional and system level online teaching resources. A number of state systems have leveraged MERLOT resources to engage faculty teaching similar courses with established common outcomes. For example, "Teaching Business in the CSU System" was a course specific set of resources shared by faculty across a variety of institutions teaching courses with similar outcomes. Tennessee has developed a similar structure for their Regents Online Degree Program to provide a consistent approach to courses taught throughout their system. Taking advantage of the faculty resources and the common course numbering used in the system would be a logical first step for establishing long term professional development stemming from faculty collaboration system-wide.

The long-range implementation of a mobile computing environment rests upon the development of a pool of instructional designers/integrationists who are responsible for keeping faculty abreast of new resources, fostering discipline collaboration, and facilitate the sharing of best practices within institutions and throughout the system. As a result, the number of instructional design staff needed to support faculty ongoing training and development will be proportional to the number of full-time faculty within the Regental system. The expansion of distance education and online courses at the on- and off-site campus locations provide us some experience as to the development staff needed. Campuses have recognized that they must add additional instructional support staff to aid faculty as they transition their courses to an online environment,

and the request is to provide an additional 1.0 FTE per 150 faculty. The system is also requesting one additional staff person to coordinate system level training and discipline level coordination. The request is for an additional instructional design support staff at an annual salary of $55,000 per 150 faculty, and a system coordinator at an annual salary of $55,000. Operating support for the staff is being requested at $3,500 per FTE which will be needed to cover training, supplies, computers and possible travel. The total request is $1,229,899 for salary, benefits and OE support for 17.0 FTE, summarized in the following table.

Table 2
Instructional Design/Integrationist Staff Needed to Support Mobile Computing Environment

	Total Faculty	*FTE at $68,847*	*Salary & Benefit Cost*	*OE Support $3,500*	*Request*
BHSU	259	2	$137,694	$7,000	$144,694
DSU	144	1	$68,847	$3,500	$72,347
NSU	161	1	$68,847	$3,500	$72,347
SDSM&T	162	1	$68,847	$3,500	$72,347
SDSU	995	7	$481,929	$24,500	$506,429
USD	663	4	$275,388	$14,000	$289,388
BOR	N/A	1	$68,847	$3,500	$72,347
	2,384	17	$1,170,399	$59,500	$1,229,899

It should also be noted that a large number of the technology fellows at each school will be used to support faculty in the classroom, work directly with faculty to develop electronic course materials and websites, and support students with the technology in the classroom.

What is the financial structure of this request?

It will require a significant investment to retrain faculty to effectively teach in the mobile computing environment and to utilize the technology to its greatest extent. The cost to do this should not be underestimated. New faculty will also have to be trained as hiring them with the appropriate skills is highly unlikely. The one-time funding available from the payroll change after funding the infrastructure, classroom upgrades, software and equipment costs is $1,584,500. These dollars are being allocated to faculty training in the amount of $1,212,000 and to a pool for course redesign in the amount of $372,500.

The base dollars needed to provide professional instructional designers to train faculty on the use of technology in the classroom and changes to pedagogy will require $1,229,899 of base funds and 17.0 FTE. The designers will keep staff current with technologies and train new staff on an on-going basis.

Technology Investment
Mobile Computing – Faculty Development and Retraining

A summary of the faculty development and retraining request follows:

Faculty Development and Retraining

	Base	FTE	One-Time
Salaries	$935,000	17.0	$845,483
Benefits	$235,399		$124,117
Operating Expenses	$59,500		$614,900
Total	$1,229,899	17.0	$1,584,500

A complete summary of the Mobile Computing initiative follows:

Summary of Mobile Computing Initiative Costs

	One-Time	Base	FTE
Network Upgrades, Software, Classroom Upgrades, Equipment			
Universities	$7,423,008	$1,002,358	
Special Schools	$44,524	$12,994	
Tablet Computers			
Universities	$1,065,600		
Special Schools	$140,800		
Technical Support			
Universities	$734,459	$1,533,918	26.0
Faculty Development and Retraining	$1,212,000		
Course Redesign	$372,500		
Instructional Design Support		$1,229,899	17.0
Total	$10,992,891	$3,779,169	43.0

What is the Governor's recommendation?

While the Governor supports the Mobile Computing Initiative, he is not recommending any funding for faculty development and retraining dollars at this time. The Board is also not moving the pay day to the first of the month so there will be no payroll savings.

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Appendix A
International Society for Technology Education
National Educational Technology Standards

1. **Creativity and Innovation:** Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology. Students:
    a. Apply existing knowledge to generate new ideas, products, or processes.
    b. Create original works as a means of personal or group expression.
    c. Use models and simulations to explore complex systems and issues.
    d. Identify trends and forecast possibilities.
2. **Communication and Collaboration:** Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others. Students:
    a. Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media.
    b. Communicate information and ideas effectively to multiple audiences using a variety of media and formats.
    c. Develop cultural understanding and global awareness by engaging with learners of other cultures.
    d. Contribute to project teams to produce original works or solve problems.
3. **Research and Information Fluency:** Students apply digital tools to gather, evaluate, and use information. Students:
    a. Plan strategies to guide inquiry.
    b. Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.
    c. Evaluate and select information sources and digital tools based on the appropriateness to specific tasks.
    d. Process data and report results.
4. **Critical Thinking, Problem Solving, and Decision Making:** Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources. Students:
    a. Identify and define authentic problems and significant questions for investigation.
    b. Plan and manage activities to develop a solution or complete a project.
    c. Collect and analyze data to identify solutions and/or make informed decisions.
    d. Use multiple processes and diverse perspectives to explore alternative solutions.
5. **Digital Citizenship:** Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior. Students:
    a. Advocate and practice safe, legal, and responsible use of information and technology.
    b. Exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.
    c. Demonstrate personal responsibility for lifelong learning.
    d. Exhibit leadership for digital citizenship.
6. **Technology Operations and Concepts:** Students demonstrate a sound understanding of technology concepts, systems, and operations. Students:
    a. Understand and use technology systems.
    b. Select and use applications effectively and productively.
    c. Troubleshoot systems and applications.
    d. Transfer current knowledge to learning of new technologies.

Appendix B

Table 1
Preliminary List of Phase One Disciplines with Enrollment Counts

Program/Discipline	BHSU	NSU	SDSU	USD	Total
Teacher Education					
Secondary Education	100	102	353	227	782
Business					
International Business	**	21	**	37	58
Banking/Finance	**	73	**	89	162
Marketing		43	**	74	117
Business Management	**	107	**	106	213
General Business/Business Administration	592	171	**	543	1,306
Accounting/Professional Accountancy	24	95	**	104	223
Economics/Pre-Economics	**	22	544	30	596
Entrepreneurial Studies	3	**	**	**	3
Tourism/Hospitality	2	**	**	**	2
Human Resource Management	187	**	**	**	187
Ag. Business & Resource Economics	**	**	46	**	46
Arts & Science/Fine Arts					
Mathematics	41	34	119	62	256
Multi-Media/Graphic Design/Visual Arts	74	68	247	138	527
Chemistry/Biochemistry	48	24	62	71	205
Journalism/Mass Communications	163	**	249	**	412
Biology/Microbiology	339	83	476	287	1,185
Physics	**	**	15	11	26
Geography/GIS	**	**	51	**	51
Landscape Architecture	**	**	70	**	70
Health Sciences					
Nursing/Accelerate/Pre-Nursing/Upward	**	**	1,141	981	2,122
Mission Specific Programs					
Industrial/Safety Management	**	**	23	**	23
Environmental Management	**	**	31	**	31
Agricultural Systems Technology	**	**	41	**	41
Agricultural & Biosystems Engineering	**	**	71	**	71
Agronomy	**	**	126	**	126
Animal Science & Range Science	**	**	336	**	336
Total Phase One Enrollments	1,573	798	4,001	2,760	9,132
Total Major Enrollments	3,029 (52%)	1,841 (43%)	8,685 (46%)	5,751 (48%)	19,306 (47%)

South Dakota Board of Regents
Joint Appropriations Committee
Budget Request Hearings

BHSU

DSU

NSU

SDSM&T

SDSU

USD

SDSBVI

SDSD

YOUR FUTURE IS HERE. South Dakota Board of Regents

Fiscal Year 2010
Budget Request

Research Investment
Human Research Capacity

Requested Base General Funds	$2,659,075
Requested One-time General Funds	$1,500,000
Requested FTE	16.5
Governor Recommended Base General Funds	$0
Governor Recommended One-time General Funds	$0
Governor Recommended FTE	0.0

What is the goal?

Stimulate and build research capacity within the State of South Dakota by adding additional human research capacity.

Why is this important to higher education and the state of South Dakota?

The goal of developing a research culture for South Dakota has been under way for the past five years. We have made significant progress. There are new doctoral programs in the sciences and engineering. We have focused on cooperative research efforts through the 2010 research centers. We have a state-of-the-art high-speed communications system that connects South Dakota researchers to the rest of the world. We are building new science facilities and updating existing ones, using state bonds authorized by the Legislature for construction of public university science and laboratory space.

Individual researchers at the public universities have grown their external research funding from $30 million to nearly $80 million since 2000. But as one of our college presidents said recently, "We have used our entire bench." If we are to continue to expand and develop this state's research infrastructure, an additional investment in our human resources' research capacity is required. This was clearly noted by external evaluators from the American Association for the Advancement of Science (AAAS), who recently studied South Dakota's research environment. Their conclusion is that in order to develop the state's research infrastructure, a significant investment in human capital for research is needed. Historically, our public universities have invested in teaching faculty. This new investment in research talent is critical. Simply put, we need to staff positions that will have research responsibility.

This proposal takes a first step in that direction. It calls for investing in 16.5 full-time equivalent (FTE) research positions at the public universities. Each of these positions is identified by institution and discipline field. This strategic and historic investment is focused on science, technology, engineering and mathematics (STEM) fields of study. It is also linked to existing investments in the current doctoral programs, and to support faculty positions that ensure there is a pipeline of undergraduate students from South Dakota institutions moving into graduate programs.

The *short-term return* on investment comes from a greater competitiveness for federal grants and other external resources to support our institutions. Put simply, the economic impact builds a research industry for South Dakota. Each faculty member will be expected to bring in $500,000 of external funding per year. A significant portion (about 60 percent) of the total dollars brought

in from outside the state is spent in South Dakota for goods and services. Those dollars circulate within the state's economy 2.4 times. Whereas, the dollars are directly spent by persons living in Vermillion or Brookings, for example, it is when those individuals buy groceries that they may be buying meat that originated in Faith or buying bread that came from the wheat grown in Winner. With each researcher FTE generating $500,000 in external funding, these dollars would have a $11,880,000 economic impact on the state. This formula is shown as follows:

16.5 FTE x [*$500,000*] x .60 [*spent in state*] x 2.4 [*circulation of dollars*] = Estimated State Economic Impact of $11.88M

The *long-term benefit* comes in the potential for developing intellectual property that can be translated into licenses or products to be developed and sold. This is very much a long-term proposition that may take 10, 15 or 20 years in order to realize real returns. In this transitional phase, however, these investments will also have numerous ties to both current and future research and industrial efforts in South Dakota. Participating universities have outlined how added research investments will relate to doctoral programs, 2010 research centers, SUSEL/DUSEL, federal government investments in competitive research and South Dakota business or industry.

University of South Dakota

The research investments at USD will be in Biomedical Engineering [4.0] and Physics [1.0]. These relate to the specific opportunities for support in the following ways:

Biomedical Engineering

- Doctoral Program**:** Both the PhD in Biomedical Engineering (in collaboration with SDSM&T) and the PhD in Materials Chemistry contribute to research on biomaterials and tissue engineering.

- 2010 Research Center: The 2010 Center for Research and Development of Light-activated Materials (CRDLM) includes a research focus on biomaterials.

- SUSEL/DUSEL: Development of anti-microbial materials requires understanding of the diversity within the bacterial world and the development of resistance by microorganisms. Thus, identification and characterization of new organisms isolated from the SUSEL/DUSEL may open opportunities for expanding the range of anti-microbial materials created by BME researchers.

- Federal research investment: Currently NIH funds four research grants in biomaterials awarded to one USD faculty member in BME. The Department of Defense also has interest in bioadhesives, tissue engineering and antimicrobial materials, and therefore offers another source for future federal funding. BME research will also be competitive for NSF funding.

- South Dakota business/industry: Because the BME faculty members conduct applied research and will be located at the GEAR Center in Sioux Falls, the potential for partnerships with business is great. In addition to the existing relationships between the

2010 CRDLM, PhotoBioMed and Prairie Scientific Innovations, there is an emerging relationship between BME and Medetech and Control Systems Technology, and potential for new relationships with, for example, AlphaGenix.

Physics

- Doctoral Program: USD is developing for BOR consideration a proposal for a PhD in Physics, with a focus on nuclear and high-energy physics. The Memorandum of Understanding establishing a Science Education Partnership between the SD Board of Regents and the University of California, Berkeley and the Lawrence Berkeley National Laboratory includes support for planning a doctoral program in physics. More immediately, an Intent to Plan for a collaborative master's degree with SDSM&T and SDSU was approved by the Board at its May 2008 meeting.

- 2010 Research Center: One aspect of the work by physics researchers is creation of new detectors, which requires research into detector technology and materials. Collaboration with chemists is important in designing purification and testing strategies for noble gases, and hence partnerships with faculty in the 2010 Center for Research & Development of Light-activated Materials, as well as the Materials Chemistry PhD program and EPSCoR PANS project, will provide key expertise.

- SUSEL/DUSEL: In anticipation of the national deep underground labs (SUSEL/DUSEL) at the former Homestake Mine, USD faculty and postdoctoral researchers are actively collaborating with scientists at the Los Alamos National Lab and participating in experiment planning with the Lawrence Berkeley National Lab physics research team. USD physics faculty also work in an interdisciplinary team of metallurgical engineers, computer scientists, chemists, and geologists on "clean materials" and low energy nuclear reaction applicable to neutrino detection. Development of USD's particle physics expertise is envisioned as an important component of the state's involvement in nuclear and high energy physics research in the underground lab.

- Federal research investment**:** USD researchers are targeting NSF EPSCoR and Department of Energy EPSCoR infrastructure programs for funding. Additionally, USD has received an indication, not yet official, that NSF will fund the project "DUSEL R&D for Measuring External Sources of Background at Homestake for Double Beta Decay and Dark Matter Experiments", proposed by USD physics faculty through mainstream NSF funding mechanisms.

- South Dakota business/industry: USD physics faculty and their collaborators are developing a technology to produce "clean materials" (such as copper, noble liquids, and crystals) underground to protect from cosmic–ray radiation. The technology is expected to be used in an on-site facility to supply SUSEL/DUSEL experiments, and thus provide jobs and make purchases in SD. However, the technology may have application to sensors in other fields – medicine and homeland security, for example – and thus have broader commercial potential as well.

South Dakota State University

At SDSU the research investments are in Biological Sciences [1.5]; Electrical Engineering [1.5]; Mathematics, Statistics and Computational Science [1.0]; Pharmaceutical Science [1.0], and Geospatial Science and Engineering [1.0]. They support the existing and potential work in the following ways:

Biological Sciences

Added research capacity in biological sciences will be directed toward genomics biology and biotechnology including microbial genetics, functional genomics and microbiology/plant genetics. These positions will strengthen the PhD in Biological Sciences and contribute to the strengthening of the Pharmaceutical Science PhD and the proposed Nutritional Sciences PhD. Applications of the research will be primarily in bio-energy, bio-products and health sciences including vaccinology, infectious diseases and health promotion and wellness. Supporting linkages will be with three 2010 Centers: the Center for Infectious Disease Research and Vaccinology, the Center for Bioprocessing Research and Development and the Center for Drought Tolerance Biotechnology.

The positions will contribute to the expanding network of corporate partners including Monsanto, Ceres, Agrivida, VeraSun, ICM, POET, and others. These positions will directly contribute to the very active collaborations with four Department of Energy National Laboratories in bio-energy and advanced computational sciences; Oak Ridge National Laboratory, National Renewable Energy Laboratory, Idaho National Laboratory, and Argonne National Laboratory.

It is clear that biotechnology and bio-energy will continue to be high priority fields and are among the four technology sectors targeted by the state of South Dakota for growth and development. There will be significant opportunities for federal funding and industry collaboration in renewable energy, climate change, infectious diseases, and human/animal health.

Summary for Biological Sciences:

PhD Programs	Biological Sciences (support to Pharmaceutical Sciences and proposed Nutritional Sciences)
2010 Centers	CIDRV, CBRD, Drought Center
SUSEL/DUSEL	Microbial genetics and linkage through CBRD
Federal funds	Anticipate many opportunities, including Sun Grant Initiative, DOE, USDA, NSF, EPA.
SD Business/Industry	Biofuels, biotechnology

Electrical Engineering

Additional faculty in electrical engineering will build capacity in electronics, software engineering and information science. Applications include renewable energy, information technology and materials science, sensors and novel devices including human health applications. The new research positions will strengthen PhD programs in Electrical Engineering and Geospatial Sciences and Engineering. Supporting linkages will be with the GIS Center of Excellence partnership with the USGS EROS Data Center and its newly expanded mission. Collaboration with the emerging electronics sector in South Dakota will be enabled by this increased capacity.

Collaborations exist with the US Army Space and Missile Defense Command, Sandia National Laboratory and with several corporations, such as Radiance Technologies. Discussions are under way with SAIC, a leading provider of scientific, engineering, systems integration and technical services and solutions. There will be significant opportunities for federal funding and industry collaboration in renewable energy, power management, sensor technology, processing of satellite data and a wide spectrum of information technology and software firms. These fields are high priorities in the US Departments of Defense and Homeland Security and the growing South Dakota distributed power industry (i.e. wind, solar, anaerobic digesters, geothermal, etc.). Potential exists for linkages to SUSEL/DUSEL.

Summary for Electrical Engineering:

PhD Programs	Electrical Engineering (support to GSE PhD)
2010 Centers	Potentially Underground Exploration
SUSEL/DUSEL	Possible, depends on outcome of current discussions
Federal funds	Anticipate many opportunities in DOE, NSF and DOD.
SD Business/Industry	Electronics, software, power

Mathematics, Statistics, and Computational Science

Computational science and information science are enabling research platforms which drive advanced research and discovery capabilities in all fields. All cutting-edge, advanced scientific research is dependent on very sophisticated novel applications of informatics and computational science. Real breakthroughs on very hard, complex problems will not occur without world-class computational science capabilities. The new research positions will strengthen the PhD program in Computational Science and Statistics, a joint program with University of South Dakota. Supporting linkages will be strengthened with the 2010 Center for Infectious Disease Research and Vaccinology, the Center for Drought Tolerance Biotechnology, the SDSU Vanguard Center (National Childrens' Study), the Ethel Austin Martin Nutrition Center, SDSU/Avera Health Partnership, the USD SDSU Health Sciences Alliance, the emerging relationship with Mayo Clinic and the developing collaborations with Argonne National Laboratory (ANL) in high performance computing. Argonne pointedly is aggressively seeking collaboration while they put one of the world's fastest computers to work to solve real hard, very complex problems such as bio-energy, human health, and global competitiveness.

Summary for Math, Statistics, Computation, Informatics:

PhD Programs	Computational Sciences and Statistics
2010 Centers	CIDRV, Drought (also Vanguard, Health Science Alliance)
SUSEL/DUSEL	Microbial genetics effort through CBRD.
Federal funds	DOE (Argonne National Laboratory) and DOT
SD Business/Industry	Biotechnology, health sciences, bio-fuels

Pharmaceutical Science

Pharmaceutical science research/teaching will significantly advance the research capacity in the health sciences, investigating and commercializing new diagnostics, new therapeutics and new delivery mechanisms to lower the cost of health care, treat diseases and improve the well being of people. The SDSU/Avera Health Partnership and the USD/SDSU Health Sciences Alliance will move forward more rapidly with increased capacity. Pharmaceutical Sciences faculty will be located in the new Avera Health and Sciences Center. The Avera Research Institute will be

located in the Center, as well, and will strengthen the PhD program in Pharmaceutical Science. Supporting linkages will be strengthened with SDSU/Avera Health Partnership, the Sanford School of Medicine and the USD SDSU Health Sciences Alliance, Mayo Clinic and several pharmaceutical companies. This will complement existing efforts in the Department of Mathematics and Statistics through the PhD in Computational Sciences and Statistics for work in developing new therapeutics and novel delivery mechanisms. The SDSU Pharmaceutical Sciences team has submitted a proposal for one of the new 2010 Research Centers.

Summary for Pharmaceutical Sciences:

PhD Programs	Pharmaceutical Sciences
2010 Centers	Possibly a new 2010 centers. The faculty currently collaborate with CIDRV.
SUSEL/DUSEL	Not likely
Federal funds	NIH, NSF
SD Business/Industry	Avera, Sanford, health care and biotechnology industries

Geospatial Science and Engineering

A geospatial science and engineering line will leverage the new flight operations mission of EROS and add new capacity in remote imagery and mapping of drifts in DUSEL, a research and development undertaking growing in interest among federal agencies, including the Department of Defense. The new research position will strengthen PhD programs in Geospatial Sciences and Engineering. Supporting linkages will be with the SDSU GIS Center of Excellence and the USGS EROS Data Center. Building capacity is particularly timely with the expanded mission of EROS that will include more USGS scientists located at EROS and with new earth observation satellite operations responsibilities, formerly a NASA function. The new position will complement existing efforts in the Department of Electrical Engineering and Computer Science by adding significant applicant research capabilities. Besides EROS, collaborations exist with the Department of Energy Oak Ridge National Laboratory and several international collaborators. The Sun Grant Initiative currently supports GIS Center research on cellulosic feedstock production. There will be significant opportunities for federal funding and industry collaboration in renewable energy, climate change, land use policy, and advanced applications of satellite imagery data. These fields of study are high priority in many federal agencies, including the Department of Defense and Department of Homeland Security and may have relevance to SUSEL/DUSEL.

Summary for Geospatial Science and Engineering:

PhD Programs	GSE
2010 Centers	No 2010 center; however, the positions will be linked with the GIS Center of Excellence.
SUSEL/DUSEL	Possibly, underground mapping
Federal funds	USGS, NASA, DOE, NSF
SD Business/Industry	EROS Data Center and partnering businesses

South Dakota School of Mines and Technology

SDSMT will use the research investments to add one position each to physics, metallurgical engineering and geology/geosciences engineering. These will relate to the existing and future work of the university in the following ways:

Physics
This position will serve as a catalyst for our involvement in the SUSEL and DUSEL initiatives. With a background in particle physics, this researcher will participate in one or more of the collaborations of physicists proposing DUSEL research. Further, this individual will be able to identify strengths in other disciplines present among our faculty that relate to SUSEL/DUSEL and will foster collaborations between the lab and faculty, expanding research opportunities.

Metallurgical Engineering
This position will be a metallurgical engineer who will further the establishment of the "Repair, Refurbish, and Return to Service – Applications Research Center (R3S-ARC)" that has just been proposed as the next 2010 Research Center. This center involves Ellsworth Air Force Base, local industry partners RMP & Associates and H.F.Webster Engineering and Consulting Services, as well as international industry partners such as Boeing, Lockheed-Martin, and Pratt-& Whitney. It will contribute to the sustainability of Ellsworth Air Force Base, a key component of the area economy, and will have strong potential for the development of commercializable IP.

The work here is an outgrowth of our NSF-funded Industry/University Cooperative Research Center in friction stir joining. This position also provides faculty support for FY08 (actual) and FY09 (anticipated) federally funded programs in aging weapons systems at the SDSMT.

While the proximate motivation for this center has been the issues surrounding our aging weapons systems, renovation and refurbishment of the SUSEL/DUSEL facilities at the deeper levels of the mine face many of the same repair, refurbishment, and return to service concerns. This provides for a synergistic application of the R3S technologies at both ends of a Technology Corridor along the I-90 stretch between SUSEL/DUSEL and Ellsworth Air Force Base.

The researcher will work with students in our doctoral program in Materials Engineering and Science and our doctoral program in Nanoscience and Nanoengineering.

Geology/Geosciences Engineering
The next major play in natural gas and petroleum development is expected to be in the North Dakota/South Dakota area. The School of Mines has been contacted by Halliburton, one of the world's largest providers of products and services to the energy industry, who is interested in having us produce the doctorally-prepared scientists and engineers who will lead that development in our region. This position will enhance current faculty expertise and expand our research in natural gas and petroleum development in conjunction with our doctoral program in Geology and Geological Engineering.

Black Hills State University
BHSU will add a position in biology that will support the university and state's work in the following ways:

Black Hills State University is committed to a long-term partnership with DUSEL in Lead, to advance science and economic development in South Dakota. Funding is requested to hire an established microbial genomics scientist to support a research program that focuses on the identification, characterization and commercialization of genes and gene products of scientific and economic importance. This investment builds on current expertise and available facilities of

the Biology program at Black Hills State University and the opportunities available at the Deep Underground Science and Engineering Laboratory (DUSEL). Black Hills State University has the opportunity to play a significant role in the development of science programs at DUSEL because of geographic proximity and the need for local scientific infrastructure necessary for long-term research projects. An investment in the research infrastructure at BHSU will ensure that South Dakota capitalizes on the opportunities that emerge from DUSEL.

The specific focus of this research initiative is to use genomics techniques to identify and harvest genes and gene variants that have economic value. The potential economic value, even from a single discovery is enormous. Organisms (extremophiles) that inhabit extreme environments (i.e. hot springs, deep-sea thermal vents, acidic environments, or polluted environments) such as the Homestake Goldmine have some of the greatest potential for commercial applications. The genes that encode these novel molecules can be of tremendous value. The DNA polymerase (*Taq* polymerase) from *Thermus aquaticus* isolated from a hot spring in Yellowstone National Park led to the development of the polymerase chain reaction and revolutionized biology. The economic value of *Taq* polymerase is conservatively estimated in the billions of dollars. The goals underlying these research objectives are directly in line with state priorities of technology-based economic development, specifically in support of the development of a biotechnology industry in South Dakota.

- Doctoral programs in South Dakota: This investment in research human capacity at Black Hills State University will build on our "pipeline" role in STEM graduate education and advance technology-based economic development in South Dakota. An emphasis on undergraduate research at BHSU has stimulated an increase in the number of students entering research career tracks, such as Ph.D. programs. The new Master of Science in Integrative Genomics at BHSU was established with the vision that it would serve as a transitional program with its graduates entering Ph.D. programs with advanced research training. An increase in research capacity and development of a research initiative in microbial genomics will serve to stimulate the growth of Ph.D. programs in the life sciences at South Dakota State University and the University of South Dakota, encourage collaboration and promote the development of new graduate programs in genomics and/or biotechnology.

- 2010 centers in South Dakota: Research expertise in microbial genomics is directly in line with the research objectives of the 2010 Center for Bioprocessing Research and Development at South Dakota School of Mines and Technology. Thus, this investment would have added value by promoting collaboration and contributing to an existing 2010 research center. In addition this investment in research infrastructure will promote the future development of competitive proposals for 2010 centers.

- DUSEL/SUSEL: Black Hills State University is actively involved in research at the DUSEL. As part of a larger national multidisciplinary collaborative team, BHSU researchers are conducting baseline studies of microbial diversity of the deep underground ecosystems using metagenomic techniques. This is a long-term research initiative that will contribute to understanding the biodiversity of this unique environment, and will lead to the identification of novel organisms, genes and/or

metabolites that will yield patentable IP, with commercial applications. The addition of an established Principal Investigator in Microbial Genomics will advance this initiative and promote the development of competitive extramural grant proposals and encourage collaborative opportunities with other DUSEL investigators.

- Federal investments in research at Black Hills State University: In the past five years, Science faculty brought $5,123,083 in federal research funding to BHSU despite having traditional teaching appointments of 24 credit hours per year. Given the existing research capacity, the opportunities at DUSEL, the expectation for an established Principal Investigator in Microbial Genomics would be $1-1.5 million per year in federal research funding. Investments in research infrastructure, such as the present proposal increase the competitiveness for federal grant applications by demonstrating state/institutional commitment.

- South Dakota business and/or industry: This investment in research capacity will contribute to the development of a biotechnology industry in South Dakota, and contribute to the development of a trained workforce as well as creating opportunities for commercialization of intellectual property leading to economic development. Black Hills State University is a member of the South Dakota Biotechnology Association.

Dakota State University

DSU will add a position in informational systems that will support the work of the university in the following matter:

Dakota State University's 2007-2012 strategic plan reaffirms DSU's commitment to and emphasis on research and information technology. The Board of Regents' authorization of DSU's doctoral degree program in information systems in December 2005 and the subsequent, unprecedented growth in information systems-related graduate programs at DSU is further testimony to DSU's potential and commitment to graduate education and research.

Funding is requested to hire an information systems position. The position will significantly enhance DSU's research capacity and support for its IS-related graduate programs. The investment builds on existing expertise in information systems, with a focus on cyber-infrastructure and decision informatics, particularly as it relates to information security (security informatics) and healthcare (health informatics).

- Doctoral programs: The proposed investment in one additional faculty FTE at DSU is tightly integrated with and supportive of DSU's IT-related graduate programs, particularly the D.Sc. program in information systems with its emphasis on decision support, security, and healthcare. At the state level, the doctoral degree program supports the state's banking / finance, health care and technology industries by providing research expertise in information systems, database management and data-mining. DSU's D.Sc. program is part of the state's 2010 Education[1] initiative and directly supports the

[1] http://www.2010education.com/

Workforce 2025[2] with its emphasis on science technology, engineering, and math (STEM).

- SUSEL/DUSEL: Given the complex nature of modern-day scientific and engineering processes, computational support is a critical resource for researchers in a variety of research domains. Recent research initiatives in South Dakota, notably the Deep Underground Science and Engineering Laboratory (DUSEL), have resulted in the development of related research projects in the areas of neutrino and solar physics, microbiology, geosciences, and the chemical sciences by researchers at South Dakota universities and other global constituencies.

Such science and engineering initiatives generate a large number of scientific and engineering models, related data, and knowledge. Often these models, data, and knowledge repositories are fragmented across various institutions and are not easily accessible to other researchers, educators and students, thus preventing efficient statewide knowledge dissemination and inter-disciplinary collaboration. DSU faculty are interested in exploring the development of a South Dakota Virtual Science Collaboratory (SD-VSC) -- a virtual organization and cyber-infrastructure that would enable South Dakota researchers, educators and students to collaborate and share knowledge, beginning with the DUSEL endeavor and eventually expanding to other science domains. Research expertise in information systems would enhance DSU's potential to pursue such research venues.

- 2010 centers: All cutting-edge and advanced scientific research is reliant on robust and reliable cyber-infrastructure. Research at South Dakota's 2010 research centers is no exception. Investment in the requested position at DSU would provide an opportunity for DSU to enhance its core expertise in information systems and informatics and ultimately to meet the cyber-infrastructure needs for these centers. In effect, this investment addresses the South Dakota EPSCoR goal of improving South Dakota research science and technology capabilities and the Governor's 2010 Research Initiative for expanding scientific research infrastructure in the state. Moreover, this investment positions DSU to meet other 2010 research centers' information systems-related needs and to provide assistance with cutting-edge analytics and data-processing approaches.

- Federal funds: In a 2007 report[3], NSF Cyberinfrastructure Council provides its cyberinfrastructure vision for the 21st century. The report recognizes the importance of cutting-edge research that addresses the challenges and opportunities pertaining to various elements making up cyberinfrastructure -- most notable data, information resources, networking, and virtual organizations. The investment in additional human research capacity at DSU would poise DSU to take advantage of related funding opportunities. The project contributes to the National Science Foundation priorities in cyberinfrastructure software development and the integration of research and education. Examples of other opportunities that may be enabled by this investment include: Cyber-enabled Discovery and Innovation (NSF 07-603 Solicitation), Community-based Data Interoperability Networks (INTEROP, NSF 07-565 Solicitation), Applied Information

[2] http://workforce2025.com/

Systems Research (NASA ROSES Solicitation), and Physics at the Information Frontier (NSF PD 05-7553 Solicitation).

- SD Business/Industry: DSU has long-established relationships with these corporate partners: Oracle, Microsoft, Citrix, Sun, IBM, Citibank, Schwans, Mutual of Omaha, and Federated Insurance, among others. The relationships that DSU currently enjoys with these corporations will be strengthened by the additional research investment the institution is requesting. The investment will also support partnerships and collaborations that are likely to develop within the health care industry in South Dakota. The additional research investment at DSU is also likely to increase entrepreneurial activity in the state through the formation of new businesses by D.Sc. graduates.

Northern State University

NSU will add capacity by reassigning an existing faculty member who has a strong research relationship with the chemistry faculty at SDSU to one-half time research. It is expected that this faculty position will work closely with the research faculty at SDSU. Therefore, NSU's request is for .5 FTE for half-time release of teaching duties to conduct research in Chemistry.

What is the financial structure of this request?

The first table below details the FTE request by discipline while the second table shows request totals by salary, benefits, and operational expense by university. Calculations were based on 12-month positions, the going fringe benefit factor and $14,000 OE support per position.

	Discipline	FTE
USD	Biomedical Engineering	4.0
USD	Physics	1.0
SDSU	Bioscience	1.5
SDSU	Engineering	1.5
SDSU	Math/Computer Science	1.0
SDSU	Pharmacy	1.0
SDSU	Geospatial Science & Engineering	1.0
SDSMT	Physics	1.0
SDSMT	Geology/Geological Engineering	1.0
	Discipline	**FTE**
SDSMT	Metallurgical Engineering	1.0
DSU	Information Systems' Doctoral Program Research	1.0
BHSU	Extremophile Microbial Genomics	1.0
NSU	Chemistry	.5
		16.5

[3] http://www.nsf.gov/pubs/2007/nsf0728/index.jsp

Research Investment
Human Research Capacity

	FTE	Faculty Salary per FTE	Benefits per FTE	OE per FTE	Total
USD	5	$138,000	$26,031	$14,000	$890,155
SDSU	6	$106,700	$21,437	$14,000	$852,822
SDSMT	3	$149,000	$37,646	$14,000	$571,938
DSU	1	$95,000	$19,719	$14,000	$128,719
BHSU	1	$125,000	$24,123	$14,000	$163,123
NSU	.5	$74,000	$16,636	$14,000	$52,318
	16.5				$2,659,075

One-time Start-up funds

Start-up funds for competitive scientists will run from $100,000-$500,000 depending on the nature of the laboratory and individual research requirements. One-time start-up fund will be placed in a system pool. Universities will compete for these resources based on the requirements of the individual positions. Universities would be expected to match the one-time start-up dollars.

What is the Governor's recommendation?

The Governor is not recommending an increase for human research capacity.

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BHSU

DSU

NSU

SDSM&T

SDSU

USD

SDSBVI

SDSD

YOUR FUTURE IS HERE. South Dakota Board of Regents

Fiscal Year 2010
Budget Request

SUSEL/DUSEL
Education Outreach

Requested Base General Funds	$146,502
Requested FTE	1.0
Governor Recommended	$0
Governor Recommended FTE	0.0

What is the goal?

To capitalize on the educational opportunities evident with the Sanford Underground Science and Engineering Laboratory and the Deep Underground Science and Engineering Laboratory.

Why is this important to higher education and the State of South Dakota?

SUSEL/DUSEL brings to South Dakota an opportunity to connect South Dakota public universities with world class research and graduate teaching universities. As the laboratories are prepared, there are numerous opportunities that will emerge where some or all of the work can be performed by South Dakota institutions and people. There is a need for a single person whose full time responsibility and focus is on brokering opportunities that may be open to South Dakota universities and personnel, with the needs of the Science and Technology Authority and the work of scientists from other universities. The following examples of what these opportunities may look like are described below.

Building the information communication system of the Lab

Dakota State University has a special expertise in designing information systems and networks that transmit electronic communications. For a scientist from MIT who wishes to place monitors in the lab and have data transmitted to his home university for analysis, having the opportunity to work with a South Dakota resource rather than with his home university staff would make for a good use of our local resources.

Finding graduate student assistance

A scientist who needs the assistance of a graduate student to collect and process information on site at the laboratory, may find it better to work with a graduate student from a South Dakota University, rather than having a student travel from California or Pennsylvania to do the work.

What is needed is someone to daily look for these opportunities to connect South Dakota expertise and resources with those who are operating or using the lab. This would be the task of this position. Whereas the position would be administratively housed in the Board of Regents System Office, it may be located at the Science and Technology Authority in order to have the maximum opportunities for interactions at the Lab.

What is the financial structure of this request?

The Board is asking for one FTE to function as the Sanford Lab Science Education Coordinator. The position would conduct significant travel across the state and country promoting and identifying educational opportunities for the lab. A summary of the request follows:

SUSEL/DUSEL
Education Outreach

Budget Summary:

Salaries	$90,000 (1.0 FTE)
Benefits	$18,985
Travel	$25,000
Contractual Services	$5,000
Supplies and Materials	$4,017
Capital Assets	$3,500
Total	$146,502

What is the Governor's recommendation?

The Governor is not recommending an increase for education outreach.

SUSEL/DUSEL
SDSM&T – Institute for Professional Education in Deep Underground Science and Engineering

Requested Base General Funds	$203,428
Requested FTE	6.0
Governor Recommended	$0
Governor Recommended FTE	0.0

What is the goal?

Developing the learning and collaborative opportunities between the scientists, educators and public constituents at the Sanford Underground Science and Engineering Lab.

Why is this important to higher education and the state of South Dakota?

For South Dakota to take full advantage of the opportunities at the Sanford Underground Science and Engineering Lab and the anticipated federal funding of the Deep Underground Science and Engineering Lab, the public universities who are in close proximity to the lab must become active partners. In addition to research, proximity to the lab presents opportunities to work with educators in both the K-12 and higher education settings. BHSU and SDSM&T are advancing proposals to organize activities to capitalize on these opportunities.

SDSM&T with its focus on science and engineering undergraduate and graduate education can become a catalyst for universities and their students and faculty from around the nation as they use the lab for their educational programs. Partnering with the local institution can provide national research institutions with a special resource as they engage in their lab activities.

SDSM&T Institute for Professional Education in Deep Underground Science and Engineering

The Institute will develop a wide range of educational opportunities for undergraduates, graduate students, faculty members, engineers and other professionals. Coursework in many disciplines lends itself to use of the Homestake mine and the Black Hills as a laboratory for advanced study. For example:

- Mine ventilation and air conditioning surveys can be conducted in conjunction with classroom study;
- Measurements taken on-site can be made as part of a rock mechanics course;
- Geology and geological engineering students can practice their mapping skills in both underground and surface mapping;
- The area provides a natural laboratory for the study of hydrology; and
- Customized short courses can be developed for professional and industry groups that have an interest in specialized aspects of underground science and engineering.

A variety of types of professional education offerings will be developed to meet the needs of different audiences. Among the range of possibilities are: one day field trips, advanced field camps, summer workshops, "executive format" courses that combine distance delivery of instruction with weekend or summer laboratory classes in Lead, seminars, and conferences.

SUSEL/DUSEL
SDSM&T – Institute for Professional Education in Deep Underground Science and Engineering

As progress continues on the Sanford Underground Science and Engineering Lab (SUSEL) and the long-term goal of establishing a Deep Underground Science and Engineering Laboratory (DUSEL) at the Homestake mine, the need and the opportunity presents itself to establish a center that would provide advanced educational and professional development in above- and under-ground sciences and engineering. Just as researchers in areas such as atmospheric science, biology, environmental science, geology, hydrology, mining and related science and engineering disciplines will use SUSEL/DUSEL to conduct research projects, university educators, college students and industry professionals will benefit from the use of SUSEL/DUSEL as an "educational laboratory".

An Institute for Professional Education in Underground Science and Engineering will provide the organizational structure that will ensure that this opportunity for advanced education does not go untapped. The Institute will be staffed by a full-time director and a program assistant with offices on the campus of the South Dakota School of Mines and Technology and at Homestake. The director will be responsible for identifying and organizing appropriate courses and programming, hiring instructors, marketing offerings and managing budgets. Instructors from all over the nation will be recruited to offer specialized training at the Homestake site. At the same time, strong connections will be developed to the master's and doctoral programs at the School of Mines, and the availability of faculty expertise in South Dakota will be capitalized upon.

Several current School of Mines activities will be incorporated into the Institute as soon as funding is obtained and a director identified. Geology and geological engineering field camps will utilize the Homestake site in conjunction with the Institute. With an active MSHA state grant (Mine Safety and Health Administration, Department of Labor), in place at the School of Mines, the Homestake mine will be an excellent venue to be used as an on-site training ground for underground safety training applications.

The professional development and advanced training opportunities available through the Institute will be marketed nationally. The attractiveness of the Black Hills as a family vacation destination will help draw in faculty from outside the region for summer offerings. Where appropriate, courses will be offered through the South Dakota School of Mines and Technology. It is anticipated that this $203,428 investment by the State of South Dakota will ultimately result in an operation with a $600,000 - $700,000 annual operating budget. Additionally, the local economy will benefit from out-of-state participants who are attracted to the unique opportunities offered by the Institute.

SDSM&T has started a dialogue with BHSU to insure there is coordination with their efforts at Homestake. We are optimistic that our combined efforts will create significant synergies in furthering SUSEL/DUSEL educational outreach objectives.

What is the financial structure of this request?

State support in the amount of $203,428 will fund the director and program assistant positions and provide for modest operating expenses. Instructors will be recruited nationwide; to enable this, authorization for an additional four (4.0) FTE is also requested. These four additional FTE will be funded through grants, contracts, course and conference revenues.

SUSEL/DUSEL
SDSM&T – Institute for Professional Education in Deep Underground Science and Engineering

Budget Summary:

Salaries	$115,000 (2.0 FTE General, 4.0 FTE Other)
Benefits	$28,428
Travel	$20,000
Contractual Services	$25,000
Supplies & Materials	$15,000
Total	$203,428 (2.0 FTE General, 4.0 FTE Other)

What is the Governor's recommendation?

The Governor is not recommending funding for the SDSM&T Professional Education Institute tied to DUSEL.

SUSEL/DUSEL
BHSU – SUSEL's Simulated Science Program

Requested Base General Funds	$199,868
Requested FTE	6.0
Governor Recommended	$0
Governor Recommended FTE	0.0

What is the goal?

This project will link the development of content materials for teaching and learning science with the unique features of the SUSEL.

Why is this important to higher education and the state of South Dakota?

For South Dakota to take full advantage of the opportunities at the Sanford Underground Science and Engineering Lab and the anticipated federal funding of the Deep Underground Science and Engineering Lab, the public universities who are in close proximity to the Lab must become active partners. In addition to research, proximity to the lab presents opportunities to work with educators in both the K-12 and higher education settings. BHSU and SDSM&T are advancing proposals to organize activities to capitalize on these opportunities.

BHSU with its long history and association with K-12 Math and Science Education is a natural to take the lead in working with the curriculum in South Dakota that includes working with practicing science teachers, while providing an innovative approach to science education that takes advantage of contemporary technology and experiential learning.

BHSU proposes to connect K-12 students and their teachers to the unique science features of SUSEL/DUSEL through experiential learning modules.

Model Science Education Program

This proposal outlines a plan to establish a model science program combining technology, simulations and experiential learning at Black Hills State University. *Workforce 2025* recognizes the critical need to prepare students to pursue careers in the STEM fields. Unfortunately, studies repeatedly note that children tend to disengage from math and science around the 3rd to 4th grades and that elementary and middle school teachers are least confident teaching science and math. Both children and teachers report that learning science is most effective when the content is taught through a hands-on, experiential model. By exposing children and teachers to *real life* science in our own backyard at SUSEL, we will stimulate children's interest and curiosity to pursue careers in science. This initiative will support the collaboration and coordination of BHSU's existing resources, including the Center for the Advancement of Math and Science Education (CAMSE), the Center for the Conservation of Biological Resources (CCBR), the innovative teacher preparation programs in the College of Education, as well as the Science Department's expertise in the fundamental principles of science.

Working with researchers from across the nation who are engaged in creating simulations for the sciences (such as NASA's Teacher Scientist Program), modules will be developed for science

using the SUSEL/DUSEL research activities and the unique features of the lab involving physics, bioscience, and geoscience. Initially, this initiative will develop simulation modules that address the fundamental principles of physics, bioscience, or geoscience that are critical as building blocks for more advanced science learning and are components of the research conducted at the underground lab. Examples of such principles include Newton's Laws, Genomics, or Bonding Properties. Development of future modules will reflect the unique sciences occurring at the lab while building on the fundamental principles. Throughout the development of the simulation modules, their effectiveness will be assessed by children and teachers in the K-12 schools in collaboration with the outreach efforts of the Center for the Advancement of Math and Science Education (CAMSE). These simulations will provide the tools for teachers to engage students in sciences.

In 2006, T. Denny Sanford noted his gift for the Science Education Center was intended to "fundamentally change the way science is taught". This proposal will directly address this goal by linking the development of content for teaching science with the unique features of the underground lab as well as with the goals for SUSEL to develop the infrastructure required for DUSEL to receive NSF funding. The simulation modules will be integrated into the Science Education Center at the SUSEL site.

What is the financial structure of this request?

State support in the amount of $200,000 will fund the director and program assistant positions and provide for modest operating expenses. Consultants will be identified from across the nation to assist in the technological aspects of creating simulations of scientific events occurring at the underground lab.

It is expected this project will create revenue generating products that can be delivered to K-12 schools across the state and country. The simulations will be licensed as Intellectual Property and will be available nation-wide for purchase to teach science in K-12 schools.

Grant opportunities for replication and distribution of the modules as well as onsite, live training for teachers and children at the lab during summer camps/conferences will be pursued. Consequently, 4 additional FTE are requested for this anticipated outcome.

Budget Summary:

Salaries	$120,000	(2.0 FTE General, 4.0 FTE Other)
Benefits	$29,162	
Travel	$12,400	
Consulting Services	$25,000	
Supplies & Materials	$5,000	
Capital Assets	$8,306	
Total	$199,868	(2.0 FTE General, 4.0 FTE Other)

What is the Governor's recommendation?

The Governor is not recommending funding a Science Education Academy tied to the Sanford Underground Science and Engineering Laboratory.

South Dakota Board of Regents
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BHSU

DSU

NSU

SDSM&T

SDSU

USD

SDSBVI

SDSD

YOUR FUTURE IS HERE. South Dakota Board of Regents

Fiscal Year 2010
Budget Request

State Workforce Development
USD - Master of Social Work

Requested Base General Funds	$474,500
Requested FTE	4.8
Governor Recommended	$0
Governor Recommended FTE	0.0

What is the goal?

The goal is to prepare master's level social workers in order to meet the State's workforce needs.

The Board requests new State resources to establish a master of social work (MSW) degree at the University of South Dakota. The University will admit students in FY11 in order to comply with national accreditation standards and so the first students will graduate from an accredited program.

Why is this important to higher education and the state of South Dakota?

The request supports key policy initiatives:

1. Workforce 2025 Initiative (http://www.workforce2025.com)
   The mission is to ensure South Dakota has a competent and qualified workforce to allow for economic growth and expansion.

2. Governor's 2010 Education Initiative (http://www.2010education.com)
   Double the number of persons ages 25 and older engaged in postsecondary education [the new MSW program is likely to attract employed social workers with a bachelor's degree].

3. Governor's 2010 Initiative (http://www.2010initiative.com)
   Brand and develop South Dakota's Quality of Life as the Best in America by 2010 [convenient availability of social work services contributes to quality of life].

4. State Healthcare Recruitment Assistance Programs (http://doh.sd.gov/RuralHealth/recruit.aspx)
   State Loan Repayment Program: Certified social worker is one of the included occupations.

Social workers are licensed by the South Dakota Board of Examiners of Social Workers (http://dhs.sd.gov/brd/SocialWorker/default.aspx). Licensure as a certified social worker requires a "doctorate or master's degree from a school of social work accredited by the council on social work education" (SDCL 36-26-14). The requirements for independent practice include licensure as certified social worker (SDCL 36-26-17). The social workers chapter (SDCL 36-26) does not apply to employees of State government who are covered by SDCL 3-6A.

State Workforce Development
Master of Social Work - USD

The South Dakota chapter of the National Association of Social Workers (NASW-SD) provided a report, *Masters Level Social Workers in South Dakota: Workforce Assessment & Recommendations* (June 2008), that included the recommendation:

> We recommend that a Masters in Social Work Program be established in South Dakota to respond to the increased demand for MSWs by employers throughout the state.

The NASW-SD report included letters of support from SD employers. The report and other letters received by the Board are available upon request from the Board office. Additional information about social work is available on these web sites:

- National Association of Social Workers (NASW) - http://www.socialworkers.org;
- NASW South Dakota Chapter - http://www.naswsd.org;
- Social Work Reinvestment Initiative - http://www.socialworkreinvestment.org (Select "State Action," "South Dakota," and "View Plan" for South Dakota background information); and
- NASW Center for Workforce Studies - http://workforce.socialworkers.org.

The Department of Labor (Labor Market Information Center: LMIC) estimates the numbers of South Dakota jobs in selected occupations and projects the numbers of jobs ten years into the future. A description of the methodology is available on the LMIC web site. The table below provides the estimated jobs in 2006 and projected jobs in 2016 for social worker occupations.

South Dakota Department of Labor Estimated and Projected Jobs
Social Workers, 2006 to 2016

				2006-2016 Annual Averages		
Occupational Title	2006 Base Number of Jobs	2016 Projected Number of Jobs	Percent Change	Jobs Due to Growth	Jobs Due to Replace-ment	Total Avg. Annual Demand
Child, Family and School Social Workers	1,445	1,640	13.5%	20	31	51
Medical and Public Health Social Workers	420	480	14.3%	6	9	15
Mental Health & Substance Abuse Social Workers	195	240	23.1%	5	4	9
Social Workers, totals	2,060	2,360	14.6%	31	44	75

Source: DOL, LMIC web site: http://www.state.sd.us/dol/lmic/menuprojections.htm, Excel file for SD occupational projections for 2006-2016, accessed August 19, 2008. Social worker totals were added. SD DOL uses the Standard Occupational Classification (SOC) developed by the US Bureau of Labor Statistics

Development of Master of Social Work Program

The University of South Dakota has an accredited Bachelor of Science in Social Work program. Current resources are not sufficient to establish an MSW program that would meet accreditation

standards. The Council on Social Work Education (CSWE) establishes the accreditation standards and processes for social work degree programs (CSWE Accreditation: http://www.cswe.org/CSWE/accreditation). A master's or doctorate from a school of social work accredited by CSWE is a requirement for South Dakota licensure (SDCL 36-26-14 and 36-26-17).

The University is preparing a proposal for a Master of Social Work degree. Proposals for new graduate programs are examined by external reviewers retained by the Board (*Board Policy 2:1 External Review of Proposed Graduate Programs*). The reviewers are distinguished faculty and administrators with expertise in the discipline, experience in graduate education, and experience in program administration and accreditation. The reviewers interview faculty and administrators and examine facilities and equipment during site visits to the universities. The Board believes that the proposal can be developed, reviewed and revised in time for action at its December meeting.

During FY10, the University will hire a program director, a clinical coordinator and a half-time secretary (approximately $248K for personal services). The University expects to use the remaining resources for operating expenses including costs of accreditation visits (about $68K) and program start-up costs such as search expenses, space renovation, furniture and office equipment for new faculty, LAN/WAN drops, phone connections, smart classroom equipment and curriculum consultants.

No MSW students will be enrolled in FY10 (fall 2009) due to accreditation timelines. The first students will begin in FY11 (fall 2010). This schedule will allow the first MSW students to graduate from an accredited program.

What is the financial structure of this request?

The University is designing a program that will serve students with an undergraduate degree in social work and students with degrees in other disciplines.

- Standard Program: Students with degrees in other disciplines will be admitted every other year beginning in fall 2010 for a two-year program (60 credit hours). Cohorts will have ten students; retention to the second year is estimated at 90% (9 of 10).

- Advanced Program: Students with degrees in social work will be admitted every year beginning in summer 2011 for a one-year program (36 credit hours: summer, fall, spring, summer). Cohorts will have ten students. In addition to USD, the University of Sioux Falls and Presentation College have accredited bachelor's degree programs in social work and Oglala Lakota College has a program in candidacy status (information from CSWE web site).

When permitted by accreditation standards, the University will examine the demand for distance/off-campus delivery of the MSW in order to accommodate students who cannot relocate or commute to Vermillion.

State Workforce Development
Master of Social Work - USD

During the development of the program proposal the University will obtain information from the Council on Social Work Education and existing MSW programs. The University will have an opportunity to revise the proposal using the report of the Board's external reviewer.

	1st FY10 2009-2010	2nd FY11 2010-2011	3rd FY12 2011-2012	4th FY13 2012-2013	5th FY14 2013-2014	6th FY15 2014-2015
Planned enrollment	0	10	19	20	19	20
Expected graduates			19	10	19	10

The resources requested are needed to establish and operate a program that will meet accreditation requirements. The program will reach full enrollment in FY12. The resources would be used for the additional faculty (4.3 FTE) and support staff needed to meet the CSWE requirements and for program operations including computers, library resources, office equipment and expenses, and faculty travel to supervise students during their practicum with an agency or organization.

In the initial years some resources will be used to develop the courses, for accreditation expenses (preparation of reports, accrediting organization fees, accreditation site visit charges) and to recruit students.

The budget request is summarized in the table below.

Budget Summary:

Salaries	$360,633 (4.8 FTE)
Benefits	$81,806
Travel	$1,500
Contractual Services	$8,361
Supplies & Materials	$22,200
Capital Assets	$0.0
Total	$474,500 (4.8 FTE)
Estimated Tuition Contractual Services	$53,488
Program Total	$527,988

What is the Governor's recommendation?

The Governor is not recommending funding a Master of Social Work program.

South Dakota Board of Regents
Joint Appropriations Committee
Budget Request Hearings

BHSU

DSU

NSU

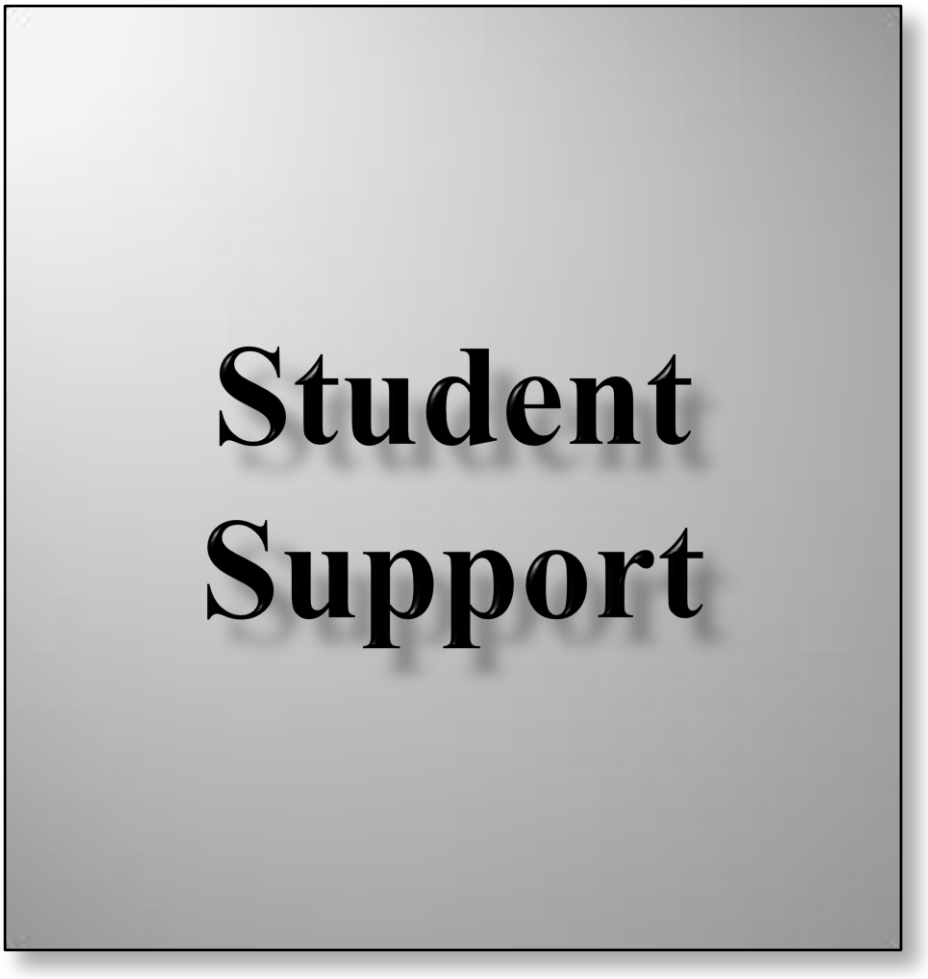
SDSM&T

SDSU

USD

SDSBVI

SDSD



YOUR FUTURE IS HERE. South Dakota Board of Regents

Fiscal Year 2010
Budget Request

Student Support
South Dakota Opportunity Scholarship Funding

Requested	$1,955,841
Requested FTE	0.0
Governor Recommended	$(468,767)
Governor Recommended FTE	0.0

What is the goal?
The goal is to provide the on-going funding needed to insure the continued success of the South Dakota Opportunity Scholarship.

Why is this important to higher education and the state of South Dakota?
The 2003 Legislature passed HB1026, which provided the structure for a Regents scholarship program. The bill passed with 98 yeas and only 4 nay votes. The bill had no funding attached, but created the structure for the scholarship. The 2004 Legislature revised the name of the scholarship to be the *South Dakota Opportunity Scholarship* and revised the total of the 4-year scholarship from $6,000 to $5,000. The first group of eligible students was awarded the scholarship in the fall of 2004.

The scholarship encourages students to take the college preparation curriculum, to maintain good grades and to attend college in-state, making them much more likely to stay in South Dakota after they graduate.

The initial reports from the school districts indicate that the scholarship is having a significant impact on the choices students are making in their curriculum. While this is exactly what we had anticipated and planned, this will increase the funding needed for the scholarship.

What is the financial structure of this request?
The request for FY10 is $1,955,841. This brings the program need to $4,321,000. This request funds a projected 2,283 currently eligible students and 1,448 additional students that are projected to enter the program. Students earn $1,000 a year in their first three years in the program and $2,000 in their fourth and final year of eligibility.

What has changed since the Board's request?
The Board has the enrollment information and program eligibility available for the fall 2008 term. Based on this information, the projections for FY2010 include 2,088 currently eligible students and 1,153 new students. The funding needed for the program will be $3,782,000. The table on the following page outlines the participants, projected participants and funding of the South Dakota Opportunity Scholarship Program.

What is the Governor's recommendation?
The Governor recommends a reduction of general funds in the amount of $468,767 and the necessary funding to instead come from the Dakota Cement Trust Fund in the amount of $1,522,942.

SOUTH DAKOTA BOARD OF REGENTS
JOINT APPROPRIATIONS COMMITTEE BUDGET REQUEST HEARINGS
JANUARY 2009

South Dakota Opportunity Scholarship

Eligible Students	**Actual FY2005**	**Actual FY2006**	**Actual FY2007**	**Actual FY2008**	**FY2009**	**FY2010**
2004 Grads	808	614	531	496	0	0
2005 Grads		858	595	544	504	0
2006 Grads			983	701	602	541
2007 Grads				1,135	809	728
2008 Grads					1,131	819
2009 Grads						1,153
Total Eligible Students	808	1,472	2,109	2,876	3,046	3,241
Program Cost						
Funding Needed at $1,000 per Student	**$807,500**	**$1,424,000**	**$2,092,500**	**$2,380,000**	**$2,542,000**	**$2,700,000**
Funding Needed at $2,000 per Student				**$992,000**	**$1,008,000**	**$1,082,000**
Funding						
2004 Session - Amendment to the FY04 General Bill From the Education Enhancement Trust Fund	$650,000					
2004 Session - FY05 General Bill From the Education Enhancement Trust Fund	$1,300,000					
2005 Session - Amendment to the FY05 General Bill From the Dakota Cement Trust Fund	$633,125					
2005 Session - FY06 General Bill From the Dakota Cement Trust Fund		$113,875	$113,875	$113,875	$113,875	$113,875
2006 Session - Amendment to the FY06 General Bill From the Education Enhancement Trust Fund		$1,208,296				
2006 Session - FY07 General Bill General Funds			$714,329	$714,329	$714,329	$714,329
2006 Session - FY07 General Bill Amendment General Funds (due to the passage of HB1157)			$146,000	$146,000	$146,000	$146,000
2007 Session - Amendment to the FY07 General Bill From the Dakota Cement Trust Fund			$571,476			
2007 Session - FY08 General Bill General Funds (due to the passage of HB1281)				$1,438,411	$1,438,411	$1,438,411
2008 Session - FY08 General Bill Amendment From the Dakota Cement Trust Fund					$1,184,338	
2009 Session - FY10 General Bill						
Proposed - From the Dakota Cement Trust Fund						$1,522,942
Proposed - General Funds Reduction						-$468,767
Previous Year Ending Balance		$1,775,625	$1,673,796	$1,126,976	$167,591	$214,544
Total Funding Available	$2,583,125	$3,097,796	$3,219,476	$3,539,591	$3,764,544	$3,681,334
Ending Balance	**$1,775,625**	**$1,673,796**	**$1,126,976**	**$167,591**	**$214,544**	**($100,666)**

South Dakota Board of Regents
Joint Appropriations Committee
Budget Request Hearings

BHSU

DSU

NSU

SDSM&T

SDSU

USD

SDSBVI

SDSD

YOUR FUTURE IS HERE. South Dakota Board of Regents

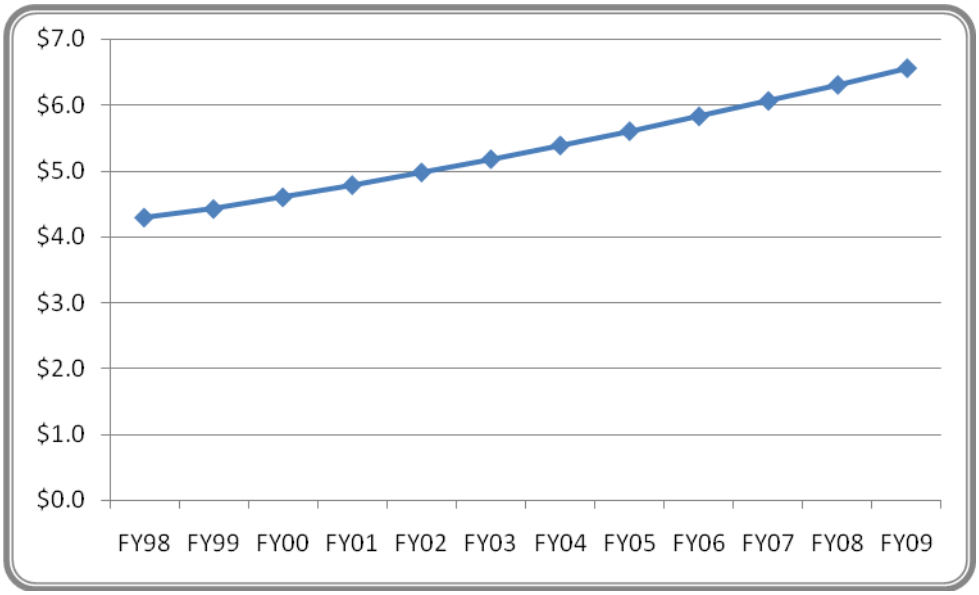
Fiscal Year 2010
Budget Request

Authority Requests HEFF, Federal and Other Authority, & FTE Authority	
Requested HEFF Maintenance & Repair Authority	$261,970
Requested HEFF Lease Payment Expenditure Authority	$1,113,881
Requested Federal Funds Authority	$5,615,000
Requested Other Funds Authority	$17,202,393
Requested FTE	64.0
Governor Recommended HEFF Maintenance & Repair Authority	$261,970
Governor Recommended HEFF Lease Payment Expenditure Authority	$1,113,881
Governor Recommended Federal Funds Authority	$5,615,000
Governor Recommended Other Funds Authority	$17,202,393
Governor Recommended FTE	64.0

HEFF Maintenance & Repair $261,970

An increase in funding of 4% or $261,970 is recommended for the maintenance and repair allocation to the institutions for FY10. This would bring the FY10 funding level to $6,811,213. The following chart provides the historical growth in the M&R allocation to the campuses.

Historic HEFF M&R Allocation



HEFF Lease Payment Expenditure Authority……..……..$1,113,881

Authority Requests
HEFF, Federal and Other Authority, & FTE Authority

According to the current lease payment schedule, the FY10 payment will be $8,696,784. The lease payment includes the Sioux Falls Center rent payment of $443,400 and the M&R bond payment of $736,833.

HEFF Lease Authority Base	$7,582,903
FY10 Lease Payment	$8,696,784
FY10 HEFF Lease Payment Expenditure Authority Need	$1,113,881

The Board is currently funded for $7,582,903 in authority. An additional $1,113,881 is needed for FY10. This increase reflects the recent $10M bond for the SDSM&T Chemical Building (Series 2008A3) and a portion of the Series 2007 bond for SDSU Shepard Hall, USD Slagle Auditorium and USD Business School.

Federal Funds Authority Requested ***$5,615,000***
Other Funds Authority Requested ***$17,202,393***
FTE Requested ***64.0***

The Board of Regents is requesting an additional $5,615,000 in federal funds expenditure authority, $17,287,393 in other funds expenditure authority, and 64.0 additional FTE.

FY10 Authority Request Summary

	Federal	Other	FTE
BHSU	($2,885,000)	$1,573,000	9.5
DSU		$1,145,000	
NSU		$946,500	4.0
SDSU	$6,000,000	$6,600,000	38.5
CES		$250,000	
AES	$2,500,000	$1,200,000	10.0
USD		$4,644,903	2.0
MED		$842,990	
	$5,615,000	**$17,202,393**	**64.0**

As in previous years, the Board is requesting a number of FTE which will be funded with grants and contracts and local funds. The grants and contracts FTE will be on soft money and when the grant funds dry up, the FTE will not be placed on permanent funds.

Authority Requests
HEFF, Federal and Other Authority, & FTE Authority

FY10 FTE Request Summary

	Federal Grants & Contracts	Other	Other Grants & Contracts
BHSU	(4.0)	13.5	
NSU	2.0	2.0	
SDSU	10.0	2.0	26.5
AES	10.0		
USD		2.0	
	18.0	**19.5**	**26.5**

What is the Governor's recommendation?

The Governor is recommending HEFF, federal, and other authority and FTE requests as requested.

The following detail from each campus identifies why the authority and FTE are needed. The detail includes the information on grant funded positions as well as student fee and "other" source funded positions.

Authority Requests
HEFF, Federal and Other Authority, & FTE Authority

Black Hills State University

Federal Funds Authority ..... ***($2,885,000)***
Other Funds Authority ***$1,573,000***
FTE Authority ..... ***9.5 FTE***

FEDERAL FUND AUTHORITY JUSTIFICATION:

- **Federal Grants and Contracts - $3,260,000 reduction**
  - Unfunded proposals, including science building
  - Movement of American Indian Health Grant to Sanford Health Systems
  - Proposals submitted to National Science Foundation for math and science ($698,000), and Graduate Research – K-12 ($400,000) and Department of Education Title III proposal for ($399,000)

- **Financial Aid - $375,000**
  - Increase in federal award limits
  - Increased enrollments

FEDERAL FTE'S

- **Federal Grants and Contracts - 4.0 FTE reduction**
  - Loss of American Indian Health Grant
  - Proposals that were not funded

OTHER FUND AUTHORITY JUSTIFICATION:

- **Student Fees - $400,000**
  - Student Union expansion
  - Inflationary and enrollment increases

- **Room & Board - $223,000**
  - Increase in rate to address M&R projects
  - Inflationary increases

- **Auxiliaries - $315,000**
  - Student Union expansion
  - Inflationary and enrollment increases
  - Expanded square footage and hours in bookstore

- **Self-Support Tuition - $465,000**
  - Movement of Industrial Technology department from campus to Rapid City, Sioux Falls and Yankton
  - Inflationary and enrollment increases
  - Growth of Rapid City program

Black Hills State University (cont'd)

- **Sales & Services - $170,000**
  - Growth of educational outreach program

OTHER FUND FTE'S

- **Student Fees – 3.0**
  - Staff for cleaning and maintenance of expanded Student Union
  - Expanded student programming

- **Auxiliaries – 1.5**
  - Bookstore expansion and increased business hours

- **Self-Support Tuition – 6.0**
  - Industrial Technology Department move to off-campus
  - Additional faculty for increased enrollments in Rapid City

- **Sales & Services – 3.0**
  - Growth of educational outreach program

Authority Requests
HEFF, Federal and Other Authority, & FTE Authority

Dakota State University

Other Funds Authority*.....*$ 1,145,000
FTE Authority*.....*0.0 FTE

OTHER FUND AUTHORITY JUSTIFICATION:

- **Student Fees - $100,000**
  - Inflationary increases to student fees and the DSU Mobile Computing fee and tablet leases

- **Room & Board - $150,000**
  - Increase in residence hall rates and numbers due to renovations in '08 and '09

- **Self-Support Tuition - $895,000**
  - DSU saw an increase in revenue of 33% from FY07 to FY08 and anticipates further increases of 3% in FY09 and FY10. The additional request will catch us up for the increase already seen and the anticipated increases in FY09 and FY10.

Authority Requests
HEFF, Federal and Other Authority, & FTE Authority

Northern State University

Other Funds Authority*.....*$ 946,500
FTE Authority*.....*4.0 FTE

FEDERAL FTE'S

- 2.0 FTE for Student Labor for Upward Bound Grant

OTHER FUND AUTHORITY JUSTIFICATION:

- **Student Fees - $521,500**
  - Expenditure Authority for a $222,500 increase in the General Activity Fee
  - Expenditure Authority for a $52,000 increase for the Salary Enhancement Fee
  - Expenditure Authority for a $247,000 increase for the Technology Fee

- **Other Grants & Contracts - $250,000**
  - Expenditure Authority for projected scholarship increase

- **Sales & Services - $175,000**
  - Expenditure Authority for Athletic Camp Activity

OTHER FUND FTE'S

- **Sales & Services – 2.0**
  - 2.0 FTE for student labor for Athletic Camps

Authority Requests
HEFF, Federal and Other Authority, & FTE Authority

South Dakota State University

Federal Funds Authority ..... ***$ 6,000,000***
Other Funds Authority ..... ***$ 6,600,000***
FTE Authority ..... ***38.5 FTE***

FEDERAL FUND AUTHORITY JUSTIFICATION:

- **Other Grants & Contracts - $5,000,000**
  - $500,000 National Children's Study is escalating
  - $1,000,000 Rural and Ethnic Nutrition Center
  - $500,000 Water Resources
  - $1,500,000 Department of Defense Grant
  - $500,000 GEPR Functional genomics of bud endodormancy induction in grapevines
  - $1,000,000 Web Enabled Lanstat data

- **Financial Aid - $1,000,000**
  - $1,000,000 increase for Federal Student Financial Aid due to increased enrollments as well as increased financial aid activity.

FEDERAL FTE'S

- 10.0 FTEs needed to accommodate the grants listed above.

OTHER FUND AUTHORITY JUSTIFICATION:

- **Student Fees - $2,025,000**
  - Expected enrollment increases
  - Various Major Fees, Technology fee, USF, GAF, SCF, Lab fee and Pharmacy application fee increases as part of the fee request – inflation

- **Room & Board - $1,950,000**
  - Increase in costs due to utility increases as well as inflation and enrollment increases.

- **Other Grants & Contracts - $1,000,000**
  - Several proposals
  - Increased scholarship activity

- **Auxiliaries - $975,000**
  - Increase for Bookstore sales at SDSU as well as in Sioux Falls due to enrollment increases.

- **Self-Support Tuition - $400,000**
  - Needed for personnel services for teaching in the various self-support sites to accommodate increases in enrollments due to new programs, especially at University Center.

South Dakota State University (cont'd)

- **Sales & Services - $250,000**
    - Revenue is increasing due to increases in services that are provided by the various service centers on campus. Need more sales staff.

OTHER FUND FTE'S

- **Student Fees:** 10.0
    - Wellness Center and Dykhouse Center not previously requested

- **Room & Board:** 6.0

- **Other Grants & Contracts:** 2.0
    - Requested for grant activity

- **Auxiliaries:** 1.5

- **Self-Support Tuition:** 7.0
    - Needed for faculty

- **Sales & Services:** 2.0

Ag Experiment Station

Federal Funds Authority ***$2,500,000***
Other Funds Authority ***$1,200,000***
FTE Authority ..... ***10.0 FTE***

FEDERAL FUND AUTHORITY JUSTIFICATION:

- **Federal Grants & Contracts - $2,500,000**
  - Agriculture Research Service, Cooperative State Research Edu, National Park Service, Natural Resource Conservation, ND Department Of Game, Fish and Parks, SD Department Of Game Fish And Parks, University Of Minnesota, US Bureau Of Land Management, US Bureau Of Reclamation, US Geological Survey
  - $1,500,000 in Pending grants

FEDERAL FTE'S

- **Federal Grants & Contracts**
  - 10 FTEs for grants above

OTHER FUND AUTHORITY JUSTIFICATION:

- **Other Grants & Contracts - $500,000**
  - $145,000 Vera Sun Energy
  - $80,000 ICM Inc.
  - $91,000 Ducks Unlimited
  - $55,000 Ceres Inc.
  - $63,000 West Dakota Water Development
  - $66,000 US Geological survey, pending

- **Other Sales and Services - $700,000**
  - Due to a re-organization in the College of Ag and the Ag Experiment Station, more personnel services authority is needed in 'other' funds for FTE shifted from general to 'other' funds.

Authority Requests
HEFF, Federal and Other Authority, & FTE Authority

Cooperative Extension Service

Other Funds Authority*.....*$250,000
FTE Authority*.....*0.0 FTE

OTHER FUND AUTHORITY JUSTIFICATION:

- **Other Grants & Contracts**
  - $100,000 US Dept of Agriculture
  - $150,000 pending grants

Authority Requests
HEFF, Federal and Other Authority, & FTE Authority

University of South Dakota

Other Funds Authority*.....*$ 4,644,903
FTE Authority*.....*2.0 FTE

OTHER FUND AUTHORITY JUSTIFICATION:

- **Student Fees - $1,441,712**
  - Request $562,366 in authority for additional salary competitiveness fees allocated to USD during the FY09 salary policy.
  - Request $879,346 in authority resulting from rate increases and additional enrollments in the University Support Fee, Delivery Fee and various other fees.

- **Room & Board - $330,000**
  - Request $330,000 in authority resulting from rate increases and additional enrollments.

- **Other Grants & Contracts - $2,100,000**
  - Request $2,100,000 in authority from expansion of scholarship programs such as the Promise scholarship provided by the University of South Dakota Foundation.

- **Self-Support Tuition - $773,191**
  - Request $397,825 in authority to cover growth in off-campus self-support courses and programs in distance education.
  - Request $375,366 in authority for the impact of the new facility at the University Center in Sioux Falls.

OTHER FUND FTE'S

- **Student Fees – 2.0**
  - 1.0 FTE for new Registrar position
  - 1.0 FTE for new Higher Commission self-study

Authority Requests
HEFF, Federal and Other Authority, & FTE Authority

Sanford School of Medicine

Other Funds Authority*.....*$ 842,990
FTE Authority*.....*0.0 FTE

OTHER FUND AUTHORITY JUSTIFICATION:

- **Student Fees - $52,161**
  - 3% Inflationary Increase to PS & OE

- **Other Grants & Contracts - $69,552**
  - 3% Inflationary Increase to PS & OE

- **Self-Support Tuition - $21,810**
  - 3% Inflationary Increase to PS & OE

- **Sales & Services - $699,467**
  - 3% Inflationary Increase to PS & OE
  - $500K increase in OE to move all of Cont Medical Ed (CME) expenses within the U framework. Currently operates as a 501 C 3 with state employees.

South Dakota Board of Regents
Joint Appropriations Committee
Budget Request Hearings

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YOUR FUTURE IS HERE. South Dakota Board of Regents

Fiscal Year 2010
Budget Request

Budget Items for Future Consideration
Self to State Support

Base General Funds .....None Requested At This Time
FTE 0.0

What is the goal?

The goal is to provide state resources to buy down the cost of general education courses for students getting their education through distance education or at an off-campus center.

Why is this important to higher education and the state of South Dakota?

On-campus operations are supported with state funding. Off-campus operations are considered "self-support" and charge a higher tuition rate to cover costs as no state assistance is provided. On-campus offerings are available at a lower tuition and fee cost than off-campus courses because of the state subsidy provided to on-campus education. The following table summarizes the amounts paid by students on and off campus. The table excludes the general activity fee paid by students on campus as the proceeds are used to support co-curricular or extra-curricular activities that are seldom found at off-campus centers or related to distance education.

Comparison of Per Credit Hour Cost

		Sioux Falls		Non-Sioux Falls	
	State-Support	Self-Support	% Higher than State-Support	Self-Support	% Higher than State-Support
UG	$169.85	$237.20	39.7%	$219.55	29.2%
Grad	$215.35	$317.40	47.4%	$290.65	34.9%

Note: Many on-campus courses do have discipline fees and lab fees which are not charged on self-support courses, but are not included in the state-support costs as they are not charged on all credits.

The premium paid for distance education can be significant over time and would cost a student $8,620 more for an undergraduate degree in Sioux Falls or $6,362 outside Sioux Falls, compared to a degree attained at one of the universities.

The buy down of the self-support rate is requested because of the innate "unfairness" of off-campus students paying more than others to receive higher education instruction from the Regental System. These students are paying more and yet not receiving the same level of state support for their education as traditional, campus-based students. The off-campus students tend to be older, many work full-time, have families, and are for the most part only able to pursue their degrees part-time, and thus are ineligible for most federal financial aid and grants. Furthermore, these students are not eligible for campus-based scholarships such as the "Jackrabbit Guarantee", "Promise" or whatever. Why is the very population that needs the most help to get an education, and better their lives, paying more and receiving less?

The cost to reduce all self-support offerings to state-support rates would be around $5.9M. This amount of funding would only provide the difference between the self-support tuition and the state-support tuition and USF cost.

Budget Items for Future Consideration
Self to State Support

The cost to reduce self-support offerings at the centers: University Center, West River Center and Capital University Center, would be $3.5M. Again, this amount of funding would only provide the difference between the self-support tuition and the state-support tuition and USF cost.

Another option would be to fund the centers similar to the universities and provide services such as counseling, registrars, library access, and financial aid support. The cost to provide comparable funding for the off-campus sites to provide 01-Instruction, 04-Academic Support and 05-Student Services would be around $6.6M.

Budget Items for Future Consideration
State Health Care Workforce Development

Base General Funds	No request for FY10
FTE	No request for FY10

What is the goal?

The goal is to expand the State's healthcare workforce by increasing the capacity of university degree programs.

Why is this important to higher education and the state of South Dakota?

Expansion of healthcare degree programs is needed to ensure that South Dakota residents have convenient and timely access to high quality healthcare. New State resources will be needed to produce additional graduates to provide care to South Dakota residents.

A recent Department of Health (DOH) report *Building South Dakota's Healthcare Workforce: An Examination of Need* (July 2008, available at http://doh.sd.gov/RuralHealth) recognized needs for certain healthcare occupations. The Department grouped occupations in "highest need," "high need" and "need" categories (occupations are listed in alphabetical order):

Highest Need
- Medical Laboratory Technologist (NSU BS, SDSU BS, USD BS)
- Physical Therapist Assistants
- Physician Assistants (USD MS)
- Physicians (USD MD)

High Need
- Licensed Practical Nurses
- Physical Therapists (USD DPT)
- Registered Nurses (USD AS & SDSU BS)
- Respiratory Therapists

Need
- Dietitians (SDSU BS)
- Medical Assistants
- Occupational Therapists (USD MS)
- Pharmacists (SDSU PharmD)
- Speech Language Pathologist (USD MA)

Increasing the number of healthcare professionals would contribute to the health of South Dakota residents and support key policy initiatives:

1. Workforce 2025 Initiative (http://www.workforce2025.com)
   - The goal is to ensure South Dakota has a competent and qualified workforce to allow for economic growth and expansion.

2. Build Dakota: Healthcare Workforce Initiative
   http://www.sdjobs.org/sdhott/summit.htm
   - Goal was to bring together individuals with a vested interest in increasing and stabilizing South Dakota's healthcare workforce.

3. Governor's 2010 Education Initiative (http://www.2010education.com)
   - Increase the number of graduates from Board of Regents' associate degree programs by 10 percent [AS in Nursing; AS in Respiratory Care].
   - Increase the number of graduates from bachelor degree programs by 20 percent [BS in Nursing, BS in Medical Technology].
   - Double the number of persons ages 25 and older engaged in postsecondary education [persons over 25 may enroll in any program; off-campus programs attract older students].

4. Governor's 2010 Initiative (http://www.2010initiative.com)
   - Brand and Develop South Dakota's Quality of Life as the Best in America by 2010 [convenient availability of healthcare contributes to quality of life].

Healthcare Recruitment Assistance Programs (http://doh.sd.gov/RuralHealth/recruit.aspx)
Existing State programs are designed to assist with recruitment of healthcare providers. Increasing the number of South Dakota healthcare graduates would assist employers and communities seeking healthcare providers. (Details for each program are available on the web site.)

- Physician Tuition Reimbursement Program;
- Dentist Tuition Reimbursement Program;
- Midlevel Tuition Reimbursement Program: physician assistant, nurse practitioner, or certified nurse midwife;
- National Health Service Corps Loan Repayment/Scholarship Program;
- State Loan Repayment Program: primary care physician, primary care nurse practitioner, certified nurse midwife, primary care physician assistant, general practice dentist, registered clinical dental hygienist, clinical or counseling psychologist, psychiatric nurse specialist, certified social worker, mental health counselor, licensed professional counselor, or marriage and family therapist; and
- Health Professional Recruitment Incentive Program: dietitian or nutritionist, nurse (LPN or RN), occupational therapist, respiratory therapist, laboratory technologist, pharmacist, physical therapist, paramedic, medical technologist radiologic technologist

The Department of Labor (Labor Market Information Center: LMIC) estimates the numbers of South Dakota jobs in occupations and projects the numbers of jobs ten years into the future. The estimates and projections and a description of the methodology is available on the LMIC web.[1]

[1] Labor Market Information Center, Menu for Projections: http://www.state.sd.us/dol/lmic/menuprojections.htm

Budget Items for Future Consideration
State Health Care Workforce Development

The table below provides the estimated jobs in 2006 and projected jobs in 2016 for selected healthcare occupations.

South Dakota Department of Labor Estimated and Projected Jobs, 2006 to 2016
Selected Healthcare Occupations with Needs Recognized by Department of Health

2006-2016 Annual Averages

Occupational Title	2006 Base Number of Jobs	2016 Projected Number of Jobs	Percent Change	Jobs Due to Growth	Jobs Due to Replace-ment	Total Avg. Annual Demand
Department of Health: Highest Need						
Medical & Clinical Lab Technologists	790	920	16.5%	13	12	25
Physician Assistants	455	610	34.1%	16	7	23
Physicians						
Anesthesiologists	155	175	12.9%	2	3	5
Family and General Practitioners	425	480	12.9%	6	8	14
Internists, General	275	310	12.7%	4	5	9
Obstetricians and Gynecologists	190	215	13.2%	3	4	7
Pediatricians, General	175	185	5.7%	1	3	4
Psychiatrists	90	100	11.1%	1	2	3
Surgeons	345	400	15.9%	6	6	12
Physicians and Surgeons, All Other	305	360	18.0%	6	6	12
Physicians, total	1,960	2,225	13.5%	29	37	66
Department of Health: High Need						
Physical Therapists	530	695	31.1%	17	7	24
Registered Nurses	9,705	12,440	28.2%	274	160	434
Recreational Therapists	25	30	20.0%	1	1	2
Department of Health: Need						
Dietitians and Nutritionists	175	180	2.9%	1	5	6
Occupational Therapists	240	300	25.0%	6	4	10
Pharmacists	1,050	1,310	24.8%	26	18	44
Speech-Language Pathologists	290	320	10.3%	3	6	9

Source: DOL, LMIC web site: http://www.state.sd.us/dol/lmic/menuprojections.htm, Excel file for SD occupational projections for 2006-2016, accessed August 19, 2008; physician totals added; university occupations only.

Public University Healthcare Degree Programs: Graduates and Enrollments

- The first table below provides the numbers of graduates in FY07 and FY08.
- The second table provides graduates testing and passing examinations (most recent information).
- The third table provides the degree program enrollments in fall 2007. Fall 2008 enrollments will be available in mid-October.

Budget Items for Future Consideration
State Health Care Workforce Development

Selected Public University Healthcare Degree Program Graduates, FY07 & FY08

Healthcare Program (University & Degree)	Graduates FY07	Graduates FY08
Department of Health: Highest Need		
Medical & Clinical Lab Technologists		
• Medical Technology (NSU BS)	1	1
• Clinical & laboratory scientist (SDSU BS)	14	13
• Medical Technology (USD BS)	5	2
Physician Assistant (USD MS)	22	19
Physician (USD MD)	48	53
Department of Health: High Need		
Physical Therapist (USD DPT)	21	21
Registered Nurse (USD AS)	278	248
Registered Nurse (SDSU BS)	202	235
Respiratory Therapists (DSU AS)	19	18
Department of Health: Need		
Dietitian (SDSU BS)	8	16
Occupational therapist (USD MS)	8	11
Pharmacist (SDSU PharmD)	54	62
Speech Language Pathologist (USD MA)	11	17

Graduates from earlier degree programs are included: Physician assistant, 1 BS in FY07; physical therapist, 15 MS in FY07. SDSU BS Nursing includes only degrees to new RNs (generic); degrees awarded to persons who became RNs with a diploma or an associate degree are not included.

Selected Public University Healthcare Degree Programs, Graduates Testing and Passing Licensure and Certification Examinations

Healthcare Program (University & Degree)	Year Tested	Tested	Passed	% Passed
Department of Health: Highest Need				
Medical & Clinical Lab Technologists*				
Physician assistant (USD MS)	2006	21	19	90%
Physician (USD MD) – MD-1	2007	47	43	91%
Physician (USD MD) – MD-2	2007	49	43	98%
Department of Health: High Need				
Physical therapist (USD DPT)	2007	6	6	100%
Nursing (USD AS)	2006	259	217	84%
Nursing (SDSU BS)	2006	191	161	84%
Respiratory Therapist (DSU AS)	2007	18	17	94%
Department of Health: High Need				
Dietitian (SDSU BS specialization)	2006	5	5	100%
Occupational therapist (USD MS)	2007	8	8	100%
Pharmacist (SDSU PharmD)	2007	54	54	100%
Speech Language Pathologists (USD MA)	2007	5	3	60%

Source: Board of Regents *Fact Book FY2008*, p. 15. * Not included in source.

Budget Items for Future Consideration
State Health Care Workforce Development

Selected Public University Healthcare Programs,
Total Enrollments, Fall 2007 & 2008

Healthcare Program (University & Degree)	Enrollment Fall 2007	Enrollment Fall 2008
Department of Health: Highest Need		
Medical Laboratory Technologist		
• Medical Technology (NSU BS)	14	
• Clinical & laboratory sciences (SDSU BS)	52	
• Medical Technology (USD BS)	51	
Physician assistant (USD MS)	59	
Physician (USD MD)	208	
Department of Health: High Need		
Physical therapist (USD DPT)	75	
Registered Nurse		
• Nursing (USD AS), all locations	531	
• Nursing (SDSU BS), all locations	556	
Respiratory Therapist (DSU AS)	56	
Department of Health: Need		
Dietitian (SDSU BS specialization)	45	
Occupational therapist (USD MS)	54	
Pharmacist (SDSU PharmD)	261	
Speech Language Pathologist (USD MA)	46	

- Fall 2008 enrollments will be available in mid-October.
- USD Physician: Includes students (6 in 2007) in the Physician Scientist MD-PhD program; new State funds were provided for the MD-PhD program in FY06.
- USD AS Nursing: Includes students enrolled on campus, in Sioux Falls, Watertown, Pierre, and Rapid City and by distance. Additional students identified themselves as "pre-nursing" (506 in 2007).
- SDSU BS Nursing: The degree is offered in three locations:
    - 2007 total, 556: Campus – 363, Rapid City – 145, Sioux Falls (Accelerated) – 48
    - 2008 total, NA: Campus – NA, Rapid City – NA, Sioux Falls (Accelerated) -- NA

  State funds were provided for the Accelerated BSN program in FY03 and FY04 (temporary) and FY05 (continuing). Funds were provided for 32 students; SDSU has had external grants to support more students. Additional SDSU students identified themselves as "pre-nursing" (555 in 2007).
- DSU Respiratory Care: AS students only; the AS degree is a prerequisite for the BS degree.
- SDSU PharmD includes juniors, seniors, and 5th and 6th year students. Additional students identified themselves as "pre-pharmacy" (348 in 2007).

Estimated Resources for Class Size Increases

To ensure adequate supply of new healthcare providers, new State resources will be needed in order to increase the numbers of students admitted to university healthcare degree programs.

The table below provides estimates of the resources needed to increase class sizes in several degree programs. For other programs, the resources needed to increase the number of graduates have not been determined.

New state resources will be needed for personal services for program faculty and other personnel (academic advisors, lab course technicians, graduate assistants). Additional operating resources

will be needed to support the new faculty (computers & related; office expenses; professional travel; travel to student clinical sites).

- The amounts are based on FY10 salaries and benefits and operating expenses.

- The amounts are based on the class size increases shown. Larger increases in the numbers of students are likely to require additional faculty and operating resources.

- The amounts will be greater in future years due to salary increases, increases in operating costs (for example, travel), and changes in national accreditation and licensing requirements.

- MD program class size increase: A significant increase in medical school classes require approval by the accrediting organization. Due to accreditation requirements and the national application/admission process, an increase in class size would not take effect until the following fiscal year. For example, new resources for FY11 (2010-2011) will result in a class size increase in FY12—fall 2011.

Budget Items for Future Consideration
State Health Care Workforce Development

Program	Current Entering Class	Student Expansion	Total Entering Class	Program Length (Years)	Cost of Expansion Net of Tuition/Fee
Department of Health: Highest Need					
Medical Lab Techs (NSU BS)	2	TBD	TBD	4	TBD
Medical Lab Techs (SDSU BS)	24	12	36	2	$130,075
Medical Lab Techs (USD BS)	18	TBD	TBD	4	TBD
Physician Assistant (USD MS)	20	4	24	3	$683,676
Physician (USD MD)	50	15	15	4	$2,643,348
Department of Health: High Need					
Physical Therapist (USD DPT)	26	6	32	3	$128,252
Registered Nurse (USD AS)	262	52	314	2	$546,200
Registered Nurse (SDSU BS) Accelerated	48	32	80	1	$206,803
Registered Nurse (SDSU BS) Rapid City	32	24	56	2.5	$182,554
Registered Nurse (SDSU BS) Campus	160	48	208	2.5	$448,220
Respiratory Care (DSU AS/BS)	26	TBD	TBD	2/4	TBD
Department of Health: Need					
Dietitian (SDSU BS)	12	15	27	2	$146,162
Occupational Therapist (USD MS)	26	6	32	3	$130,099
Pharmacist (SDSU PharmD)	70	10	10	4	$609,157
Speech Language Pathologist (USD MA)	39	TBD	TBD	2	TBD
Other Areas					
Audiology (USD AuD)	4	TBD	TBD	4	TBD
Health Information Mgt (DSU AS/BS)	19	TBD	TBD	2/4	TBD
Residency Programs					TBD
		FY10 total, selected programs			*$6,319,061*

- Medical Laboratory Technologists: The SDSU "clinical and laboratory sciences" major requires 2 years after admission as a junior. The NSU and USD programs are titled "medical technology." NSU and USD: New fall 2007 students.
- Registered Nurse, SDSU BS: The Accelerated program takes one year because students enter with general education and required prerequisite courses completed. On the campus and in Rapid City, students complete three semesters of general education and science before admission; the nursing component is five semesters (2.5 years).
- Respiratory Care, DSU: Unduplicated number of new associate and bachelor's degree freshmen and transfers in fall 2007 who declared the major; admissions requirements are applied before clinicals.
- Health Information management, DSU: Unduplicated number of new associate degree (health information technology) and bachelor's (health information administration) freshmen and transfers in fall 2007 who declared the major; admissions requirements are applied before the practicum.
- Speech Language Pathologist: Fall 2008 entering students; includes an off-campus/distance cohort funded by SDDOE grant so that persons with bachelor's degree can complete the MA.

Budget Items for Future Consideration
State Health Care Workforce Development

Brief information about specific program expansions is provided below.

Medical & Clinical Laboratory Technologist (NSU, SDSU, USD BS)
Medical & Clinical laboratory technologists work in hospitals and clinics. The degree is available at three universities in the system.

Physician Assistant (USD MS)
The Physician Assistant Program accepts 20 students annually (10 residents & 10 non-residents) and each December graduates 20 students, approximately 53 percent of whom stay in the state. The admission of four more students each year would assist in meeting the need for physician assistants.

Physician (USD MD)
Increasing Sanford School of Medicine class size from 50 to 65 will partially address the physician shortage. While South Dakota's projected shortfall can only fully be addressed through a comprehensive strategy with public, private and community involvement and increased financial support for all health infrastructures, the additional 15 medical students each year would yield approximately seven more MD's per year for the state at the current retention rate. NOTE: Due to accreditation requirements, there will be a one year lag between new resources and an increase in the number of new MD students admitted.

Physical Therapist (USD DPT)
Increasing the class size from 26 to 32 will improve access to physical therapy for South Dakotans who might not already have ready access to physical therapists in their communities or region. South Dakota's population is aging. The elderly population is particularly vulnerable to chronic and debilitating conditions that require therapy services and physical rehabilitation. Medical advances are improving the survival rate of patients, creating additional demand for rehabilitative care. A growing number of employers are using physical therapists to evaluate worksites, develop exercise programs, and teach safe work habits to employees in hopes of reducing workplace injuries.

Nearly half of the students in the University of South Dakota Department of Physical Therapy (USDPT) receive job offers before they graduate. Most are employed within a month of passing their examinations. The majority of students admitted to the program are from South Dakota, primarily from rural/frontier counties and the majority practice in a rural setting upon graduation.

Registered Nurse (USD AS)
The USD associate degree nursing program is offered on the campus, in Sioux Falls, Watertown, Pierre and Rapid City and via distance education. Increasing the number of students annually from 262 to 314 (increase of 52) would provide convenient access to nursing education and thus increase the supply of RNs in South Dakota. The distribution of new students across these locations would be determined based on facilities, clinical opportunities and qualified students seeking admission.

Budget Items for Future Consideration
State Health Care Workforce Development

Registered Nurse (SDSU BS)
The SDSU baccalaureate degree nursing program is offered on the campus, in Rapid City and in Sioux Falls. The campus and Rapid City locations follow a traditional five-semester sequence; students begin nursing courses after completing three semesters of general education and prerequisite science courses.

In Sioux Falls, SDSU operates an "accelerated" program that can be completed in one year (August to August). This program is for students who have completed the basic science and other prerequisite courses before they begin. Most students have already completed a degree; the program appeals to those who what to change careers. Students (with the prerequisite courses required for admission) can become an RN in one year of full-time enrollments. The State funded the program for 32 students beginning in FY03; SDSU has obtained external grants to support additional students.

Respiratory Therapist (DSU AS & BS)
The program is offered on the campus with clinical training in Sioux Falls. The program is also offered in Rapid City. The associate degree qualifies students for employment; the associate degree is a prerequisite for the bachelor's degree.

Dietitian (SDSU BS)
The dietetics program at SDSU is a specialization with the Nutrition and Food Science major. The program is accredited by the American Dietetics Association (ADA). Increasing the number of students admitted annually from 12 to 27 (increase of 15) will provide more opportunities for South Dakotans seeking careers as dietitians.

Dietitians are employed by hospitals, nursing homes, long-term care facilities and larger school districts. Some work in private practice as consultants. Students who graduate from the SDSU program have a high success rate on placement in the post-baccalaureate internship (which is nationally competitive placement) and a nearly 90% pass rate on the Registered Dietitian exam. Placement of graduates is nearly 100% after passing the examination.

Occupational Therapist (USD MS)
From 2002-2007, 63 percent of the students in our program were SD residents; only 40 percent accepted employment in the state. The demand for occupational therapists in South Dakota is increasing. Currently, there are 358 occupational therapists licensed in South Dakota; USD has prepared approximately one-third of them.

The demand for occupational therapists is increasing at a rate higher in South Dakota than in other regions of the country, because South Dakota has an older and rural population. From 2003-2007, approximately 20 percent of occupational therapists nationwide were employed in skilled nursing facilities. In addition to working in traditional long-term care environments, an increasing number of occupational therapists are working with the elderly in their homes. Occupational therapists adapt the environment to enable the elderly to stay at home longer rather than enter long-term care facilities. Occupational therapists consult with individuals, families, architects and city planners to create accessible individual and community environments. There has also been an increased demand for occupational therapists to provide driver assessment and

training programs for the elderly and disabled and to provide modifications and training in the use of assistive technology for the elderly with low vision.

Doctor of Pharmacy (SDSU)
Graduates from the SDSU program have a high pass rate on the pharmacy examination (usually 100%). In the fall 2007 semester there were 348 students who identified themselves as pre-pharmacy; SDSU expects that there are enough interested and qualified students to fill new seats.

Speech Language Pathologist (USD MA)
The campus program prepares new speech language pathologists. There is also an off-campus/distance cohort supported by a one-time grant from SDDOE so that speech language pathologists with the BS can complete the master's degree. The off-campus/distance cohort was designed to address the needs of speech language pathologists working in schools.

What is the financial structure of this request?
This information is provided for future consideration. There is no budget request for FY10.

Budget Items for Future Consideration
USD – Physics Ph.D.

Base General Funds	None Requested At This Time
FTE	0.0

What is the goal?

The goal is to expand the State's research infrastructure in response to the choice of Homestake as the site for a Deep Underground Science and Engineering Lab (DUSEL). Initiating a Ph.D. program in Physics will allow South Dakota scientists and students to be full participants in this national facility located within the state.

Why is this important to higher education and the State of South Dakota?

There are fundamental questions that uniquely require a deep laboratory and which offer exciting potential for cross-disciplinary research. Much of this research is in physics and related disciplines and focuses upon the nature of the universe, the nature of dark matter/antimatter and energy dynamics. The SUSEL/DUSEL is expected to attract substantial federal research and education funding for South Dakota, as well as draw preeminent researchers to the area, thereby substantially expanding the scientific and educational resources in the state. The educational, economic and social benefits will be far-reaching, such that the selection of the Homestake Mine as the site for development of a national laboratory is a landmark event of South Dakota's scientific and economic development. Significant involvement by South Dakota faculty and students at the lab will contribute to this national research center; and doctoral students will be integral to its success, both through their work as graduate students and as researchers upon graduation. As an early indication of the importance of DUSEL, the P5 (Particle Physics Project Prioritization Panel) report specifically mentions the importance this facility can play in the High Energy Physics community. The report calls for:

- A world-class neutrino program as a core component of the US program, with the long-term vision of a large detector in the proposed DUSEL and a high-intensity neutrino source at Fermilab.
- An R&D program in the immediate future to design a multimegawatt proton source at Fermilab and a neutrino beamline to DUSEL, and recommends carrying out R&D on the technologies.[1]

The addition of a Ph.D. in physics to the curricular offerings of the Regental system of South Dakota will increase the national and international reputation of the state, and remove it from the list of only two states in the nation which do not offer a doctoral degree in physics. Additionally, the development of a Ph.D. program will make South Dakota physics faculty more competitive in the pursuit of external funding, as they will now be able to put together strong research groups that include not only postdoctoral researchers, master's students and undergraduates, but also critically needed doctoral students.

[1] http://www.er.doe.gov/hep/HEPAP/reports/P5_Report%2006022008.pdf

Budget Items for Future Consideration
USD – Physics Ph.D.

The focus of this graduate program at the doctoral level reflects that national need for physicists and the norm for physics graduate programs. Further, physics research, particularly of the type to be conducted at the lab, requires a time frame and training of investigators that is not possible with master's students. Thus, in order for physics graduate students to meaningfully contribute to and learn from the experiments ongoing at the lab, they would have to be in a doctoral program that provides the time (e.g. four to six years) and training to participate in the collaborative, large-scale experiments typical in nuclear physics research.

Finally, the lab may be a focus of the new RII (Research Infrastructure Improvement) submission for the NSF-EPSCoR program. Although an explicit match is not required, the NSF-EPSCoR proposal will be stronger if state commitment is demonstrated through a new doctoral program targeted to support the lab.

The Ph.D. in Physics supports the following state initiatives:

Governor's 2010 Education Initiative (http://ww-w.2010education.com)
3C: Support postsecondary education programs designed to enhance the state's long-term economy.

- Double the number of Ph.D. programs;
- Double the number of Ph.D. graduates;
- Enhance Ph.D. program support infrastructure; and
- Achieve the national average of people with graduate degrees, moving from 6.5 to 9.4 percent.

Governor's 2010 Initiative (http://www.2010initiative.com)
GOAL THREE: Become a Recognized Leader in Research and Technology Development by 2010.

- 3B. Improve ranking to at least 30th nationally for National Science Foundation [research] funding; and
- 3C. Develop research and technology infrastructure at our universities and with the private sector (Emphasis on research that can be commercialized and will benefit South Dakota).

Board of Regents Policy Goals for the System of Higher Education
Goal #3 - State Wealth: South Dakota public universities shall engage in activities designed to enhance the state's long-term economy.

- Enhance research and development productivity through grants and contracts; and
- Increase the universities' role in stimulating economic activity in the State.

In May 2008 the Board authorized SDSM&T, SDSU and USD to develop a proposal for a Master of Science in Physics. The universities requested authorization to develop a joint program and intend to share responsibility for teaching. Development of the program proposal is in progress.

Budget Items for Future Consideration
USD – Physics Ph.D.

What is the financial structure of this request?

The new Ph.D. program is to be primarily funded with new State resources. The University would be able to redirect one Physics faculty member. The financial structure is in the table below:

Budget Summary:

Program Operations	Request	University	Total
FTE (9.0 Faculty; 5.0 Exempt; 1.0 Secretary)	*15.0*	*1.0*	*16.0*
Salaries	$996,000	$70,000	$1,066,000
Benefits	$225,915	$15,565	$241,480
Personal Services	$1,221,915	$85,565	$1,307,480
Operating Expenses	$259,944	$0	$259,944
Program Operations Subtotal	**$1,481,859**	**$85,565**	**$1,567,424**
Graduate Assistants			
FTE Graduate Assistants	*10.5*	*0.0*	*10.5*
Salaries Graduate Assistants	$688,422	$0	$688,422
Benefits Graduate Assistants	$1,549	$0	$1,549
Graduate Assistants Subtotal	**$689,971**	**$0**	**$689,971**
Operations & Graduate Assistants	**$2,171,830**	**$85,565**	**$2,257,395**

South Dakota Board of Regents
Joint Appropriations Committee
Budget Request Hearings

BHSU

DSU

NSU

SDSM&T

SDSU

USD

SDSBVI

SDSD

Supporting Documents

YOUR FUTURE IS HERE. South Dakota Board of Regents

January 2009

South Dakota Board of Regents
Joint Appropriations Committee
Budget Request Hearings

BHSU

DSU

NSU

SDSM&T

SDSU

USD

SDSBVI

SDSD

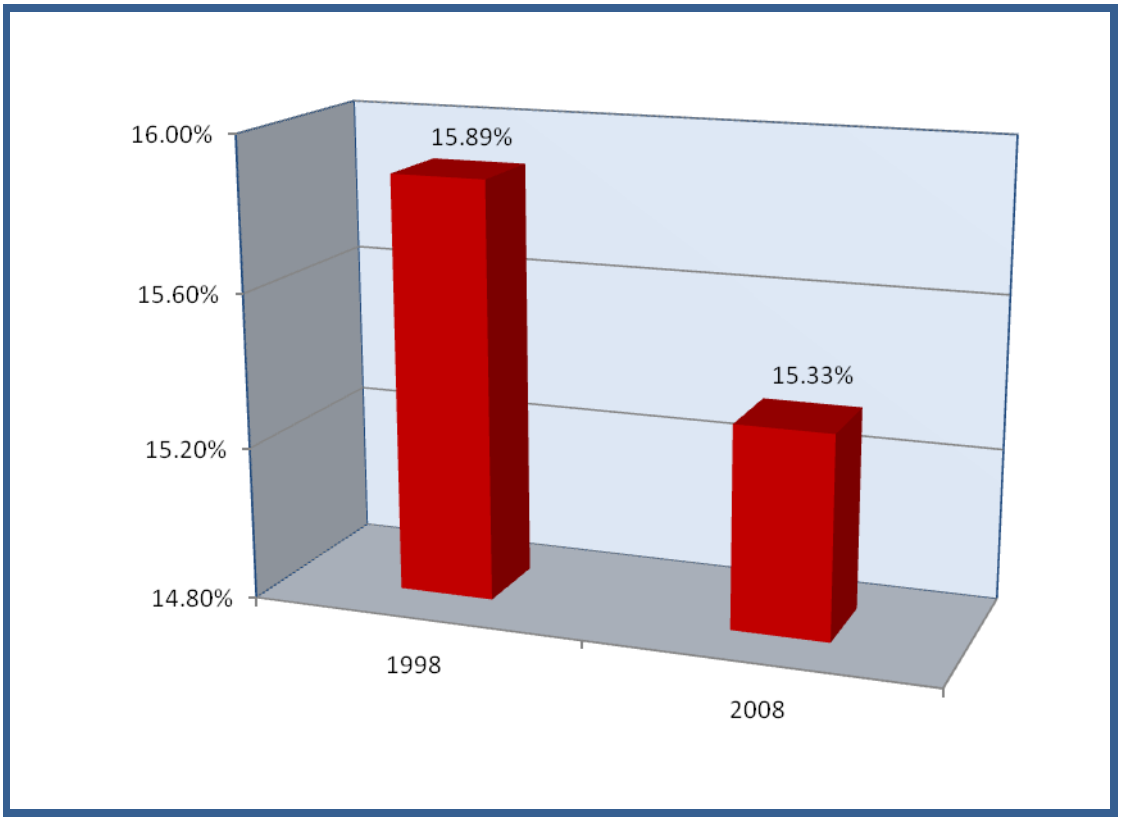
Funding Overview

YOUR FUTURE IS HERE. South Dakota Board of Regents

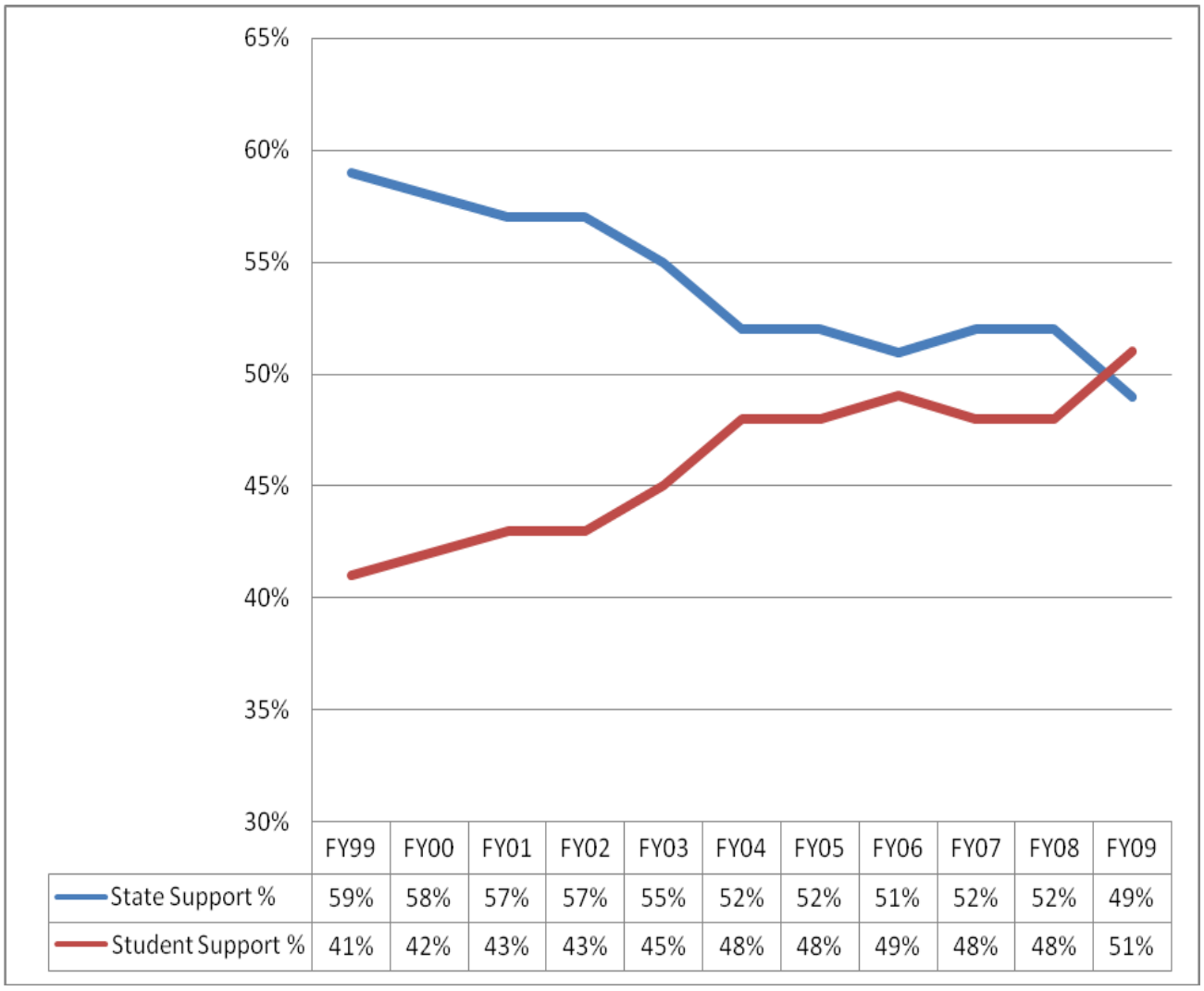
Fiscal Year 2010
Budget Request

Board of Regents

Percent of Total State General Fund Appropriations



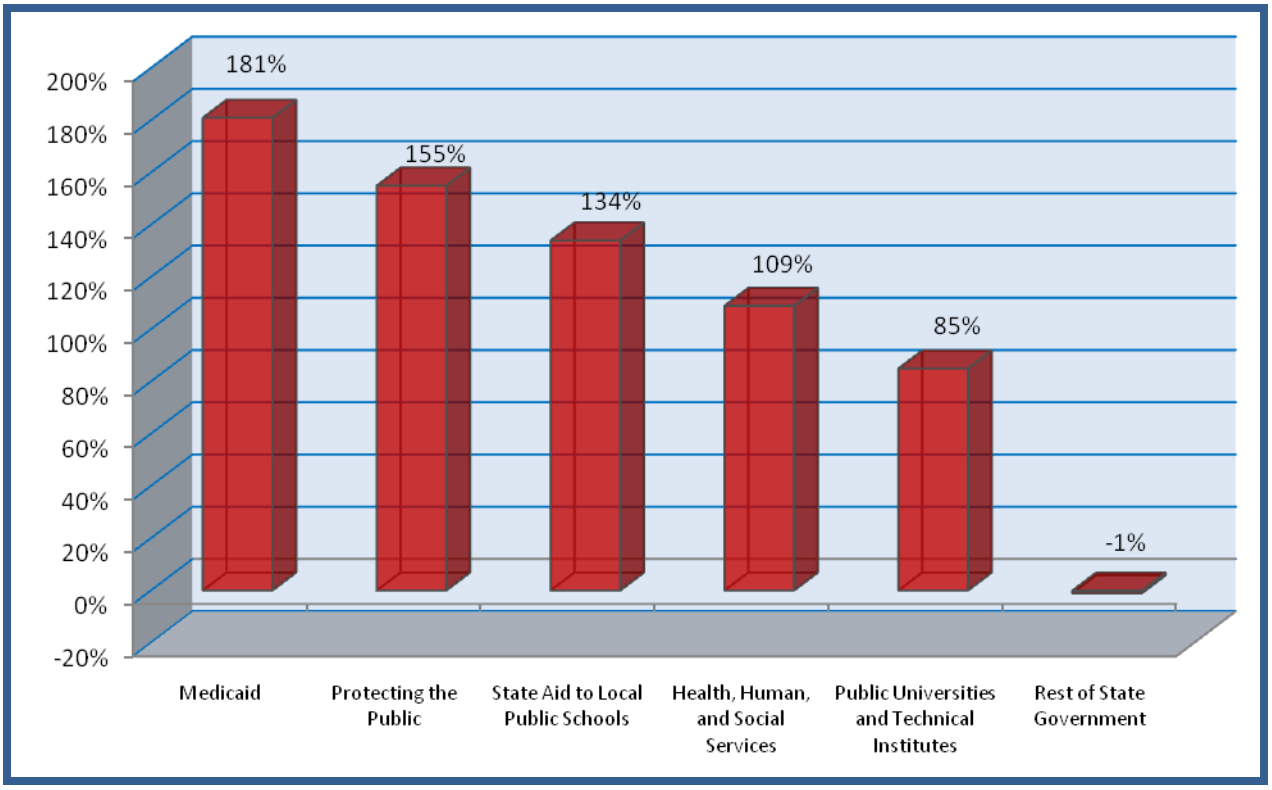
Student Support v State Support



	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09
State Support %	59%	58%	57%	57%	55%	52%	52%	51%	52%	52%	49%
Student Support %	41%	42%	43%	43%	45%	48%	48%	49%	48%	48%	51%

Percentage Change in State Funding Priorities

FY95 (actual) - FY10 (recommended)



Funding Overview
History of General Fund Appropriations

The following overview provides the general fund base budget adjustments over the last ten years. The changes in the budget are categorized as "Salary Package", "Maintenance", or "New Investments". Maintenance and salary package items simply keep the system at a status quo, such as the annual adjustment to salary policy and benefit costs, inflation adjustments to operating budgets, chargebacks from state agencies, or other regulatory items. New Investment items provide additional funding to the base to expand offerings or address a targeted appropriation.

Looking at the bottom line, it can be seen that the funding from the State over the last ten-year period has increased by $68,450,590 or 58.6%. While the increase appears significant, a closer look will show that the increases have gone largely into salary policy and maintenance of the base. The increase in new investments to expand educational services or to leverage the research and service mission of the universities over that same time period was $17,249,653 or 14.8%. The following summary categorizes the funding changes over the last ten years.

		Purpose of Funding
Salary Policy	$43,081,461	Annual salary adjustments and benefit costs increases
Maintenance Funding		
ADR&DL Lease Payments	($5,293)	Pay lease payment
Chargebacks	$271,886	Cover billing increases from state agencies
Cost Increases	$4,254,895	Utility cost increases, bank fees, and inflation
Library Funding	$482,632	Support for research infrastructure support in the form of enhanced library holdings
Total Maintenance Increase	**$5,004,120**	
New Investments		
Program Expansion (Nursing)	$951,373	Expand offerings in Nursing to meet needs of the State
Regulatory Requirements (Office of Medical Education and Teacher ED Assessment)	$530,408	Address accreditation and NCLB requirements

Research (Carbon Sequestration, Fire Predictor Specialist, BOR Office of Research, Ph.D programs, Research Infrastructure.)	$6,162,995	Add staffing to support state's research efforts including Ph.D. programs
NSU E-Learning	$1,487,002	Provide K-12 distance education and integration of e-learning across the NSU curriculum
Technology Infrastructure (Internet1 & 2, V-Tel Costs, Equipment, Technology Fellows and, REED)	$2,727,557	Provide funding for increased cost of access to Internet and needed technical staffing
Electronic University Consortium	$119,852	Staffing to support expansion of and services to distance education students
SDCollegePrep	$75,000	New initiative to inform citizens and students of post-secondary readiness and opportunities
Performance Fund Match	$250,000	New funding from State to support performance funding
SDSD & SDSBVI After School Activities	$50,000	To fund after school activities and increase Operating Expense bases to cover inflation
Gen Ed Delivery	$921,399	Support to address the delivery of general education curriculum across the state including technical institutes
Facilities Investments (HEFF Match, New and Upgraded Science Facilities)	$3,974,067	New funding to achieve an acceptable level of maintenance and repair to build and remodel Science facilities.
Total New Investments	**$17,249,653**	
Student Investments		
Opportunity Scholarship	$2,412,615	University budgets do not include dollars for State appropriated scholarships.
Critical Deferred Maintenance	$703,141	Bond payment repaid to the General fund through additional student M&R fee.
Total Student Investments	**$3,115,756**	
Total Ten Year Base Increase	**$68,450,590**	

While the increases have enabled South Dakota Higher Education and the Special Schools to remain quality, thriving entities for the citizens of South Dakota, the investment in the institutions to address the on-going effects of inflation and the impact of technology has been minimal over the last ten years. The Board must have increased funding to address technology

costs and to cover cost increases for staple items, impacted annually by inflation, if we are to maintain quality and be competitive.

The new investment items over the last ten years total $17,249,653. This investment represents only 9.3% of the current base budget. It should be noted that new investments grew by roughly $13M under the leadership of Governor Rounds compared to only about $3.5M in the immediate equal time frame previous to Governor Rounds taking office. The investment in research infrastructure, including the new Ph.D. programs, and in the health services areas represents positive investment in the research missions of the universities and in the future economy and well-being of South Dakota citizens in the years to come.

South Dakota Board of Regents
History of General Fund Appropriations
FY90-FY99

	FY90	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99
Previous FY General Fund Base	$91,023,557	$99,638,903	$105,677,583	$113,751,262	$121,303,692	$129,399,089	$105,474,854	$106,663,451	$107,095,078	$111,868,651
Total Salary Package	$2,751,513	$4,527,603	$4,904,367	$4,047,723	$5,670,818	$3,357,041	$1,528,175	$336,983	$3,435,226	$4,791,540
% Change of Base	3.02%	4.54%	4.64%	3.56%	4.67%	2.59%	1.45%	0.32%	3.21%	4.28%
Maintenance (Maintain Value)										
Total Maintenance	$3,021,456	$701,656	$2,092,232	$3,267,094	$2,377,706	$487,222	($339,578)	$94,644	$936,384	$107,715
% Change of Base	3.32%	0.70%	1.98%	2.87%	1.96%	0.38%	-0.32%	0.09%	0.87%	0.10%
New Investments										
Total New Investments	$2,842,377	$809,421	$1,077,080	$237,613	$46,873	$0	$0	$0	$401,963	$0
% Change of Base	3.12%	0.81%	1.02%	0.21%	0.04%	0.00%	0.00%	0.00%	0.36%	0.00%
Total General Fund Increase	$8,615,346	$6,038,680	$8,073,679	$7,552,430	$8,095,397	$3,844,263	$1,188,597	$431,627	$4,773,573	$4,899,255
Tuiton and Fees Moved to BOR						($27,768,498)				
Final Base	$99,638,903	$105,677,583	$113,751,262	$121,303,692	$129,399,089	$105,474,854	$106,663,451	$107,095,078	$111,868,651	$116,767,906
Total % Change	**9.46%**	**6.06%**	**7.64%**	**6.64%**	**6.67%**	**2.97%**	**1.13%**	**0.40%**	**4.46%**	**4.38%**

South Dakota Board of Regents
History of General Fund Appropriations
FY00-FY09

	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09
Previous FY General Fund Base	$116,767,906	$121,032,971	$125,447,125	$131,682,255	$138,216,780	$141,879,439	$149,572,980	$154,160,513	$162,881,972	$174,429,288
Total Salary Package	$4,270,734	$3,419,896	$4,269,698	$5,427,547	$3,557,088	$4,118,303	$3,142,398	$4,627,268	$5,061,733	$5,186,796
% Change of Base	3.66%	2.83%	3.40%	4.12%	2.57%	2.90%	2.10%	3.00%	3.11%	2.97%
Maintenance (Maintain Value)										
Total Maintenance	($5,669)	$73,981	$449,646	$2,792	$155,571	$1,503	$648,020	$882,403	$2,491,375	$304,498
% Change of Base	0.00%	0.06%	0.36%	0.00%	0.11%	0.00%	0.43%	0.57%	1.53%	0.17%
New Investments										
Total Regental Investments	$0	$920,277	$1,515,786	$1,104,186	($50,000)	$2,273,735	$1,983,240	$2,351,459	$2,290,057	$4,860,913
% Change of Base	0.00%	0.76%	1.21%	0.84%	-0.04%	1.60%	1.33%	1.53%	1.41%	2.79%
General Fund Increase	$4,265,065	$4,414,154	$6,235,130	$6,534,525	$3,662,659	$6,393,541	$5,773,658	$7,861,130	$9,843,165	$10,352,207
% Change of Base	**3.65%**	**3.65%**	**4.97%**	**4.96%**	**2.65%**	**4.51%**	**3.86%**	**5.10%**	**6.04%**	**5.93%**
New Student Investments										
SD Opportunity Scholarship						$1,300,000	($1,186,125)	$860,329	$1,438,411	$0
Critical Deferred Maintenance									$265,740	$437,401
Final Base	$121,032,971	$125,447,125	$131,682,255	$138,216,780	$141,879,439	$149,572,980	$154,160,513	$162,881,972	$174,429,288	$185,218,896
Total % Change	**3.65%**	**3.65%**	**4.97%**	**4.96%**	**2.65%**	**5.42%**	**3.07%**	**5.66%**	**7.09%**	**6.19%**

SOUTH DAKOTA BOARD OF REGENTS
JOINT APPROPRIATIONS COMMITTEE BUDGET REQUEST HEARINGS
JANUARY 2009

History of General Fund Appropriations
FY90-99

	FY90	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99
Previous FY General Fund Base	$91,023,557	$99,638,903	$105,677,583	$113,751,262	$121,303,692	$129,399,089	$105,474,854	$106,663,451	$107,095,078	$111,868,651
Salary Package										
Total Salary Package	$2,751,513	$4,527,603	$4,904,367	$4,047,723	$5,670,818	$3,357,041	$1,528,175	$336,983	$3,435,226	$4,791,540
Percent Change of Base	3.02%	4.54%	4.64%	3.56%	4.67%	2.59%	1.45%	0.32%	3.21%	4.28%
Maintenance (Maintain Value)										
Formula Adjustment	$2,385,815	$701,656	$2,092,232	$2,667,094	$2,346,453	$275,518	($339,578)		$757,491	
ADRDL Lease Payments						$286,736		$180,091	$223	$107,715
BIT Billings & PEPL Adjust.	$435,641							($49,138)	$178,670	
Utilities	$200,000			$600,000						
Special Schools M&R						($75,032)				
SDSD & SDSBVI OE					$27,353					
Fleet Consolidation								($36,309)		
Health Lab Fees					$3,900					
Total Maintenance	$3,021,456	$701,656	$2,092,232	$3,267,094	$2,377,706	$487,222	($339,578)	$94,644	$936,384	$107,715
Percent Change of Base	3.32%	0.70%	1.98%	2.87%	1.96%	0.38%	-0.32%	0.09%	0.87%	0.10%
New Regental Investments										
WICHE/Prog Review/Spec Studies	$56,028									
S&PL Replacement	($362,487)									
Base OE	$676,907									
Discretionary Fund	$1,241,902	($422,302)	($65,898)	($307,927)	($102,353)					
Med School Faculty	$140,000									
BHSU Equalization	$68,184									
DSU Equalization	$47,059									
Personnel Support Pool	$600,000									
Federal Funds Shortfall	$190,000									
SEOG and Workstudy Match	$184,784	$155,921								
Grants Coordinator		$54,784								
Nursing Expansion		$586,878								
West River Nursing		$424,140	$77,080	$45,540						
Ag Research Barn		$10,000	($10,000)							
NCATE			$435,000							
OT/PT			$475,000							
Business Opportunity Center			$100,000							
CES Salary Shortfall			$65,898							
Academic Support & Student Services				$500,000						
Physician Assistant					$170,359					
Medical School					($21,133)					
Technology Infrastructure									$401,963	
Total Regental Investments	$2,842,377	$809,421	$1,077,080	$237,613	$46,873	$0	$0	$0	$401,963	$0
Percent Change of Base	3.12%	0.81%	1.02%	0.21%	0.04%	0.00%	0.00%	0.00%	0.38%	0.00%
General Fund Increase	$8,615,346	$6,038,680	$8,073,679	$7,552,430	$8,095,397	$3,844,263	$1,188,597	$431,627	$4,773,573	$4,899,255
Tuition and Fees Moved to BOR						($27,768,498)				
Percent Change of Base	9.46%	6.06%	7.64%	6.64%	6.67%	2.97%	1.13%	0.40%	4.46%	4.38%
Final Base	$99,638,903	$105,677,583	$113,751,262	$121,303,692	$129,399,089	$105,474,854	$106,663,451	$107,095,078	$111,868,651	$116,767,906

SOUTH DAKOTA BOARD OF REGENTS
JOINT APPROPRIATIONS COMMITTEE BUDGET REQUEST HEARINGS
JANUARY 2009

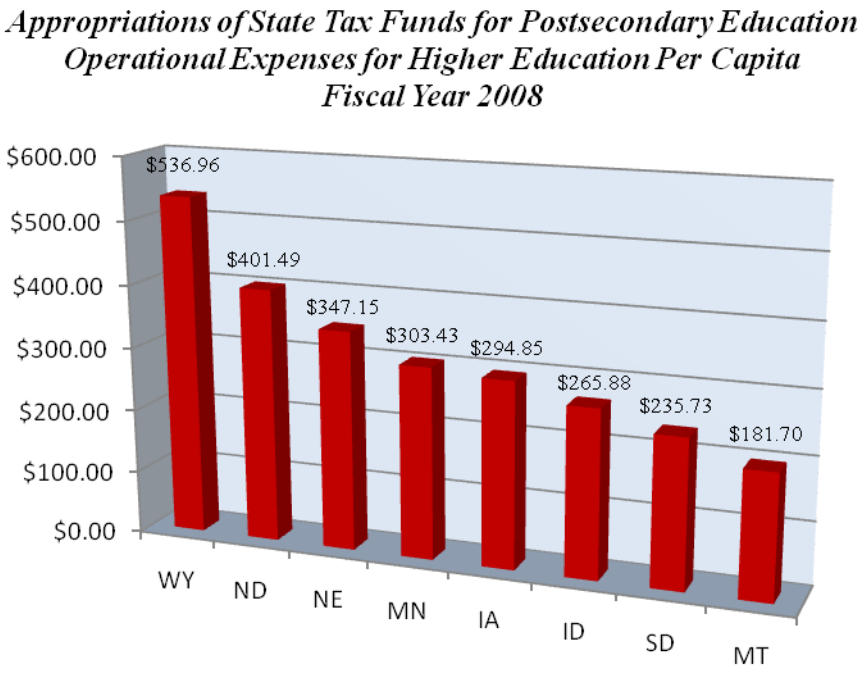
History of General Fund Appropriations
FY00-09

	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09
Previous FY General Fund Base	$116,767,906	$121,032,971	$125,447,125	$131,682,255	$138,216,780	$141,879,439	$149,572,980	$154,160,513	$162,881,972	$174,429,288
Salary Package										
Total Salary Package	$4,270,734	$3,419,896	$4,269,698	$5,427,547	$3,557,088	$4,118,303	$3,142,398	$4,627,268	$5,061,733	$5,186,796
Percent Change of Base	3.66%	2.83%	3.40%	4.12%	2.57%	2.90%	2.10%	3.00%	3.11%	2.97%
Maintenance (Maintain Value)										
ADRDL Lease Payments	($5,669)	($1,019)	($1,506)	$2,792	($2,853)	$1,503	$691	($278)	($1,348)	$2,394
BIT Billings & PEPL Adjust.			$113,462		$158,424					
Utilities		$40,000	$313,690				$647,329	$850,609	$2,042,163	$302,104
SDSD & SDSBVI OE			$24,000							
Travel Cut								($410,000)	$410,000	
Bank Charges		$35,000								
SDSM&T Audit Cut								($40,560)	$40,560	
Library Funding								$482,632		
Total Maintenance	($5,669)	$73,981	$449,646	$2,792	$155,571	$1,503	$648,020	$882,403	$2,491,375	$304,498
Percent Change of Base	0.00%	0.06%	0.36%	0.00%	0.11%	0.00%	0.43%	0.57%	1.53%	0.17%
New Regental Investments										
Student Tech Fellows		$700,425								
Electronic University Consortium		$119,852								
AES Genetically Mod. Or. Study		$100,000	($100,000)							
SDSD After School Activities			$50,000		($50,000)	$50,000				
Fire Predictor Specialist			$100,000							
Saterlee Study (Demographics)			$100,000	($100,000)						
Carbon Sequestration			$22,500	$56,066						
Internet1 & 2			$1,062,840	($210,000)						
V-Tel Equipment & Service			$280,446	($45,811)						
E-Learning				$1,351,120		$220,882	($85,000)			
Systems Security Position				$52,811						
Office of Medical Education						$409,811				
Nursing Expansion						$951,373				
Performance Fund Match						$250,000				
Research Infrastructure						$196,072			$500,000	
SD College Prep						$75,000				
Teacher Ed Assessment						$120,597				
PhD Graduate Research Assistants							$597,076			
General Ed Courses - Tech Schools							$383,000	$538,399		
PhD Programs							$1,088,164	$1,813,060	$1,790,057	
REED Operating & Technical Suport										$886,846
HEFF Match - 2% of M&R - Year 1										$1,632,999
Science Facilities - $74.5M Bond										$2,306,300
CUC Lease Payment										$34,768
Total Regental Investments	$0	$920,277	$1,515,786	$1,104,186	($50,000)	$2,273,735	$1,983,240	$2,351,459	$2,290,057	$4,860,913
Percent Change of Base	0.00%	0.76%	1.21%	0.84%	-0.04%	1.60%	1.33%	1.53%	1.41%	2.79%
General Fund Increase	$4,265,065	$4,414,154	$6,235,130	$6,534,525	$3,662,659	$6,393,541	$5,773,658	$7,861,130	$9,843,165	$10,352,207
Tuition and Fees Moved to BOR										
Percent Change of Base	3.65%	3.65%	4.97%	4.96%	2.65%	4.51%	3.86%	5.10%	6.04%	5.93%
New Student Investments										
SD Opportunity Scholarship						$1,300,000	($1,186,125)	$860,329	$1,438,411	
State Investment Repaid with Student Fees										
Critical Deferred Maintenance									$265,740	$437,401
Final Base	$121,032,971	$125,447,125	$131,682,255	$138,216,780	$141,879,439	$149,572,980	$154,160,513	$162,881,972	$174,429,288	$185,218,896

Appropriations of State Tax Funds for Postsecondary Education Operational Expenses for Higher Education per Capita Fiscal Year 2008

Regional State	Appropriations	Funding Per Capita	Rank
Wyoming	$280,738,000	$536.96	1
North Dakota	$256,838,000	$401.49	2
Nebraska	$616,042,000	$347.15	3
Minnesota	$1,577,102,000	$303.43	4
Iowa	$881,031,000	$294.85	5
Idaho	$398,660,000	$265.88	6
South Dakota	$187,693,000	$235.73	7
Montana	$189,506,000	$197.84	8

Source: Appropriations from the Grapevine, www.coe.ilstu.edu/grapevine, Census Data is from U.S. Census Bureau Estimates from July 2006, http://www.census.gov/Press-Release/www/releases/archives
Note: Appropriations includes Postsecondary Vocational Education Funding



Source: Appropriations from the Grapevine, www.coe.ilstu.edu/grapevine, Census Data is from U.S. Census Bureau Estimates from July 2007, http://www.census.gov/Press-Release/www/releases/archives
Note: Appropriations includes Postsecondary Vocational Education Funding

Board of Regents System Efficiencies

The Board continues to streamline and re-evaluate priorities in order to better serve our students and to expend tax dollars as effectively and efficiently as possible. The Board has taken on several initiatives and reprioritized the expenditure of student tuition and fees and state appropriations and addressed critical investments in higher education without new state resources.

- **Instructional Formula Eliminated** - The Board no longer receives full formula funding for enrollment growth, which provided the full instructional cost of educating additional students, approximately $3,925 per student. The Board is educating students on the margin, relying on the $2,000 average undergraduate tuition to pay for the full cost. The estimated full-funding shortfall is around $3.9M for FY09.

- **Salary Competitiveness** - In FY99, the Board began the Salary Competitiveness Program after repeated requests for state resources beyond state salary policy to hire and retain quality faculty (university faculty and staff are not covered by the state program that provides 2.5% above salary policy to employees below mid-point of their salary range). South Dakota was 17% behind the salaries of regional institutions at the start of the program. As of FY08, SD had closed the gap to 5.3.%. Without the program SD would be 27.3% behind the regional salaries. Of the $27.8 million now funding this program, the state general fund provided $1.6 million, the institutions redirected $5.8 million, and tuition/fee increases provided $20.4 million.

  The institutions cut 115 faculty and administrative positions to redirect funds, requiring that we deliver instruction and services more efficiently.

- **Reinvestment Through Efficiencies** – In FY06, a number of actions were taken to redirect a pool of resources of $10M that could be used to support efficiencies and reduce costs through technology, cooperation and collaboration.
  - 47.8 FTEs were cut to generate $1.78M to fund the new Student Information System and a portion of the funds were eventually redirected to establish the Enrollment Services Center.
  - 5% of general funds were redirected to system priorities resulting in reorganization, process changes, program elimination/modification, and reductions resulting in $4.7M of reinvested dollars.
  - Small sections were eliminated redirecting $3.45M to the reinvestment pool.
  - The value of the Reinvestment Resources have been maintained with a pool of $12.2M targeted towards technology infrastructure, redesigning curriculum, protecting assets, economic development, linkages to k-12, investments in change, and centers of excellence.

- **New Ph.D. Programs** – The State has provided $5,288,357 to fund 9 new Ph.D. programs since FY06. The total cost of the programs was determined to be $10,039,649.

The universities are redirecting $4,751,292 in base dollars to support these new programs. The universities have made research and the necessary Ph.D. programs to support the research infrastructure one of their highest priorities.

- **Grants and Contracts** – In support of the Governor's 2010 Research Goals and responding to the Board's goals to increase externally funded grants and contracts, the universities and the faculties have made a concerted effort and have increased federal and other funded grants and contracts from $36.8M to $70.6M in just 7 years, a 192% increase! Considering a 2.4 multiplier and that 60% of the dollars will remain in the state, the total economic impact is $101.7 million for FY08! This funding provides approximately 480 FTE jobs for faculty, researchers and staff support across the state.

- **Scholarships** – Foundation and institutional scholarships have grown by 111% in just 8 years (FY00-FY08). Currently, scholarships funded with non-state resources total $24.3M per year. These dollars help to retain the best and brightest students in SD.

- **Administrative Systems** – The Board invested $6.3M into the purchase and implementation (FY05 – FY07) of a new Human Resource and Finance Information System (HR/FIS) with no new state resources. This system replaced an aged system that was no longer supported by the vendor. The new system is a robust, integrated system that was implemented with minimal modifications and as a single instance for all of higher education. This means we have one finance and payroll system for all of the Board of Regents and not separate installations.

- **Common Business Practices** - The Board has adopted best business practices across the Regental system in conjunction with the implementation of the HR/FIS. These changes include the following efficiencies:
  - Consolidation of 6 vendor files to a single vendor file reducing duplication of effort and related staffing;
  - Moved to paperless transactions and approvals reducing processing time, the cost of printing copies and mailing costs;
  - Operate a single payroll system reducing duplication;
  - Partnered with the State Office of Procurement Management to reduce duplicate data entry and to provide them with better purchasing and management data;
  - Partnered with the State Auditor to approve vouchers electronically eliminating paper and duplicate data entry;
  - Identified purchasing specialists that handle commodity groups for all universities, allowing the combining of purchase orders, better relationships and coordination with vendors, and expertise in buyers;
  - Access to on-line catalogs for direct purchasing off of state contracts to reduce effort and delivery time;
  - A single payables center for Board of Regents eliminating duplicate effort across the system. The process and forms are now standardized providing for better accounting data and management by BOR and State agencies. Vendors now have a single point of contact eliminating confusion and misinformation about who to contact;

- Warrants now have expanded detail to assist vendors in identifying invoices and institutions to credit for payments. The check stock is more secure and managed at one institution;
- Significant improvements in expenditure and payroll interface data to the State reducing problems with bank reconciliation and manual corrections;
- Implementation of on-line recruiting and applicant tracking and reclassification and compensation reviews;
- Significantly improved position management and FTE tracking and reporting to the State;
- Employee self-service for on-line timekeeping and leave information;
- Standardization of forms and paperless work flows using document imaging;
- Automated report distribution eliminating printed reports and related costs; and
- Move to a deferred payroll cycle allowing for accurate overtime payment, elimination of overpayments and up-to-date leave reporting.

- **Inflation on OE Base** - The Board has not received annual inflation on its general fund operating expense base in decades. This is a reduction in purchasing power of approximately $300,000 - 500,000 annually. In the last ten years we have lost $2.8M of purchasing power on our general fund operating expense base.

- **Health Rate Increases** - In FY03, health rates were increased with no new appropriated funds costing the Board of Regents $1,684,757 in all funds. The general fund portion of $928,981 had to be covered by an increase in tuition and fees. In FY05, rates were increased by $97.68 per FTE costing an additional $442,783 for all funds. No general funds were received to cover the $232,478 increase in rates.

- **Lodging Rate Increase** - The State approved lodging rates were increased 28.6% from FY03 to FY07 with an annual budget impact of $106,040 with no additional funds.

- **Fleet Billings** - The fleet billings have increased by over 40% from FY00 to FY07 with an estimated budget impact of $591,000 per year to the Board of Regents System.

- **E-Commerce System** – The Board implemented an e-commerce system that costs about $225,000 annually which allowed us to move to on-line bill presentment and payment. This system cost the state nothing and was paid with savings from the reduction in postage and charging students a fee to use credit cards. The system saved an additional $250,000 per year from credit card fees that has allowed us to implement refunds electronically to students rather than cutting checks. We have also adopted a fully automated payment plan eliminating significant manual work in managing payment plans. The payment plans and fees have also been standardized across the system.
- **Desire2Learn Learning Management System** – The Board implemented a centralized learning management system to support the academic mission of the public universities in 2008. The implementation was off the shelf eliminating expensive modifications and was done as a single installation. This allowed for a single student log-in, allowing students taking courses from multiple institutions to access all of their courses at once rather than having to log-in through the sites of each of the institutions.

Implementation of the single installation, centralized system has resulted in significant savings over the alternative decentralized model that was in place. The approach has allowed the development of shared technical and support expertise as Desire2Learn has been implemented. We now have common shared training materials for faculty and for students. A system-wide management council was put in place to continue coordination of the Learning Management System.

- **Electronic Common Application Project (ECAP)** – In 2008 we completed the ECAP project which provides potential students the opportunity to apply to any BOR university and pay their application fee online eliminating manual entry and streamlining the process for all concerned. The system provides 24/7 access to the application process. The electronic application provides an electronic import of applicant data into Colleague, bypassing manual entry and allowing for cleaner data. The system allows university staff to access and track applicant data more efficiently, including those who have started the application but not completed the process. Significant efficiencies resulted from the project including a reduction in manual data entry, tracking paper applications and processing payments has resulted from this project. It is estimated that as more students use the process we will save $100,000 per year system-wide.
- **Registration Confirmation Project** – This project completed for fall 2007 provides students with an electronic workflow which allows students to confirm or cancel their attendance for the coming term and to provide updates to personal information. The process is consistent across the universities providing a standard electronic process and eliminating paper and manual work. The check-in process automated and streamlined a number of tasks:
    - Facilitates the refund process for students and provide the universities with an opportunity to remind students about the availability of Direct Deposit Refunds.
    - To electronically gather information on how students expect to pay their bill and how they would like to receive their refund, so the information is available for university planning and decision making.
    - To provide the ability for the universities to re-survey current students regarding their ethnicity, as required by NCES for the IPEDS surveys.
    - To allow students an automated mechanism to update their local address and cell phone number on file and to enter a 'for refunds only' address if they choose.
    - To remind students about the need to complete the Financial Aid Authorization form, which authorizes the universities to apply financial aid to miscellaneous charges and prior term charges, avoiding holds on the student record.
    - The information obtained allows universities to better prepare for tuition and fee payment days.
- **Electronic Recruiting System** - The South Dakota Board of Regents implemented a software package to assist in the recruitment of positions as well as the reviewing of positions as provided for under South Dakota Administrative Rules. This recruitment package allows the applicants to apply online. The ability for applicants to apply online has minimized the need for printing or copying applications/resumes, cover letters, and other recruitment materials for our search committees. The Regents have implemented the ability to utilize the software from the internet and computer. The system is utilized for communication with a resulting reduction in postage expense. The position

description software package has reduced the need for a paper process in review of the current position description. These systems are completely paperless and automated.

South Dakota Board of Regents
Joint Appropriations Committee
Budget Request Hearings

BHSU

DSU

NSU

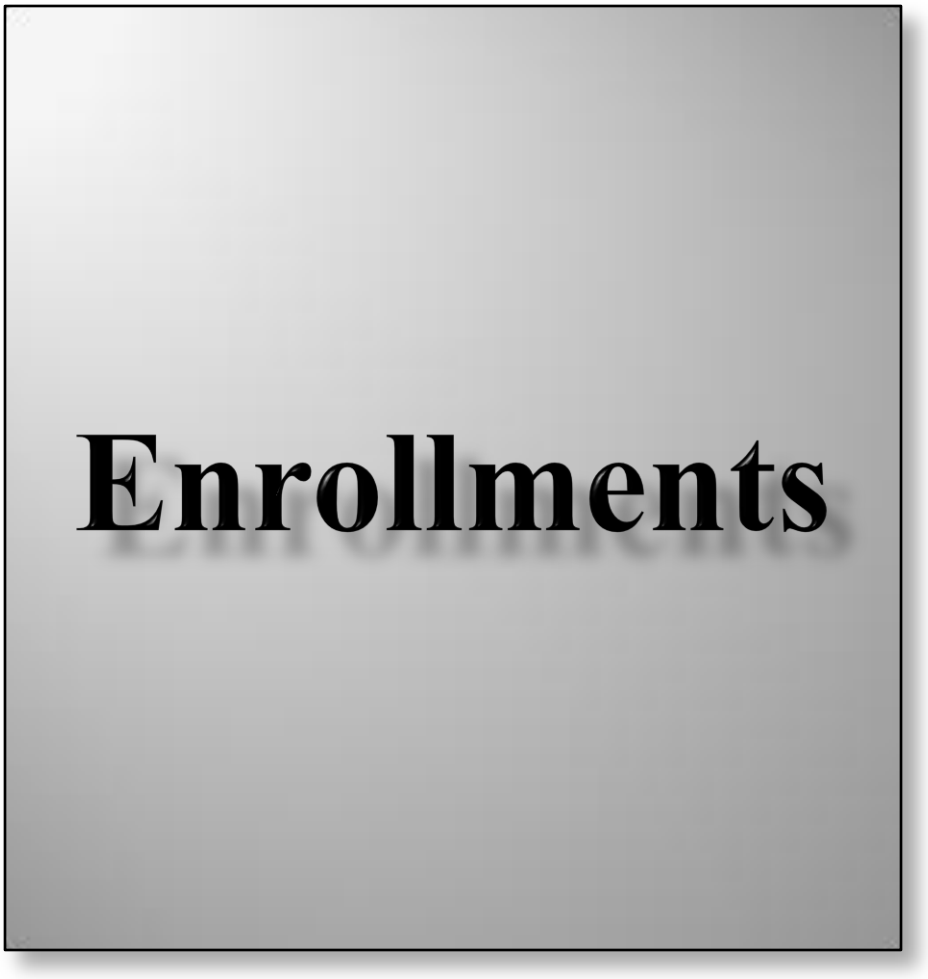
SDSM&T

SDSU

USD

SDSBVI

SDSD

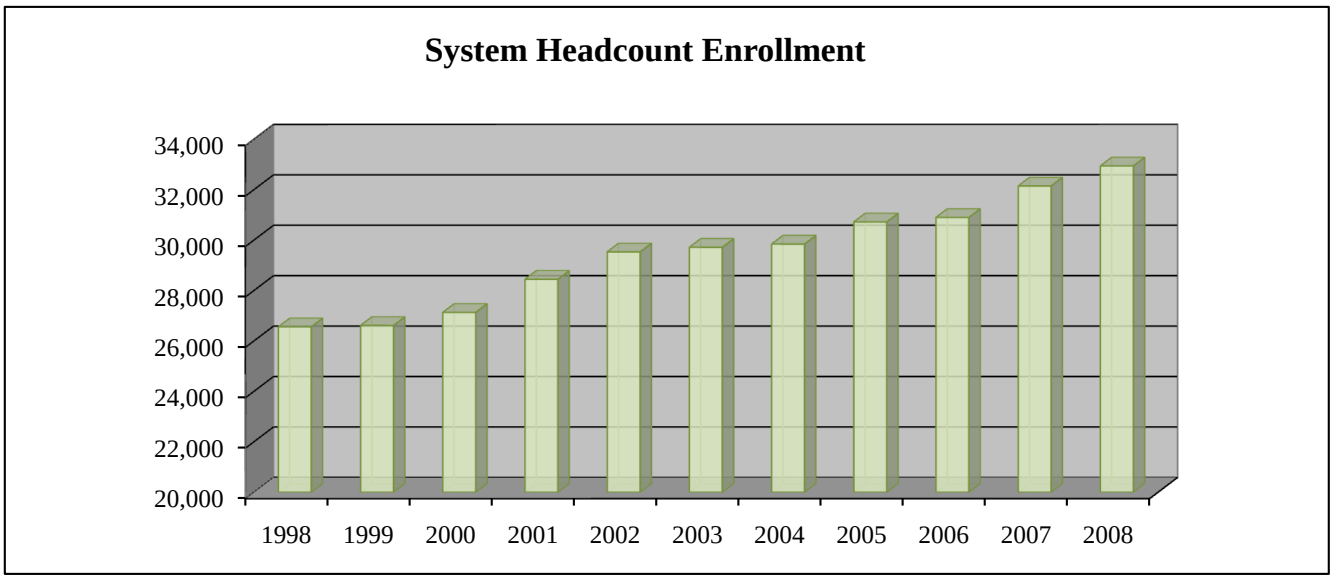


YOUR FUTURE IS HERE. South Dakota Board of Regents

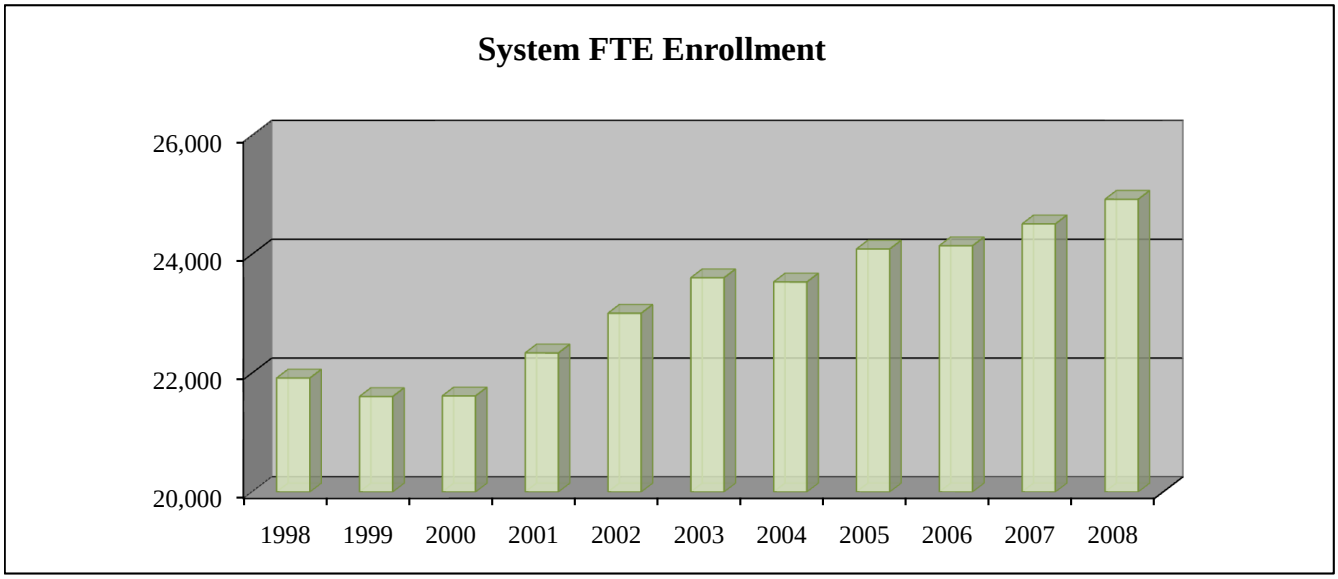
Fiscal Year 2010
Budget Request

SOUTH DAKOTA BOARD OF REGENTS
JOINT APPROPRIATIONS COMMITTEE BUDGET REQUEST HEARINGS
JANUARY 2009

Board of Regents University Enrollment
State and Self-Support Enrollments



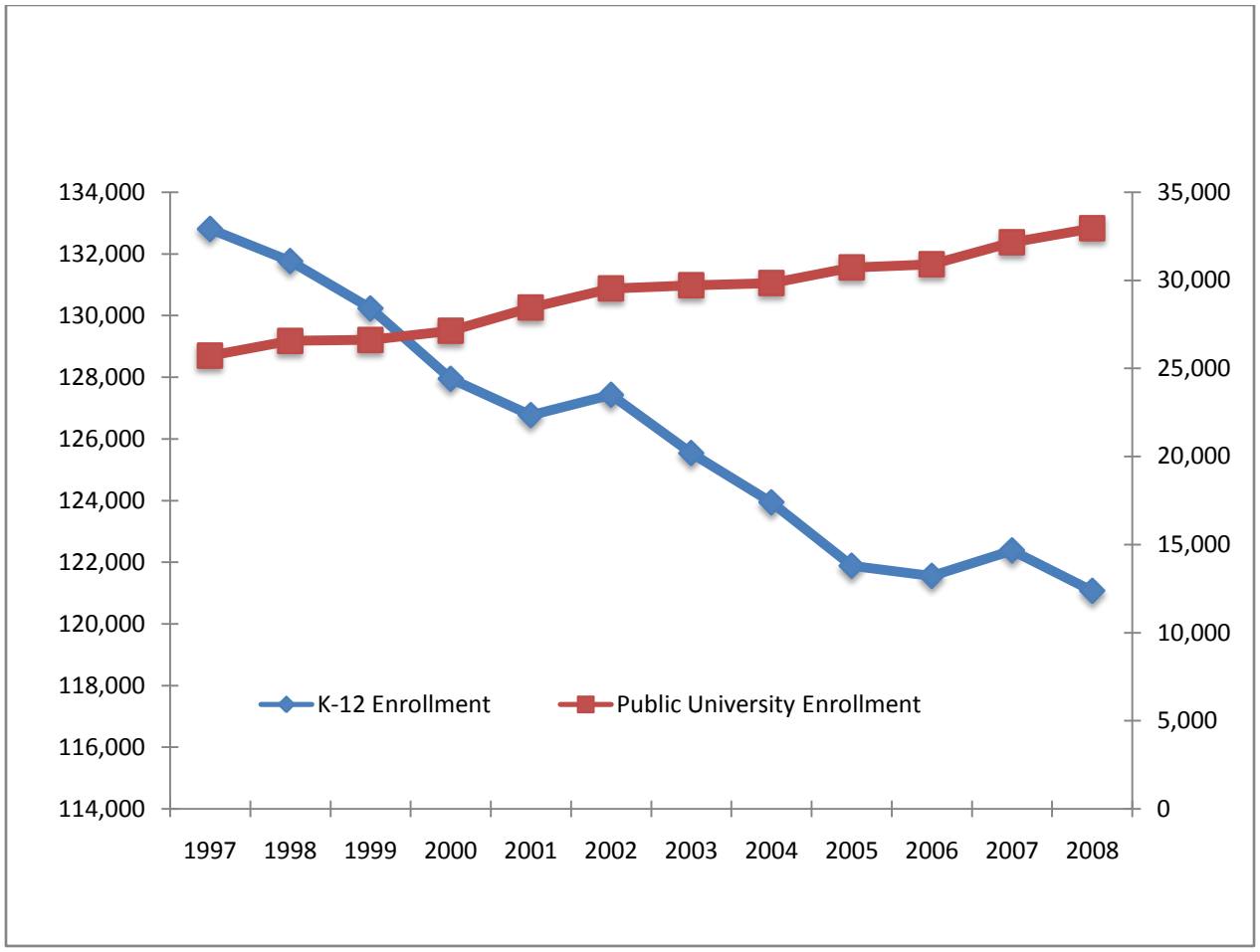
Headcount	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Enrollment	26,560	26,616	27,134	28,446	29,533	29,716	29,844	30,720	30,901	32,148	32,943



FTE	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Enrollment	21,917	21,606	21,616	22,339	23,008	23,605	23,534	24,089	24,144	24,512	24,926

Enrollment History

SD Public K-12 Schools and University System



South Dakota Board of Regents
Joint Appropriations Committee
Budget Request Hearings

BHSU

DSU

NSU

SDSM&T

SDSU

USD

SDSBVI

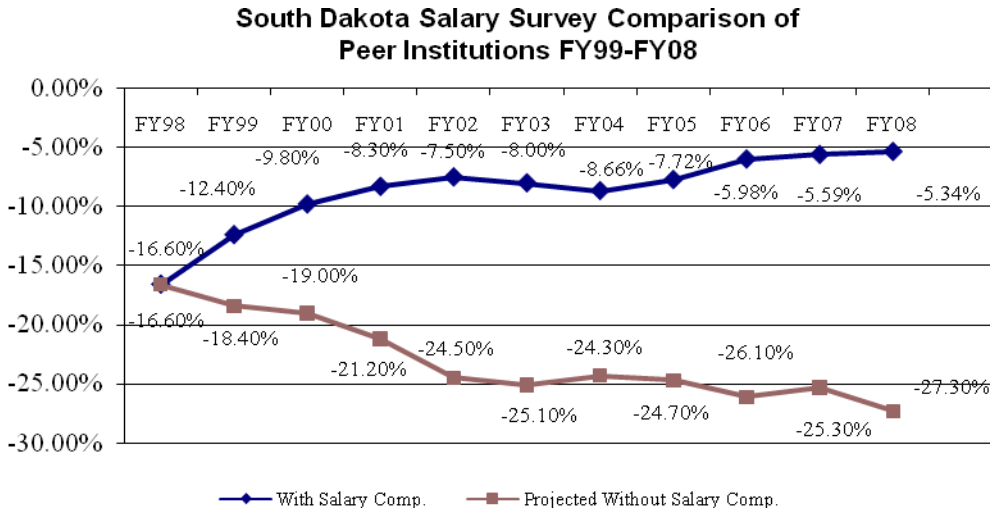
SDSD

YOUR FUTURE IS HERE. South Dakota Board of Regents

Fiscal Year 2010
Budget Request

Salary Competitiveness

The Board initiated a program to increase the salaries of faculty and non-faculty exempt employee's at all Regental institutions. The salaries of the faculty and exempt staff trail those of counterparts in surrounding states at the rate of 5.34% in March of 2008 and nationally at the rate of 30.18% in March of 2008. Because the universities must recruit in a national market and the special schools must compete in their area markets for teachers, the institutions must have competitive salaries to recruit and retain qualified staff. To address the situation, in FY99 the Regents developed a three-year plan to increase the funds available for salary distribution by approximately 10% above the normal state salary adjustment. The 10% was generated with reductions in staffing levels by eliminating 114 positions, a redirection of general funds of $1.6M to salaries, and an increase in student fees and ancillary charges for services. The three-year plan was completed in FY01 with salaries moving from 16.6% to within 8.3% of similar faculty in surrounding states. In order not to lose ground gained by the salary competitiveness plan, the Board has continued to increase student fees annually to bridge the gap between surrounding state's salary increases and the South Dakota salary policy.



The above graph represents two data comparisons. The first data comparison is represented by the tan line and demonstrates where South Dakota would have been ranked in comparison to the market had the System not implemented a salary enhancement program. As noted, the data reflects that the compensation plan would have been 27.30 percent below the market in FY08 without a salary enhancement plan. The second data comparison represents where South Dakota ranks since the implementation of the compensation enhancement program. As noted in blue, the data reflects that South Dakota is 5.34 percent under the market as of FY08. Therefore, South Dakota has accomplished roughly an 11.0 percent gain from the enhancement program; however, there is still a gap in competitiveness as reflected with the market.

From FY99 to FY09, the states surrounding South Dakota increased faculty salaries by more than 3.83 percent on average per year. The following table represents the average increase awarded for the following states: South Dakota, Iowa, Minnesota, Montana, Wyoming,

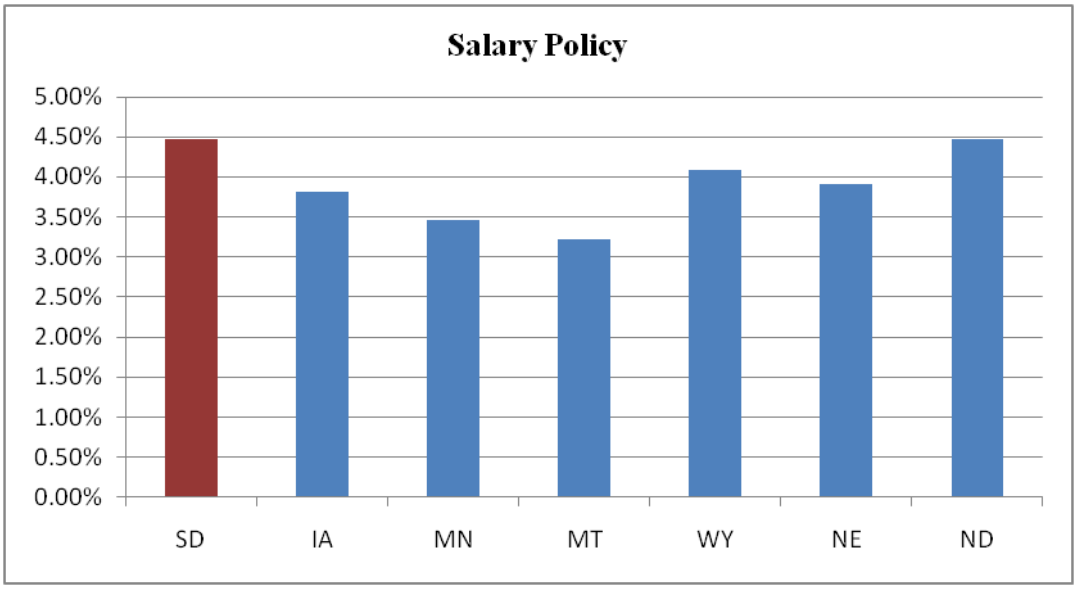
Salary Competitiveness

Nebraska, and North Dakota. This table reflects the local market for which South Dakota competes for talent. The table provides data comparisons as to where South Dakota ranks in comparison to salary competitiveness. South Dakota has tried to achieve and remain competitive in the market, which would include the regional states listed in the table below. However, it is important to note that our market not only consists of the surrounding states but nationally as well.

It is important to note that the overall targeted goal is to be competitive in the entire market. Since FY99, the Board of Regents has been committed to achieving this goal. The *Opportunities for South Dakota* report highlights the continued efforts toward achieving this goal as can be found in Opportunity #7, Salary Enhancement and Competitiveness in the Recruitment and Retention of Faculty and Administrators.

Salary Policy History for Surrounding States

	SD	IA	MN	MT	WY	NE	ND
FY99	7.20%	4.00%	6.40%	6.85%	3.00%	3.00%	3.90%
FY00	6.10%	4.00%	3.50%	3.00%	3.00%	4.63%	3.00%
FY01	6.10%	4.00%	4.80%	3.00%	8.10%	4.63%	4.50%
FY02	4.50%	3.90%	4.25%	4.00%	12.40%	5.22%	5.10%
FY03	4.00%	3.50%	3.00%	4.00%	0.00%	5.50%	5.00%
FY04	3.00%	2.70%	0.00%	0.00%	0.00%	2.13%	3.60%
FY05	4.00%	3.51%	3.00%	0.50%	6.90%	1.88%	4.24%
FY06	3.25%	3.45%	3.88%	3.50%	0.00%	3.85%	5.50%
FY07	4.00%	3.83%	2.67%	4.00%	3.50%	3.81%	3.00%
FY08	3.00%	5.32%	3.25%	3.60%	4.00%	4.2%	5.60%
FY09	4.00%	3.75%	3.40%	3.00%	4.00%	4.2%	5.70%
Total	49.15%	41.96%	38.15%	35.45%	44.90%	43.05%	49.14%
Average	4.47%	3.81%	3.47%	3.22%	4.08%	3.91%	4.47%



Salary Competitiveness

Sources of Salary Competitiveness Dollars

The funding for the salary enhancement program was accomplished with almost no additional dollars from the Legislature. The total cost of the initial program was $16.4 million. Approximately $4.0 million was derived from base FTE reductions in FY99, FY00, and FY01. The Legislature also allowed the Board to keep $1.6 million dollars in formula dollars that would have been lost due to reduced enrollments. A total of 30.1 FTE in formula positions were eliminated, but those dollars were applied to the salary competitiveness program. Another initial $9.0 million was raised through increases in student fees. In FY99, the Board also increased its allocation from existing tuition revenue and allocated those dollars to base faculty and non-faculty exempt salaries. The remaining dollars were allocated from user fees, increased federal grant charge backs, and $77,960 in pesticide fee revenue provided by the Legislature. Each year since its inception, the Board has used the Salary Competitiveness Program to maintain our salaries within the region, relying on student fee increases to fund the program. Following is a summary of the current annual investment.

Funding Sources	**BOR**	**State**
FTE Reductions (84.8 FTE)	$ 3,979,639	
Formula Reductions (30.1 FTE)		$ 1,613,960
Student Fee Increases (FY08)	$20,497,185	
Reallocation of Existing Tuition Revenue (FY99)	$ 680,000	
Federal Grant Recovery	$ 842,700	
User Fees	$ 218,487	
Pesticide Fee Revenue	$ 77,960	
Total Revenues	$ 26,295,971	$ 1,613,960
Total % of Revenues Paid	94.22%	5.78%

As noted, the above table represents an itemization of the funding for the salary enhancement program to date. This table further illustrates that the state funding represents only a small percentage of the total funds needed for the enhancement program and how much funding the salary enhancement program needs to ensure market-worth for key and quality personnel. The table below further clarifies how the System achieved greater funds through reductions in FTE, which aided in creating an additional funding source to assist in the salary enhancement program.

FTE Reductions

FY99	41.7 FTE
FY00	36.7 FTE
FY01	36.5 FTE
FY02	----- FTE
Total Reduction in Employees	114.9 FTE

Salary Competitiveness

How Dollars Were Distributed

The Board's contract with the faculty union (COHE) calls for salary policy dollars to be distributed based on individual employee performance, market conditions, and institutional priorities. The following table reflects the distribution of salary increases within the regental system.

NFE and Faculty Salary Distribution History
Percent of Employees Receiving Salary Policy Dollars

Salary Percent Awarded	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08
<2 %	6.7%	6.2%	3.8%	6.0%	8.0%	19.4%	8.2%	11.3%	10.19%	13.1%
2 to 4 %	12.3%	13.1%	14.6%	30.2%	43.9%	64.1%	46.4%	54.5%	43.3%	39.4%
4 to 6 %	20.5%	36.9%	32.8%	45.4%	37.8%	14.1%	36.9%	26.1%	35.82%	26.3%
6 to 8 %	23.5%	27.2%	29.5%	10.8%	7.3%	1.8%	6.5%	6.6%	8.61%	11.0%
8 to 10 %	15.1%	9.0%	10.8%	2.4%	1.6%	0.1%	1.5%	1.1%	1.37%	5.1%
10 to 12 %	8.4%	3.2%	3.1%	1.6%	0.8%	0.1%	0.2%	0.3%	0.62%	2.6%
12 to 14 %	5.3%	2.9%	2.2%	1.8%	0.2%	0.2%	0.2%	0.04%	0.081%	1.0%
14 to 16 %	3.3%	1.2%	1.8%	1.2%	0.3%	0.1%	0.0%	0.0%	0.0%	0.6%
>16%	4.9%	0.5%	1.4%	0.6%	0.1%	0.1%	0.1%	0.0%	0.0%	0.8%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

As the table reflects, the trend from FY99 to FY08 supports a distribution of dollars based on performance, market, and institutional priorities.

As you will note, the Board of Regents applies both the market and individual equity when establishing annual increases. The compensation offered to employees for positions is priced according to the various labor markets where the employer competes for talent. A basic premise of the market-based pay philosophy is that employers be able to effectively compete in a variety of markets to attract and retain qualified employees. Individual equity is the extent to which employees are compensated for individual performance. Therefore, a link always exists between external competitiveness and the internal values of work. For this reason, the South Dakota Board of Regents does not provide a flat percent across the board, but rather supports a market based individual equity pay system.

Salary Competitiveness

How South Dakota Ranks to National Market

Regental *FY08* Average Faculty Salary*

Institution	Professor	Associate Professor	Assistant Professor	Instructor	Institution Average	Market Survey Results Average
BHSU	$61,050	$54,968	$50,316	$41,583	$53,377	$ 83,188
DSU	$69,990	$63,741	$55,598	$42,085	$56,227	$ 95,369
NSU	$67,472	$55,876	$47,355	$41,748	$54,376	$ 89,708
SDSMT	$86,354	$61,988	$58,243	$42,401	$70,580	$ 102,832
SDSU	$70,372	$61,276	$53,831	$42,585	$58,521	$ 95,604
USD**	$81,745	$59,025	$49,430	$35,893	$61,040	$ 92,263
Sanford SOM	$89,880	$61,160	$51,798	$47,673	$63,332	$ 99,508
System	$75,423	$60,495	$53,266	$42,069		

The Market Survey Results Average is included to allow you to look at the institutional averages and make comparisons to the Oklahoma Survey (OK) results which have been designated as the national market.

*The chart reflects the overall average needed as compared by OK (FY08 Survey Data). This calculation was compared to the November file in FY08 for the comparison.

** USD does not include the medical school.

Regental *FY09* Average Faculty Salary***

Institution	Professor	Associate Professor	Assistant Professor	Instructor	Institution Average
BHSU	$69,377	$59,807	$49,573	$42,129	$54,356
DSU	$74,399	$66,850	$54,701	$40,418	$57,977
NSU	$72,798	$57,575	$46,888	$44,010	$57,405
SDSMT	$88,849	$66,117	$59,270	$43,716	$72,350
SDSU	$74,934	$62,773	$55,178	$43,343	$60.988
USD	$87,693	$62,551	$55,381	$39,417	$62,891
Sanford SOM	$98,560	$69,368	$52,812	$47,528	$63,842
System	$79,507	$63,135	$54,089	$42,735	

***This data is calculated by Regents Information Systems and is the current calculation used to arrive at average faculty salaries. Faculty salaries are based on nine-month employment status.

South Dakota Board of Regents
Joint Appropriations Committee
Budget Request Hearings

BHSU

DSU

NSU

SDSM&T

SDSU

USD

SDSBVI

SDSD

YOUR FUTURE IS HERE. South Dakota Board of Regents

Fiscal Year 2010
Budget Request

SOUTH DAKOTA BOARD OF REGENTS
JOINT APPROPRIATIONS COMMITTEE BUDGET REQUEST HEARINGS
JANUARY 2009

2001 and 2005 Ten Year Capital Improvement Projects

2001 10-Year Plan

Campus	FY Planned	FY Approved	Project Name	Renovation/New Const	HEFF	Other	Total
100% HEFF or Partial HEFF Funded Projects							
BHSU	2002	2002	Cook Classroom Renovation	New Construction	$8,250,000	$0	$8,250,000
DSU	2003	2002	Technology Classroom Building Renovation	Renovation	$2,500,000	$0	$2,500,000
SDSM&T	2007	2003	Library -- 1st/4th Floor Remodel/Completion	Renovation	$881,000	$0	$881,000
SDSM&T	2007	2003	Upgrade Primary Elec Dist System	Renovation	$784,000	$0	$784,000
SDSM&T	2007	2003	M.I. Building Air Conditioning	Renovation	$376,000	$0	$376,000
NSU	2011	2005	Technology Center Addition to Mewaldt-Jensen	New Construction	$7,000,000	$0	$7,000,000
USD	2006	2003	Lee Medicine & Science Hall	New Construction	$12,500,000	$19,500,000	$32,000,000
SDSU	2009	Deferred	Shepard Hall Renovation	Ren (59%)/New (41%)	$11,800,000	$8,200,000	$20,000,000
Subtotal					$44,091,000	$27,700,000	$71,791,000
100% Federal or Private - In Ten-Year Legislation							
SDSU	2002	2002	Solberg Hall Renovation	Renovation		$7,570,000	$7,570,000
USD	2008	2008	New Business School	New Construction		$12,800,000	$12,800,000
USD	2002	2003	Old Armory Renovation	Renovation		$2,200,000	$2,200,000
USD	2002	2002	Al Neuharth Media Center	Renovation		$4,200,000	$4,200,000
USD	2010	Deferred	Slagle Auditorium	Renovation		$3,500,000	$3,500,000
Subtotal						$30,270,000	$30,270,000

2005 10-Year Plan

Campus	FY Planned	FY Approved	Project Name	Renovation/New Const	HEFF	Other	Total
100% HEFF or Partial HEFF Funded Projects							
SDSU	2008	2008	Shepard Hall Renovation and Addition	Ren (20%)/New (80%)	$24,000,000	$27,000,000	$51,000,000
USDSU	2008	2008	Classroom Building	New Construction	$7,700,000	$0	$7,700,000
USDSU	2008	2006	Graduate Education and Research Center	New Construction	$2,000,000	$13,000,000	$15,000,000
USD	2008	2008	Business School	New Construction	$5,400,000	$15,100,000	$20,500,000
USD	2008	2008	Slagle Hall Renovation	Renovation	$4,600,000	$3,900,000	$8,500,000
SDSM&T	2010	2008	Chemistry Building Replacement	New Construction	$10,000,000	$6,000,000	$16,000,000
NSU	2011		Lincoln and Graham Hall Renovation	Renovation	$3,000,000	$0	$3,000,000
DSU	2011		Utility Infrastructure	Renovation	$3,000,000	$0	$3,000,000
BHSU	2011		Woodburn Hall	Renovation	$5,400,000	$0	$5,400,000
Subtotal					$65,100,000	$65,000,000	$130,100,000
100% Federal or Private - In Ten-Year Legislation							
SDSU	2005	2005	Pugsley Center Addition	New Construction		$502,289	$502,289
SDSD	2006	2006	Myklebust Recreation Center	Renovation		$838,192	$838,192
Subtotal						$1,340,481	$1,340,481

Note: Amounts reflect Legislative authorizations and not actual project expenditures.

South Dakota Board of Regents Capital Improvement Projects - December 2008

Facility Name	Ten-Year Plan Science or Critical M&R	Legislative Action / YR	Fund Type	Legislative Approved Amount	Last Board Action	Project Status	Projected Completion Date	Building Committee Rep.
ACADEMIC FACILITIES								
Black Hills State University								
Woodburn Hall - Renovation	2005	HB1025-2005	HEFF	$5,400,000	May-08	Facility Statement	Fall 2014	Exempted
Science Building	Science	HB1085-2008	Bonds	$8,078,400	Dec-08	Bid	Fall 2010	Morris
Dakota State University								
Utility Infrastructure - Renovation	2005	HB1025-2005	HEFF	$3,000,000			Fall 2011	
Athletic Indoor Practice Facility			Donations		Mar-06	Facility Statement	Fall 2012	
Habeger Science Center Renovation	Science	HB1085-2008	Bonds	$6,038,670	Oct-07	Facility Statement	Fall 2010	Belatti
Information Systems Building			Donations		Mar-08	Facility Statement	Fall 2012	
Northern State University								
Barnett Center Addition			Donations	$557,000	Dec-08	Facility Statement		Jewett
Lincoln & Graham Hall - Renovation	2005	HB1025-2005	HEFF	$3,000,000			Fall 2014	
MeWaldt-Jensen / Krikac Admin Bldg Science Upgrades	Science	HB1085-2008	Bonds	$2,701,900	Oct-07	Facility Statement		Baloun
South Dakota School of Mines and Technology								
Chemistry/Chemical Engineering Bldg Renovation			Donations	$1.5 - $6.0 M	Dec-07	Program Plan	Summer 2011	Johnson
Paleontology Building	Science	HB1085-2008	Bonds	$7,063,963	Dec-07	Program Plan	Summer 2010	Johnson
New Chemical & Biological Engineering/Chemistry Bldg	Science	HB1085-2008	HEFF Bonds Donations	$10,000,000 $7,170,000 $825,000 $17,995,000	Dec-08	Design	Summer 2010	Johnson
South Dakota State University								
Health Sciences Complex/Shepard Renovation *(AKA Avera Health & Science Center)*	2001/2005	HB1084-2008	HEFF Donations	$24,000,000 $27,000,000 $51,000,000	Apr-07	Construction	Spring 2011	Baloun
Administration Building Life Safety Upgrades	Critical	HB1101-2007	Student Fee Bonds	$1,800,000	Dec-08	Design	Fall 2010	Krogman
		Deferred Maintenance Savings	HEFF	$554,611 $159,881 $2,514,492				
Ag Hall	Science	HB1085-2008	Bonds	$8,006,075	Dec-08	Design	Winter 2010	Krogman
Dykhouse Athlete Development Center		HB1080-2008	Donations	$6,000,000	Dec-07	Bid	Womter 2009	Baloun
Dairy Microbiology Building Renovation	Science	HB1085-2008	Bonds	$8,259,250	Dec-08	Desgin	Winter 2010	Krogman

South Dakota Board of Regents Capital Improvement Projects - December 2008

Facility Name	Ten-Year Plan Science or Critical M&R	Legislative Action / YR	Fund Type	Legislative Approved Amount	Last Board Action	Project Status	Projected Completion Date	Building Committee Rep.
South Dakota State University (con't)								
New Dairy Processing Unit		HB1082-2008	Donations	$5,852,000	Oct-07	Design	Summer 2010	Krogman
East Farm Storage Buildings		HB1065-2007	AES/Grant & Other Funds	$450,000	Oct-06	Completed	Winter 2007	Exempted
Fire Alarm Systems Replacement-Various Bldgs	Critical	HB1101-2007	Student Fee Bonds	$1,700,000	Jun-07	Construction	Fall 2009	Krogman
Harding Hall South Addition		SB53-2007	Donations	$6,500,000	Jun-07	Construction	Spring 2009	Pagones
Harding Hall South - 4th Floor			Other	$1,035,449	Dec-08	Program Plan		Pagones
Northern Plains Biostress Classroom Renovation			Local	$1,000,000	Mar-08	Final Inspection	Winter 2008	Exempted
Northern Plains Biostress - Bsement Renovation			Local	$1,800,000	Dec-08	Program Plan		Pagones
Phys Ed Ctr-Exit Stair Replacement	Critical	HB1101-2007	Student Fee Bonds	$800,000	Jun-07	Construction	Spring 2009	Exempted
Phys Ed Center - Team Rooms Renovation			Donations Title IX	$530,000 $300,000 $830,000	Oct-07	Construction	Spring 2009	Baloun
Seed Technology Building		SB56-2007	Donations	$6,500,000	Dec-06	Program Plan	Fall 2010	Belatti
South Dakota Art Museum			HEFF	$1,800,000	Dec-08	Facility Statement		Pagones
South Loop Extension/Steam Condensate Return Utilities			HEFF	$3,800,000	Dec-08	Program Plan		Pagones
Student Wellness Center/Locker Room Renovation		HB1011-2006	Local City Donations GAF Tuition M&R Fee	$569,838 $500,000 $1,775,000 $8,711,270 $168,892 $375,000 $12,100,000	Mar-06	Final Inspection	Summer 2008	Belatti
University of South Dakota								
Lee Memorial Medicine and Science Center	2001	HB1068-2001 HB1024-2005	HEFF General Other	$12,500,000 $1,800,000 $19,500,000 $33,800,000	Oct-04	Construction	Winter 2008	Jewett
Business School - Replacement	2005	HB1084-2008	HEFF Other	$5,400,000 $15,100,000 $20,500,000	Dec-07	Construction	Summer 2009	Pagones
Slagle Hall - Renovation	2005	HB1084-2008	HEFF Other	$4,600,000 $3,900,000 $8,500,000	Jun-08	Bid	Fall 2009	Hansen
Akeley Lawrence Science Center Renovation	Science	HB1085-2008	Bonds	$5,256,751	Oct-07	Program Plan		Pagones
Churchill-Haines Science Renovation	Science	HB1085-2008	Bonds	$6,751,145	Oct-07	Program Plan		Pagones
Pardee Lab Life Safety	Critical	HB1101-2007	Student Fee Bonds	$1,750,000	Dec-07	Construction	Winter 2008	Hansen
Pardee Lab Renovation	Science	HB1085-2008	Bonds	$3,792,104	Oct-07	Program Plan		Hansen

South Dakota Board of Regents Capital Improvement Projects - December 2008

Facility Name	Ten-Year Plan Science or Critical M&R	Legislative Action / YR	Fund Type	Legislative Approved Amount	Last Board Action	Project Status	Projected Completion Date	Building Committee Rep.
South Dakota Public Universities and Reseach Center								
Classroom Building	2005	HB1025-2005	HEFF	$7,700,000	May-07	Construction	Winter 2008	Pagones
Graduate Education and Research Center	2005	HB1025-2005	HEFF	$2,000,000	May-07	Construction	Winter 2008	Hansen
			Federal	$4,276,173				
				$6,276,173				
New Health Sciences Simulation Center & Science Lab Facility	Science	HB1085-2008	Bonds	$10,593,842	Oct-07	Facility Statement		Jewett
South Dakota School for the Deaf								
Myklebust Recreation Center - Renovation	2005	HB1084-2008	Other	$788,192	Oct-05	Construction		Exempted
			Statewide M&R	$50,000				
				$838,192				
REVENUE FACILITIES								
BHSU	Student Union Addition/Renovation		Bonds/Local	$11,370,000	Dec-07	Construction	Winter 2009	Morris
DSU	Residence Hall Renovations		Bonds/Local	$5,350,000	Mar-08	Construction	Fall 2009	Belatti
NSU	Kramer Hall Renovation		Bonds	$2,500,000	May-08	Design	Fall 2009	Pagones
SDSM&T	Connolly/Palmerton Hall Renovation		Bonds/Local	$8,118,580	Dec-08	Design	Summer 2009	Morris
SDSM&T	Surbeck Center Renovation/Addn-Phase II		Bonds/Local	$6,000,000	Dec-07	Program Plan	Fall 2008	Johnson
SDSU	Binnewies Hall-Bathroom Renovations		Local	$1,800,000	Dec-08	Program Plan		Pagones
SDSU	Larson Commons Renovation		Local	$536,530	Dec-09	Program Plan		Pagones
SDSU	Medary Commons HVAC Renovation		Bonds/Local	$1,015,225	Oct-06	Completed	Winter 2007	Exempted
SDSU	New Rsidence Hall		Bonds/Local	$20,347,185	Dec-08	Program Plan		Pagones
SDSU	Residential Facilities - Phase II		Bonds/Local	$9,250,000	Jun-04	Completed	Summer 2008	Venhuizen
SDSU	Student Union - Dining Expansion & Addition		Local	$6,555,795	Dec-08	Program Plan		Pagones
SDSU	West Electrical Loop - Phase I		Bonds/Local	$600,000	Mar-06	Completed	Spring 2008	Exempted
SDSU	West Electrical Loop - Phase II, III, IV		Bonds/Local	$1,200,000	Oct-06	Final Inspection	Winter 2008	Exempted
USD	Residential Facilities-Phase III (Beede Hall)		Bonds/Local	$2,159,288	Oct-06	Completed	Fall 2007	Venhuizen
USD	Student Union -New		Bonds/Local	$22,835,598	Apr-07	Construction	Fall 2008	Hansen
USD	Wellness Center		Student Fee	$15,000,000	Dec-09	Program Plan		Pagones

Note: Many of the Critical Deferred Maintenance Projects bonded for in 2007 were maintenance and repair projects and do not appear on this list.

Project Phases and Approvals:

1) Preliminary Facility Statement - Board Approves
2) A/E Selection - Building Committee Approves
3) Facility Program Plan - Board Approves
4) Design - Building Committee and Board Approve
5) Bid - Building Committee Approves if within approved limits
6) Bid - Board approves substantive changes from Program Plan

SOUTH DAKOTA BOARD OF REGENTS
JOINT APPROPRIATIONS COMMITTEE BUDGET REQUEST HEARINGS
JANUARY 2009

Higher Education Facilities Funds Cash Flow

Fiscal Year	Beginning Balance July	Net 20% Tuition	Interest Revenue	Total Revenue	FY M&R Expenditures	Lease Payment	Total Expenditures	Obligated Unexpended	Ending Cash	Unobligated Funds
2008	$12,007,593	$13,791,375	$596,820	$14,388,195	$6,619,135	$8,230,782	$14,849,917	$4,111,984	$11,545,871	$7,433,887
2009	$11,545,871	$14,205,116	$377,355	$14,582,472	$10,272,046	$9,761,972	$20,034,018	$0	$6,094,325	$6,094,325
2010	$6,094,325	$14,631,270	$323,773	$14,955,043	$6,418,247	$9,447,879	$15,866,126	$0	$5,183,242	$5,183,242
2011	$5,183,242	$15,070,208	$287,330	$15,357,537	$6,694,933	$10,246,884	$16,941,818	$0	$3,598,962	$3,598,962
2012	$3,598,962	$15,522,314	$223,958	$15,746,272	$7,710,875	$9,533,404	$17,244,279	$0	$2,100,955	$2,100,955
2013	$2,100,955	$15,987,983	$164,038	$16,152,022	$8,005,555	$9,086,406	$17,091,961	$0	$1,161,016	$1,161,016
2014	$1,161,016	$16,467,623	$126,441	$16,594,063	$8,312,023	$8,477,061	$16,789,084	$0	$965,996	$965,996
2015	$965,996	$16,961,652	$118,640	$17,080,291	$8,630,749	$8,481,107	$17,111,856	$0	$934,431	$934,431
2016	$934,431	$17,470,501	$117,377	$17,587,878	$8,962,224	$8,475,123	$17,437,347	$0	$1,084,962	$1,084,962
2017	$1,084,962	$17,994,616	$123,398	$18,118,015	$9,306,958	$8,086,718	$17,393,677	$0	$1,809,301	$1,809,301
2018	$1,809,301	$18,534,455	$152,372	$18,686,827	$9,665,482	$8,092,269	$17,757,751	$0	$2,738,376	$2,738,376
2019	$2,738,376	$19,090,488	$189,535	$19,280,023	$10,038,347	$8,088,081	$18,126,428	$0	$3,891,971	$3,891,971
2020	$3,891,971	$19,663,203	$235,679	$19,898,882	$10,426,126	$8,080,237	$18,506,363	$0	$5,284,490	$5,284,490

1. Assumes a 4.0% interest calculation based on the ending cash balance plus $2,000,000 for unexpended M&R funds.
2. Assumes stable enrollments and an annual tuition increase of 3%.
3. Includes an annual inflationary growth to the M&R project funding equal to 4%
4. Lease payments include the M&R bond payment and the Sioux Falls Center rent starting in FY01.
5. Lease payment for M&R bond is satisfied in 2011 so the 2012 M&R allocation increases by previous M&R bond lease payment amount.
6. Bond debt will increase by $10.6 in 2009 to fund the Simulation Center and by $11.4 in 2011 to fund projects on the 2005 ten-year plan.

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South Dakota Opportunities
Research Infrastructure

Experimental Program to Stimulate Competitive Research – South Dakota's 2010 Initiative goal to become a recognized leader in research and technology development gained more momentum with a three-year, $6.75 million National Science Foundation EPSCoR (Experimental Program to Stimulate Competitive Research) grant in 2006 for the project, "The 2010 Initiative: Science-Based Leadership for South Dakota." Participating universities include South Dakota State University, University of South Dakota, South Dakota School of Mines and Technology, Black Hills State University, and Sinte Gleska University. The project will strengthen South Dakota's research infrastructure and reinforce the state's basic science and engineering research capabilities through an emphasis on photo-active nanoscale systems. The state commitment to the NSF EPSCoR grant over the past three years is $2.7 million and along with university and private sector investments has yielded more than $31 million during the last three fiscal years in federal EPSCoR funding from the NSF, National Institutes of Health, Department of Defense, Department of Energy, NASA and the USDA EPSCoR programs in supporting the development of South Dakota research infrastructure investments in people, equipment, and students**.**

2010 Research Centers – The state investment in 2010 Research Centers is paying off. In 2005 the state through the Research and Commercialization Council created four 2010 Research Centers and later added two additional Centers. To date these research centers have generated more than $77 million in sponsored research activities which, using a conservative impact model, has resulted in an economic impact of more than $111 million to the state of South Dakota. In addition to the direct economic impact of the Research Centers their activities helped South Dakota to achieve the 2010 Initiative goals of growing our gross state product, becoming recognized leaders in focused areas of research and enhancing the quality of life for South Dakotans. An additional center, the National Center for the Protection of the Financial Infrastructure, was approved at Dakota State University in September 2008. The original 2010 Research Centers have developed the infrastructure and capabilities needed to continue to be nationally competitive for research funding that will allow them to continue to grow.

Original Centers
Center for Infectious Disease Research and Vaccinology
South Dakota Signal Transduction Center
Center for the Research and Development of Light-Activated Materials
Center for Advanced Applications at the Nanoscale
Center for Bioprocessing Research and Development

Center for Infectious Disease Research and Vaccinology – SDSU Department of Veterinary Science, USD School of Medicine – This center was created to foster

research activities leading to the development of novel therapeutic and diagnostic technologies and products for infectious disease in humans and domestic animals. The Center has received around $7 million in competitive research grant funding, collaborated with small businesses to obtain more than $2 million in SBIR funding, licensed two commercial products and published more than 110 journal articles. This center played a key role in attracting Chronix Biomedical, Inc. to South Dakota. The Center and Chronix recently announced a research collaboration with Dr. Luc Montagnier, winner of the 2008 Nobel Prize in medicine, which will enhance research capabilities at the 2020 Research Center and potentially the Sanford Laboratory at Homestake.

South Dakota Signal Transduction Center – Sanford School of Medicine's Cardiovascular Research Institute – Federal and Foundation Grants worth more than $30 million in biomedical research funding since the centers establishment in 2005 and has grown to more than 70 researchers, technicians, and students working on this exciting research. In addition, the Center reports 21 publications in the professional literature and 14 presentations of their scientific work. Cardiovascular disease and cancer are the most frequent causes of death in today's society, and research under way at this center examines the pathways that regulate cell growth and differentiation, cell death, response to stress, and the maintenance of constant physiological conditions.

Center for the Research and Development of Light-Activated Materials – USD Department of Chemistry, SDSU Department of Chemistry and Biochemistry, Avera Research Institute – Researchers at this center are working with major pharmaceutical, medical device, animal health companies as well as start-up companies to further develop and commercialize technologies for use in vascular, opthomology, and other human and animal applications. This Center's research and its applications for solar energy is also the foundation of the current and proposed NSF EPSCoR RII proposal.

Center for Advanced Applications at the Nanoscale – This center is a partnership between SDSM&T and SDSU. The center played a key role in the current $6.75 million National Science Foundation South Dakota EPSCoR project and the proposed $20 million SD EPSCoR project. This investment was also a key factor in Radiance Technologies, Inc. establishing R&D collaborations in Brookings, Rapid City and Mission.

Center for Bioprocessing Research and Development – SDSMT Department of Chemical and Biological Engineering SDSU Department of Biology/Microbiology - The Center successfully partnered with four universities and more than 30 companies throughout the United States for a National Science Foundation Bioprocessing Industry/University Cooperative Research Center. The Center has received more than $5 million in federal funds in the first two years of operation.

Additional Centers - FY2007-2008
Center of Excellence for Drought Tolerance Biotechnology
National Center for the Protection of the Financial Infrastructure

Center of Excellence for Drought Tolerance Biotechnology – The objective of this SDSU based project is to develop a premier public research center on applied crop genomics with an emphasis on abiotic stresses, such as drought, and crop adaption to them. This project will speed to market the availability of drought/stress resistant crop genetics for South Dakota farmers and ranchers. During the previous two years greenhouse and equipment infrastructure improvements were made. Team members have published 23 refereed papers and presented research results in 16 papers at scientific meetings. During the Center's first two years more than $1.4 million in funding from industry and nearly $5 million in federal research funding has been secured.

National Center for the Protection of the Financial Infrastructure - The Research and Commercialization Council in September of 2008 invested $2 million over the next 5 years to create this center at Dakota State University. The Center builds on Dakota State University's nationally recognized leadership in information security and South Dakota's larger financial services industry to create a national center to advance the security and safety of the nation's financial infrastructure. The Federal Reserve Bank and US Department of Homeland Security are partners in this new Research Center.

New Centers
The Center for Detecting Rare Physics Processes with Ultra-Low Background Experiments
The Center for Biological Control and Analysis by Applied Photonics
The Translational Cancer Research Center
Repair, Refurbish, and Return to Service Applied Research Center

On January 6, 2009 the Research and Commercialization Council recommended creating four additional Research Centers to capitalize on unique opportunities South Dakota has to continue to develop leadership positions in focused areas. The four new Research Centers that will be supported over the next five years are:

The Center for Detecting Rare Physics Processes with Ultra-Low Background Experiments led by USD at Sanford Lab and DUSEL will enable South Dakota's public and private university physics researchers to contribute to the research and science education activities at Homestake. It will build the infrastructure needed to produce super clean materials for ultra-low background experiments conducted at the Sanford Lab, DUSEL and in other facilities around the world.

The Center for Biological Control and Analysis by Applied Photonics and the Translational Cancer Research Center Two Centers at SDSU, , will partner with Sanford Research and USD to link basic research activities at SDSU in the development of innovative materials, chemicals, and processes with the clinical research activities at

Sanford Research USD to more efficiently move biomedical discoveries from the laboratory to the bedside.

Repair, Refurbish, and Return to Service Applied Research Center - The fourth center to be created will be Repair, Refurbish, and Return to Service Applied Research Center is the which will involve a wide range of industry partners in both South Dakota and nationally with DoD to develop, certify and implement innovative methods to extend the useful life of military equipment. The Center will not only help to save the US Department of Defense billions of dollars but could also provide another mission for Ellsworth Air Force Base and help to expand existing South Dakota businesses as well as potentially attracting several large defense and manufacturers to South Dakota.

These four new research centers with modest investments will position South Dakota to capitalize more fully on the three large opportunities associated with the development of the Sanford Lab and DUSEL at Homestake, the $400 million Sanford Initiative, and the future need to refurbish and return to service vital military equipment.

* Other State, Federal and Private funding based on reports of the 2010 Centers through December 2008.

SOUTH DAKOTA BOARD OF REGENTS
JOINT APPROPRIATIONS COMMITTEE BUDGET REQUEST HEARINGS
JANUARY 2009

Summary of 2010 Center Activity and Economic Impact Including All Funds

2010 Centers	2010 Funding	Other State Funding	Federal Funding	Private Funding	TOTALS
Center for Research & Development of Light-activitated Materials:					
FY2005	503,741	117,013	-	80,773	701,527
FY 2006	503,741	272,706	372,674	178,000	1,327,121
FY 2007	503,741	948,400	804,382	537,286	2,793,809
FY 2008	643,741	1,291,072	1,085,466	319,786	3,340,065
FY 2009	503,741	1,318,290	1,607,278	50,000	3,479,309
Totals:	**2,658,705**	**3,947,481**	**3,869,800**	**1,165,845**	**11,641,831**
South Dakota Signal Transduction Center:					
FY2005	900,000	300,000	3,051,377	227,500	4,478,877
FY 2006	900,000	433,115	4,029,278	276,928	5,639,321
FY 2007	900,000	803,117	5,197,136	305,860	7,206,113
FY 2008	900,000	455,347	4,596,477	788,425	6,740,249
FY2009	900,000	250,000	4,781,848	463,400	6,395,248
Totals:	**4,500,000**	**2,241,579**	**21,656,116**	**2,062,113**	**30,459,808**
Center of Excellence for Drought Tolerance:					
FY2005	-	-	-	-	-
FY 2006	-	-	-	-	-
FY 2007	2,000,000	-	-	1,231,650	3,231,650
FY 2008	750,000	-	-	739,650	1,489,650
FY 2009	213,500		5,120,777	1,180,730	6,515,007
Totals:	**2,963,500**	**-**	**5,120,777**	**3,152,030**	**11,236,307**
Center for Bioprocessing Research and Development:					
FY2005	-	-	-	-	-
FY 2006	-	-	-	-	-
FY 2007	500,000	-	660,000	1,001,590	2,161,590
FY 2008	500,000	12,000	4,502,170	253,000	5,267,170
FY 2009	500,000		170,000	-	670,000
Totals:	**1,500,000**	**12,000**	**5,162,170**	**1,254,590**	**7,428,760**
Center for Infectious Disease Research and Vaccinology:					
FY2005	780,000	-	1,510,676	-	2,290,676
FY 2006	780,000	12,500	627,145	195,950	1,615,595
FY 2007	780,000	-	2,489,552	545,366	3,814,918
FY 2008	780,000	-	702,996	327,301	1,810,297
FY2009	780,000	40,000	1,194,869	339,336	2,354,205
Totals:	**3,900,000**	**52,500**	**6,525,238**	**1,407,953**	**11,885,691**
Center for Accelerated Applications at the Nanoscale:					
FY2005	835,000	-	1,102,396	250,000	2,187,396
FY 2006	654,000	-	0	42,000	696,000
FY 2007	585,000	-	87,279	32,385	704,664
FY 2008	585,000	-	-	-	585,000
Totals:	**2,659,000**	**-**	**1,189,675**	**324,385**	**4,173,060**
National Center for the Protection of the Financial Infrastructure					
FY 2009	410,874	-	0	0	410,874
FY 2010	719,844				719,844
FY 2011	507,561				507,561
FY 2012	280,082	-	-	-	280,082
FY 2013	81,640				81,640
Totals:	**2,000,001**	**-**	**0**	**0**	**2,000,001**
Center Totals 2005-2009	**$ 18,592,079**	**$ 6,253,560**	**$ 43,523,776**	**$ 9,366,916**	**$ 77,236,331**
Economic Impact $x2.4x.60	**$ 26,772,594**	**$ 9,005,126**	**$ 62,674,237**	**$ 13,488,359**	**$ 111,220,317**

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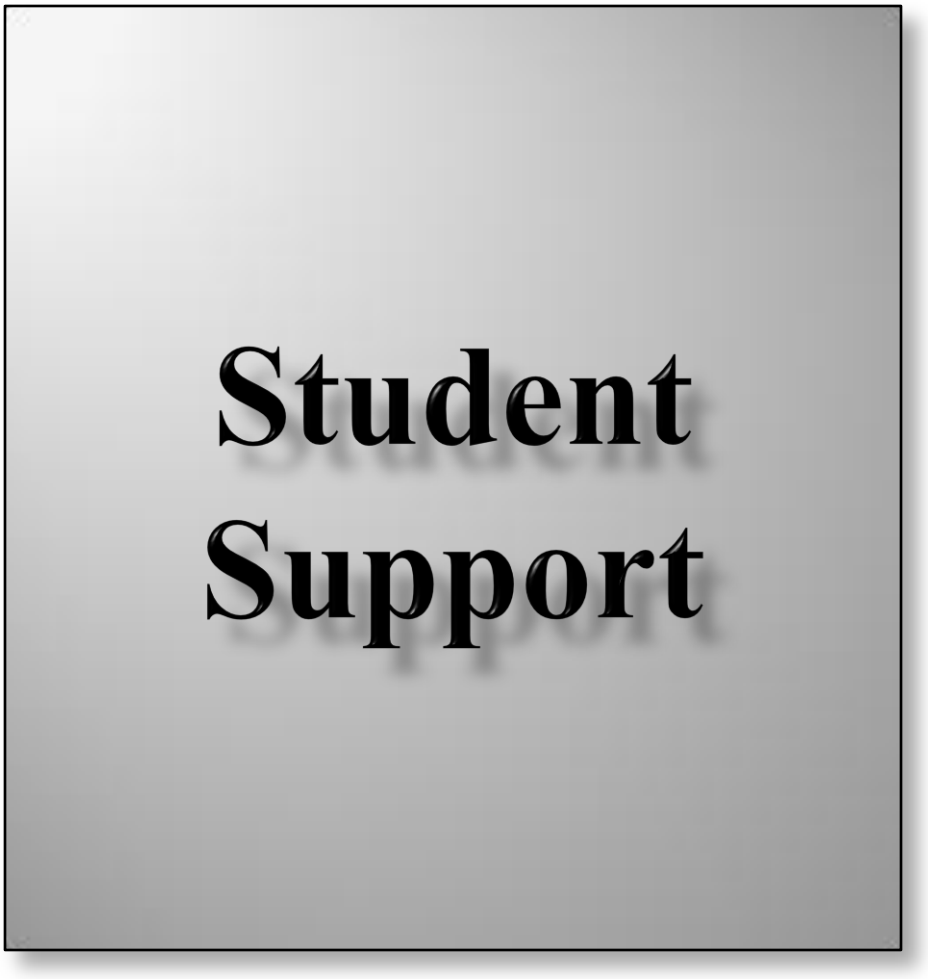

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Fiscal Year 2010
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Return on Investment: Fulfilling Established Objectives of the South Dakota Opportunity Scholarship

The South Dakota Legislature authorized the creation of the South Dakota Opportunity Scholarship (SDOS) which has allowed South Dakota high school graduates, who were residents of South Dakota at the time of graduation, received an ACT composite score of 24 or higher, and completed high school course requirements consistent with the Regents scholar curriculum to receive financial support. The argument for developing the Opportunity Scholarship program was to accomplish two primary objectives including the desire: 1) to persuade students to complete a rigorous high school curriculum that would enhance college readiness for high school graduates as they pursue post-secondary careers; and 2) to encourage high achieving South Dakota graduates to remain in the state. As the SDOS program has entered into its fourth year of funding a series of data elements were assessed to examine the programs ability to accomplish these two objectives.

Impact of a Rigorous High School Curriculum.

The South Dakota *High School to College Transition Report* is an annual report developed by the South Dakota Board of Regents to track South Dakota high schools and the Regental system. As South Dakota graduates progress through their first year of college, various data elements are assessed (e.g., ACT scores, first-year GPA, retention, remedial enrollment, advanced placement, etc.) to measure student success at the post-secondary level. Data depicted in the transition report indicate a higher percentage of South Dakota graduates who have remained in the state and attended one of the six public institutions (up 2% since the inception of the SDOS program). Additionally, as noted in Table 1 below, the level of remedial enrollments (unduplicated for mathematics and English) has also experienced a continuous decline, dropping to roughly 26% this past year after a high of 34% in 2003. Specifically, graduates requiring remediation in English has dropped by 8% during this five year period, and 9% for those requiring remediation in mathematics.

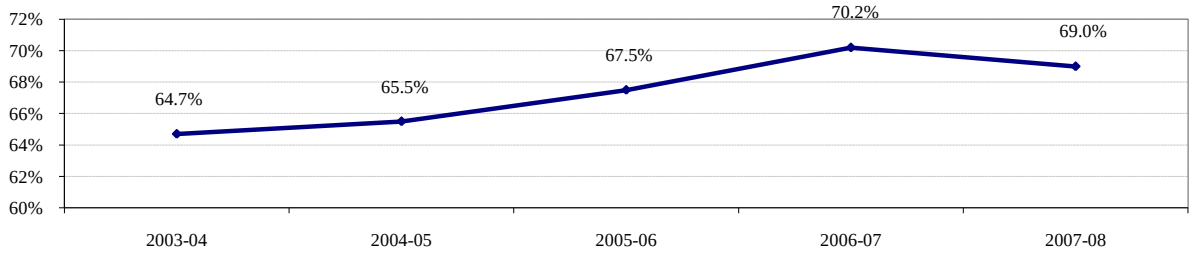
Table 1
South Dakota High School Graduates Entering Regental Institutions Between 2003-2007

	2003	**2004**	**2005**	**2006**	**2007**
# Entering Cohort	2,884	2,796	2,690	2,786	***2,665***
% of SD Graduates Entering Regental System[i]	30.2%	28.1%	28.6%	30.0%	***29%***
Average ACT composite score	22.2	22.5	22.5	22.7	***23.5***
% requiring English Remedial Courses	17%	13%	14%	13%	***9%***
% requiring Mathematics Remedial Courses	30%	27%	25%	25%	***21%***
% of unduplicated remedial enrollments	34.2%	31.8%	30.8%	30.0%	***26%***
Average GPA of all students	2.73	2.79	2.82	2.82	***2.85***

Return on Investment: Fulfilling Established Objectives of the South Dakota Opportunity Scholarship

In addition to the *Transition Report*, a marked change in student admissions into the Regental system has been evident in our *Minimum Progression Report* which tracks student academic performance based on key admission criteria. The Regental system has developed a series of eight admission tracking codes that are assigned to students once they enroll at one of the six institutions. To meet stringent Baccalaureate degree requirements, students are required to: 1) meet minimum course requirements; 2) rank in the top 60% of their graduating class; 3) obtain an 18 or higher on the ACT examination; and 4) obtain a high school GPA of at least 2.6. Students who meet these academic admission classifications are assigned an AAC code for admission tracking (separate admission codes are assigned to transfer students, non-traditional students, and non-high school graduates). The system has experienced a marked increase in the percentage of students who have fallen within this particular classification during the past five years (see Figure 1).

Figure 1
Percentage of Students in the Regental System Who Met Baccalaureate Degree Admission Requirements: Five Year Trend



High Achieving Students Retained Within the State

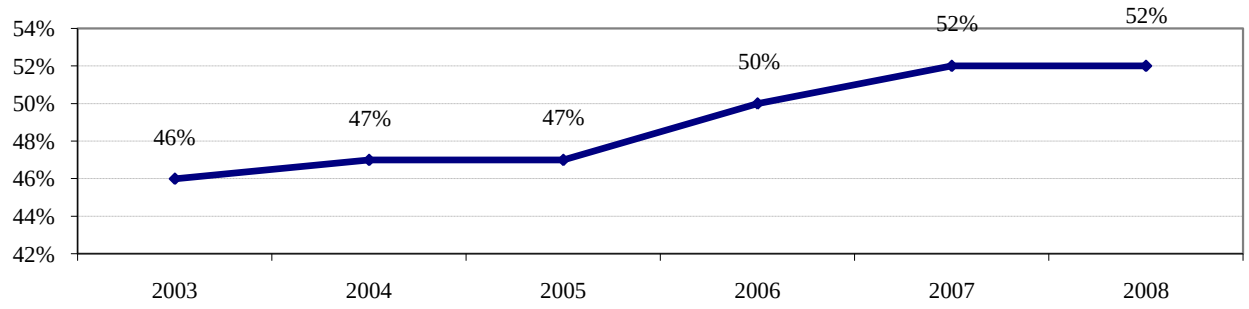
Students seeking to obtain the Opportunity Scholarship are required to complete the Regent Scholar curriculum as well as obtain a composite ACT score of at least 24 or higher. Twenty-two percent of South Dakota high school graduates obtained a 24 or higher on the ACT the two years leading into the implementation of the Opportunity Scholarship program. This percentage increased to 23% in 2004, with the state seeing marked increases to 28% for 2008. In relation to the overall state percentage, the percentage of high school graduates with a 24 or higher ACT score entering the Regental system also experienced similar positive trends (see Table 2).

Table 2
South Dakota High School Graduates with 24 or Higher on the ACT

Year	*SD Graduating Class*	*South Dakota High School*	*Entered Regental System*	*% of 24 or Higher Entering Regental System*
2002	10,353	2,309 (22%)	1,028 (10%)	44%
2003	10,591	2,334 (22%)	1,084 (10%)	46%
2004	10,722	2,511 (23%)	1,172 (11%)	47%
2005	10,442	2,411 (23%)	1,136 (11%)	47%
2006	9,908	2,443 (25%)	1,229 (12%)	50%
2007	9,340	2,530 (27%)	1,322 (14%)	52%
2008	9,136	2,556 (28%)	1,329 (14%)	52%

Return on Investment: Fulfilling Established Objectives of the South Dakota Opportunity Scholarship

Figure 2
Percentage of South Dakota High School Graduates with 24 or Higher on the ACT who Enter the Regental System: Six Year Trend



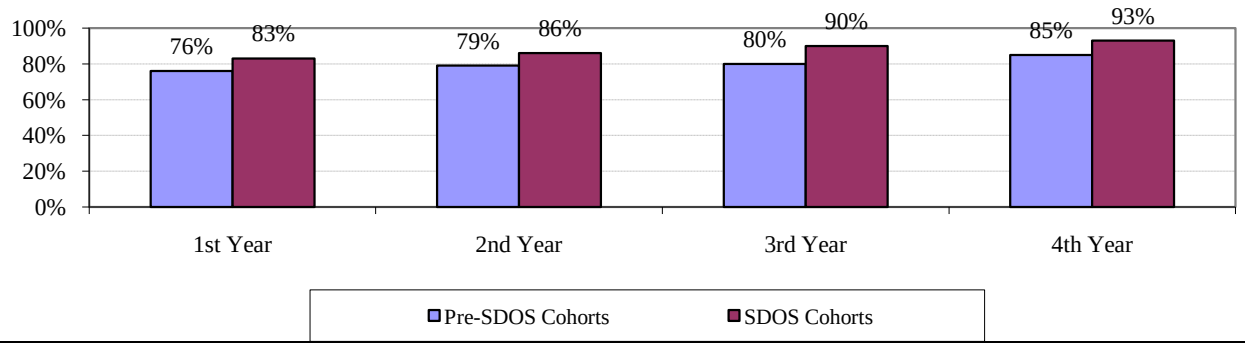
Retention data also depict positive implications for the funding provided by the legislature toward the Opportunity Scholarship program. To establish a benchmark to compare the success of the program, data from a Pre-SDOS cohort were evaluated to establish a baseline for high achieving students within the Regental system. Beginning with the 2000-01 entering class of South Dakota high school graduates, students with an ACT of 24 or higher were flagged and tracked through the three following academic years. The unique student identifiers employed in the Regents Information System were used to compare student retention beginning with the start of the Fall 2004 semester. Data in Table 3 depict the number of students entering in 2000-01 with an ACT of 24 or higher and their retention rate three years later at the start of the 2004-05 semester. The 2001-02 cohort represents student retention after 3 years, while 2003-04 depicts this percentage after just one year in the system. Using this data, a total of 76% of these students had been retained within the system through the four year time period (see Table 3). Comparison of SDOS recipient data, using the same general time frame parameters, indicates that 83% of SDOS recipients have been retained within the state.

Table 3
Retention Rates for Pre-SDOS and SDOS Cohorts

Pre-SDOS Academic Cohort	*Enrolled/Graduate*	*No Longer Enrolled*	*Total*
2000-01	627 (76%)	198 (24%)	***825***
2001-02	665 (79%)	179 (21%)	***844***
2002-03	847 (80%)	218 (20%)	***1,065***
2003-04	1,022 (85%)	181 (15%)	***1,203***
	3,161 (80%)	***776 (20%)***	***3,937***
SDOS Academic Cohorts			
2004-05	697 (83%)	143 (17%)	***840***
2005-06	738 (86%)	120 (14%)	***858***
2006-07	885 (90%)	98 (10%)	***983***
2007-08	1,085 (93%)	82 (7%)	***1,167***
	3,405 (88%)	***443 (12%)***	***3,848***

Return on Investment: Fulfilling Established Objectives of the South Dakota Opportunity Scholarship

Figure 3
Percentage of Students Retained For Pre-SDOS and SDOS Cohorts Based on Time Within the System



[i] *Based on graduating class figures provided by SD Department of Education.

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Fiscal Year 2010
Budget Request

Higher Education Center West River

Expanding Access to Higher Education

... Enhancing Educational Attainment in Western South Dakota

SOUTH DAKOTA BOARD OF REGENTS

A history of service

Public higher education in South Dakota has been serving the Rapid City market for more than 50 years. Black Hills State University first began offering on-site courses at Ellsworth Air Force Base for military personnel. Over time, the program expanded to serve the entire Rapid City region.

In 2006, the education building at Ellsworth was converted to an Air Force financial service center; subsequently that facility was no longer available and public higher education programs were relocated to multiple sites within Rapid City.

Dakota State University, Northern State University, South Dakota State University, and The University of South Dakota also offer degrees in Rapid City. In addition to its degree programs, BHSU offers general education courses, including electives and other coursework tailored to students' needs.

West River South Dakota has a significant need to expand educational access for its population, especially as this area becomes a more attractive location for knowledge-based businesses. West River's proportion of its residents age 25 and older who have a bachelor's degree is lower than either the state or national averages.

Bachelor's Degree Attainment

National	**26.5%**
South Dakota	**24.5%**
West River	**22.6%**

These individuals tend to have families and hold down full-time jobs, so it is important to offer educational opportunities that are convenient—and that means **easy access**, an **identifiable location**, and a **one-stop approach** for all needed services.

The Need

Of those residents 25 and older who live in six counties in the greater Rapid City area:

- 31% have a high school diploma or equivalent.
- 26% have some college but no degree.
- 7% have an associate degree.
- 7% have a graduate or professional degree.

Source: U.S. Census Bureau

A solution

There will continue to be increased demand for public higher education services in western South Dakota. The non-traditional-aged student population pool will grow by 12 percent in the next two decades, and BHSU's enrollment plan for Rapid City calls for serving 650 more students within the next five years. Additional growth is expected as opportunities expand with consolidated services.

A **permanent Higher Education Center-West River facility**, built adjacent to Elk Vale Road (Exit 61) off Interstate 90 on the east side of Rapid City, will serve up to 1,170 students in general classrooms during a single class period. This facility, to be bonded through the South Dakota Building Authority, will provide 54,241 total gross square feet of space to meet the region's current and future education needs.

A dynamic plan to meet the region's educational needs...

The property

The property consists of 40.32 acres just off Elk Vale Road at Exit 61 in east Rapid City. This real property has an appraised value of $3,645,000.

In 2008, the Legislature accepted a gift of 12 acres of land at this site, which is part of the entire 40.32-acre tract. Legislation introduced this year will request approval for the Board of Regents to purchase the other 28.32 acres for $2,233,755, which represents the value of buildable property adjacent to the 12 acres of land previously donated.

The difference between the appraised value ($3.645 million) and the sale price of $2,233,755 is the donation of 12 acres from the property owner.

The financing

A generous gift from the Great Plains Educational Foundation to the state of South Dakota will provide the $2,233,755 needed to purchase the real property.

Along with securing the land, the legislation will also authorize the South Dakota Building Authority to contract for the construction, equipping, and furnishing of a higher education facility estimated to cost up to $16 million.

Revenue bonds issued by the state building authority will finance $13,425,000 of the construction costs. These bonds will be repaid over a period of 25 years from student fees deposited in the Higher Education Facilities Fund (HEFF).

At a minimum, the Board of Regents is committed to constructing a $13.4 million facility financed by the revenue bonds. It is important to move forward with a structured solution to the space dilemma in Rapid City, as significant demand for classrooms and other services exists now. A bonding project could move forward as soon as legislative authorization is obtained. However, if other non-state or non-student resources are available, a facility designed at the authorized level of $16 million could be erected.

The building

Higher Education Center-West River students currently access courses delivered at multiple locations throughout Rapid City. This new facility will consolidate programs and services, providing students with a highly visible location that emphasizes convenience, access, and one-stop services.

The main components of the 54,241 square-foot facility include:

- 27 classrooms;
- Two computer labs;
- Administrative offices;
- 16 faculty offices;
- General reception/waiting area;

- Testing center;
- Bookstore;
- One small conference room;
- Two small storage rooms;
- Four counseling rooms;
- Shared office space for commuting faculty;
- Student support services area;
- Room for technical support, network servers;
- Shipping/receiving area;
- Parking lot.

Funding at a Glance

The Property

⇒ 12 donated acres, valued at $1,411,245

⇒ 28.32 acres purchased for $2,233,755 through a grant from the Great Plains Educational Foundation

The Building

⇒ $13.4 million financed through HEFF (SD Building Authority revenue bonds)

⇒ $2.6 million in potential funding from non-public sources

Demonstrating the need…

A high level of student demand

More than 1,600 students were served in Rapid City in the fall 2008 semester, including nursing students and other students enrolled in state– and self-support courses.

A total of 17,516 self-support credit hours were delivered in 2007-08, equating to about 608 full-time students in the Rapid City area. There is a history of strong enrollments in this area, which will only be enhanced with construction of a permanent facility dedicated to higher education use.

Current Enrollments
Higher Education Center-West River

University	*Fall 2008 Enrollments*
Black Hills State University	1,052
Dakota State University	10
South Dakota State Univ	281
University of South Dakota	318
TOTAL	**1,661**

Many degree programs offered

These degree programs currently are offered in Rapid City through the Higher Education Center-West River:

Associate Degrees:

- General Studies-BHSU
- Respiratory Care-DSU
- Nursing –USD

Bachelor Degrees:

- Professional Accountancy-BHSU
- Banking and Financial Services-NSU
- Business Administration-BHSU
- Accounting and Management (minor)-BHSU
- Criminal Justice-USD
- Education Certification-BHSU
- History-BHSU
- Human Services (with an emphasis in community service, probation/law enforcement, or gerontology)-BHSU
- Industrial Technology-BHSU
- Nursing-SDSU
- Political Science-BHSU

- Social Science-BHSU
- Sociology-BHSU

Graduate Degrees:

- Counseling (master's)-SDSU
- Administrative Studies (master's)-USD
- Curriculum and Instruction (master's)-BHSU
- Educational Administration (master's)-USD
- Educational Administration (doctorate)-USD

Why this site?

A single site is critical

Non-traditional students desire a location that is easy to identify and locate, as well as quickly accessible from the interstate highway system for students coming from Rapid City, Ellsworth AFB, and other Black Hills communities. They want a location that is convenient and saves time—a single place to conduct all of their academic business, including registration, class sessions, and student services.

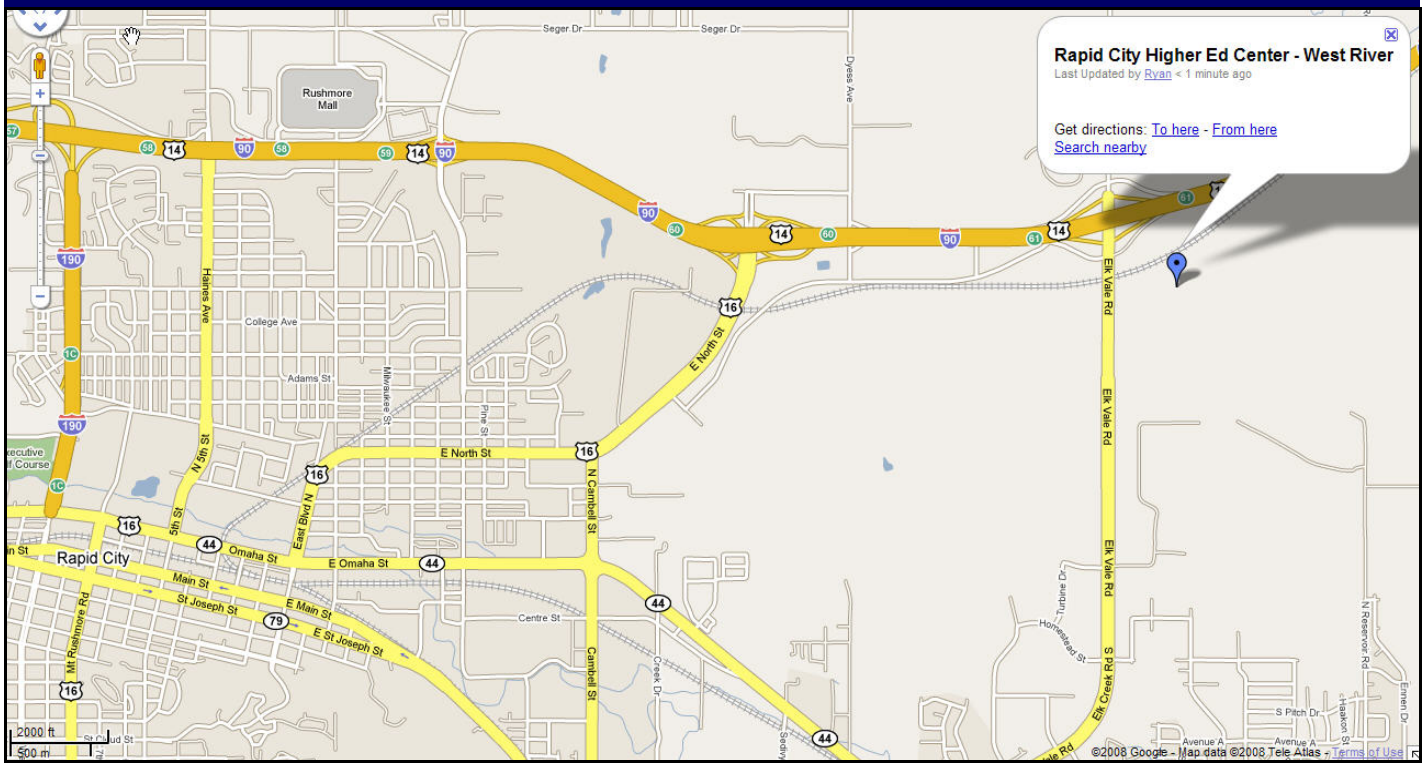
Other locations come up short

Sufficient classroom space is not available at the SDSM&T campus.

Daytime instructional space is already fully committed to School of Mines' courses, and there is no additional room for meetings between students and instructors or for administrative support services. Office space for West River center faculty also is not available on campus, nor is there enough additional parking.

SDSM&T only has 6.4 acres of land available on which to build. Committing that property to the Higher Education Center locks in the campus, with no additional land available for SDSM&T's future development. Construction costs also are estimated to be higher at the School of Mines' campus, primarily because of the presence of shale.

Future Location of Higher Education Center-West River
Rapid City, South Dakota



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