



Joint Appropriations Committee January 22, 2010



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<http://www.departments.dsu.edu/appropriationdoc/>

The Impact of DSU's Focused Mission

Mission:

Dakota State University is an institution specializing in programs in computer management, computer information systems and other related undergraduate and graduate programs as outlined in SDCL 13-59-2.2. A special emphasis is the preparation of elementary and secondary teachers with expertise in the use of computer technology and information processing in the teaching and learning process.

Information Technology as Career Choice and Workforce Implications: (Sources: *Career Overview-1/7/10*, and Bureau of Labor Statistics)

- By 2012, nearly 1.9 million jobs are expected to be added in the areas of scientific and technical services professions. Of these, 632,000 (33%) are expected in the information and computer systems design sector.
- The need for computer and information systems (CIS) managers is expected to grow faster than the average for all occupations.
- For CIS manager positions, a bachelor's degree in a computer-related field is usually required, although employers often prefer a graduate degree, especially an MBA with technology as a core component.
- Network systems, data communication analysts and computer software engineers are projected to be among the top 10 fastest-growing industries.

Madison Regional Economic Impact Study:

A 2009 economic impact study, conducted by the National Center for Rural Health Works at Oklahoma State University, reports that Dakota State University has a total economic impact of **\$52.5 million** annually on the Madison region. (See [brochure](#) for more details.)

Student Enrollment / Access / Success

Fall 2009 - 2,861 students enrolled

2.91% increase in headcount and 4.81% increase in FTE over Fall 2008

293% increase since mission change, Fall 1984 to Fall 2009 (see [enrollment](#) graph)

237 graduate students in one doctoral and four master's programs (see [graduate enrollment](#) graph)

945 students enrolled at attendance center ("University Center") in Sioux Falls (See [UC enrollment](#) graph)

1,098 students enrolled in distance courses (See [distance enrollment](#) graph)

Placement: Collection of information on 2008-09 graduates is in process. Completed data collection to date indicates seven programs with 100% placement in their field:

- Health Information Administration (B.S.)
- Respiratory Care (both A.S. and B.S.)
- Digital Arts and Design
- Computer and Network Security
- Biology for Information Systems
- Elementary Education & Special Learning and Behavioral Problems
- General Studies (A.A.)

Budget Considerations to Fulfill the Mission

Faculty Salaries: For IT faculty, 52% are below 85% of the average salary by rank reported in the 2008-09 Oklahoma Salary Study

Utility Efficiencies: Facilities Needs Assessment completed in 2005. M&R investments have focused on energy efficient projects and enhancements: DDC (Digital Direct Control) upgrades, more efficient doors & windows, replacement of lighting, more efficient air conditioner systems upgrades, and more efficient ventilation. The Habeger Science Center is currently undergoing renovation work to certify it as a LEED Silver building.

Infrastructure Investment: Commitment of \$3 million in Higher Education Facilities Funds

Mission-Critical Investment in Technology: A significant annual investment in academic hardware/software is required to keep current technology in the classroom. Requests from colleges and units have historically been nearly twice the dollars available.

New Investments and Priorities to Promote the Mission

Research and Development: Value of campus grant/contract proposals submitted has increased from \$3,232,523 in FY08 to \$3,765,820 in FY09. FY10 value as of 1/8/10 was **\$9,748,227** with another \$13 million in development stage. (See attached list of [FY10 proposals](#) to date.)

Campus Research and Development Initiatives:

- 2010 Research Center – National Center for the Protection of the Financial Infrastructure
- Center for the Advancement of Health Information Technology
- B.S. Degree Program in Computer Game Design
- Barrier-Free Access
- Federal Cybersecurity Legislation

New Degree Development:

- MS in Computer Science (joint with SDSU)
- MBA in Sioux Falls (IT component)

Funding Initiatives

Capital Campaign Objectives: Goal of \$37 million

- Annual Scholarships and Operating - \$7 million
- Endowments - \$10 million
- Information Systems Classroom Building – \$10 million
- Indoor Athletic Facility - \$10 million

**Please contact us with any questions: Doug.Knowlton@dsu.edu
DSU home page: www.dsu.edu**



The Capital Campaign

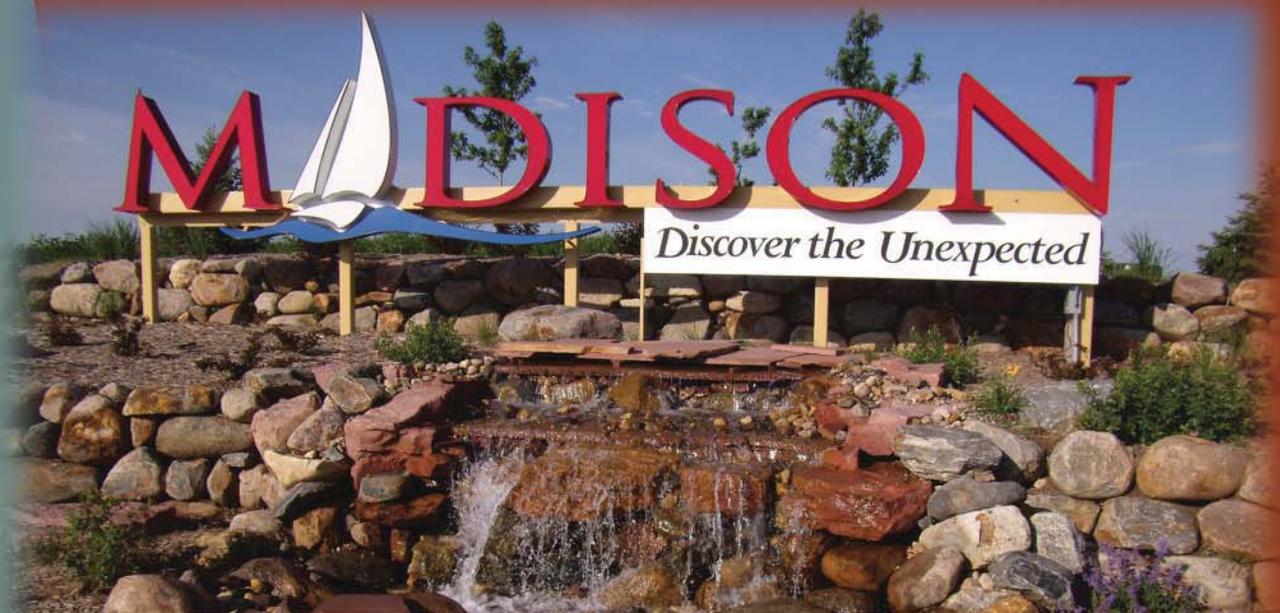
Campaign Goal - \$37 million

More Jobs. Greater opportunities. A better quality of life.

When Dakota State University opened its doors in the late 19th century, the university brought all of these assets to the Madison community. Founded in 1881 as a teacher training institute, DSU:

- Provides hundreds of jobs for residents of Madison and surrounding communities as the city's largest employer
- Attracts talented professionals from all over the country to live and work in Madison
- Draws businesses and industrial enterprises to operate in the Madison community
- Enhances the intellectual and cultural quality of life in Madison through research, specialized programs and entertainment options

Today, DSU continues to enrich the Madison community through 41 undergraduate and graduate degree offerings that in 2009 enrolled 2,861 students from South Dakota, the United States and all over the world. As leaders look to the future, they are committed to enhancing and improving their programs for the benefit of DSU and everyone who resides in Lake County.



DSU's Current Economic Impact: \$52.5 Million Annually

The Study

Since 1881, DSU has stimulated the Madison economy as an employer, major consumer and key part of the city's intellectual and cultural quality of life. The scope of the university's economic impact was recently quantified in a study conducted by the National Center for Rural Health Works at Oklahoma State University.

The study found that DSU in FY'09 had a total economic impact of \$52.5 million on the Madison community. This number was determined after applying a higher education economic multiplier of 1.41 to the income generated by DSU, which was \$37.2 million. The multiplier reveals the total direct and secondary economic benefits from the university's activities.

Data from the study was divided into three major categories, including construction expenditures, student expenditures and visitor expenditures. Statistics from the study included:

- DSU spent nearly \$3.4 million on construction projects in Lake County in FY 2009, impacting 70 jobs in the area. DSU is planning \$8 million in construction projects in 2010 and an estimated \$23.9 million in construction projects in 2012 with funding from the DSU 2.0 capital campaign.
- Every DSU student spends approximately \$8,820 annually to live in Lake County. As a result, a total of \$2.1 million was spent by DSU students on housing and living expenses during FY 2009.
- Visitors, including alumni, prospective students and parents of students, spent approximately \$2 million in Madison during FY 2009, impacting 51 jobs in the Lake County area.



In summary, statistics from the study revealed that in FY 2009 alone, DSU generated income of nearly \$37.2 million and impacted 560 jobs in the Lake County area. In addition, the university generated retail sales of nearly \$7.4 million and city sales tax revenue of \$147,542. As DSU continues to grow and expand, the university will continue to impact more jobs, provide more opportunities and help promote a better quality of life for Madison residents.

Total Economic Impact of Dakota State University - \$52.5 million

Income Generated	\$37.2 Million
Retail Sales Generated	\$7.4 Million
City Sales Tax Generated	\$147,542
Jobs	560



The Need

To meet the growing needs of DSU and the Madison community, leaders recently embarked on the DSU 2.0 Capital Campaign. The \$37 million campaign will provide for many necessary university enhancements, improvements, and financial needs, including:

- **A new Information Technology Building.** The new 32,800-square-foot, state-of-the-art classroom and research building will enable the university to match the quality and scope of its current programs with its responsibility as South Dakota's designated information technology university. **Cost: \$10 million.**
- **A new Indoor Athletic Facility.** The new facility will complement the DSU Fieldhouse, Community Center and Trojan Field to create a well-rounded complex that meets the athletic needs of every student. **Cost: \$10 million.**
- **Current Financial Needs.** Funds will provide for more scholarships to help DSU recruit top-quality students to its programs. **Cost: \$7 million.**
- **Long-term Financial Needs.** Funds will establish endowments to support academics, faculty salaries and athletic needs. They will also provide for a general endowment fund to promote various programs for the library, the arts and other program areas. **Cost: \$10 million.**

The DSU 2.0 Capital Campaign will not only enhance and improve the DSU campus, but also positively impact the community through more jobs, greater opportunities and a better quality of life for everyone who lives in the Madison community. As DSU improves and expands its programs through the \$37 million DSU 2.0 Capital Campaign, the city of Madison will be poised to excel and thrive as one of South Dakota's greatest treasures.

How You Can Help

Please consider how you can make a difference for DSU's 2.0 Capital Campaign. With your support, DSU can continue to attract more businesses to Madison, enrich the quality of life for residents of Lake County, and will help the City of Madison to continue to excel and thrive as one of South Dakota's greatest treasures.

The DSU Foundation accepts gifts in the following forms:

- Cash
- Check
- E-giving
- Electronic Fund Transfer
- Memorials and Tribute Gifts
- Will/Bequest
- Stock/Securities
- Property

Campaign Leaders

National Chairs

Larry Canfield, '74, Sioux Falls, SD
Dan, '68, and Sharon, '67, Meadows, Paradise Valley, AZ

Honorary Chairs

Dr. Jerry and Nancy Tunheim, Madison, SD
Dale, '57, and Kitty Kringen, Wentworth, SD
Dick, '63, and Judy Anderson, Lake Havasu City, AZ
Ed and Phyllis Harter, Madison, SD
Val Fox, Sioux Falls, SD

Campaign Co-Chairs

Miles Beacom, '81, Sioux Falls, SD
Deb Bowman, '76, Pierre, SD
Marlin and Linda, '94, Brozik, Madison, SD
Mike Halverson, '88, Wentworth, SD
Shantel Krebs, '98, Sioux Falls, SD
DeLon Mork, Madison, SD
Kim Nelson, '79, Sioux Falls, SD
Wayne, '01, and Crystal Pauli, Madison, SD
Pat Prostrollo, Madison, SD
Randy Schaefer, '84, Madison, SD
Lee, '68, and Betty, '67, Stoddard, Madison, SD

"There is a next step. There is a next version of what Dakota State University is going to be. And this campaign takes us there."

Dr. Doug Knowlton

President, Dakota State University

"The collaboration of Dakota State University with local business means DSU does much more than just generate revenue. The combination of employment, spending, and investment by staff, students and visitors to the university has made Dakota State University an economic powerhouse in the community of Madison."

Pat Prostrollo, Madison, SD

DSU 2.0 Campaign Co-Chair

"Dakota State University enjoys a positive relationship with the Madison community and the surrounding area. As a small business owner, I benefit from that relationship every day from the DSU students I employ, to the faculty, staff, students and visitors who patronize my restaurant, to the increased customer traffic drawn to town for events hosted by the university."

DeLon Mork, Madison, SD

DSU 2.0 Campaign Co-Chair

For more information, please contact University Advancement at

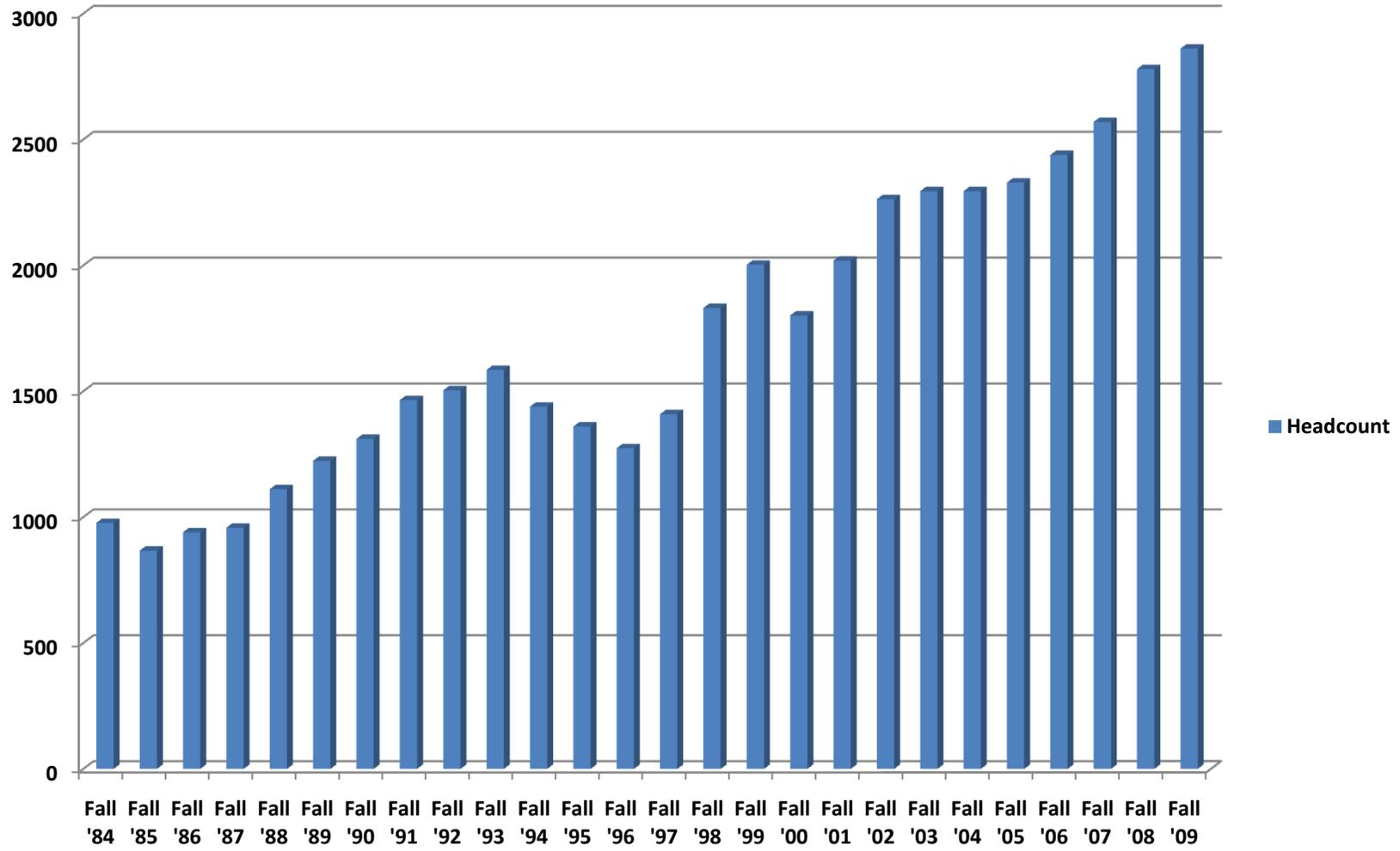
(605) 256-5693 or visit

<http://foundation.dsu.edu/>

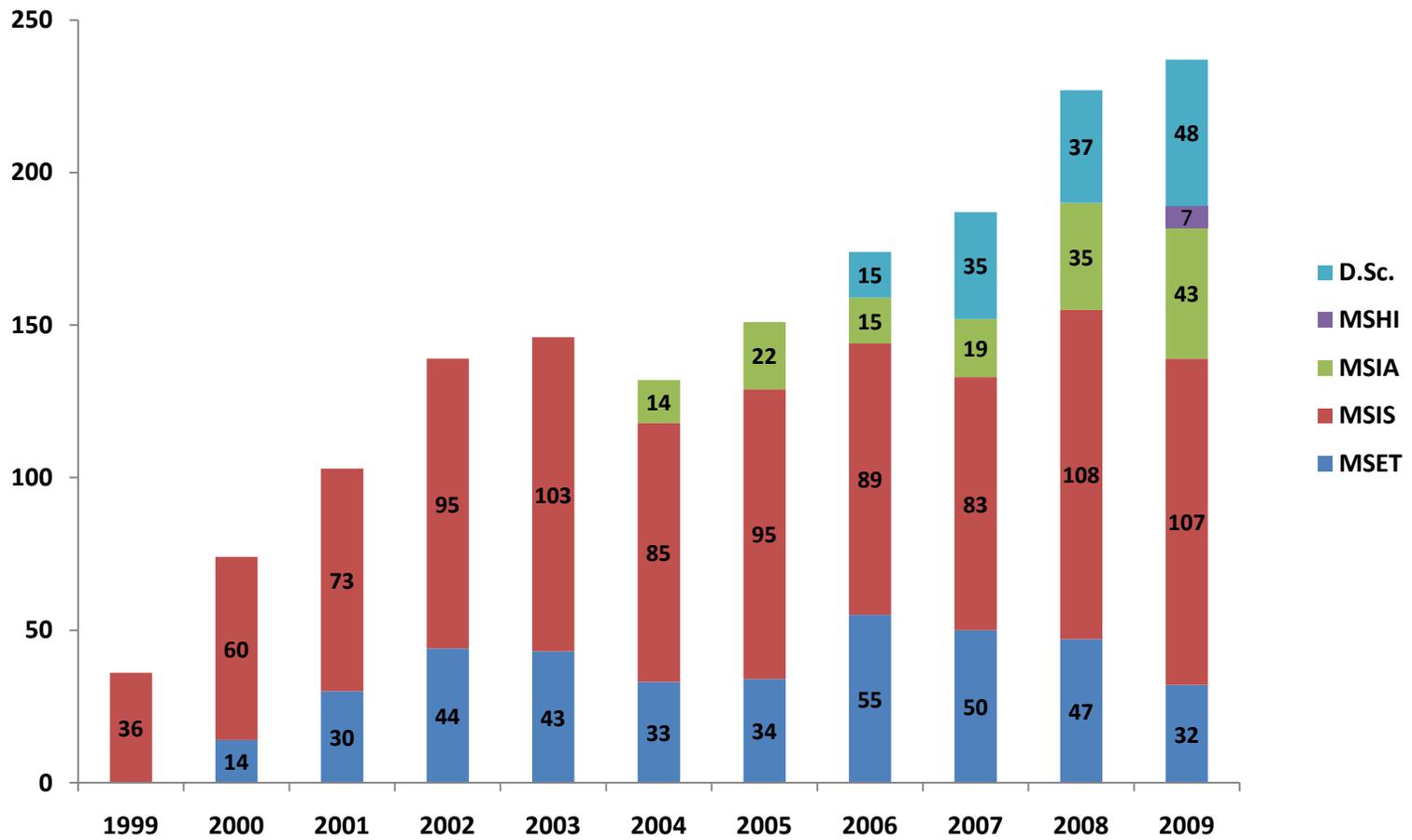
Thank you for your consideration.

DSU Enrollment

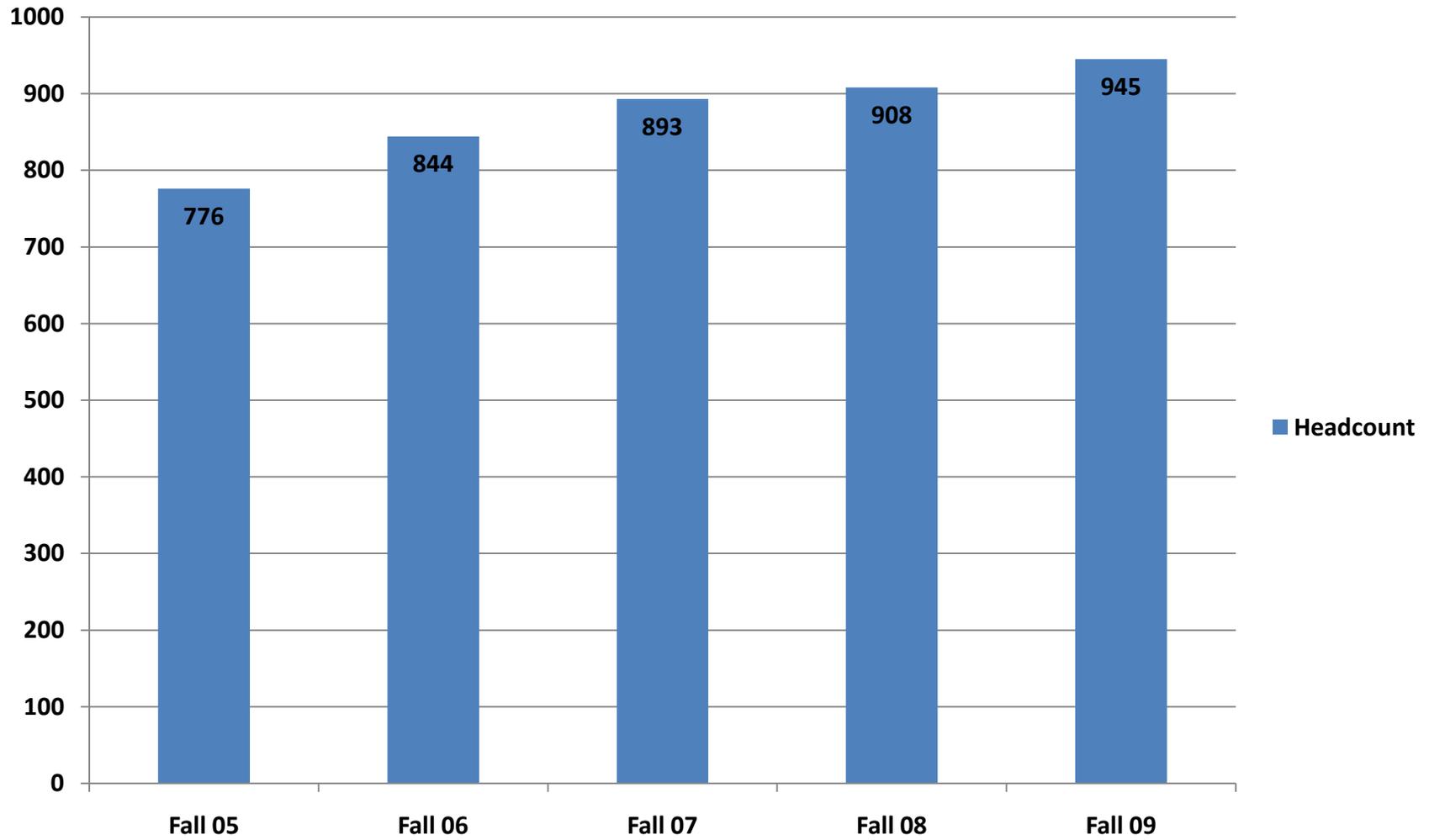
Since mission change, 1984-2009



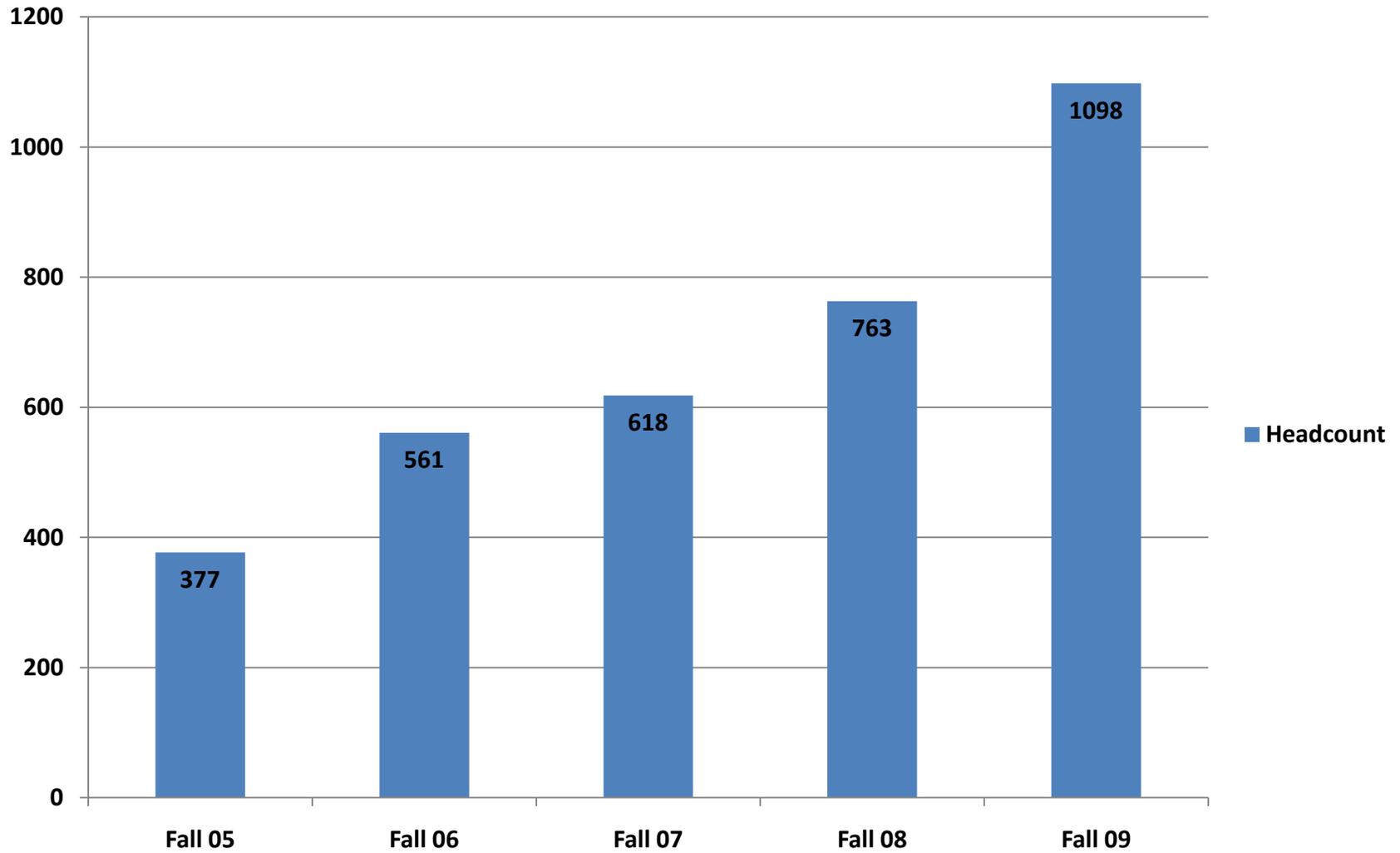
History of DSU Graduate Program Enrollments



DSU University Center Enrollment 2005-2009



DSU On-Line Enrollment 2005-2009



Current Proposal and Project Status
July 2009 – January 8, 2010

Proposals Submitted

Title	Submitted	Status	Funder	Amount	Investigator
Women in Science & Technology: Analysis of Barriers Among & Between STEM Disciplines	November 2009	Pending	NSF	\$196,915	Wittmayer
REU: Information Assurance & Security	October 2009	Pending	NSF	\$317,773	Xu
Women in Science & Technology Campus Action Project	October 2009	Awarded	AAUW	\$4,998	Szczerbinska, Murphy
STEP Up to Career Success in Science & Technology Education	September 2009	Pending	NSF	\$360,876	Forbes-Boyte
A Collaborative Anomaly Detection Framework for the Banking Society	September 2009	Pending	NSF	\$729,321	Zhan. Streff
Raising the Bar Information Science & Technology Program	September 2009	Pending	NSF	\$597,908	Streff
NASA Space Grant Consortium Development	August 2009	Awarded	NASA (through SDSMT)	\$15,000	Szczerbinska
Demonstration of Solar Power Generation with a Battery Storage System	August 2009	Declined	Dept. of Energy	\$195,750	Pauli, Engebretson, McKeown, (subcontract to HCPD)
Upper Midwest Information Assurance Faculty Development Project	August 2009	Awarded	DHS/NSF	\$50,000	Streff
Renovation of Cyberinfrastructure Research Laboratory	August 2009	Pending	NSF	\$1,336,996	Streff
MRI-R2: Acquisition of a Instrumentation to Support Usability Testing	August 2009	Pending	NSF	\$444,188	Murphy, Sarnikar
MRI-R2: Acquisition of a Model Banking System	August 2009	Pending	NSF	\$531,847	Xu, Pauli
An Integrated Digital Forensics Learning Model	May 2009	Declined	NSF	\$247,718	Streff, Podhradsky
Collaborative Research: Software Engineering for Distributed Development of STEM-Based Games	May 2009	Declined	NSF	\$126,667	Graham (with RIT)
Developing Faculty Expertise to Integrate Usability Testing Across the Curriculum	May 2009	Declined	NSF	\$169,433	Murphy, Sarnikar
vDUSEL in Support of Cyberinfrastructure-enable Learning and Research Projects	January 2009	Pending	NSF	\$966,555	Krebsbach (subaward to SDSU)
TRIO	December 14	Pending	Dept. of Education	\$1,168,010	Wise

A Theoretical Foundation for Usability and Anonymity in Social Networks	December17	Pending	NSF	\$499,860	Zhan
Methodology for Adapting & Disseminating CER Products for Improved Clinical Decision Support	December 17	Pending	NIH-Agency for healthcare Research & Quality	\$1,364,492	El-Gayar, Sarnikar (partner with Sanford Health)
A Novel Technique for Full Automation of Integration Testing	December 17	Pending	NSF	\$423,920	Xu

Proposals in Development

Title	Due Date	Funder	Est. Budget	Investigator
State Health Information Exchange	Award made to state; pending contract paperwork	Subaward from State DoH	\$300,000	CAHIT/Friedrich
NASA EPSCoR Major Research Grants	Jan 5, 2010	NASA	\$750,000	Xu (with SDSU)
Community College Consortium for HIT Workforce Training	January 22, 2010	Subaward from Bellevue College	\$625,000	CAHIT/Bennet & Friedrich
Information Technology Professional in Health Care: Program of Assistance for University-Based Training	January 25, 2010	U.S. Office of the National Coordinator of HIT	\$4,000,000	El-Gayar
Regional Health Technology Extension Center	Jan 29, 2010	U.S. Office of the National Coordinator of HIT	\$6,000,000	CAHIT/Friedrich
Anomaly of Online Social Networks for Determining Adversarial Effects	???	MURI-DoD	\$750,000	Zhan
Developing Information Assurance Professionals & Educators with the National Collegiate Cyber Attack Competition	February 2, 2010	NSF	\$499,861	Pauli, J.
DoD Information Assurance Scholarship & Capacity Building	February 27, 2010	DoD	\$272,000	Pauli, J.