
Agency 365 – Washington State University
 2010 Supplemental Budget Request

Student Information Systems

Agency Recommendation Summary:

Washington State University is seeking \$15 million in one-time funding for urgent replacement of its crippled core Student Information Systems (SIS) that serve all its campuses and distance degree programs. Many of these systems are 30-40 years old. These computer systems are antiquated and failing, putting in jeopardy university functions for students including admissions, registration, financial aid, advising, transcripts and collection of tuition. WSU has been working with the Department of Information Services and the Information Services Board on this issue for more than 18 months. On October 17, 2008 (more than one year ago) the Office of Financial Management approved the financial components of the new student information system. But recent developments this fall indicate the problem is even more severe than identified 18 months ago and cast serious doubt whether this system can adequately perform essential university functions until a new system is brought online. WSU believes it has a responsibility to begin building a new system this year so that a replacement system will be fully operational in 18 to 24 months.

Fiscal Details:

The following fiscal details are WSU estimates for purchase and implementation of the student information system in this current national financial climate. Actual costs may vary based on the results from the formal request for proposal process.

By Fund	2009-10		2010-11		2009-11
	FTE	Dollars	FTE	Dollars	Biennium
General Fund State	-	-	-	15,000,000	15,000,000
Total	-	-\$	-	\$ 15,000,000	\$ 15,000,000

Narrative Justification and Impact Statement:

The concern over replacement of the Core Student Information Systems is heightened and verified by these recent developments:

- Last August, 2009 – The web programs that provide student functions such as registration, class schedules and financial aid failed and were unavailable for four days during the busiest time of the year. This was the week before classes when both parents and students were on campus preparing for the current fall semester. The downtime caused major chaos and confusion for students and parents since many of them were forced to stand in line and wait for hours to get their information. Since the student systems are centralized in Pullman and provide support to all WSU campuses, the failure also impacted students and their families at WSU Spokane, WSU Tri-Cities and WSU Vancouver. The current system is running on a “patch” with many of its services turned off in order to prepare for the spring and fall of 2010.
- 2008 – There were 248 errors and 87 web failures that created problems throughout the year and impacted many critical student services.
- Fall 2006 – A system crash in the fall of 2006 prevented processing of tuition payments and prevented faculty from communicating class assignments.

The crippled student information system is a substantial risk to the entire WSU community. Students and parents depend on its applications to access all of their student teaching and learning functions, and the University requires these same systems to enroll students and receive tuition payment. Without a stable, reliable and robust system WSU will have to return to old, archaic, tedious, manual methods of standing in line to process transactions and services. Future failures of this system will likely prevent student access to essential services 24 hours per day, every day. It will require students and/or parents to be physically present during certain hours at campus offices and wait in long lines to complete registration, financial aid, etc.

The risk to the university was documented and verified by the Northwest Commission on Colleges and Universities (NWCCU). This year the commission did its 10-year review of WSU and reaffirmed its accreditation. But the commission named core computing systems as one of only three serious areas of concern and “in need of improvement.” The commission indicated they will revisit the issue in 2010.

Current core student systems are based on 1970’s technology and are no longer able to provide the level of service required to serve students, faculty, staff, support personnel, the public, and the state of Washington. These systems require an extraordinary amount of maintenance and reprogramming compared to modern “off-the-shelf” systems available through vendors who specialize in these services. While old, the core student systems are complex and essential to the university’s basic operation. WSU has over fifty external systems, most of which have been developed in-house and which are linked to these core student systems. These systems require considerable maintenance of software interfaces to ensure accurate and synchronized data transfers. The archaic nature of the core student systems places them at risk for a prolonged period of shutdown in the event of an emergency or a disaster.

WSU hired a nationally-recognized professional consultant to evaluate the system and the report indicates:

- 80% of WSU's core student services applications may be may need to be fully replaced or undergo substantial change as they do not provide full support for the identified requirements and are built on obsolete technology. Examples include recruitment, admissions, student financials, and student advising.
- Fewer than 10% of the applications may be candidates for functional enhancement as they are built on flexible, scalable technologies. Examples include Oracle document imaging, and management of international student information.
- More than 70% of the applications indicate limited ability to meet future requirements and demonstrate lack of adaptability and scalability due to the old technology they are based on.

New core systems are a combination of new enterprise computing software and business practices working together to perform these vital university functions. These new core systems are a software suite that contains products designed to integrate data and business functions across campuses, colleges, departments and offices. These systems will run off a single database so that departments can easily share information and communicate more efficiently. Once implemented, this suite will positively impact virtually everyone associated with the University: students, their families, faculty, and staff supporting students. The new system will make data management more accurate, convenient, and easier to access.

The additional functional and technical capabilities and increased efficiencies of new core student systems will support WSU in its primary mission as a multi-campus public institution serving the state of Washington and beyond. It will make the university more accountable to state government, families, and the public as it will be easier to glean specific types of data from the system.

The new system will be implemented with a strong focus on business process improvement, organizational and cultural change management, risk management, project and budget accountability, and the efficient use of funds.

New core student systems will provide the following high level functions with the necessary reliability, integration, reporting, and ease of use:

- Recruitment and retention
- Admissions
- Registration (academic history and awards - transcripts, degree management)
- Enrollment management
- Financial aid packaging and delivery
- Advising
- Loan processing
- Catalog course management and class scheduling
- Student accounts (tied to registration, admissions, and financial aid)
- Work study and student employment management
- Health and safety

The benefits of installing the new system WSU is proposing include:

- More efficient, effective, robust, and timely business processes and transactions
- Accurate, consistent, and readily available data for internal planning and reporting to the state and other agencies
- Ability to drill down into data for targeted analysis
- Improved controls for privacy and security purposes
- Ability to leverage newer technology for redundancy and disaster recovery
- Self service and personalized access to information
- Ability to track graduation requirements
- Better student experience from recruitment to admission to learning to graduation through integration of applications regardless of location
- Modern, integrated student systems software will be more easily integrated with the State's definition of common systems for payroll and human resources
- Secure online personal computer access to information 24 hours per day, seven days per week
- Easy management of course information, rosters, and grading
- Streamlined administrative processes, reduced paperwork and increased staff productivity
- Ensured compliance with requirements from outside agencies, including those focused on international scholars

Funding Requests:

WSU requests \$15M to implement the student information system, of which \$6M is for equipment (initial servers, hardware equipment and software) that could be appropriated as capital funds, as necessary.

Alternatives:

The University considered alternative approaches to replacing core student systems including:

- converting old code to a new language
- building new systems in-house
- outsourcing or hosting
- a hybrid approach combining in-house development and purchasing components
- taking no action

None of these alternatives are viable; pursuing any of the alternatives perpetuates the existing problems.

Other types of core administrative systems, such as those that handle payroll and finance, may be shared among different agencies and institutions within the state. WSU is exploring those options and is willing to be part of a shared solution. But as student systems tend to be unique to each higher education institution, they should be tailored to meet each institution's needs.

Calculations:

FISCAL DETAIL TABLES - STUDENT INFORMATION SYSTEMS					
	2009-10		2010-11		2009-11
By Program	FTE	Dollars	FTE	Dollars	Biennium
Instruction		-			-
Research		-			-
Public Service		-			-
Primary Support		-			-
Libraries		-			-
Student Services		-		15,000,000	15,000,000
Institutional Support		-			-
Plant		-			-
Total	-	\$ -	-	\$ 15,000,000	\$ 15,000,000
	2009-10		2010-11		2009-11
By Object	FTE	Dollars	FTE	Dollars	Biennium
Salaries					
Faculty		-			-
AP		-			-
TA/GA		-			-
Classified		-			-
Benefits		-			-
Goods/Services		-		8,684,000	8,684,000
Travel		-		316,000	316,000
Equipment		-		6,000,000	6,000,000
Total	-	\$ -	-	\$ 15,000,000	\$ 15,000,000