

**2001 – 2003 BUDGET REQUEST**  
***MADISON INITIATIVE***

**Broadening  
Student Learning Programs  
\$10.3 Million**

**Enhancing Wisconsin's  
Economic Development  
\$8.8 Million**

**Maintaining Affordability  
\$4.0 Million**

**Continued Strategic  
Hiring  
\$4.9 Million**

**2001-2003 BIENNIAL BUDGET REQUEST**  
*MADISON INITIATIVE*

**SUMMARY**

BACKGROUND

The *Madison Initiative* is a four-year plan designed to keep UW-Madison competitive. It is a public-private partnership between the state and students and the university's alumni and donors. The plan calls for an investment of \$57 million in state support and tuition over four years (1999-2003) to be matched by \$40 million from the independent UW Foundation and the Wisconsin Alumni Research Foundation (WARF). The \$57 million is necessary to bring UW-Madison up to the median of its peers in the Big 10 in terms of state/tuition support per student. The private money will be used to maintain and ensure the university's margin of excellence.

In the 1999-2001 biennial budget the state provided \$29.2 million for the first two years of the Madison Initiative, which has been matched by \$20 million from the UW Foundation and WARF. These funds are being used to hire and retain top faculty and academic staff in key fields; to provide for academic improvements such as increasing course offerings and improving libraries; to renovate facilities; and to provide financial assistance to students in need.

2001-2003 REQUEST

For the 2001-2003 biennial budget, the university is seeking the remaining \$28 million in state/student support, which will again be matched by \$20 million in private funds from the UW Foundation and WARF. The university plans to invest these funds in a series of inter-connected programs and initiatives that will broaden student learning opportunities, prepare students and Wisconsin citizens for the 21<sup>st</sup> century workforce and enhance Wisconsin's economic development, and complete the four-year plan of strategic faculty hires in emerging areas while at the same time maintaining affordability for students. The funding requested in the 2001-2003 budget is necessary to ensure that students and the state will fully realize the benefits from the investment in the 1999-2001 budget.

A biennial breakdown of the request is as follows:

Student Learning	\$10.3 million (57 FTE)
Economic Development	\$8.8 million (25 FTE)
Strategic Faculty Hires	\$4.9 million (33 FTE)
Maintaining Affordability	<u>\$4.0 million</u>
BIENNIAL TOTAL	\$28.0 million (115 FTE)

**2001-2003 BIENNIAL BUDGET REQUEST**  
**MADISON INITIATIVE**

BROADENING STUDENT LEARNING (\$10.3 Million)

The onset of the 21<sup>st</sup> century has brought about tremendous changes in student learning – both in terms of *what* is taught and *how* it is taught. Advances in technology and the growth of the high tech and global economies require the university to prepare students and Wisconsin citizens for careers that did not exist even a decade ago. Those same advances in technology allow us to transfer the knowledge necessary for those new careers in ways that heretofore were unimaginable.

To harness the new technology and improve student learning UW-Madison has developed an initiative called **Transformation of Teaching Through Technology**. This initiative will provide an infrastructure that encourages and supports faculty and instructional staff across disciplines in the development and implementation of instructional technology that will change the way teaching and learning is occurring on campus and expand it off campus. Whether it be academic programs with large student enrollments such as the Introduction to Biology course series, foreign language programs where immersion is required for fluency or certificate and master's programs in new areas such as Geographic Information Systems, technology is a powerful tool that can transform our traditional approaches to teaching and learning.

Notwithstanding all the advantages of today's technology, the first year at a university can be the most challenging on a number of intellectual and social levels for an entering student. To help that transition and ensure the ultimate success of the student, UW-Madison will create and expand new programs for freshman, including **freshman "seminars"** and **integrated learning initiatives**. The former will provide a transitional academic and orientation experience from high school to the rigors of the university environment, including an engagement with a faculty member and closer intellectual and social engagements with other students from diverse backgrounds. The latter creates an integrated learning experience, a collaborative learning environment and a small community of teachers and students within the larger university. Expanding the number and scope of these small classes and seminars in the freshman year will lead to improvement in academic success, writing and communication skills, and the retention of students.

Equally important to the ultimate collegiate success of many students, particularly minority and economically disadvantaged students, is pre-college programming that encourages students to aspire to the opportunities available through higher education and assists in developing critical academic skills.

Using funding from the Madison Initiative UW-Madison will expand its existing **Pre-College programs** such as the PEOPLE program, a partnership of Beloit, Madison, Milwaukee and Racine public schools and UW-Madison to prepare highly motivated students for college-level academics.

As noted above the Wisconsin economy in the 21<sup>st</sup> century will become increasingly global and technology oriented. For UW-Madison students and Wisconsin citizens to be prepared for jobs in this new economy, and to ensure that there is a labor pool large enough to sustain growth in that economy, the university must offer students learning opportunities in these areas, especially in high growth areas such as biotechnology. To that end UW-Madison will design and implement a two-year **Masters degree in Biotechnology** to meet current and future workforce needs of Wisconsin's biotechnology industry. This program will be multi-disciplinary in nature involving faculty and facilities at a number of UW System campuses as well as the expertise of the biotechnology industry in workshops and practical internships.

The university will also strengthen undergraduate training in international studies. The **Center to Supply Undergraduates with Resources for Global Education (SURGE)** will restructure the existing International Studies major making it more comprehensive and contemporary, ensuring that graduates have both a broad understanding of international issues as well as knowledge of specific countries and regions important to global commerce. SURGE will promote overseas study abroad experiences as well as opportunities for individual research and overseas internships; provide voluntary language certification; encourage language acquisition through new language-based courses and advise students on careers in the global economy.

#### ENHANCING WISCONSIN'S ECONOMIC DEVELOPMENT (\$8.8 Million)

Creating a new M.S. in Biotechnology and providing enhanced resources for international education illustrate the strong nexus that exists between student learning and economic development and captures the essence of the Wisconsin Idea. But perhaps nowhere is this relationship more evident than in the area of **Capstone Degrees and Certificate Programs**. These programs meet the needs of two groups - students finishing a traditional degree program who would like some additional training in another area before starting their professional careers (for example recent graduates in the liberal arts who wish to acquire technical expertise in geographic information systems to support the topical knowledge gained in their undergraduate major), and Wisconsin's working professionals who wish to acquire specialized training to meet current (or future) job requirements. UW-Madison will use funding from the Madison Initiative to create a number of Capstone and Certificate programs in areas critical to

Wisconsin's future such as BioInformatics, Computational Science and an Alternative Program leading to Teaching Certification in K-12 Education.

A certificate program will also be developed in E-Commerce by a "virtual" campus-level institute that will focus on E-Commerce issues. This new **E-Commerce initiative** will serve three functions: (1) create a campus hub for multidisciplinary research related to E-Commerce; (2) help coordinate E-Commerce related curriculum evolution through various departments and manage the E-Commerce Certificate Program; and (3) promote active research collaboration and knowledge dissemination with both the private sector and government through the existing UW Consortium for Global E-Commerce. All of these functions will help support the creation of a high technology workforce and stimulate e-business development, both of which are crucial to Wisconsin's economic future.

Funding will also be used to focus interdisciplinary activities in **environmental biotechnology**. Little is known today about the fate of human-made chemicals on the environment. There has been tremendous concern in Wisconsin about the persistence of toxic compounds at the Badger Army Ammunition Plant near Baraboo and the detection of nitrogen-containing herbicides such as atrazine in the groundwater. The focus of this new center will be to study the fate of these chemicals in the environment from a molecular and biotechnological perspective and train students and working professionals in the development of environmental technologies for pollution control and the creation of environmentally benign chemicals.

The campus also has a direct role in Wisconsin's economic development through **technology transfer**. More than 170 Wisconsin companies are based in some way on research conducted at UW-Madison – seventy of those companies have been created in the last 5 years alone. UW-Madison will use funding from the Madison Initiative to further expand the transfer of the results of research from the university to the private sector through programs such as the Office of University-Industry Relations' Industrial and Economic Development grants.

The Madison Initiative will also provide permanent funding for the **Center for World Affairs and the Global Economy (WAGE)**. UW-Madison is home to many centers of specialized expertise on the global economy, including units and groups that work on international issues such as business, trade and finance, public policy and public affairs, and agriculture. The mission of WAGE is to support these separate centers and link them together in a campus network that will enhance their combined expertise to benefit the state of Wisconsin, its citizens and businesses. It does so by recruiting top-flight faculty with global economic expertise, enriching professional education programs by bringing overseas experts to campus as visiting professors and practitioners in residence,

supporting research on economic questions, business opportunities and policy concerns and coordinating an innovative outreach program that links UW-Madison's international network to networks in business, civic affairs, state government and other educational institutions.

#### STRATEGIC FACULTY HIRING INITIATIVE (\$4.9 Million)

Critical to the university's ability to create new learning programs, transfer knowledge and help support economic development in the state is the completion of the four year plan for at least 100 strategic faculty hires in emerging areas, funded equally by state funds and private gifts. These 100 new faculty positions will replace about half of the 200 positions that were cut in the late 1980s and early 1990s.

The 1999-2001 budget provided state funding for 17 new faculty positions that are being hired in inter-disciplinary "clusters" to better support the expansion of knowledge that increasingly requires collaboration across and between academic disciplines. These new faculty bring not only their expertise to the university and the state but many bring substantial outside resources as well – one new professor hired as part of the Genomics cluster brought with him more than \$4 million in extramural funding. Faculty provided in the 1999-2001 budget are being hired in areas ranging from Computational Science to Energy Sources and Policy to Global and International Relations.

The 33 additional state-funded faculty requested in the 2001-2003 budget as part of the Strategic Faculty Hiring Initiative will also be hired in clusters to do research and create or enhance programs in emerging areas such as E-Commerce, Technology and Design Visualization, Molecular Imaging, Occupational Safety and Health, and Infancy/Early Childhood Development.

#### MAINTAINING AFFORDABILITY (\$4.0 Million)

Because of the partnership between the state, students and alumni and donors UW-Madison has nationally recognized faculty, research and academic programs that benefit both its students as well as the state. It is important, however, to ensure that we maintain affordability so that any Wisconsin citizen, regardless of income or background, can afford a UW-Madison education. To that end the university will use funding to provide all UW-Madison students who receive need-based financial aid with a grant that offsets the extra tuition related to the funding of the Madison Initiative. In addition, funding will be used to enhance other programs that mitigate tuition for students such as research fellowships and internships and merit-based scholarship programs.