New Jersey's Strategic Plan for Higher Education

A Blueprint for Excellence 2007 Progress Report and Call to Action

"... enabling all people to achieve their maximum potential . and supporting the state's success in a global economy."

Dear Citizen,

An investment in higher education is more than an investment in the success of individual students or individual communities. It is an investment in the long-term economic growth of New Jersey and the nation. Institutions of higher education provide the human capital, skilled managers and leaders, and scientific research that have made New Jersey a center of commerce and innovation. New Jersey's strength in developing an innovative and knowledge-centric economy is supported by the 2007 State New Economy Report, sponsored by the Ewing Marion Kauffman Foundation and the Information Technology & Innovation Foundation. In this report, New Jersey ranks 2nd in its preparedness to transition to a more dynamic economy, partly due to its highly educated workforce. The role of higher education will become even more critical in the years ahead as our state and nation seek to remain competitive in a global economy.

New Jersey public and private institutions of higher education make many important contributions to the economic, political, and social life of the Garden State. They provide jobs to New Jersey residents and economic benefits to the communities where they are located; they foster research and advance knowledge to improve and protect the quality of life; they are centers of arts, athletics, and cultural enrichment; and they encourage the frank exchange of ideas and critical thinking essential to a democratic society.

All of our higher education institutions play a critical role in the growth, development, and future of our state. They provide students with an opportunity to expand their knowledge and broaden their personal horizons, enhance their career skills, and ultimately, realize their full potential. These institutions also provide New Jersey businesses with a high-quality workforce and access to industry-specific research.

As this report indicates, we have made progress in achieving the objectives of the state's long-range plan for higher education, *A Blueprint for Excellence*, since its adoption in 2003. For example, both enrollment and the number of degrees awarded have increased, there are signs of decreasing the gap in graduation rates between minority or low-income students and the remaining population of students, and institutions have increased research funding received from the federal government.

New Jersey has an opportunity in 2007 and beyond to build on the progress already made in order to achieve state goals for higher education. There is still a great deal to be accomplished, and it will require the collaborative effort of all stakeholders. We urge you to take a moment to review this report and join us in supporting targeted efforts going forward to build a stronger higher education system in New Jersey for the good of our state and our nation.

Sincerely,

Jon S. Corzine Governor Laurence M. Downes

Chairman, Commission on Higher Education

Lamence M. Sanner

Planning for the Future

In 2003, the New Jersey Commission on Higher Education adopted a long-range strategic plan, *A Blueprint for Excellence*, following a planning process that involved a broad-based group of educators, policymakers, business leaders, and other stakeholders. The vision established as part of that process is the foundation of the plan.

VISION

New Jersey and its colleges and universities embrace their shared responsibility to create and sustain a higher education system that is among the best in the world, enabling all people to achieve their maximum potential, fostering democratic principles, improving the quality of life, and supporting the state's success in a global economy.

A Blueprint for Excellence sets forth the seven principal objectives below, which are still priorities today.

- · Achieve excellence in teaching, learning, and research at all institutions
- · Educate more students across racial, ethnic, and income groups
- Assure affordability for students from all backgrounds
- Invest strategically and enhance revenues to achieve specific state goals
- Enhance collaboration among all segments of the educational community
- Develop partnerships with business and other sectors to meet workforce needs
- · Advance the competitiveness of public research universities

Despite significant challenges, progress has been made in achieving the original seven objectives. There are also opportunities for improvement.

The strategic direction for the 2007 update of New Jersey's plan for higher education, which embodies the original seven objectives, is built around targeted state needs in four priority areas:

Access

Affordability

Excellence

Partnerships

Progress Made and Targeted Goals

Progress made within the original seven objectives and targeted goals for the future are summarized under the priority areas below.

Priority Area: ACCESS

Increased access to higher education will support growth in targeted areas and ensure a well-prepared citizenry and the highly skilled workforce necessary to maintain quality of life and economic competitiveness of New Jersey.

EDUCATING MORE STUDENTS

There is a clear need to extend access to higher education to educate the growing number of recent high school graduates, to provide ongoing education and upgrade the skills of the current workforce, and to serve more students from disadvantaged and underrepresented groups.

Progress

Forty-two of New Jersey's colleges and universities established enrollment growth targets for 2010, and 37 of those institutions have increased enrollment over the 2002-2003 academic year.

(Details regarding progress in achieving this and other institution-specific goals are available on the Commission on Higher Education's website at www.state.nj.us/highereducation/lrp07data.)

Headcount enrollment in New Jersey colleges and universities has increased by 24,184 students, or 6.7 percent, since fall 2002, enrolling a total of 385,941 students and exceeding projected growth through fall 2006.

Enrollment of African American, Hispanic, and Native American students, all underrepresented groups in higher education, has increased since fall 2002 by 4,833 (10.9 percent), 7,477 (18.5 percent), and 197 (21.2 percent), respectively. As a percentage of total enrollment, the number of African American students increased by 0.4 percent, and the number of Hispanic students increased by 1.2 percent; the percentage of Native American students remained static.

Approximately 100 additional special needs students, a 10 percent increase over fiscal 2003, received services through the state's Special Needs program in fiscal 2006, despite continued level state funding for this program.

Efforts are also underway to address underrepresentation of groups within degree program areas, such as in STEM (Science, Technology, Engineering, and Mathematics) programs. The Commission on Higher Education worked with the State Chamber of Commerce to form and participate in an Engineering Consortium that has been established among the seven engineering schools and the community colleges to address pipeline needs and underrepresentation in the field.

- Increase headcount enrollment to serve an additional 26,000 students, an increase of an additional 6.7 percent by 2010.
- As headcount enrollment increases:
 - increase the enrollment of recent high school graduates;
 - increase the enrollment of working age adults to provide ongoing education and meet changing workforce needs; and
 - increase the number of students served from underrepresented groups, with the number of students from each underrepresented group increasing as a percentage of total headcount enrollment.

Priority Area: AFFORDABILITY

Student financial assistance programs serve individual students but also serve the future economic and social well-being of the state. Dollars for student financial aid represent an investment in low-income students to allow them to reach their full potential and enable them to help meet the demand for a well-prepared workforce of lifelong learners and responsible citizens.

MAKING HIGHER EDUCATION MORE AFFORDABLE

A commitment to maintaining affordable higher education opportunities for students from all socioeconomic backgrounds is critical to meeting the needs of individuals and the state's workforce and economy.

Progress

New Jersey has consistently been among the leaders in the nation in providing need-based student financial assistance. Since fiscal 2003, despite extraordinary state budget constraints, need-based aid to students has increased by \$49 million.

Additional funding for the Educational Opportunity Fund (EOF) and the Tuition Aid Grant (TAG) programs has provided larger awards to qualifying students to cover increasing costs. In fiscal 2006, 6,566 more students received TAG awards than in fiscal 2003, and 41 additional students received EOF awards. A total of 66,401 students received TAG in fiscal 2006, and 13,783 students received EOF grants.

\$000		
	Fiscal 2003	Fiscal 2006
EOF	\$ 34,295	\$ 39,795
TAG	\$170,476	\$213,979
TOTAL	\$204,771	\$253,774

The number of students at New Jersey colleges and universities who receive Federal Pell Grants has also increased, with 83,240 students receiving grants in fiscal 2003 and 85,412 in fiscal 2006.

Nevertheless, the share of family income of low- and middle-income families needed to pay for college expenses continues to increase, putting higher education out of reach for many students, even after financial aid is provided.

- As tuition and enrollment increase, expand state funding for need-based financial aid programs proportionately each year to meet the need of an estimated additional 6,000 to 7,000 eligible students by 2010.
- Decrease the share of family income of low- and middleincome families needed to pay for college expenses after financial aid is provided.

Priority Area: EXCELLENCE

Enhanced excellence in teaching and learning, research, and service at the colleges and universities will attract additional talented faculty; better prepare individuals for the future; improve the state's workforce; draw and retain business and industry in New Jersey; and improve research that is essential to educational, social, technological, and economic progress and innovation.

INCREASING THE NUMBER OF DEGREES EARNED

Intellectual capital is the foundation of the state's future prosperity in an economy that is driven by knowledge, information, and technology. Higher education is called upon to efficiently and effectively prepare people of all backgrounds to contribute to society. In addition, more highly skilled graduates are needed, particularly in high-demand areas, such as nursing, teaching, and engineering and other professional and business services industries.

Progress

<u>Degrees Earned</u>: Overall, students at New Jersey colleges and universities earned 6,828 more degrees in the 2005-2006 academic year than they did in 2002-2003, an increase of 12 percent.

2005-2006: 65,105 degrees earned 2002-2003: 58,277 degrees earned

<u>Degrees in High-demand Areas</u>: Institutions have made significant efforts to address the need for more graduates in high-demand areas. Examples of high-demand workforce areas for which the number of degrees increased include nursing, engineering, accounting, and teaching.

	Acad. Yr. 2002-2003	Acad. Yr. 2005-2006
Nursing Degrees Increased by 63.8%	1,958	3,207
Total Engineering Degrees Increased by 11.8%	2,476	2,768
Biomedical/Medical Engineering Degrees Increased by 141%	79	191
Accounting/Related Services Degrees Increased by 33%	1,098	1,456

In the area of teacher preparation, institutions recommended 4,970 graduating students for initial teacher certification for 2005-2006, an increase of 9 percent over the number recommended in 2002-2003. Increases in specific high-demand teaching areas were especially significant, as noted below.

	Acad. Yr. 2002-2003	Acad. Yr. 2005-2006	Change
# of students recommended for P-3 certification	197	372	88%
# of students recommended for special education certification	694	941	35%
# of students recommended for certifications with math or science emphasis	186	325	74%

- Prepare significantly more graduates in high-demand areas to meet the most critical workforce needs identified for New Jersey as high-skill occupations with the highest demand between 2004-2014:
 - · Accountants and Auditors
 - Computer and Information Systems Managers
 - Computer Software Engineers, Applications
 - Computer Systems Analysts
 - Engineers
 - Financial Managers
 - General and Operations Managers
 - Nurses
 - Pharmacists
 - Securities, Commodities, and Financial Services Sales Agents
 - Teachers

IMPROVING GRADUATION RATES

Graduation rates provide an important indication of quality, efficiency, and effectiveness in higher education. As the demand for a highly skilled workforce continues to grow, the importance of preparing students for the workforce in a timely manner, across all racial/ethnic and income groups, is critical. Timely graduation is also a factor in efficiently using limited facilities and resources to educate growing numbers of students.

Progress

Graduation Rates: A total of 42 institutions are focused specifically on improving graduation rates, including two-and three-year graduation rates for first-time full-time degree-seeking freshmen at the community colleges and four- and six-year rates at baccalaureate institutions. In 2005, 20 of these institutions had increased overall cohort graduation rates over the base cohort established in 2003.

The Achievement Gap: EOF programs across the state are beginning to narrow the gap in graduation rates between low-income students and the total student population. The state college and university sector has decreased the gap by 25 percent, and the public research university sector has closed the gap by 11 percent.

Targeted Goals

- Increase by 2010, New Jersey's average four- and six-year graduation rates for full-time undergraduate students by a minimum of 5 percent over 2002 rates.
- Increase by 2010, New Jersey's average two- and three-year graduation rates for full-time undergraduate students at community colleges by a minimum of 5 percent over 2002 rates.
- Increase average retention and graduation rates of low-income and minority students by at least 10 percent by 2012.
- Improve high schools and student readiness for college for all students and decrease the need of recent high school graduates for college-level remediation statewide by a minimum of 20 percent by 2012.

ENHANCING RESEARCH TO SUPPORT ECONOMIC DEVELOPMENT AND IMPROVE QUALITY OF LIFE

The quality of institutional research, particularly at research universities, is critical to the competitiveness of both the institutions and the state. Strategic efforts to increase academic research and the amount of federal and other research dollars coming to colleges and universities in the state can significantly improve the economy and quality of life in New Jersey.

Progress

The state's recent \$270 million investment in stem cell research centers is critical to strategic efforts to enhance research and increase the amount of federal and other research dollars coming to colleges and universities in the state. In addition, since fiscal 2005, the state has appropriated \$35.7 million for stem cell research at the research universities, which has begun to enhance institutional competitiveness in this area.

New Jersey increased its amount of federal research dollars for higher education by nearly \$146.5 million since 2002, and the total amount of external research dollars increased as well.

	\$000		
	Federal Research	Total External Research	
	Dollars	Dollars	
2002	\$316,912	\$485,508	
2005	\$463,457	\$627,457	

Examples of new federally funded research in 2006 include:

- A five-year, \$19.2 million grant to UMDNJ-Robert Wood Johnson Medical School and Rutgers University to develop a new center for excellence aimed at measures against chemical terrorism
- A four-year, \$1.25 million award to UMDNJ from the National Aeronautics and Space Administration (NASA) to understand and find ways to protect future space travelers from harmful radiation
- A \$2.7 million award to NJIT from the U.S. Army to study hybrid and energetic advanced fuel cells
- A \$1.7 million award to Rutgers University from the National Institutes of Health (NIH) for anti-HIV drug research

 A \$17 million award to Princeton's Woodrow Wilson School of Public and International Affairs from the National Institute of Child Health and Human Development to support a new round of data collection for the Fragile Families and Child Wellbeing Study

Targeted Goals

- Focus state and private sector resources on a few targeted areas that offer the greatest potential for increased federal funding, commercial development, and enhancement of knowledge.
- Expand existing research and development programs at each of the research universities.
- Improve New Jersey's ranking in aggregate share of federal research dollars for higher education from 21st to 15th by 2012.
- Achieve national recognition in stem cell research and at least two other targeted areas by 2012.
- Increase the number of businesses created as a result of university research and development spending.
- Increase the number of patents issued to university research laboratories in New Jersey.

FURTHER ADVANCING THE EDUCATION OF STUDENTS FOR CIVIC AND SOCIAL RESPONSIBILITY

Colleges and universities have the opportunity to reflect the value of service in their teaching and research and engage students, faculty, and staff in public service on and off campus. The implementation of strategies to further advance public service is critical to improving the relevance of academic courses, promoting democratic principles, maximizing human potential, and improving the quality of life.

According to a recent report by the Corporation for National and Community Service, New Jersey ranks 45th in college student volunteer rates, with a 25 percent rate. Greater promotion of civic and community engagement on New Jersey college campuses is necessary.

Progress

Through initial efforts, the Commission on Higher Education has linked colleges and universities with the state service commission and participated in a statewide service learning conference.

- Strengthen the statewide college service learning network.
- Organize a statewide policy forum to create a state agenda.
- Increase student participation in community service by a minimum of 5 percentage points by 2010.

Priority Area: PARTNERSHIPS

Joint efforts among government, educational institutions, business, and the nonprofit sector provide a competitive advantage in achieving shared workforce and economic development goals. Such partnerships will provide opportunities to attract a broader base of human and financial capital necessary to realize economic goals.

BUILDING PARTNERSHIPS AMONG EDUCATIONAL INSTITUTIONS, STATE AGENCIES, AND THE PRIVATE SECTOR TO ACHIEVE STATE GOALS

Increased state agency and institutional collaboration and government, institutional, and industry partnerships are essential to help meet the state's most pressing education and workforce needs and to create nationally competitive research and development programs. In addition, this collaboration will further improve New Jersey's position as a leader in innovation and technology transfer.

Progress

A new statewide transfer agreement has been developed, and a task force is working on policy and procedures for implementation.

Efforts are underway to align high schools with the workplace and higher education and to convince students, parents, educators, and employers of the need for more rigorous middle and high school courses. For example, the New Jersey High School Redesign Committee completed its review of high school courses and completed a plan to design curricula with business and higher education needs; the "Learn. Do. Earn." website of the Business Coalition for Educational Excellence at the New Jersey Chamber of Commerce focuses on understanding how to get ready for life after high school; and the Department of Education is working to align policy, standards, and assessment to the American Diploma Project.

State Innovative Partnership Grants were awarded recently for three high-demand industry sectors — Financial Services, Information Technology, and Biotechnology/ Pharmaceutical — to encourage substantive partnerships between the state's business community and the educational system.

GEAR UP and College Bound programs served 361 more students in fiscal 2006 than in fiscal 2003, working to prepare middle and high school students in disadvantaged areas to enter and succeed in college, with a focus on math and science. A total of 2,991 students were served in fiscal 2006.

The Governor's School has been restructured and is proceeding with a renewed vitality to provide gifted high school students with rigorous experiences in the arts, the sciences, engineering and technology, environmental studies, international studies, and public issues.

Targeted Goals

- Fully implement the higher education transfer agreement by September 2008.
- Continue to make the case for more rigorous high school courses, and make the necessary investments of time, effort, and money to improve the preparation of students for college and the workplace.
- Make targeted state, federal, and private sector investments to advance state economic growth goals through collaborative efforts.
- Develop additional partnerships and enhance collaboration among higher education and the business, nonprofit, and public sectors.

IMPLEMENTING STATE POLICY TO GUIDE STATE SUPPORT AND ACHIEVE STATE GOALS

Higher education institutions have a variety of responsibilities, and each of those responsibilities is dependent, to varying degrees, on a partnership with the state for fundamental financial support. Clear predictable funding policies and practices are essential to guide state support.

Progress

The Commission on Higher Education worked with presidents and other stakeholders to develop funding principles and recommendations for consideration by the Governor and Legislature in two areas — annual state operating support for the senior public colleges and universities, and support for higher education capital needs. Strategic investments in each of these areas are necessary to achieve many of the key goals and objectives in *A Blueprint for Excellence*.

(The specific recommendations are available online in the following reports, "Long-Term Capital Planning and Support Recommendations for New Jersey Higher Education" and "Policy Recommendations for Operating Support of Senior Public Colleges and Universities in New Jersey.")

- Adopt and implement the recommended policy for operating support for senior public colleges and universities.
- Move toward full funding for operating support of community colleges and public-mission independent institutions.
- Develop a capital plan using the principles enumerated in the capital funding recommendations.

Call to Action

Transform the Vision to Reality

A Blueprint for Excellence is a plan to make New Jersey stronger, more competitive, and a better place for all to live, work, and go to school. The entire higher education community, state policymakers, private and public sector leaders, and other stakeholders all have a role to play.

We have made advances in achieving the objectives in the *Blueprint*, but advances have not been significant enough to remain competitive in today's global information economy.

All are invited to support the broad-based, collaborative efforts to build on success and shape the future of New Jersey and all of its citizens by continuing to work toward the shared vision and goals.

To learn more about A Blueprint for Excellence or to obtain more detailed descriptions of the progress made to date in implementing the state higher education strategic plan, visit the New Jersey Commission on Higher Education website at http://www.state.nj.us/highereducation.