NEW JERSEY COMMISSION ON HIGHER EDUCATION

Promoting Excellence for All

UPDATE 2005

A Blueprint for Excellence

New Jersey's Long-Range Plan for Higher Education

NEW JERSEY
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New Jersey's Long-Range Plan for Higher Education

A BLUEPRINT FOR EXCELLENCE – UPDATE 2005

Introduction

One of the Commission on Higher Education's primary statutory responsibilities is statewide planning for higher education, including the development of a master plan for higher education in New Jersey that is regularly revised and updated. In November 2003, the Commission adopted *New Jersey's Long-Range Plan for Higher Education: A Blueprint for Excellence.* This dynamic plan, which was developed with the assistance of over 500 stakeholders, will be reviewed regularly and revised as needed based on progress and changes in circumstances. Annual updates of the *Blueprint* will (1) monitor progress in achieving the plan's seven principal objectives and key outcome measures, (2) inform future state investments linked to the objectives, and (3) develop new components to enhance progress toward achieving the overall vision.

A Plan to Ensure New Jersey's Competitiveness and Well-Being

New Jersey's public and private colleges and universities have a high degree of autonomy. They are encouraged to pursue distinct institutional missions to meet the varied needs of the state and its diverse population. At the same time, a central voice and plan for higher education are essential to balancing institutional missions, visions, and ambitions with the state's interests and evolving needs.

This long-range plan for higher education is critically important to the state, because it provides the coordinating blueprint to bring institutions and state and private sector leaders together to ensure New Jersey's future economic prosperity. The state's employment growth rate has started to fall behind the nation's, including in key technology-based sectors of the economy. Concerted efforts must be made to enhance the state's economic trajectory. As a critical aspect of New Jersey's infrastructure and economic prosperity, higher education will play a major role in revitalizing the economy and maintaining the state's status as a regional and national economic leader. That revitalization will require a sustained public policy effort focused on education, technology, and industry in the state, as America and the world transform the way business is done.

New Jersey will continue to benefit from market location. But the rapidly changing knowledge economy brings a new landscape, intensifying competition and the need for workers with increasingly sophisticated skills. The future of New Jersey's economy is tied to workforce quality, employment opportunities in knowledge-based industries, and complex research and technology. Higher education is challenged to deliver enhanced research and prepare people of all backgrounds to contribute to society. But it will require increased state support for faculty and facilities, efficient and strategic use of

resources, enhanced coordination and collaboration, and targeted initiatives. It requires a deliberate plan – a blueprint – that has the commitment of state and business leaders, the higher education community, and the citizens.

Update 2005

This 2005 update of *A Blueprint for Excellence* provides refined key outcome measures; initial recommendations regarding the enhancement of public research universities (Objective VII); status reports on the other six principal objectives, including some new and revised components; and baseline data to assess progress in achieving goals over time. Where data are readily available, institutional or sector comparison groups of similar institutions are used to provide an external context.

Using the Integrated Postsecondary Education Data System (IPEDS) and other sources, the Commission will track outcome data annually on seven institution-specific components that are directly related to key state goals of enhancing student access, improving student outcomes, and increasing external funding. The baseline data for those components are in Appendix A, along with peer group comparisons where data are available. Moreover, while each institution will work to achieve all aspects of the plan, individual institutions have internally identified several specific components on which they will focus primary efforts; a summary of initial increases over baseline data is provided under the relevant objectives.

In reviewing progress made since the plan was adopted in late 2003, it is important to recognize that changes in student outcomes and external funding are best assessed by examining trend data over several years. Also, as noted in the plan, external circumstances and funding levels will significantly influence the degree to which some institutional goals can be met.

In addition to the outcome data in Appendix A, Appendix B provides supporting data for various recommendations in the plan. And Appendix C presents a general system overview, with data on student enrollments, faculty, degrees conferred, and the fiscal 2006 state higher education budget.

The long-range plan assessment process will continue to evolve as circumstances warrant. Ultimately, the assessment of statewide progress on all of the key outcome measures and individual components in *A Blueprint for Excellence* will help to guide future higher education planning, policy development, and initiatives.

Overview

Higher education has become increasingly important to the success and the quality of life of individuals, states, and the nation. New Jersey's economic competitiveness and prosperity are directly related to the quality and capacity of its colleges and universities, which develop human potential and discover and apply knowledge through teaching, research, and service. It is essential that New Jersey harness the intellectual power of higher education to propel the economy forward and serve the needs of the state and its citizens.

A Blueprint for Excellence includes seven principal state objectives, along with action components and outcome measures, to achieve the following vision for the state:

> ***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.***

To realize this vision, the *Blueprint* proposes an unprecedented new compact between the state and higher education, calling for a significant investment by the state and a measurable return on that investment by the institutions.

The additional state investment in higher education is necessary to do the following:

- Achieve greater levels of excellence
- Increase capacity
- Expand student aid
- Expand collaboration with the P-12 community and among institutions
- Create innovative partnerships with business and other sectors
- Dramatically expand research and excellence at the public research universities

Colleges and universities in New Jersey need increased and predictable operating support and a major infusion of capital funds to help meet growing expectations. Consistent with the proposed compact, state and institutional leaders began working on two task forces in the summer of 2005 to develop sound state policy and methodologies to address these two fundamental institutional needs and guide state investments.

The *Blueprint's* recommendations are divided into four categories: Quality, Capacity, Resources, and Collaboration. Within those four areas, seven principal state objectives were identified to realize the vision.

PRINCIPAL STATE OBJECTIVES

The Foundation of the State Plan for Higher Education

I. Achieve and sustain higher levels of excellence in teaching and learning, research, and public service in all sectors, valuing differences in institutional missions and using resources effectively and efficiently.

II. Support targeted, multifaceted increases in capacity and specific state and campus programs to (1) prepare a growing and increasingly diverse population for responsible citizenship in a democratic society and (2) attract more New Jersey students to New Jersey institutions and prepare them for high-demand occupations.

III. Support financial aid programs that enable New Jersey students from all backgrounds to afford higher education of high quality.

IV. Establish and implement funding policies and methodologies that provide sufficient and reasonably predictable state operating support and ongoing state capital investments for the public research universities, state colleges and universities, community colleges, and independent institutions to provide the fundamental infrastructure necessary to achieve the state's vision for higher education.

V. Encourage and enhance coordination and collaboration between and among all educational institutions in the state, including P-12 schools and associate and baccalaureate degree-granting institutions, to facilitate transition from each educational level to the next, to develop mutually beneficial partnerships, and to improve the quality of teaching and learning at all levels.

VI. Encourage and expedite systemic, innovative, and institutionalized partnerships and other collaborations between higher education and other sectors of society, including business and industry, the nonprofit sector, and the public sector to help meet the state's most pressing workforce needs and to create nationally competitive programs of research and development.

VII. Enhance the public research universities to improve (1) the overall educational excellence of the universities; (2) collaboration in teaching, research, and service; and (3) the state's competitiveness for federal and other support for research and development.

Achievement of these principal state objectives through the coordinated leadership efforts of elected and appointed state officials, the Presidents' Council, the Commission on Higher Education, boards of trustees, and other stakeholders will make the vision for higher education a reality.

KEY OUTCOME MEASURES

The key outcome measures have been refined and revised where necessary to reflect changing circumstances. To varying degrees, full achievement of these measures will be influenced by levels of state operating aid and capital support, student tuition and fees, and external support. Given the time necessary to achieve results, progress in the initial years may be modest on many measures.

A. New Jersey's colleges and universities will make annual progress toward providing access to high-quality higher education opportunities for between 411,600 and 415,600 students, an increase of 50,000 to 54,000 students by 2010.

   Enrollment grew by 18,675 between 2002 and 2004, exceeding projections. (See Objective II.)

B. Coordination and collaboration between and among educational institutions will increase in demonstrable ways to improve student achievement and success, to expand access, and to enhance efficiency.

   An example of progress is the August 2005 $20.9 million federal GEAR UP grant to expand collaboration and enhance access. In addition, renewed efforts are underway to improve transfer and articulation. (See Objective V.)

C. Alignment between higher education admissions-related requirements and P-12 curriculum frameworks, standards, and tests will decrease the need of recent high school graduates for college-level remediation statewide by a minimum of 20 percent by 2012.

   Efforts through the American Diploma Project and other initiatives are underway. (See Objective V.)

D. Colleges and universities will achieve their institution-specific student outcome improvement targets by 2010.

   Baseline data have been established, and initial progress is summarized in Objective I.

E. New Jersey's average four-year and six-year graduation rates for full-time undergraduate students will each increase by a minimum of 5 percent by 2010.

   Baseline data are available in Objective I and Appendix A.

F. The state's retention and graduation rates of low-income and minority students will increase by at least 10 percent by 2012 and begin to close the achievement gap.

   Baseline data are available in Objective I and Appendix A.

G. As enrollments increase, colleges and universities will prepare significantly more graduates in high-demand areas to meet the most critical workforce needs identified for New Jersey.

   While specific areas of need are still being identified, growth in the number of degrees in some high-demand areas has occurred since 2003. (See Objective VI.)

H. Student preparedness for the workforce will improve, and the need for basic skills training by employers will decrease significantly.

   An initial employer satisfaction survey was completed, and focus groups are planned to gather additional information. (See Objective VI.)

I. New Jersey will increase its 2002 national ranking of 21st to at least 15th in aggregate share of federal research dollars by 2012.

   New Jersey continues to be 21st in the national ranking, but the institutions increased their federal research funding by 14 percent in 2003, one percent more than the increase in total federal dollars available; they increased funding in 2004 by 16 percent. (See Objective I.)

J. New Jersey colleges and universities will attain increased regional and national recognition of institutional programs and achievements through defined institutional efforts in targeted areas.

   A compilation of most valuable higher education assets was completed in 2004; updates will help to assess increased recognition and achievements, as well as national rankings and ratings. (See Objective I.)

K. As enrollments increase, state funding for student financial aid programs will be expanded proportionately each year to meet the needs of the growing number of eligible students.

   State support has increased for the state's two major financial aid programs, and two new programs have been established. (See Objective III.)

L. State policies and funding methodologies for operating support of colleges and universities in each sector will be linked to state goals, and annual funding will be consistent with methodologies and defined state targets.

Initial operating support goals have not been met. A task force of key state and institutional leaders is working to develop a funding policy/methodology for public research universities and state colleges and universities. (See Objective IV.)

M. The state will provide significant additional capital support for higher education to enhance quality and preserve and expand campuses consistent with defined annual capacity targets and other principal state objectives.

Additional capital funding has not yet been provided. A task force of key state and institutional leaders is working to develop a long-term state policy for support for capital needs. (See Objective IV.)

N. Colleges and universities will increase external revenue as a percentage of total revenue.

Baseline data are available in Objective IV and Appendix A. Two-year rolling averages show external funding revenue increases at several institutions.

OBJECTIVE I - Achieve and sustain higher levels of excellence in teaching and learning, research, and public service in all sectors, valuing differences in institutional missions and using resources effectively and efficiently.

RATIONALE

The quality of teaching and learning, research, and service at the colleges and universities in a state has an enormous impact on the overall competitiveness of the state and its economic strength and societal well-being. Increased excellence of programs and outcomes at New Jersey's rich array of higher education institutions will benefit New Jersey's students; attract additional talented faculty members; better prepare individuals for the future; improve workforce development; draw business and industry to New Jersey and retain them in the state; and enhance research that is essential to educational, social, technological, and economic progress and innovation.

The development and maintenance of an excellent system of higher education call for deliberate planning, adequate and predictable state funding, and institutional accountability. Achieving excellence will require institutions to focus on enhancing existing programs and improving student outcomes consistent with their clearly focused and differentiated missions. And recognizing that state and other resources are limited, new program development should occur only within a well-articulated statewide planning context consistent with what the market and funding sources can sustain. These basic components, along with the specific strategies described below, are necessary to move New Jersey higher education to the upper echelon nationally.

ONGOING ACTION COMPONENTS

1. Student Outcomes

Assessment of student outcomes is a key step to institutional improvement and excellence. By identifying goals and expected outcomes and analyzing resultant data, institutions are in a better position to improve educational quality and effectiveness. Ultimately, improved student outcomes are essential to realizing New Jersey's vision for higher education.

Status

An annual examination of student retention, graduation, and transfer rates at New Jersey colleges and universities will provide important indications of the quality, efficiency, and effectiveness of higher education. Appendix A provides baseline data; data for 2004; and, where available, comparative data to provide a national context for review of these

key student outcome areas in New Jersey. Graduation rate data are also disaggregated to monitor success of groups traditionally underrepresented on college campuses.

Institutions or sectors have identified peer institutions that provide a national comparative context for the annual update of the *Blueprint.* In the case of the community colleges and the independent colleges and universities, sector peer comparisons are provided for each of the sectors as a whole, comparing aggregate outcomes for each sector with the aggregate outcomes of its respective national sector.

Each of the public research universities, nine state colleges and universities, and proprietary institutions has individually identified a group of similar institutions for peer comparative purposes. In those cases, institutional peer comparisons are provided for each institution, comparing each institution's outcomes with the average of the outcomes of its respective peers. The number of institutions in each peer group and the variability among the peer institutions differ significantly. In some cases, institutions chose to include both peer and aspirant institutions in their comparative groups, which provides a broader and more challenging comparison level.

The student outcome data in this report are essentially baseline data, and it will take time for institutional initiatives to be reflected. Also, it should be noted that student retention, graduation, and transfer rates naturally fluctuate somewhat with individual student cohorts, and variations of a few percentage points from year to year are not uncommon. Improvements are best measured by longer-term trend data, which will be established in subsequent updates.

Comparative Data

The comparative data for retention rates show that most New Jersey institutions are very competitive with their peers nationally, often exceeding retention rates of comparable institutions.

The comparisons of graduation rates with peer institutions vary significantly across timeframes and when disaggregated for groups traditionally underrepresented on college campuses.

Undergraduate graduation data for the public research universities and state colleges and universities indicate that several lag behind their peers on four-year graduation rates, but most of these institutions are comparable to or exceed their peers on six-year rates. The community college and independent sectors lag behind their respective peers on this measure, although the independent sector's six-year rate is closer to that of its peers. Proprietary institutions generally exceed their peers on graduation rates. When disaggregated for minority students, the graduation rate comparisons exhibit similar patterns.

There are no peer data available for graduation rates for low-income students. Appendix A presents these rates for New Jersey institutions in 2003 and 2004, indicating a significant increase for a few institutions.

The transfer rates for the community college and independent sectors remained level during 2003 and 2004. The average percent of transfer students across all senior public institutions is the same over the two-year period. The percentage of students that transferred to individual senior public institutions shows variation from 2003 to 2004, which is not uncommon, because of fluctuations in the percentage of those who are accepted and those who actually enroll.

NEW
All data for retention and graduation rates are for first-time full-time degree-seeking students, and community college transfer data are for first-time full-time degree-seeking students. As a result, outcomes for a large number of students are not captured here. Consideration should be given to tracking data for other New Jersey students in future years.

Institutional Goals
As indicated in the Introduction, each institution was asked to identify several of seven institution-specific components of the long-range plan on which to set long-term goals and focus primary efforts. Four of those components are related to student outcomes, and most institutions are focusing efforts on at least one of those components. An aggregate summary of progress in these key student outcome areas is provided below. Again, it should be noted that student retention, graduation, and transfer rates will naturally fluctuate somewhat with individual cohorts of students. Progress toward 2010 goals is therefore best measured by longer-term trend data. Future updates will report both annual progress and ongoing progress toward goals.

- Student Retention Rates
  A total of 39 institutions are focused on improving student retention rates as measured by third-semester retention rates for first-time full-time freshmen. In 2004, 21 of these institutions increased student retention rates over 2003. A majority of the institutions selected this as a goal, indicating their recognition of retention beyond the third semester as a critical foundation of student success.

- Undergraduate Graduation Rates
  A total of 43 institutions are focused 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 2004, 25 of these institutions increased overall graduation rates over 2003. It is gratifying that this is the goal most often selected by institutions, since it has a significant impact on students, institutional capacity, state funds, and efficient preparation of a skilled workforce.

- Minority Graduation Rates
  A total of 21 institutions are focused specifically on improving graduation rates of minority students. In 2004, 12 of these institutions increased minority graduation rates over 2003.

- Low-Income Graduation Rates
  A total of 10 institutions are focused specifically on improving graduation rates of low-income students. In 2004, 3 of these institutions increased low-income graduation rates over 2003.

  The concerted effort of the institutions that are focused on minority and low-income undergraduate graduation rates is very important. Enhancing outcomes for these two groups will have a major impact on the students and the economy.

- Student Transfer Rates
  A total of 21 institutions are focused on increasing student transfer rates. For the community colleges, this is the three-year rate of transfer for first-time full-time degree-seeking freshmen. For baccalaureate institutions, the transfer rate represents the percentage of entering first-time degree-seeking undergraduate students who are transfers. In 2004, 13 of these institutions increased transfer rates over 2003. Nineteen of the 21 institutions that selected this goal as a primary focus are community colleges.

Individual institutions are also pursuing other internal goals, such as decreasing time to degree, enhancing learning outcomes, improving student and alumni satisfaction and job placement rates, and increasing rates of acceptance into graduate or professional programs.

It should be noted that the 46 colleges and universities in New Jersey that are accredited by the Middle States Commission on Higher Education must also have a student learning assessment process and ensure its use.[1]

2. Enhancement of Research

The quality of institutional research, particularly at research universities, is critical to the competitiveness of both the institutions and the state. Strategic efforts to enhance research and increase 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.

Status

In January 2005, the Commission on Higher Education adopted a report, *Target Areas for Enhanced Research Funding and Milestones Toward an Improved National Ranking*, to initiate steps to significantly enhance higher education research in New Jersey. The report was prepared in collaboration with the leadership of the research universities and with advice and consultation from other institutions.

[1] Middle States Commission on Higher Education, *Characteristics of Excellence: Eligibility Requirements and Standards for Accreditation,* 2002.

The report concludes that the state, its research universities, and other colleges and universities where appropriate to their mission have a significant challenge before them to increase New Jersey's ranking in aggregate share of federal research dollars for higher education from 21st to 15th (by 2012), as called for in the November 2003 *Blueprint for Excellence.* The magnitude of this increase will require more than incremental growth of existing R&D programs at institutions. It will require a significant investment of state and private sector resources focused on a few target areas that offer the greatest potential for increased federal funding, commercial development, and enhancement of knowledge. Five target areas are identified: stem cell research, biomedically related nanoscience, homeland security, advanced imaging technology, and genomics/bioinformatics.

Changing circumstances at the state and federal level may result in a change in the specific target areas or a limitation of targets over time. But the five areas identified provide a strong initial focus with potential to greatly increase the amount of federal and other research dollars for higher education and also increase New Jersey's role as a national leader in research and economic development.

In order to close the gap between New Jersey and the state currently ranked 15th, it will be necessary for New Jersey institutions to consistently, over time, increase their percentage share of the total federal research dollars available for higher education. Currently, the 15th-ranked state receives 2.10 percent of federal dollars available, while New Jersey receives 1.46 percent. Over ten years, New Jersey should seek to increase its share of available federal dollars by a full percent. In order to grow the state's percentage share of available dollars, New Jersey should annually increase its federal research dollars at a percentage that exceeds the annual federal increase in funding available for that year. In 2003, federal dollars increased by 13 percent, and New Jersey's increase in federal research dollars was 14 percent. National data for 2004 are not yet available, but we know that New Jersey institutions increased their federal research dollars by 16 percent.

Since fiscal 2005, the state has appropriated $20 million for stem cell research at the public research universities, which will enhance institutional competitiveness in this area. In addition, the research universities have initiated discussions about how to enhance successful existing research partnerships and to break down barriers that will allow for the development of new partnerships. The continuation and expansion of such discussions are essential in order to develop specific strategies in the target research areas through interinstitutional and private industry partnerships and focused state investments that will provide the strongest possible advantage. The Presidents' Council's newly established Research Committee will work with the Commission on Higher Education and the Commission on Science and Technology to coordinate efforts of the various public and private entities that support this goal and to develop specific strategies to achieve it.

New Jersey increased its amount of federal research dollars and the total amount of external research dollars[2] for higher education between 2002 and 2004, as indicated below.

Federal Research Dollars for NJ Higher Education

	2002	2003	2004
New Jersey	$316,912,000	$361,174,000	$419,811,000

Total External Research Dollars for NJ Higher Education

	2002	2003	2004
New Jersey	$485,508,000	$535,929,000	$585,839,000

A total of 12 individual institutions are focused specifically on increasing total external research dollars. In 2004, 11 of those institutions increased external research funds over 2002 levels.

3. Public Service

Colleges and universities provide public service in myriad ways, but especially through their faculty, staff, and students, with projects ranging from faculty sharing professional expertise to solve problems to students engaged in internships. Public service significantly expands the boundaries of the institution, promoting democratic principles and maximizing human potential.

Status

Each college and university is encouraged to reflect the value of service in its teaching and research and to further engage students, faculty, and staff in public service on and off campus. In particular, each institution is called upon to expand, consistent with its mission, the level of student participation in learning experiences outside the classroom. These experiences include, but are not limited to, cocurricular offerings and off-campus learning experiences such as internships, mentoring, public service, service learning, and international study.

Since 2003, many new public service efforts and out-of-class learning experiences have been initiated, ranging from off-campus learning for students in social service degree programs and free dental care for underprivileged children in the community, to a university delegation helping to improve living conditions in Honduras by building a water purification system.

The Commission on Higher Education will survey institutions in 2007 and 2010 on their progress in enhancing on- and off-campus public service.

[2] Total external research dollars is defined as the difference between the total academic R&D expenditures and institutionally funded R&D expenditures as reported to NSF.

NEW
A working group will be formed to consider strategies to further advance the public purpose of colleges and universities, improvement of community life, and education of students for civic and social responsibility. Discussion will include the possibility of becoming a state affiliate of Campus Compact, which is a national nonprofit organization dedicated to promoting community service, civic engagement, and service-learning in higher education.

4. Faculty

Because of their primary role in teaching and learning, faculty members are critical to student outcomes and institutional quality. Regardless of the type of institution or its mission, an adequate core of full-time faculty is important, as is the provision of professional growth opportunities for all faculty members, including opportunities related to teaching and learning with a diverse student body.

Status

Each institution has developed or will develop by June 2006:

- A plan to strengthen full- and part-time faculty development programs, including programs focused on teaching and learning with an increasingly diverse student body, students for whom English is a second language, and those who have a disability.

- Faculty composition targets (e.g., part-time and full-time) appropriate to its mission, considering responsibilities assumed by and proportion of sections and kinds of courses taught by different faculty classifications.

The Commission on Higher Education will survey the institutions in summer 2006 and provide a summary report regarding institutional faculty composition targets and development plans. Subsequently, the Commission will survey institutions in 2008 and 2010 and report on progress in achieving institution-specific goals in these areas. It should be noted, however, that changes in faculty composition are extremely difficult in times of fiscal constraint when revenues are not increased sufficiently to add new faculty.

Increased faculty diversity continues to be a goal as well. The chart below summarizes full-time faculty diversity data available for 2002 and 2004. However, a full picture of the breakdown among these racial/ethnic groups is not possible because there are approximately 1,000 faculty members for whom ethnicity is unknown. Overall, the number of full-time faculty members increased by 9 percent between 2002 and 2004, but there was very little change in the distribution by ethnicity (to the extent that it was reported), as indicated on the chart below.

FULL-TIME FACULTY DIVERSITY

	White		Black		Hispanic		Asian		Am Indian	
	#	%	#	%	#	%	#	%	#	%
Fall 2002	9,226	81%	696	6%	388	3%	1,037	9%	18	0%
Fall 2004	9,674	80%	720	6%	416	3%	1,198	10%	16	0%

5. Collaborative Funding Opportunities

It is critical that institutions and the state collaborate and make every effort to garner revenues available through external sources. Joint efforts to bring additional external funds to New Jersey must be a priority.

Status

The Presidents' Council, working with the Commission on Higher Education and other entities as appropriate, will develop and implement strategies for increasing collaborative efforts to seek external funding in areas related to achieving the long-range plan objectives. A notable example of such efforts is the research funding initiative. The importance of collaboration is paramount in this new statewide initiative to enhance external funding for university research. (See pages 11-13.) The Council, the Commission, and various other state and private sector entities are working together to develop strategies to achieve this broadly shared goal.

6. Raising Public Awareness

The reputation and image of a state's higher education system directly affects the desirability of the state as a place to attend school, to operate a business, to pursue a career, and to live. States that have been in the forefront nationally in terms of economic growth and quality of life depend on the excellence, image, and visibility of their colleges and universities.

Status

The Commission appointed a Marketing Leadership Team of distinguished state leaders to guide the development of a multiyear public awareness campaign. The purposes of the campaign are to enhance the image of the state by raising the visibility of higher education quality and diversity in New Jersey and to increase public awareness of and support for higher education. The team anticipates three sources of support for the campaign: colleges and universities, state entities with related goals, and the private and nonprofit sectors.

Two efforts have been completed to inform development of the campaign. The Commission gathered information from the colleges and universities regarding higher education's most marketable assets, and a baseline public opinion survey was completed. The resulting information will be provided as background when a public relations firm is

employed to develop the campaign. In addition, the Commission and Presidents' Council have made initial commitments to support the campaign, state entities have expressed an interest in supporting or working collaboratively on the campaign, and a subgroup of the Marketing Leadership Team has begun to seek external support.

In April 2005, a coalition headed by the American Council on Education initiated a similar campaign at the national level. Together, the state and national campaigns offer significant potential to increase the understanding of the social benefits of and need for an educated population.

OBJECTIVE II – Support targeted, multifaceted increases in capacity and specific state and campus programs to (1) prepare a growing and increasingly diverse population for responsible citizenship in a democratic society and (2) attract more New Jersey students to New Jersey institutions and prepare them for high-demand occupations.

RATIONALE

The convergence of economic competitiveness, growing workforce demands, and demographic trends poses critical policy decisions for New Jersey. Increasing higher education capacity – to educate the growing number of recent high school graduates, to provide ongoing education to upgrade the skills of the current workforce, to extend educational access to underrepresented groups, and to provide baccalaureate and graduate programs in underserved areas of the state – is an opportunity and an obligation deserving immediate statewide attention and resources. It will require new commitments and accountability from colleges and universities, a central plan and policies to balance institutional growth with state interests and needs, and a significant additional investment in higher education. Such an investment is vital to New Jersey's prosperity in the knowledge-based, global economy. Moreover, making the benefits of the new economy available to all is essential to maintaining quality of life and the nation's preeminence.

New Jersey ranks eighth among the states in the percentage of high school graduates that go directly from high school to college, and fifth among the states in percentage of the population with bachelor's degrees or higher. Nevertheless, the state has the sixth highest outmigration rate of baccalaureate-seeking students in the nation. And net migration (the difference between the number of students leaving the state and those entering to attend college) is the highest in the nation.

Compared with other states, colleges and universities in New Jersey have historically served a relatively smaller percentage of the state's recent high school graduates. Based on 2002 data, approximately 47 percent of recent high school graduates across the nation remained in their home states to attend college compared with only 36 percent in New Jersey. In 2004, the percentage staying in New Jersey grew to 38 percent; comparative national data regarding student attendance are not yet available for 2004.

Recent population growth projections from various sources indicate that New Jersey will be a high-growth state in the number of 18-to-24-year-olds over the next eight to ten years. The prospect of being unable to serve the growing number of high school graduates and others in need of higher education due to lack of capacity does not bode well for workforce development and the economy. State, county, and institutional revenue will be necessary to support incremental growth at colleges and universities in New Jersey through multiple means. The necessary expansion of services should not

depend solely on new or enhanced facilities. Nevertheless, a state bond issue, a dedicated revenue source, or some other means of support will be essential to address facility renovation and construction needs. In addition, significantly increased collaboration between and among the public and private senior institutions and community colleges, enhanced use of technology, and expanded facilities and human resources should all be employed strategically through the diverse missions of the institutions to increase the state's ability to efficiently meet increasing demand.

ONGOING ACTION COMPONENTS

1. Increased Capacity to Serve More Students

For the most part, New Jersey's colleges and universities lack additional capacity to respond to the increasing demand from high school graduates, nontraditional undergraduates, recent associate degree graduates who seek the baccalaureate, and graduate students, especially in math, science, and other areas related to the state's economic development initiatives. The institutions also lack additional capacity to attract more high-achieving out-of-state students, which is an important aspect of a competitive, nationally recognized system of higher education.

Status

Institutional Plans: Each institution has or will develop a plan consistent with state needs and its mission to efficiently increase capacity to provide high-quality higher education opportunities. The use of available resources through collaboration and other strategies should be employed, along with plans for necessary renovation and construction. Each institution is working to make progress annually in achieving the goals of its plan within the parameters of its mission and budget.

Overall Growth: As this plan was developed in 2002 and early 2003, growth estimates were based on projected increased demand from recent New Jersey high school graduates and nontraditional undergraduates (over age 25), as well as modest growth in graduate students. Actual enrollment growth reported by the institutions for fall 2003 and 2004 indicates that undergraduate increases were primarily attributable to students who were not recent high school graduates. In addition, graduate enrollment increases far exceeded expectations. As detailed in the two sections below, total enrollment growth between 2002 and 2004 was 18,675, rather than the originally projected 15,450. Changes in enrollments by sector vary considerably, with the greatest growth occurring in the community college sector.

Headcount Enrollment Changes by Sector – Fall 2002 to Fall 2004

Public research universities	-858
State colleges & universities	+3,498
Community colleges	+13,119
Independent colleges & universities	+3,248
Proprietary institutions	-1,009
Theological/rabbinical institutions[3]	+677
Total	18,675

Based on the new data available and revised projections, the enrollment growth goal for 2010 is slightly higher than originally proposed. The total enrollment should increase annually, and by 2010 the number of undergraduate and graduate students should be between 50,000 and 54,000 more than in 2002. (See breakdown in two sections below and detail in Appendix B, pages 62-63.)

A total of 42 institutions established enrollment growth targets for 2010. In 2004, 31 of these institutions increased their enrollment. This commitment of so many of the state's public and independent, two-year and four-year institutions to serving more students is essential to achieving statewide enrollment and workforce goals. And increased state support will be essential for these institutions to increase their capacity to serve the additional students.

Undergraduate Students:

Recent High School Graduates: In 2004, New Jersey colleges and universities served 38 percent of recent high school graduates, up from 36 percent in 2002. Considerable additional growth continues to be necessary to move closer to the national average of 47 percent, but current capacity for growth is severely limited without additional resources and space.

According to data provided by the institutions through the Integrated Postsecondary Education Data System (IPEDS), progress was made in increasing the number of recent high school graduates who attend college within the state, with 2,641 more recent high school graduates served in 2004 than in 2002. The institutions did not achieve the anticipated increase of 4,200 recent high school graduates.

Nevertheless, based on revised high school graduation projections from the Western Interstate Commission for Higher Education (WICHE) of more high school graduates by 2010 and actual reported 2004 enrollments in New Jersey colleges, the goal of enrolling approximately 14,000 more recent high school graduates in 2010 than in 2002 still appears reasonable, providing there are additional resources and space. Growth at that level would move New Jersey considerably closer to the national average of serving 47 percent of recent high school graduates. Enrolling approximately one percent more each

[3] Data regarding theological institutions is provided only for enrollment increases. Due to the nature of the programs at these institutions, retention, graduation, and transfer rates are atypical.

year will increase enrollments of recent high school graduates by about 14,000 and bring New Jersey to 44 percent of the projected graduating class by 2010.

Students Other Than Recent High School Graduates: Overall, undergraduate enrollment increased by 16,306 between 2002 and 2004. In addition to the 2,641 more recent high school graduates, undergraduate enrollment increased by another 13,665. This growth in the number of students who were not recent high school graduates could be attributable to many factors, and the number has fluctuated considerably over time. But student demand in this group is significant, as demonstrated by the increase over the past four years. Projected annual enrollment increases of about 4,500 for this group are based on the average increase over the past eight years.

Graduate Students: Capacity at the graduate level should continue to increase, particularly in high-demand workforce areas. Between 2002 and 2004, the number of graduate students served increased by 2,369. The initial incremental targets recommended for total students enrolled were 1.2 percent a year. Recent data suggest the initial target was low; for the past fifteen years, the average growth in full- and part-time graduate students enrolled was actually 1.5 percent. If this trend continues, New Jersey's colleges and universities will need capacity to serve an estimated 7,900 more full- and part-time graduate students in 2010 than in 2002.

2. Multifaceted Strategies Necessary to Increase Capacity

Facilities and human resources expansion will be essential to meet the recommended growth targets, but colleges and universities should also achieve capacity increases through technology, increased use of classrooms and other enhanced productivity, innovative facility design, possible new educational sites, and interinstitutional collaboration.

Status

Enhanced Use of Technology: The NJEDge.Net Network Board and the Commission on Higher Education staff collaboratively collected baseline data on the institutions' use of technology. The initial survey provided data on courses, enrollments, and graduates in terms of various instructional modalities, including online, web-enhanced, and hybrid. Future surveys will seek examples of how technology enhances capacity to serve additional students. By 2010, all institutions should have demonstrated the use of technology to increase capacity to some degree.

Programs in Underserved Areas: The Commission on Higher Education and Presidents' Council proposed $3 million in seed money for enhanced collaboration to provide high-quality baccalaureate and graduate degree programs in underserved areas of the state, including the northwest, southern, and coastal regions. Owing to state fiscal constraints, the proposed fiscal 2006 budget does not include funding for this initiative, but efforts to generate seed money for this program should continue in future years.

In the meantime, institutions continue the many efforts already underway to meet needs in underserved areas. For example, the New Jersey Coastal Communiversity, a unique partnership of community colleges and senior colleges and universities, is significantly increasing access to post-associate-degree education for residents in the coastal region of the state. Similarly, senior colleges and universities have increased their provision of degree completion programs offered on community college campuses in underserved and other areas of the state. As a result, residents and employers benefit from the increased access to convenient postsecondary education and workforce development opportunities.

Meeting the Needs of an Increasingly Diverse Student Population: The Commission on Higher Education should collaborate with the Presidents' Council to support institutional efforts that address the needs of an increasingly diverse student population.

Commission staff is working with the Council for the Education of Language Minority Students and the New Jersey Council of ESL/Bilingual Program Coordinators in Higher Education to create an online directory of institutional ESL programs that will provide information for prospective college students. The number of ESL students served statewide increased from 13,812 to 15,860 between fall 2001 and fall 2003.

The Special Needs Regional Centers and several other organizations hosted a statewide conference to provide college service providers, administrators, and other stakeholders with information about serving students with disabilities. The seven student service centers funded through the statewide Special Needs grant program increased the number of students served from 912 to 1,052 between fiscal 2002 and fiscal 2004. The eighth center allows all New Jersey institutions to borrow adaptive technology for students who have learning disabilities, are deaf or hard of hearing, or are visually impaired.

The Commission, in collaboration with its partners, reapplied for the federal GEAR UP grant and will receive $20.9 million over the next six years. (See pages 38 and 43.) In addition, the Commission recommended increased state funding in fiscal 2006 for the College Bound program to serve additional students from Abbott school districts. While significant state fiscal constraints precluded increased state support for College Bound in fiscal 2006, efforts to expand College Bound should continue in future years, and outreach to Abbott middle and high school students will be expanded through the renewed GEAR UP program. Despite level state funding between fiscal 2002 and fiscal 2004, the number of students served through these two programs was 2,539, an increase of 300 students. Both of these programs benefit from systemic collaboration across educational levels.

The institutions have done an extraordinary job of sustaining services and serving additional students in the above programs with basically level funding. Institutions are also working on efforts to better meet the needs of the increasingly diverse student population by expanding faculty professional development and faculty diversity. (See page 14.)

NEW

Capacity can be further enhanced by obtaining for the 14 independent colleges and universities with a public mission the same status in the zoning/planning process that is provided for public institutions. The Commission on Higher Education will create a working group with the independent sector and representatives from the Department of Community Affairs to study this issue and make recommendations regarding the zoning/planning process for these 14 institutions.

OBJECTIVE III - Support financial aid programs that enable New Jersey students from all backgrounds to afford higher education of high quality.

RATIONALE

Historically, state support for student financial assistance has been guided by three basic principles: access, affordability, and choice. Broadly defined, access refers to providing opportunities for all who desire to pursue higher education, while affordability refers to the reduction or elimination of cost barriers. Choice is the ability of students to select among the range of colleges and universities in the state.

Guided by these three principles, New Jersey is consistently among the leaders in the nation in providing need-based student financial assistance and has expanded merit-based aid during the past decade. New Jersey ranks second in the nation in the estimated need-based undergraduate dollars per full-time undergraduate student, fourth in the nation in the estimated undergraduate grant dollars per full-time-equivalent student, and twelfth in expenditures for need-based programs.

The enrollment of students of color and other traditionally underrepresented students continues to increase in New Jersey. Overall demographics suggest that future undergraduate student populations will require substantially increased levels of financial assistance and support to ensure improved levels of persistence. Net costs for students to attend college in New Jersey, and across the nation, have increased rapidly and are threatening postsecondary opportunity for low- and middle-income students. A mix of financial aid options (i.e., grants, scholarships, loans, college savings plans) is necessary to achieve the goals of making New Jersey colleges and universities accessible, affordable, and attractive to students from diverse socioeconomic backgrounds.

ONGOING ACTION COMPONENTS

1. Adequate Need-Based Student Aid

New Jersey has a long-standing commitment to need-based student financial assistance. Approximately 87 *percent of the total state appropriation for student financial assistance is channeled through the need-based Tuition Aid Grant (TAG) and the Educational Opportunity Fund (EOF). It is essential that these programs keep pace with growing enrollments, rising costs, and changing demographics.*

Status

Full-Time TAG: Consistent with recommendations by the Commission on Higher Education, Presidents' Council, and the Higher Education Student Assistance Authority (HESAA), state funding for TAG increased, and awards for the neediest full-time students were based on the previous year's tuition levels in fiscal years 2005 and 2006. In future years, state funding should be increased to adjust awards for other recipients proportionately to reduce the current three-year lag to a one-year lag between tuition levels and award values. The fiscal 2005 and 2006 budgets combined also provided increased funding for up to 3,000 additional TAG award recipients.

In addition, the Governor and Legislature should be encouraged to implement the statutory language regarding TAG for independent colleges and universities (up to 50 percent of their weighted average tuition).

Part-Time TAG: There are compelling needs for both the full- and part-time TAG programs. Since its inception in fiscal 2004, the appropriation for the part-time TAG program for community colleges has increased from $3.5 million to $4.45 million in fiscal 2006. Within the next few years, the HESAA Board will conduct an evaluation of this program and consult with the Commission and Presidents' Council on the future potential and expansion of the program.

Federal Financial Aid: The Commission and HESAA have encouraged the state's Congressional representatives to support increases in federal student financial aid and to maintain the key programs that exist.

Educational Opportunity Fund: As called for in the plan, the EOF Board amended its regulations in 2004 to extend eligibility and program services to graduates of College Bound and NJ GEAR UP programs who attend colleges and universities in New Jersey.

In fiscal 2005, the Legislature and Governor responded to recommendations made by the Commission and EOF Board for increased support to assist students with rising educational costs and to enhance foundational support services. An additional $1.5 million for Article III was used to increase academic year student grants by $100 per student. A $500,000 increase for Article IV provided a 3.2 percent increase to support campus programs, including but not limited to counseling and tutoring to improve student success rates. In addition, $80,000 of the Article IV increase was distributed to eight EOF programs based on improved student outcomes, consistent with the recommendation to link increases for campus programs with program outcomes.

In fiscal 2006, the Legislature and Governor again increased funding for student grants. An additional $3.5 million was appropriated, with $3 million designated as "Opportunity Program Enhancement" funds for institutions to increase their number of EOF students and/or increase maximum awards for students. A portion of the increased funding will support the EOF summer program and increased awards for graduate students.

The Commission, Presidents' Council, and EOF Board should continue to seek increased EOF funding. The first and most critical priority is additional support for Article IV to ensure high-quality, campus-based services to improve EOF student success rates. Article IV support services, including but not limited to counseling and tutoring, are the critical components that make EOF successful, and state support has not kept up with inflation over the years. In addition, the increased number of students in the program will require expansion of programs and services.

The EOF program should continue to benchmark retention and graduation rates to measure improvement, and increases for campus programs should be linked to program outcomes. In addition, the Commission's EOF staff and a committee of EOF directors should continue to review EOF outcomes data, benchmarks, and regulations for future recommendation to the EOF Board.

2. Undergraduate Merit-Based Aid

New Jersey has gradually increased funding for merit-based undergraduate grants during recent years. While approximately 12.6 percent of all current student aid allocation is designated for merit-based scholarships, the state's student assistance programs continue to be primarily need-based. Dependable, annual, merit-based state appropriations enhance the ability of institutions to attract high-achieving students and help to curtail the exodus of top students. (New Jersey ranks sixth in the nation in outmigration of its recent high school graduates.[4])

Status

NJ STARS, a merit-based program established in fiscal 2005, covers the cost of tuition and approved fees at the state's community colleges for high school graduates who rank in the top 20 percent of their graduating class. During its first year of operation, approximately 1,140 students participated in this program. The possibility of extending the program has been raised by some legislators who wish to allow NJ STARS recipients who complete their associate degree to receive continued support at a New Jersey baccalaureate institution. The higher education community should continue to work with the Legislature and Governor's office to shape such a program. The NJ STARS statute requires that HESAA provide a report on the implementation of the program to the Governor and Legislature no later than September 2006.

HESAA, in collaboration with the Commission and the Presidents' Council, should make recommendations regarding merit-based aid availability and distribution in the fiscal 2007 budget and beyond.

[4] U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics, 2002,* June 23, 2003.

3. Graduate and Professional Student Aid

Labor force requirements for employees with master's and doctoral degrees are rapidly increasing, particularly in high-demand fields. To meet those needs, New Jersey's public and private sectors need well-prepared, highly skilled leaders who have completed their graduate studies at colleges and universities in the state.

Status

By March 2006, HESAA should review, in consultation with the Commission and the Presidents' Council, the feasibility of creating a graduate and professional student assistance program to encourage students to complete advanced degrees in those areas where the most pressing labor force needs exist. If determined advisable, HESAA, the Commission, and the Council should make a joint recommendation to the Governor and Legislature to establish such a program for inclusion in the fiscal 2008 budget.

While not focused only on graduate and professional students, the Social Services Student Loan Redemption Program was created in fiscal 2006 to provide an opportunity for students with baccalaureate or master's degrees in a human services discipline to redeem a portion or all of their outstanding student loans in exchange for years of employment in state-designated areas of need.

OBJECTIVE IV - Establish and implement funding policies and methodologies that provide sufficient and reasonably predictable state operating support and ongoing state capital investments for the public research universities, the state colleges and universities, the community colleges, and the independent institutions to provide the fundamental infrastructure necessary to achieve the state's vision for higher education.

RATIONALE

The development and maintenance of a higher education system that is among the best in the world requires a new compact between the state and its public and private colleges and universities. Higher education institutions have a variety of responsibilities – effective and efficient operations, strategic use of limited resources, high-quality programs and student services, successful student outcomes, significant scholarship and research, and attainment of external revenues – and they are dependent on the state to varying degrees for fundamental financial support. Excellence in teaching and learning, research, and public service to accomplish broad state economic and societal goals hinges on this support.

As a result, this objective of the long-range plan is integral to the successful implementation of the other objectives and specific goals. Some progress can be made without the proposed sufficient and reasonably predictable state operating support, but the colleges and universities will not be able to make the significant advances necessary to propel New Jersey forward in today's knowledge-based economy.

The three public research universities, nine state colleges and universities, nineteen community colleges, and fourteen independent institutions in New Jersey all receive varying levels of state operating and capital assistance. Each of these colleges and universities derives its operating and capital revenues from differing combinations of direct state appropriations, tuition and fees, federal support, and private gifts and grants. The community colleges also receive widely varying county support. Cohesive planning and effective operation of colleges and universities to meet student and state needs require clear state support policies and methodologies.

New Jersey law establishes state funding levels for the community colleges and the independent institutions, but the established levels are contingent on annual appropriations and have not been fulfilled. There has been no clear funding policy or methodology for the public research universities or the state colleges and universities since the 1980s, resulting generally in across-the-board annual increases or decreases for all twelve senior public institutions without regard to enrollment, programmatic need, or other considerations.

It is understandable that predictability of state operating appropriations for all sectors is affected by the state's overall fiscal condition in a given year. But state funding predictability and adequacy have been lacking even in the best of fiscal climates, which is apparent in comparing the percent change of the higher education budget over time with that of the state budget and New Jersey's gross state product (Appendix B, page 63). This lack of adequate and predictable funding impedes efficient and effective management of institutions and predictability of student tuition and fees.

New Jersey, like most other states, has experienced serious revenue constraints since fiscal 2002. As a result, increased state support for higher education has been limited. Fortunately, New Jersey has avoided the drastic cuts made in many other states that have led to extreme increases in student tuition and fees. Nevertheless, enrollments have increased, and state support has not kept pace with inflation.

At the same time, rapidly changing demographics and workplace needs are placing far greater demands on higher education each year, leaving the state with a pressing need to enhance teaching and research and efficiently increase capacity to serve more students. It is critical to the economic and societal well-being of New Jersey for the state to commit to increased investments in higher education through clear funding methodologies that are consistent with the state's vision and the six other principal objectives for higher education.

ONGOING ACTION COMPONENTS

1. Operating Support for Public Research Universities and State Colleges and Universities

Of all the institutions, the twelve senior public colleges and universities rely to the greatest extent on state operating aid, including direct operating support, annual funding for contractual salary increases, and fringe benefits. But for nearly two decades, state support has not recognized enrollment growth or new program development, and these institutions have relied increasingly on tuition and fees to cover increased costs. The lack of a funding methodology or policy to provide adequate funding has created, to some degree, a disincentive to the growth and development of the state's institutions.

The Commission on Higher Education's recommendation in 1995 that the state pay two-thirds of the operating costs for the senior public institutions has not guided state appropriations.[5] *In fact, the state share has decreased almost every year since fiscal 1988, and students have paid an ever-increasing share of the rising costs of their education. A state policy that guides state support for these institutions is long overdue.*

[5] For UMDNJ, the recommended state operating support level has historically been 90 percent, with students paying the remaining 10 percent.

Status

Public Research Universities: Consistent with Objective VII of the long-range plan, a funding methodology for the public research universities should be designed to improve (1) the overall educational excellence of the universities; (2) collaboration in teaching, research, and service; and (3) the state's competitiveness for federal and other support for research and development.

The enhanced quality and increased capacity envisioned within the *Blueprint* calls for an additional investment in the state's public research universities. The development of specific operating aid policies and methodologies for the public research universities was delayed somewhat, but is now underway. A working group of institutional presidents and representatives from the public research universities and the state colleges and universities drafted recommendations for consideration by the Senior Public Operating Aid Task Force, which formally got underway in July 2005. The Task Force is reviewing the various major policies/methodologies used to support senior public colleges and universities in other states, discussing the working group's recommendations/options from a policy and practical perspective, and discussing other options as deemed appropriate. The Task Force will submit a report and recommendations to the Commission on Higher Education in winter 2005.

In the interim, the Commission and the Presidents' Council budget recommendations for fiscal 2005 and fiscal 2006 included increased funds for direct operating aid, full funding of the salary program, and continued funding of fringe benefits. As a result of competing demands and a structural budget deficit, increased state support was limited in both fiscal years. Fringe benefits were, however, fully funded, and the salary program was funded at approximately 50 percent in each year. In addition, Rutgers University received an increase of $743,000 in direct support for its base budget in 2005.

Funding recommendations for fiscal 2007 should once again cover core cost increases and thereby minimize increased costs for students. Specifically, increased state support is recommended to cover negotiated salary increases, fringe benefits, and an inflationary increase of 3.5 percent on the remainder of the previous year's base budget.

State Colleges and Universities: Consistent with this plan's vision to create a system of higher education that is among the best in the world, a methodology should be developed to enable the state colleges and universities, each within a context appropriate to its mission, to (1) achieve overall excellence in teaching, research, and service; (2) contribute to the state's competitiveness for federal support in programs aligned with state needs; and (3) create high-quality public higher education options for citizens of New Jersey, and attract talented students from other states and nations.

As is the case with the research universities, the enhanced quality and increased capacity envisioned within the plan calls for an additional investment in the nine state colleges and universities. The development of specific support recommendations for all 12 of the state's senior public institutions was delayed somewhat, but is now underway. As mentioned in the previous section, a working group has drafted recommendations for

consideration by the Senior Public Operating Aid Task Force, which formally got underway in July 2005. The Task Force will submit a report and recommendations to the Commission on Higher Education in winter 2005.

In fiscal 2005 and 2006, the Commission and the Presidents' Council made the same budget recommendations for the state colleges and universities as they did for the public research universities, i.e., increased funds for direct operating aid, full funding of the salary program, and continued funding of fringe benefits. As a result of the structural budget deficit and competing demands, increased state support was limited in both years. But fringe benefits were fully funded, and the salary program was funded at approximately 50 percent in each year. In addition, the state colleges and universities received $6.3 million in direct operating support for their base budgets in fiscal 2005.

Funding recommendations for fiscal 2007 should once again cover core cost increases and thereby minimize increased costs for students. Specifically, increased state support is recommended to cover negotiated salary increases, fringe benefits, and an inflationary increase of 3.5 percent on the remainder of the previous year's base budget.

2. Community College Operating Support

New Jersey statutes set forth a state operating support level for the community colleges, but state support has never met the statutory level, and there is often little predictability regarding increased support from one year to the next. While the statute calls for the state to support 43 to 50 percent of community college operating costs, the state has been focused recently on trying to get county, student, and state levels each to one-third. The state funds are distributed among the community colleges by formula, which is driven primarily by full-time-equivalent students. County support varies widely across the state, and county maintenance of support will be critical in trying to get the student share to one-third.

Status

The goal of increasing the state share of funding for community colleges to approximately one-third by fiscal 2010 should be linked to addressing state priorities (such as increased capacity and enhanced quality). Due to the structural budget deficit and competing demands, the state did not make progress in moving toward a one-third share of operating costs, which called for an increase of $17.5 million each year. There was a $2 million increase for community colleges in fiscal 2005 and level funding in fiscal 2006.

With state support levels falling significantly short of those proposed in the original *Blueprint*, it is appropriate to update the original funding model as follows:

- Reaffirm the 1/3-1/3-1/3 level of support by the state, the counties, and tuition.

- Continue an expenditure-driven approach using actual data and revised projections.

- Extend to 2014 the timeframe in which to fully achieve the state's cost-sharing partnership.

An annual increase in state support of approximately $15 million per year will be necessary to achieve the partnership by 2014. The funding methodology is delineated in Appendix B, page 64.

It will be necessary for counties to work to establish and maintain support for one-third of the operating costs of community colleges as well. Data regarding the county share in fiscal 2005 will not be available until audits are completed.

3. Independent College and University Support

The Independent College and University Assistance Act was passed in 1972 and amended in 1979. The act provides state support to independent colleges and universities that serve a public mission. The statutory funding is tied to the number of full-time-equivalent New Jersey undergraduates enrolled during the prebudget year at eligible independent institutions multiplied by 25 percent of direct per-student support in the state colleges and universities during the prebudget year. The actual level of funding has fluctuated, with the highest level achieved in 1988 at 95.5 percent (Appendix B, page 64).

Status

The goal of fully funding the Independent College and University Assistance Act by fiscal 2010 should be linked to a commitment to address state priorities (such as increased capacity and enhanced quality). Although enrollment has been growing, the statutory full-funding level for these institutions has actually declined since 2003 as a result of the drop in direct per-student support in the state colleges and universities over the past two years. As with the other sectors, funding increases have been constrained in recent years due to the structural budget deficit and competing demands. Since the adoption of the *Blueprint* in November 2003, the independent sector received an increase of $1.2 million in fiscal 2005 and level funding in fiscal 2006, resulting in about 82 percent of full funding for the current year.

The following state support targets, based on the fiscal 2006 full-funding level of $29,825,273 (24,467 students x $1,219),* are recommended to reach the statutory funding level:

> By fiscal 2007, achieve 90 percent of full funding at approximately $27,000,000 (an additional $3,000,000).

By fiscal 2008, achieve 95 percent of full funding (original goal) at approximately $28,500,000 (an additional $1,500,000).

By fiscal 2009 achieve 100 percent of full funding at approximately $30,000,000 (an additional $1,500,000).

*The actual full-funding number for each year will vary based on (1) the number of students served by the independent institutions and (2) the level of state support for the state colleges and universities.

4. Funds for Capital Needs

Funding mechanisms to support extensive capital needs in New Jersey are a critical element of the state's long-range plan. While multiple approaches should be used to expand capacity to serve more students, a significant amount of capital funds will be essential to preserve existing capacity and expand facilities to accommodate a large portion of the increased enrollments as well as state-of-the-art research.

Historically, New Jersey has provided assistance for major capital construction and renovation through the periodic issuance of state bonds. Public institutions have received between 89 and 94 percent of the funds, with the remainder going to the 14 independent institutions with a public mission. All institutions have assumed a share of the cost of the debt on many of the state bond programs.

New Jersey's capital bond programs have not kept pace with the need to preserve existing campuses or to expand to meet growing demands. The state has passed on, by default, a very large share of the responsibility for facilities to the institutions and their students. The senior public colleges and universities, which have increasingly relied on their own debt for facility investment, are now among the most leveraged public institutions in the nation, according to bond rating agencies.[6] *The resulting debt service generally falls to students through tuition or fees.*

The community colleges benefit from a 1971 statute (known as "Chapter 12"), in addition to periodic state bond programs. Chapter 12 provides a revolving fund for construction and renewal, with debt service shared by the state and the county. Similar and more recent statutes, meant to be a continuing source of support for construction and renovation in all sectors, have not been refunded to provide ongoing capital assistance.

The Commission on Higher Education worked with the institutions during July and August of 2003 to complete a capital needs analysis to provide empirical support for the development of a proposed bond issue. At that time, the 45 public and independent institutions had unmet academic and administrative capital needs through 2010 estimated at over $5.8 billion.

[6] Moody's Investors Service, *Special Comments: NJ Public University Ratings, Stable Despite Downgrade*, March 2002.

Status

Capital Aid: Plans for a November 2004 bond referendum to support higher education capital needs did not proceed, and the critical need for a major infusion of state capital support persists. A bond referendum would significantly increase the state's ability to address the capacity, quality, and economic development goals that underlie the long-range plan for higher education.

As called for, the Commission formed a Higher Education Capital Planning Task Force, and the group began meeting in June 2005. The Task Force, comprising a broad base of state leaders, is reviewing past capital funding sources, methods, and levels in New Jersey as well as capital support practices in other states. The group will make recommendations to the Commission on Higher Education in early 2006 for a long-term public policy to guide state support for higher education capital needs in New Jersey, including long-term funding assistance for major capital needs at all 45 institutions eligible for state support and for regular capital maintenance and renewal of facilities at the 12 senior public institutions. An updated survey of needs will be completed and externally validated to inform long-term funding considerations. Recommendations will be made within the context of overall funding for higher education.

Greater Financing Flexibility: As recommended, the Educational Facilities Authority developed draft legislation to create options, such as working capital loans to institutions, a state credit support mechanism, and innovative financing, that provide greater flexibility to the colleges and universities in order to lower their financing costs without additional cost or debt for the state. Efforts will continue to have such legislation introduced and adopted.

5. External Funds

Revenues for higher education come primarily from state and local appropriations, student tuition and fees, and various external funding sources. While adequate and predictable state support is essential, the level of external funding is also an important factor in the competitiveness and support of institutions. When compared with counterparts in other states, New Jersey's public institutions receive lower levels of funding from private gifts and contracts, endowment income, or federal grants and contracts.

Status

By 2010, public colleges and universities in New Jersey, particularly the four-year institutions, should leverage state and local appropriations and student tuition and fees to increase revenues from private gifts and contracts, endowment income, and federal grants and contracts. Institutional goals should be established to increase the percentage of revenue from external funds and be more competitive in this regard with peer institutions.

It should be noted that the degree to which other goals under this objective are achieved will affect the extent to which external funds are increased.

Eight institutions selected this component as one of their primary internal institutional goals. Based on two-year rolling averages that smooth annual fluctuations in this area, five of those institutions increased the percentage of revenue from external funds in 2003-2004 over 2002-2003 levels.

OBJECTIVE V – Encourage and enhance coordination and collaboration between and among all educational institutions in the state, including P-12 schools and associate and baccalaureate degree-granting institutions, to facilitate transition from each educational level to the next, to develop mutually beneficial partnerships, and to improve the quality of teaching and learning at all levels.

RATIONALE

In the knowledge economy, high-quality educational opportunities are essential for success – success of the individual and of the economy. Without improvements to our educational system, the United States is in danger of losing its status as a leader in the global economy. Other nations have rapidly increasing rates of college participation and graduation that outpace those in this country. It is imperative that systemic collaboration be employed to more effectively and efficiently prepare students for life and the workforce. The entire education system, from preschool through graduate school, must work together and be held accountable for efficiently meeting the needs of students and the state.

National reports indicate the need for higher education to (1) align curriculum and expectations across educational sectors, (2) support students in the transition from high school to college, and (3) improve teacher quality. New Jersey will be well served by coordination of efforts, joint endeavors, shared or pooled resources, systemic collaboration among sectors and among institutions, avoidance of unnecessary duplication, and efficient transfer of students from associate degree-granting to baccalaureate degree-granting institutions.

ONGOING ACTION COMPONENTS

1. Alignment of P-12 and Higher Education (P-20)

The smooth transition of students between high school and college requires alignment among prekindergarten-to-grade-12 (P-12) curriculum frameworks, standards, and assessments; high school graduation requirements; and higher education admissions-related requirements. Failure to develop such alignments has an impact on student decisions to attend college, the need for remediation, retention rates, time to degree completion, and potential duplication of courses.

Status

The Department of Education, Presidents' Council, and Commission on Higher Education should develop specific strategies and projects to increase alignment between the P-12 education system and higher education. Some efforts have been made in this regard.

> Colleges and universities actively participated in the Department of Education's twelfth-grade options pilot program in 2003 and 2004, creating additional opportunities, such as increased college course availability and other experiences, for high school seniors who have completed most of their graduation requirements at conclusion of the junior year. Forty-eight high schools across the state are involved with the Department's twelfth-grade option; 45 of these involve college initiatives. As a result of the Department's pilot program and other dual-enrollment opportunities, thousands of high school students enrolled in college-level courses in 2004, the majority of which were provided by community colleges.
>
> The pilot project to establish a preschool-to-graduate-school collaboration in the eight southern counties continues to build partnerships and enhance alignment.
>
> Focus groups were held collaboratively by the Department of Education, the Commission on Higher Education, the State Chamber of Commerce, and the Educational Testing Service to discuss the need for remediation or skill development for high school graduates entering college or the workforce.

While strategies were not developed by 2004 to address the need for correlating higher education admissions-related requirements and college placement tests with P-12 curriculum frameworks, standards, and the High School Proficiency Assessment, the state has made a commitment in recent months to address this issue.

> New Jersey has joined the American Diploma Project (ADP), a network of 18 states established to implement recommendations from the 2005 national summit on strengthening the high school diploma. While ADP encompasses a number of initiatives, a primary focus for New Jersey is the alignment of academic standards in high school with the knowledge and skills required for success in the first year of college. The Presidents' Council and Commission on Higher Education are working collaboratively with the Governor's office, the Department of Education, and the business community on the ADP. The Presidents' Council's Emerging Issues Committee established a task force of chief academic officers that has begun developing a set of benchmarks for English and mathematics that reflect a shared understanding of the skills necessary for success in first-year college courses.
>
> Initial discussions are underway among education, state government, and business leaders to develop a cohesive and structured partnership to collaboratively address P-20 issues.

2. Teacher Preparation, Retention, and Recruitment

Teacher quality is the key to improved student-learning outcomes. Nationally, the demand for more teachers in this decade is projected to be close to two million. This is exacerbated by the fact that up to 50 percent of teachers leave the profession within five years.[7] *In addition, New Jersey has specific critical shortage areas, such as math, science, and special education, and the state needs hundreds of certified preschool teachers to fulfill the mandate of the Abbott v. Burke Supreme Court decision. There are four critical challenges facing higher education institutions and schools:*

- *To prepare substantially more teachers*
- *To systematically work to retain teachers in the profession*
- *To ensure that teachers have the skills necessary to improve student achievement with an increasingly diverse student population*
- *To ensure sufficient teachers in particular fields and types of districts*

Status

Several strategies were recommended to address these challenges, and some have been undertaken already.

- Consistent with the federal "No Child Left Behind" requirements, New Jersey collaboratively defined a "highly qualified teacher." Colleges and universities assisted in offering programs for teachers who did not meet the standards, and the percentage of teachers who are "highly qualified" has increased significantly; close to 94 percent of the teachers statewide are highly qualified.
- Efforts have not yet been undertaken by the Department of Education to estimate the number of additional teachers needed by 2010. Once that is done, the Commission on Higher Education and Presidents' Council will establish a specific long-term plan to ensure that enough qualified P-12 teachers are educated to meet that demand by 2010. In the interim, the colleges and universities will continue to increase teacher education graduates, particularly in high-demand areas.
- The Commission and Presidents' Council have initiated discussions to improve articulation and transfer between community and senior institutions, with an initial focus on programs to prepare students for P-3 teaching certificates.
- In 2004, the Commission completed an assessment of the outcomes of current recipients of the Commission's three teacher education grant programs, and based on that assessment, a new, targeted grant program should be developed for implementation in collaboration with the Department of Education.
- Consistent with the adoption of standards-based regulations for the preparation of educators, colleges and universities are implementing standards-based reform in their teacher and administrator preparation programs. All teacher/administrator

[7] Kathleen Szuminski, "Teacher Development in CTE," *In Brief*, no. 21 (2003).

preparation programs were required to be standards-based by September 2005. In May 2004, colleges and universities provided the Department of Education with information about which national accreditation they would seek. By January 2009, all of the institutions must have acquired this national accreditation.

- In an effort to retain teachers longer and improve teacher quality, colleges and universities with teacher preparation programs should play an active role in providing mentoring and induction support for beginning teachers. An intensive mentoring training effort was conducted by the Department of Education in spring and summer of 2005, in an effort to upgrade the quality of the mentoring provided to novice teachers. Teacher mentoring programs across the state should now provide positive induction experiences, which are reflected in improved retention rates of new teachers.
- The community colleges and senior institutions were called upon to work with the Department of Education to offer standards-based, high-quality alternate route options for teacher certification. The Department's Master of Arts in Teaching alternate route option was expanded, as called for, and the Department indicates that there are sufficient high-quality, standards-based alternate route options available to provide access to all who are interested.

3. Stimulating Partnerships

There is a wealth of P-12 and higher education partnerships of various sizes and scopes. Some are institutionalized, and others are dependent on the continuing dedication and interest of a few individuals. Those that provide simultaneous renewal and improvement of schools and teacher education are particularly effective. To address longstanding problems, the state should capitalize on and stimulate local, regional, and statewide partnerships that are highly successful.

Status

The partnership that has grown out of the federal GEAR UP state grant program is an extraordinary example of collaboration to address state goals. In August 2005, the Commission on Higher Education was awarded a six-year, $20.9 million federal GEAR UP grant, following the completion of its initial grant of $12 million in 1999. The highly successful GEAR UP partnership is a collaborative project established among dozens of entities that work to ensure that students in Abbott school districts are prepared for college and the workplace. Participants include middle and high schools; colleges and universities; community agencies; the state Department of Education; the state Higher Education Student Assistance Authority; and the Commission, including the Educational Opportunity Fund and College Bound programs. Together, GEAR UP and College Bound will serve over 3,000 students and thousands of parents and teachers.

Consistent with the *Blueprint*, the Commission completed an inventory of P-12 and higher education partnerships in May 2005. The searchable database is available on the Commission's website, www.state.nj.us/highereducation. As of 2004, there were 272

partnerships in various categories, such as professional development, curriculum development, and the provision of academic services to students.

Partnerships that demonstrate measurable success in improving the quality of teaching and learning, such as professional development schools and similar systemic partnerships, should be recognized and replicated where possible with incentive funding. A special focus should be directed to exemplary partnerships in Abbott or other disadvantaged districts that seek to close the academic achievement gap between economically or educationally disadvantaged students and other segments of the population and/or to provide ongoing, standards-based preparation and professional development of educators.

4. Articulation and Transfer

Interinstitutional articulation is an essential component in the smooth transfer of students between institutions with little or no loss of credit and academic standing. Without effective collaboration there are extensive cost and capacity implications for students, institutions, and the state. The Presidents' Council and Commission on Higher Education, with advice from the Articulation and Transfer Coordinating Committee, will monitor the progress of seamless transfer of students among the state's degree-granting institutions and initiate new means to promote the collegial development of transfer policies.

The Presidents' Council and Commission on Higher Education oversee the New Jersey Statewide Transfer Initiative, which promotes the development and implementation of (1) articulation among community colleges and senior institutions, (2) transfer standards, and (3) mechanisms for enhanced communication about program changes and other issues affecting seamless transfer between institutions.

Status

- The state increased funding to support the transfer initiative by $217,000 in fiscal 2005, as requested by the Presidents' Council. A plan for continued support with consideration of a combination of ongoing state support and other funding sources should be developed.
- Significant progress has been made on the NJ Transfer project, which now provides students and advisors with electronic access to the articulation and equivalency information between the 19 community colleges and most participating baccalaureate degree-granting institutions in New Jersey. To ensure the accuracy and currency of the data, the community colleges continue to submit new/revised courses for review by the baccalaureate institutions. By June 2006, all participating institutions should be sending and/or receiving electronic transcripts to enhance the admission and enrollment process for transfer students.
- Nevertheless, there continues to be a need to build on the information and mechanisms available through NJ Transfer and create new ways to address

articulation among institutions that will allow for more effective, efficient, and seamless student transfer. In response to a request from the Abbott Subcommittee of the Joint Committee on the Public Schools, the Council and Commission are, as a first step, working on a collaborative effort to analyze articulation and transfer for students who wish to earn a Preschool-to-Grade-Three teaching certificate. Initial recommendations will be made in fall 2005 to create a more seamless experience for these students.

- The Articulation and Transfer Coordinating Committee began analyzing the level of institutional course and GenEd acceptance across all programs, and will report its findings to the Council and Commission in February 2006, with recommendations for continued progress in the area of articulation and transfer policy.
- In fall 2005, the Coordinating Committee, in cooperation with the Commission, should conduct a random survey of students transferring from New Jersey community colleges to baccalaureate degree-granting institutions in the state. The survey should measure progress and identify barriers to transfer; results will be discussed by the Council and Commission in March 2006.
- In fall 2006 and annually thereafter, the participating senior institutions should report to the Commission the number of students transferring through dual-degree programs. The Commission will work with the Coordinating Committee to review and assess outcomes of these students in September 2008 and annually thereafter.
- By March 2006, the Presidents' Council and Commission should hold a transfer and articulation seminar for presidents, faculty, and academic officers to review articulation and transfer policy and principles and discuss additional means of improving the student transfer experience.

OBJECTIVE VI - Encourage and expedite systemic, innovative, and institutionalized partnerships and other collaborations between higher education and other sectors of society, including business and industry, the nonprofit sector, and the public sector to help meet the state's most pressing workforce needs and to create nationally competitive programs of research and development.

RATIONALE

Intellectual capital underpins the state's future prosperity in an economy that is driven by knowledge, information, and technology. Human development and economic development are interrelated and depend substantially on higher education. All types of colleges and universities have opportunities and responsibilities for workforce training, because New Jersey competes with other states and other nations for high-tech entrepreneurs, companies, and technically trained workers.

Similarly, research and development are critical to the advancement of knowledge and societal well-being. The productivity and competitiveness of the state's economy depend on maintaining a strong research and development environment for New Jersey businesses, the military, and the public welfare. The presence of high-quality research universities is a vital element in the synergy among successful research-dependent businesses, military bases, and the higher education sector.

Higher education is challenged to deliver enhanced research and prepare people of all backgrounds to contribute to society. Increased state support for faculty and facilities, efficient and strategic use of resources, enhanced coordination and collaboration, and targeted initiatives are required to address this challenge.

ONGOING ACTION COMPONENTS

1. Establish Systemic Institutional and Industry Partnerships to Meet Workforce Demands

Workforce development is one key function for the state's higher education system that must adapt to emerging industries and the skills they need in their workforce to sustain New Jersey's economic competitiveness.

Status

The plan calls for the development of systemic partnerships among colleges and universities and business and industry to meet related higher education workforce needs.

A great deal has occurred since the adoption of the plan to create such systemic partnerships, and efforts are ongoing.

The John J.Heldrich Center for Workforce Development at Rutgers University completed phase I of a study (*Ready for the Job*) under the direction of the State Employment and Training Commission (SETC). The study covered more than 70 occupations in eight of New Jersey's key industries: construction, finance, health care, information technology, manufacturing, tourism/hospitality, transportation, and utilities. The study profiled the skills and training required for jobs where demand is expected to exceed the supply of qualified workers in the near future. The Center created a career education website for SETC, www.NJNextStop.org, to make the results of the studies available in an online format for New Jersey high school students and others.

The Commission on Higher Education, Presidents' Council, Department of Labor and Workforce Development, and State Employment and Training Commission cosponsored a conference in November 2003 at the Heldrich Center. The conference, entitled "Skills in Demand: The Role of Higher Education Institutions," addressed how postsecondary education institutions can best respond to the need for skilled workers in New Jersey's major industries. The group concluded that New Jersey educators and employers must collaborate further to develop a more prepared and qualified workforce. Suggested strategies included aligning curricula, where appropriate, with current and future demands of the labor market; institutionalizing the *Ready for the Job* project; and building on innovative workforce strategies with demonstrated success. A summary of the conference was provided to the Presidents' Council's Emerging Issues Committee and the Commission to inform their joint efforts to improve employer satisfaction and address workforce demands.

In 2005, the Center will profile the skill requirements of additional industry sectors in New Jersey. Phase II of the SETC project will explore the changing workforce needs of retail and wholesale trade, business services, e-commerce, and education.

The Commission, working with the Department of Labor and Workforce Development, identified occupations with the greatest projected need for individuals with associate, baccalaureate, and advanced degrees and examined those data in relation to the total number of degrees granted by New Jersey colleges and universities in related fields. While projections of this type are moving targets, and employers recruit graduates from both in-state and out-of-state institutions, the data can be helpful in anticipating demand for additional graduates. Since fiscal 2002, several new degree and certificate programs have been created for high-demand occupations, and colleges and universities have steadily increased the number of degrees awarded in several areas with projections of significant need for more graduates, including nursing (associate level), computer and information sciences (bachelor's level), counseling psychology (master's level), and medical scientists (doctoral level). In addition, computer and information sciences increased significantly, exceeding projected openings.

The Commission contracted with the Heldrich Center to conduct a survey of New Jersey businesses to help establish baseline data regarding employer satisfaction with recent New Jersey college graduates. The information collected in the survey will be used in conjunction with information gathered through focus groups, the projected needs in key occupations, and other studies to inform statewide efforts to raise the level of employer satisfaction over time. The Presidents' Council's Emerging Issues Committee began working with the Commission and the Heldrich Center to develop strategies by early 2006 to improve employer satisfaction and address demands for additional graduates in targeted areas.

The State Employment and Training Commission has worked with union leaders, the community college system, a few baccalaureate institutions, and various other partners to develop a statewide model for connecting registered apprenticeships in the building and construction trades to college degree programs throughout the state. NJ PLACE: Pathways Leading Apprentices to a College Education, is a collaborative effort to increase opportunities for professional and personal advancement of individual workers and to strengthen New Jersey's workforce. Articulation agreements for some of the building and construction trades are completed, and others are under development. The intention is to promote a new understanding of apprenticeships – not as an alternative to a college education, but rather as a pathway to a college degree.

In addition, Verizon has sponsored Career Connections, an initiative to bring employers and educators together to create industry-specific curricula that give students the skills they need to succeed in a modern workplace. Recent projects include a fall 2004 conference of top business, government, and academic leaders that showcased new training courses developed by New Jersey community colleges and their partners in the pharmaceutical, utility, health care, and hospitality industries.

The need for an increased number of graduates prepared in the fields of science and mathematics continues to grow. Targeted support has been sought to expand the pipeline to meet workforce needs, particularly in areas requiring math, science, and technology backgrounds. In 2005, the Commission on Higher Education requested an additional $2 million in state support for the state's College Bound program to enhance institutional programs. The funds would assist up to 1,500 more disadvantaged students in grades 6-12 to complete secondary school and successfully pursue a postsecondary education in the sciences, mathematics, or technology. Owing to ongoing fiscal constraints and extraordinary competing demands, additional funding has not been appropriated; the Commission will continue to advocate for increased College Bound funds.

The federal GEAR UP state project, in collaboration with College Bound, continues to work successfully to prepare students academically and socially for school, college, and the workplace. In August 2005, the Commission was awarded a six-year, $20.9 million GEAR UP grant, following completion of its initial $12 million grant in 1999. The GEAR UP project provides academic and college readiness services for students in Abbott districts. Together, GEAR UP and College Bound will serve over 3,000 students and thousands of parents and teachers.

Consistent with the *Blueprint's* call for specific efforts to address needs in health care and other professions that are severely stressed, the fiscal 2006 state budget includes a $3.5 million loan forgiveness program for mental health workers. In addition, the fiscal 2005 budget provided funds to enhance the pipeline for new nurses through nursing camp programs at four institutions across the state. Individual colleges and universities are also engaged in other targeted programs to address workforce needs in the area of health care.

NEW
Higher education institutions should establish systemic working relationships with the various trade associations in the state to assist with outreach to the business community.

2. Increase Linkages Between Corporate and Institutional R&D

New Jersey is a hub of corporate research and a leading state for R&D investments, but the state's higher education institutions lag behind the nation's per capita federal funding, which is partly explained by the state's relatively small higher education system. New Jersey's industry profile reflects strong commercial interests in interdisciplinary research that has been the focus of increased federal funding. The extent to which New Jersey universities become more competitive for these research dollars is critical.

Status

The initiative to increase New Jersey's national ranking in aggregate share of federal research dollars described on pages 11 to 13 will influence the state's attractiveness for businesses by providing excellent opportunities for the exchange of scientists, research, commercialization of intellectual property, and an educated and trained workforce.

In addition, the Jobs Growth and Economic Development Commission report issued in October 2004 emphasizes the need to accelerate the transfer of ideas into the New Jersey economy and the global marketplace. Consistent with that report, state government and higher education should collaborate to implement the following strategies.

- The New Jersey Economic Development Authority (EDA) and the New Jersey Commission on Science and Technology (CST) should continue efforts to develop innovation zones surrounding university, college, and hospital facilities in the Camden, Newark, and greater New Brunswick areas.

- The New Jersey Commission on Science and Technology (CST) should increase proof-of-concept funding, provide matching funds for industry research, and expand incubator environments for emerging businesses. Recent CST efforts include:

  $1 million in 2005 for the Commercialization of University Intellectual Property initiative, which funds university technology transfer offices to enhance their services

$500,000 in 2005 for New Jersey Technology Fellowships, which support science Ph.D. graduates to work as postdoctoral students in a New Jersey technology company

$1 million in 2005 for increased support for the Technology Incubator Network, which enhances services to early-stage companies

- Institutions should reward faculty who generate intellectual property, package innovations within and across universities, and review intellectual property and technology transfer procedures to minimize barriers to intrainstitutional and interinstitutional intellectual property agreements and streamline the time required to negotiate and execute material transfer agreements.

- Collaborative efforts should support launching new university enterprises through establishment of a seed fund for start-up companies, development of a statewide network of engineering and test facilities, and organization of a nonprofit New Jersey Technology Development Corporation. The corporation would operate across all public research universities (or within one of the universities) to encourage collaboration, fund proof-of-concept and seed projects, broker R&D contracts, and take other practical steps to enhance the universities' competitiveness.

NEW

3. Increase Overall Collaboration and Connections Among Business, Academia, the Military, and State and Local Government to Enhance the State's Intellectual Capital and Competitiveness

Broad-based efforts are essential to develop economic agendas that respond to the growing demands of a competitive environment. As a result of the global, knowledge-based economy, other nations are surpassing the United States' previously clear leadership in higher education and economic development, which suggests a growing economic vulnerability for the country. New Jersey must enhance the state's economy, and higher education must play a critical role.

The higher education community in New Jersey has been an active partner in maintaining a competitive economy in the state. Enhanced partnerships will be critical to sustaining New Jersey's position as a leader in key industries.

In fall 2004, the Heldrich Center held a briefing on the telecommunications environment, and in spring 2005, the Commission collaborated with the New Jersey Legislative Caucus on Science and Technology and Princeton University to sponsor a telecommunications summit, "Shaping New Jersey's Telecommunications Future." These events should serve as prototypes for future public/private symposia in other areas of science, technology, and economic development.

The Department of Labor and Workforce Development worked with a broad-based group of stakeholders, including the Commission and other higher education representatives, to hold a health care summit in October 2005.

Higher education should encourage and support the development of an ongoing statewide organization led by the private sector and including higher education leaders to identify and implement solutions to enhance New Jersey's competitiveness in the regional, national, and global economy.

New Jersey's educational infrastructure maintains a robust pipeline of future scientific and engineering (S&E) workers. New Jersey has the highest concentration of S&E workers and firms in America and takes pride in hosting Department of Defense R&D Centers. Colleges and universities should enhance their partnerships with S&E firms and Department of Defense R&D Centers in New Jersey to ensure that there is continued support for workforce needs and a continual flow of technical knowledge in both directions, and that a culture of scientific innovation is encouraged.

OBJECTIVE VII - Enhance the public research universities to improve (1) the overall educational excellence of the universities; (2) collaboration in teaching, research, and service; and (3) the state's competitiveness for federal and other support for research and development.

RATIONALE

A state's public research universities should serve as vanguard institutions. Over the years, their quality and accomplishments have shaped, to a large degree, the image and reputation of higher education within a state and even the image of the state itself. With missions deeply committed to research as well as teaching and learning, these universities should serve as centers to which other institutions and the states look for leadership.

The quality of public research universities has become a linchpin in state and national efforts to enhance economic development and prosperity. Research universities are at the forefront of innovation and perform a significant amount of the nation's basic research. Nurturing technology and innovation at these institutions drives business improvement and growth. And their integration of cutting-edge research with graduate and undergraduate education contributes greatly to preparing new generations of leaders in all fields.

New Jersey's three public research universities – Rutgers, The State University of New Jersey, the New Jersey Institute of Technology, and the University of Medicine and Dentistry of New Jersey – must play a central role in developing a higher education system that is among the best in the world. Such a distinction will not be possible without highly regarded, distinguished public research universities. It is essential, therefore, that the long-range plan addresses specific strategies and investments to improve the quality and competitiveness of its three public research universities.

ONGOING ACTION COMPONENTS

1. Components from other Objectives

An action plan for Objective VII of A Blueprint for Excellence was not developed in the initial plan in light of related discussions that were underway. However, several components of the plan that fall under other objectives are particularly pertinent to the improvement of the public research universities. Those components are listed below.

- Achieve institution-specific goals to improve student outcomes (page 8).
- Provide sufficient and reasonably predictable state support (page 27).

- Engage in strategic efforts to enhance research and increase the amount of federal and other research dollars coming to the universities (page 11).

- Increase linkages between corporate and institutional research and development (page 44).

- Establish systemic institutional and industry partnerships to meet workforce demand (page 41).

- Make progress toward achieving institution-specific faculty composition and development plans (page 14).

- Expand the boundaries of an institution through public service (page 13).

- Encourage and participate in an ongoing statewide organization led by the private sector to identify and implement solutions to enhance New Jersey's competitiveness in the regional, national, and global economy (page 46).

2. New Strategies

In addition to advancing in each of the areas above, additional specific strategies should be developed to achieve this objective.

By February 2006, two or three roundtable discussions should be held with the presidents and key staff from the three public research universities and representatives from the business sector, state government, the Commission on Science and Technology, and the Commission on Higher Education. Based on those discussions, specific strategies and focused resources for enhancing the competitiveness of the three public research universities should be recommended for discussion by the Presidents' Council and the Commission on Higher Education.

CONCLUSION

A Blueprint for Excellence calls for a new compact between higher education and the state to prepare students for the future, support economic development, and enhance the quality of life in New Jersey. It proposes an unprecedented level of state funding that is commensurate with the levels in other states that aspire, as New Jersey does, to national leadership. In return, higher education proposes a comprehensive response to state needs – from increasing capacity to improving quality, from increasing research to improving the state's economy, from increasing the quality and number of teachers to improving collaboration among educational sectors. In addition, higher education proposes to be held more accountable for its performance in the areas outlined in the plan.

These are extraordinary times: exciting because of the emergence of a knowledge economy, challenging because of the constraints on the state budget. As part of the new compact, higher education pledges to expand its resource base not only through state dollars, but also by increasing research funding, expanding private giving, accelerating internal efficiencies, launching additional collaborative efforts, and avoiding unnecessary duplication.

This long-range plan for higher education is critically important to the state, because it provides the coordinating blueprint to bring institutions and state and private sector leaders together to ensure New Jersey's future economic prosperity. The state's employment growth rate has started to fall behind the nation's, and concerted efforts must be made to revitalize the economy and maintain New Jersey's competitiveness in the rapidly changing global landscape.

The plan recognizes the need to phase in investments and fundamental changes. There is an urgency to begin, yet achievement of desired results will require time, collaboration, and persistence by all stakeholders. In one sense, considerable progress has been made in implementing the plan since it was adopted two years ago. Institutions have established internal goals and strategies to address key components of the plan, and they have identified peer groups to provide comparative contexts and inform their improvement strategies. The state has increased its long-standing commitment to an array of student financial aid programs. Two major task forces, involving state and institutional leaders, are underway to develop long-term public policy related to state support for institutions. And myriad other steps have been taken to advance the goals under each of the *Blueprint's* seven principal objectives.

On the other hand, the lingering fiscal constraints caused by the state's structural budget deficit have hindered any serious discussion or consideration of significantly increasing the level of state support for higher education, which is essential to the compact. In the coming years, increased state funding will be necessary to make the desired progress in achieving the state's goals for enhanced student access and outcomes, a highly skilled workforce, and sophisticated research and technology.

New Jersey stands at a crossroads. A handful of states will separate themselves from the others by harnessing the intellectual power of their colleges and universities to propel their economies forward and to increase the quality of life for all residents. This plan seeks to firmly establish New Jersey among those special states.

APPENDIX A
Institution-Specific Outcomes

Introduction

Using the Integrated Postsecondary Education Data System (IPEDS) and other national sources, the annual updates of the plan will provide outcome data on seven institution-specific components that are directly related to key state goals of enhancing student access, improving student outcomes, and increasing external funding. Baseline data for those components are provided, along with peer group comparisons where data are available, in Appendix A.

Institutions or sectors have identified peers that provide a national comparative context to assist in assessing progress in meeting the objectives of the *Blueprint.* In the case of the community colleges and the independent colleges and universities, **sector peer comparisons are provided for each of these sectors as a whole, comparing aggregate outcomes for each sector with the aggregate outcomes of its respective national sector.**

Each of the public research universities, nine state colleges and universities, and proprietary institutions individually identified a group of similar peer institutions for comparative purposes.* In those cases, **institutional peer comparisons are provided for each of these institutions, comparing the institution's outcomes with the average of the outcomes of its respective peers.** The number of institutions in each peer group and the variability among the peer institutions differs. In addition, some institutions chose to include both peer and aspirant institutions in their comparative groups, which provides a broader and more challenging comparison level.

In reviewing progress made since the plan was adopted in late 2003, it is important to recognize that these data provide a baseline. Changes are best assessed by examining trend data over several years, giving time for institutional initiatives to be reflected. As noted in the plan, external circumstances and funding levels will also significantly influence the degree to which some institutional goals can be met.

*Due to their unique missions, Thomas Edison State College and the University of Medicine and Dentistry of New Jersey are not included in most of the comparative data, although they have identified specific goals on which to focus primary efforts.

APPENDIX A (continued)

STUDENT RETENTION RATES

Comparative Data

Student retention rate is defined as the third-semester retention rate for first-time full-time degree-seeking freshmen. It should be noted that this rate will fluctuate somewhat with individual cohorts of students, and it will take time for institutional initiatives to be reflected.

The following retention data provide a comparative national context over two years for each of the public research universities, state colleges and universities, and proprietary institutions and for the community college and independent sectors.

Each of the senior public and proprietary institutions is compared below against itself and against a group of institutionally identified peer institutions, which have similar missions and student composition.

Public Research Universities

	2003	2004		2003	2004
NJIT	79%	79%	Rutgers	87%	87%
Peers	74%	78%	Peers	83%	83%

State Colleges/Universities

	2003	2004		2003	2004		2003	2004
Kean	75%	75%	Montclair	82%	84%	NJCU	69%	76%
Peers	78%	77%	Peers	71%	72%	Peers	72%	71%

	2003	2004		2003	2004		2003	2004
Stockton	83%	83%	Ramapo	87%	89%	Rowan	85%	86%
Peers	83%	83%	Peers	77%	73%	Peers	85%	85%

	2003	2004		2003	2004
TCNJ	95%	96%	Wm. Pat	75%	78%
Peers	86%	88%	Peers	75%	76%

Proprietary Independents*

	2003	2004		2003	2004		2003	2004
Berkeley	59%	59%	DeVry	47%	49%	Gibbs	62%	62%
Peers	62%	59%	Peers	62%	61%	Peers	56%	53%

The average rates for New Jersey's community college sector are compared below with the national average for community colleges. Independents are compared to the national average for independent institutions.

Community Colleges

	2003	2004
NJ	62%	61%
US	57%	57%

Public Mission Independents

	2003	2004
NJ	78%	77%
US	77%	76%

**University of Phoenix became operational in the year 2004. Hence, prior data are not available for this institution.*

APPENDIX A (continued)

UNDERGRADUATE GRADUATION RATES

Comparative Data

Graduation rates are for first-time full-time degree-seeking freshmen, as reported in the IPEDS:Graduation Rate Survey (GRS). It should be noted that these rates will fluctuate somewhat with individual cohorts of students, and it will take time for institutional initiatives to be reflected.

The following graduation data provide a comparative national context over two years for each of the public research universities, state colleges and universities, and proprietary institutions and for the community college and independent sectors.

Each of the senior public and proprietary institutions is compared below against itself and against a group of institutionally identified peer institutions, which have similar missions and student composition.

Public Research Universities

	fall 1997 cohort		fall 1998 cohort	
	4-Year	6-Year	4-Year	6-Year
NJIT	15%	49%	17%	53%
Peers	19%	50%	20%	51%

	fall 1997 cohort		fall 1998 cohort	
	4-Year	6-Year	4-Year	6-Year
Rutgers	40%	69%	40%	69%
Peers	32%	60%	32%	61%

State Colleges/Universities

	fall 1997 cohort		fall 1998 cohort	
	4-Year	6-Year	4-Year	6-Year
Kean	15%	47%	14%	45%
Peers	14%	40%	15%	40%

	fall 1997 cohort		fall 1998 cohort	
	4-Year	6-Year	4-Year	6-Year
Montclair	20%	56%	23%	57%
Peers	18%	42%	19%	42%

	fall 1997 cohort		fall 1998 cohort	
	4-Year	6-Year	4-Year	6-Year
NJCU	7%	37%	7%	37%
Peers	8%	33%	8%	34%

	fall 1997 cohort		fall 1998 cohort	
	4-Year	6-Year	4-Year	6-Year
Stockton	40%	65%	43%	64%
Peers	32%	58%	34%	59%

	fall 1997 cohort		fall 1998 cohort	
	4-Year	6-Year	4-Year	6-Year
Ramapo	28%	52%	36%	62%
Peers	23%	37%	30%	42%

	fall 1997 cohort		fall 1998 cohort	
	4-Year	6-Year	4-Year	6-Year
Rowan	31%	60%	37%	63%
Peers	46%	67%	47%	67%

	fall 1997 cohort		fall 1998 cohort	
	4-Year	6-Year	4-Year	6-Year
TCNJ	62%	82%	63%	81%
Peers	52%	71%	52%	72%

	fall 1997 cohort		fall 1998 cohort	
	4-Year	6-Year	4-Year	6-Year
Wm. Pat	15%	48%	13%	48%
Peers	20%	47%	21%	46%

Proprietary Independents

	fall 1997 cohort	fall 1998 cohort
	150% of normal time	150% of normal time
Berkeley	50%	50%
Peers	39%	50%

	fall 1997 cohort	fall 1998 cohort
	150% of normal time	150% of normal time
DeVry	39%	41%
Peers	39%	37%

	fall 1997 cohort	fall 1998 cohort
	150% of normal time	150% of normal time
Gibbs	80%	57%
Peers	39%	40%

APPENDIX A (continued)

UNDERGRADUATE GRADUATION RATES – continued

The average rates for New Jersey's community college sector are compared below with the national average for community colleges. Independents are compared with the national average for independent institutions.

Community Colleges

	fall 1997 cohort		fall 1998 cohort	
	2-Year	3-Year	2-Year	3-Year
NJ	4%	13%	4%	13%
US	N/A	23%	N/A	23%

Public Mission Independents

	fall 1997 cohort		fall 1998 cohort	
	4-Year	6-Year	4-Year	6-Year
NJ	44%	61%	45%	61%
US	51%	65%	53%	66%

APPENDIX A (continued)

MINORITY GRADUATION RATES

Comparative Data

Graduation rates are for first-time full-time degree-seeking freshmen who are black or Hispanic, as reported in the IPEDS: GRS survey. It should be noted that these rates will fluctuate somewhat with individual cohorts of students, and it will take time for institutional initiatives to be reflected.

The following minority graduation data provide a comparative national context over two years for each of the public research universities, state colleges and universities, and proprietary institutions and for the community college and independent sectors.

Each of the senior public and proprietary institutions is compared below against itself and against a group of institutionally identified peer institutions, which have similar missions and student composition.

Public Research Universities

	fall 1997 cohort		fall 1998 cohort	
	4-Year	6-Year	4-Year	6-Year
NJIT	6%	30%	4%	39%
Peers	12%	45%	14%	41%

	fall 1997 cohort		fall 1998 cohort	
	4-Year	6-Year	4-Year	6-Year
Rutgers	22%	56%	27%	58%
Peers	23%	51%	23%	51%

State Colleges/Universities

	fall 1997 cohort		fall 1998 cohort	
	4-Year	6-Year	4-Year	6-Year
Kean	16%	43%	11%	39%
Peers	10%	34%	11%	34%

	fall 1997 cohort		fall 1998 cohort	
	4-Year	6-Year	4-Year	6-Year
Montclair	16%	49%	20%	51%
Peers	12%	33%	12%	34%

	fall 1997 cohort		fall 1998 cohort	
	4-Year	6-Year	4-Year	6-Year
NJCU	4%	30%	3%	29%
Peers	7%	30%	7%	32%

	fall 1997 cohort		fall 1998 cohort	
	4-Year	6-Year	4-Year	6-Year
Stockton	25%	54%	32%	55%
Peers	21%	46%	23%	49%

	fall 1997 cohort		fall 1998 cohort	
	4-Year	6-Year	4-Year	6-Year
Ramapo	20%	47%	26%	59%
Peers	15%	34%	26%	35%

	fall 1997 cohort		fall 1998 cohort	
	4-Year	6-Year	4-Year	6-Year
Rowan	19%	44%	23%	52%
Peers	25%	46%	24%	48%

	fall 1997 cohort		fall 1998 cohort	
	4-Year	6-Year	4-Year	6-Year
TCNJ	44%	71%	43%	64%
Peers	40%	59%	44%	64%

	fall 1997 cohort		fall 1998 cohort	
	4-Year	6-Year	4-Year	6-Year
Wm. Pat	11%	38%	7%	38%
Peers	12%	36%	11%	34%

Proprietary Independents

	fall 1997 cohort	fall 1998 cohort
	150% of normal time	150% of normal time
Berkeley	47%	49%
Peers	36%	52%

	fall 1997 cohort	fall 1998 cohort
	150% of normal time	150% of normal time
DeVry	32%	34%
Peers	36%	26%

	fall 1997 cohort	fall 1998 cohort
	150% of normal time	150% of normal time
Gibbs	82%	59%
Peers	33%	32%

APPENDIX A (continued)

MINORITY GRADUATION RATES – continued

The average rates for New Jersey's community college sector are compared below with the national average for community colleges. Independents are compared with the national average for independent institutions.

Community Colleges

	fall 1997 cohort		fall 1998 cohort	
	2-Year	3-Year	2-Year	3-Year
NJ	1%	6%	1%	6%
US	N/A	17%	N/A	16%

Public Mission Independents

	fall 1997 cohort		fall 1998 cohort	
	4-Year	6-Year	4-Year	6-Year
NJ	28%	49%	32%	49%
US	29%	44%	37%	53%

APPENDIX A (continued)

LOW-INCOME GRADUATION RATES

Comparative Data

Graduation rates are for first-time full-time degree-seeking freshmen from low-income families. Students are classified as low-income if their TAG New Jersey Eligibility Index score is less than or equal to 2499. It should be noted that these rates will fluctuate somewhat with individual cohorts of students, and it will take time for institutional initiatives to be reflected.

The following low-income graduation data provide a comparative context over two years for each of the public research universities and state colleges and universities and for the community college sector. There are no comparable national data for this indicator, and no data are available for the independent or proprietary institutions.

Public Research Universities

	fall 1997 cohort		fall 1998 cohort			fall 1997 cohort		fall 1998 cohort	
	4-Year	6-Year	4-Year	6-Year		4-Year	6-Year	4-Year	6-Year
NJIT	13%	46%	17%	54%	Rutgers	25%	61%	28%	62%

State Colleges/Universities

	fall 1997 cohort		fall 1998 cohort			fall 1997 cohort		fall 1998 cohort	
	4-Year	6-Year	4-Year	6-Year		4-Year	6-Year	4-Year	6-Year
Kean	16%	48%	17%	43%	Montclair	19%	58%	17%	50%
	fall 1997 cohort		fall 1998 cohort			fall 1997 cohort		fall 1998 cohort	
	4-Year	6-Year	4-Year	6-Year		4-Year	6-Year	4-Year	6-Year
NJCU	5%	34%	7%	42%	Stockton	25%	58%	38%	61%
	fall 1997 cohort		fall 1998 cohort			fall 1997 cohort		fall 1998 cohort	
	4-Year	6-Year	4-Year	6-Year		4-Year	6-Year	4-Year	6-Year
Ramapo	25%	56%	24%	51%	Rowan	20%	51%	19%	43%
	fall 1997 cohort		fall 1998 cohort			fall 1997 cohort		fall 1998 cohort	
	4-Year	6-Year	4-Year	6-Year		4-Year	6-Year	4-Year	6-Year
TCNJ	48%	74%	44%	63%	Wm. Pat	10%	45%	8%	45%

Community Colleges

	fall 1997 cohort		fall 1998 cohort	
	2-Year	3-Year	2-Year	3-Year
NJ	2%	9%	2%	8%

APPENDIX A (continued)

STUDENT TRANSFER RATES

Comparative Data

For the community colleges, student transfer rate is the three-year rate of transfer for first-time full-time degree-seeking freshmen. For baccalaureate institutions, student transfer rate represents the percentage of entering first-time degree-seeking undergraduate students who are transfers. It should be noted that these rates will fluctuate somewhat with individual cohorts of students, and it will take time for institutional initiatives to be reflected.

The following transfer data provide a comparative context over two years for each of the public research universities and state colleges and universities and for the community college and the independent sectors. There are no comparable national data for the baccalaureate institutions, and there are no transfer data available for proprietary institutions.

Public Research Universities

	2003	2004		2003	2004
NJIT	41%	38%	Rutgers	33%	33%

State Colleges/Universities

	2003	2004		2003	2004		2003	2004
Kean	46%	45%	Montclair	43%	40%	NJCU	45%	52%
	2003	2004		2003	2004		2003	2004
Stockton	50%	51%	Ramapo	41%	39%	Rowan	39%	35%
	2003	2004		2003	2004			
TCNJ	14%	16%	Wm. Pat	41%	38%			

Public Mission Independents

	2003	2004
NJ	24%	24%

The average rates for New Jersey's community college sector are compared below with the national average for community colleges.

Community Colleges

	fall 1997 cohort 3-Year	fall 1998 cohort 3-Year
NJ	16%	16%
US	16%	16%

APPENDIX A (continued)

EXTERNAL RESEARCH DOLLARS

Comparative Data

External research dollars is the difference between the total academic R&D expenditures and institutionally funded R&D expenditures as defined by National Science Foundation (NSF). It should be noted that the availability of funds for research grants fluctuates from year to year.

The following data on external research dollars provide a comparative national context over two years. The data are only for those institutions/sectors that report research expenditures in the NSF R&D expenditures survey. It is important to note that the NSF survey does not capture all types of R&D funds generated by institutions. In future years, data may be provided for New Jersey institutions to give a more complete accounting of external research funds.

Each of the senior public institutions is compared below against itself and against a group of institutionally identified peer institutions, which have similar missions and student composition.

Public Research Universities

	2002	2003
NJIT	$45,381,000	$50,890,000
Peers	$55,297,273	$61,233,000

	2002	2003
Rutgers	$163,809,000	$179,320,000
Peers	$147,297,882	$162,354,794

	2002	2003
UMDNJ	$136,238,000	$148,945,000
Peers	$55,207,417	$62,338,750

State Colleges/Universities

	2002	2003
Montclair	$472,000	$502,000
Peers	$4,548,904	$4,760,710

	2002	2003
NJCU	$184,000	$326,000
Peers	$6,160,200	$8,535,200

	2002	2003
Rowan	N/A	$5,964,000
Peers	N/A	$866,000

	2002	2003
TCNJ	$1,194,000	$1,724,000
Peers	$7,660,000	$8,874,125

Independents are compared with the national average for independent institutions.

Public Mission Independents

	2002	2003
NJ	$23,038,333	$29,619,600
US	$44,094,474	$48,675,461

APPENDIX A (continued)

EXTERNAL FUNDS

External funds are revenues other than federal, state, and local government appropriations; tuition and fees; state grants and contracts; and the financial aid portions of federal and local grants and contracts.* This category includes private gifts and contracts, additions to endowments, investment income, and non-financial aid portions of federal and local grants and contracts.

The data below show external funds as a percentage of total revenue. Because periodic, large capital grants are reported on this IPEDS line, there may be significant fluctuations for an institution. To smooth these fluctuations, the data are reported as two-year moving averages. Two-year moving averages of the actual dollar amounts are provided as well.

The following data on external funds provide a comparative context over two years for each of the senior public and proprietary institutions, and for the community college and independent sectors.**

Public Research Universities

	2002-03	2003-04		2002-03	2003-04		2002-03	2003-04
NJIT	21.3%	30.1%	Rutgers	19.4%	19.4%	UMDNJ	15.7%	15.8%
($000)	$39,916	$65,465	($000)	$265,884	$275,003	($000)	$228,328	$237,070

State Colleges/Universities

	2002-03	2003-04		2002-03	2003-04		2002-03	2003-04
Kean	N/A	1.5%	Montclair	6.1%	4.8%	NJCU	5.2%	4.1%
($000)		$2,229	($000)	$10,474	$8,780	($000)	$5,247	$4,256

	2002-03	2003-04		2002-03	2003-04		2002-03	2003-04
Stockton	11.0%	10.4%	Ramapo	5.7%	5.3%	Rowan	14.6%	12.1%
($000)	$10,697	$10,505	($000)	$4,813	$4,685	($000)	$21,801	$18,966

	2002-03	2003-04		2002-03	2003-04		2002-03	2003-04
TCNJ	10.8%	11.0%	Wm. Pat	4.0%	5.0%	Edison	3.6%	2.2%
($000)	$16,656	$17,148	($000)	$5,634	$7,218	($000)	$907	$622

Proprietary Independents

	2002-03	2003-04		2002-03	2003-04		2002-03	2003-04
Berkeley	0.2%	0.1%	DeVry	0.4%	0.0%	Gibbs	0.4%	2.8%
($000)	$41	$19	($000)	$189	$0		$77	$608

Community Colleges

	2002-03	2003-04
NJ	7.3%	7.9%
($000)	$61,399	$70,343

Public Mission Independents

	2002-03	2003-04
NJ	44.8%	57.5%
($000)	$742,258	$1,392,472

** State capital grants are included in the data above, because they are reported to IPEDS with all capital grants. In future years we hope to devise a means to pull out state capital grants, which are generally distributed from state bond funds.*

*** Consistent with the definition used here for external funds, services such as net patient services at UMDNJ and other revenues generated directly by institutional operations are not included.*

APPENDIX A (continued)

STUDENTS SERVED

Comparative Data
The number of students served by an institution represents the total headcount of all students enrolled in credit-bearing or remedial/ESL courses at that institution.

The following enrollment data provide a comparative context over two years for each of the public research universities, state colleges and universities, and proprietary institutions and for the community college and independent sectors.

Public Research Universities

	fall 2003	fall 2004		fall 2003	fall 2004		fall 2003	fall 2004
NJIT	8,770	8,249	Rutgers	51,268	50,552	UMDNJ	4,942	5,329

State Colleges/Universities

	fall 2003	fall 2004		fall 2003	fall 2004		fall 2003	fall 2004
Kean	12,978	12,897	Montclair	15,204	15,637	NJCU	9,361	8,799
	fall 2003	fall 2004		fall 2003	fall 2004		fall 2003	fall 2004
Stockton	6,881	7,002	Ramapo	5,631	5,617	Rowan	9,667	9,688
	fall 2003	fall 2004		fall 2003	fall 2004		fall 2003	fall 2004
TCNJ	6,911	6,812	Wm. Pat	11,210	11,409	Edison	10,233	11,000

Proprietary Independents

	fall 2003	fall 2004		fall 2003	fall 2004		fall 2003	fall 2004
Berkeley	2,200	2,313	DeVry	2,547	2,007	Gibbs	1,651	1,462
	fall 2003	fall 2004						
Phoenix	0	188						

Community Colleges

	fall 2003	fall 2004
NJ	145,850	152,043

Public Mission Independents

	fall 2003	fall 2004
NJ	61,823	63,563

APPENDIX B
Supporting Data

Estimated enrollment growth was based on the following data and assumptions. (pages 18 -20)

Enrollment at 57 NJ Institutions of Higher Education (Headcount)

	Fall 2002	Projected Growth	Enrollment by 2010
Undergraduates	305,246	42,000 – 46,000	347,246 – 351,246
Graduates	56,511	7,871	64,382
Total	361,757	49,871 – 53,871	411,628 – 415,628
		(50,000 – 54,000)	

Factors, such as retention rates, time to degree, enrollment patterns, and economic conditions will affect this projection.

Projected Undergraduate Enrollment Increases (Headcount)

Recent High School Graduates

Year	Fall 2002	Estimated Enrollment	Estimated Increase
2004	32,200	34,841	2,641
2005	32,200	37,091	4,891
2006	32,200	40,331	8,131
2007	32,200	42,797	10,597
2008	32,200	44,148	11,948
2009	32,200	45,471	13,271
2010	32,200	46,491	14,291

Not Recent High School Graduates

Year	Change in Undergraduate Enrollment of Other Than Recent NJ High School Graduates
1996-1998	-2,497
1998-2000	5,935
2000-2002	19,501
2002-2004	13,665
Avg (8-year)	4,576

Enrollment projections for traditional students were based on the goal of increasing the rate of recent NJ high school graduates attending NJ colleges and universities to 44 percent by 2010.

Cumulative Impact in 2010 of Undergraduate Enrollment Increases (Headcount) 2007- 2010

Year	Recent HS Graduates	Other Students	Adjusted Total
2007	4,452	1,922	6,374
2008	6,176	2,365	8,541
2009	8,938	3,082	12,020
2010	14,291	4,576	18,867
Cumulative Total	33,858	11,945	45,802

Each year's projected enrollment growth was first prorated between 4-year and 2-year enrollments, based on the 2002 distribution. 2002 retention rates were then applied to these numbers. The adjusted totals for the 3 years were then added to the projected number of additional students for 2010 in order to calculate the total increase in enrollment in 2010.

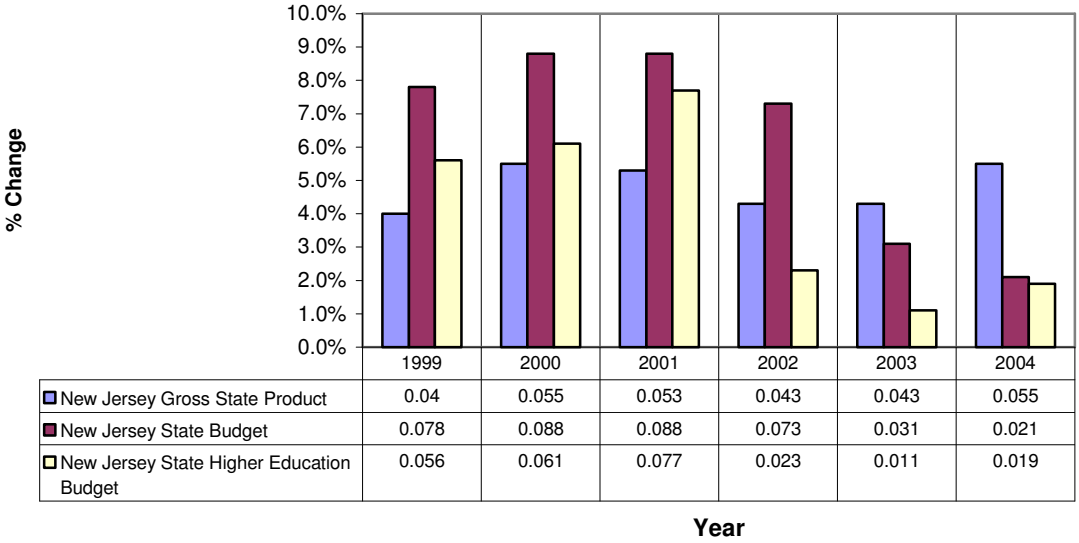
APPENDIX B (continued)

Projected Enrollment Increases (Headcount) of Graduate Students

Year	Total Fall 2002	Estimated Enrollment	Estimated Increase
2004	56,511	58,880	2,369
2005	56,511	59,763	3,252
2006	56,511	60,660	4,149
2007	56,511	61,570	5,059
2008	56,511	62,493	5,982
2009	56,511	63,430	6,919
2010	56,511	64,382	7,871

The graduate student enrollment increase projection was based on continuing the average annual growth of 1.5% for the past 15 years.

NJ GSP vs. State Budget vs. Higher Education Budget 1999-2004 (page 28)



	1999	2000	2001	2002	2003	2004
New Jersey Gross State Product	0.04	0.055	0.053	0.043	0.043	0.055
New Jersey State Budget	0.078	0.088	0.088	0.073	0.031	0.021
New Jersey State Higher Education Budget	0.056	0.061	0.077	0.023	0.011	0.019

APPENDIX B (continued)

Community College Operating Support (pages 30 & 31)
The following targets, based on the current level of state support of $194,938,000 (approximately $1,690 per FTE) are recommended to move to a one-third state share:

- By fiscal 2007, receive an additional $15,000,000 for a total of $209,938,000.
- By fiscal 2008 receive an additional $15,000,000 for a total of $224,938,000.
- By fiscal 2009 receive an additional $15,000,000 for a total of $239,938,000.
- By fiscal 2010, receive an additional $15,000,000 for a total of $254,938,000.
- By fiscal 2011 receive an additional $15,000,000 for a total of $269,938,000.
- By fiscal 2012 receive an additional $15,000,000 for a total of $284,938,000.
- By fiscal 2013 receive an additional $15,000,000 for a total of $299,938,000.
- By fiscal 2014 receive an additional $15,000,000 for a total of $314,938,000.

Methodology Utilized to Determine Community College Proposal:

1. Cost per FTE was calculated based on historical trends (audited data for FY1992 – FY 2004) and on best estimates for FY2005 – FY 2006.
2. This figure was multiplied by estimated FTE's for FY2006 to get total expenditures. This amount was reduced by 4 percent to account for "other" revenue.
3. In order to determine the total amount of expenditures anticipated in FY2014, cost per FTE was increased by 2 percent per year for FY2007 through FY2014. FTEs were increased by 2 percent per year for FY2007 – FY2008 and by 1% per year for FY2009 to FY2014. Cost per FTE was then multiplied by FTEs for 2014. The amount was reduced by 4 percent to determine total adjusted expenditure for FY 2014. One-third of this amount represents the State share for 2014.
4. The state aid in 2006 was then subtracted from the 2014 state share. The result was divided by 8 to determine the annual budget increase necessary to achieve 1/3, 1/3, 1/3 by 2014.
5. Funding may have to be adjusted to account for enrollment growth.

ICUAA Funding History (pages 31 & 32)

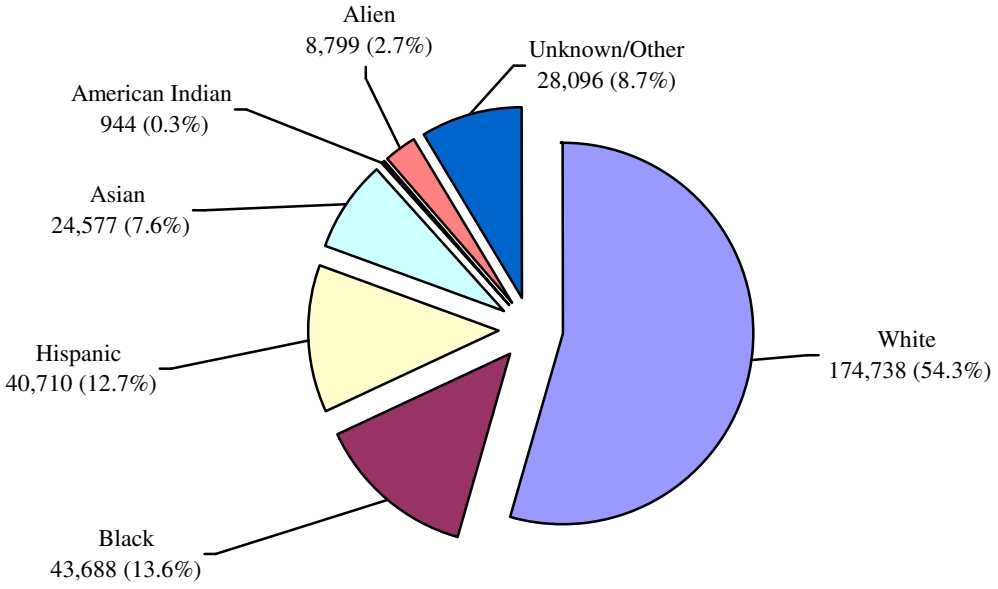
	Gap From Full Funding	% of Full Funding
FY2006	($5,280,591)	81.94%
FY2005	($4,752,021)	83.45%
FY2004	($8,949,968)	71.78%
FY2003	($7,690,000)	76.10%
FY2002	($5,222,180)	82.99%
FY2001	($5,438,185)	82.28%
FY2000	($5,657,822)	80.42%
FY1999	($6,190,135)	77.44%
FY1998	($6,228,685)	76.47%
FY1997	($7,185,530)	72.18%
FY1996	($3,463,644)	85.36%
FY1995	($4,137,373)	82.86%
FY1994	($6,208,320)	77.20%
FY1993	($4,715,261)	80.94%
FY1992	($6,461,168)	75.60%
FY1991	($8,988,628)	69.50%
FY1990	($3,879,172)	85.94%
FY1989	($1,299,404)	94.90%
FY1988	($997,140)	95.50%

APPENDIX C
Overview of the System

Total Undergraduate and Graduate Enrollment by Sector - NJ Colleges and Universities, Fall 2004

	Undergraduate	Graduate	Total
Public Research Universities	43,690	20,440	64,130
State Colleges & Universities	74,111	14,750	88,861
Community Colleges	152,043	-	152,043
Public Mission Independents	43,209	20,354	63,563
Proprietary Institutions	5,970	-	5,970
Religious Institutions	2,529	3,336	5,865
NJ Total	**321,552**	**58,880**	**380,432**

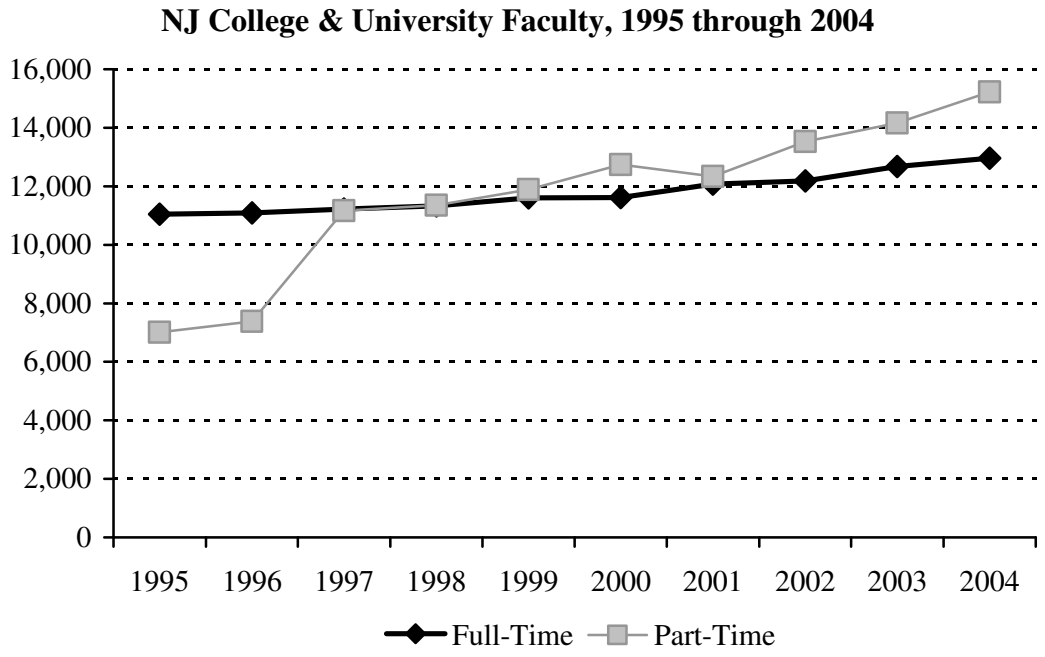
Race/Ethnicity Distribution Undergraduate Students, Fall 2004



APPENDIX C (continued)

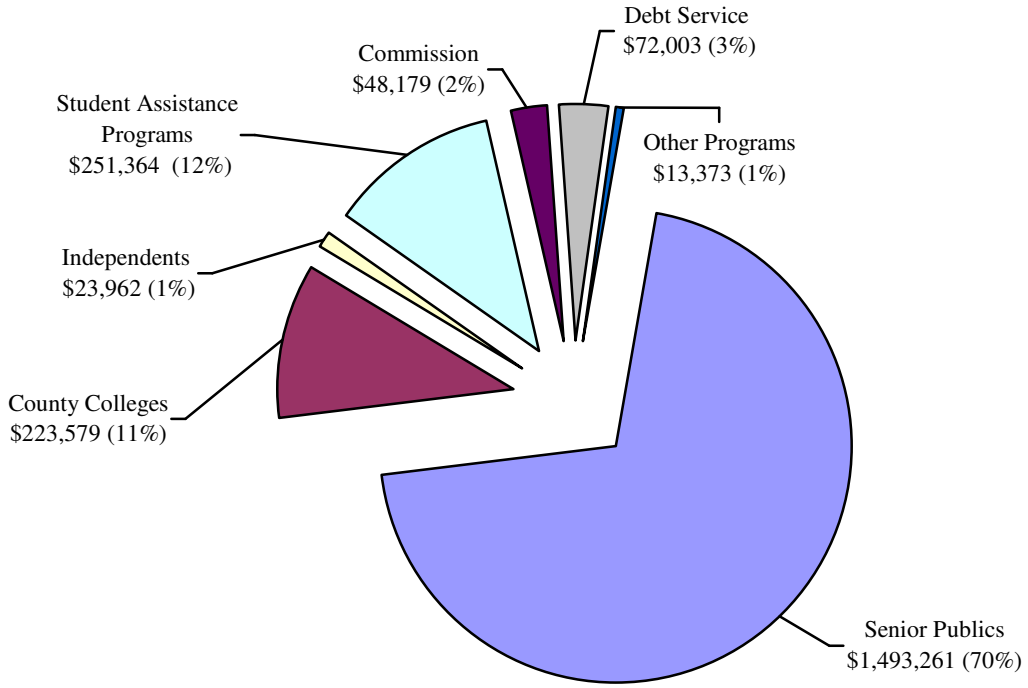
Faculty Employed at NJ Institutions by Sector, Fall 2004

	Full-Time		Part-Time		TOTAL
	#	%	#	%	
Public Research Universities	4,934	64.2%	2,746	35.8%	7,680
State Colleges & Universities	2,623	42.1%	3,614	57.9%	6,237
Community Colleges	2,250	28.6%	5,624	71.4%	7,874
Public Mission Independents	2,911	49.8%	2,935	50.2%	5,846
Proprietary Institutions	138	35.8%	247	64.2%	385
Religious Institutions	108	63.9%	61	36.1%	169
NJ Total	**12,964**	**46.0%**	**15,227**	**54.0%**	**28,191**



APPENDIX C (continued)

Degrees and Certificates Awarded by New Jersey Colleges and Universities, 2004

	Cert.	Assoc.	Bach.	Mast.	Doct.	1st Prof.	Total
Public Research Universities	43	98	8,857	3,743	692	1,128	14,561
State Colleges & Universities	4	205	13,511	3,013	7	-	16,740
Community Colleges	862	12,409	-	-	-	-	13,271
Public Mission Independents	79	174	7,833	5,071	444	377	13,978
Proprietary Institutions	126	1,310	565	-	-	-	2,001
Religious Institutions	4	12	286	379	39	157	877
NJ Total	**1,118**	**14,208**	**31,052**	**12,206**	**1,182**	**1,662**	**61,428**

Higher Education Budget, Fiscal 2006 ($000)