

To better meet employers' needs for training and retraining programs, institutions should allow employers to design programs and curricula that are responsive to their specific needs. Also, institutions should provide more information to employers about how the higher education system can address their needs.

Rapidly changing demands create a continuing challenge for higher education to meet workforce needs effectively. Further, surpluses and shortages that occur within the labor market are difficult to respond to in a timely fashion with the appropriate number of well-prepared college graduates (or trained personnel).

In order to meet higher education needs in all areas of the state, current and proposed degree and certificate programs at all levels, including graduate and professional degree programs, should be evaluated in relation to projected labor demands and regional needs. New programs should be established only where program quality and a need for additional graduates is demonstrated.

Health/Health Care

Institutions in all sectors provide education and training for health care workers. UMDNJ has special responsibilities for medical, dental, and allied health programs and research. The university also provides direct patient care. Ongoing changes in medical practice, government programs, and the health needs of citizens create significant challenges, and suggest that the state may soon face a surplus of physicians and hospital beds. These factors affect the numbers and types of educational programs needed for physicians, both at the undergraduate and graduate medical education level, and for other health professionals.

Based on recommendations by the Advisory Graduate Medical Education Council, there should be a statewide initiative to reduce the number of residents, decrease the percent of residency positions filled by international medical graduates, and achieve an appropriate balance between primary and specialty care. Teaching hospitals should reduce reliance on residents as low-cost providers and seek other ways to provide cost-effective services.

Institutions should reexamine and prioritize instructional health care programs, and continue coordination with other institutions, to

ensure that programs are cost-effective and that offerings address the state's health care needs. Preparation of students should emphasize primary care and allied health programs such as nurse practitioner and physician assistants, etc.

In addition to delivering services cost-effectively, the high cost of health care can be addressed by educating individuals about disease prevention and by promoting prenatal care and healthy lifestyles.

Higher education institutions should address prevention in health care programs and work proactively to provide information and education to communities on health-related issues.

Environment

Protection of the environment is critical to preserving New Jersey's quality of life. Higher education plays an important role in advancing environmental research and technology development, and in raising awareness about environmental issues.

Higher education institutions should make the remediation of environmental hazards a priority issue for research, and include environmental studies in the curriculum.

Higher education institutions should stress environmental preservation as a value, and should provide strong leadership on campus and within the larger community that encourages students and citizens to take pride in their surroundings and protect natural resources.

Community/Social Stability

As New Jersey's population has become increasingly diverse, so too have campus communities, with growing numbers of minority and foreign-born students. On campus, and in the larger community, there is a need to bring together diverse populations and promote a sense of harmony and respect.

Campus administrators, faculty members, and boards of trustees should provide strong leadership, both on campus and in the larger community, in an effort to foster a spirit of civility and respect among religious, racial, ethnic, and language groups. Institutions should stress cultural diversity as a value and offer academic programs and student services that invite students (at all levels) onto their campuses to celebrate the richness of various cultures.

Higher education institutions are uniquely equipped to help the state and local communities identify solutions to prevalent social issues. They conduct social science research and provide public service to address issues such as hunger, homelessness, crime, substance abuse, and violence. Higher education institutions play a unique role within their host communities, often serving as leaders or focal points for community initiatives.

The Presidents' Council should appoint a task force composed of community leaders and college and university social scientists to identify specific research and public service efforts that could be undertaken by higher education institutions to make substantial contributions to the social health of the state.

AFFORDABLE, ACCESSIBLE HIGHER EDUCATION

Across the nation, states struggle with limited resources and rising costs of government. As a result, higher education faces increasingly fierce competition for scarce discretionary funding. Significant increases in public tuition and fees are directly related to limited state resources, because the revenue to support higher education comes primarily from the government and student tuition and fees. When adjusted for cost of living, New Jersey ranks in the top one-third nationally in state support per student. In unadjusted dollars, New Jersey also ranks in the top one-third in dollars from tuition and student assistance. In order to ensure accessibility, the recommendations in the following areas address the maintenance of affordable tuition and fees for residents attending college in New Jersey.

The overall cost to operate a college or university is a major factor in the cost of attending college. Therefore, institutional cost-containment and resourcefulness is essential to affordable, accessible higher education. As resources become increasingly scarce, institutions will have to be diligent in streamlining administration, enhancing instructional productivity, holding down costs, and collaborating with their peers and the private sector. Changes in the way things have traditionally been done are called for, as are difficult decisions to discontinue high-cost and poorly enrolled programs, as well as programs for which there is limited demand for graduates, while focusing more specifically on state and institutional priorities.

Cost efficiency in providing high-quality programs and services should be enhanced at every institution. Institutions should

continually reevaluate program offerings and organizational structures, including administrative procedures and student services, in order to cost-effectively enhance the quality of the institution, promote student access, and meet state needs. And, in order to promote greater institutional flexibility, current faculty appointment policies and procedures should be examined by each institution or by sectors.

In October 1995, the Commission on Higher Education adopted recommendations for funding higher education which stressed the importance of a cost-sharing partnership between the state and students and their families, based on the significant benefit of higher education to both the student and society. (See Appendix A for summary of recommendations.)

The state should move toward the Commission on Higher Education's funding recommendations issued in October 1995 which focused on:

- **an appropriate partnership of shared responsibility for higher education among students, government, and the institutions;**
- **adequate and predictable operating support for each sector as well as sector-specific capital funding support; and**
- **a continued commitment to student assistance programs, with an emphasis on need-based, full-time undergraduate aid.**

A subgroup of the Master Plan Steering Committee studied mission-based (formula) funding as requested in the Commission's funding report. The subgroup concluded that formula funding is viable, but it is very costly in time and personnel to develop and to follow. In addition, funding formulas are often established, but not adhered to as a result of fiscal constraints and competing needs for limited state resources. The Committee, therefore, does not recommend formula funding.

Over one-third of all students entering the state's public colleges and universities lack proficiency in reading or writing and in math computation; over half are lacking in elementary algebra. Lack of adequate preparation is a barrier to access to higher education, and the cost of providing remediation to underprepared students is estimated at about \$50 million annually.

While many of these students' remediation needs can be addressed in a semester or two while they pursue their regular academic programs, severe remediation and literacy needs must be addressed before students begin college-level studies. Literacy and basic skills training are offered in a number of settings, including colleges, and are funded through a variety of mechanisms.

Since severe remediation and literacy needs must be addressed before pursuing a postsecondary degree, this process should be conducted outside the regular higher education funding structure. The Commission and the Departments of Education and Labor should jointly appoint a task force to examine literacy and remediation programs serving severely underprepared students and recommend how services and funding can be coordinated most efficiently and effectively to serve the needs of the state.

- **A preadmissions test for higher education should determine if students are prepared, moderately underprepared, or severely underprepared in the three basic skill areas. Before moving on to postsecondary education, students who are severely underprepared in more than one basic skill area should receive remediation delivered and funded as determined by the task force.**

The Tuition Aid Grant (TAG) Program currently helps make higher education accessible and affordable to over 60,000 state residents, and is considered by many nationally to be a model for need-based state student financial assistance. However the rapidly escalating cost of the TAG program, which grew from \$75 million in fiscal year 1991 to \$135 million in fiscal year 1996, raises issues for the future.

Recognizing fiscal constraints and the state's goal of maintaining affordable, accessible higher education, the Commission on Higher Education, in consultation with the Student Assistance Board and the Presidents' Council, should examine, in the context of other state and federal aid programs, the overall funding structure of the TAG program. The program examination should provide a recommended funding structure for tuition assistance within the New Jersey higher education system to effectively meet the needs of the state and its changing population.

Along with TAG, the Educational Opportunity Fund (EOF) Program for economically and educationally disadvantaged students also helps make

higher education affordable and accessible. Over 13,000 students are currently assisted through EOF, which provided over \$30 million in state funds in fiscal year 1996. It is essential that the state dollars dedicated to each of these programs are used most effectively to assist students who are committed to furthering their education.

The Student Assistance Board (SAB) and the EOF Board should review academic progress requirements for TAG and EOF students to ensure that annual grants are renewed only for students who progress sufficiently each semester to warrant continued state funding.

As state funds are provided for TAG and EOF students to attend institutions, it is important that students use those funds at an institution that will effectively meet their needs. If these students attend an institution that has poor academic outcomes for TAG and EOF students, state dollars are not well spent and students are not well served.

Institutions should meet minimum group expectations for the academic progress of TAG and EOF students.

- **Institutions should establish and monitor the average academic progress of students receiving TAG and EOF funds.**
 - **The Commission, in conjunction with the Presidents' Council, the EOF Board, and the SAB, should determine minimum group expectations for the academic progress of TAG and EOF students. Institutions falling below that minimum should implement a plan for improvement in order to continue eligibility to receive students who are supported by TAG and EOF funds.**
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SYSTEMWIDE EXCELLENCE, EFFECTIVENESS, AND EFFICIENCY

Graduation rates are an important measure of institutions' success in preparing students for careers in a competitive economy. Therefore, institutions should continue to focus on improving graduation rates for all students who are in degree programs. In spite of the state's ongoing efforts, equal access to and success in higher education for New Jersey's neediest students, underprepared students, and minorities are often elusive. Performance indicators in these areas provide partial evidence of some

success in fulfilling important state goals. Nevertheless, there are data indicating significant differences between graduation rates for minority students and those for white students in all sectors. Similarly, graduation rates are also lower for students from the lowest income brackets.

Increasing graduation rates for all students, particularly for minority and economically disadvantaged students, should be a statewide priority. Competitive incentive funding should be provided to institutions that demonstrate outstanding performance or significant improvement in assisting minority and economically disadvantaged students to graduate or transfer successfully to four-year institutions.

Significant developments in technology and networking, coupled with increased demand for distance learning opportunities, require systemwide and campuswide changes. Technology training for faculty, students, and staff is essential, as is coordination of services.

The technological infrastructure between and within institutions should be enhanced to put higher education in the forefront of applying information technologies to teaching, learning, and research. Future Equipment Leasing Fund allocations should be prioritized to assist in this effort. Further, institutions should collaborate in establishing regional centers for higher-order preparation of faculty in the use of technology.

The transfer of courses and programs from one institution to another is particularly important to students, and successful transfer saves money and time for students and the state. The Presidents' Council encourages interinstitutional transfer and articulation, and is developing criteria for "full faith and credit" transfer agreements between county colleges and other institutions of higher education. To further facilitate course and program transfers:

The Presidents' Council should establish a task force to develop a computerized system for information on the transferability of courses and programs between New Jersey institutions of higher education.

Based on the demographic data, demand for higher education will increase steadily in New Jersey, but increases will be limited compared with many other states. Student demand and institutional location are not always

coordinated, but a need for new institutions is not envisioned in light of new technologies, distance learning, and interinstitutional cooperation. However, to ensure sufficient capacity and appropriate higher education programs across the state through 2005:

The Commission should appoint a special task force to examine the structure of the system and its ability to meet the needs of the state, especially in educationally underserved areas. Information on programs by level and location should be considered, along with clearly focused and differentiated institutional missions. As proposals to meet citizen and employer needs are developed and evaluated, the financial and educational impact on quality, efficiency, and effectiveness should guide decisions.

Statistical analysis confirms that New Jersey's small geographic area and relative affluence are related to the state's long-standing atypical pattern of high outmigration and low immigration of college students. In addition, while New Jersey has a diverse mix of higher education institutions, there is a limited number of highly selective institutions which often are desired by the state's highest-achieving high school graduates. Consequently, many of the state's most affluent and well-prepared graduates select public and independent institutions outside New Jersey. A limited number of institutions with a higher level of prominence and selectivity would increase the choice available to the state's accomplished high school graduates seeking higher education, and would attract more high-achieving nonresidents as well.

Some of the state's four-year institutions should consider enhancing their prominence and selectivity in order to further develop the diversity and quality of the state's higher education system and attract a larger number of New Jersey's best and brightest students, as well as accomplished out-of-state students.

State resources for higher education are limited and institutional missions should be clearly focused and differentiated to effectively and efficiently meet the state's needs.

In order to utilize limited state funding most effectively, expansion of institutional missions should be considered only in the context of statewide needs, as well as program and institutional quality.

Institutions of different types and across sectors should form partnerships for resource sharing and coordination in program

development and delivery, recognizing that complementary programs and services serve students effectively and economically.

Institutions, for the most part, determine what will be supported with the funds provided by the state. Some special-purpose funds also are provided by the state, but they often are not connected systematically to state objectives. Dedication of additional state funds to address statewide priorities would direct institutional attention to central state concerns while maintaining local autonomy and the necessary base operating funds to run institutions.

Additional state funding equal to a small percentage of the state budget for higher education should be appropriated for competitive incentive funding for institutions to address state priorities as recommended in the areas of improved graduation rates, urban revitalization, and research infrastructure.

CONCLUSION

The Proposed Master Plan for Higher Education in New Jersey is based on assumptions about New Jersey's future and critical state needs. It is designed to make New Jersey's higher education system a major force for developing the full potential of the state and its citizens through high-quality, affordable postsecondary education.

The proposed broad policy recommendations emphasize the importance of cost-effectiveness, collaboration, and quality. They address needs for New Jersey's economic development, workforce training, health, environmental preservation, and community and social stability, while recognizing the importance of the effective use of public resources. Realization of the vision for higher education requires a coordinated system of institutions with an appropriate balance between autonomy and accountability. Institutions must clearly focus and differentiate missions, while operating in the context of the master plan.

APPENDIX A

SUMMARY OF COMMISSION ON HIGHER EDUCATION

FUNDING REPORT

The Commission on Higher Education was guided by the statewide goals for higher education -- accessibility and affordability, institutional excellence, and accountability. Certain assumptions about New Jersey's social, political, and economic environment provide the context for the panel's deliberations. With a growing and increasingly diverse population, New Jersey higher education faces difficult challenges to meet the workforce needs of the future. Funding austerity due to greater demands on the state budget is likely to continue despite the increasing pressures on the higher education system caused by projected growth in enrollments, more students requiring remedial education and English language skills, a growing need for student financial assistance, and increasing state needs. The additional financial burden of maintaining the infrastructure and keeping pace with technological changes further exacerbates the situation.

The Funding Partnership for Educational Operating Costs:

From a systemwide perspective, the Commission reaffirms the long-standing policy of a cost-sharing partnership between the state and students and their families based on the significant benefit of the degree to both the student and society. As partners, institutions are called upon to establish clearly defined mission statements and provide evidence of resource sharing, institutional efficiencies, the receipt of private funds, programmatic quality, and infrastructure maintenance. Although state appropriations must be made annually, the practice of multi-year budgeting is recommended to enhance fiscal planning and management efforts.

For **senior public institutions**, the Commission recommends a more complete statement of educational operating costs, to include previously identified items plus fringe benefits, salary increases, and student fee-supported educational services. A funding partnership in which the state assumes greater responsibility by contributing approximately two-thirds of educational operating costs, with students and their families paying one-third, is endorsed by the Commission.

The Commission recommends that the state's share of educational operating costs for the **community college sector** be increased to 33%, to be phased in over five to seven years. A 33% share is also recommended for the sectorwide county and student/family components. The partners' shares currently vary widely from college to college, and the recommendations apply only to the sector as a whole.

In the cases of **both the senior public institutions and the county college sector**, the Commission recognizes that it is unrealistic to expect the state and students to commit to a fixed percentage share of uncontrolled costs. Therefore, until adequacy of funding and mission differentiation issues are explored through the master planning process, increases in educational operating costs should be limited to inflationary costs on current

operations and negotiated salary and benefit agreements. New programs or initiatives should be funded through reallocations or private funds. Expansion of programs and services should only be funded within the framework of institutional mission and planning and the higher education master plan.

The Commission recommends that state support for the **independent sector** gradually increase to the amount it would receive if the statutory formula allocation were fully funded. This recommendation recognizes that these institutions help meet public policy goals at a significant savings compared with what would be the cost to the state to increase the capacity of public institutions.

Capital Funding:

The Commission recommends continuation and enhancement of the Higher Education Facilities Trust Fund and the Equipment Leasing Fund. However, these programs will not address the overwhelming backlog of maintenance and renewal projects at institutions. Therefore, the Commission proposes a state commitment to fund a five-year facilities renewal program for the senior public institutions and additional Chapter 12 state bonding capacity for county college facilities renewal. The Commission proposes that institutions also provide a share of the funds for facilities renewal.

Student Assistance:

The Commission recommends continued support for state student assistance programs with a focus on undergraduate assistance to maintain affordability, access, and choice for New Jersey students. The panel recommends annual increases in state appropriations for TAG and EOF grants recognizing annual cost increases. The panel proposes more efficient and effective use of current funding, where possible, and assessments to determine what changes, if any, might be necessary for programs to better meet their goals.