



NEW YORK STATE COMMISSION ON
HIGHER EDUCATION



A Preliminary Report of Findings and Recommendations

December 2007

New York State Commission on Higher Education
Alfred E. Smith Office Building • 29th Floor
80 South Swan Street • Albany, NY 12210

www.hecommission.state.ny.us

Transmittal Letter

December 17, 2007

The Honorable Eliot Spitzer
Governor of New York
State Capitol
Albany, New York 12224

Dear Governor Spitzer:

On behalf of the New York State Commission on Higher Education, I herewith submit this Preliminary Report of Findings and Recommendations.

This report recommends major policy changes that, if implemented, will result in the long-term improvement of higher education in New York State. The Commission believes strongly that such changes are needed if New York is to remain competitive in the 21st Century, a time when education is more important than ever for the intellectual, cultural and economic wellbeing of our citizens.

Members of the Commission and staff have made every effort to base recommendations on the best data available about higher education in New York and beyond our borders. We have solicited advice from leaders throughout the nation, especially academic leaders. We have invited public comment in the development of the report. During the next six months, the Commission will invite further public comment, refine our recommendations and submit the Final Report by June 1, 2008.

I know I speak for all members of the Commission when I say that it is an honor to participate in this important work. We look forward to completing our charge to identify ways to improve higher education throughout New York.

Respectfully submitted,

A handwritten signature in black ink, reading "Hunter R. Rawlings, III". The signature is written in a cursive style with a prominent flourish at the end.

Hunter R. Rawlings, III
Chairman

New York State Commission on Higher Education

Commission Members

Hunter Rawlings, *President Emeritus, Cornell University, Chair*
Stephen Ainlay, *President, Union College*
Donald Boyce, *President, Student Assembly of the State University of New York*
Nancy Cantor, *Chancellor, Syracuse University*
John Clark, *Interim Chancellor, State University of New York*
Milton Cofield, *Regent, New York State Board of Regents*
Lois DeFleur, *President, Binghamton University, State University of New York*
John Dyson, *Chairman, Millbrook Capital Management, Inc.*
Peter Fishbein, *Special Counsel, Kaye Scholer LLP*
Hon. Deborah Glick, *Chair, Assembly Higher Education Committee*
Matthew Goldstein, *Chancellor, City University of New York*
Carl Hayden, *Chair, State University of New York Board of Trustees*
Elena Kagan, *Dean, Harvard Law School*
Marcía Keizs, *President, York College, City University of New York*
Abraham Lackman, *President, Commission on Independent Colleges and Universities*
Hon. Kenneth LaValle, *Chairman, Senate Higher Education Committee*
Eduardo Martí, *President, Queensborough Community College*
Richard Mills, *Commissioner of Education*
Myron Mitchell, *Professor, College of Environmental Science & Forestry, State University of New York*
Robert Paaswell, *Professor, City College, City University of New York*
Hon. Crystal Peoples, *Member of the New York State Assembly*
Bruce Raynor, *President, UNITE HERE*
William Scheuerman, *President, United University Professions*
Joel Seligman, *President, University of Rochester*
John Sexton, *President, New York University*
John Simpson, *President, University at Buffalo, State University of New York*
Thomas Schwarz, *President, Purchase College, State University of New York*
Marc Shaw, *Trustee, City University of New York*
Lauren Talerma, *Student, Queens College, City University of New York*
Adam Urbanski, *President, Rochester Teachers Association*

Staff

John Reid, *Executive Director*
Kathy Bennett, *Chief of Staff*
Craig Abbey
Elizabeth Bringsjord
David Crook
James Ketterer
Ernesto Malave
Pamela Sandoval
Daniel Sheppard
Jane Sovern
Clarissa Wertman
Ryan Greer, *Intern*
Laura Mahoney, *Intern*

Executive Order

No. 14: ESTABLISHING THE NEW YORK STATE COMMISSION ON HIGHER EDUCATION

May 29, 2007

WHEREAS, New York State's public higher education system is among the world's largest, educating more than 400,000 degree candidates on 64 campuses in the State University of New York ("SUNY") and more than 200,000 degree candidates on 23 campuses in the City University of New York ("CUNY"), and also educating hundreds of thousands of non-degree students; and

WHEREAS, New York State's private colleges and universities educate 460,000 students on 150 campuses; and

WHEREAS, New York's colleges and universities must meet the challenges posed by rapidly changing demographic, scientific, technological and economic trends in order to prepare students to be successful in commerce, science, education, government, social sciences, humanities and the arts; and

WHEREAS, many students currently enter New York's higher education institutions lacking certain knowledge and skills necessary for success in college; and

WHEREAS, many well prepared and qualified students are confronted with financial and other barriers to obtaining a college education; and

WHEREAS, New York's colleges and universities should attract, prepare and retain the best students and faculty from the State, the nation and other countries; and

WHEREAS, New York's colleges and universities should educate their students about the importance and value of public and community service and afford them opportunities to pursue such endeavors as part of their formal education; and

WHEREAS, college and university research and degree programs must strike a balance between the opportunity for students and faculty to pursue research which is untethered to predetermined economic objectives, and the need to align a significant portion of their efforts and resources to New York's economic agenda, regional economic development plans and the needs of New York's current and future workforce; and

WHEREAS, all New York residents, businesses and community groups are vitally affected by the quality of higher education;

NOW THEREFORE I, Eliot Spitzer, Governor of the State of New York, by virtue of the authority vested in me by the Constitution and the laws of the State of New York, do hereby order as follows:

1. There is hereby established the New York State Commission on Higher Education ("Commission").
2. The Commission shall consist of 30 members appointed by the Governor, including two members appointed upon the recommendation of the Speaker of the Assembly, two upon the recommendation of the Temporary President of the Senate, one upon the recommendation of the Minority Leader of the Assembly, one upon the recommendation of the Minority Leader of the Senate, one member of the faculty of a college or university within SUNY, one member of the faculty of a college or university within CUNY, one SUNY student and one CUNY student.
3. The Governor shall select a Chair of the Commission from among the members. A majority of the members of the Commission shall constitute a quorum, and all recommendations of the Commission shall require approval of a majority of the total members of the Commission.
4. The Governor shall appoint an Executive Director of the Commission, who shall be an employee of one of the State agencies or instrumentalities herein directed by the Governor to render assistance to the Commission.
5. The Commission may establish such committees as it deems necessary to facilitate the analysis and formulation of recommendations pertaining to specific areas of inquiry and concern, and may enlist the assistance of experts in the subject matter of each committee.
6. The Commission shall conduct a review and analysis of New York's colleges and universities, with particular emphasis on public higher education and the SUNY and CUNY systems. To the maximum

extent possible, the Commission shall consider, and where appropriate incorporate, the expertise and learning of prior commissions devoted to higher education in New York State, and that of State agencies and instrumentalities with authority over and expertise in higher education.

7. The Commission's inquiry shall include analysis of:
 - (a) academic standards and performance in New York's colleges and universities, with particular emphasis on SUNY and CUNY;
 - (b) access to higher education in New York State and particularly to the SUNY and CUNY systems;
 - (c) the degree to which public primary and secondary education adequately prepare New York students to enter and succeed in college;
 - (d) the mission of the State's community colleges, and the proper balance between preparing students to enter four-year institutions upon graduation and to obtain high-value jobs upon graduation;
 - (e) the extent to which SUNY and CUNY research and degree programs are aligned with economic development objectives of the State and the region of the State where each campus is situated;
 - (f) the financing of public colleges and universities, including State support, federal support, tuition, alumni support and other sources of income;
 - (g) the reasonable costs of an education for students in various SUNY and CUNY degree programs, and the available sources and amounts of financial aid for students who need assistance to meet such costs;
 - (h) the types and amounts of financial support provided by the State to private colleges and universities and their students, and the rationale for such programs;
 - (i) the degree to which different types of SUNY institutions (i.e. two-year colleges, four-year colleges, technical colleges, university centers and the SUNY schools within Cornell University) are treated and governed similarly or differently within SUNY and by the State;
 - (j) the degree to which different SUNY campuses are permitted to tailor their offerings, practices and policies to the specific needs of their students, faculties and the surrounding communities; and
 - (k) the nature of public and community service opportunities and degree requirements afforded and enforced at SUNY, CUNY and more generally in New York's colleges and universities.
8. The Commission shall make recommendations which it deems necessary or advisable for:
 - (a) improving the academic standards and performance in New York's public colleges and universities;
 - (b) increasing access to higher education in New York State, with particular attention to improving access to public higher education;
 - (c) better aligning the curricula and standards in New York's public primary and secondary schools so that high school graduates are fully prepared to enter and succeed in the New York's public colleges and universities;
 - (d) with respect to the State's community colleges:
 - (i) improving their graduation rates;
 - (ii) better aligning their curricula and standards so that graduates who wish to enter a four-year SUNY or CUNY school can easily and successfully do so; and
 - (iii) improving the alignment of community college offerings and standards with current and future community workforce needs;
 - (e) increasing the alignment of SUNY and CUNY research centers and degree programs with the economic development objectives of the State and the region of the State where each campus is situated, while maintaining the ability of students and faculty to pursue research untethered to any predetermined economic objectives;

- (f) improving the governance of the SUNY and CUNY systems including, but not limited to, recommendations concerning the feasibility and benefits of allowing SUNY and CUNY campuses to more substantially tailor their offerings, practices and policies to the specific needs of their students, faculties, and their surrounding communities;
 - (g) improving the financing of public colleges and universities through greater flexibility in tuition practices, increasing alumni and other private support, increasing direct State assistance, and providing flexibility for schools to obtain other sources of funding;
 - (h) improving the affordability of higher education for needy students by directing more of the available aid to students with the greatest demonstrated need and allowing for greater flexibility in tuition pricing; and
 - (i) improving the public and community service opportunities offered to SUNY and CUNY students as part of their formal education.
9. In undertaking its review and analysis, the Commission may request documents, conduct public hearings, take the testimony of witnesses in the form and manner which it deems most efficient, consult with education experts concerning the issues specified herein, and take all other actions necessary or advisable for carrying out its functions.
10. The Commission shall issue a preliminary report of its findings and recommendations on or before December 1, 2007. The initial report shall be made in a form and with sufficient specificity to assist the Governor and the Legislature in the budgeting process. The Commission shall issue a final report of its findings and recommendations on or before June 1, 2008. The report shall be submitted to the Governor, the Speaker of the Assembly, the Majority Leader of the Senate, the Minority Leader of the Assembly, the Minority Leader of the Senate, the Commissioner of Education, the Chancellor of SUNY, the Chancellor of CUNY and the Chancellor of the New York State Board of Regents.
11. No member of the Commission shall be disqualified from holding any public office or employment, nor shall he or she forfeit any such office or employment by virtue of his or her appointment hereunder. Members of the Commission shall receive no compensation for their services, but shall be allowed their actual and necessary expenses incurred in the performance of their functions hereunder. All members of the Commission shall serve at the pleasure of the Governor and vacancies shall be filled in the same manner as original appointments.
12. Every agency, department, office, division or public authority of this State shall cooperate with the Commission and furnish such information and assistance as the Commission determines is reasonably necessary to accomplish its purpose.

G I V E N under my hand and the
Privy Seal of the State
in the City of Albany
this twenty-ninth day
of May in the year two
thousand seven.

BY THE GOVERNOR



Secretary to the Governor

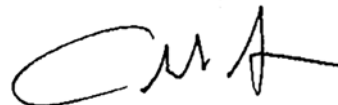


Table of Contents

Preface	1
Executive Summary	4
Introduction	9
Chapter 1 – Cornerstones in a Foundation for Excellence	12
<i>Adapting and Connecting to a World of Ideas</i>	
Chapter 2 – Building on a Foundation for Excellence	14
<i>Building World-Class Research, Technology, a Diverse Workforce</i>	
Attracting World-Class Research	
Connecting Faculty, Researchers, and Students to a World of Ideas	
Developing a Diverse Workforce	
Adapting Quickly to Change	
Chapter 3 – Making Excellence Available to All	25
<i>Access and Preparedness, Seamless Articulation, Removing Financial Barriers</i>	
Education Partnership Zones	
College Readiness	
Transfer and Articulation	
Financial Aid and Considerations of Access	
Low-Cost Student Loans	
Chapter 4 – Organizing for Excellence	36
<i>Governance and Regulatory Reform</i>	
SUNY and CUNY Governance	
SUNY Mission Differentiation	
Public Higher Education Regulatory Reform	
SUNY System Administration	
Chapter 5 – Resources Required for Excellence	44
<i>Operational and Capital</i>	
NYS Compact for Higher Education	
Differential Tuition and Tuition Deregulation	
Community College Finances	
Capital Reinvestment	
Layered Capital Financing	
Greening of CUNY and SUNY	
Appendix	55
Appendix A: Summary of Findings and Recommendations	
Appendix B: White Papers Received by the Commission	
Appendix C: Hearings and Testimony	
Appendix D: References Cited in Report	
Appendix E: Bibliography	
Appendix F: Regional Maps of New York State	

Preface

Context for the Report

Historically, state policies concerning higher education, especially the State University of New York (SUNY) and the City University of New York (CUNY), have been reviewed periodically by specially appointed commissions. The work of these commissions, beginning with the Young Commission in 1948, led to the creation of the State University of New York as well as many of the transformative changes to New York's higher education system, including state aid for private institutions (Bundy Commission, 1968) and the Tuition Assistance Program—one of the nation's most generous need—based higher education assistance programs (Keppel Task Force, 1973). More recently, the 1985 report of the Independent Commission on the Future of the State University of New York, *The Challenge and the Choice*, concluded that SUNY was greatly hampered by overregulation. That commission's work paved the way for giving SUNY and CUNY more regulatory flexibility, albeit limited in scope.

This New York State Commission on Higher Education, in accord with Governor Spitzer's Executive Order No. 14, has closely examined New York State's higher education system in a national context, comparing New York against peer states, and against the backdrop of rapidly improving educational institutions of other countries. Although still among the strongest in the nation, this Commission unfortunately must warn that New York State is losing ground in an intensifying global competition for preeminence in the knowledge economy. We are falling behind because our public institutions of higher education have too little revenue, too little investment and too much regulation. Moreover, we have put ourselves at a competitive disadvantage because we have failed to implement many of the most salient recommendations of commissions past.

The Work of the Commission

Preliminary and Final Reports

As requested in Executive Order No. 14, we submit this preliminary report of findings and policy recommendations. The final report of the Commission will be transmitted to the Governor on or before June 1, 2008.

Consultation with Stakeholders throughout the State and Beyond

This Commission has traveled throughout New York State in order to assess the diversity and complexity of our institutions of higher education. We have reviewed national and international literature on subjects relevant to the Commission's charge to ensure that the views of the very best minds in the world have been considered. Recognizing that we stand on the shoulders of commissions past, we have carefully reviewed their reports and consulted with many of the leaders who prepared those reports. We have prepared over 45 working papers, each representing an in-depth analysis of a subject within the charge of the Commission. We have solicited input from the public, both in the form of testimony and in the form of white papers. Over 50 such papers were received from around the State and from national sources. Over 115 individuals provided testimony formally recorded at public hearings. And, of course, the Commission and its members participated in scores of meetings, phone conversations, and e-mail exchanges with the public, subject-matter experts, stakeholders, and elected officials. In sum, we benefited from a rich diversity of views.

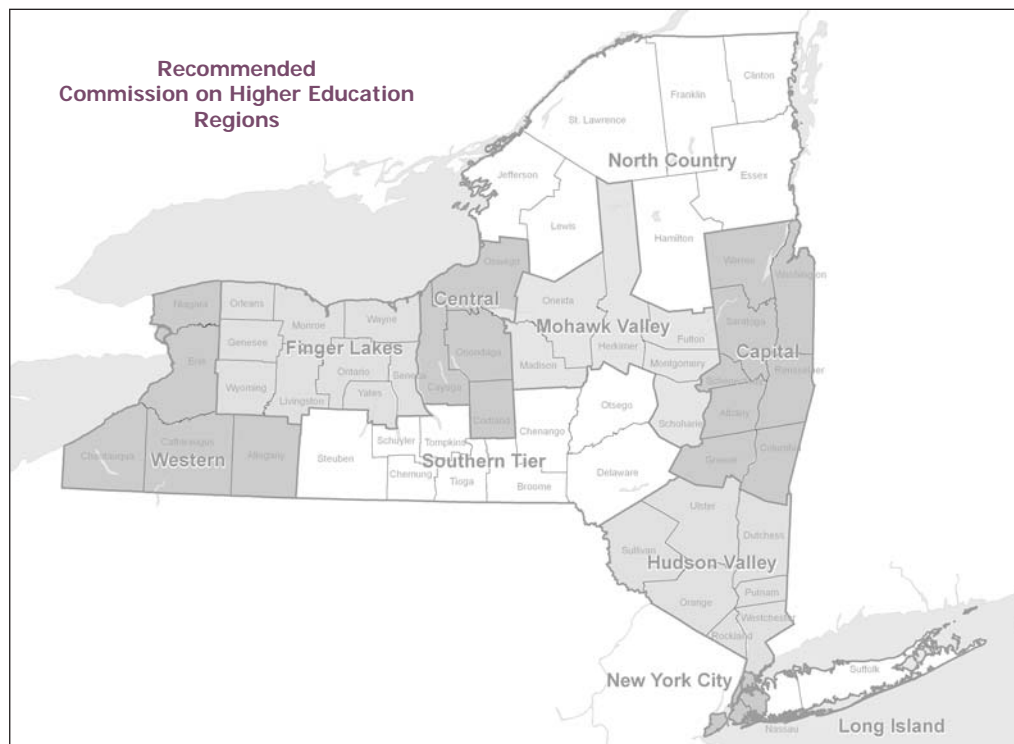
Seven Peer States that Serve as Comparisons

The Commission committed itself early in the process to avoiding myopia—the myopia that sets in when we believe that the only good ideas are ideas that originate here.

Accordingly, every idea entertained by the Commission was tested with a simple question: How does this compare to other states? Commission staff carefully analyzed all fifty states, and presented to the Commission a view that seven of them, which we labeled "peer states," were comparable to New York in terms of size, complexity, and diversity. Those states are California, Florida, Illinois, Massachusetts, Ohio, Pennsylvania, and Texas. For particular issues, if a state outside the set of seven was identified by experts as having an innovative approach or a best practice, that specific idea was evaluated.

Ten Regions of New York State

The Commission also committed itself early on to a statewide view, leaving no region behind. The Commission directed staff to identify an appropriate list of regions. After careful evaluation, staff recommended, and the Commission agreed, that the ten regions utilized by the Department of Labor were best suited to the Commission's work. Those regions are: Capital District, Central New York, Finger Lakes, Hudson Valley, Long Island, Mohawk Valley, New York City, North Country, Southern Tier, and Western New York. The counties within each region are shown on the map below. Staff tested, where appropriate, the viability of policies and the implications of policies on a regional basis.



There is an extraordinary number of higher education institutions spread across the regions of New York State. Each region is supported by an array of excellent public and private colleges, and an array of institutional types with distinct missions—community colleges, comprehensive colleges, technical colleges, and research institutions—each contributing in its own way to the vibrancy in the region, by supporting the economy, prosperity, and quality of life.

Considering Diversity across New York State

The Commission was mindful that averages for the State as a whole do not represent the whole of the State, nor do averages of a region represent the entire region. Thus, in addition to viewing the State region-by-region, the Commission examined many matters through the lens of the poorest cities and towns in New York State. This led to a fuller understanding, for example, that overall state graduation rates from high school are 67%

on average, but frequently 50% or lower in the neediest school districts in the State. Likewise, the Commission was confronted with low graduation rates among Hispanics and African-Americans, and seeing the world through this lens was helpful in determining certain policy recommendations.

Executive Summary

Background

The New York State Commission on Higher Education ("the Commission") was established by Executive Order No. 14 of Governor Eliot Spitzer, dated May 29, 2007. The Governor asked the Commission to broadly examine long-term policy issues facing higher education in the State. The examination included the City University of New York ("CUNY"), the State University of New York ("SUNY"), and New York's private colleges and universities.

The Commission reviewed the reports of all previous higher education commissions in the State, sought the insights of state, national and international experts, received testimony from citizens and leaders throughout the State, and generated in-depth working papers on the issues identified in the Governor's Executive Order. The Commission developed its recommendations through comparative analysis, wherever appropriate, of the policies and practices in seven "peer states," and considered the perspectives of all ten regions of New York State, all communities, and all populations—especially the most vulnerable.

This is the Commission's Preliminary Report. The Final Report will be published before June 1, 2008, after due consideration of reaction from the public, and further consultation with interested parties.

Among the Commission's major recommendations are the following:

- Establish a \$3 billion research fund, the Empire State Innovation Fund, to support meritorious research important to New York's future.
- Create a low-cost student loan program for residents attending college in New York State.
- Establish the New York State Compact for Public Higher Education to clearly delineate shared responsibility for public higher education resources.
- Rebuild CUNY and SUNY faculty ranks by strategically hiring an additional 2,000 full-time faculty, including 250 eminent scholars, over the next five years.
- Modify SUNY's governance structure and system administration to provide more focused attention and support for the research campuses.
- Provide meaningful regulatory relief for SUNY and CUNY, by removing restrictions that impede campuses' ability to adapt quickly and promote quality.
- Develop Educational Partnership Zones in high-need school districts, bringing together higher education and P-12 resources to improve student outcomes and enhance college participation.
- Ensure that high school graduates are well prepared for college through a College Readiness Act.
- Strengthen articulation and transfer throughout SUNY and CUNY with a goal of system-wide articulation of comparable courses and seamless transfer into parallel programs by 2011-12.
- Address the backlog of critical maintenance at SUNY and CUNY with a sustained program of capital reinvestment.

These and all of the recommendations offered in the report focus on building excellence across New York State's higher education system—public and private.

The context for this report is a new reality.

New York commands deep respect as a global center of ideas—it is a center of culture, entertainment, tourism, business and finance, government, science, health care and education. The institutions of higher education of the State are the heart of this idea capital, and their vitality will be tested in the coming decades. To prepare, New York's leaders must embrace a new reality of global connectedness and competition, of accelerating idea creation and dissemination. New York has no choice: we must compete with many others on the cutting edge of ideas and innovation, or be left behind. We must meet the challenge of this new reality.

New Yorkers can be proud. But they should also be worried.

We can be very proud of our institutions of higher education, which enroll more than a million students on over 250 campuses. They comprise a blend of public and private excellence that has enriched the State. Their direct economic impact exceeds \$100 billion dollars a year. In SUNY, New York has the largest state university system in the nation, a fact made all the more impressive because it is one of the youngest such systems, created in 1948. CUNY is the largest urban university system in the nation. And New York's sector of private colleges and universities is the largest in the world. These are rich assets, thanks to visionary leadership of the past.

But we should also be worried. There is troubling evidence that the State has slipped in stature over the last twenty years. For example, as this report documents, the powerful position that New York State once enjoyed in national research standings has faded. Whereas the State captured 10% of the nation's academic research and development spending in 1980, today that number stands at 7.9%, as other states have received a greater proportion of these funds. Using just this one measure, the Commission calculates that more than \$2.2 billion dollars and over 27,000 jobs have been lost in the State. The Commission believes that outstanding research universities are key to the State's future, and that while New York's private research universities are widely recognized as world-class institutions, SUNY and CUNY need significant investment to become competitive with other states' top public research universities.

The decline in share of national research and development is but one of many troubling indicators noted by the Commission. From a backlog of critical maintenance to the dramatic rise in the percentage of classes taught by adjunct, part-time faculty, all of our higher education institutions—public and private—are in need of strategic investment.

We must build a foundation for excellence starting with four cornerstones.

The Commission has identified four cornerstones essential to building a strong foundation for higher education in New York State in the 21st Century: attracting world-class research; connecting faculty, researchers and students to a world of ideas; developing a diverse workforce; and adapting quickly to change. These critical elements will strengthen our higher education institutions to become the backbone of a robust economy.

To have a solid foundation for excellence, we must fix the chronic problem.

The Commission has grave concerns about our public institutions, SUNY and CUNY. While making progress on many fronts, they face a chronic problem: too little revenue, too little investment, and too much regulation.

The problem has taken its toll.

Too little revenue has forced campuses to compromise academic quality, especially with respect to full-time faculty. Public colleges and universities in peer states have *far more* revenue to support academic programs and services than SUNY or CUNY. The arithmetic of revenue is simple: it is the sum of state support plus tuition, with supplemental revenue from fees, research, and philanthropy. New York's public institutions are constrained by over-regulation on tuition pricing and insufficient state

aid. Measured on a revenue-per-student basis, public peers have 17% to 120% more resources than CUNY or SUNY. Too frequently, the only alternative for campuses has been to increase fees. However, since most fees are not covered by the Tuition Assistance Program (TAP), increased fees pose a serious threat to access. Community colleges, which have some tuition pricing flexibility, have been forced to raise tuition when the State and county sponsors fail to fulfill their obligation for revenue contributions. Such increases, especially if unpredictable or excessive, also threaten access, by hurting middle-class students and their families who earn too much for TAP but too little to afford high tuition and fees. Average community college tuition and fees in New York are above the national average, and are the highest among the peer states.

To address the fundamental issue of revenue constraints, the Commission has recommended a "New York State Compact for Public Higher Education." The Compact offers an innovative approach—premised on a cost-sharing relationship among the State, SUNY and CUNY, alumni and friends, and students—that significantly leverages state dollars, while holding SUNY and CUNY accountable for addressing operational issues within their control. If enacted, the Compact will profoundly improve financing of SUNY and CUNY on an ongoing basis.

Too little investment has left the State with the daunting challenge of playing "catch-up." The Commission identified a backlog of over \$5 billion in critical maintenance for facilities at SUNY and CUNY, and has recommended a strategy for the State to manage its way out of this problem over the next decade, with a new capital budgeting methodology that systematically addresses critical maintenance.

Over-regulation has inhibited SUNY and CUNY from seizing emergent opportunities, and has been a recurring theme for New York higher education since its earliest years. Although legislative changes resulted from the recommendations of past commissions, the remedies have been half-steps. Today, SUNY and CUNY are major, mature institutions with legal, accounting, and information systems that provide the controls they need for accountability. While these institutions must be held fully accountable to meet standards and obey laws, layers of micro-management inhibit action and impede adaptation. Accordingly, the Commission recommends statutory changes that preserve full accountability while providing the systems with enhanced ability to react quickly and seize opportunities that facilitate competition in a global economy. This Commission recommends deregulation in three key areas: more flexibility in the sale and lease of property, easing purchasing and financial restriction in the SUNY Construction Fund, and more flexibility in contracts and procurement.

We must build on our strengths and seize opportunities.

We must meet these challenges, and think boldly. Given the centrality of higher education to New York State's history and future prosperity, the potential benefits are enormous.

This report identifies opportunities for building on historical strengths, ranging from research, to workforce development, to technological innovations, to pre-kindergarten through college (P-16) partnerships, collaborations, and global alliances. These opportunities should not be viewed in isolation but, rather, as an array of opportunities that will prepare New York for a future in the innovation economy.

One of the most exciting opportunities is strengthened research. New York is well positioned with impressive cyber infrastructure and library connectivity, and there are promising developments in biomedicine, nanoscience, optics, advanced engineering and numerous other fields. Building on these strengths by attracting world-class research in areas with promise for economic development will ensure the State's prosperity for decades to come. The Commission has developed a comprehensive set of recommendations to reinstate New York's preeminence in research, including a \$3 billion Empire State Innovation Fund to support public and private research on the basis of academic merit, and a major commitment to targeted recruitment of 250 eminent scholars, together with 1,750 more full-time faculty, to SUNY and CUNY campuses, over

the next five years. At SUNY, efforts to strengthen research would be led by separate committees of the Board of Trustees and senior vice chancellors that will focus exclusively on the institutions that conduct research.

An additional major opportunity is greater integration of higher education institutions into the State's workforce development efforts to prepare New Yorkers for the jobs of tomorrow. When a sector of the economy surges, members of the workforce must be trained, or re-trained, to perform the jobs created as a result. Albany offers a case in point, as a global center for nanoscience. The surge underway in nanoscience involves good jobs at every level, including scholarly positions for eminent researchers, who bring the knowledge and credibility that draws other resources, and then, as the field expands, for technicians in electron microscopy and metals fabrication. The Commission believes strongly that the recommendations offered in this report will encourage research and development, and spur economic growth and job creation throughout New York.

Educational opportunities in minority and low-income communities are another important focus. The Commission's report includes a recommendation to create Education Partnership Zones (EPZ). The Commission reviewed dozens of promising programs involving partnerships between colleges and school districts that seek to ensure that students, particularly those in low-income and minority communities, are prepared for college. By marshaling resources within a geographic zone, and building upon the strengths of both public and private colleges and universities in that zone, the EPZ seeks to effectuate the promise: "Study hard and you can go to college."

Another major priority is environmental. There are tremendous opportunities to build on our environmental strengths, in every region of the State, especially in environmental technology and alternative energy. These fields are fast-growing with increasing global significance. The Commission reviewed exciting work already underway, including SUNY's and CUNY's plans for the "greening" of their campuses. Together, these campuses represent over 122 million square feet of space—a huge footprint that can showcase leading-edge environmental technology and set an example for New York and the nation. The Commission recommends that any new construction or rehabilitation meet the "Silver LEED" building standard, a well known guideline for excellence in environmental design.

These are but a few examples of the many opportunities discussed in this report—opportunities that the Commission believes New York must seize with sharp focus and shared commitment, building upon our collective strength.

We need to remove barriers and ensure that the next generation of students is prepared for college.

Dramatic demographic shifts are underway that will have an adverse impact on our state unless we take action now. It is unacceptable that, in some cities in New York, fewer than 50% of students graduate from high school. Equally unacceptable are the very low graduation rates among under-represented minority groups, especially among African-Americans and Hispanics. This is a significant barrier to higher education, and the Commission applauds school districts and the Board of Regents for aggressively pursuing the goal of raising high school graduation rates.

A second major barrier is students who graduate from high school lacking the skills they need to succeed in college. Community colleges throughout the State have borne the brunt of this unfortunate reality. As open access institutions, these campuses shoulder much of the burden of providing remedial education to under-prepared students—preparation that should occur during high school. Community colleges generally tackle remediation and do so quite well. However, the opportunity costs are sizable: students who should be taking college credit courses are, instead, taking high school make-up courses, devoting precious financial aid and time to do so.

The Commission believes that the remediation process must be significantly restructured, and recommends a new "College Readiness Act" which funds remediation separately from the college experience.

Credit transfer is another issue fundamental to educational access and upward mobility. The Commission heard widespread testimony about difficulties experienced by students who study in one college, yet are unable to transfer credits when they move on to another college. The Commission recommends that a system of transferring credits be fully established within three years.

The State of New York must urgently respond to the challenges of the 21st Century. There is no question that today we are one of the great global centers of ideas, but we risk losing this prominence. Our prosperity depends on preserving and enhancing that status, and the vitality of our institutions of higher education will be critical to the task. While New York's higher education assets far outweigh its liabilities, there is cause for deep concern about the consequences of a protracted period of underinvestment, coupled with continued over-regulation. The Commission urges implementation of a long-term plan to rectify the problem, as recommended in this report. More generally, the Commission believes that the recommendations offered in this report will serve to strengthen higher education overall, and will make it possible for the State to seize future opportunities, ensuring that the 21st Century will be our century, and the citizens of New York will prosper in the years ahead.

Introduction

Unique New York – A Blend of Public and Private Excellence

In less than sixty years, the State of New York has emerged from the Second World War and built an economy that will soon surpass a trillion dollars. The underpinnings of that economy today are its great institutions of higher education, a blend of public and private excellence.

We have visionary leadership to thank: successive elected officials strongly supported the creation of the State University of New York and the continuing growth of both SUNY and the City University of New York. Simultaneously, deliberate steps were taken to ensure that the State's great private universities and colleges continued to thrive and contribute to New York as a global center of ideas.

Today, we believe that those past leaders would be intensely proud of what has been accomplished. But they would also be worried.

They would be proud that over one million students are enrolled in institutions of higher education in New York State. Parents the world over recognize that this State is a great place for their children to go to college. They would be proud that SUNY is the largest university system in the country, in spite of its status as one of the youngest of the major state systems. And that CUNY, serving the City of New York, is the largest urban university system in the country. Today, fully 44% of the college degrees granted in New York State are from public institutions. And, of course, they would be proud that New York State's private colleges and universities comprise the largest such sector in the world.

Past leaders would be proud of the diversity of these institutions—student and faculty racial, ethnic and gender diversity, as well as academic program diversity. New York has made a wide range of higher education opportunities broadly available. Moreover, they would be impressed by signs of greatness everywhere. Our world-class research universities, such as Columbia, Cornell, New York University (NYU) and Rochester, continue to break new ground in fields both old and emerging. And they are joined by some newcomers. It is intensely gratifying, for example, to see Stony Brook and the University of Buffalo, as well as the Graduate Center of CUNY make significant strides in the research fields of tomorrow. While New York boasts some of the most highly regarded private liberal arts institutions, including Colgate, Hamilton, Skidmore, Union and Vassar, to name just a few, SUNY Geneseo is one of the top public liberal arts colleges in the country and SUNY Purchase is recognized for its outstanding conservatory programs in the visual and performing arts. The Fashion Institute of Technology leads its field, as does Environmental Science and Forestry (ESF). Albany excels in nanoscience and Binghamton has an international reputation in electronics packaging, and these public institutions have joined Rensselaer (RPI) and others in revitalizing the economy in upstate New York. Downstate and Upstate Medical are highly regarded medical research centers that serve very broad segments of the State's population, and Syracuse University joins its neighboring universities in bringing significant stature to the central region.

Today, past leaders would be intensely proud of what has been accomplished. But they would also be worried.

A Chronic Problem at CUNY and SUNY

SUNY and CUNY have a chronic problem: too little revenue, too little investment and too much regulation.

But the leaders of the past would also be worried. SUNY and CUNY have a chronic problem: too little revenue, too little investment and too much regulation. This problem has taken a heavy toll. A backlog of critical maintenance amounting to over \$5 billion is documented in this report, and the Commission has identified a systematic approach to tackling that enormous challenge. In addition to neglecting the physical infrastructure of our public systems, this chronic problem has forced SUNY and CUNY to make operational compromises on the margin. For example, campuses have hired more part-time, less expensive adjunct faculty. Failure to invest in a strong base of full-time faculty poses the single greatest threat to academic quality. Equally troubling is the dramatic rise in mandatory fees—student charges that are not covered by New York State's Tuition Assistance Program—imposed in an effort to maintain an adequate level of resources.

Lack of investment in full-time faculty poses the single greatest threat to academic quality.

This leads us to one of the central themes of this report: while New York's higher education assets far outweigh the liabilities, there is cause to be deeply concerned about the long-term consequences of a protracted period of underinvestment coupled with continued over-regulation. Cracks are beginning to appear in the foundation, literally and figuratively. Although both SUNY and CUNY received more budgetary support in the last two years, beginning to reverse an untenable situation, we must continue to build our investment, not just for one or two years, but for the foreseeable future.

Now is the time to forge a new alliance to benefit all in New York State. Higher education is a means for attracting and retaining jobs, and it is time for SUNY, CUNY and independent colleges and universities to join together to maximize New York's prospects. Our global competitors are investing heavily in their future. If New York State does not follow suit, we will be left behind. The world will not stand still waiting for New York to catch up.

The World Today – A New Reality Posing Challenges

From Singapore to Sao Paulo, from Dublin to Dubai, from virtually every big and small corner of the world, New York today commands deep respect as a global center. Depending on your perspective, New York State is a world center of culture, entertainment, tourism, business and finance, government, science, health care, or education. The importance of New York's standing as a global center of ideas cannot be understated: New York is among the most prosperous states in the nation, as a direct result of its preeminence as a global center of ideas.

The World Today – A New Reality of Global Connectedness

Ideas have always mattered. But today they matter more than ever. A profound shift is underway as we enter the new millennium. We now live in a knowledge economy that transcends disciplines, transcends organizations, and transcends borders. Ideas move effortlessly and rapidly. This new reality is a deeply interconnected globe whose currency is ideas. We cannot change this reality. We cannot ignore it. But we must not fear it. Instead, we must join the global effort to respond successfully to these new challenges.

The World Today – A New Reality of Accelerating Idea Creation and Dissemination

This new reality has a key characteristic: ideas originate and are disseminated faster than ever. Why does this matter? Because ideas are linked to prosperity and quality of life, they spawn new sectors of the economy and the jobs that support them. In the past, shifts in the economy were discernable only over decades. Today, the stark reality is that the speed of change has accelerated so that entire sectors undergo shifts in a matter of

years, rising and falling based on the power of ideas. Citizens are understandably shocked by the massive dislocations that such change produces. Companies rise and fall. Regions rise and fall. Jobs from an old economy disappear while new jobs appear. New York's citizens are no different from others around the world. All have felt the brunt of these seismic shifts and are anxious about how their hometown, their state and their country stand in today's global competition. They expect leaders to anticipate changes and adapt successfully. They expect that, in a global center of ideas such as New York, their leaders will rise to the challenge of maintaining preeminence.

The World Today – A New Reality of Global Competition

In the last decade, Jiangsu Province in China has built over 50 universities, enrolling over 700,000 students. This is but one example of an old script: governments raising the quality of life of their citizens by investing in higher education. But there is a new version to this old script: the competition is global and it is intense. Ireland has invested heavily to achieve a highly educated workforce in a very short span of time. Japan, India, Singapore, Korea, Venezuela and Saudi Arabia are but a small sample of major new competitors, representing a seismic shift in the global landscape of higher education. New York State's great institutions of higher education are in a global competition for the best leaders, the best faculty, the best students and the best grants. Never before has the competition been this fierce, nor more demanding of fast, flexible responses.

Summary: The World Today and the New Reality New York State Must Confront

In this intensely competitive world, New York State has no choice. We must compete or be left behind. There are hundreds of competitors; the nations, provinces, and states that are taking concerted steps to meet the daunting challenges of the new reality. New York's competitors see the power of global connectedness, and they are investing in connectivity. They see the power of accelerating idea creation and dissemination, and they are unrelenting about staying "ahead of the curve" by providing tools to keep their citizens and their institutions on the cutting edge of ideas and innovation.

Some of these global competitors have strategic advantages. Some produce oil, and are investing their oil profits in higher education. Some have fast-growing economies, and are investing increased government revenues in higher education.

The State of New York has powerful advantages. We are among the wealthiest of states in the United States, and we have massive scale in our higher education infrastructure, with a vast array of excellent private and public institutions that is virtually unmatched anywhere. But our advantageous position is, the Commission has concluded, precarious. Others want what we have, and are investing heavily to surpass us. The prosperity we have enjoyed is at stake.

The history of New York has been to grasp new realities and react appropriately. New York has adapted to past challenges the world has presented, and there is little doubt that New York can rise to this challenge. Is it too much to ask for New York, a global center of ideas, to rise to this challenge with more vigor than others? This Commission not only thinks New York can, New York *must*.

The history of New York has been to grasp new realities, and react appropriately.

Is it too much to ask for New York, a global center of ideas, to rise to this challenge with more vigor than others? This Commission not only thinks New York can, New York *must*.

It is easy to be complacent about U.S. competitiveness and preeminence in science and technology. We have led the world for decades, and we continue to do so in many research fields today. But the world is changing rapidly, and our advantages are no longer unique...Without a renewed effort to bolster the foundations of our competitiveness, we can expect to lose our privileged position..."

Rising Above the Gathering Storm

New York State will remain at the center—one of the great idea capitals of the world—only if its foundation is designed for the 21st Century. Few would argue that the Erie Canal laid the foundation for New York as a center of commerce. Our challenge today is in some ways even greater. Tomorrow's foundation must support our role in the age of ideas, and we must think boldly.

We must lay the foundation for an age of ideas... to do this, we must think boldly.

A high school education was once considered sufficient for most working adults. This is no longer the case. Many jobs require some level of higher education, as do most of the high-paying jobs. Without a college degree, the average citizen will lose well over a million dollars of income during his or her lifetime, and the State's economy will lose, as well. This central point is widely recognized: in the coming age of ideas, institutions of higher education are the key, the foundational *sine qua non*. The quality of life of the citizens of New York State—the quality of our jobs, businesses, culture, and environment—will, most certainly, depend upon the extent to which our citizens of today and tomorrow are educated.

In the 21st Century, the following cornerstones must be laid to build a strong foundation for higher education excellence. New York's colleges and universities must be able to:

- **Attract World-Class Research** – New York's doctoral research institutions, which conduct world-class research, play an essential role in the State's intellectual and economic development. Focus and support are needed to make the good ones great, and the great ones even better. All can and should be a beacon of academic excellence, a source of pride and opportunity for New Yorkers, a generator of "new economy" jobs and a key factor in stemming the "brain drain" hindering revitalization in upstate New York.
- **Connect Faculty, Researchers and Students to a World of Ideas** – The ability to adapt in today's world depends on connectivity. Technology is critical: in the global innovation economy, excellence depends on high-speed, high-capacity communication networks. The people-to-people foundation is also critical; ideas germinate and thrive with robust national, and frequently global, cooperation and collaboration.
- **Develop a Diverse Workforce** – Our institutions must prepare citizens for jobs in every region of New York State, at every level of business, industry, government, and culture. As society changes quickly, so too do the opportunities for employment. A great job today may not exist tomorrow. The ability of our higher education institutions to provide education and training that adequately anticipate new realities is of paramount importance to workforce development.
- **Adapt Quickly to Change** – To be competitive, our institutions of higher education must be positioned to adapt quickly. The Commission has heard from administrators, faculty, and students throughout the State, and noted widespread and deep concern that it takes far too long to implement recommended changes to academic programs—sometimes so long that the opportunity originally identified has passed.

These are the cornerstones of a foundation for excellence. Our higher education institutions must attract world-class talent, connect broadly, develop a diverse workforce that fuels a robust economy, and adapt quickly. This is the foundation on which New York State must build preeminence in global competition.

“For the United States to compete in this environment, American higher education needs to remain preeminent. It must continue to play a central role in the production of knowledge and innovation. It needs to create dynamic environments that will entice knowledge-based companies to locate in this country. The United States should facilitate world leadership of its higher education system by continuing to invest where it counts most.”

Rising Above the Gathering Storm

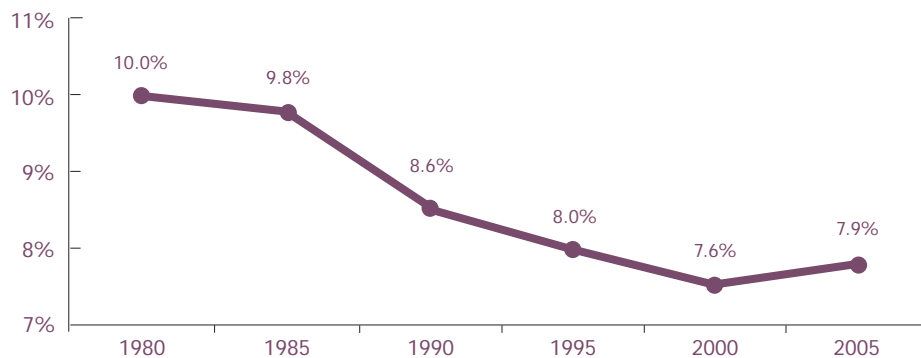
In this chapter, the Commission addresses each of the cornerstones in more detail, with appropriate recommendations.

Attracting World-Class Research

The prosperity of New York State is inextricably linked to success in the emerging knowledge economy. How can this success be measured? This Commission believes that the share of federal research dollars that flows into New York State is a good indicator—especially when the research dollars are competitively won. The stakes are enormous: in FY 2005, U.S. higher education institutions spent \$45.8 billion on academic research and development (R&D).

Historically, New York has enjoyed a commanding presence in the competition for the nation's research funds. Today, New York has fallen from preeminence. The chart below shows the deterioration of the State's share of national academic research and development dollars, from 10.0% of all U.S. research dollars in 1980, to 7.9% in 2005. New York State's share of academic R&D has declined sharply over the last 25 years.

New York's Share of U.S. Academic Research and Development



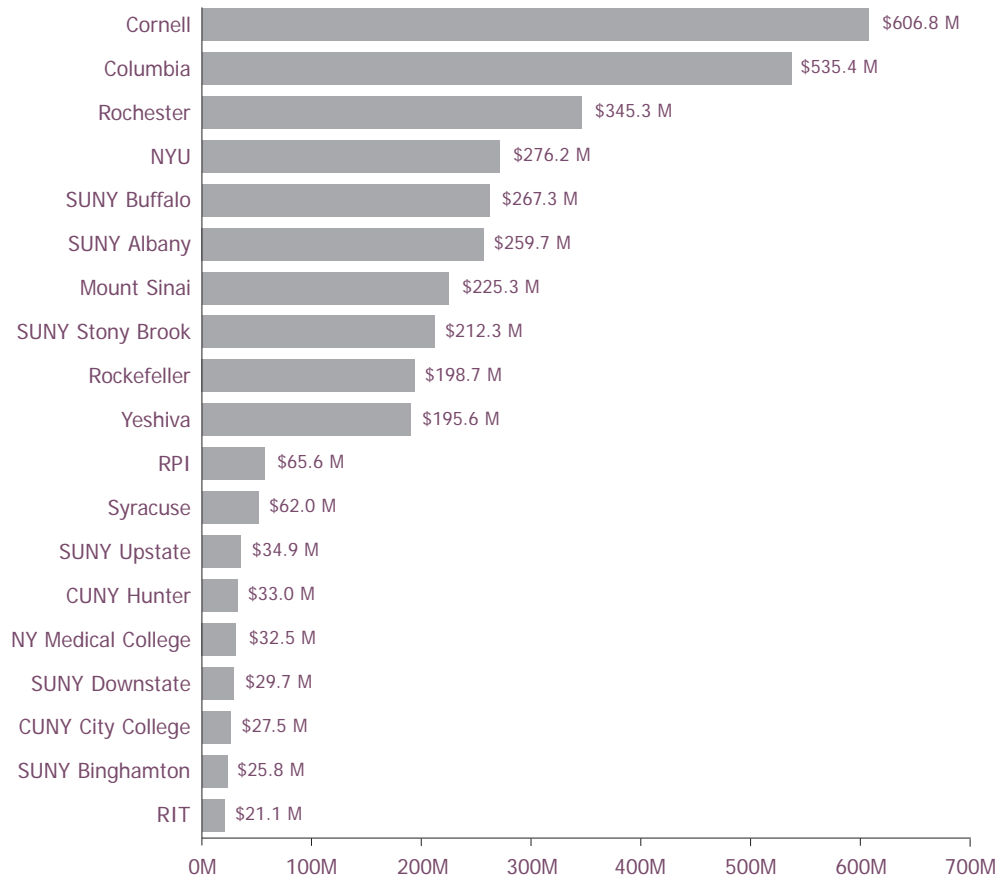
Source: National Science Foundation, Academic Research and Development Survey, FY2005.

This decline in research and development funding has had an enormous impact on our economy, our citizens and the availability of jobs. The loss of 2.1% of the \$45.8 billion total U.S. R &D translates into a loss of almost a billion dollars in research expenditures. Using a conservative short-term multiplier, the impact on annual economic activity generated from such a loss of research expenditures exceeds \$2.2 billion—that is a \$2.2 billion loss to New York State's annual economy in FY2005 alone. In terms of employment, according to the National Science Foundation, for every \$1 million in academic R&D expenditures, 29 jobs are created. Had New York State simply maintained its 10% share, an additional 27,600 jobs would have been generated in the

State's economy. Beyond the impact in a given year are the cumulative and long-term consequences of less academic research and development, for example, slower economic growth, fewer businesses locating in the State and less growth in intellectual property.

On a more positive note, 19 of New York State's universities expended more than \$20 million on research and development in FY2005. The five institutions receiving the most research funding, Cornell, Columbia, Rochester, NYU and Buffalo, account for more than 50% of the State's total. Among the ten institutions receiving the most funding, each exceeded \$100 million in R&D expenditures. Together, these ten institutions account for 86.6% of New York State's total.

New York Research Institutions with More than \$20 Million in Total R&D



Source: National Science Foundation, Academic Research and Development Survey, FY2005.

The Key Role of New York's Publics in Attracting World-Class Research

New York's public doctoral research institutions play an integral role in the State's intellectual and economic development. They are good today, but it is essential that they be great. Focus and support are needed to make them so. These institutions can and should be a beacon of academic excellence, a source of pride and opportunity for New Yorkers, a generator of "new economy" jobs and a key factor in stemming the "brain drain" identified as hindering revitalization in upstate New York.

The range of research activity generated by the public institutions throughout the State is impressive. SUNY's research and development expenditures totaled \$853 million in 2005, supporting 10,000 research projects. Over the past decade, SUNY has secured more than 750 patents and \$150 million in royalties, and established numerous start-up

companies. Notwithstanding its lack of a central research mission, CUNY faculty researchers expended \$88 million in 2005. Both SUNY and CUNY have distinguished research faculty, including members of the National Academy of Sciences, the National Academy of Engineering, the Institute of Medicine, and many national award winners. The 1985 report of the Independent Commission on the Future of the State University of New York, *The Challenge and the Choice*, recommended that the university centers at Buffalo and Stony Brook be treated as comprehensive research centers. It was prescient advice. National Science Foundation academic research data for FY2005 and 2006 reveal that both universities—Buffalo and Stony Brook—are rapidly *increasing* their share of national research dollars. Moreover, both are now fast approaching the top rank of great research centers of New York State. Research funds for each institution exceed \$250 million dollars annually, and the most recent year's growth exceeds ten percent, as shown in the chart below.

New York Institutions with More than \$20 Million in Total R&D

(\$ in Thousands)

	FY 2005	FY 2006	\$ Change	% Change	FY 2005 NYS Rank	FY 2006 NYS Rank	Rank Change
Cornell	\$606,804	\$648,802	\$41,998	6.9%	1	1	
Columbia	\$546,093	\$541,356	-\$4,737	-0.9%	2	2	
Rochester	\$345,337	\$366,658	\$21,321	6.2%	3	3	
SUNY Buffalo	\$267,271	\$297,909	\$30,638	11.5%	5	4	+1
NYU	\$276,198	\$284,164	\$7,966	2.9%	4	5	-1
SUNY Albany	\$259,708	\$274,354	\$14,646	5.6%	6	6	
Mt. Sinai School of Medicine	\$225,293	\$273,216	\$47,923	21.3%	7	7	
SUNY Stony Brook	\$212,289	\$234,635	\$22,346	10.5%	8	8	
Rockefeller	\$198,719	\$215,417	\$16,698	8.4%	9	9	
Yeshiva	\$193,104	\$189,416	-\$3,688	-1.9%	10	10	
RPI	\$65,571	\$70,576	\$5,005	7.6%	11	11	
SUNY Upstate Medical	\$34,931	\$37,181	\$2,250	6.4%	13	12	+1
Syracuse	\$62,020	\$36,100	-\$25,920	-41.8%	12	13	-1
NY Med Col	\$32,460	\$34,397	\$1,937	6.0%	15	14	+1
CUNY Hunter	\$33,024	\$31,308	-\$1,716	-5.2%	14	15	-1
SUNY Downstate Medical	\$29,732	\$31,064	\$1,332	4.5%	16	16	
SUNY Binghamton	\$25,769	\$29,635	\$3,866	15.0%	18	17	+1
CUNY City College	\$27,471	\$28,593	\$1,122	4.1%	17	18	-1
RIT	\$21,068	\$22,107	\$1,039	4.9%	19	19	
Top 19 NYS Institutions Total	\$3,462,862	\$3,646,888	\$184,026	5.3%			

Source: National Science Foundation, Survey of Academic Research and Development, 2005 and 2006.

Projecting these results into the future and assuming an increased level of investment befitting great public research universities, both schools would make substantial strides toward competing with the finest research institutions in the world today. This advancement in New York State's public research universities is indeed promising, and this goal should be pursued vigorously. To further build public research capacity, the State must also support the University Centers at Albany and Binghamton, the two free-standing health science centers (Downstate and Upstate), the College of Environmental Science and Forestry (ESF) and the College of Optometry. CUNY, through its consortial arrangement, in which more than 1,700 faculty members from the University's senior colleges collaborate with centrally appointed faculty, has spurred joint research. To achieve excellence and to succeed in global competition, New York must support all of its research institutions, private as well as public.

**Policy Recommendation:
Create a \$3 billion
Empire State Innovation
Fund to provide grants
for scientific research.**

Empire State Innovation Fund

To foster economic growth and promote research by higher education institutions, the Commission proposes an Empire State Innovation Fund, to provide grants for research in the physical sciences, bioscience, engineering and medicine at public and private research universities located in the State.

This \$3 billion fund, disbursed in equal annual amounts over a ten-year period, will support research that holds significant promise for economic development, cementing New York's long-term commitment to science. Grants should be awarded through a competitive process including rigorous peer review that evaluates the scientific and/or technological merit of proposed research and makes recommendations for funding.

Administration of the Empire State Innovation Fund could be modeled on recently created state funds in other fields of endeavor, with a board appointed and functioning in a similar fashion.

The Commission recommends that this investment in research be guided by the following principles, both in the issuance of requests for proposals and in the distribution of awards:

- Only highly meritorious proposals, as determined by peer review, will be funded.
- No single institution will receive more than 10% of the total funding available in a given year.
- Proposals with the most economic development promise for the State will receive priority.
- Proposals involving cross-sector collaboration between public and private universities (with a set-aside for exceptional projects where such collaboration is not possible) will receive priority.

The results of each investment should be measured, with recipients held accountable for meeting research productivity and economic growth goals.

Recruiting Eminent Faculty and Graduate Students

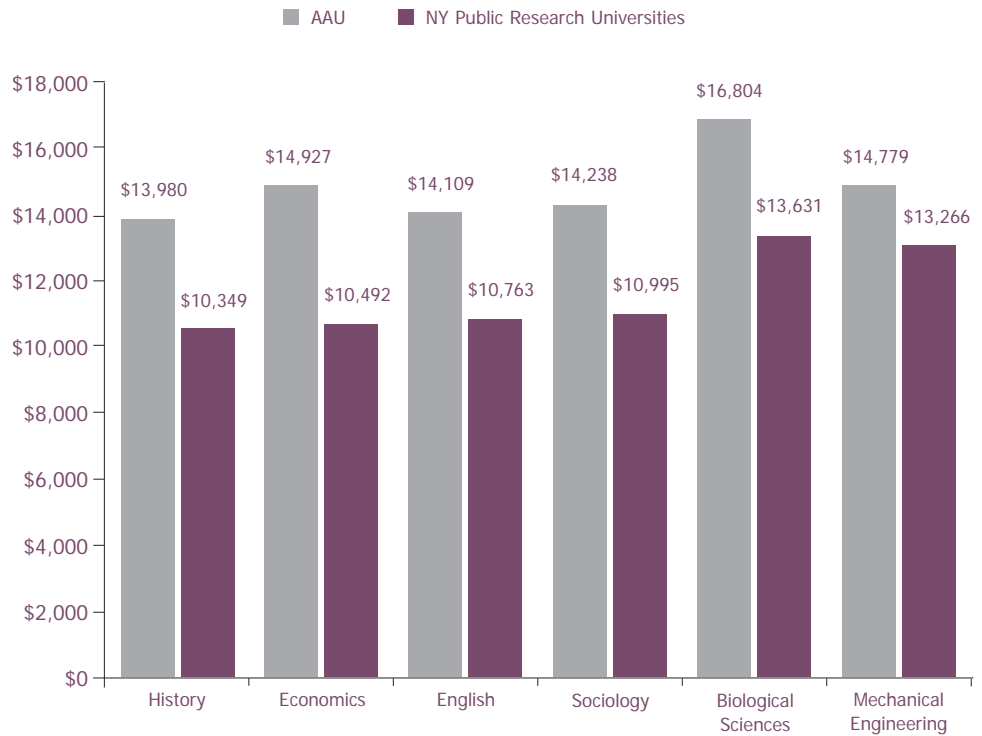
To further strengthen and enhance its public doctoral programs and research capacity, New York State must make a substantial investment, both to redress under-funding in the past and to reach new levels of excellence in the future. That investment begins with world-class faculty and top-flight graduate students, both essential to research excellence across the full range of academic disciplines.

The ability to hire eminent senior as well as elite junior faculty depends on the availability of competitive salaries and start-up packages. Start-up costs, which include laboratory space and sophisticated research equipment, are especially crucial in the sciences where the average package for new faculty at U.S. public research universities in 2002 ranged from approximately \$300,000 for an assistant professor in biology to nearly a million dollars for a senior chemistry professor.¹

Recruiting top-flight graduate students is also a challenge because SUNY and CUNY graduate stipends are comparatively low. As shown in the chart below, graduate student stipends at New York's public research universities fall well below the average for AAU institutions, across disciplines.

¹ Cornell Higher Education Research Institute (2002) survey on start-up costs.

Average Graduate Student Stipends



Source: AAU Data Exchange and the Chronicle of Higher Education, 2006.

Hiring outstanding faculty and recruiting top-flight graduate students depend on another factor: facilities. CUNY and SUNY must have advanced laboratories, equipment, and computing infrastructure to be competitive.

The Commission recommends that over the next five years:

**Policy Recommendation:
Recruit eminent
researchers and
top-flight doctoral
graduate students.**

- 250 eminent scholars should be recruited by New York's public higher education systems, and the State should make funds available for competitive salaries and start-up packages. Because the goal of this program is to strengthen New York State's position in the knowledge economy, every effort should be made to ensure a net increase in intellectual capital by recruiting hires from out-of-state, to the extent possible.
- A minimum of 4,000 doctoral students should be recruited for SUNY and CUNY combined, and the State should make funds available for competitive stipends, at least equal to the average of AAU institutions.
- Salaries and stipends should be supplemented with sufficient funding for equipment, laboratories, buildings and other infrastructure.

Private colleges and universities face a similar challenge in hiring leading academic researchers. Given the State's pluralistic support of higher education, as part of their evaluation of this recommendation, the Governor and the Legislature should consider expanding resources in a manner that enables private colleges and universities to hire eminent researchers for their institutions

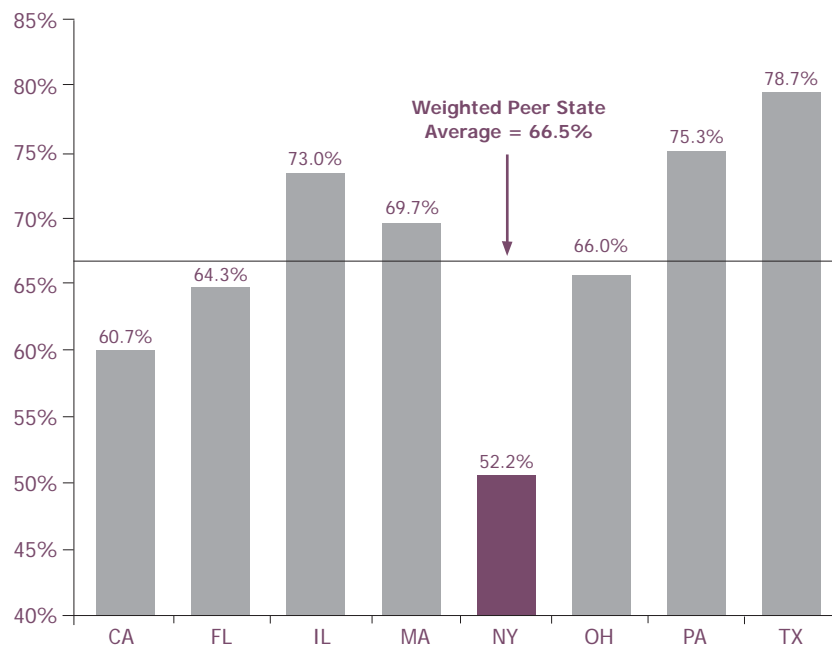
Restoration of Full-time Faculty

A cadre of eminent scholars is essential to building world-class research and top-ranked academic programs. A more fundamental requirement for academic excellence is a sufficient base of full-time faculty overall. Full-time faculty represent the heart and soul

of our colleges and universities: they develop curricula, deliver instruction, advise and inspire students, assess program quality and student performance, conduct research, and provide institutional, professional, and community service. Failure to invest in full-time high quality faculty has a crippling effect on the vitality of an institution and is antithetical to fostering academic excellence.

SUNY and CUNY have suffered through a protracted period of under-funding that has resulted in perilously lean operating budgets. Indeed, New York State's public colleges and universities continue to fall further behind peer institutions in the amount of operating revenue per student full-time equivalent (FTE) and, as a result, must search for cost-saving alternatives such as hiring more part-time, less expensive adjunct faculty in lieu of full-time faculty. Regardless of the benchmark one chooses, the proportion of full-time faculty or any number of student-faculty ratios, the story is the same: SUNY and CUNY need many more full-time faculty. The chart below shows that in 2006, New York State four-year publics had 52.2% full-time faculty compared to a weighted peer state average of 66.5%.

Percent of Faculty that are Full-time at Four-year Public Institutions



Source: IPEDS Employees by Assigned Position, Fall 2006

Given the magnitude of the problem, the Commission recommends that a minimum of 2,000 additional full-time faculty members be hired by CUNY and SUNY over the next five years (this total includes the 250 eminent research faculty previously recommended). The State should provide support for competitive salaries, start-up packages and equipment.

Strengthening NYSTAR

The Commission recommends that the Governor take steps to strengthen NYSTAR's capacity to guide investment and interaction between businesses and academics, initiate experimental programs in emerging technologies, and facilitate commercialization of the results of public and private university research. These efforts should be guided by a senior scientist.

Collaboration through Global Science Excellence Clusters

A fierce international competition is developing for clusters of research and development excellence, particularly in areas such as biomedicine, nanomaterials, and alternative energy. Such clusters typically attract the leading researchers. Those who collaborate, who emerge from silos—of discipline, institution or economic sector—will be in the best position to compete.

New York has made a significant investment in research infrastructure, for example, through its six Centers of Excellence located across the State and, most recently, through creation of the Empire State Stem Cell Board which seeks to advance the promise of stem cell research statewide. The Center of Excellence in Bioinformatics and Life Sciences at Buffalo brings together leading university and private researchers advancing our understanding of protein and gene structures. The Photonics and Microsystems Center near Rochester works on technology transfer for high-resolution imaging and ultra-fast communications, translating university-generated ideas into new products. The Center of Nanoelectronics at Albany houses the world's leading computer wafer pilot and prototyping facility where industry and university researchers work side by side. Information Technology on Long Island focuses on local world-class expertise in information technology and software. Environmental Systems in Syracuse builds upon the region's cutting-edge research and development in environmental systems engineering. In Binghamton, the Small Scale Systems Integration and Packaging Center brings together international experts in electronics packaging and sensor development.

Creating robust opportunities for recruitment and collaboration to unite the State's leading investigators will complement such investments and can be one of New York's greatest strengths. The Commission recommends working with the New York Academy of Sciences to develop "Global Science Excellence Clusters" to be located in upstate New York and patterned after the successful cluster created by the Academy in New York City.

One cluster could be in the Rochester-Buffalo area (Western Region), another in Binghamton-Syracuse (Central/Southern Tier) and a third in Albany (Capital Region). In each cluster, the aim would be to leverage the science and technology excellence in the region's institutions by encouraging collaboration and connection to industry and other global centers. Specific program components include:

- **The Science Alliance for Graduate Students and Post-Docs**, providing career mentoring and guidance for thousands of students who are underserved in their home institutions, and who seek expert advice on how to excel as academic scientists or prepare for careers outside academia.
- **Frontiers of Science**, creating interdisciplinary discussion groups in the cutting-edge areas of science that bring leading senior and junior scientists together in a fashion that transcends the traditional disciplinary and institutional barriers.
- **Science without Borders**, offering virtual classrooms that engage scientists around the world.

Connecting Faculty, Researchers and Students to a World of Ideas

Technological Infrastructure

The capacity of New York State colleges and universities can be strengthened through enhanced connections. Too many of our colleges cannot individually afford the scale of investment that the 21st Century demands. Two scale-intensive infrastructure investments are particularly critical to participation in the knowledge economy: technology and academic libraries.

Technological development is essential to New York's preeminence in the future. Grid computing spurs computational research by using advanced communication networks to bring the power of high-performance computers to one's desktop. Technology can facilitate global collaboration of researchers, and is a key to inter-agency workforce and economic development collaboration. And continued advancement of distance learning opportunities brings advantages to rural parts of the State, making it feasible for all learners who seek education to get it.

New York State has a world-class cyber infrastructure. NYSERNet provides next-generation Internet connectivity to New York's public and private education institutions. NYSGRID's high performance computing capacity is unequalled nationally. To build on these assets and advance the State's interests, the Commission recommends expanding access to NYSGRID for researchers, and increasing NYSERNet bandwidth throughout the State.

There is a second opportunity for the sharing of infrastructure: academic library pooling of electronic information. Not only are scientific discoveries shared through electronic journals, but faculty and students in both the sciences and humanities increasingly rely on electronic resources such as collections of primary literary texts and historical archives. Academic libraries are now contending with rapidly expanding information sources, and facing increasing costs for licensing fees. Some small campuses simply cannot afford what they need.

Other states have taken steps to achieve powerful economies of scale through state-wide licensing (New Jersey, Ohio, and Virginia are examples). New York can strongly benefit from the efficiencies gained through this pooling of effort. The Commission is persuaded by the arguments advanced by hundreds of academic librarians throughout New York and recommends that the State invest \$15 million to facilitate college and university libraries moving from individual library licenses to state-wide shared licenses.

International Education

Preparing students to thrive in an increasingly interconnected world is central to the mission of higher education. Students are exposed to other cultures in many ways: internationalizing the curriculum, interacting with immigrant communities, internships, studying and volunteering abroad, and the enrollment of international students on home campuses. New York State is a leader on all counts.

In 2006, over 64,000 international students enrolled in New York State's colleges and universities, second only to California. On a per capita basis, New York leads the nation. In that same year, New York State colleges and universities sent roughly 16,000 students to study in countries around the globe. New York University sent 2,611 students to study abroad, more than any other institution in the country.

While study abroad is essential if students are to acquire global competence, it is not, by itself, sufficient. Many universities and colleges in New York State are undertaking efforts to enhance academic, community service and internship offerings that not only support foreign language and area studies, but serve to internationalize the broader curriculum to ensure that students in every major graduate with a more comprehensive and nuanced understanding of the world beyond our borders. Additional and important innovative approaches include faculty research with international partners, dual diploma programs between institutions of higher education in New York and overseas, and international exchange of faculty.

In short, international education is a major strength on which New York State public and private higher education should build. To that end, the Commission believes continued expansion of international education is essential, and will give students access to rich and life-changing experiences.

The Commission recommends that:

- New York State international trade offices place a high priority on promoting higher education and creating international research links.

- The State establish an international education advisory council that will identify the scholarship and grant sources throughout the State, to increase access to international programs. This advisory body should include representatives from public and private higher education, state economic development officials, and relevant non-governmental organizations and businesses.
- SUNY and CUNY increase their capacity to market academic programs to a wider international audience. In addition, both systems should focus on internationalizing curricula, expanding international partnerships for faculty, and increasing internship and study abroad opportunities for students.

Connecting Students and Faculty to their Community

An ethos of community service is good for New York State and strengthens academic excellence. Service-learning projects connect students and faculty to their surrounding communities and to each other. Volunteering is an important part of campus life, and a vibrant culture of community service can serve to attract potential students to a particular institution. Additionally, students who engage in volunteer service are more likely to continue to contribute to their communities after graduation.

National data indicate that New York is far behind in volunteer rates for all citizens, 49th among the states.² For New York's college student population, the rate is 20.4%, compared to a national average of 29.6%.³ Such low participation is clearly unacceptable.

To increase participation, the Commission has identified a number of partnerships that already exist between campuses and community organizations (for example, 71 of the State's institutions of higher education belong to the "Campus Compact," an organization dedicated to encouraging volunteerism). These partnerships should be encouraged.

In addition, the Commission recommends the development of a statewide clearinghouse for community service programs as a way to connect students to service opportunities throughout the State. This could be accomplished by expanding *CareerZone*, the job-clearing website of the Department of Labor, to include community service postings. The Commission will continue to examine ways to expand community service and service learning programs throughout New York, and will offer further recommendations in the final report.

Policy Recommendation:
Expand *CareerZone*, the job-clearing website of the Department of Labor, to include community service opportunities.

Developing a Diverse Workforce

An effective approach to workforce development must encompass the full range of educational offerings, including all degree programs and non-credit education, as well as instruction designed to impart basic skills, such as literacy, which enable students to benefit from collegiate study. Workforce development must also be responsive to the needs of a diverse citizenry, including out-of-school youth who must be reconnected to education; unemployed workers who must be reconnected to jobs, or retrained if necessary; and government, non-profit, and private sector workers who require new skills. To respond to these diverse needs, instructional activity can take place in a variety of formats; traditional classroom instruction, classes taught outside the regular semester schedule, workshops, short courses, contract training in the workplace and distance learning.

There is unsettling evidence that our state is not ready to tackle the challenges of developing the workforce of the 21st Century.

² Corporation for National and Community Service, *Volunteering in America: 2007 State Trends and Rankings in Civic Life*, p. 9.

³ *Ibid.* pp. 24-25.

There is no lead agency. No single state agency has been assigned a lead role for workforce development. As a result, a coherent set of workforce objectives has not been identified and, thus, the State cannot target funding effectively.

There is no funding for non-credit courses. Until the early 1990s, community colleges received FTE-based funding for non-credit vocational and workforce training. When that funding was discontinued due to budgetary constraints, community colleges lost an important incentive for offering non-credit vocational training.

There is inadequate funding for program startup. The Association of Presidents of Public Community Colleges (APPCC) stated that under the current funding formula, their campuses do not receive support until a program has enrollment and, even then, the college has to wait for more than a year to receive additional funding. This makes it very difficult for community colleges to develop new programs or expand existing programs to meet workforce needs.

Market demand is not analyzed. Academic administrators lack the data required for planning and evaluation, including information to estimate potential demand for new academic programs. The data gathered by the State on training activities is limited to headcounts and credit hours in a few broad categories of instruction. Although more data are collected for credit courses, they are not systematically analyzed for planning purposes.

Training results are not tracked. It is difficult to evaluate the effectiveness of training, as student records are not linked with state employment records. Linking records and tracking training results would allow the State to assess how well job training programs prepare participants for better jobs. While privacy concerns have been raised about the linkage of such data, in some states, including Florida, comprehensive databases make such tracking routine.

Course scheduling does not accommodate student needs. Courses typically are offered on schedules that are more convenient to faculty than to students, particularly those with work and family obligations. Courses are offered during the regular semester schedule and may not be available at certain times of the year, such as the summer, when many students have more flexibility.

Based on these findings and observations, the Commission recommends that the Governor announce a workforce training initiative, and assign responsibility for statewide workforce planning to a single entity to guide investment in the training and education capacity of New York State's colleges and universities, particularly community colleges.

The coordinating organization should be charged with the following responsibilities:

- Identification of regional training needs and capacities of training providers, including postsecondary educational institutions, to meet needs throughout the State. Businesses, community colleges and those involved in shaping regional economic priorities should be involved in identifying high-priority sectors.
- Ensuring alignment of higher education policies, curricula and resources with current and future workforce development and economic needs.⁴

Once training priorities have been established, the State should:

- Provide funding to community colleges for vocational non-credit training courses, and provide enhanced funding for targeted high-cost training areas.
- Provide funding for the development of new credit-bearing programs that will allow colleges to adapt quickly to changing needs. These new programs must be closely aligned with economic objectives and meet regional economic needs.

**Policy Recommendation:
Assign responsibility
for coordinating
statewide workforce
planning to a
single entity.**

**Policy Recommendation:
Provide funding for
vocational non-credit
courses.**

⁴National Governor's Association, 2007. *Innovation America, A Final Report*, p. 13.

**Policy Recommendation:
Fund the start up
of new credit-bearing
programs.**

- Require more detailed data on training activities to facilitate planning and assessment of program quality. Investment in a more comprehensive data system would allow tracking of students from non-credit to credit courses and from both types of instruction into the labor force.

Adapting Quickly to Change

New York State's community college presidents have told the Commission that State Education Law process through which community colleges obtain New York State Education Department approval of their academic programs involves multi-layered procedures that can take as long as two years. Local governance and system review processes consume much of the time required for approval.

First, a letter of intent is prepared by the academic department or by the college, and after approval by faculty governance, circulated for comment throughout the system. Next, a full proposal is developed, passed through the faculty governance process, and submitted to the system administration for approval. In both systems, new programs require approval by the central Office of Academic Affairs. Programs in new areas of study and new degrees must be approved by the Board of Trustees. Proposals that have been ratified by the system are next submitted to SED for final approval. This arduous process impedes responsiveness, including implementation of training programs to meet urgent workforce needs within service regions.

In peer states, the process involves fewer steps, with higher education institutions able to make program changes in a much shorter timeframe. In a global competition, New York's public institutions are left behind in advancing new ideas and programs.

New York State needs a fast, streamlined process, not only for community colleges but also for technology colleges, as well as the comprehensive colleges and research universities.

The Commission recommends that the Board of Regents review the process for program review to develop mechanisms for expedited review. SUNY and CUNY should coordinate with the Board of Regents to ensure that their internal processes for program review are conducted simultaneously and collaboratively with those of the Regents. This review should be completed by June 2008.

**Policy Recommendation:
The Board of Regents
should coordinate with
SUNY and CUNY to
streamline the academic
program review process,
by June 2008.**

"Civilization is on the brink of a new industrial order. The big winners in the increasingly fierce global scramble for supremacy will not be those who simply make commodities faster and cheaper than the competition. They will be those who develop talent, techniques and tools so advanced that there is no competition." Letter to the President's Council of Advisors on Science and Technology,

Rising Above the Gathering Storm

Key to New York State's future as a global leader is tapping the underutilized talent pool that exists in the State's diverse population. Education is the essential infrastructure investment for a modern, knowledge-driven economy, and thus for ensuring the State's future as a world-class idea capital. Colleges and universities can play a transformative role in our communities—to drive P-12 school districts forward, to build stronger neighborhoods and create sustainable wealth. New York State's position as a leader in innovation is a direct result of our ability to educate and engage a broad, deep and diverse mix of people.

A State of "Haves" and "Have-nots"

With the third largest economy in the country, and as the nation's center of banking, finance and communication, and home to the world's largest stock exchange, it is ironic that New York State is really a tale of two states: the *haves* and the *have-nots*. On one hand, New York is among the wealthiest states, with a large proportion of highly educated and financially secure citizens; on the other hand, New York has one of the highest poverty rates and largest proportions of the educationally disadvantaged. Several relevant facts and trends document this dichotomy:

- Differences in educational attainment between New York State's two largest populations, White and Hispanic, are among the largest of any state. Only 18% of Hispanics have attained college degrees, compared to 45% of Whites.⁵
- Approximately 50% of New York City high school students graduate within four years, in other large urban districts in the State the rate falls below 50%. Among less needy districts, the graduation rate is generally 70% or above, and frequently far higher than that.⁶ Low graduation rates are pervasive among the five largest ("Big Five"⁷) urban school districts and in many of the remaining 50 school districts where a *Contract for Excellence* has been required.⁸
- While New York's overall population will remain relatively flat, significant growth is projected among demographic groups with low rates of graduation from high school.

One of the most important commitments New York State can make is to address the immense challenges facing our inner-city schools. Our schools, teachers, and leaders must have the skills, tools, resources, guidance, and support necessary to integrate

⁵ *As America Becomes More Diverse: The Impact of State Higher Education Inequality. (2005).* A report from National Center for Higher Education Management Systems with support from the Lumina Foundation for Education.

⁶ *New York State District Report Cards for School Year 2005-06 (2002 cohort).* The University of the State of New York.

⁷ "Big-five" school districts include Buffalo, New York City, Rochester, Syracuse, Yonkers.

⁸ Education Law § 211-a.

proven practices and programs, to achieve and sustain higher levels of student performance.

The success of New York's higher education sector is directly linked to the performance of the State's primary and secondary institutions. Public and private institutions of higher education have expertise and resources to contribute to partnerships that spearhead improvements in our public school system, and strengthen all levels of education in the State.

In this context, the Commission recommends expansion of education strategies that, collectively, will have the greatest impact on access and alignment. These strategies address four specific areas: partnerships between P-12 and higher education to remove obstacles in our neediest districts; college preparedness to improve graduation rates; strengthened transfer and articulation between associate and baccalaureate degree programs; and a strategy to address financial barriers (i.e., targeted enhancements to the tuition assistance program, reduced fees, and a state low-interest college loan program).

Education Partnership Zones

The Commission seeks to support the New York State Board of Regents' P-16 Plan and goals to increase P-12 student performance and access to higher education through mutually beneficial, innovative education partnerships between high-need school districts and institutions of higher education. These efforts involve a range of partners, including school districts, higher education institutions, local governments, the private sector, non-governmental organizations, and state agencies, addressing health, social services, economic development and education needs. The goal is to magnetize lost talent and ensure that students thrive and progress, in order to create new generations of innovators who will enable New York State to continue as one of the world's idea capitals.

The Commission recommends establishing "Education Partnership Zones" (EPZ). The EPZs will operate in a manner fully consistent with the constitutional and statutory jurisdiction of the Board of Regents and the State Education Department (SED). The Regents, through SED, will oversee the EPZs with the advice of an advisory council consisting of representatives from public and private higher education, school districts, other educational institutions, private sector entities, state agencies including health, social services, economic development and other stakeholders. Financial support for the EPZs would flow through the University of the State of New York (USNY) Regents Research Fund, a not-for-profit corporation of which the Regents are trustees. A framework will be developed that is consistent with the Regents P-16 Plan. The intent is to leverage the ability of school districts to work in partnership with local higher education institutions and other organizations. Education Partnership Zones may target the following seven areas for additional investment and collaboration.

1. **Birth to Five: Early Learning Services and Universal Pre-K**, to provide a foundation for success in elementary school.
2. **Elementary (K-6) and Adolescent Literacy Focus, including Effective Intervention Models and Practices for Struggling Readers**, to provide support necessary to prevent early failure including intervention with struggling readers.
3. **Focus on Math and Science, with Effective Intervention Models and Practices for Struggling Students**, including:
 - Restructuring Mathematics Curriculum
 - Improving Math Preparation
 - Increasing High School Opportunity/Enrichment Programs
 - Sponsoring Competitions

**Policy Recommendation:
Create Education
Partnership Zones,
within which higher
education will partner
with schools in high-
need districts.**

- Stakeholder Engagement
- Contribution of Graduate Schools
- Alignment

4. **Restructuring of schools or the development of new schools using proven models or programs**, including accelerated efforts to redesign or restructure schools by building on successful models and extensive support in EPZs with Schools under Registration Review (SURR) and Corrective Action schools.
5. **Building Teacher Capacity through “Teach NY,”** which may include programs to increase contact between higher education and P-12 professionals. New alternative certification programs, possibly modeled on NYC’s Teaching Fellows Program, may be identified to increase the supply of highly qualified teachers in shortage areas. Such programs would be subject to the normal review and approval by SED. Loan forgiveness programs would be offered to teachers who agree to teach in high-need districts and/or high-need disciplines.
6. **Comprehensive Student Support and Guaranteed Access to Higher Education.** While the Commission is aware that the Tuition Assistance Program and other financial aid programs are currently available to many students in high-need districts, the EPZs will build on those existing financial aid programs and clearly communicate to students and their parents that higher education is within their reach. In addition, the Commission understands that there may be unmet financial needs⁹ that present obstacles to higher education and therefore recommends the following programs:

- **"Million Dollar Promise"** – In recognition that a college degree increases average lifetime earnings by at least a million dollars, every 7th and 8th grade student within an EPZ will be guaranteed the opportunity to attend, tuition-free, plus unmet needs paid by the State, a community college or a four-year CUNY or SUNY college if they meet grade 7 and 8 Math and ELA standards, and high school graduation requirements.
- **Independent college and university commitment** – Participating independent colleges and universities will support those who graduate from EPZ schools via an independent college and university commitment, through which students and their families will receive special college financial assistance, where needed. (The "Say Yes to Higher Education Compact" provides a model for this financial guarantee.) This financial incentive ensures that all EPZ students who meet the entrance requirements and enroll in a participating private college or university will receive grants sufficient to cover the full cost of tuition, as well as an allowance for the cost of books and supplies. Such students may also be eligible for financial assistance to help cover additional costs of room, board, and other expenses, to be determined by the institution at the time of enrollment. This may include student loans, to supplement parental and/or student contributions. Students will be expected to maintain satisfactory academic progress as set by the participating higher education institutions. Given the rising cost of attendance at independent colleges and universities, this program represents a substantial investment by those institutions in the education of the children in New York State’s neediest districts.
- **EPZ Enhancement Award** – The best EPZ high school graduates will be attractive candidates for admission to universities and colleges in other states. To help stem the flow of talent from the State, additional efforts must be made to retain EPZ students. Accordingly, a special enhancement award of \$1,000 will be made with state funds to a small percentage of exceptionally qualified students who choose to attend institutions of higher

Policy Recommendation:
"Million Dollar Promise"
 guarantees every 7th and 8th grader within the EPZ the opportunity to have expenses paid to attend a public college or university in New York State.

Policy Recommendation:
 Independent colleges and universities will provide significant financial incentives to EPZ students.

⁹ Including expenses such as books, supplies, and room and board for resident students.

education in New York State. In order to qualify for this award, students must meet standards set by the local EPZ in coordination with EPZ governing bodies.

- 7. Monitoring and Evaluation**, under a structured, systematic effort to ensure that lessons learned are applied from one phase to another.

The Commission proposes initial phase-in demonstration EPZ projects in one or two communities beginning in 2008, with the eventual goal of at least one EPZ per region in the State. Collaboration among higher education and school districts, and other governmental and non-governmental organizations will ensure that all students have an opportunity to succeed. This recommendation will narrow the pervasive opportunity and achievement gaps that exist throughout New York State, starting in the neediest districts and spreading in phases throughout the State.

Out-of-School Youth and Re-entering Adult Learners

Far too many youth become educationally disenfranchised. Eventually, young people who leave school without a diploma become adults with limited opportunities for employment and civic engagement. New York's economy benefits if there are opportunities for educational re-entry.

While the dropout problem cuts across socioeconomic levels, geography, and racial and ethnic groups, it is particularly acute in the "Big-Five" school districts. Students who drop out urgently need support services that increase their chances for long-term success through education.

There is an extensive network of service providers in the State, many affiliated with public and private institutions of higher education. The Buffalo Public Schools' South Buffalo Education Center, Liberty Partnerships between higher and post-secondary education, and the CUNY John Jay College of Criminal Justice Prisoner Reentry Institute are among dozens of programs in New York State that focus on this population. The Commission believes that these programs deserve ongoing support.

College Readiness

Education Partnership Zones can address the concerns that, in general, disadvantaged students and families tend to be unfamiliar with the college application process and may lack the financial wherewithal necessary to attend college. In addition, these efforts will help assist in ensuring that students are prepared to enter and thrive in college. But to increase achievement, schools and colleges must also work together to align curricula, communicate standards, evaluate effectiveness, and monitor student performance.

The Commission was asked for recommendations for improving the graduation rates of the community colleges of New York State. Currently, the three-year graduation rate is 21.2% for New York State's community colleges, 13.4% for CUNY and 24.7% for SUNY. While the statewide rate exceeds the performance of five of the seven peer states, it is lower than the graduation rates in California (34.8%) and Florida (27.7%). Despite New York State's favorable comparison, it is of great concern that the overwhelming majority of students in each entering class do not complete a degree.

However, graduation rates are not, in themselves, an adequate measure of success. Community colleges prepare students for transfer, and in New York State, almost as many students transfer out before completing the associate degree (19.6%) as graduate in three years. Our transfer-out rate is lower than that in Illinois (30%), Texas (25.6%), and Pennsylvania (22.2%), and higher than the rates in the other four peer states. The combined associate degree completion rate and transfer rate yields a success rate of 40.8% for two-year publics in New York, placing the state behind California and Illinois on this measure, but ahead of the other five benchmark states. But those who neither transfer nor graduate may have encountered an array of barriers, including the cost of

attending or the competing demands of work and family. And graduation rates tend to be higher in states where students have funds remaining after tuition and fees have been paid.¹⁰ Perhaps the most important factor is that, as open-access institutions, community colleges serve a diverse body of students, many of whom have suffered from socioeconomic disadvantage and poor high school preparation.

In its 1999 report, *An Institution Adrift*, the Mayor's Task Force on CUNY, headed by Benno Schmidt, recommended that all remedial instruction be removed from CUNY's senior colleges and left to the expertise of the community college faculty and staff. Eight years later, few would dispute the extraordinary success of this change. In the words of the Center for an Urban Future, CUNY is no longer "adrift" but is a "national leader." Remediation at SUNY has long been the purview of its community colleges.

Notwithstanding the success of these remediation efforts, re-educating students is inefficient. With limited resources available to support college-level instruction in higher education, it is essential that students be prepared for college by the time they graduate from high school. This facilitates progress toward a degree and avoids student expenditure of tuition dollars and TAP to complete non-credit remedial course work.

In New York State, two measures of academic preparation, the amount of remedial instruction delivered to first-year students and the percentage of students whose high school average falls below 75, are associated with low graduation rates. The presidents of New York State's community colleges cite an array of strategies widely recognized as effective—learning communities, academic support targeted to difficult "gateway" courses, close monitoring of student progress and timely referrals, convenient scheduling of classes, and support services specifically targeted to student needs, all of which require financial resources.

New York State College Readiness Act

High school students whose basic academic skills are insufficient must be offered new opportunities to become college-ready while still enrolled in high school, at no cost to them, as follows:

- The Commission supports the initiative being undertaken by the Regents under a recent legislative enactment¹¹ to review and, where necessary, modify academic standards to provide adequate opportunity for students to acquire the skills and knowledge they need to succeed in employment or post secondary education. Systematic high school assessments will be aligned with college readiness, and assessments of the attainment of academic standards will be revised to measure year-to-year growth. In accord with this initiative, districts should implement procedures to evaluate college readiness using Regents examination scores, the PSAT and/or SAT, high school grades, and other tests and assessments.
- Teams of high school and college faculty will cooperate to develop appropriate supplementary coursework to bridge the gap between students' current level of preparation and the basic skill requirements of introductory credit-bearing college courses.
- The supplementary courses could be offered by college faculty or qualified high school faculty under the auspices of a local college, either on the premises of the high-school, during the regular school day or after hours, or at the local college after the school day.
- Students who do not opt to take remediation courses while in high school could enroll in total immersion programs during the summer prior to college enrollment.

**Policy Recommendation:
Collaboration between
high school and college
faculty to provide
supplementary
instruction at no
cost to the student.**

¹⁰ California, for example, has low community college tuition and a much higher average three-year graduation rate (35% versus New York's rate of 21%).

¹¹ Education Law § 211-a.

- The supplementary courses would be offered free of charge to the student, and the cost of instruction would be funded through the College Readiness Act. A special allocation per FTE, with supplemental aid to cover the cost of tuition and county local assistance, could be provided to the college.

Opportunity Programs for Educationally and Economically Disadvantaged

One of New York State's most notable success stories is its set of opportunity programs for economically and academically disadvantaged citizens, including: College Discovery (CD) and Search for Education, Elevation and Knowledge (SEEK) at CUNY; Educational Opportunity Programs (EOP) at SUNY; and the independent sector's Higher Education Opportunity Program (HEOP). These programs have provided educational opportunity and academic support to thousands of students who would otherwise be excluded from higher education, through pre-college summer preparation programs and tutoring, counseling, and other support services throughout their college career. Today, approximately 26,000 students are enrolled. Given their importance and long-standing track record of success, the Commission recommends increased support.

Transfer and Articulation

Every fall, about one-third of entering undergraduate students at SUNY and CUNY four-year colleges are transfer students. For some of these students the road to transfer and ultimately graduation is unnecessarily bumpy. Transfer students do not always receive full credit for coursework they have completed prior to transfer. Not only do such students lose time, but prolonging time-to-degree can exhaust financial aid eligibility.

In addition to the transfer students earning an associate degree ("degree completers") at a SUNY or CUNY college who wish to enroll in a baccalaureate program in one of the two systems, a large group of students (the majority at many colleges) opt to transfer before completing the associate degree. Additionally, there are lateral transfer students, who move between institutions while remaining enrolled at the same degree level—associate or baccalaureate.

Associate in Applied Science and Associate in Occupational Science (AAS/AOS) degree programs are applied or occupationally oriented, designed to prepare graduates for the workforce. Therefore, success in these programs is defined primarily in terms of post-graduate employment rather than transfer. Nonetheless, it is essential that any general education course credits taken as part of these degree programs be fully transferable, to benefit graduates who eventually choose to pursue a baccalaureate degree, a population that is likely to grow.

The needs of all of these categories of students must be addressed.

SUNY and CUNY Articulation and Transfer Policies and Concerns

New York does not have a legally mandated transfer policy, and SUNY and CUNY have full discretion to determine their respective policies. In sharp contrast, all of the peer states have adopted statewide transfer policies. As described below, these policies vary in scope and in the extent to which specific transfer practices are legally mandated.

Legislation: In most of the peer states, including California, Illinois, Massachusetts, and Ohio legislation requires the governing boards of the public systems to create formal transfer agreements. Laws in Florida and Texas are more prescriptive. For example, Florida law requires the admission of associate degree graduates as juniors to any four-year public institution in the State as long as the university has space, money, and the curriculum to meet the students' needs.

Statewide Articulation Agreements: All of the peer states have in place at least a limited common articulation agreement covering two- and four-year public systems within the state, although the comprehensiveness of these agreements varies. Some states (e.g., Ohio and Texas) have established a coordinating board to implement the agreement.

Common Course Numbering: Florida and Texas have common course numbering systems, in which equivalent courses carry the same prefix and number. Florida's covers all courses, while the voluntary system in Texas applies to courses in the common core curriculum.

Statewide Transfer Guide: Some of the peer states have a statewide transfer guide, including California, Florida, Illinois, Pennsylvania, and Texas.

Both CUNY and SUNY have comprehensive policies guaranteeing transfer for completers of the AA/AS and governing the transfer of credits completed as a part of the general education curriculum. Neither system has a core curriculum nor do they use common course numbering. CUNY has an online system-wide transfer guide while individual SUNY campuses have their own guides.

A comparison of the two systems' policies reveals the following:

- Both systems guarantee transfer of credits to completers of the AA and AS degrees. CUNY grants all degree completers a minimum of 60 credits toward a baccalaureate degree and guarantees associate degree recipients at least nine credits toward a parallel major. SUNY policy states that AA/AS graduates "when accepted in parallel programs at baccalaureate campuses of the University, shall be accorded full junior status and be given the opportunity to complete the requirements for a bachelor's degree within four additional semesters of fulltime work."
- The two systems take different approaches to the articulation of general education requirements:
 - Under CUNY policy, AA and AS degree completers are deemed to have automatically fulfilled all lower-division liberal arts and science distribution requirements for the baccalaureate degree. CUNY colleges may require students to complete courses to meet senior college distribution, or foreign language proficiency, requirements that were not part of the student's associate degree program, but credit is granted toward the total required for the baccalaureate.
 - SUNY follows a 30-credit general education requirement for all baccalaureate programs. Each baccalaureate degree-granting college has a general education program addressing ten learning outcomes and two competencies. Associate degree programs have not been held to this standard, but colleges have committed to meeting at least seven of the ten learning outcomes in transfer degree programs, with the remainder to be completed at the baccalaureate institution. Transferability of earned general education credits is guaranteed for any campus within the system.
- CUNY guarantees AAS completers admission to a baccalaureate program in the system. SUNY's policies do not address non-transfer programs, such as AAS and AOS degree programs.

Community college presidents from both SUNY and CUNY expressed significant dissatisfaction with the level of enforcement of current policies.¹² In addition, a number

of community college presidents indicate that some SUNY four-year institutions do not offer enough transfer admission slots to meet the demand. With 35,000 associate degrees awarded by New York State's community colleges each year (approximately 27,500 in SUNY and 7,500 in CUNY) and a growing demand for baccalaureate preparation in the workforce, transfer capacity is a significant concern. This is especially acute at more selective SUNY institutions, where lower attrition rates provide less capacity to accept transfer students from community colleges. Transfer slots are also closely rationed in certain competitive programs, such as nursing. Lack of capacity becomes most urgent for place-bound SUNY community college students who wish to attend a four-year institution relatively close to home.

Recently, SUNY's Student Assembly passed a resolution calling for full articulation of all 100 and 200 level courses across the system.

The Commission has concluded that transfer and articulation are of paramount importance and recommends that articulation and transfer policies be strengthened and enforced to eliminate all unnecessary impediments. Although course and degree requirements are appropriately the domain of faculty, it is essential that students who wish to transfer from an associate to a baccalaureate program have explicit information about the coursework and level of performance required to transfer into each major or professional baccalaureate program. The governing boards of SUNY and CUNY should take the following steps to improve articulation and transfer:

**Policy Recommendation:
Require the SUNY and
CUNY Boards to take
steps to strengthen
course and program
articulation and
transfer by 2011-12.**

- Presidents of the colleges must be held accountable for establishing mechanisms under which faculty, within each discipline and across sectors, strengthen course-to-course and program-to-program articulation with a goal of full system-wide articulation of comparable courses and seamless transfer of AA and AS students into parallel programs by 2011-12. As an initial milestone, the Commission recommends that campuses focus on the major transfer pathways,¹³ so that by the start of the 2010-11 academic year, articulation agreements are in place that specify how every comparable lower-division course can be transferred for credit, as prerequisite for more advanced courses in parallel programs and counted toward baccalaureate degree requirements at receiving institutions within the system. This includes agreement about required courses at the lower division, acceptable minimum standards for all lower-division courses, and levels of student performance, for each baccalaureate degree program. The number of equivalent courses should be maximized by aligning course content and standards. If, after examination, a course is deemed not acceptable for transfer, the community college must clearly identify it as such to students, faculty and staff (i.e., publish the information to support advisement and course selection).
- Create explicit SUNY policies governing transfer and articulation by AAS and AOS degree holders and the transfer of credits earned in pursuit of an AAS or AOS degree.
- Strengthen the entry-level advisement process for community college students overall, especially with respect to transfer options and requirements. Expand the CUNY on-line transfer guide to provide more comprehensive information on course equivalencies and build a web-based transfer guide for SUNY that provides students, faculty, and staff with comprehensive transfer and articulation information.
- Undertake a comprehensive audit annually for three years to determine the level of compliance with existing transfer policies at SUNY and CUNY and those that are subsequently adopted as a result of this policy, and report the results of the audit publicly, noting trends in the level of compliance.

¹² *Report to the Commission on Higher Education*, Association of Presidents of Public Community Colleges, August 2007.

¹³ For community colleges a major pathway is any baccalaureate-granting institution to which the college regularly sends at least 10% of its AA/AS recipients. For baccalaureate-granting institutions, it is any associate-granting institution supplying at least 10% of the students transferring in with an AA/AS.

The requirement for full articulation of courses and credits should not be misconceived as a guarantee of admission to any particular campus. Rather, it is an expectation that an associate degree graduate will be fully prepared to succeed in upper-division courses within his or her chosen major or professional program, once admitted to a baccalaureate college or university. Nevertheless, each system should make it the highest priority to ensure that adequate capacity exists in its baccalaureate programs to accommodate every student who completes an AA or AS degree and who wishes to transfer, as guaranteed by the current policies of both governing boards.

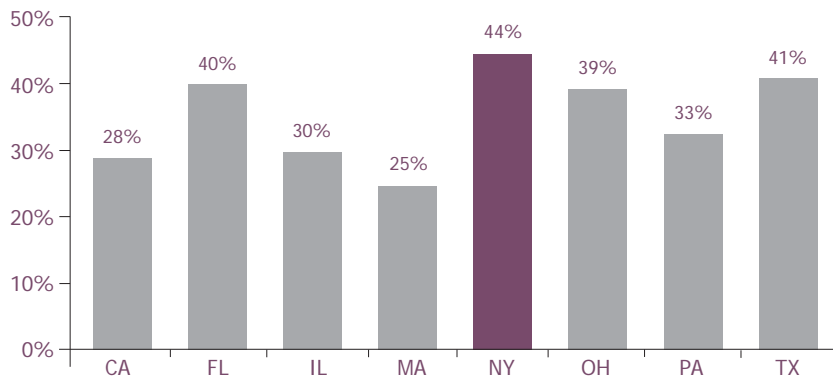
Financial Aid and Considerations of Access

Questions concerning the financing of a college education stimulate the interest of millions of New Yorkers. As tuition rises, how does the State ensure that the poor and middle class maintain access to higher education? Will the State's financial aid programs, designed to preserve access, accommodate tuition increases?

One of the best measures of low-income access to higher education is the percentage of enrolled students that receive federal aid under the Pell Grant program. Compared to peer states, New York's higher education institutions have a higher percentage of undergraduates receiving this federal aid.

Percent of Undergraduates that Receive a Pell Grant

All Sectors

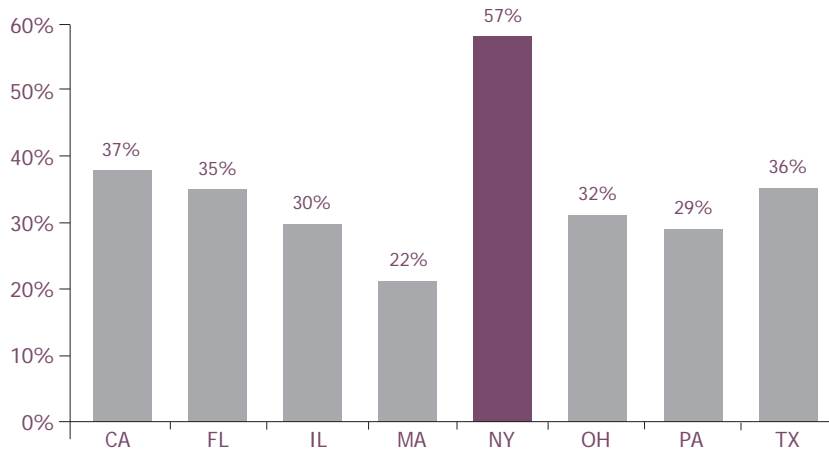


Source: Postsecondary Education OPPORTUNITY, January 2007 (data is for 2004).

Among public universities, the percentage is even higher, with 57% of enrolled undergraduates receiving Pell Grants. New York leads peer states in providing low-income students with access to public university education.

Percent of Undergraduates that Receive a Pell Grant

Public Universities



Source: Postsecondary Education OPPORTUNITY, January 2007 (data is for 2004).

New York's success in providing access to low-income students, as indicated by the high proportion of undergraduates receiving Pell aid, is also partially due to the success of the Tuition Assistance Program. For almost all low-income students, Pell Grants are simply insufficient to support college attendance, but Pell and TAP combined can make the dream of college a reality. As described below, TAP also provides much needed aid to middle-income students who are not eligible for Pell or other federal aid programs.

TAP and Fees

The New York State Tuition Assistance Program, one of the most generous need-based programs in the country, helps eligible New York residents pay tuition at approved schools in New York State. The award amount is mainly determined by family net taxable income and the student's financial status (dependent or independent). TAP awards can range from a minimum of \$500 to a maximum of \$5,000. The Higher Education Services Corporation reports that:

- In FY2006, New York State spent \$862 million on tuition assistance grants to support 323,290 undergraduate students. Of those recipients, about 60% were enrolled in public institutions with 127,890 (39.6%) at SUNY and 65,000 (20.1%) at CUNY; 91,660 (28.4%) were enrolled in independent colleges; and 38,740 (11.9%) at proprietary colleges.
- Nearly a quarter million students, or 68.4% of all recipients, have incomes of \$30,000 or less. Among the different sectors, the shares are 84.9% at CUNY, 59.7% at SUNY, 59.9% at the independent colleges, and 89.5% at the proprietary colleges. Sixty-one percent (61%) of all dependent recipients and 92.6% of all independent recipients have incomes of \$30,000 or under. Over 90% of all TAP expenditures are received by recipients with incomes of \$30,000 or less.
- The average award for dependent schedule recipients with incomes up to \$10,000 ranges from \$3,581 at CUNY, to \$3,760 at SUNY, to \$4,876 at the independent colleges, to \$4,894 at schools in the proprietary sector. The average award for independent schedule recipients with incomes up to \$10,000 ranges from \$2,679 at CUNY, to \$2,702 at SUNY, to \$2,747 among the independent colleges, to \$2,827 among the schools in the proprietary sector.

TAP, as currently constituted, helps hundreds of thousands of the neediest New Yorkers gain access to higher education. However, several shortcomings may restrict access or create significant financial hardship for certain students.

One gap is in the treatment of financially independent students. For example, a dependent student with an income \$10,000 or less attending CUNY receives an average award of less than \$3,600. The average award for an independent student with the same income is approximately \$3,000. Thus, the neediest independent student is unable to cover the cost of tuition because the award schedule for independent students has not kept pace with rising tuition costs. Regardless of status (independent vs. dependent), the award schedules for students whose family adjusted gross income falls within the \$40,000 to \$60,000 range should be enhanced.

A related shortcoming of the current program is the treatment of orphans and wards of the State. These students are classified as independent when they should be considered dependent.

In addition, the level of support for graduate students has been unchanged for nearly 20 years, despite two decades of inflation and tuition increases. As the marketplace seeks a highly educated workforce, the lack of a more generous program may be affecting access to graduate education for low-income New Yorkers.

There has also been a tremendous growth in fees that are not covered by TAP. At SUNY, annual fees average nearly \$1,000. Many of these fees are mandatory and have been

imposed by institutions in order to cover escalating costs. However, the unfortunate result is that students most in need of financial aid are charged fees that are not covered by TAP. This must be rectified over time, either by lowering fees or by making fees eligible for TAP.

Another concern is inadequate tuition assistance for part-time students. People who must work full-time, single parents who must be home with their children, and others—all deserve the State's support when they seek to better their lives by pursuing a college education. Many of these students are low income and would qualify for aid under the existing income eligibility requirements. An effort has been made to address this challenge through the recent implementation of a part-time TAP program in FY2007. However, the requirement that the student must first earn 24 credits in full-time study (one full year before the student can be eligible for part-time TAP) is particularly problematic, as many part-time students will never be eligible.

Progress has been made, to be sure, but more needs to be done. Making part-time TAP more broadly available by eliminating the required year of full-time study would cost the State well over \$100 million dollars, a 15% increase in the overall TAP budget. There is insufficient data about results from the recently enacted changes to support such a costly additional change. The Commission suggests that the possibility of expanding TAP to all part-time students should be evaluated in the summer of 2011, when three years of data will be available to determine the use of TAP by part-time students. In the meantime, we note that the State has an initiative, the Aid to Part-time Study (ATPS) program, which is currently funded at \$14 million. The Commission believes significant increased funding for this program during the interim period would accelerate progress toward the goal of comparable support for part-time students with financial need.

Overall, TAP is largely meeting its mandate to ensure that the neediest New Yorkers have access to higher education. To address the identified gaps, the Commission recommends that:

- TAP benefits be enhanced for: a) wards of the State, excluding incarcerated persons, b) independent students, c) graduate students, and d) students whose family adjusted gross income falls within the \$40,000 to \$60,000 range. The estimated cost is \$70 million (assuming a 25% increase in value of TAP award to recipients with adjusted gross incomes of \$40,000 to \$60,000).
- SUNY and CUNY develop multi-year plans to significantly reduce fees not covered by TAP or other Federal and State aid programs, and work with the State to offset campus financial losses from fee reductions with additional resources.

Low-Cost Student Loans

New York State is the only large, urban state in the nation, and the only state in the northeast, that does not offer residents attending college in the State a low-cost student loan program. As a result, New York students and their families do not have the same range of college financing options as their counterparts in other states. This may inhibit access or lead to accumulation of high-interest debt.

The Commission recommends:

- Establishment of a state low-interest subsidized loan program, to be financed through the issuance of tax-exempt bonds. All resident undergraduate and graduate students enrolled full-time in a degree program at a college or university in New York State would be eligible to apply for a low-interest loan to supplement other aid.

"The United States is now part of a connected, competitive world in which many nations are empowering their indigenous 'brainware' and building new and effective performance partnerships—and they are doing so with remarkable focus, vigor, and determination. The United States must match that tempo if it hopes to maintain the degree of prosperity it has enjoyed in the past."

Rising Above the Gathering Storm

To meet the challenge of the accelerating global competition for ideas, our institutions of higher education must be organized to achieve excellence. What does this mean?

- The leaders of these institutions must be empowered to achieve greatness, unfettered by regulations that impede successful competition for the best administrators, faculty, graduate and undergraduate students.
- These leaders should have flexibility to plan for revenues, expenses, facilities, equipment and staffing, consistent with practices at the best-run institutions in the world.
- These leaders must be held accountable for their results, on a "post-audit" basis, with appropriate positive or negative consequences.
- Campus and sector mission and distinctiveness should be enhanced, to strengthen the university systems overall.

SUNY and CUNY Governance

As is the case for all higher education institutions in this State, both public and private, SUNY and CUNY are members of the University of the State of New York, which is overseen by the Board of Regents. SUNY and CUNY each promulgate a Master Plan every four years, which the Regents review, approve and incorporate into the overall Master Plan for Higher Education.

SUNY and CUNY are both governed by Boards of Trustees, appointed by elected officials, with broad authority over the public systems, including the authority to appoint the Chancellor of each system, and both are subject to inflexible and complex regulatory systems governing procurement of goods and services. However, CUNY has greater governance flexibility in certain areas, such as real property transactions.

SUNY Governance

SUNY's governance structure derives from its initial statutory creation as a corporation within the State Education Department, headed by the Board of Regents.¹⁴ In 1961, day-to-day control of the University was shifted from the Board of Regents to a separate SUNY Board of Trustees vested with responsibility and authority to administer SUNY's operations,¹⁵ and empowered with respect to academic matters, including granting degrees and regulating curricula.

¹⁴ NY Const. Art. XII, § 2, continues the powers previously granted to the corporation known as the Regents of the University of the State of New York under the name of the University of the State of New York. See also Ed. L. § 101. Some confusion arises because the "University of the State of New York," a construct which includes all of the State's schools, museums and libraries, and many cultural institutions, is not New York's state university.

¹⁵ Ed. L. §§ 353-55.

SUNY's governance structure is complex. The SUNY Board of Trustees oversees 64 campuses enrolling approximately 420,000 students, with operational and fiduciary responsibility over 29 State-operated campuses and supervisory responsibility over five statutory colleges (four at Cornell University and one at Alfred University), 30 community colleges, four medical schools and three university hospitals.

In addition, a local body that is neither a board of trustees nor a board of visitors, known as a campus council, supervises the operations and affairs of each state-operated institution of higher education.¹⁶ Except for elected student representatives, the Governor appoints the councils' members. Campus councils exercise their statutory powers subject to the general supervision and control of the SUNY Board of Trustees. The councils recommend candidates for appointment as campus president to the SUNY Trustees, and have advisory and regulatory functions. Faculty and students advise the SUNY Board through the University Faculty Senate and Student Assembly, which each place a member on the Board of Trustees. The student, but not the faculty representative, is a voting member.

Each of SUNY's community colleges is locally governed by a board of trustees, whose members are appointed by the local sponsor (the county or counties that support the college) and by the Governor, and include an elected student representative. A community college board of trustees is authorized to administer the community college, including appointment of the college president, subject to approval by the SUNY Trustees. The boards are also authorized to adopt curricula, to prepare a budget and submit it to the local sponsor for approval, and to acquire and hold property. The boards are not vested with the power to contract, to sue and be sued or to invest funds. The SUNY Board of Trustees and System Administration are responsible for coordinating community colleges and providing oversight, which includes responsibility for budget and academic program approval.

In addition, two independent legal entities play important roles in the operations of the State University: the Research Foundation of the State University of New York and the State University Construction Fund.

The Research Foundation of the State University is an independent not-for-profit corporation chartered in 1951 to support SUNY's educational mission and manage SUNY's sponsored research programs. The Research Foundation receives no state appropriation and is not a state agency.

The State University Construction Fund, created by statute in 1962 as an independent public benefit corporation, serves as the construction agency for SUNY and plays a lead role in the implementation of the SUNY capital program. The Fund is governed by a three-member Board of Trustees appointed by the Governor, which includes at least one SUNY trustee. SUNY's capital budget is appropriated annually to the Fund. The Dormitory Authority of the State of New York (DASNY) issues bonds for the Fund's construction program, including operating expenses.

Although legally a public benefit corporation, the Fund is treated by the Legislature, Division of the Budget, the Attorney General, and the State Comptroller as a state agency. Fund contracts must be approved by the Attorney General and the State Comptroller and its operating and capital budgets are subject to Division of the Budget oversight, even though both budgets are supported by bond proceeds. Fund Trustees must approve all contracts involving an estimated expense of \$75,000 or more.

CUNY Governance

The City University of New York is composed of twenty-three colleges: eleven senior colleges, six community colleges, the Graduate School and University Center, the School of Law, the School of Journalism, the William E. Macaulay Honors College, the School of Professional Studies, and the Sophie Davis School of Biomedical Education at City College.

¹⁶ The comparable advisory body for SUNY's College of Environmental Science and Forestry (ESF) is its local board of trustees..

CUNY is governed by a Board of Trustees established by state statute with seventeen members, including appointees of both the Governor and the Mayor of the City of New York, as well as the chairpersons of the university faculty (non-voting) and student senates. Each college has its own governance plan approved by the Board of Trustees.

CUNY is neither a state nor city agency, but an independent system of public higher education. Certain aspects of the Board's power are circumscribed by statute, such as setting tuition, as well as closure or consolidation of campuses.

In the wake of the New York City fiscal crisis, the State assumed primary responsibility for and control of the University. Contracts using State funds are subject to review and approval by the Attorney General and the State Comptroller; those using City funds are subject to review and approval by the New York City Corporation Counsel and the New York City Comptroller. All CUNY employees, including community college employees, are covered by state laws with respect to ethics and conflicts of interest issues.

As with SUNY, construction and major renovation are handled by a public benefit corporation, the City University Construction Fund (CUCF), which is administered by a seven-member Board that includes appointees of both State and New York City officials. DASNY also plays a significant role in CUNY's construction and renovation projects.

SUNY Mission Differentiation

Operationally, SUNY's 64 campuses are divided into four sectors by mission: Doctoral-Degree Granting Institutions (including four that are designated as University Centers), Comprehensive Colleges, Colleges of Technology, and Community Colleges. Within sectors, each campus has distinctive characteristics. In the doctoral sector, for example, Buffalo and Stony Brook are members in the prestigious Association of American Universities (AAU). Each University Center has unique academic strengths such as: Albany's top-ranked criminology program and focus on nanotech; Stony Brook's extensive healthcare programs and top-ranked programs in physics and mathematics; Buffalo's engineering school, the largest in the system, and its top-ranked programs in pharmacy and speech-language pathology; and Binghamton's renowned liberal arts and top-ranked programs in psychobiology and rural nursing. Downstate and Upstate Medical, SUNY's two free-standing health science centers, achieve excellence with an even more sharply differentiated mission focus. And Environmental Science and Forestry is one of the very few colleges of stature in the nation focused on those specialties.

Each of these institutions must excel in order to succeed in the competition for students, faculty and resources. To excel, thousands of decisions must be made by leaders who have a thorough understanding of the national and global competitive landscape. Yet, despite the critical importance of these institutions to the State of New York, their autonomy in making decisions is severely limited, as they must seek approval from the SUNY Board of Trustees or, frequently, from both the Trustees and the Legislature—waiting when they should, instead, be acting.

Recommendations for SUNY Structure and Mission Differentiation

With a single board governing all levels of public higher education institutions outside of the CUNY system, SUNY stands alone among the comparison states. Each of the peer states (California, Florida, Illinois, Massachusetts, Ohio, Pennsylvania, and Texas) has a governing structure that provides focused attention and support on either a single tier or set of flagship institutions. Additionally, in states such as California, North Carolina and Wisconsin, the quality and reputation of the entire system is elevated by the presence of one or more outstanding research universities. The Commission believes that the span of control makes it too great a challenge for the SUNY Board of Trustees to provide adequate oversight to the entire system within its current committee structure. Moreover, we conclude that no system can be truly great without one or more

world-class research universities. The Commission has concluded that, to enhance their integral role in the State's intellectual and economic development, it is essential that SUNY's research universities receive focused attention and support.

To compete effectively, New York must (1) focus concentrated efforts on improving the resources and results of its research institutions in order to position them as national leaders; (2) sharpen the distinctiveness of these campuses by identifying areas of strength on which to focus and build, and increase public awareness of their distinctive missions and strengths; and (3) tailor central oversight to reflect the specific needs of this sector as a whole and its individual campuses, to assist every campus in achieving excellence. There is no leading public higher education system in this nation that does not have excellent research universities, and one or more flagship campuses, and the SUNY structure should be modified accordingly. The Commission recognizes the progress that both Stony Brook and the University at Buffalo—the only public members of the AAU in New York State—have made in becoming major research universities.

To that end, the Commission recommends:

**Policy Recommendation:
Strengthen campus and
sector distinctiveness
at SUNY.**

- Significantly greater recognition of, support for and enforcement of campus strengths and specializations, at all levels of SUNY. The SUNY Mission Review and Master Planning processes, for example, should focus more on building upon specific strengths to be integrated into the State's economic development efforts, and enforcing campus missions. Distinctive, superior programs at each of SUNY's campuses will, cumulatively, greatly enhance the quality and stature of the system as a whole.

**Policy Recommendation:
The SUNY Board of
Trustees should appoint
a new committee of the
Board, and establish a
vice chancellor, with
sole focus on the four
University Centers
and ESF.**

- Increased attention to the development of SUNY's research capacity. To accomplish this goal, the SUNY Board of Trustees should appoint a new committee of the Board to focus on the needs of the four university centers and the College of Environmental Science and Forestry, much like the Health Sciences and Hospitals Committee that currently oversees health sciences and hospitals, including SUNY Upstate, Downstate and the College of Optometry. The SUNY Board should also establish two new positions at the senior vice chancellor level to work with the Board committees to further support the advancement of these institutions. Together, the Board committees and the senior vice chancellors should exhort the Governor and the Legislature to provide additional funding for these campuses, and greater authority over budgetary, fiscal, personnel and property management.

The SUNY Board of Trustees should charge the new committee for the four university centers and ESF and the senior vice chancellor for that sector with developing a plan to raise the research profile and productivity of these institutions, to enhance their entrance requirements, and to establish programs for attracting more private support.

- Consideration for particular campuses. There are distinctive strengths at each of the four University Centers—Stony Brook and Buffalo are AAU institutions, Binghamton has achieved stature as a highly ranked university, and Albany has garnered a world-class reputation in nanotechnology. The Commission asks the SUNY Board to identify the distinctive missions of each University Center, and to promote those distinctive missions in planning and goal-setting.

Public Higher Education Regulatory Reform

"Over-regulation pervades every aspect of SUNY's operation, in ways large and small."¹⁷ Unfortunately, that finding still resonates, more than 20 years later. The Wharton Commission's 1985 report concluded that SUNY was greatly hampered by over-regulation. That commission's recommendations were instrumental in securing

¹⁷ *The Challenge and the Choice*, Report of the Independent Commission on the Future of the State University of New York (1985), pp. 33-35.

Virtually every individual the Commission consulted urged the state to unshackle SUNY, end micromanagement and free the system to focus on achieving excellence.

legislation that significantly improved SUNY's regulatory environment. However, many of the report's recommendations were never implemented.

This Commission's comparison of governance structures in peer states revealed that SUNY's classification as a state agency is extremely unusual. Indeed, the autonomy of public university systems in many states is guaranteed in constitutional or statutory provisions. Moreover, virtually every individual the Commission consulted on this matter urged the State to unshackle SUNY, end micromanagement and free the system to focus on achieving excellence in a competitive global environment.

To best position our public higher education systems to achieve excellence, the Commission finds that statutory changes are necessary in three areas: (1) empowering SUNY's Board of Trustees to lease SUNY property for a purpose in support of its mission without prior legislative approval; (2) granting the SUNY Construction Fund necessary operational flexibility; and (3) streamlining and improving the procurement process for SUNY and CUNY.

Property

SUNY is unable to lease, transfer or otherwise make available its real property and facilities to any public or private entity other than the SUNY Construction Fund or New York State Dormitory Authority absent special legislation, even for a purpose in support of SUNY's mission. This impedes SUNY's ability to enter into public-private partnerships to facilitate construction of research, housing, economic development, health care or other facilities, and precludes SUNY from making real property available as security for industrial development agencies or private financing of such facilities. Campuses are not able to take on creative and entrepreneurial projects, or leverage capital and know-how to create partnerships that would benefit the campus and the local economy. By contrast, in the absence of similar restrictions, CUNY has completed or is working on a number of public-private partnerships including dormitories, academic buildings, and research facilities.

The Commission recommends:

- Amending Education Law §355(2)(s) to authorize SUNY to lease or otherwise make available its real property and facilities to any public or private entity for a purpose in support of SUNY's mission.
- Exempting SUNY from provisions of Public Lands Law §§3, 30-a, and 33 and State Finance Law §167 that control and restrict how and to whom SUNY may transfer real property.

Construction Fund

It is startling that the SUNY Construction Fund is subject to even more restrictive purchasing and financial regulation than SUNY itself. The Fund is not allowed to set its own level of staffing, support and equipment, and is fully subject to public procurement regulations, including pre-audit. Given changes in the construction industry and the scope of the current and future capital multi-year capital programs, the Fund needs flexibility to fulfill its statutory mission.

The Commission recommends:

- Amending State Finance Law §112(2) and (3) to substitute a post-audit process for the current cumbersome pre-approval process for leases, contracts and permits where SUNY gives consideration other than money, and capital construction contracts.

**Policy Recommendation:
Create an environment of meaningful regulatory reform—put SUNY on a level playing field with the great public university systems across the country.**

- Amending Education Law §§373 and 376 to: (1) allow the Fund to determine the staffing, support services and equipment it needs within its own operating budget; (2) permit the Fund to conduct procurements subject only to its own procurement guidelines, with post-audit accountability; and (3) to put the Fund on the same footing as the Dormitory Authority, allow it to use emerging project delivery models such as design/build and maximum price commitment to construction managers.

Procurement

Restrictions on procurement were a central concern of the Wharton Commission. SUNY is subject to the State's standard procurement requirements, but since 1985 has not been required to submit many contracts for goods and services to the State Comptroller and Attorney General for review and approval. The monetary limit for this exemption, initially set at \$20,000, is subject to annual negotiation with the State Comptroller. Currently, the threshold amount is \$250,000.

In addition, SUNY is still required to obtain review and approval of "revenue contracts" involving payments to SUNY for a service or other consideration. The approval role of the State Comptroller and the Attorney General has also been a factor whenever SUNY issues one of hundreds of routine licenses to entities to use space in its facilities.

This review by the State Comptroller and the Attorney General is an anomaly among state university systems. Most public systems are subject only to post-audit of expenditures, while SUNY and CUNY are subject to both pre- and post-audit.

The Commission recommends:

- Amending State Finance Law §112(2) and (3) and Education Law §6218 to provide SUNY and CUNY flexibility to enter into contracts/procurements without pre-approval for goods and services and construction, by substituting a post-audit process for the current cumbersome pre-approval process for goods and services contracts.
- Amending Economic Development Law Art. 4-C to exempt SUNY and CUNY from provisions requiring publication of procurement opportunities, which delay SUNY's and CUNY's ability to purchase.
- Amending Education Law §355 to allow for the transfer or interchange of amounts appropriated to SUNY without limitation, giving SUNY flexibility to address educational and economic needs as they arise.
- Amending State Finance Law §112(3) and Education Law §355 to allow SUNY to enter into revenue contracts up to \$1 million, subject to post-audit review rather than prior approval.

SUNY System Administration

SUNY System Administration, which provides centralized interface between the worlds of state government and the State University, is located in Albany, and employs a total staff of approximately 550 persons with an operating budget of about \$32 million. It is divided into numerous departments and programs, only some of which are involved directly in the planning, operation, and oversight for the State University's 29 State-operated campuses, 30 community colleges and 5 statutory colleges. About half of SUNY's system administration staff positions are state-supported, the remaining are self-supported through external funding or university-generated revenues. Apart from funding, SUNY System Administration employees fall into two functional groups: core system administration and university-wide programs.

There are approximately 270 core system administration staff, with associated funding of about \$18 million, performing campus-support functions that can be grouped as

follows: (1) academic, fiscal and legal compliance oversight of campuses; (2) policy support and outcome measurement for the Chancellor and Board of Trustees; and (3) consulting support for campuses in areas such as federal/state relations, financial aid, human resources, employee relations, procurement/contracting, energy management and planning. In addition, administrative personnel support the business needs of all system administration departments and programs, and there are personnel in the offices of the Chancellor and Board of Trustees.

SUNY System Administration supports additional functions that fall into the category of "University-wide Programs" which are system-wide in nature, creating cost-saving opportunities through economies of scale, and/or are related to research or public service. University-wide programs include entities such as the Rockefeller Institute of Government, New York Network, Levin Institute of International Relations and Commerce, Charter Schools Institute, Educational Opportunity Program, Educational Opportunity Centers, Office of International Programs, the University Faculty Senate, the Community College Faculty Council, the Student Assembly, Nylink (a statewide membership organizations consisting of libraries both within and outside of the SUNY system), and operation of SUNY-wide information technology systems with services such as data storage/back-up, accounting/cash management, human resources, enrollment and application management, electronic library resources and distance learning.

Primary factors that drive the majority of core administrative activity at System Administration include: SUNY's status as a single corporate entity, with overall fiduciary and governance responsibility vested in the Board of Trustees; SUNY's status as a state agency; and the need to comply with various state and federal mandates applicable to higher education institutions.

The State and legislative budget processes emphasize the whole of SUNY over its campuses and that factor, along with SUNY's state agency status and unitary corporate structure, tends to inhibit differentiation among campus sectors in matters of policymaking and priority setting. System administration staff are assigned to help ensure that sector and individual campus interests and needs are represented in the academic and budget areas. In the past, there was, for example, a vice-chancellor for the health science centers but now, with the exception of the standing committees for community colleges and hospitals and health sciences, there is no structural or functional sector differentiation within the Board of Trustees or at the vice chancellor/senior officer level.

In December 1995, the SUNY Board of Trustees issued *Rethinking SUNY*, which concluded that efficiency and performance could be improved by empowering campuses to manage more of their academic and financial affairs, thereby limiting the role of System Administration. This resulted in a "culture of devolution" that continues to this day. For example, SUNY's Mission Review process provides a forum for each institution to specify its goals and priorities, and the University's method for allocating funds ("Budget Allocation Process"), introduced in 1998 and updated in 2005, reflects differences between campuses, weighting, for example, the mix of enrolled undergraduate and graduate students, the disciplines they study, the level of federally sponsored research, geographic cost differentials and performance, among other factors. Since *Rethinking SUNY*, the University has conducted several efficiency and effectiveness studies, resulting in system administration staff reductions and/or restructuring of departments.

Notwithstanding SUNY's efforts at devolution, a number of campuses, especially the university centers, see SUNY System Administration as an impediment to development of new initiatives, and increased achievement and distinctiveness.

The Commission believes that administrative focus on strengthening particular sectors, through the appointment of senior level staff to support their missions, is appropriate. In addition, the Commission has concluded that further devolution of responsibility for

**Policy Recommendation:
SUNY should commission an outside review of the structure and role of system administration, in the context of meaningful regulatory relief and the University's long-range plans, to determine how it can best support and enhance the various SUNY sectors.**

day-to-day affairs to the sectors and individual campuses, especially in the context of additional meaningful regulatory relief, will likely enhance performance and achievement, and recommends that:

- The Governor call upon the Chair of the SUNY Board of Trustees and the Chancellor, when he or she is installed, to commission and oversee an outside review of the structure and role of SUNY's system administration to determine how that administration can best support and enhance the various SUNY sectors, including the appointment of vice-chancellors or other senior level staff for particular sectors. The report should be completed by spring 2009 and should take account of previous reviews to avoid duplication.

"... American higher education needs to remain preeminent. It must continue to play a central role in the production of knowledge and innovation. It needs to create dynamic environments that will entice knowledge-based companies to locate in this country. The United States should facilitate world leadership of its higher education system by continuing to invest where it counts most."

Rising Above the Gathering Storm

Excellence in higher education requires sufficient resources. Our education institutions rely on diverse revenue streams, including tuition, state aid, philanthropy, and private and governmental grants. They require capital for investment in classrooms, laboratories, and dormitories. Finally, students with need require financial support. The Commission has studied the resources extended by the State to all of our institutions, public and private, as well as the support we offer our students. Our conclusion is that adjustments are in order.

New York State's public higher education institutions face a chronic problem—they have too little revenue and too little investment. A comprehensive financing platform is essential. SUNY and CUNY must submit multi-year master plans to the New York State Board of Regents, but because the State lacks a coherent approach to financing public higher education, there is no mechanism to ensure that the resources needed for implementation are available. With a backlog of critical maintenance in excess of \$5 billion and unacceptably low proportions of full-time faculty, SUNY and CUNY require a significant and sustained commitment of resources.

For nearly two decades, underinvestment in SUNY and CUNY has lagged the systems and campuses further and further behind peers in other states. In 1991-92 constant dollars (excluding fringe benefits costs), state support per FTE has declined from \$5,581 to \$3,992 (28.5%), and total operating budget funding per FTE declined from \$8,178 to \$6,997 (14.4%). This erosion of resources has led to a loss of full-time faculty, higher student-faculty ratios, and diminished academic and student support services. Ongoing long-term investment, rather than one-time infusions of substantial dollars, is the most prudent answer to a resource problem that has plagued both CUNY and SUNY for too long. The Commission recommends a new financing approach: the New York State Compact for Public Higher Education.

The New York State Compact for Public Higher Education

The Compact for Public Higher Education creates new connections between key constituencies to stabilize and enhance public higher education. As the name implies, the burden of financial support for CUNY and SUNY would be explicitly defined as a shared commitment involving the State, the university systems (through internal budget restructuring and efficiencies), philanthropic sources, and the students (through managed enrollment growth and modest, predictable tuition increases for which the neediest students are held harmless). The Compact would offer a balanced financing approach by delineating responsibility among partners and creating opportunities to leverage public and private aid, while assuring both government leaders and donors that their support yields additional revenues for investment in academic quality.

The Compact would require that the State of New York commit to providing tax-levy funding to cover 100% of the systems' mandatory costs, (e.g., labor contracts, fringe benefits and energy) and at least 20% of the costs of financing the state-approved master plan investment program. In turn, the university systems would commit to funding the balance of the investment plan through a combination of sources, including:

- **Philanthropy:** The university systems commit to raising private funds as a permanent source of revenue to support programmatic initiatives.
- **Restructuring/Efficiencies:** The university systems commit to reshaping their base budgets to achieve greater efficiencies, and to redeploying existing resources to meet the new priorities contained in the master plan.

Policy Recommendation:
 Establish a new approach to financing NYS public higher education—one that explicitly delineates shared responsibility and yields additional revenues to support academic quality.

- **Enrollment Growth:** The university systems will be expected to continue to increase enrollment, and revenue from tuition paid by additional students will be used for funding investments.
- **Predictable Tuition Policy:** The final element of the financing program is a series of modest tuition increases, averaging 2.5% to 4%, and not exceeding an appropriate index based on a basket of economic indicators (the Higher Education Price Index and the Consumer Price Index are two such indicators). Increases of this level will not result in additional tuition expense for the thousands of students who receive full Tuition Assistance Program awards. The maintenance of full financial aid for needy students is an essential element of this plan, as the State's commitment to access must not be diminished. The revenue from increased tuition would go exclusively toward funding investment initiatives, to be determined in full consultation with students, faculty and elected representatives.

Because the Compact requires that the State commit to funding the mandatory costs and at least 20% of the investment plans, the share of the operating budgets financed by tuition will decline over time.

The following table provides a model of how the mechanics of the New York State Compact for Public Higher Education would work. The figures reflect the combined investment needs of SUNY and CUNY over five years, and the shared burden of funding those costs. Importantly, the calculations in this table show the power of the Compact: it allows the State to stretch and leverage its support for SUNY and CUNY, providing much needed additional revenue.

Financing NYS Compact for Public Higher Education - 5 Year Incremental Costs for CUNY and SUNY
 (\$ in millions)

	Example Base Funding	Incremental Funding					5 Year Total	Example Future Funding	% of Total
		Year 1	Year 2	Year 3	Year 4	Year 5			
CUNY and SUNY Investment Plan		\$200	\$200	\$200	\$200	\$200	\$1,000		
Research Environment CUNY and SUNY		\$20	\$20	\$20	\$20	\$20	\$100		
Total New Investments		\$220	\$220	\$220	\$220	\$220	\$1,100		
Mandatory Costs		\$150	\$155	\$160	\$165	\$170	\$800		
Total New Needs		\$370	\$375	\$380	\$385	\$390	\$1,900		
Funding Sources									
Mandatory Costs (100% State Supported)		\$150	\$155	\$160	\$165	\$170	\$800		
State Share of New Investments (20%)		\$44	\$44	\$44	\$44	\$44	\$220		
Total State Support	\$3,500	\$194	\$199	\$204	\$209	\$214	\$1,020	\$4,520	54%
Non-State Financing of New Investments	\$1,500	\$176	\$176	\$176	\$176	\$176	\$880	\$2,380	46%
Total Funding	\$5,000	\$370	\$375	\$380	\$385	\$390	\$1,900	\$6,900	100%
Percent Change in Total Funding		7.4%	7.0%	6.6%	6.3%	6.0%	38.0%		
Percent Change in Total State Support		5.5%	5.4%	5.2%	5.1%	5.0%	29.1%		

The New York State Compact for Public Higher Education calls for a dramatic break from past practices, by involving government, institutions, alumni and friends, and students in a long-term partnership ensuring predictable future funding for SUNY and CUNY to support academic excellence.

Differential Tuition – Tuition Rate Deregulation

One of the essential features of the New York State Compact for Public Higher Education is a balanced and predictable resource base that includes modest tuition increases. To achieve this, New York's public systems must be given greater ability to determine tuition charges.

Currently, although the SUNY and CUNY Boards have statutory authority to set tuition, this power is significantly restricted. First, the State Education Law prohibits the

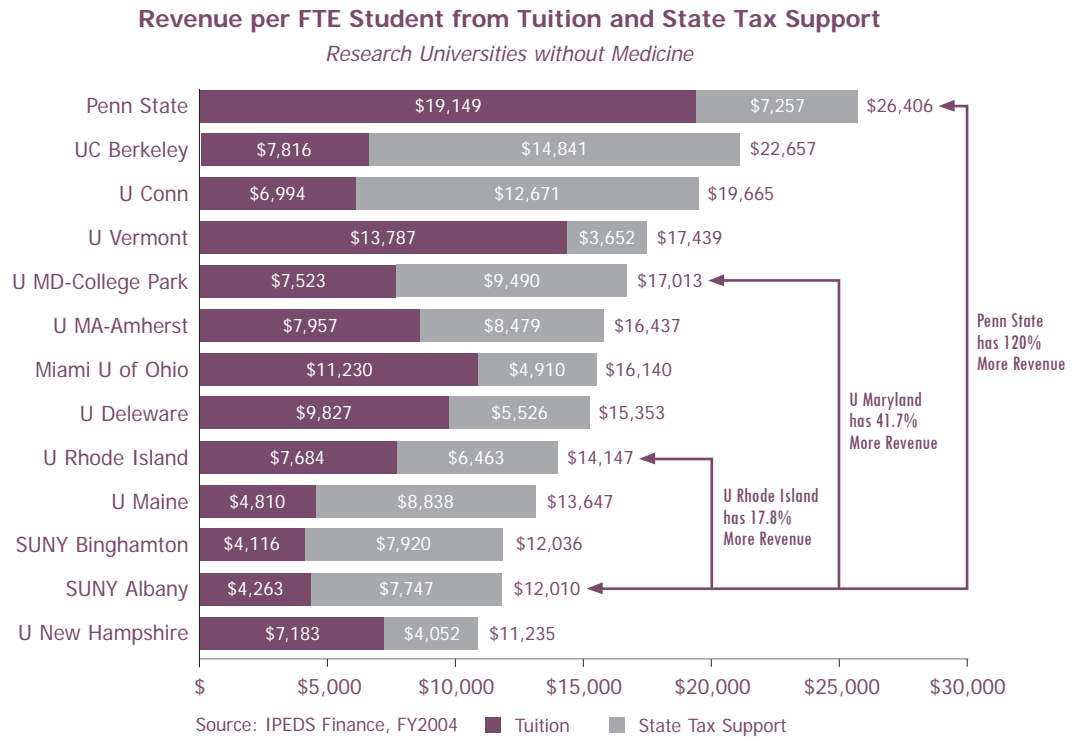
The New York State Compact for Higher Education calls for a dramatic break from the past, drawing upon partners for support to provide CUNY and SUNY with predictable funding.

charging of differential tuition rates unless the program offers a unique degree (e.g., graduate degrees and professional programs, such as medicine, dentistry and law). Additionally, tuition revenues are available to SUNY and CUNY only through legislatively enacted appropriations.

In contrast to New York State public universities, most of the outstanding public research institutions in the country (University of California at Berkeley, UCLA, University of Michigan, University of North Carolina at Chapel Hill, to name but a few) are able to set tuition levels that take into account their missions, cost structures and needs. A number of members of the Commission have served in senior positions at these institutions, and assert that the ability to set tuition at an appropriate level has been an essential element in the success of these institutions.

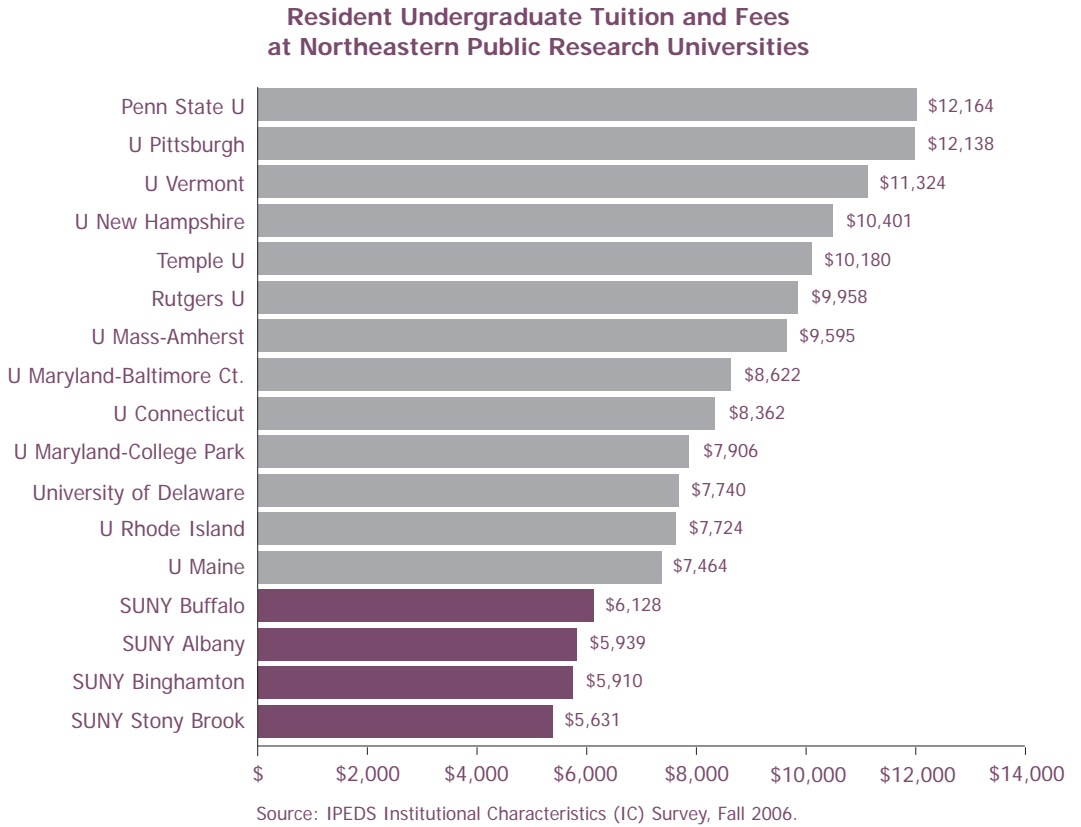
Differential tuition pricing has become increasingly prevalent in recent years, as colleges have sought to align price with cost, and ensure stable and predictable funding to support quality. In some states, increases in tuition have outpaced state support such that tuition now accounts for a larger share of revenues. In the northeast, this is true for many institutions, including Pennsylvania State University and the Universities of Delaware, New Hampshire, Rhode Island, and Vermont.

The chart below shows total revenues per FTE student (undergraduate and graduate), including tuition and state support, at research universities without medical schools in the northeast. Note the variability in total revenues as well as the proportional distribution between state support and tuition. Also note that the Universities at Albany and Binghamton are near the very bottom of the chart, with strikingly low levels of revenue per student FTE, far below most of the peer institutions.

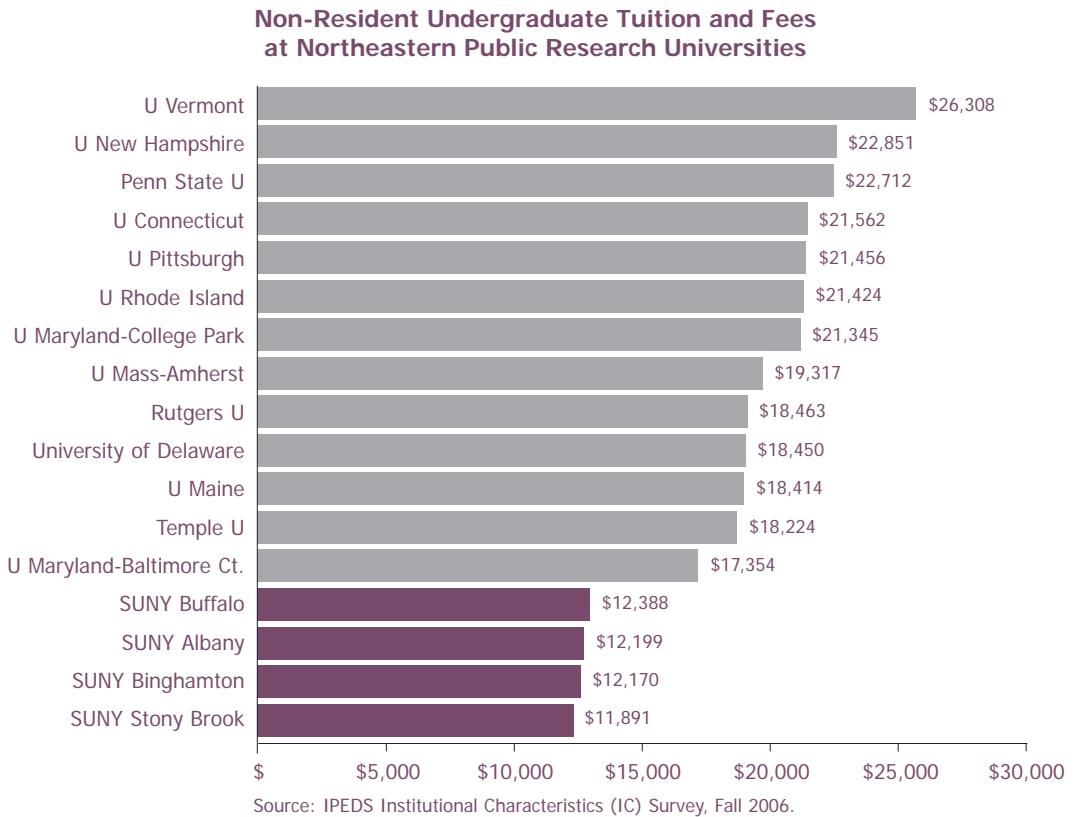


One of the most prevalent types of differential pricing is the distinction that public colleges and universities make between resident and nonresident students. Virtually every public higher education institution in the country charges a higher tuition rate to non-resident students. The tuition differential varies considerably. For illustrative purposes, the following two charts compare northeast public research university tuition and fees, for resident and non-resident undergraduate students, respectively.

SUNY research center resident tuition and fees are the lowest in the peer group.

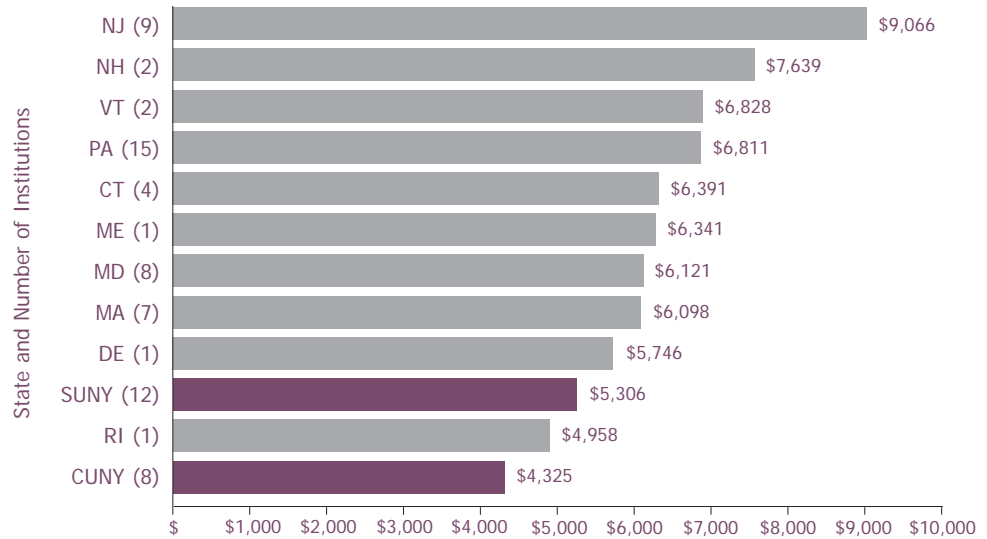


SUNY research center non-resident tuition and fees are lowest in the peer group.



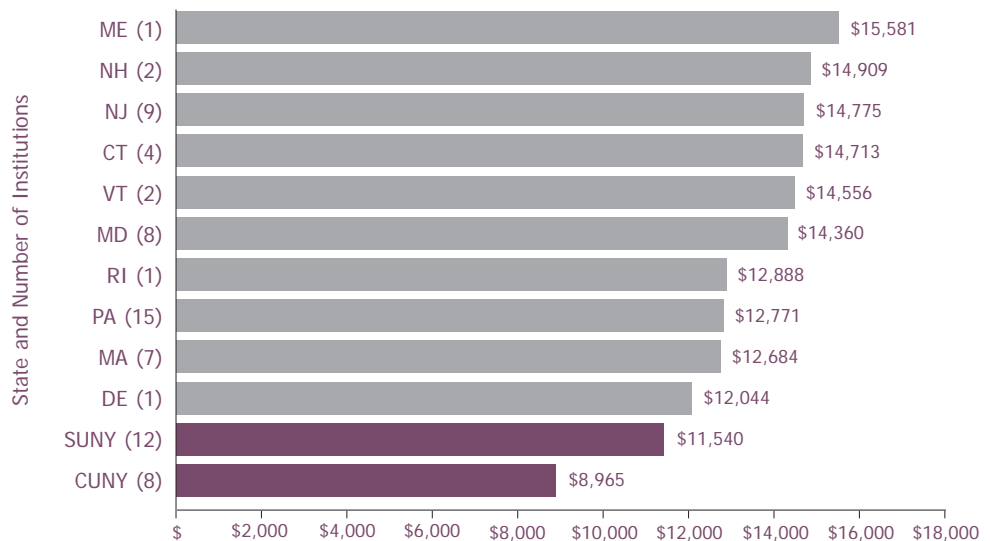
Moreover, resident/non-resident differential tuition is found across all institution types. A similar pattern can be seen in the charts below showing the average tuition and fees at public master's granting institutions in northeast states.

Resident Average Tuition and Fees at Northeastern Master's Granting Colleges



Source: IPEDS, Institutional Characteristics (IC) Survey, Fall 2006.

Non-Resident Average Tuition and Fees at Northeastern Master's Granting Colleges



Most states also allow differential tuition charges by level of study (lower division, upper division, graduate and professional) and institution type (e.g., community college, masters I, doctoral research I). Other variables may include major or program, time period when courses are offered, or cohort-based tuition (guaranteed tuition plans).

New York State Education Law prohibits CUNY and SUNY from charging differential tuition rates unless the program offers a unique degree. Thus, CUNY charges higher tuition levels for graduate degrees at Baruch College's School of Business, City College's Schools of Architecture and Engineering, and Hunter College's School of Social Work,

which offer unique degrees in the system. SUNY charges differing levels of tuition for its graduate professional programs, such as medicine, dentistry and law.

Both CUNY and SUNY have expressed a desire for a more deregulated tuition pricing environment, to permit the systems to price programs and levels of study appropriately, and to allow campuses to take into account varying cost, mission, and need. A deregulated environment would acknowledge that certain types of instruction are more costly than others and encourage better appreciation of market forces. Each institution would be permitted to petition its board of trustees for differential tuition pricing. All tuition revenues generated would remain at the campuses for investment, with required reporting to the trustees on the use of the revenue. The State would need to permit additional appropriation authority for the differential tuition revenue. Importantly, the neediest students would be held harmless through supplementary financial aid.

**Policy Recommendation:
Permit SUNY and CUNY
to charge differential
tuition rates by program
and campus, with
revenues generated
used by the campus
for investment.**

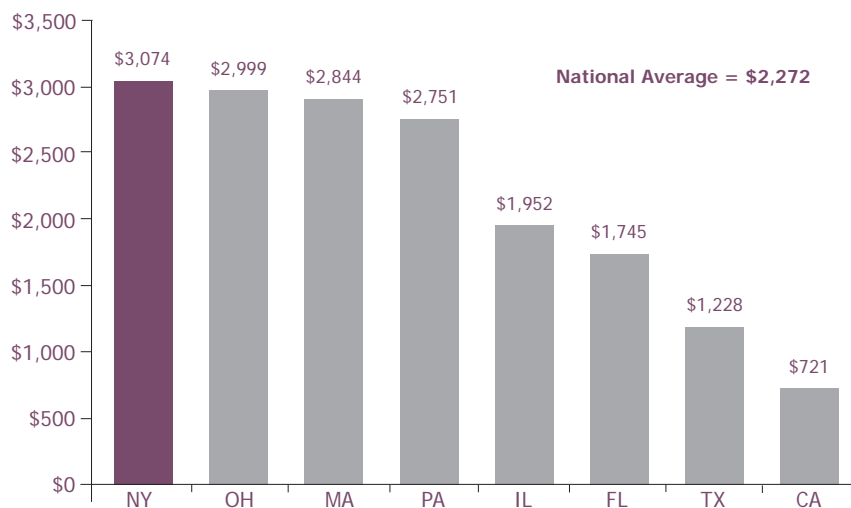
The Commission recommends amending the Education Law to permit SUNY and CUNY to charge differential tuition rates by program and by campus, with the revenues generated returned to the campuses for investment. Initially, differential tuition rates should be permitted for nonresident students by program and by campus and for resident and nonresident graduate students by program and by campus and, within three years, for all students by program and by campus. Changes in tuition should be predictable and modest, and used for investments in quality, rather than as a basis for reduction in public support.

Community College Finances

Nearly four decades ago, New York State law established a formula for the annual operational funding of community colleges providing that the State, the sponsoring county or counties and the students would each participate equally, paying one-third of budgeted costs. Subsequently, state law obligated the State to fund "up to" 40% (6/15) of the operational budget, while the student continued to provide 33% (5/15) and the county share was reduced to 26.7% (4/15), for community colleges that became "full-opportunity" schools by enrolling any New York State student with a high school diploma, an equivalency diploma, or a demonstrated ability to benefit from a community college education.

Notwithstanding the statutory revision, the State has only once in 37 years funded full-opportunity community colleges at the 40% level. In addition, a majority of sponsoring counties persistently fail to fulfill their 26.7% funding obligations. These shortfalls have been covered through higher student tuition rates. In sharp contrast to the New York's state-operated senior institutions where tuition levels are substantially lower than comparable institutions in peer states, community college average tuition and fees are well above the national average, and highest among the peer states identified. The average tuition at a SUNY community college is roughly four times the tuition paid by students in California's community college system.

Community College Tuition and Fees in Peer States



Source: American Association of Community Colleges, accessed on November 16, 2007.

Moreover, many counties consistently fail to match the State's capital appropriations as required by law, leaving state capital appropriations unspent, despite unmet needs for improvements at community colleges.

In addition, community college funding fails to reward academic excellence or educational success. Instead, community colleges are currently funded solely for enrollment of students. This one-dimensional per full-time equivalent student funding formula leads to many perverse incentives and creates destructive competition between certain community colleges.

The Commission recommends:

- Requiring the State to meet the full 66.7% (state and county) obligation up front, and then bill the counties for their mandated share. This process avoids the last-minute uncertainty about the level of support that will be provided by the county legislature.
- Holding local sponsors accountable for their operational and capital budget obligations by mandating that a county's persistent failure to reimburse the State at the 26.7% level and/or to match the State's capital appropriation would lead to a proportional loss of seats on the community college's board of trustees. These seats would then be filled by gubernatorial appointment.
- Allowing the community colleges to spend the unspent state capital appropriation when the sponsoring county or counties have failed for two successive years to match the State's appropriation of capital for infrastructure projects.
- Revising the current funding model for SUNY community colleges to reward excellence and success by retaining per-FTE funding at a slightly lowered amount, and providing community colleges with additional funding for desired services and outcomes such as: awarding of degrees and certificates; retention of students; transfer of students to four-year schools (with additional financial rewards for intra-SUNY/CUNY transfer); provision of remedial and targeted high-cost programming; and provision of non-credit vocational training and retraining. This list should be expanded to include other measures of community college service and success as appropriate.

Under current law, community colleges are technically prohibited from acquiring or building dorms. Despite this prohibition, one-half of SUNY's community colleges have built or acquired dorms by utilizing indirect mechanisms, such as contracting through their foundations for the lease or construction of such facilities.

Community colleges need dorms for at least part of their student populations. Not all students can live at home. Many community colleges attract out-of-county and out-of-state students, and there has been a recent influx of significant numbers of international students at SUNY community colleges. These colleges have evolved from commuter schools into multi-dimensional campuses serving a diverse mix of students, and the Commission recommends removal of the prohibition on community college dormitory acquisition.

Capital Reinvestment

Facilities are in Desperate Need of Critical Maintenance

SUNY and CUNY occupy a combined total of more than 122 million square feet of space. The estimated current replacement value (CRV) for all CUNY senior and community colleges, and all SUNY State-operated campuses is estimated at \$40 billion. While the State has reason to be extremely proud of the investments made over the years, these assets are falling into disrepair.

SUNY and CUNY have suffered the negative effects of more than a decade of under-investment, with a devastating toll on their facilities. The average age of buildings at CUNY and SUNY now exceeds 40 years. While most educational facilities are built to have a useful life of 75 years, various components of buildings, such as electrical equipment, heating, plumbing and roofing, need to be replaced every 20 to 50 years. These periodic re-capitalizations are essential to ensuring that academic buildings and the supporting infrastructure are functional and in "good repair."

New York State has not provided adequate levels of support to renew its academic capital stock over the past 20 years and now faces a critical maintenance backlog of at least \$3.2 billion for academic facilities on SUNY's state-operated campuses. Such a large sum is the inevitable result of neglecting a substantial asset base for many years.

CUNY and SUNY will soon submit new five-year academic facility capital plans. These plans will include retroactive and ongoing critical maintenance needs, new priority academic facility projects, and "green" energy conservation/sustainability projects. The most critical need identified involves infrastructure subsystems, especially aging underground power, heat, and water distribution systems. In the next five years, another estimated \$2.1 billion in critical maintenance will be needed to avoid accumulation of additional backlogs.

Ongoing studies of all CUNY institutions and SUNY community college critical maintenance will undoubtedly reveal billions more in backlogged critical maintenance. Persistent failure to address essential capital maintenance adequately will ultimately increase costs, and will negatively affect public higher education's academic quality.

In order to maintain CUNY and SUNY's capital facilities adequately, the Commission recommends a uniform, systemic approach of assessing ongoing capital facility renewal requirements. The Life Cycle Model based on CRV calculates the critical maintenance backlog and ongoing needs over the next 50 years. This approach is recognized by the National Association for College and University Business Officers (NACUBO), the Association of Physical Plant Administrators (APPA) and Society for College and University Planners (SCUP), and is used by a number of large public university systems, including those in peer states (e.g., University of Texas and University of California).

The critical maintenance backlog cannot be eliminated in a short period without affecting ongoing campus operations. Only portions of campus facilities can be taken off-line without adversely affecting core operations. Thus, the backlog of critical maintenance must be addressed over a period of 10 years with a sustained program of capital reinvestment.

For illustrative purposes, below is a chart showing the estimated five-year costs of ongoing critical maintenance and backlog reduction for SUNY and CUNY.

Estimated 5-Year Critical Maintenance Expenditures

(\$ in Millions)

SUNY	CUNY
\$3,500.0	\$2,333.3

Layered Capital Financing

Traditionally, CUNY and SUNY have relied on state-tax dollar pay-as-you-go and debt financing to support the majority of capital projects. Under this structure, traditional levels of state capital support available for both systems' capital needs may not be adequate. This situation could be exacerbated by the anticipated impact of the national economic downturn on available state revenues, especially in the upcoming fiscal year.

Policy Recommendation:
Address the backlog of critical maintenance at SUNY and CUNY over a period of 10 years with a sustained program of capital reinvestment.

CUNY's and SUNY's new five-year capital plans will identify new priority academic facility projects, and "green" energy conservation/sustainability projects. It is likely that these plans will call for significantly larger investments than previous plans.

For New York State's public universities to remain competitive with those in other key states, additional capital investment is required. Compared to public systems in California, Florida, Illinois, Massachusetts, Ohio, Pennsylvania and Texas, New York ranks fifth in overall capital investment for the most recent five-year period available (2001-01 through 2005-06), and sixth on a per FTE basis. These peer states tend to provide their public higher education institutions with a wider variety of state and campus revenue-supported funding options in a less regulated environment than exists for CUNY and SUNY.

**Policy Recommendation:
Support capital plans
through use of multiple
funding streams.**

It is important to identify innovative financing structures that can leverage CUNY's and SUNY's assets (e.g., real property, intellectual property, tuition revenue streams.) or otherwise provide financial support for investment in priority needs and initiatives (e.g., public-private partnerships). To maximize available capital financing, the Commission recommends the separation of CUNY's and SUNY's capital plans into layers that allow for multiple funding streams in a partnership model as follows:

1. **Capital for Facilities Renewal/Deferred Maintenance/Adaptation:** This involves traditional funding, with 100% state-supported debt, expended under an analytically based capital reinvestment methodology.
2. **Cost-Reduction Capital:** This category implements "greening" or energy-conservation/sustainability projects, where the improvements reduce energy consumption and related expenditures. Many projects can be self-supporting, with annual energy cost savings equal to annual financing requirements. Examples include window replacement, installation of more efficient heating and cooling system components, and installation of on-site power generation facilities utilizing renewable resources such as solar, wind or bio-fuels. Such projects may be suitable for public-private partnerships.
3. **Revenue-Justified Capital:** These are fully self-supporting revenue-generating projects, such as residence halls, dining facilities, hospitals and student retail commons.
4. **New Projects – Basic Educational Facilities:** These facilities host core educational and general (E&G) functions, and could be funded in traditional fashion with 100% state-supported debt.
5. **New Projects – Special Educational/Student Support Facilities:** These projects might include recreational centers, student unions, specialized technology-intensive instructional infrastructure and/or facilities. Such projects often align with campus fundraising efforts.
6. **New Projects – Research Facilities:** These are advanced laboratory and other high technology facilities intended to accommodate and foster sponsored research activities. Financing for these facilities should come from both state tax dollars and non-state funds, such as indirect costs recoveries on research grants, public-private partnerships or other sources. The appropriate ratio of state to non-state support could be determined by examining national standards for annual research expenditures per assignable square feet of space.
7. **New Projects – Economic Development:** These are typically associated with applied research, direct business support, or the early- to mid-stage commercialization of research innovations that have a direct regional and/or statewide economic benefit in terms of job creation. Capital funding could come from dedicated state economic development resources, a capital matching program, or public-private partnerships, and should be coordinated with New York State's economic development and workforce development strategies via structured working relationships among government stakeholders.

Policy Recommendation:
Establish a matching program to assist SUNY and CUNY campuses in raising private gifts for capital projects.

The Commission recommends establishment of a capital matching program for CUNY and SUNY, as well as the completion of the match program that currently exists for New York's private colleges. A state match for private gifts for capital projects will greatly assist campuses in raising funds. CUNY and SUNY should be afforded flexibility in allocating and setting differential matching rates to reflect varying campus missions, ability to raise private funds, as well as a range of project types.

Greening of CUNY and SUNY

With energy costs at all-time highs, never before have investments in energy savings had such dramatic returns. The scale of the opportunity is proportionate to the scale of the problem. SUNY and CUNY, with their combined total of more than 122 million square feet of space, represent one of the largest consumers of energy in the State. The debt service on the upfront capital investment can be paid for by the energy cost savings over time. Once the debt has been paid off, the additional savings accrue to the benefit of the system and can be reinvested to support academic excellence.

Moreover, energy conservation within SUNY and CUNY can have a sustained impact on New York's long-term environmental future, and will provide leadership that the entire nation can emulate. The opportunity is even greater when the environmental capabilities of SUNY and CUNY are considered. Both have expert staff with decades of experience, and modest additional staffing and funding can make these two institutions national environmental leaders.

New York State's public university systems should reduce their environmental impact, while assuming national roles in the transformation of higher education to sustainability through planning, teaching, and research. The Commission recommends that CUNY and SUNY act in four specific areas: achieve measurable energy efficiencies; specify green design requirements; increase the use of renewable energy; and fund research and development that focuses on alternative, renewable and sustainable energy. A brief description of each follows.

Achieve Measurable Energy Efficiencies at Campuses

Keeping up with ongoing critical maintenance of New York's higher education facilities will lead to more energy efficient facilities. The replacement of windows and roofs, heating and cooling systems, and underground heating, cooling and water lines will help ensure maximally efficient energy expenditures. Heat recovery projects in science and fine arts buildings, which need ventilation with outdoor air and typically use three to four times the energy used in a standard classroom building, can dramatically reduce energy consumption. Cogeneration plants producing heat and electricity simultaneously can save on energy outlays. Electric metering on all buildings larger than 5,000 square feet should be required to monitor usage, and the State should encourage energy performance contracting to maximize energy savings.

Design New Buildings and Rehabilitate Existing Buildings to a Minimum LEED Silver Rating

Major rehabilitation and construction projects should be designed to a minimum LEED (Leadership in Energy and Environmental Design) level of Silver. All applicable strategic initiative projects funded from the CUNY and SUNY capital plans should be certified to a minimum Silver rating. Project budgets should include the 2.5% cost premium needed to attain Silver LEED rating.

Increase the Use of Renewable Energy

Geothermal, wind, and fuel cell energy should be used where feasible and efficient. Solar power panels should be installed on all campuses to increase on-site generated green energy. Purchasing supplemental off-site generated renewable electricity will encourage development of green power generation throughout New York. Campuses

Policy Recommendation:
Implement energy efficiency improvements at both SUNY and CUNY campuses.

using heating oil should adjust or upgrade their boilers to use B20 heating oil and purchase of flex-fuel vehicles will allow for the use of B20 bio-diesel and E85 ethanol.

Fund Research and Development Projects

New York can ensure a national leadership role in the emerging research areas of bio-fuels and bio-energy through strategic long-range operating and capital support. The Commission recommends that a center for bio-fuels and bio-energy be established, to bring university research experts and businesses together to support the emerging upstate bio-fuels industry. Carbon sequestering, which reduces greenhouse gases through the use of trees, plants and aquaculture to fix carbon emissions, also deserves significant state support.

Appendix A: Summary of Findings and Recommendations

Expanding Research Capacity

A \$3 Billion Empire State Innovation Fund

An Empire State Innovation Fund should be established to provide grants for research in the physical sciences, bioscience, engineering and medicine at public and private research universities located in the State. This \$3 billion fund, disbursed in equal annual amounts over a ten-year period, would support research that holds significant promise for economic development, cementing New York's long-term commitment to science.

Recruit 2,000 Full-time Faculty to SUNY/CUNY, including 250 Eminent Scholars

To rebuild the faculty ranks and enhance research capacity, a minimum of 2,000 additional full-time faculty members should be hired by SUNY and CUNY during the next five years, including 250 eminent research faculty.

Recruit 4,000 Doctoral Students to SUNY/CUNY

A minimum of 4,000 SUNY and CUNY doctoral students should be recruited over the next five years, and offered salaries that are competitive with levels at similar institutions.

Strengthen NYSTAR

NYSTAR's capacity to guide investment and interaction between businesses and academia, initiate experimental programs in emerging technologies and facilitate the commercialization of results of public and private university research should be strengthened.

Scientific Collaboration through Global Science Excellence Clusters

To encourage collaboration among New York State's leading scientists, the New York Academy of Sciences should develop "Global Science Excellence Clusters" to be located in upstate New York, patterned after the cluster created by the Academy in New York City.

Connecting Faculty, Researchers and Students to a World of Ideas

Technological Infrastructure

Researchers' access to the high performance computing capacity of NYSGRID should be expanded, and the bandwidth of NYSERNet, which provides next-generation Internet connectivity, should be increased throughout the State.

Incentives for Academic Libraries to Pool Electronic Information

Access to electronic information should be expanded throughout the State by facilitating college and university libraries moving from individual licenses to state-wide shared licenses.

International Education

New York's strength as a leader in international education should be increased through efforts by the State's international trade offices and SUNY and CUNY to attract more international students and expand international research links. The State should establish an advisory council on international education. In addition, SUNY and CUNY should expand study abroad opportunities and international internship programs.

Developing a Diverse Workforce

Workforce Training Alignment

Responsibility for statewide workforce planning should be assigned to a single entity to guide investment in the training and education capacity of New York State's colleges and universities, particularly community colleges. This coordinated workforce planning effort should identify regional training needs and capacities of training providers, ensure alignment of higher education policies, and collect data that facilitates planning and assessment of program quality.

Support the Role of Higher Education in Workforce Development

Funding should be provided to community colleges for vocational non-credit training courses, enhanced for targeted high-cost training areas, and the State should also commit resources to the development of new credit-bearing programs.

Community Service

A statewide clearinghouse for community service programs should be established to connect students to service opportunities throughout the state. CareerZone, the job-clearing website of the Department of Labor, could be expanded to include community service postings.

Adapting Quickly to Change

Expedite Program Review

The Board of Regents should review the process for program review to develop mechanisms for expedited review. SUNY and CUNY should coordinate with the Board of Regents to ensure that their internal processes for program review are conducted simultaneously and collaboratively with those of the Regents, to be completed by June 2008.

Making Excellence Available to All

Education Partnership Zones

New York State should create "Education Partnership Zones" in which institutions of higher education and schools collaborate on a full range of educational development including early learning and pre-kindergarten, elementary and adolescent literacy, math and science studies, restructuring of schools, and building teacher capacity. Students' access to higher education would be supported through the "Million Dollar Promise," under which EPZ students are guaranteed the opportunity to attend, tuition-free, with unmet needs paid for by the state, a community college or a four-year CUNY or SUNY college if they meet certain standards and graduate from high school. Participating independent colleges and universities would support graduates from EPZ schools with special financial assistance, as needed. In addition, an award of \$1,000 would be available from state funds to support exceptionally qualified EPZ students who choose to attend institutions of higher education in the State.

College Readiness

High school students whose basic academic skills are insufficient must be offered a new opportunity to become college-ready while still enrolled in high school, at no cost to them. After high school assessments, those students in need of remediation should be offered appropriate supplementary coursework developed by teams of high school and college faculty. Students who opt not to take remediation courses while in high school could enroll in total immersion programs during the summer prior to college enrollment. The costs of supplementary course instruction would be funded through a College Readiness Act.

Opportunity Programs for Educationally and Economically Disadvantaged

Given their importance and long-standing track record of success, increased financial support should be provided for the opportunity programs for economically and academically disadvantaged citizens, including: College Discovery (CD) and Search for Education, Elevation and Knowledge (SEEK) at CUNY; Educational Opportunity Programs (EOP) at SUNY; and the independent sector's Higher Education Opportunity Program (HEOP).

SUNY and CUNY Articulation and Transfer

Presidents of the colleges must be held accountable for establishing mechanisms under which faculty, within each discipline and across sectors, strengthen course-to-course and program-to-program articulation with a goal of full system-wide articulation of comparable courses and seamless transfer of AA and AS students into parallel programs by 2011-12. As an initial milestone, the Commission recommends campuses focus on the major transfer pathways, such that by the start of the 2010-11 academic year, articulation agreements are in place that specify how every comparable lower-division course can be transferred for credit, as prerequisite for more advanced courses in parallel programs and counted toward baccalaureate degree requirements at receiving institutions within the system. This includes agreement about required courses at the lower division, acceptable minimum standards for all lower-division courses, and levels of student performance, for each baccalaureate degree program.

Entry-level advisement for community college students should be strengthened overall, especially with respect to transfer options and requirements, and comprehensive information on credit transfer should be available to students on-line. An annual audit should be undertaken for three years to determine compliance with transfer policies.

TAP and Fees

The Tuition Assistance Program award schedule should be modified to provide enhanced benefits for wards of the State, excluding incarcerated persons; independent students; graduate students; and students whose family adjusted gross income falls within the \$40,000 to \$60,000 range. In addition, SUNY and CUNY should develop multi-year plans to significantly reduce fees not covered by TAP or other Federal and State aid programs, and work with the State to offset campus financial losses from fee reductions with additional resources.

Low-Cost Student Loans

The State should establish a low-interest subsidized loan program, to be financed through the issuance of tax-exempt bonds. All resident undergraduate and graduate students enrolled full-time in a degree program at a college or university in New York State would be eligible to apply for a low-interest loan to supplement other aid.

Organizing for Excellence

SUNY Structure and Mission Differentiation

There should be significantly greater recognition of, support for and enforcement of campus strengths and specializations, at all levels of SUNY. In addition, to increase the focus on the development of SUNY's research capacity, the SUNY Board of Trustees should appoint a new committee of the Board to focus on the needs of the four university centers and the College of Environmental Science and Forestry, much like the Health Sciences and Hospitals Committee that currently oversees health sciences and hospitals, including SUNY Upstate, Downstate and the College of Optometry. The SUNY Board should also establish two new positions of senior vice chancellor to work with the Board committees to further support the advancement of these institutions.

Regulatory Reform

Statutory change should be sought to lessen regulation in three areas. SUNY's Board of Trustees should have authority to lease SUNY property for purposes that support SUNY's mission without prior legislative approval, the SUNY Construction Fund should be granted necessary operational flexibility, and the procurement process for SUNY and CUNY should be streamlined.

SUNY System Administration

The Governor should call upon the Chair of the SUNY Board of Trustees and the Chancellor to commission an outside review of the structure and role of SUNY's system administration to determine how that administration can best support and enhance the various SUNY sectors.

Resources Required for Excellence

NYS Compact for Public Higher Education

Funding for SUNY and CUNY should be reformulated under the New York State Compact for Public Higher Education, involving government, institutions, alumni and friends, and students in a long-term partnership to ensure predictable future funding for both systems in support of academic excellence. The State should provide support for 100% of mandatory costs (for example, labor contracts, fringe benefits and energy) and 20% of the costs of financing the state-approved master plan investment program. The universities would fund the balance of investment plans through a combination of private philanthropy as a permanent source of revenue; reshaping base budgets to achieve greater efficiencies and redeploying existing resources to meet new master plan priorities; enrollment growth and a series of modest tuition increases, averaging 2.5% to 4%, with additional tuition revenue used for funding investments. Modest increases in tuition charges will not result in additional expense for the thousands of students who receive full Tuition Assistance Program awards.

Differential Tuition

SUNY and CUNY should be permitted to charge differential tuition rates by program and by campus, with implementation to occur in stages over three years. Initially, differential tuition rates could be set for nonresident students by program and by campus, and for resident and nonresident graduate students by program and by campus with differential tuition eventually authorized for all students by program and by campus.

Community College Finances

The State should provide funding for the required state and county funding obligation of 66.7% of each community college's budget up front, and bill the county for its mandated share. Local sponsors should be held accountable for their operational and capital budget obligations, and a county's persistent failure to reimburse the State at the 26.7% level or to match the State's capital appropriation should result in a proportional loss of seats on the community college's board of trustees. These seats would then be filled through gubernatorial appointment. In addition, the current funding model for SUNY community colleges should be revised to reward excellence and success by retaining per-FTE funding at a slightly lowered amount, and providing community colleges with additional funding for desired services and outcomes.

Community colleges should be authorized to spend remaining state capital appropriations when the sponsoring county or counties has failed for two successive years to match the State's appropriation of capital for infrastructure projects.

Capital Reinvestment

The critical infrastructure maintenance backlog should be eliminated over the next 10 years to bring facilities into "good" repair. Ongoing needs should be calculated using a life cycle model based on the current replacement value (CRV).

Greening of CUNY and SUNY

CUNY and SUNY should act in four specific areas: attaining measurable energy efficiencies at campuses, specifying green design requirements, increasing use of renewable energy, and funding of research and development programs that focus on alternative, renewable and sustainable energy.

Layered Capital Financing

CUNY's and SUNY's capital plans should be altered to allow for multiple funding streams. Facilities renewal and adaptation, deferred maintenance and new basic educational facilities would continue to be completely funded through state-supported debt. There should also be cost-reduction improvements implementing "greening" or energy conservation/sustainability projects, where the improvements reduce energy consumption and related expenditures. Some revenue-generating projects, such as residence halls, dining facilities, hospitals and student retail commons, can be fully self-supporting, and special educational and student support facilities such as recreational centers, student unions, specialized technology-intensive instructional infrastructure may align with campus fundraising efforts. For new research facilities, the appropriate ratio of state to non-state support could be determined by examining national standards for annual research expenditures. Finally, capital funding for new economic development capital projects could come from dedicated state economic development resources in coordination with state economic and workforce development strategies.

Capital Matching Program

State funding should be provided to match donations made to CUNY and SUNY for capital projects to assist campuses in raising funds, and the match program that currently exists for New York's private colleges should be completed. CUNY and SUNY should be afforded flexibility in allocating and setting differential matching rates to reflect varying campus mission, ability to raise private funds, as well as a range of project types.

Appendix B: White Papers Received by the Commission

- Angiel, Randal. (October 2, 2007). *Learning in the Empire State: Gutenberg, Marconi and Google*. Oneonta, NY: State University of New York at Oneonta.
- Association of Presidents of Public Community Colleges. (August 1, 2007). *Report to the Commission on Higher Education*. Albany, NY: Author.
- Association of Presidents of Public Community Colleges. (July 30, 2007). *Survey of Presidents: Public Community Colleges of New York State*. Albany, NY: Author.
- Botman, Selma. (August 2, 2007). *Academic Quality in Higher Education: Testimony before the New York State Commission on Higher Education*. New York, NY: City University of New York.
- College Board. (October 1, 2007). *How the College Board Can Partner with New York State to Help Students Achieve College Success*. New York, NY: Author.
- Constantine, Lloyd. (October 9, 2007). *White Paper on Community College Issues from the Governor's Emissary*. Albany, NY: New York State Executive Chamber.
- Dutcher, James M. (July 24, 2007). *15 Ideas to Improve the State University of New York*. Middletown, NY: Orange County Community College, State University of New York.
- Edelstein, Frederick S., Jeffrey R. Michaels, and David K. Moldoff. (August 9, 2007). *The Need for a Systematic Approach for College Student Transfer of Credit*. West Chester, PA: Academy One.
- Engelbride, Edward. (September 14, 2007). *A White Paper on Volunteerism, Community Service, Service Learning*. Albany, NY: State University of New York.
- Garvey, John. (August 23, 2007). *College/University and School Partnerships: Lessons Learned at CUNY and Recommendations to the Committee*. New York, NY: City University of New York.
- Gearan, Mark. (September 11, 2007). *Remarks for the New York State Commission on Higher Education*. Ithaca, NY.
- Gosende, Robert. (October, 5 2007). *Making International Education a Priority for Higher Education in New York State*. Albany, NY: State University of New York.
- Heffernan, James. (September 29, 2007). *Higher Education and Community Service - a Blueprint for Action*. Ithaca, NY: New York Campus Compact.
- Lackman, Abraham M. (August 1, 2007). *Higher Education Capital Matching Grants Program*. Albany, NY: Commission on Independent Colleges and Universities.
- Lackman, Abraham M. (August 1, 2007). *I Live New York Loan Program*. Albany, NY: Commission on Independent Colleges and Universities.
- Lackman, Abraham M. (September 1, 2007). *Tuition Assistance Program Expansion*. Albany, NY: Commission on Independent Colleges and Universities.
- Lackman, Abraham M. (October 1, 2007). *Study New York Program*. Albany, NY: Commission on Independent Colleges and Universities.
- New York State Department of Labor. (October 5, 2007). *Department of Labor Comments: Public Education and Workforce Development in New York State*. Albany, NY: Author.
- New York State Higher Education Initiative. (July 25, 2007). *Academic Research Information Access*. Albany, NY: Author.
- New York State University Police Officers. (September 10, 2007). *New York State University Police Officers Union: Higher Education Commission 2007 Report*. Albany, NY: Author.
- Paaswell, Robert. (August 23, 2007). *The Creation of a State Internship Bank*. New York, NY: City College of New York.
- Paaswell, Robert. (July 24, 2007). *The Role of Academic Research Centers*. New York, NY: City College of New York.
- Palm, Risa. (July 24, 2007). *Addressing Academic Quality in New York's Public Universities*. Albany, NY: State University of New York.

- Phillips, Cecil. (October 15, 2007). *White Paper Regarding Monetization of Real Estate Assets*. Atlanta, GA: Place Properties.
- Rivera, Manuel. (July 20, 2007). *Education Partnership Zones: Access and Pre-K to 16 Partnerships*. Albany, NY: New York State Executive Chamber.
- Rockefeller Institute of Government. (September 28, 2007). *Analyzing SUNY Facility Renewal and Backlog Needs: Final Report*. Stanford, CA: Pacific Partners Consulting Group, Inc.
- Rubenstein, Ellis. (October 1, 2007). *The New York Academy of the Sciences and the State of New York: A Proposal of Partnership*. New York, NY: New York Academy of the Sciences.
- Scheuerman, William. (August 15, 2007). *Funding Issues: State University of New York Hospital Operations, 1990-91 Through 2005-06*. Albany, NY: United University Professions.
- Scheuerman, William. (August 15, 2007). *Recommendations for Consideration by the State Commission on Higher Education*. Albany, NY: United University Professions.
- Scheuerman, William. (November 9, 2007). *Thoughts on Devolution*. Albany, NY: United University Professions.
- Scheuerman, William. (July 7, 2007). *Tuition Assistance Program*. Albany, NY: United University Professions.
- Schroeder, Mark, Stacey Watson and Carol LeClair. (October 29, 2007). *Adult Education and Education for Out-of-School Youth in New York State*. Buffalo, NY.
- Seligman, Joel. (August 1, 2007). *Innovation Fund*. Rochester, NY: University of Rochester.
- Simpson, John B. (August 6, 2007). *Building a Premier System of Public Higher Education in New York: Governing a Premier System*. Buffalo, NY: University at Buffalo, State University of New York.
- Simpson, John B. (August 6, 2007). *Building a Premier System of Public Higher Education in New York: Increasing Access and Diversity in a Premier Public System*. Buffalo, NY: University at Buffalo, State University of New York.
- Simpson, John B. (August 6, 2007). *Building a Premier System of Public Higher Education in New York: Investing in a Premier Public System of Public Higher Education in New York*. Buffalo, NY: University at Buffalo, State University of New York.
- State University of New York Office of Community Colleges. (July 24, 2007). *Community Colleges Comparative Systems of Governance and Funding in Selected States*. Albany, NY: Author.
- State University of New York. (August 6, 2007). *Comparative Governance*. Albany, NY: Author.
- State University of New York. (August 6, 2007). *Comparison of SUNY to Four State University Systems*. Albany, NY: Author.
- State University of New York. (September 21, 2007). *Governance and the Pursuit of Academic Excellence at the State University of New York: Recommendations for Positive Change*. Albany, NY: Author.
- State University of New York. (September 24, 2007). *SUNY White Paper for the Commission on Higher Education*. Albany, NY: Author.
- Thompson, Gary, Chris Filstrup, and Jason Kramer. (July 25, 2007). *The Strategic Value of Academic Libraries in Economic and Workforce Development*. Albany, NY: New York State Higher Education Institute.
- United University Professions. (July 30, 2007). *Funding Issues*. Albany, NY: Author.
- United University Professions. (July 30, 2007). *Recommendations for Consideration*. Albany, NY: Author.
- United University Professions. (July 30, 2007). *Recommendations for Consideration 2*. Albany, NY: Author.

Appendix C: Hearings and Testimony

October 11, 2007, Albright Knox Art Gallery: Buffalo, New York

Individuals/Groups Who Presented Testimony (in presentation order):

Brian Petraitis, Director, New York State Office, College Board
Christen Pollock, Director of Advocacy and Government Relations, College Board
Robert Bennett, Chancellor, New York State Board of Regents
Carl Haynes, President, Tompkins Cortland Community College, SUNY
Tyler Swanson, President, Jamestown Business College, Association of Proprietary Colleges
James Williams, Superintendent, Buffalo Public Schools
Francis Clark, Program Coordinator, NYPIRG
Aaron Krolikowski, Student, University Honors College, University at Buffalo, SUNY
Jason Kramer, Executive Director, New York State Higher Education Initiative
William Reuter, Interim President, Erie Community College, SUNY
Milton Johnson, President, Faculty Council of Community Colleges, SUNY
Muriel Howard, President, Buffalo State College, SUNY
Alex Cartwright, Vice Provost for Strategic Initiatives, University at Buffalo, SUNY
Charles Caples, Program Director, Continuing Education Association of New York
Christopher Dahl, President, College at Geneseo, SUNY
Robert Brower, Chair, Education Committee, NYS GIS Association
Russell Bessette, Special Advisor to the Vice Provost and VP of Health Science, NYS Center of Excellence in Bioinformatics-Life Sciences, University at Buffalo, SUNY
Debra Colley, Dean, College of Education, Niagara University
Thomas Stewart, President, Gaymar Industries
Steven Scheiman, Senior Vice President and Dean, College of Medicine, Upstate Medical University, SUNY
Ronald Rosati, Provost and Officer in Charge, Alfred State College, SUNY
Mary Gresham, Dean, Graduate School of Education, University at Buffalo, SUNY
Dennis Hefner, President, College at Fredonia, SUNY
Debra Park, Associate Vice President for Public Relations, Canisius College

Additional Written Testimony Submitted to the Commission by:

Michael Gayle, Director, University at Buffalo Liberty Partnership Program, SUNY

November 15, 2007, Nassau Community College: Garden City, New York

Individuals/Groups Who Presented Testimony (in presentation order):

Hubert Keen, President, Farmingdale State College, SUNY
Samuel Aronson, Laboratory Director, Brookhaven National Laboratory
Chris Filstrup, Dean of libraries, Stony Brook University, SUNY
Kimberley Reiser, Professor of Biology, Nassau Community College; Past President, Faculty Council of Community Colleges, SUNY
Shirley Strum Kenny, President, Stony Brook University, SUNY

Chuck Cutolo, Director of Governmental Affairs, Nassau Community College, SUNY
Mary Adams, Chair, Board of Trustees, Nassau Community College, SUNY
Sydney Gary, Director of Research Operations, Cold Spring Harbor Laboratory
Cheryl Lynch, Chairperson, NYPIRG
Matthew Fiel, President of the Student Association, Fashion Institute of Technology, SUNY
Ellen Schuler Mauk, NYSUT Board of Director Member for SUNY Community Colleges; President,
Faculty Association of Suffolk County Community College
Marc Jerome, Executive Vice President, Monroe College
Adam Kirschenbaum, President, Student Government Association, Nassau Community College,
SUNY
Sean Galvin, Director, LaGuardia CC Liberty Partnership Program, LaGuardia Community College,
CUNY
Mary Anne Meyer, Project Director, Career Pathways in Tech-Prep, Queensborough Community
College, CUNY

Additional Written Testimony Submitted to the Commission by:

Michael J. Borges, Executive Director, New York Library Association

December 5, 2007, CUNY Graduate Center: New York, New York

Individuals/Groups Who Presented Testimony (in presentation order):

Barbara Bowen, Professional Staff Congress, CUNY
Elizabeth Peña, Director and Professor, Art Conservation Department, Buffalo State College, SUNY
Sandi Cooper, Professor of History, College of State Island and the Graduate Center, Member of the
Executive Committee of the University Faculty Senate, CUNY
Charles Becker, Chief Scientist, Micro & Nano Structure Technologies, GE Global Research
Berneal Sutherland, Student, Queens College, CUNY
Manfred Philipp, Ex Officio Trustee of CUNY, Chair of University Faculty Senate, CUNY
Jonathan Buchsbaum, Professor of Media Studies, Queens College and the Graduate Center, CUNY
Ellen Silber, Project Director, Mentoring Latinos, Fordham University Graduate School of Social
Services
Jamal Manassah, Professor of Electrical Engineering, City College of New York, CUNY
Curtis Kendrick, University Librarian, CUNY
Jean Weisman, Administrative Coordinator and Financial Aid Counselor, Center for Worker
Education, City College of New York, CUNY
Anna Spiro, Student, Graduate School of Arts and Sciences, Columbia University (former Adjunct
Instructor, SUNY and CUNY)
Kenneth Ryesky, Attorney and Faculty member, Accounting and Information Systems, Queens
College, CUNY
Terence Martell, Saxe Distinguished Professor of Finance, Baruch College, CUNY
Stefan Baumrin, Professor of Philosophy, Lehman College and the Graduate Center, Member of the
Executive Committee of the University Faculty Senate, CUNY

Additional Written Testimony Submitted to the Commission by:

Andrea McArdle, Professor of Law, City University of New York Law School
Barry Gross, Professor of Electrical Engineering, City College of New York, CUNY

Michael Green, Department of Chemistry, City College of New York, CUNY
Sy Stemberg, New York Life

December 11, 2007, Hunter College, CUNY: New York, New York

Individuals/Groups Who Presented Testimony (in presentation order):

William Crain, Professor of Psychology, City College of New York, CUNY
Nancy Aries, Professor, Executive Director of Academic Programs - Public Affairs, Baruch College, CUNY
Clive Belfield, Professor of Economics, Queens College, CUNY
Deena Bernstein, Chair, Professor, Lehman College, CUNY
Anthony Hernandez, President, Student Government Association, Baruch College, CUNY
Jose Coronado, Student Leader, Baruch College, CUNY
Evita Belmonte, Student Leader, NYC College of Technology, CUNY
Maida Hernandez, Student, Borough of Manhattan Community College, CUNY
Marianne Kalinowski, Student Leader, Hunter College, CUNY
Gonul Asiker, Vice-Chair, Committee for Disabled Students, Queens College, CUNY
Seon Nanton, Chairperson, Coalition for Students with Disabilities, CUNY
Robert Ramos, Chairperson University Student Senate and CUNY Trustee, CUNY
Dina Dahbany-Miraglia, Professor of Speech and Theatre (Retired), Queensborough Community College, CUNY
Dean Savage, Professor of Sociology, Queens College, CUNY
James Freeman, Professor and Coordinator, Political Science, Bronx Community College, CUNY
Rick Repetti, Professor of Philosophy, Kingsborough Community College, CUNY
Susan Croll, Director of Neuroscience and Professor of Psychology, Queens College, CUNY
Timothy Alborn, Professor of History, Lehman College, CUNY
Nicholas Freudenberg, Distinguished Professor, Urban Public Health Program, Hunter College, CUNY
Susan Klitzman, Professor, Urban Public Health Program, Hunter College, CUNY
Robert Dottin, Professor of Biology, Director of the Center for Study of Gene Structure and Function, Hunter College, CUNY
Hector Lopez, Professor, Hostos Community College, CUNY
Gay Brookes, Professor, Chairperson Developmental Skills, Borough of Manhattan Community College, CUNY
Lenore Beaky, Professor of English and Vice Chair of University Faculty Senate, LaGuardia Community College, CUNY
Martha Bell, Professor and Chair of SEEK Department, Brooklyn College, CUNY
Marcia Newfield, Vice President for Part Timers/BMCC, Adjunct, Professional Staff Congress, Borough of Manhattan Community College
Raffael Guidone, Professor, NYC College of Technology, CUNY
Frank Kirkland, Professor and Chair of Philosophy, Hunter College, CUNY
Andrew Beveridge, Professor and Chair, Sociology, Queens College and the Graduate Center, CUNY
John Tarbell, Distinguished Professor and Chair of Biomedical Engineering, City College of New York, CUNY
Geroge Sussman, Professor of History, LaGuardia Community College, CUNY

Victor Rosado, Business Agent, Graduate Student Employees Union, CUNY
Stanley Wine, Adjunct Lecturer, Statistics and Computer Information Systems, Baruch College, CUNY
Urs Jans, Professor, City College of New York, CUNY
Rudolph Chase, President, Student Advisory Council, Student Government, Kingsborough Community College, CUNY
Rusty Mateev, President, Business Council, Student Government, Kingsborough Community College, CUNY
Joy Marchionni, President, Honors Club, Kingsborough Community College, CUNY
Millicent Roth, Professor, Assistant Dean for Undergraduate Programs, City College of New York, CUNY
Mary Lou Bilek, Associate Dean for Special Projects and Professor of Law, CUNY School of Law
Samantha Jackson, Student Ambassador, President of the English Club, Vice President of the West Indian Club, Hostos Community College, CUNY
Jeff Rothman, Professor of Physical Therapy, College of Staten Island and the Graduate Center, CUNY
Fred Naider, Distinguished Professor of Chemistry and Biochemistry, College of Staten Island and the Graduate Center, CUNY
John Drobnicki, Acting Chief Librarian, York College, CUNY
Morris Hounion, Professor, Library, NYC College of Technology, CUNY

Additional Written Testimony Submitted to the Commission by:

Lynda Caspe, Adjunct Professor of Art, Borough of Manhattan Community College, CUNY
William Hersh, Chair, Professor of Chemistry and Biochemistry, Queens College, CUNY
Jubril Lawal, Student Ambassador, Hostos Community College, CUNY
Dawn Minerve, Student, LaGuardia Community College, CUNY
Martha Jane Nadell, Professor of English, Brooklyn College, CUNY
Yezmin Pena, Student Ambassador, Hostos Community College, CUNY
Glenn Petersen, Professor and Chair, Department of Sociology and Anthropology, Baruch College, CUNY

Appendix D: References Cited in Report

- Achieve, Inc. (2004). *Do Graduation Tests Measure Up: A Closer Look at State High School Exit Exams*. Washington DC: Author.
- Association of American Universities Data Exchange. (2006). <http://www.pb.uillinois.edu/AAUDE/>.
- Association of Presidents of Public Community Colleges. (2007). *Report to the Commission on Higher Education*. Albany, NY: Author.
- Association of Presidents of Public Community Colleges and the Association of Boards of Trustees of the Community Colleges. (1999). *Community Colleges and SUNY: A Study of the Statewide Governance of the SUNY Community Colleges*. Albany, NY: Author.
- AT Kearney. (2007). *Delivering the Promise of New York State: A Strategy for Economic Growth and Revitalization*. Prepared for Empire State Development. Albany, NY.
- Atkinson, Robert D. and Daniel K. Correa. (2007). *The 2007 State New Economy Index: Benchmarking Economic Transformation in the States*. Washington, DC: The Information Technology and Innovation Foundation.
- Blegen, Theodore C. (1957). *The Harvests of Knowledge. A Report on Research Potentials and Problems in the State University of New York*. Albany, NY: The Research Foundation of State University of New York.
- Buder, Leonard. (March 1, 1977). "Carey Panel to Propose Forming 2 New Public University Systems." New York, NY: *New York Times*.
- Conley, D. (2003). *Mixed Messages: What State High School Tests Communicate About Student Readiness for College*. Eugene, OR: Center for Educational Policy Research.
- Cornell Higher Education Research Institute. (2002). *Survey on Start-up Costs*. Ithaca, NY: Author.
- Corporation for National and Community Service. (2007). *Volunteering in America: 2007 State Trends and Rankings in Civic Life*. Washington, DC: Author.
- Douney, J. (2006). *Alignment of High School Graduation Requirements and State-Set College Admissions Requirements. State Notes: High School Transition to Postsecondary*. Denver, CO: Education Commission of the States.
- Editorial Projects in Education Research Center. (2007). *Quality Counts: From Cradle to Career: Connecting American Education from Birth through Adulthood*. Washington, DC: Education Week.
- Education Trust. (Fall 1999). "Ticket to Nowhere: The Gap between Leaving High School and Entering College and High Performance Jobs." *Thinking K-16, Vol. 3, issue 2*. Washington, DC: Author.
- Fine, Benjamin. (December 1, 1957). "A Centralized Versus a Decentralized State University Is Now the Question." New York, NY: *New York Times*.
- Independent Commission on the Future of the State University of New York. (1985). *The Challenge and the Choice*. Albany, NY: Author.
- Kolker, Robert. (November 22, 1999). "The Old College Try." New York, NY: *New York Magazine*.
Laws of New York.
- Levine, Sanford H. (October 1988). *Transcript of speech on SUNY History, the State University of New York Administrators' Retreat*. Saratoga Springs, NY: Author.
- Mayor's Advisory Taskforce on the City University of New York. (1999). *CUNY: An Institution Adrift*. New York, NY: Author.
- McCall, Carl H. (1998). *New York State's Higher Education Policy Vacuum*. Albany, NY: Office of the State Comptroller.
- National Academy of Sciences, National Academy of Engineering, and Institute of Medicine. (2007). *Rising Above the Gathering Storm: Energizing and Employing America for a Brighter Economic Future*. Washington, DC: The National Academies Press.
- National Center for Education Statistics. (June 2007). *Mapping 2005 State Proficiency Standards onto the NAEP Scales: Research and Development Report*. Washington, DC: U.S. Department of Education.

- National Center for Educational Statistics, Integrated Postsecondary Education Data System. (Multiple years, multiple surveys). Washington, DC: U.S. National Center for Higher Education Management Systems.
- National Center for Higher Education Management Systems. (2005). *As America Becomes More Diverse: The Impact of State Higher Education Inequality*. Boulder, CO: Author.
- National Center for Public Policy and Higher Education. (2006). *Highlights from Measuring Up 2006, National Report Card on Higher Education*. San Jose, CA: Author.
- National Center for Public Policy and Higher Education. (2004). *Highlights from Measuring Up 2004, National Report Card on Higher Education*. San Jose, CA: Author.
- National Governor's Association. (2007). *Innovation America: A Final Report*. Washington, DC: Author.
- National Science Foundation. (2007). *Academic Research and Development Survey, FY 2005*. Arlington, VA: Author.
- New York State Constitution.
- New York State Committee on Higher Education. (1960). *Meeting the Increasing Demand for Higher Education in New York State. A report to the Governor and the Board of Regents*. Albany, NY: The Committee.
- New York State Department of Labor. (Accessed 2007). CareerZone. <http://www.nycareerzone.org/>.
- New York Times Editorial Desk. (January 25, 1985). "Stop Suffocating SUNY." New York, NY: *New York Times*.
- Postsecondary Education OPPORTUNITY. (January 2007). Oskaloosa, IA: Author.
- Regents' Commission on Higher Education. (1993). *Sharing the Challenge*. Albany, NY: The Commission.
- Select Committee on the Future of Private and Independent Higher Education in New York State. (1968). *New York State and Private Higher Education*. Albany, NY: State Education Department.
- State Task Force on Financing of Higher Education in New York State. (1973). *Higher Education in New York State; A Report to Governor Nelson A. Rockefeller*. Albany, NY: The State Task Force.
- State Task Force on the Financing of Higher Education in New York State. (1972). *Report of the State Task Force on the Financing of Higher Education in New York State*. Albany, NY: The State Task Force.
- State University of New York. (2006). *New York: The State of Learning. A Report to the Governor and the Legislature on the Education Status of the State's Schools. Statewide Profile of the Educational System*. Albany, NY: New York State Education Department.
- Temporary State Commission on the Future of Postsecondary Education. (1977). *Report of the Temporary State Commission on the Future of Postsecondary Education*. Albany, NY: The Commission.
- Temporary Commission on the Need for a State University. (1948). *Report of the Temporary Commission on the Need for a State University*. Albany, NY: Williams Press.
- Trustees of the State University of New York. (1995). *Rethinking SUNY*. Albany, NY: State University of New York.
- U.S. Census Bureau. (2004). *Current Population Survey (CPS) Supplement*. Washington, DC: Author.
- University of the State of New York. (2006). *New York State District Report Cards for School Year 2005-06*. Albany, NY: New York State Education Department.
- Venezia, A., M. W. Kirst, and M. D. Usdan. (2003). *The Governance Divide: The Case Study for New York National Center Report #05-6*. Washington, DC: National Center for Public Policy.

Appendix E: Bibliography

- American Enterprise Institute for Public Policy Research. (2007). *Looking Beyond Loan Scandals and Codes of Conduct: AEI Scholar Offers Strategies to Revamp College Finance System for the 21st Century*. Washington, DC: Author.
- Angelou, Angelos G. (2006). *Collaborating for our Future*. Binghamton, NY.
- Arthur Steen, Lynn, ed. (1997). *Why Numbers Count: Quantitative Literacy for Tomorrow's America*. New York, NY: College Entrance Examination Board.
- Association of Presidents of Public Community Colleges and the Association of Boards of Trustees of the Community Colleges. (1999). *Community Colleges and SUNY: A Study of the Statewide Governance of the SUNY Community Colleges*. Albany, NY: Author.
- Association of Presidents of Public Community Colleges. (2007). *Report to the New York State Commission on Higher Education*. Albany, NY: Author.
- Bank of America. (2007). *Presentation of Financing Ideas to the New York State Commission on Higher Education*. New York, NY: Author.
- Bank of America. (2007). *Recommendations for the 2008-2009 New York State Budget*. New York, NY: Author.
- Bank of America. (2006). *Debt and Endowment Management Practices at New England Colleges and Universities: 2005 Study and Roundtable Discussion*. New York, NY: Author.
- Baum, Sandy and Jennifer Ma. (2007). *Education Pays: The Benefits of Higher Education for Individuals and Society*. New York, NY: College Board.
- Blegen, Theodore C. (1957). *The Harvests of Knowledge. A Report on Research Potentials and Problems in the State University of New York*. Albany, NY: The Research Foundation of the State University of New York.
- Board of Regents, State of New York. (2005). *The Statewide Plan for Higher Education 2004-2012*. Albany, NY: Author.
- Buder, Leonard. (March 1, 1977). "Carey Panel to Propose Forming 2 New Public University Systems." New York, NY: *New York Times*.
- Bundy Select Committee on the Future of Private and Independent Higher Education. (1968). *New York State and Private Higher Education*. The Committee.
- Burke, Joseph. (1990). *Reaffirmation and Extension of Transfer and Articulation Policy*. Albany, NY: State University of New York.
- California Higher Education Policy Center. (1997). *State Structures for the Governance of Higher Education: New York Case Study Summary*. California: Author.
- California Higher Education Policy Center. (1997). *State Structures for the Governance of Higher Education: A Comparative Study (Illinois, Texas, Georgia, California, Florida, New York, Michigan)*. California: Author.
- California Higher Education Policy Center. (1997). *State Structures for the Governance of Higher Education: California Case Study Summary*. California: Author.
- California Higher Education Policy Center. (1997). *State Structures for the Governance of Higher Education: Florida Case Study Summary*. California: Author.
- California Higher Education Policy Center. (1997). *State Structures for the Governance of Higher Education: Georgia Case Study Summary*. California: Author.
- California Higher Education Policy Center. (1997). *State Structures for the Governance of Higher Education: Illinois Case Study Summary*. California: Author.
- California Higher Education Policy Center. (1997). *State Structures for the Governance of Higher Education: Michigan Case Study Summary*. California: Author.
- California Higher Education Policy Center. (1997). *State Structures for the Governance of Higher Education: Texas Case Study Summary*. California: Author.
- Center for Measuring University Performance. (2006). *The Top American Research Universities*. Tempe, AZ: Arizona State University.

- Citigroup. (July 2007). *Financing Opportunities*. New York, NY: Author.
- City University of New York. (2007). *CUNY College Now Foundation Courses (CNFCs): A Curriculum Development Project for College and High School Faculty*. New York, NY: Author.
- City University of New York (2007). *CUNY Prep: CUNY Preparatory Transitional High School. A Comprehensive School Report and History of the Project: 2004-2006*. New York, NY: Author.
- City University of New York. (2007). *NYC Public Collaborative Programs*. New York, NY: Author.
- City University of New York. (2007). *Program Overview: CUNY Middle Grades Initiative /GEAR UP (MGI/GU)*. New York, NY: Author.
- City University of New York. (2006). *CUNY: GEAR UP. Collaborative Programs Research Report*. New York, NY: Author.
- City University of New York. (2006). *CUNY: Testimony for Chancellor Matthew Goldstein, CUNY; NYS Senate Higher Education Committee Hearing: Encouraging Post-Secondary Studies in Science, Math, and Engineering*. New York, NY: Author.
- City University of New York. (2006). *Early Colleges in New York City: A New Model for Student Success*. New York, NY: Author.
- City University of New York. (2006). *Funding for Early College Schools in New York City*. New York, NY: Author.
- City University of New York. (1999). *CUNY: An Institution Adrift: Report of the Mayor's Advisory Task Force on The City of New York*. New York, NY: Author.
- College Board. (2007). *AP Report to the Nation 2007: Executive Summary*. New York, NY: Author.
- College Board. (2007). *How the College Board Can Partner with New York State to Help Students Achieve College Success*. New York, NY: Author.
- College Board. (2007). *Recent College Board Research Relating to Higher Education: 14 Research Notes, 19 Research Reports*. New York, NY: Author.
- College Board. (2007). *State Reports: Executive Summary*. New York, NY: Author.
- College Board. (2007). *Trends in College Pricing*. New York, NY: Author.
- College Board. (2007). *Trends in Student Aid*. New York, NY: Author.
- College Board. (2006). *State Reports: SAT Reasoning Test Trends, SAT Executive Summary, State Overview Report, State Integrated Summary, SAT College-Bound Seniors Report, PSAT/NMSQT College-Bound Sophomores and Juniors Reports, Report Tutorials*. New York, NY: Author.
- College Board. (1999). *A Challenge to Change: The Language Learning Continuum*. New York, NY: Author.
- College Board Schools, (2007). *New York Education Initiative*. New York, NY: College Board.
- Commission on Higher Education, Middle States Association of Colleges and Schools. (1982). *Characteristics of Excellence in Higher Education: Standards for Accreditation*. Philadelphia, PA: Author.
- Convening of Academic Institutions. (2007). *New York City Academic Real Estate: Needs, Benefits, and Opportunities* New York, NY: Author.
- Corporation for National and Community Service. (2007). *Volunteering in America: 2007 State Trends and Rankings in Civic Life*. Washington, DC: Author.
- Council for Aid to Education. (2005). *Voluntary Support of Education (VSE) Survey*. New York, NY
- CRS Report for Congress. (2007). *Title III and Title V of the Higher Education Act: Background and Reauthorization Issues*. Washington, DC: Author.
- Education Commission of the States, National Center for Higher Education Management Systems, National Center for Public Policy and Higher Education. (2003). *Getting Better Now: The National Collaborative for Postsecondary Education Policy*. San Jose, CA: The National Center for Public Policy and Higher Education
- Fine, Benjamin. (December 1, 1957). "A Centralized Versus a Decentralized State University Is Now the Question." New York, NY: *New York Times*.

- Goldman Sachs. (July 2007). *Presentation to New York State Commission on Higher Education*. New York, NY: Author.
- Handel, Stephen J. (2006). *Academic Cultures of Community Colleges and Selective Four-Year Institutions: The 'Transfer-Going' Context in California*. New York, NY: College Board.
- Handel, Stephen J. (2006). *Pursuing Higher Education Access and Achievement: Case Studies in the Development of 'Transfer-Going' Cultures*. New York, NY: College Board.
- Handel, Stephen J. (2005). *High School-to-Community College: Strengthening the Transition*. New York, NY: College Board.
- Heald Committee on Higher Education. (1960). *Meeting the Increasing Demand for Higher Education in New York State*. Albany, NY: The Committee.
- Hess, Frederick M. (2007). *Footing the Tuition Bill: There Must be a Better Way*. Washington, DC: American Enterprise Institute.
- Hurd State Task Force on the Financing of Higher Education. (1972). *Report of the State Task Force on the Financing of Higher Education in New York State*. Albany, NY: The Task Force.
- Independent Commission on the Future of the State University. (1985). *The Challenge and the Choice*. Albany, NY: The Commission.
- JP Morgan. (July 2007). *Presentation to the New York State Commission on Higher Education*. New York, NY: Author.
- Keppel Task Force on Financing Higher Education. (1973). *Higher Education in New York State*. Albany, NY: The Task Force.
- Kentucky Council on Postsecondary Education. (2006). *Five Questions, One Mission: Better Lives for Kentucky's People: Accountability Report Summary, 2005-2006*. Frankfort, KY: Author.
- Kolker, Robert. (November 22, 1999). "The Old College Try." New York, NY: *New York Magazine*.
- Levesque, Joseph L. (2007). *Niagara University High Demand Workforce Training and Retention Project*. Niagara, NY: Niagara University.
- Levine, Sanford H. (October 1988). *Transcript of speech on SUNY History, the State University of New York Administrators' Retreat*. Saratoga Springs, NY: Author.
- Lombardi, John V., Elizabeth D. Capaldi, Denise S. Mirka, Craig W. Abbey. (2005). *Deconstructing University Rankings: Medicine and Engineering, and Single Campus Research Competitiveness*. Gainesville, FL: TheCenter, University of Florida.
- Lombardi, John V., Diane D. Craig, Elizabeth D. Capaldi, and Denise S. Gater. (2000). *The Myth of Number One*. Gainesville, FL: TheCenter, University of Florida, Gainesville, FL
- Mayor's Advisory Task Force on CUNY. (1999). *CUNY Statistical Profile: 1980-1998, Volume I: Draft Report*. New York, NY: The Task Force.
- Mayor's Advisory Task Force on CUNY. (1999). *CUNY's Testing Program: Characteristics, Results, and Implications for Policy and Research*. New York, NY: The Task Force.
- Mayor's Advisory Task Force on CUNY. (1999). *The Governance of CUNY: A System at Odds with Itself*. New York, NY: The Task Force.
- Mayor's Advisory Task Force on CUNY. (1999). *Report I: Financial Analysis of Remedial Education at CUNY Final Report: Revised*. New York, NY: The Task Force.
- Mayor's Advisory Task Force on CUNY. (1998). *Report II: Planning and Budgeting at CUNY Final Report*. New York, NY: The Task Force.
- Mayor's Advisory Task Force on CUNY. (1999). *Report III: Review of Revenues and Expenditures at CUNY*. New York, NY: The Task Force.
- Mayor's Advisory Task Force on CUNY. (1999). *Financing Remediation at CUNY on a Performance Basis: A Proposal*. New York, NY: The Task Force.
- Mayor's Advisory Taskforce on the CUNY. (1999). *CUNY: An Institution Adrift*. New York, NY: The Task Force. McCall, Carl H. (1998). *New York State's Higher Education Policy Vacuum*. Albany, NY: Office of the State Comptroller.

- Meng Task Force on Higher Education. (1975). *Final Report of the Governor's Task Force on Higher Education*. Albany, NY: The Task Force.
- Minnesota Office of Higher Education. (2007). *Minnesota Measures: 2007 Report on Higher Education Performance*. St. Paul, MN: Author.
- Morgan Stanley. (2007). *Monetizing of Royalty Assets*. New York, NY: Author.
- National Association of College and University Business Officers. (2005). *NACUBO Endowment Study*. Washington, DC: Author
- National Center for Public Policy and Higher Education. (1998). *Higher Education Governance: Balancing Institutional and Market Influences*. San Jose, CA: Author.
- National Governors Association Center for Best Practices. (June 2007). *Retooling Career Technical Education: Issue Brief*. Washington, DC: Author.
- National Science Foundation. (2006). *Investing in America's Future: Draft, Strategic Plan, FY 2006-2011*. Arlington, VA: Author.
- National Science Foundation. (2005). *NSF-NIH Survey of Graduate Students & Postdoctorates in Science and Engineering*. Arlington, VA: Author.
- National Science Foundation. (2005). *NSF Survey of Earned Doctorates*. Arlington, VA: Author.
- Nelson, John and Kim Tuby. (2007). *Innovative Debt & Capital Strategies in U.S. Public Finance*. New York, NY: Moody's Investors Service.
- New York State Blue Ribborn Commission on Youth Leadership. (2006). *Leading Tomorrow: Developing Youth Leadership Skills*. Report of Recommendations of the New York State Blue Ribbon Commission on Youth Leadership, Magellan Foundation. New York: The Commission.
- New York State Committee on Higher Education. (1960). *Meeting the Increasing Demand for Higher Education in New York State. A report to the Governor and the Board of Regents*. Albany, NY: The Committee.
- New York State Department of Labor. (2007). *New York State Regions, Department of Labor Regions and Career and Occupational Information*. Albany, NY: Author.
- New York State Science and Technology Foundation, Battelle Columbus Laboratories. (1982). *Development of High Technology Industries in New York State: Special Report V: The Higher Education System in New York and Its Potential Role in Economic Development: A Strategy for the Development of High Technology Activities in New York State*. Albany, NY: Author.
- New York Times Editorial Desk. (January 25, 1985). "Stop Suffocating SUNY." New York, NY: *New York Times*.
- Office of College and University Evaluation, SED. (2006). *Program Registration Procedures (SED Guidelines for submitting academic programs; Master Plan Amendments)*. Albany, NY: Author.
- Orrill, Robert, ed. (1997). *Education and Democracy: Re-imagining Liberal Learning in America*. New York, NY: The College Board.
- Pelikan, Jaroslav. (1992). *The Idea of the University: A Reexamination*. New Haven, CT: Yale University Press.
- Pell Institute for the Study of Opportunity in Higher Education. (2006). *Straight from the Source: What Works for First-Generation College Students*. Washington, DC: Author.
- Regents' Commission on Higher Education. (1993). *Sharing the Challenge*. Albany, NY: Regents' Commission on Higher Education.
- Relyea, Michael J. (2006). *New York State Foundation for Science 2006 Annual Report*. Albany, NY: New York State Foundation for Science, Technology, and Innovation.
- Royal Bank of Canada. (August 28, 2007). *Presentation to New York State Commission on Higher Education*. New York, NY: Author
- Salins, Peter. (2003). *Policy Review and Update: The State University General Education Requirement and Transfer*. Albany, NY: State University of New York.

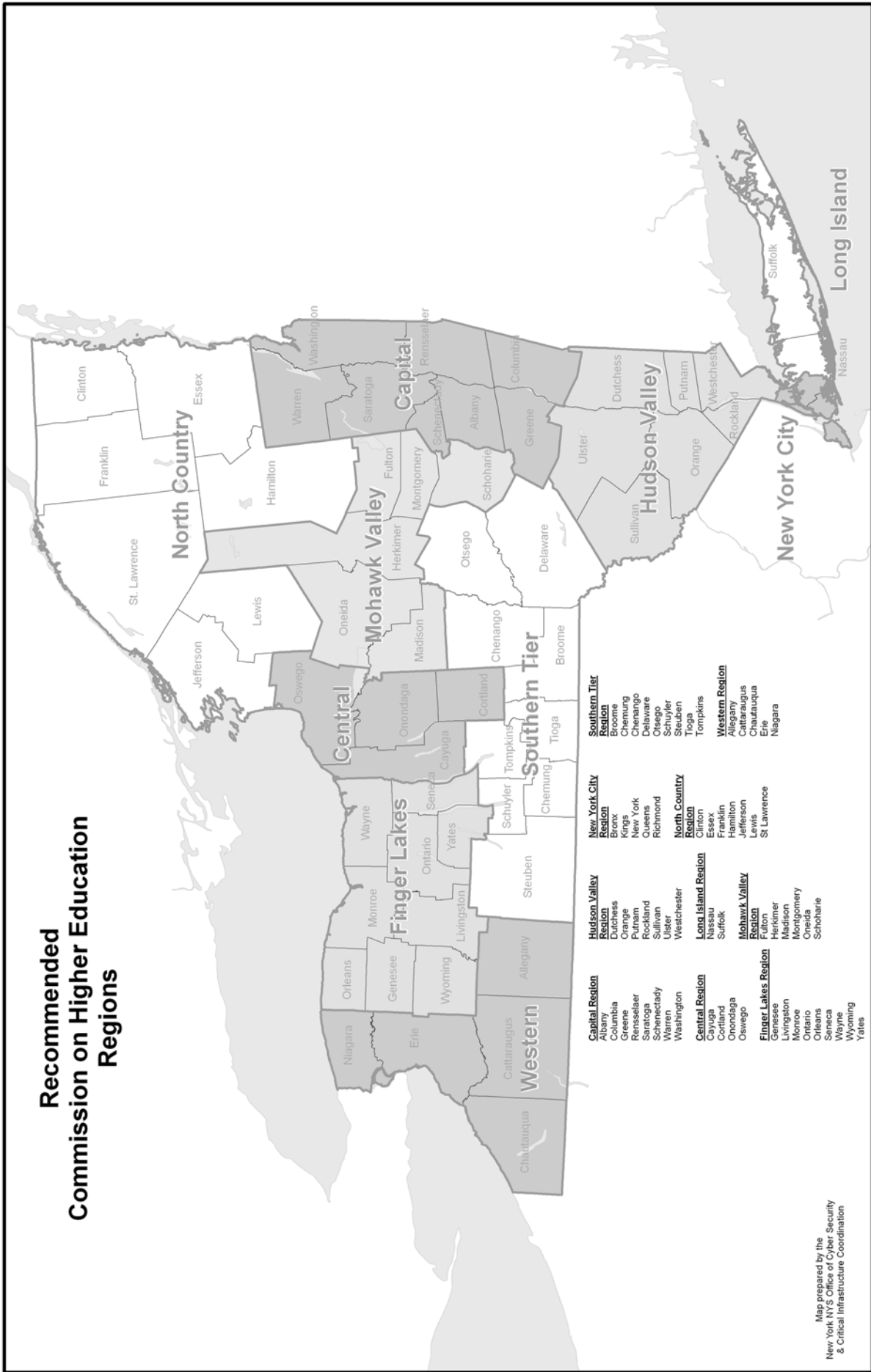
- Salins, Peter. (1999). *Procedures for the Review of State University General Education Programs*. Albany, NY: State University of New York.
- Select Committee on the Future of Private and Independent Higher Education in New York State. (1968). *New York State and Private Higher Education*. Albany, NY: The Committee.
- Sino-US Institute of University Design. (2006). *A Toolkit for University Design: Perspectives on Institution Building from Public University Leaders in the United States*. Author.
- Spitzer, Eliot. (2007). *Executive Order No. 14 Establishing The New York State Commission on Higher Education*. Albany, NY: New York State Executive Chamber.
- Standard & Poor's. (2007). *U.S. Public Finance Ratings: State & Local Government Group Municipal Enterprise Group*. New York, NY: Author.
- State Council of Higher Education for Virginia. (2002). *Advancing Virginia through Higher Education: The Systemwide Strategic Plan for Higher Education*. Richmond, VA: Author.
- State Task Force on Financing of Higher Education in New York State. (1973). *Higher Education in New York State; A Report to Governor Nelson A. Rockefeller*. Albany, NY: The Task Force.
- State Task Force on the Financing of Higher Education in New York State. (1972). *Report of the State Task Force on the Financing of Higher Education in New York State*. Albany, NY: The Task Force.
- State University of New York. (2007). *SUNY Factbook: Summary of Facts and Figures, Enrollment, Diversity, Employees, Faculty Awards, Benchmarking, Fiscal Overview, Tuition, Financial Aid Financial Plan, Community Colleges, Hospitals, Research, Philanthropy*. Albany, NY: Author.
- State University of New York. (2006). *Annual Financial Report*. Albany, NY: Author.
- State University of New York. (2006). *Commitment to Excellence: Budget Request 2007-2008*. Albany, NY: Author.
- State University of New York. (2006). *SUNY State Operated Campuses and Community Colleges: Dashboard (draft)*. Albany, NY: Author.
- State University of New York (2006). *Trends in SUNY Six-Year Graduation Rates*. Albany, NY: Author.
- State University of New York. (2005). *Mission Review II (2005-2010)*. Albany, NY: Author.
- State University of New York. (2005). *Trends in First Year SUNY Retention*. Albany, NY: Author.
- State University of New York. (2004). *Mission Review II (2005-2010): Building an Expectation of Excellence*. Albany, NY: Author.
- State University of New York. (2004). *Initial Report: Provost's Mathematics Education Task Force*. Albany, NY: Author.
- State University of New York. (2004). *Master Plan 2004-2008*. Albany, NY: Author.
- State University of New York. (2004). *SUNY Community Colleges Multi-Year Capital Plan 2003-04 to 2007-08*. Albany, NY: Author.
- State University of New York. (2004). *SUNY Pass Rates on the NYS Teacher Certification Examination (2000-01 through 2002-03)*. Albany, NY: Author.
- State University of New York. (2004). *Progress Report on the Community Colleges of the SUNY Strategic Plan for 2001-2004*. Albany, NY: Author.
- State University of New York. (2004). *Memorandum to Presidents: Teacher Education Transfer Template Status Report*. Albany, NY: Author.
- State University of New York. (2003). *A Plan for the State University*. Albany, NY: Author.
- State University of New York. (2003). *SUNY Facts: SUNY Quantitative Information*. Albany, NY: Author.
- State University of New York. (2003). *Guidelines for the Implementation of Campus-based Assessment of the Major*. (Revision). Albany, NY: Author.
- State University of New York. (2002). *Intra-SUNY Transfer Action Plan*. Albany, NY: Author.
- State University of New York. (2001). *A New Vision in Teacher Education: Agenda for Change in SUNY's Teacher Preparation Programs*. Albany, NY: Author.

- State University of New York. (2001). *Project 2015: Workforce Analysis: Percent Distribution of the Age of Full-time Instructional Faculty of the State-Operated Institutions of the State University of New York*. Albany, NY: Author.
- State University of New York. (2001). *Provost's Advisory Council on Teacher Education Report and Recommendations*. Albany, NY: Author.
- State University of New York. (2001). *The SUNY 2000-2004 Master Plan*. Albany, NY: Author.
- State University of New York. (1983). *SUNY at the Crossroads: A Thirty-Fifth Anniversary Prospectus*. Albany, NY: Author.
- State University of New York Office of Community Colleges. (2007). *The Community Colleges of the State University of New York: An Overview*. Albany, NY: Author.
- Stoll, Adam. (2006). *Higher Education Act Reauthorization: A Comparison of Current Law and Major Proposals*. Washington, DC: CRS Report for Congress.
- Temporary State Commission on the Future of Postsecondary Education. (1977). *Report of the Temporary State Commission on the Future of Postsecondary Education*. Albany, NY: The Commission.
- Temporary Commission on the Need for a State University. (1948). *Report of the Temporary Commission on the Need for a State University*. Albany, NY: Williams Press.
- Terenzini, Patrick T., Alberto F. Cabrera and Elena M. Bernal. (2001). *Swimming Against the Tide: The Poor in American Higher Education*. New York, NY: College Board.
- Texas Higher Education Coordinating Board. (2007). *Closing the Gaps: The Texas Higher Education Plan*. Austin, TX: Author.
- Trustees of the State University of New York. (2004). *Report of the Task Force on Efficiency and Effectiveness*. Albany, NY: Author.
- Trustees of the State University of New York. (1995). *Rethinking SUNY*. Albany, NY: Author.
- U.S. Department of Education. (2006). *A Test of Leadership: Charting the Future of U.S. Higher Education*. A Report of the Commission Appointed by Secretary of Education Margaret Spellings. Washington, DC: Author.
- University at Buffalo. (2007). *Catalyst for Western New York's Economic Future: The University at Buffalo; A Proposal for Governor Spitzer*. Buffalo, NY: Author.
- University at Buffalo. (2007). *The Knowledge to Build our Economic Future: Path to Prominence for Buffalo Niagara through UB*. Buffalo, NY: Author.
- University of Illinois, Office for Planning and Budgeting. (2007). *Strategic Plan: Welcome from President White*. Urbana, IL: Author.
- University of Illinois, Office for Planning and Budgeting. (2006). *Environmental Assessment*. Urbana, IL: Author.
- University of Illinois. (2005). *Creating a Brilliant Future for the University of Illinois: Strategic Planning Framework*. Urbana, IL: Author.
- University of North Carolina, Board of Governors. (2004). *Long-Range Plan 2004-2009*. Chapel Hill, NC: Author.
- University of Texas System, Office of Strategic Management. (2006). *The University of Texas System Strategic Plan: 2006-2015*. Austin, TX:
- University of the State of New York and the State Education Department. (2006). *A Report to the Governor and the Legislature on the Educational Status of the State's Schools: Statewide Profile of the Educational System*. Albany, NY: Author.
- University System of Maryland, Board of Regents. (2004). *The USM in 2010: An Update of the USM Strategic Plan*. Adelphi, MD: Author.
- Wessell Temporary State Commission on the Future of Postsecondary Education in New York State. (1977). *The Report of the Temporary State Commission on the Future of Postsecondary Education in New York State*. Albany, NY: The Commission.
- Wharton Jr., Clifton. (1986). *Autonomy in Academia: The State's Responsibility to Higher Education*. Albany, NY: State University of New York.

Appendix E: Commission Maps of New York State

- **Recommended Commission on Higher Education Regions**
- **Universities and Colleges in New York State – Capital Region**
- **Universities and Colleges in New York State – Central Region**
- **Universities and Colleges in New York State – Finger Lakes Region**
- **Universities and Colleges in New York State – Hudson Valley Region**
- **Universities and Colleges in New York State – Long Island Region**
- **Universities and Colleges in New York State – Mohawk Valley Region**
- **Universities and Colleges in New York State – New York City Region**
- **Universities and Colleges in New York State – North Country Region**
- **Universities and Colleges in New York State – Southern Tier Region**
- **Universities and Colleges in New York State – Western Region**

Recommended Commission on Higher Education Regions



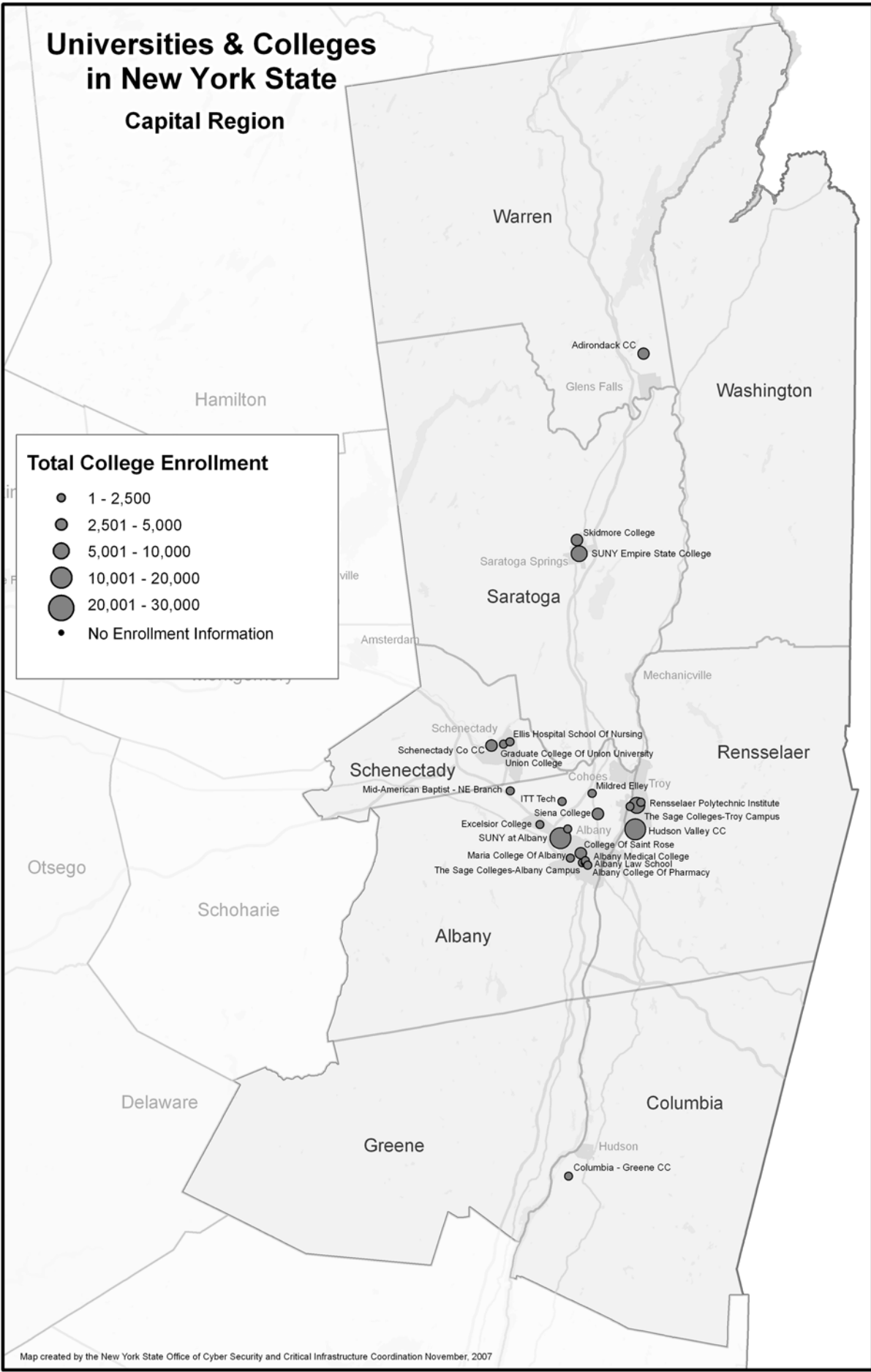
Map prepared by the
New York NYS Office of Cyber Security
& Critical Infrastructure Coordination

Universities & Colleges in New York State

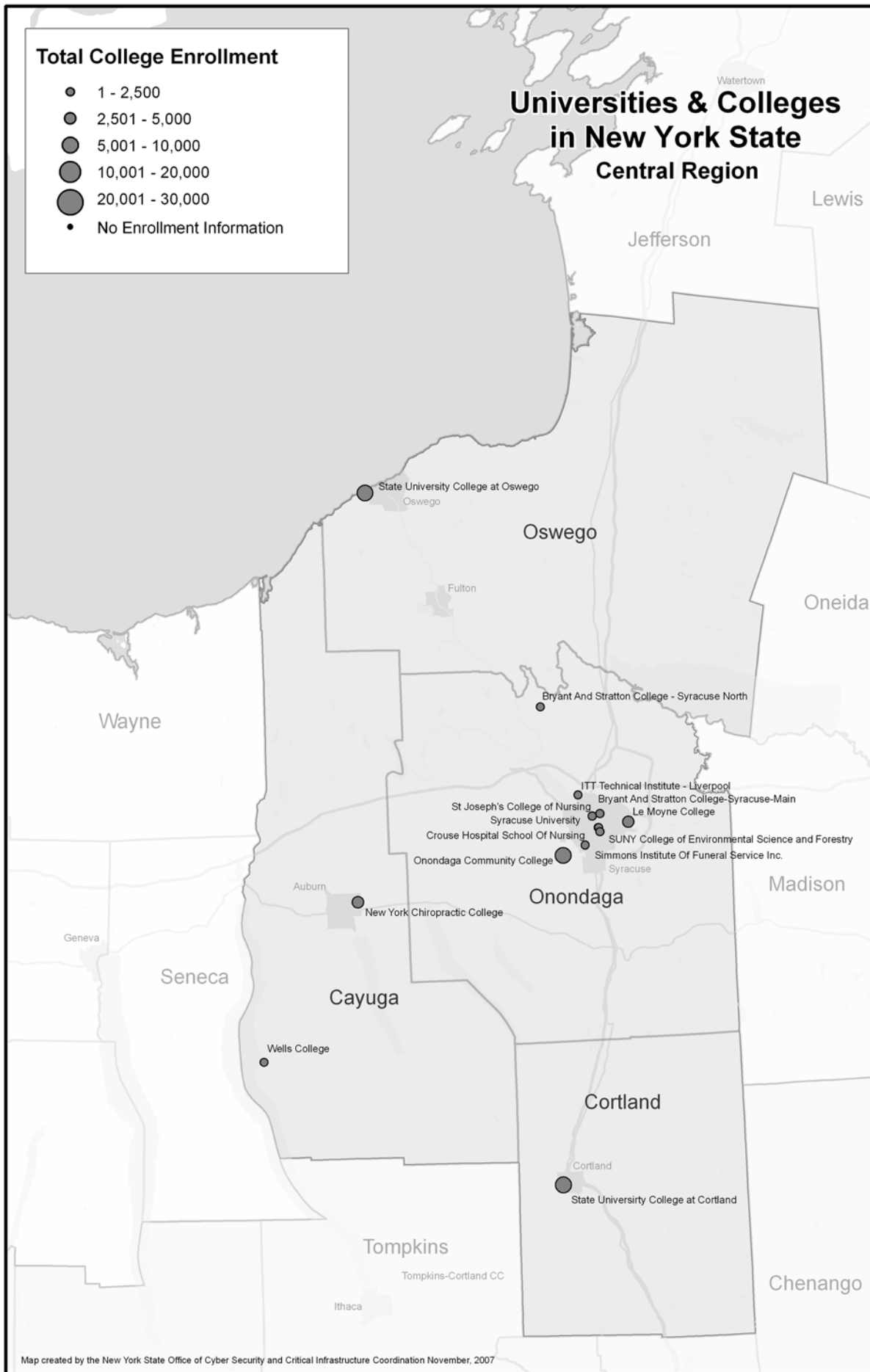
Capital Region

Total College Enrollment

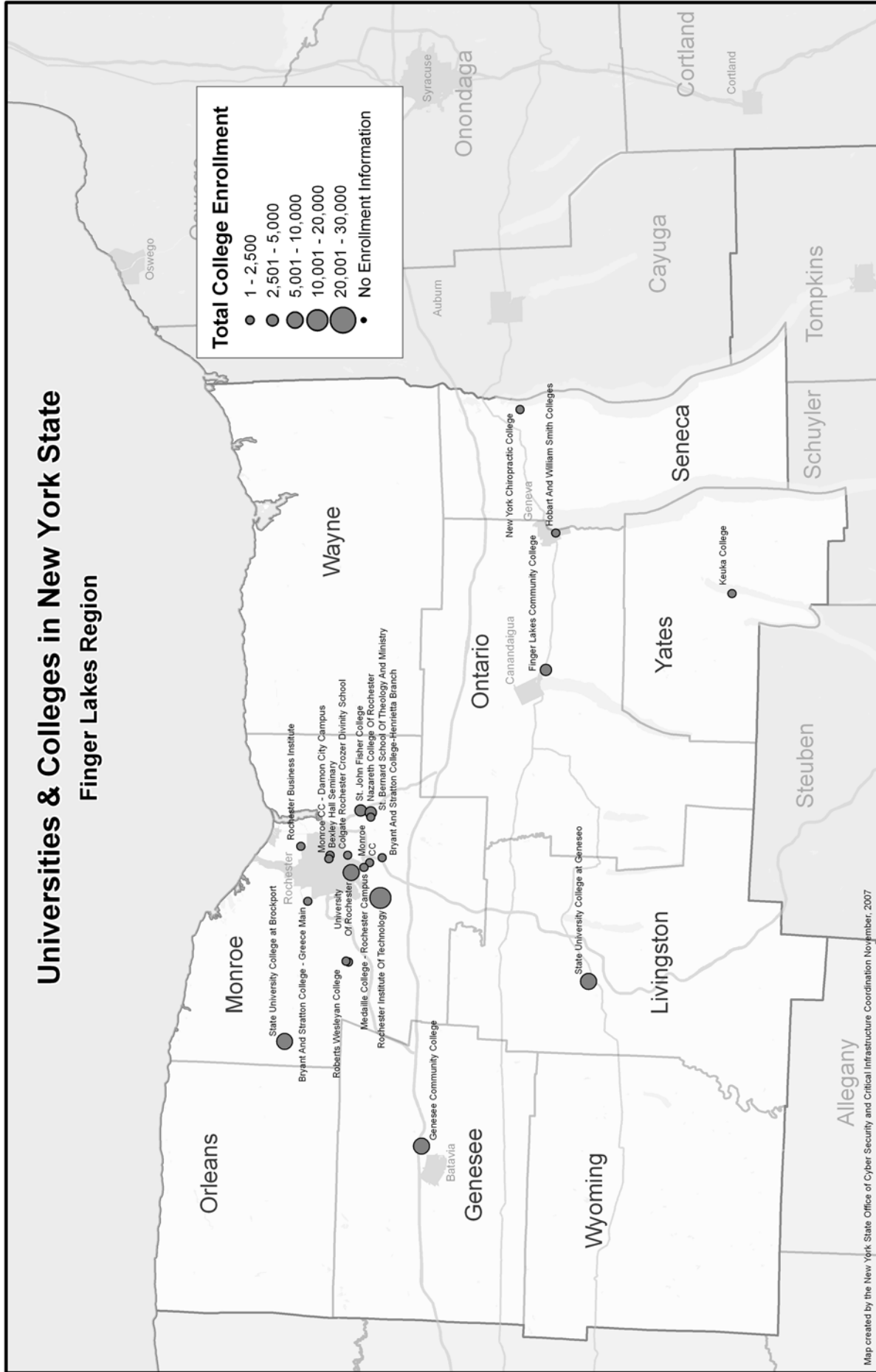
- 1 - 2,500
- 2,501 - 5,000
- 5,001 - 10,000
- 10,001 - 20,000
- 20,001 - 30,000
- No Enrollment Information



Map created by the New York State Office of Cyber Security and Critical Infrastructure Coordination November, 2007

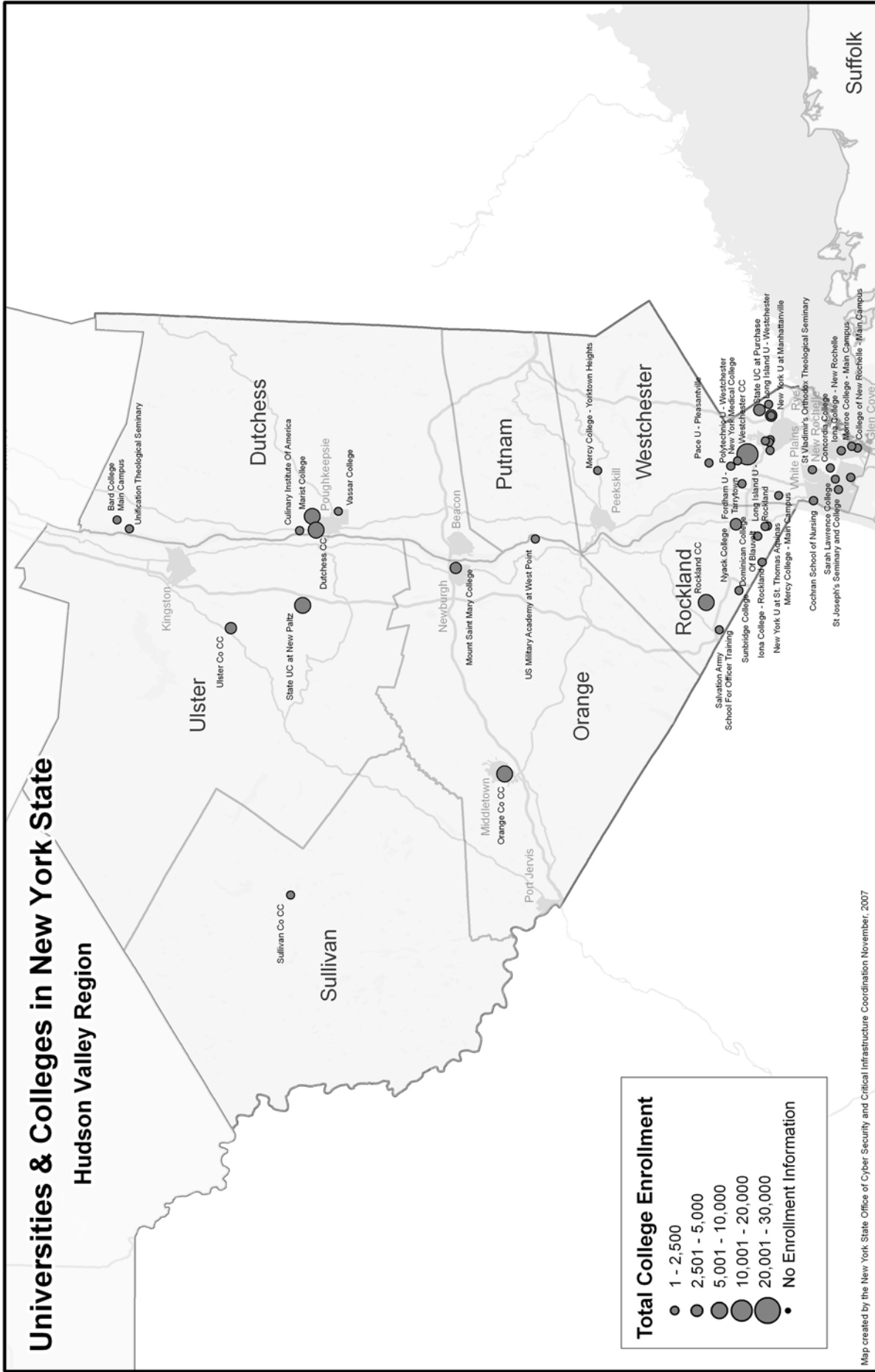


Universities & Colleges in New York State Finger Lakes Region



Map created by the New York State Office of Cyber Security and Critical Infrastructure Coordination November, 2007

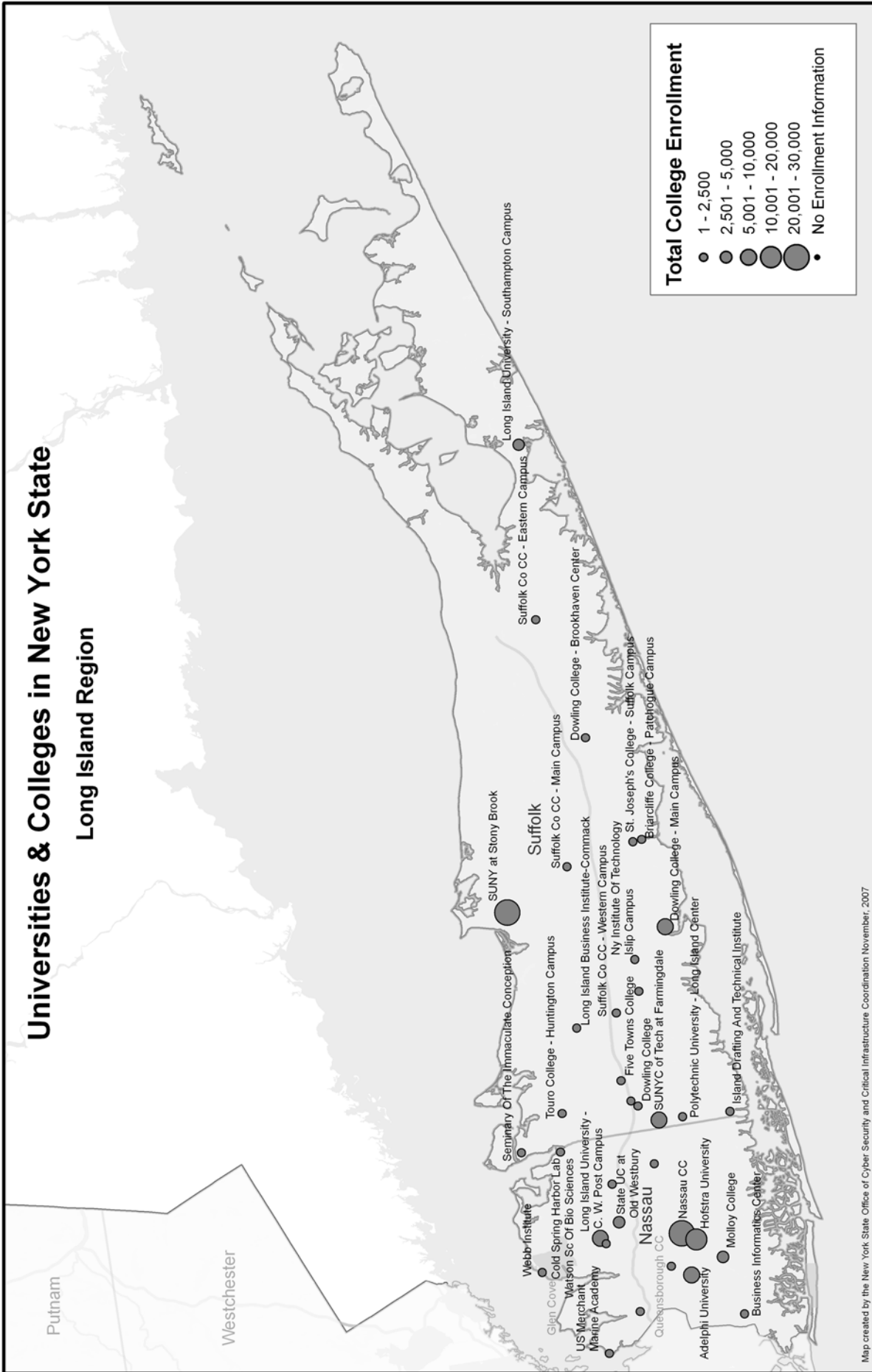
Universities & Colleges in New York State Hudson Valley Region



Map created by the New York State Office of Cyber Security and Critical Infrastructure Coordination November, 2007

Universities & Colleges in New York State

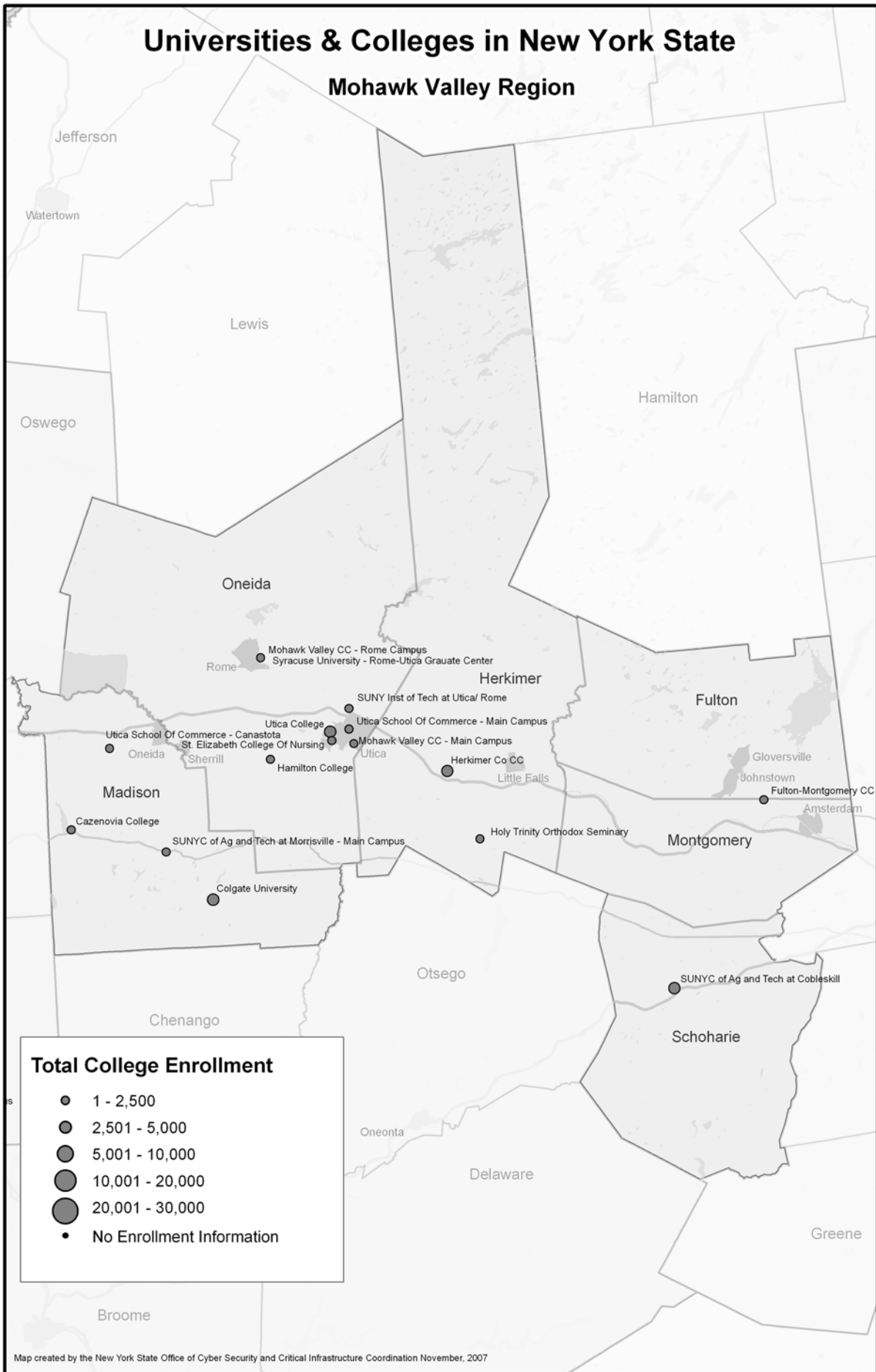
Long Island Region



Map created by the New York State Office of Cyber Security and Critical Infrastructure Coordination November, 2007

Universities & Colleges in New York State

Mohawk Valley Region



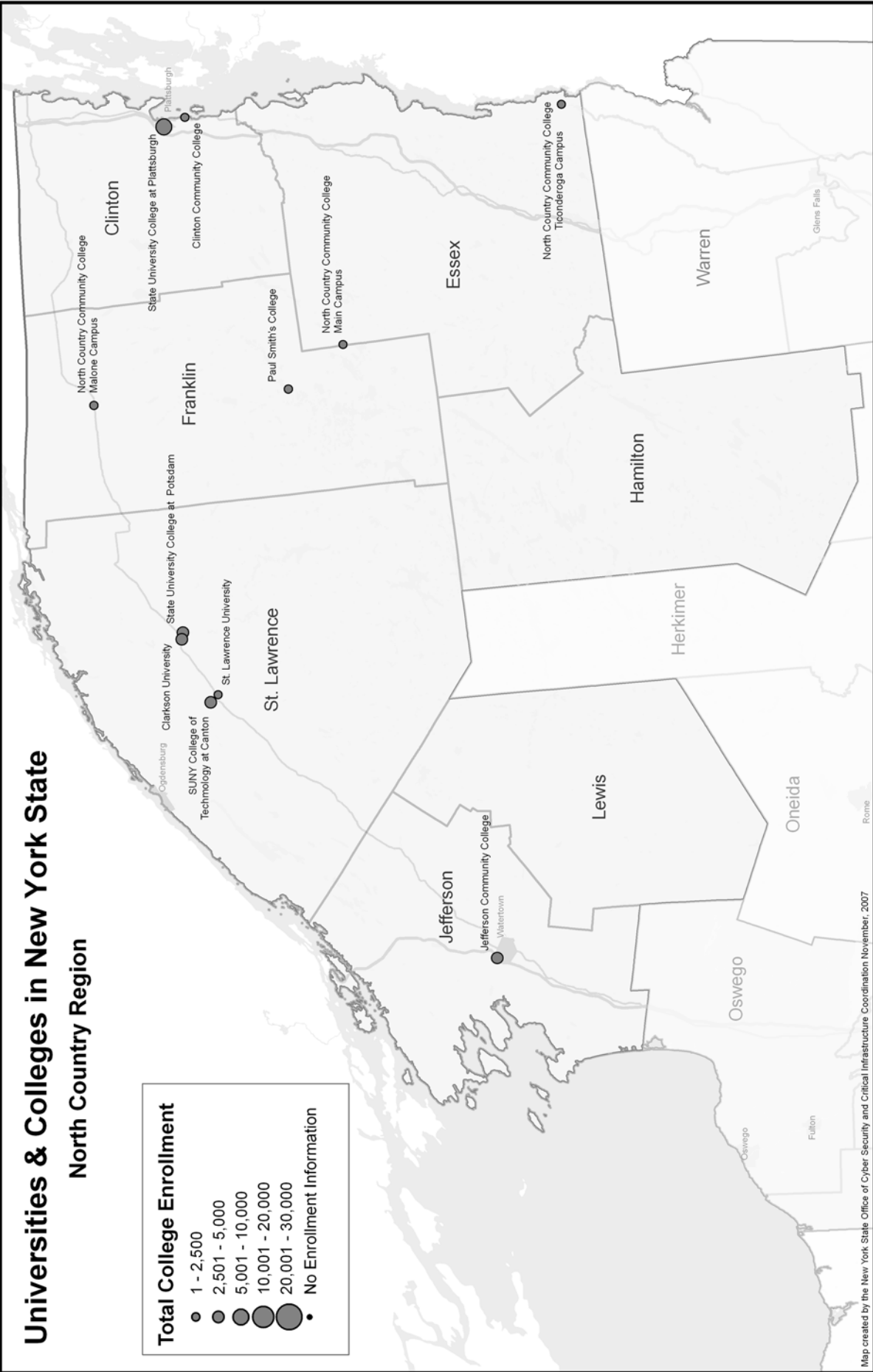
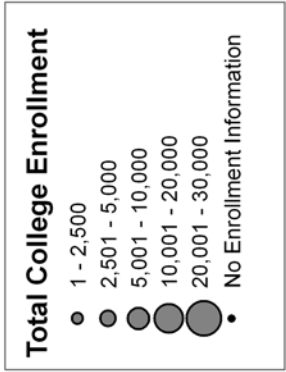
Total College Enrollment

- 1 - 2,500
- 2,501 - 5,000
- 5,001 - 10,000
- 10,001 - 20,000
- 20,001 - 30,000
- No Enrollment Information

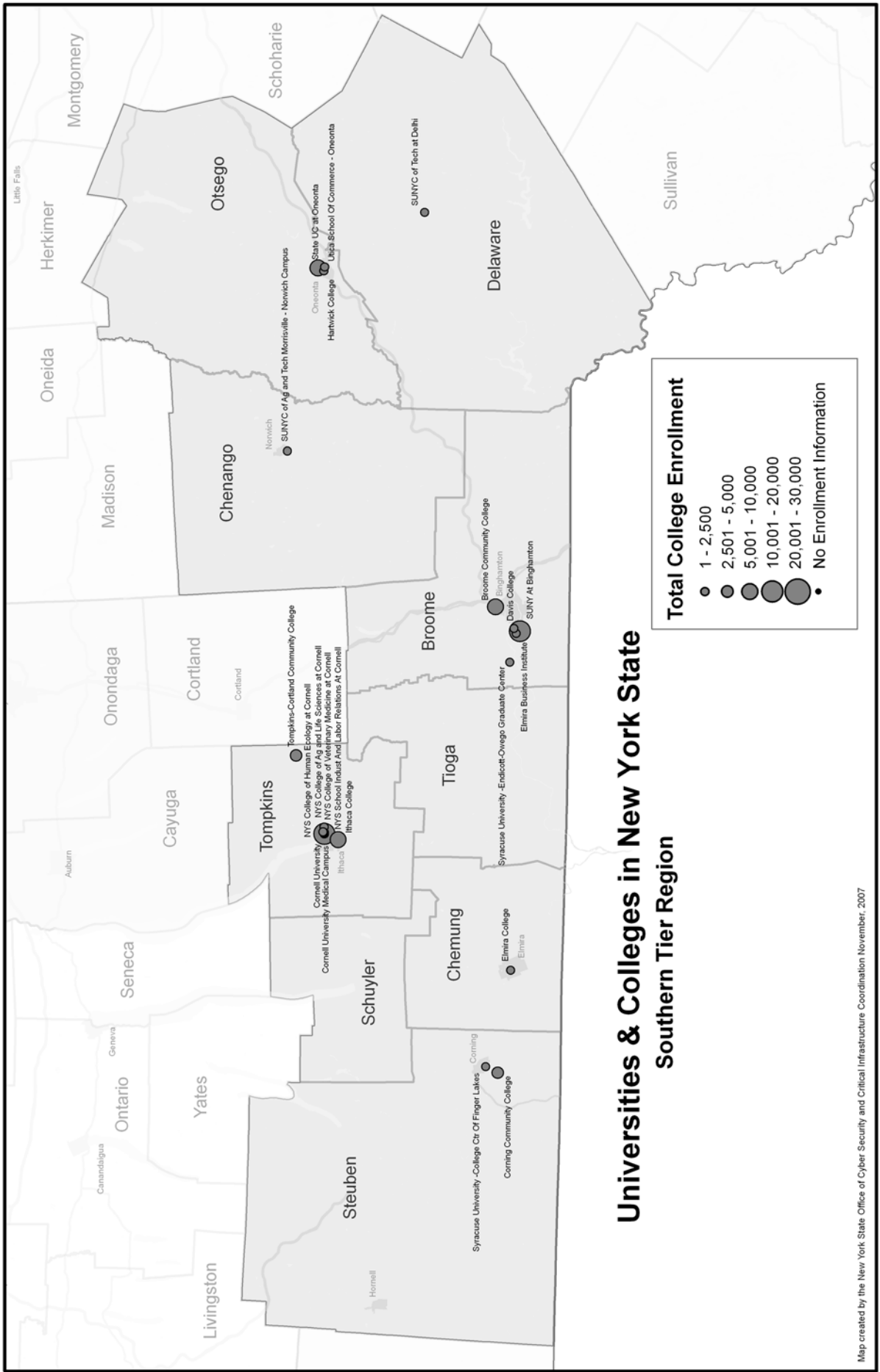
Map created by the New York State Office of Cyber Security and Critical Infrastructure Coordination November, 2007

Universities & Colleges in New York State

North Country Region

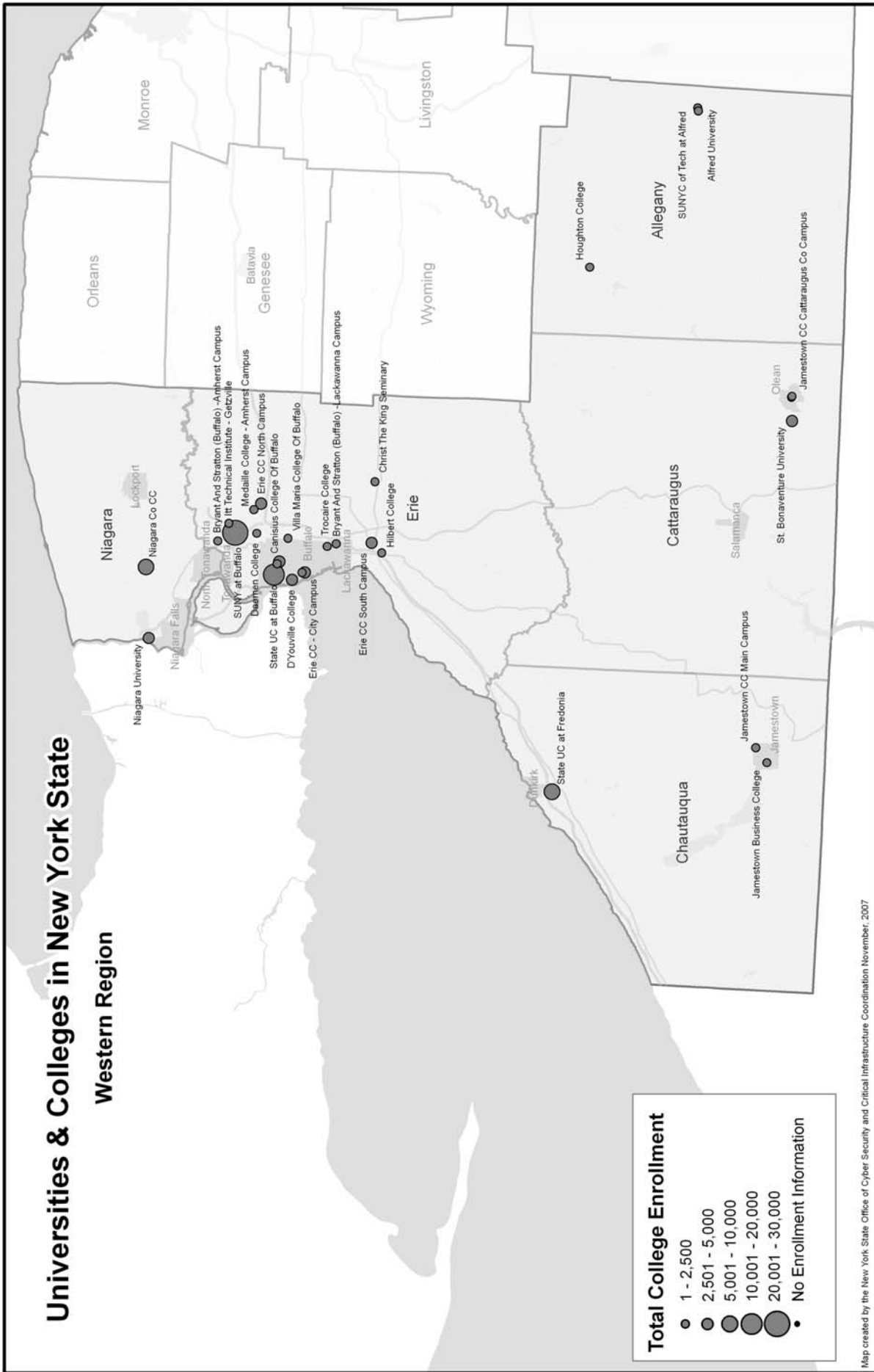


Map created by the New York State Office of Cyber Security and Critical Infrastructure Coordination November, 2007



Map created by the New York State Office of Cyber Security and Critical Infrastructure Coordination November, 2007

Universities & Colleges in New York State Western Region



Map created by the New York State Office of Cyber Security and Critical Infrastructure Coordination November, 2007