



MSA Middle States Commission on Higher Education
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Certification Statement:

Compliance with MSCHE Requirements of Affiliation and Related Entities Policy (For SUNY State-Operated Institutions Effective October 1, 2009)

An institution seeking initial accreditation or reaffirmation of accreditation must affirm that it meets or continues to meet established MSCHE requirements of affiliation and "Related Entities" policy.

This signed statement should be attached to the executive summary of the institution's self-study

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State University of New York at Buffalo	
(Name of Institution)	
The State University of New York represents the program of the SUNY System. The undersigned Commission's compliance requirements for this University's policies pertaining to MSCHE stan	hereby certify that SUNY recognizes the institution and will uphold State
Satish K. Tripathi (Common Provident)	12 3 13 (Date)
(Campus President) Digitally signed by H. Carl McCall	
H. Carl McCall DN: cn=H. Carl McCall, o=SUNY, ou, email=dulce.kontakgsuny.edu, c=US Date: 2014.01.10 14:23:38 -05'00'	

(Date)



Middle States Commission on Higher Education

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Certification Statement: Compliance with Federal Title IV Requirements (For SUNY State-Operated Institutions Effective July 1, 2011)

An institution seeking initial accreditation or reaffirmation of accreditation must affirm by completing this certification statement that it meets or continues to meet established federal requirements relating to Title IV program participation, including relevant requirements under the Higher Education Opportunity Act of 2008 such as those on distance education, transfer of credit, and the assignment of credit hours.

This signed statement should be attached to the executive summary of the institution's self-study or periodic review report.

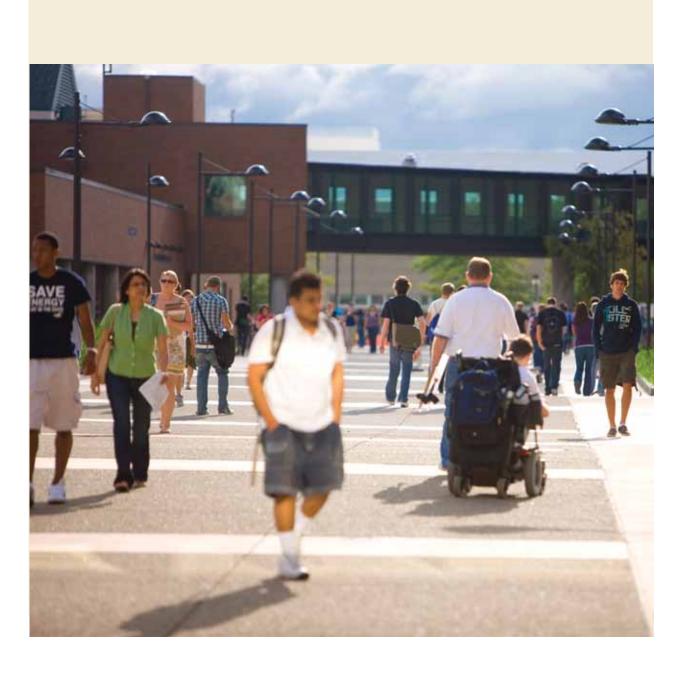
If it is not possible to certify compliance with all such requirements, the institution must attach specific details in a separate memorandum.

State University of New York at Buffalo	
(Name of Institution)	
is seeking (Check one):Initial Accreditate	ion _X Reaffirmation of Accreditation
The undersigned hereby certifies that the inst requirements relating to Title IV program par under the Higher Education Opportunity Act transfer of credit, and the assignment of credi	rticipation, including relevant requirement of 2008 such as those on distance education
Exceptions are noted in the attached	memorandum (Check if applicable)
(Campus President) Satish K. Tripathi	12/3/13 (Date)

Publication Date: 2/1/2014

(Chair, SUNY Board of Trustees)

Executive Summary



Framework for Excellence is the self-study report prepared by the University at Buffalo (UB) for the Middle States Commission on Higher Education (MSCHE), members of the Middle States site visit review team and the UB community. This summary provides an overview of the purpose, structure and areas of focus of the self-study report, as well as key findings and opportunities for improvement that have emerged from the process. Framework for Excellence documents the evidence for UB's compliance with the 14 Middle States Standards of Excellence as part of the university's reaccreditation process.

The decade since the last accreditation visit represents a period of significant growth and change at the University at Buffalo, including new leadership in many key areas. The university has embarked upon strategic, programmatic and procedural innovations aimed at strengthening the institution and better positioning UB to achieve its mission. Several notable changes include:

- Implementation of strategic planning initiatives through UB 2020;
- Revision of the resource-allocation model to support planning and meet current funding realities;
- Significant campus transformations, including the Downtown campus, new buildings and major renovations;
- Surge in faculty hiring;
- Increased enrollments;
- Replacement of aging administrative systems with a consolidated, state-of-the-art, databasedriven infrastructure;
- Enhancement of institutional assessment, including comprehensive program reviews; and
- Promoting a culture of assessment to support academic programs and enhance student learning outcomes.

Institutional History

The University at Buffalo was founded in 1846 as a private medical college located in downtown Buffalo. UB joined the State University of New York (SUNY) in 1962 and is today the largest and most comprehensive university center within the 65-campus SUNY system. Within SUNY, UB is the primary center for professional education and training. UB enrolls nearly 30,000 students and offers approximately 400 degree programs at the baccalaureate, master's, professional and doctoral levels across 12 decanal units. The University at Buffalo has been a member of the Association of American Universities since 1989.

Middle States Accreditation

The University at Buffalo was one of the initial 58 institutions on the approval list of the Middle States Commission on Higher Education in 1921, and has sustained accreditation since that time. UB most recently was reaccredited through the Periodic Review in 2009. There were no weaknesses or concerns outlined in the external reviewers' report to the University at Buffalo following the submission of the Periodic Review Report in June 2009. UB's accreditation was affirmed for the full five-year period leading up to the 2013-2014 decennial self-study. The university was requested to provide a progress letter, due October 1, 2011, documenting that the results of the assessment of institutional effectiveness were used to improve planning and budgeting, and that the institution's evaluation of its assessment

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activities included the identification of expected student learning outcomes and the development of systematic measures of student learning, in addition to indicators of student achievement. The progress report was accepted by the Commission on November 17, 2011. UB's further progress in these areas, as well as other facets of achievement, improvement, evaluation and assessment, are discussed in this self-study report.

Preparation and Scope of the Self-Study Report

Preparation for the decennial evaluation began in 2010 under the leadership of the Office of the President and the Office of the Provost with the formation of a coordinating committee. In addition to attending Middle States annual meetings and workshops, members of the coordinating committee attended the Middle States Self-Study Institute in Philadelphia in November 2011. The University at Buffalo selected a comprehensive self-study approach. This approach was logically consistent with the organization, structure, institutional priorities and broad initiatives encompassed in the realization of UB 2020.

Six working groups were formed corresponding to a grouping of the 14 standards to be addressed in the self-study:

- **Group 1:** Standards 1, 2, 3;
- **Group 2:** Standards 4, 5, 6;
- **Group 3:** Standards 8, 9;
- **Group 4:** Standard 10;
- Group 5: Standards 11, 12, 13; and
- **Group 6:** Standards 7, 14.

Members of these working groups included administrators, staff, faculty and students from across the university. Research questions were prepared for each of the groups. Each working group was asked to:

- Review the Middle States publication "Characteristics of Excellence in Higher Education" with particular attention to those standards relevant to its charge;
- Review, discuss, and refine the research questions the group was tasked to address;
- Undertake a review of documents, reports and other source materials relevant to its charge;
- Identify additional information and evidence relevant to the development of the self-study report;
- Identify institutional strengths and weaknesses relative to its assigned standards; and
- Identify opportunities for improvement or enhancement of programs, processes or outcomes.

A Blackboard site was created for group discussion and document sharing. The reports from the working groups formed the basis for creating an initial draft of the self-study report.

The goals for the self-study were to:

Create a clear and purposeful document that demonstrates that the University at Buffalo meets
Middle States expectations for accreditation and is in compliance with the 14 standards of
excellence;

- Identify UB's strengths and weaknesses relative to each standard within the context of the university's mission; and
- Identify opportunities for improvement and affirm UB's commitment to assessment and continuous improvement.

Organization and Overview of the Self-Study Report

The self-study report — Framework for Excellence — consists of five chapters. Each chapter addresses a grouping of the Middle States standards; discusses UB's processes, initiatives, and effectiveness with respect to each of the standards; cites sources and evidence supporting the institution's compliance with each standard; and concludes with a set of major observations and future directions. Each chapter includes "spotlights" that provide examples of programs, policies and processes that serve as evidence and illustrate that UB meets the Middle States standards for accreditation.

Chapter 1 — Charting the Course to Excellence: Mission, Vision, Leadership, Integrity. Chapter 1 addresses Standards 1 (Mission and Goals), 4 (Leadership and Governance), 5 (Administration), and 6 (Integrity). This chapter includes a brief institutional history and a discussion of the university's mission, vision and goals. Since the last decennial review, the university has embarked on a comprehensive strategic planning initiative and a campus master plan to guide the institution over the next several years and beyond. The realization of UB's mission is guided by the UB 2020 vision for academic and research excellence. UB's mission statement demonstrates the university's commitment to students, faculty and the external communities it serves, and recognizes UB's vision to achieving greater standards of academic excellence. The chapter describes the leadership and governance structure of SUNY and UB, including the Faculty Senate, and the undergraduate and graduate student associations. Over the past five years, UB has inaugurated a new president and welcomed several new senior leaders, including a new provost and several new vice presidents, vice provosts and deans. The university's administrative structure and academic leadership are described along with the steps that UB has taken to improve the overall functioning of the university. UB's commitment to academic freedom, the rights and responsibilities conferred by the State of New York and SUNY, and UB's policies and procedures attest to a broad array of fair and impartial policies that are published and widely available. The university strives diligently to create an inclusive campus environment that embraces diverse perspectives and represents multicultural populations. Human resource programs, including employee assistance, are responsive and sensitive to work and life considerations. Enhancements in administrative systems, service delivery and communication have been realized through an integrated database-driven infrastructure; streamlined and redesigned university websites; and improved access to academic-program information and university news.

Chapter 2 — Building a Foundation for Excellence: Strategic Planning, Resource Allocation and Institutional Effectiveness. Chapter 2 addresses Standards 2 (Planning, Resource Allocation, and Institutional Renewal), 3 (Institutional Resources), and 7 (Institutional Effectiveness). This chapter describes the comprehensive planning effort the institution has engaged in since the last decennial review, including UB 2020, NYSUNY 2020, and Realizing UB 2020. The Build UB Physical Plan and major transforming operations related to information technology, student services, environmental stewardship, digital communication, human resources, and sponsored programs are aligned with the mission and priorities of the academic plan. The university is committed to environmental stewardship

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and is a signatory to the American College and University Presidents' Climate Action Plan. UB created the Environmental Stewardship Committee and the position of chief sustainability officer to provide leadership and direction for sustainability initiatives. Classroom technology upgrades, equipment replacement, infrastructure renovations and new learning landscapes have been created and sustained. Resource-allocation processes have evolved to include specific considerations related to unit staffing and financial needs, cross-unit initiatives and funds to be held in reserve to meet contingencies and emerging opportunities. The impact of reductions in state support is discussed in terms of how these challenges have been addressed over the past several years. These challenges have resulted in a revision of budget policies and procedures to better coordinate academic, campus and fiscal planning. The financial-planning process involves deans, budget officers and administrators from across the university. The approaches adopted have placed the university on a strong foundation. The fiscal condition of the university is sound and stable and is less reliant on state appropriations than in the past. UB regularly assesses its overall effectiveness through a variety of qualitative and quantitative measures. Past and current efforts to assess effectiveness at unit and higher levels are described along with a discussion of how these assessments have helped overall planning, decision making and identification of opportunities for improvement. The university utilizes peer comparisons, internal performance metrics, local and published surveys of satisfaction and engagement, comprehensive program reviews, facilities audits, and teaching and course evaluations, among others. The university incorporates this information into its agenda at academic leadership retreats, academic strategic-planning efforts and decision making to guide hiring, enhance academic programs and improve services. UB has recognized the need to deepen its commitment to evaluating institutional effectiveness in a sustained way. This chapter concludes with a description of some of the organizational changes and new initiatives mandated to enhance unit and institutional assessment efforts. UB remains an effective institution committed to understanding its strengths and areas in need of improvement.

Chapter 3 — Educating for Excellence: Faculty and Scholarship. Chapter 3 addresses Standard 10 (Faculty). This chapter focuses on the highly qualified and dedicated faculty, and other professionals who support the university's educational and research mission. Faculty recruitment is consistent with the institution's educational programs and commitment to research excellence and diversity. This year UB has made substantial progress toward its goal of hiring 250 new faculty by adding 95 new tenure-track faculty. The university has published standards and procedures for promotion, tenure, grievance, discipline and dismissal in accordance with principles of fairness and due process. The university has well-established practices for evaluation of teaching effectiveness. A critical university priority is growth of the research enterprise. Competitive start-up packages to recruit and retain research-active faculty are resonant with the goals of UB 2020. Research policies and distribution of indirect-cost-recovery funds allows deans the flexibility to plan and provide vision for their units. Faculty achievement, productivity and recognition are documented.

Chapter 4 — Educating for Excellence: Instructional Programs. Chapter 4 addresses Standards 11 (Educational Offerings), 12 (General Education), 13 (Related Educational Activities) and 14 (Assessment of Student Learning). UB's undergraduate, graduate and professional programs are consistent with the goals and priorities of UB 2020. University publications, communications, websites, advising resources and information provided by academic units outline the program requirements and goals, including learning outcomes and opportunities for careers and further study. Professional

programs are accredited by their respective bodies. SUNY and UB requirements of the general education program for all new students (freshmen and transfer) are described. Besides the traditional academic programs, UB offers a range of educational activities including certificates, experiential learning, international programs, distance learning, and noncredit programs. These offerings are consistent with the university's mission and core academic programs. Development of courses and programs offered via distance learning is the responsibility of the relevant decanal unit. These offerings adhere to rigorous university academic standards with regard to depth, breadth, content, comparability and consistency with on-campus programs. Distance learning most commonly takes the form of online courses delivered using security protocols that comply with university, state and federal guidelines regarding distance education. The UB libraries support the diverse range of academic activities required by curricular and research needs. The TAURUS Web tool enables potential transfer students to determine the transferability and UB equivalency of courses completed elsewhere. The university has clearly articulated educational and learning outcomes that reflect the core institutional values inherent in a UB education and consonant with the university's mission. Individual programs and schools are responsible for the assessment of student learning and do so in a variety of ways, including the use of embedded course assessments, rubrics, portfolios, and surveys, among others. The university has developed an assessment template that academic programs use to report learning goals, assessment strategies, outcomes and use of data for program improvement.

Chapter 5 — Fostering Student Learning and Achievement: Admissions, Retention and Student Support Services. Chapter 5 addresses Standards 8 (Student Admissions and Retention) and 9 (Student Support Services). The university has developed recently a more robust and holistic enrollmentmanagement structure. The university sets admissions goals at all levels that support and reflect its mission. Distinctive undergraduate learning opportunities — such as the Undergraduate Academies, University Honors College, Discovery Seminars, undergraduate research opportunities, study abroad, and special interest housing — have been key components of the undergraduate recruitment strategy. The university informs prospective students through a variety of modalities, including publications, Internet, social media, direct mail, campus visits, open houses, and on- and off-campus recruitment events. Admissions policies and criteria, including the awarding of transfer credit, are available online to assist students in making informed decisions about enrolling at UB. The university's graduation and retention rates are not yet at the levels of those AAU institutions we aspire to emulate. The Finish in 4 Program is a university commitment to provide undergraduate students with the curricular and advising support needed to ensure timely graduation. The university offers academic support, tutoring, mentoring, counseling, advising, career services, wellness programs, recreational and fitness facilities, and intellectual-enrichment opportunities, among others. It provides access and services to students with disabilities and is committed to meeting the social and emotional needs of all students. The university assesses student use, participation and satisfaction with support services and university life to best meet students' personal and professional needs and interests.

Dissemination, Feedback and Follow-up

The initial self-study draft was distributed to university leadership (vice presidents, vice provosts, deans) for their detailed review and feedback. Besides an opportunity for identifying any errors of omission or commission, this group was asked to provide feedback in terms of the intended purpose and

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overarching narrative of the report. Based upon the input and comments received, the revised self-study was then broadly distributed through the Office of the Provost website to the campus community for discussion, comment and feedback. Consequently, a very significant number of university community members have been engaged or directly participated in this comprehensive self-study. The resulting discussions have been wide-ranging, productive, and highly valued.

Items identified in the self-study report as areas of strength, or opportunities for improvement, reflect the priorities and initiatives encompassed in Realizing UB 2020. Based upon observations and findings arising through the comprehensive self-study process, a number of action items have helped to inform the Realizing UB 2020 process and several initiatives have been undertaken. In particular, a new Office of Educational Innovation and Assessment has been mandated under the direction of the senior vice provost for academic affairs to oversee and coordinate campuswide activities related to teaching assessment and the faculty assessment of student learning.

Conclusion

UB 2020, the academic strategic plan of the University at Buffalo, has served to define the institutional mission and vision and establish the goals of the university for the next several years and beyond. The initiative called Realizing UB 2020, is the compass that will guide the university through the implementation and actualization of UB 2020.

As demonstrated through this self-study, the University at Buffalo has the requisite faculty, staff, organizational framework, facilities, infrastructure, resources and support to continue to realize its mission and vision as a major public research university. The university has developed planning processes, mechanisms, open discourse and assessment procedures of institutional effectiveness, including the assessment of student learning outcomes, to accomplish its goals and objectives. The evaluation of progress and institutional effectiveness, through UB 2020 and Realizing UB 2020, has informed strategic planning efforts, decision making, and the development of new initiatives.

This comprehensive self-study has served to sharpen our vision of the role and responsibility of a major public research university serving a diverse population of students in the 21st century. Framework for Excellence has helped to identify, assess and address ways to enhance the educational experience of our undergraduate, graduate and professional students. This in-depth, open and wide-ranging self-examination has reaffirmed our vision, direction and commitment to providing all students with an excellent education that meets their highest aspirations and expectations.

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Chapter One

Charting the Course to Excellence: Mission, Vision, Leadership, Integrity

Addresses Standards 1, 4, 5, and 6

Standard 1 - Mission and Goals

The institution's mission clearly defines its purpose within the context of higher education and indicates whom the institution serves and what it intends to accomplish. The institution's stated goals, consistent with the aspirations and expectations of higher education, clearly specify how the institution will fulfill its mission. The mission and goals are developed and recognized by the institution with the participation of its members and its governing body and are utilized to develop and shape its programs and practices and to evaluate its effectiveness.

Standard 4 - Leadership and Governance

An institution conducts ongoing planning and resource allocation based on its mission and goals, develops objectives to achieve them, and utilizes the results of its assessment activities for institutional renewal. Implementation and subsequent evaluation of the success of the strategic plan and resource allocation support the development and change necessary to improve and to maintain institutional quality.

Standard 5 - Administration

The human, financial, technical, facilities, and other resources necessary to achieve an institution's mission and goals are available and accessible. In the context of the institution's mission, the effective and efficient uses of the institution's resources are analyzed as part of ongoing outcomes assessment.

Standard 6 - Integrity

In the conduct of its programs and activities involving the public and the constituencies it serves, the institution demonstrates adherence to ethical standards and its own stated policies, providing support for academic and intellectual freedom.



Institutional History and Overview

The University at Buffalo¹ was founded in 1846 as a private medical college located in downtown Buffalo. UB joined the State University of New York² in 1962 and today is the largest, most comprehensive research university within the 65-campus SUNY system and its primary center for professional education and training. UB enrolls nearly 30,000 students (approximately two-thirds undergraduate and one-third graduate and professional students) and offers nearly 400 degree programs at the baccalaureate, master's, professional and doctoral levels across its 12 decanal units.

A premier research-intensive public university, the University at Buffalo has been a member of the Association of American Universities since 1989. UB was first accredited by the Middle States Commission on Higher Education in 1921 and was most recently reaccredited through the Middle States Periodic Review in 2009.

With a College of Arts and Sciences, 11 professional schools (Architecture and Planning, Dental Medicine, Graduate School of Education, Engineering and Applied Sciences, Law, Management, Medicine and Biomedical Sciences, Nursing, Pharmacy and Pharmaceutical Sciences, Public Health and Health Professions, and Social Work) plus a graduate division at Roswell Park Cancer Institute, UB has among the widest range of academic programs of any public institution in the northeast. UB was ranked among the top 200 universities internationally by the Times Higher Education World University Rankings (2012-2013), affirming UB's stature as one of the world's preeminent universities.

UB boasts a distinguished faculty of approximately 1,300 full-time members and more than 800 part-time members. UB's esteemed faculty includes members of the National Academy of Engineering, the Institute of Medicine and the National Academy of Education, as well as 58 SUNY Distinguished Professors, 29 SUNY Distinguished Teaching Professors and 18 SUNY Distinguished Service Professors. In addition, UB faculty members have been recipients of the Nobel Prize, the Pulitzer Prize, the National Medal of Science, the National Medal of Technology and Innovation, the MacArthur Foundation "Genius Award" and the Guggenheim Fellowship. With more than 150 research centers and institutes, UB's current annual research expenditures, including affiliated institutions, are approximately \$360 million. The libraries hold 3.8 million volumes and an exceptionally wide array of digital information resources.

Academic programs and facilities are located on three campuses in the Buffalo metropolitan area:

- The North Campus Amherst, N.Y.: 1,192 acres, 128 buildings;
- The South Campus Buffalo, N.Y.: 154 acres, 51 buildings; and
- The Downtown Campus Buffalo, N.Y.: includes New York State (NYS) Center of Excellence
 in Bioinformatics and Life Sciences, Clinical and Translational Research Center and UB
 Biosciences Incubator, UB Downtown Gateway, Educational Opportunity Center, Research
 Institute on Addictions, Ira G. Ross Eye Institute and the Jacobs Executive Development Center.

With one of the nation's largest international enrollments and affiliation agreements with more than 80 universities in Asia, Europe, Latin America and Africa, UB is a global university in scope and impact, recognized around the world as a leading center for groundbreaking research and discovery. UB consistently ranks among the nation's top 20 universities for the enrollment of international students. Nearly 11 percent of UB students study abroad, notably five times the national average.

The University at Buffalo is a major presence in the region and one of Western New York's largest employers with a workforce of more than 6,600 FTE employees (including student employees). With annual revenues of almost \$1.2 billion from all sources, UB and its affiliated entities generate a tremendous economic impact in the state and region. UB also is a leader and active partner with the more than 20 public and private colleges and universities in the Buffalo Niagara region.

University Mission, Vision, and Goals

Mission

The University at Buffalo is a diverse, inclusive scholarly community dedicated to bringing the benefits of its research, scholarship and creative activity, and educational excellence to global and local communities in ways that impact and positively change the world. We view the three traditional pillars of the public higher-education mission — research, education and service — as interdependent endeavors that continually enrich and inform each other. Groundbreaking research, transformative educational experiences and deeply engaged service to its communities define the University at Buffalo's mission as a premier, research-intensive public university.

Vision

Building on the existing strong foundation of academic excellence, knowledge and understanding, UB will advance into the highest tier of the nation's leading public research universities, thereby expanding the scope of its reach and the strength of its worldwide impact.

Goals

UB will enhance its national and international stature by achieving a number of specific academic objectives. Among the **strategic goals** articulated for the immediate future, UB will:

- Build on its foundation of faculty excellence through significant investments in areas of strategic strength across the disciplines to build intellectual and instructional capacity, increase federal and other research funding, expand student opportunities and heighten the academic reputation of the university;
- Enhance the overall student educational experience while raising the academic profile of its undergraduate, graduate and professional students and significantly improving its undergraduate four- and six-year graduation rates;
- Improve academic support infrastructures to provide state-of-the-art educational and research environments that advance faculty and students in their ongoing pursuit of excellence;
- Further enhance its faculty and student diversity through focused enrollment and hiring strategies and implementation of best practices with regard to recruitment and retention;
- Expand its impact as a recognized leader in international education, leveraging its diverse international population and strong portfolio of institutional partnerships to strengthen the

- university's international presence and to advance its commitment to preparing students to live and lead in a global world;
- Deepen its impact and outreach in the regional community, strengthening programs and partnerships that contribute to the social, cultural and economic vitality of Western New York; and
- Align strategically the School of Medicine and Biomedical Sciences and the other healthsciences schools with key health-related and research partners to improve health-care outcomes for the region and expand the university's health-sciences programs and curricula, while improving the national rankings of the health-sciences schools.

Realizing Our Mission: The UB 2020 Vision

As a leading 21st century public research university, the University at Buffalo is dedicated to advancing the greater public good through ideas, discoveries, and innovations. The university's pursuit of excellence is guided by its ambitious UB 2020 vision,³ which seeks to enhance the university's distinction and relevance among the world's foremost research universities and strengthen UB's impact as a recognized leader in responding to broadly defined societal challenges.

In 2004, UB officially launched this campuswide strategic planning initiative with a series of institutional planning and implementation meetings engaging faculty and staff across the university. Over the course of the past decade, the university has been using UB 2020 as a roadmap for aligning resources and making strategic investments to support UB's goals. UB 2020 provides an institutional context for making decisions at all university levels, including investment in key academic priorities: innovation and rigor throughout the undergraduate and graduate curricula; faculty teaching excellence; diversity of faculty and students; translational and transdisciplinary innovation; global leadership in research and education; regional and state economic engagement; and re-envisioning the campuses' physical infrastructure to fulfill the needs of 21st-century learners, teachers, and researchers.

The guiding objective — from the inception of the UB 2020 strategic planning process in 2004 to the current efforts to build on this progress through the Realizing UB 2020 initiative—is to elevate and strengthen the university's academic profile to advance excellence across the research enterprise and provide our students with an exceptional education. Pursuit of the UB 2020 vision requires continuous self-assessment, and UB is committed to ensuring that this institutional vision is consistent with and connected to its institutional mission. At every step along the way, UB is engaged continually in a process of gauging progress, evaluating the alignment of programs with the mission and refining the necessary next steps in pursuit of the institutional vision. In assessing institutional progress across academic programs, the university is able to better identify areas of success, where adjustments must be made, and where UB is best positioned to make strategic investments in its future.

President Satish K. Tripathi launched the Realizing UB 2020 initiative⁴ in 2012 as a detailed implementation strategy for building on the university's progress and momentum and using it as the springboard for taking the institution to the next level of excellence. As he remarked in introducing this initiative in his 2012 State of the University Address, "when we make that leap, we will be much closer to our ultimate goal: to be recognized as one of our nation's most distinctive, and most relevant, research universities."

Leadership and Governance

A strong senior leadership team that effectively engages all aspects of the university community and its broader constituencies in the institutional mission and vision is essential to the University at Buffalo successfully pursuing its ambitious vision of excellence. To achieve these goals, the senior leadership team must work collaboratively and transparently with faculty, staff and students, as well as with key external constituencies, including the SUNY Chancellor and Board of Trustees.

UB has assembled a strong and cohesive senior leadership team whose members not only are acknowledged leaders and innovators in their fields of expertise, but also are committed to leading by example in building a culture of collaboration, transparency and innovation as they steer the university's academic vision. As a major public research university serving a broad range of constituencies regionally, statewide, nationally and internationally, UB pursues its mission within the broader contexts of several interrelated leadership and governance organizations. The principal governance bodies relevant to the pursuit of UB's mission are summarized below.

State University of New York

UB is part of SUNY, ² the nation's largest and most comprehensive state university system. Established in 1948, SUNY encompasses 65 campuses, including four university centers, 13 comprehensive colleges, 20 specialty colleges and 28 community colleges committed to providing a broad range of programs for students within New York State and from around the world. SUNY's administrative offices are located in Albany.

SUNY is governed by a board of trustees consisting of 17 members, 15 of whom are appointed by the governor with the consent of the New York State Senate. In addition, the president of the SUNY Student Assembly serves as student trustee and the president of the University Faculty Senate serves as an ex-officio trustee. The SUNY Board of Trustees has ultimate governance authority for the SUNY system, including direct authority over state-operated campuses, general supervisory authority over state-funded colleges at Alfred University and Cornell University, and shared responsibilities for the community colleges under SUNY. Among the authorities of the Board of Trustees are the powers to:

- Appoint its own officers, the chancellor and the system administration senior staff;
- Appoint the president of each state-operated institution, and approve the appointment of statutory and community college presidents by their respective boards
- Grant all degrees, diplomas and certificates for the completion of studies at any state-operated campus, including honorary degrees;
- Regulate the admission of students and prescribe qualifications for their continued attendance;
- Regulate tuition, fees and charges, curricula and all other matters pertaining to the operation and administration of each state-operated campus; and
- Establish new campuses.

The State of New York assists in financing the SUNY system, which provides affordable college and university-level educational opportunities to students in the state and beyond. The annual all-funds budget for SUNY is approximately \$10.5 billion, which includes approximately \$3.5 billion in state support.

State University of New York Central Administration

The SUNY Board of Trustees⁵ appoints the chancellor, who serves as SUNY Chief Executive Officer. The current SUNY Chancellor is Nancy L. Zimpher.⁶ The chancellor and her staff are responsible for recommending and implementing the plans, policies and actions of the Board of Trustees. In addition to the responsibilities established by state and federal statutes and the Board of Trustees, the chancellor and central administration also are responsible for the following:

- Providing leadership and advocacy for the entire university system;
- Coordinating the planning, development and implementation of systemwide initiatives intended to result in greater effectiveness and efficiency, such as campus-based planning agreements and assessment of academic programs;
- Implementing and being responsive to applicable provisions of executive orders, directives, regulations, administrative procedures, information requests, etc., as established by state and federal agencies; and
- Providing oversight, coordination and reporting in response to requests by state agencies, such as the State Comptroller's Office.

SUNY University Faculty Senate

The SUNY system has a faculty governing body, the University Faculty Senate,⁷ made up of elected representatives from each of the university centers and four-year campuses. The University Faculty Senate meets three times a year, affording each campus representative an opportunity to meet with governance leadership from other campuses and with the chancellor, provost and other officials within the system. At these meetings, common concerns and possible solutions are discussed, and the chancellor and provost share SUNY administration perspectives. Occasionally, the University Faculty Senate has the opportunity to discuss more general issues of public higher education with members of the New York State Legislature.

University at Buffalo Leadership and Governance

The University at Buffalo Council⁸ serves as the primary oversight and advisory body to the University at Buffalo and its president and senior officers. Established in accordance with New York State Education Law, the council consists of 10 members, nine of whom are appointed to seven-year terms by the governor of the State of New York, and one student member who is elected to an annual term by the university's students.⁹

Among the regular duties of the council are reviewing all major plans and activities of the university in the areas of academics, student life, finances, and buildings and grounds, as well as making recommendations and regulations for the benefit of the university in matters of community and alumni relations. As directed by state law, the UB Council is responsible for the review of major institutional plans prior to submission to the SUNY Board of Trustees. Also under the UB Council's legal purview is the appraisal and/or improvement of academic programs and standards for earning degrees, institutional expansion plans, appraisal or improvement of student activities and housing, and other major initiatives as determined by the SUNY Trustees. A more detailed description of the roles, responsibilities and procedures of the UB Council can be found in New York State Education Law, Section 356.9.¹¹

All sponsored research awards are managed centrally by the **SUNY Research Foundation** (RF),¹² a 501(c)(3) nonprofit educational corporation that was established in 1951 specifically to manage external funding received by SUNY campuses for their research activities. As the largest, most comprehensive university-connected research foundation in the country, it serves SUNY by providing sponsored-programs administration and innovation support services to assist SUNY faculty to translate research and discovery into invention, entrepreneurship, economic opportunity and public benefit. The RF develops, provides and maintains electronic business tools that are made available to individual campuses in the management of their respective sponsored projects portfolios. Each campus has RF employees who conduct the day-to-day management of research awards made to that campus. Staff at the central office of RF (located in Albany, N.Y.) provide services such as legal advice through the Office of General Counsel, auditing services and other general services to campuses to ensure that best grants management practices are applied consistently across the entire system.

The University at Buffalo Foundation, Inc. (UBF)¹³ was chartered in 1962 by the Regents of the State of New York as a nonprofit educational corporation. The mission of the UBF is to support and promote the activities and programs of the university by providing advice and counsel regarding philanthropy and fund raising, managing gifts and grants on behalf of the university, providing a wide range of financial services for the various units of the university, developing and managing real property on behalf of the university, and providing a strong base of private-sector support for the university through the foundation's trustees and directors.

The Faculty Senate¹⁴ is the university's faculty governance body. The Senate's bylaws¹⁵ give it a substantial role in key governance issues, including advising on budget and the creation of academic departments and programs. Its Executive Committee meets weekly, and the university president is invited to attend. The Faculty Senate is advisory to the president and the provost, and works collaboratively with senior administration in academic policy development, delineation of promotion and tenure criteria and matters relating to the formation, restructuring and dissolution of academic units. Through its standing committees, the Faculty Senate explores a full range of academic, academic-support and student-life issues.

The Faculty Senate is responsible for discharging the powers and duties of the Voting Faculty regarding undergraduate degree requirements and policies and procedures regarding undergraduate curricula. These include educational requirements and other matters of academic policy common to undergraduate programs. The Faculty Senate may review general university policies and procedures pertaining to graduate and professional curricula, and may make recommendations to the professional or graduate program faculties, the provost or the president. Proposals for new degree programs require further review by SUNY system administration and the New York State Education Department.

The Professional Staff Senate (PSS)¹⁶ serves the interests of all professional staff not holding academic rank, including exempt staff of the SUNY Research Foundation, the Faculty Student Association and UBF. PSS actively participates in the policy decisions of the university; provides a forum for exchange of information, discussion of ideas, and consideration of matters related to the administration of the university; promotes the professional development of individuals committed to careers in higher education; cultivates collegiality among all members of the university community; and maintains liaison with other organizations concerned with university affairs. PSS promotes the welfare of the

university community through its active committee engagement in university matters. PSS committees include constitution and bylaws, diversity, marketing and communications, policy and governance, staff development and services, outstanding service awards, website, mentoring and welcoming.

The purpose of the **Graduate Student Association** (GSA)¹⁷ is to act, through its Senate, as the advocate for the graduate student body in matters affecting graduate student life and to promote the interests of the university community. The GSA Senate has the authority to initiate and conduct matters, within its powers, that relate to the graduate student body as a whole. The Senate may make recommendations to the appropriate university authorities with regard to policies affecting graduate students. GSA officers are elected by their peers and meet regularly with the dean and executive director of the Graduate School to discuss issues related to the graduate student experience.

The purpose of UB's **Undergraduate Student Association** (SA), ¹⁸ which serves the undergraduate student population, is to enact resolutions concerning issues of importance to the undergraduate student body with regard to academic policy, student rights and student welfare. The SA also serves to create ad hoc positions, agencies, task forces and committees to take action on issues of importance to students. The officers of the Student Association are elected by their peers and meet periodically with the vice president for university life and services and the senior vice provost for academic affairs for consultation and information exchange on a variety of academic and student-life issues. The SA administers a budget funded from student fees for that purpose.

The **Intercollegiate Athletics Board** (IAB)¹⁹ is an oversight group for intercollegiate NCAA Division I athletics that reports directly to the president. The IAB meets twice per semester and has representation from faculty, professional staff, administration, students and student-athletes.²⁰ The IAB reviews the intercollegiate athletics budget, gender equity in athletics, NCAA rules compliance and student-athlete welfare, including academic performance and progress.

University Administration

UB's administration²¹ establishes policies and sets priorities in all university matters, including academic, professional and financial issues. Led by the president and the provost, and working collaboratively and consultatively with various constituent governing bodies to advance the goals of the university, the administration charts the course for UB's future. It expands and refines the mission of the university; provides direction and facilitates research, teaching and learning; and bolsters the institution's responsibility and commitment to public service, both locally and abroad. Deans, vice presidents and vice provosts meet regularly with the president and the provost to discuss university policies and issues affecting the College of Arts and Sciences (CAS), professional schools and non-academic units. These meetings provide a forum to discuss a broad range of academic and administrative issues, including strategic planning, budgeting, academic standards, services and assessment.

President

The chief administrative officer of the University at Buffalo, the president is appointed by and serves at the pleasure of the SUNY Board of Trustees, upon the recommendation of the chancellor and following review of the recommendations provided by the University Council. Reporting directly to the SUNY chancellor, the president assembles and guides a strong campus leadership team in the fulfillment of the university's mission and the advancement of its strategic vision. The president provides leadership, clarity, and focus in articulating the university's vision of excellence, and guides its realization in partnership with a broad range of internal and external university constituencies. As a leading voice in the national and global higher-education community, as well as a prominent civic and regional leader, the president works to develop and nurture synergies with individuals, institutions and communities—regionally, statewide, nationally, and internationally—to successfully engage them in the mission and vision of the university. **Satish K. Tripathi**²² was appointed the 15th president of the University at Buffalo on April 18, 2011.

Provost and Executive Vice President for Academic Affairs

As the university's second ranking officer, reporting directly to the president, the provost is responsible for leading the development and implementation of the university's academic vision. The provost provides leadership across the academic enterprise through the articulation and support of academic priorities. These priorities include excellence in undergraduate, graduate and professional education; faculty excellence in teaching, research and public service; intellectual, geographic and cultural diversity of faculty and students; transdisciplinary innovation in research, scholarship and creative activities; and global leadership in research and education. **Charles F. Zukoski**²³ was appointed provost and executive vice president for academic affairs in June 2012 following an international search.

President's Cabinet

The president's cabinet discusses institutional policy matters and timely issues and exchanges information. In pursuit of the university's strategic vision, the president works collaboratively with the provost, the vice presidents and academic deans, individually and collectively, to set academic and operational goals and assess progress. In addition to the provost, the president's chief of staff, seven vice presidents and the director of athletics comprise the president's cabinet. Responsibilities of the vice presidents encompass health sciences, research and economic development, finance and administration, university life and services, development and alumni relations, communications, and information technology. The portfolios of the cabinet officers are outlined below.

The Vice President and Chief Information Officer (CIO) (Brice Bible²⁴) is responsible for the delivery of a robust and innovative information technology infrastructure to advance the university's research and educational missions. Leveraging technology and digital resources, the vice president and CIO provides critical oversight of information technology, computing services and administrative information systems across the university.

The Vice President for University Life and Services (Dennis R. Black²⁵) provides leadership on student issues, formulating and implementing policies that encompass all facets of student affairs to ensure effective educational and service programs, including managing administrative interactions with student governments, residence halls/apartments and residential life, students' personal development in areas such as leadership training and multicultural affairs, food service and public safety.

The Vice President for Health Sciences (Michael E. Cain²⁶) has administrative responsibility for the five health sciences schools (Medicine and Biomedical Sciences, Dental Medicine, Nursing, Pharmacy and Pharmaceutical Sciences, and Public Health and Health Professions), particularly with regard to hospital affiliations, residency training and faculty practice plans.

The Vice President for Research and Economic Development (Alexander N. Cartwright²⁷) is responsible for the overall management of UB's research enterprise, including research funding, research administration and compliance, research communications, research support, university/industry relations and economic development. The vice president supports UB 2020 through the creation of new cross-disciplinary initiatives and oversees eight campus research centers.

The Chief of Staff to the President (Beth Del Genio²⁸) serves as the president's advisor on a wide range of internal and external issues to ensure that presidential initiatives are carried out in support of the university mission. The chief of staff also serves as the primary liaison with the SUNY system.

The Vice President for Finance and Administration (Laura E. Hubbard²⁹) is responsible primarily for strategic financial planning and analysis of resource use and development; partnering in budget planning and oversight of budget implementation; treasury and risk management; accounting, procurement and business services; internal audit; facilities planning, construction and operations; and human resources.

The Vice President for Communications (Nancy Paton³⁰) oversees the University Communications enterprise, telling UB's story effectively to its many internal and external audiences and giving the university a competitive edge in continuing to recruit outstanding faculty, staff and students. The vice president is responsible for deploying the university's overarching communications strategy in support of institutional goals; ensuring collaboration among communications professionals and teams across the university; and building and guarding UB's institutional brand.

The Vice President for Development and Alumni Relations (Nancy L. Wells³¹) serves as the university's senior officer for development and alumni relations, and works closely with the president, provost, deans, executive director of the UBF and the UB Alumni Association Board of Directors, as well as other university leaders and volunteers to lead the university's development and alumni engagement efforts.

The Director of Athletics (Daniel J. White³²) oversees UB's 20 NCAA Division I intercollegiate sports programs, including the associated academic support, training and development, as well as intramural and recreational sports programs and community outreach.

Academic Leadership

Decanal Leadership

The deans of the College of Arts and Sciences³³ and 11 schools (Architecture and Planning,³⁴ Engineering and Applied Sciences,³⁵ Education,³⁶ Law,³⁷ Management,³⁸ Social Work,³⁹ Medicine and Biomedical Sciences,²⁶ Dental Medicine,⁴⁰ Nursing,⁴¹ Pharmacy and Pharmaceutical Sciences,⁴² and Public Health and Health Professions⁴³) report to the provost.

UB's deans are distinguished faculty members and scholarly leaders in their fields, as well as experienced and innovative administrators dedicated to collaborating across disciplinary boundaries to achieve a shared institutional vision of academic excellence. The deans serve as the academic leaders and chief executive officers for their schools, providing leadership in academic, administrative and external affairs. They are involved directly with fundraising and faculty recruitment and retention, and engage the faculty, alumni and other constituencies in realizing unit and university goals and aspirations.

Vice Provostal Leadership

Six vice provosts report to the provost,⁴⁴ each overseeing a specific area of academic administration. These include the senior vice provost for academic affairs;⁴⁵ vice provost for international education;⁴⁶ vice provost for faculty affairs,⁴⁷ vice provost for university libraries;⁴⁸ vice provost for academic planning, budget, and evaluation;⁴⁹ and vice provost for educational collaboration and engagement.⁵⁰ A search has begun to fill the newly created position of vice provost for equity and inclusion.

Integrity

Rights and Responsibilities Conferred by the State of New York

All university leaders are governed by the New York State Public Officers Law Code of Ethics.⁵¹ As employees of the State of New York, all faculty and staff must comply with the ethics, conflict-of-interest, and financial-disclosure laws of the state, as well as the policies of SUNY. These policies, rights and responsibilities are addressed in the Policies of the Board of Trustees of the State University of New York,⁵² the State of New York's Public Officers Law,⁵³ and the Regulations and Procedures for Maintaining Public Order on Campuses of the State University of New York.⁵⁴

Ethical obligations also are outlined in state-negotiated contractual agreements with faculty and staff (represented by United University Professions), classified service employees (represented by the Civil Service Employees Association), health professionals (represented by Public Employees Federation), security service assistants (represented by NYSCOPBA) and university police (represented by PBANYS). As an institution of higher education, the university complies with all state and federal laws, including the Family Educational Rights and Privacy Act (FERPA),⁵⁵ the Higher Education Opportunity Act (HEOA),⁵⁶ the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act,⁵⁷ the New York State Human Rights Act,⁵⁸ the Americans With Disabilities Act (ADA),⁵⁹ the

Federal Drug Free Schools and Communities Act (with policies pertaining to both employees⁶⁰ and to students⁶¹), and the Health Insurance Portability and Accountability Act (HIPAA).

SUNY Policies, Procedures and Regulations

The Policy, Procedure, SUNY Regulation, and Form and Appendix Library at the State University of New York⁶² serves as the official repository for all system policies and procedures for SUNY employees.

University at Buffalo Policies and Procedures

UB's policies and procedures connect its mission to the everyday actions of the academic community, enhance efficiency, clarify the institution's expectations of its individual members, mitigate risk and support compliance with applicable laws and regulations. All members of the university community are expected to be familiar with, and abide by, the university's policies.

At UB, several different departments are responsible for monitoring compliance with applicable laws and regulations. Given the rising standards for accountability and stewardship, the Policy and Internal Control Office⁶³ was created in 2006 to support the commitment of the university to high standards of stewardship and ethical behavior and to coordinate and monitor the compliance function.⁶⁴ This office focuses its efforts on three main areas of responsibility: policy, internal control and compliance, all under the overarching framework of risk management. The University at Buffalo Policy Library⁶⁵ serves as the official repository for all universitywide policies.

Rights and Responsibilities of Faculty and Staff

Academic and personnel policies relating to faculty and staff rights, responsibilities and conduct are detailed in the Faculty/Staff Handbook.⁶⁶ In 2006, the Faculty Senate established a Faculty Code of Conduct.⁶⁷ The Employee Relations unit within the Office of Human Resources⁶⁸ oversees the resolution of conflicts involving members of the faculty and staff.

Student Policies and Procedures

All students are required to affirm their knowledge of, and adherence to, UB's Student Conduct Rules, University Standards and Administrative Regulations⁶⁹ prior to their inaugural semester at UB. A "Student Responsibility Statement," along with the university's academic policies and procedures, is delineated in the online Undergraduate Catalog.⁷⁰ Student behavior expectations also are disseminated at student orientation sessions. The Office of Judicial Affairs & Student Advocacy updates the University Code of Conduct and University Standards and Administrative Regulations each summer. Various units and student leaders are consulted on these changes and updated policies are posted each August. When appropriate, changes are approved by the UB Council. Policies and Procedures specific to graduate and professional students are described in the Graduate Student Policies and Procedures Manual.⁷¹

Academic Freedom, Ethics and Integrity at UB

Academic freedom, intellectual freedom, freedom of expression and diversity of opinion are central to UB as an institution of higher education. The university subscribes to the Statement of Principles on Academic Freedom and Tenure⁷² as articulated by the Association of American Colleges and the

American Association of University Professors, and to the rights established by the SUNY Board of Trustees relating to academic freedom.⁷³

Equity, Diversity and Inclusion

The Office of Equity, Diversity and Inclusion (EDI)⁷⁴ is committed to the principles of equal opportunity in education and employment. EDI promotes a campus environment that values the tenets of a democratic and pluralistic society; supports the intellectual, personal and professional development of each individual; and generates understanding, attitudes and perspectives that create an atmosphere of civility, collegiality, appreciation and mutual respect for diversity and cultural differences. The office is committed to ensuring a work and educational environment that is free of discrimination and harassment.

Maintaining Integrity through Continual Policy Review and Development

The university has developed procedures for the development, formulation, amendment, distribution, implementation and review of universitywide policies. Most commonly, academic policies are forwarded for consideration to, or directly emanate from, an appropriate standing committee of the Faculty Senate. The members of these standing committees are appointed by the Faculty Senate Executive Committee. Policies and resolutions are drafted by the appropriate committee and submitted for review by the Faculty Senate Executive Committee. Following consideration and approval by the Faculty Senate Executive Committee, the draft resolution is placed on the agenda of the Faculty Senate for discussion and vote. Policies and resolutions approved by the Faculty Senate are forwarded to the provost and president for approval and promulgation. For example, in 2005-2006, UB conducted a survey of undergraduates, graduate students and faculty, through participation in the Center for Academic Integrity. The findings prompted the Faculty Senate to adopt revisions to the university's academic integrity policies and a campaign to promote greater awareness and compliance.

Evidence

Examples of evidence that the University at Buffalo meets Middle States Standard 1 are summarized below:

- UB has a clearly defined mission and goals. UB 2020 expresses the strategic direction of the university and has involved collaborative participation and extensive feedback from a broad array of constituencies, including senior leadership, administration, faculty, staff and students. Through this process, UB's institutional goals have been revised to guide planning, faculty hiring, curriculum development, pedagogical innovation, student success outcomes, research and scholarship, community engagement, resource allocation and campus investment. The resulting documents and findings have been disseminated widely and publicized and are readily accessible through the provost's website.
- Institutional goals are focused on academic excellence and institutional improvement.
- The president has highlighted UB's mission and vision at every formal address that he has

- given and in all major campuswide communications. The institutional mission and goals also are emphasized and communicated through UB 2020 and a variety of venues, including regular communications by the president and provost to faculty, staff and students; new faculty orientation; presentations to the Faculty Senate and Professional Staff Senate; open forums; and the president's annual State of the University Address.
- Over the past several years, numerous improvements and enhancements of educational programs, academic support services and auxiliary operations have been realized.

Examples of evidence that the University at Buffalo meets Middle States Standard 4 are summarized below:

- UB is part of the State University of New York system, which is governed by a Board of Trustees consisting of 17 members, 15 of whom are appointed by the governor of the State of New York. The SUNY Board of Trustees has ultimate governance authority over the SUNY System and state-operated campuses including UB. The SUNY Board of Trustees operates in accordance with published bylaws. The president of the Student Assembly serves as student trustee and the president of the University Faculty Senate serves as an ex-officio trustee.
- Systemwide policies are administered by the SUNY central administration to ensure adherence
 to the mission and operational principles of SUNY as mandated by the State of New York.
 University administration and faculty are subject to financial-disclosure and conflict-of-interest
 policies of SUNY and the State of New York.
- The governing body of UB is the University at Buffalo Council established in accordance with New York State Education Law.
- The university president is evaluated through a formal periodic review by the SUNY Chancellor.
- The Faculty Senate is responsible primarily for academic policy recommendations, including academic standards, grading policies and academic calendar.

Examples of evidence that the University at Buffalo meets Middle States Standard 5 are summarized below:

- Led by the president and the provost, the University at Buffalo relies on an effective and strong administrative structure to provide leadership in realizing the academic, research and service mission of the institution and charting future directions.
- Members of the administrative leadership are highly qualified to carry out their specific
 responsibilities and functions. They possess the appropriate academic background, experience,
 and leadership skills to perform effectively the duties appropriate to the university's mission.
- There is a collegial and productive working relationship among the vice presidents, the vice
 provosts and the academic deans. The president, provost and other senior administrators
 consult and collaborate regularly with various constituents and stakeholders, including faculty,
 staff, students and community groups.
- The effectiveness of administrative structures, services and leadership is reviewed periodically. Vice presidents, vice provosts, deans and other administrators undergo performance reviews. Academic deans undergo a comprehensive, faculty-led five-year review of their performance.

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- The administrative structure is not static, but evolves in response to a changing highereducation environment to deliver most effectively core academic offerings, campus services and fiduciary operations.
- The organizational structure of the university has adequate staffing structures and decision-making systems to support the administrative operation of the institution. The organizational chart is available on the university's website.

Examples of evidence that the University at Buffalo meets Middle States Standard 6 are summarized below:

- UB has promulgated fair and impartial universitywide policies relating to the rights, responsibilities and ethical conduct of faculty, staff and students, and provides due process for all parties involved.
- University Human Resources and collective-bargaining agreements between the university and unions representing various segments of the university's faculty and staff provide guidelines that describe the conditions for hiring, as well as dismissing, employees.
- The university strives diligently to create an inclusive campus environment that embraces
 diverse perspectives and represents multicultural populations. The Office of Equity, Diversity
 and Inclusion is focused on upholding the university's commitment to advancing diversity,
 affirmative action and equal opportunity within the conditions, terms and privileges of
 employment and education.
- Processes to address faculty grievances and personnel issues are described in the Faculty/Staff Handbook and are posted on the website of the provost.
- Processes to address student grievances promptly, equitably and appropriately are described in the Undergraduate Catalog and in the Graduate School Policies and Procedures Manual and on university websites.
- Policies and procedures regarding student conduct are posted on the website of the Office of Judicial Affairs & Student Advocacy.
- UB is committed to academic freedom, intellectual freedom, freedom of expression and diversity of opinion. The university endorses the rights established by the SUNY Board of Trustees relating to academic freedom and has established a Faculty Code of Conduct that is posted on the website of the provost. The university's commitment to academic and intellectual freedom is demonstrated by the absence of any formal grievances by faculty relating to this issue over the past several years. Formal grievances relating to academic freedom are addressed directly by the vice provost for faculty affairs in conjunction with an impartial committee.
- Additional policies that foster and support a climate of ethical behavior, sensitivity for equity
 and diversity, and standards of fairness and respect include policies governing conflict of
 interest, conduct of research and creative expression, intellectual property rights, discrimination
 and harassment, and reasonable accommodation.
- Major policies are available widely and published on the university's Policy Library website. The
 Undergraduate Catalog is available online and is regularly updated and archived. The university
 communicates to the Middle States Commission on Higher Education, and other accrediting
 bodies, by submitting substantive change requests, requests to add additional locations and

- other evaluative reports as required. UB publishes all IPEDS/Common Data Set information on the UB Fact Book website. Factual information regarding the institution, self-study reports and other accreditation reports, actions, and communications are available to the university community.
- Policies regarding the adding, dropping, resigning, withdrawing and repeating of courses are clearly articulated and consistently applied.
- Internal and voluntary audits of various academic and academic-support units are conducted
 routinely to ensure that regulatory and legal requirements are adhered to and that operations are
 conducted efficiently and effectively.
- University websites are reviewed regularly to ensure that they are informative, accurate, engaging, and user-friendly.

Future Directions

Academic excellence is UB's core and guiding principle. UB has clearly stated institutional goals that specify how we will fulfill our mission as a 21st-century public research university.

We are committed to an annual cabinet-level review of the university's stated mission and goals so that we will shape effectively our programs and practices, and evaluate our effectiveness over the next 10 years. Members of the UB community take pride in accomplishments to date but know that UB can be even better with the realization of UB 2020.

Chapter **two**

Building a Foundation for Excellence: Strategic Planning, Resource Allocation and Institutional Renewal

Addresses Standards 2, 3 and 7

Standard 2 - Planning, Resource Allocation, and Institutional Renewal

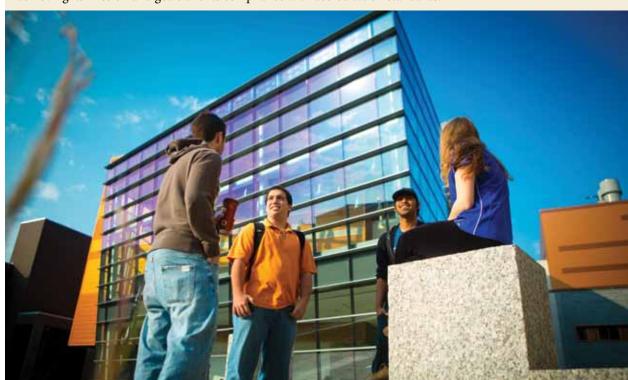
An institution conducts ongoing planning and resource allocation based on its mission and goals, develops objectives to achieve them, and utilizes the results of its assessment activities for institutional renewal. Implementation and subsequent evaluation of the success of the strategic plan and resource allocation support the development and change necessary to improve and to maintain institutional quality.

Standard 3 - Institutional Resources

The human, financial, technical, facilities, and other resources necessary to achieve an institution's mission and goals are available and accessible. In the context of the institution's mission, the effective and efficient uses of the institution's resources are analyzed as part of ongoing outcomes assessment.

Standard 7 - Institutional Effectiveness

The institution has developed and implemented an assessment process that evaluates its overall effectiveness in achieving its mission and goals and its compliance with accreditation standards.



Strategic Planning at UB — The UB 2020 Story

On January 1, 2004, John B. Simpson was appointed as UB's 14th president, and he selected Satish K. Tripathi as provost on July 1, 2004. The new leadership team saw an immediate need to assess the university's strengths, weaknesses and capacities for improvement. By September 2004, they had launched the initial phase of the UB 2020 strategic planning process. This chapter tells the story of the origins and evolution of UB 2020 and the projected impact of the plan on the next 10 years.

The UB 2020 timeline is presented in Figure 2.1. From September 2004 through 2007, the university completed its internal self-assessment and conceived the vision, goals and priorities of the UB 2020 plan. In 2007, UB introduced the plan to its supporters, SUNY and New York State government leaders. For three years, UB made proposal after proposal for the resources and authority to implement the plan. This advocacy effort galvanized public support in Western New York. However, because

Realizing UB 2020 10/2012 - 2/2014 Realizing UB 2020 Process

NYSUNY 2020 03/2011 - 01/2012 NYSUNY Negotiations and bill signing 04/2011 President Tripathi–15th President

Original UB 2020 01/2011 President Simpson retires 08/2007 UB 2020 Roll Out to Governor Spitzer 07/14/2004 Inaugural UB 2020 Planning Retreat 07/1/2004 Satish Tripathi appointed provost 01/1/2004 John Simpson–14th President

Figure 2.1UB 2020 Timeline

of the fiscal crisis of 2008 and the instability in leadership at the state-level, UB's proposals went unaddressed until 2011. In the first months of 2011, Satish K. Tripathi became UB's 15th president and, together with SUNY Chancellor Nancy Zimpher, led negotiations with newly elected Governor Andrew Cuomo leading to the passage of the NYSUNY 2020 legislation. In the time since NYSUNY 2020 became law, President Tripathi and new Provost Charles F. Zukoski have directed the campus effort to implement the next phase of UB 2020, known as Realizing UB 2020.

UB 2020 — The Beginning

UB 2020 began with a process of self-assessment that examined faculty strength within and across disciplines, reviewed how the university allocated resources and the impact of those investments, inventoried facility condition and space utilization around the campus, and compared university performance, staffing, revenues and expenditures with those of peer AAU universities.⁷⁵ The lessons learned from the review were:

- UB's student/faculty ratio was significantly higher than peer AAU universities; (see Figure 2.2)
- UB's administrative operations were inefficient and in need of transformation;
- UB did not have a capital plan, deferred maintenance was at very high levels, and underdeveloped capital planning processes were ineffective in responding to strategic facility needs;
- UB was affordable and attracted very good students, but retention and graduation rates were not at expected levels based on the academic profile of entering cohorts; and
- UB did not have the financial capacity to remedy the most important issues revealed by the self-study.

28.9 UB

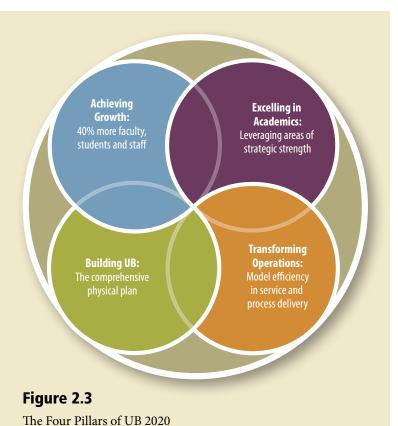
22.4 AAU Median

Figure 2.2

Comparison of Student to Faculty Ratios: Student FTE Divided by Nonmedical Faculty FTE, 2004

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After the initial self-study was concluded, President Simpson and Provost Tripathi commenced a two-year strategic planning process that reached across the campus and resulted in UB 2020.³ Featured in the plan were four pillars of bold action (see Figure 2.3) that would elevate UB from the level of a good university to a place among the best public research universities in the country.



Achieving Growth — Faculty, Staff and Students

University leaders concluded that the only way to generate funding for faculty growth was to increase enrollment, especially at the undergraduate level. Sufficient growth would produce enough revenue to enable an increase in faculty large enough to reduce the student/faculty ratio to AAU competitive levels. UB proposed a plan to add 10,000 students, 1,000 faculty and 1,000 staff over a 10-15 year period. The university recognized that student, faculty and staff growth of this magnitude could not be supported without increased tax support and tuition rates, nor would the existing campus infrastructure support this large growth in campus population. Thus, UB proposed that New York State give the university authority to implement rational tuition and fee increases over the plan period. UB also asked the state to supply the means to implement the needed capital improvements to support this growth with state capital appropriations, or by authorizing campus autonomy to issue debt and enter into agreements with contractors, or a combination of both.

Excelling in Academics — Leveraging Strategic Strengths and Building Quality Educational Programs

The UB 2020 planning process identified the areas where UB had built superior faculty strength through an extensive dialogue with faculty across the campus. What emerged was the conclusion that the university had strategic strength in eight areas:⁷⁶

- Artistic Expression and the Performing Arts;
- Civic Engagement and Public Policy;
- Cultures and Texts;
- Extreme Events: Mitigation and Response;
- Health and Wellness Across the Lifespan;
- Information and Computing Technology;
- Integrated Nanostructured Systems; and
- Molecular Recognition in Biological Systems and Bioinformatics.

UB 2020 envisioned that growing the faculty in these areas would encourage multidisciplinary teams to improve UB's research reputation and attract major growth in research funding from federal and private

sources. Since its inception, the Strategic Strengths Initiative has resulted in 131 new faculty hires in these areas.⁷⁷ In 2006, the provost created the position of vice provost for strategic initiatives. The vice provost works closely with faculty leaders in each strength area and reports annually on the scholarly impact of the entire initiative.

The UB 2020 plan also recommended many improvements in the UB student experience. At the undergraduate level, a UB 2020 task force proposed the implementation of new programs and initiatives that are having a lasting impact, including (see Chapter 4 for further information and an evaluation of impact):⁷⁸

- **Discovery Seminars:**⁷⁹ This program provides first-and second-year undergraduates the opportunity to engage with a distinguished faculty member around a thought-provoking topic in a small-class environment. Students are able to explore particular interests or unique topics and enhance their abilities to think critically and communicate effectively.
- Undergraduate Academies:⁸⁰ The academies are living and learning communities that bring together university students, faculty, staff and alumni to focus on three broad themes: Civic Engagement, Global Perspectives and Research Exploration. Participation is open to all undergraduate students. Opportunities include seminars, workshops, residential communities, field trips and community-building events. Two new academies were introduced in Fall 2012 with the broad themes of Entrepreneurship and Sustainability.
- Center for Undergraduate Research and Creative Activities (CURCA):⁸¹ The center serves as a clearinghouse for undergraduate students interested in pursuing challenging research and creative opportunities that match their academic interests and career goals. It reviews project proposals and provides funding for undergraduate projects.

For graduate programs, the UB 2020 plan required the implementation of a systematic program-review process (see Chapter 4). Every program is reviewed by an external team on a five-year cycle coordinated by the Graduate School with deep involvement of the program faculty and departmental and school leadership. ⁸² The review teams make specific recommendations to enable programs to improve quality and target investment to address major deficiencies. UB 2020 also encourages appropriate attention to graduate-student support and the competitiveness of fellowship awards and TA/GA stipends (see Chapter 4 for additional description). In several fiscal years, the university made sizable investments from central and unit sources to increase TA/GA stipends in response to these recommendations. ⁸³ The UB 2020 plan also suggested improvements in professional education that led to the creation of an Interprofessional Education (IPE) program in which students in professional programs in the Health Sciences, Engineering, Management, Law, Education, Social Work, and Architecture and Planning work together to address complex challenges requiring multiple types of professional skills. ⁸⁴

Transforming Operations

The UB 2020 plan recommended a series of operational transformations to reduce costs and improve customer service. 85 These projects included:

• The Information Technology (IT) Transformation: The IT Transformation involved consolidation of common services, development of service-delivery tools and processes, and implementation of infrastructures to support better new modes of teaching, learning and scholarship. As an example, before the IT Transformation, there were 70 separate telephone

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- systems at UB. Following the transformation, more than 6,600 faculty and staff members use the same Voice Over Internet Protocol (VoIP) system, and 3,000 phone lines have been eliminated.
- The Student Systems Transformation: In 2004, UB operated an internally developed and maintained student-information system that was comprised of several systems that did not communicate effectively with each other. The lack of accurate, integrated student information undermined faculty and staff support of students. The Student Services Transformation moved the university to a single system, PeopleSoft, for all student-related data.
- Environmental Stewardship: In 2007, UB's president signed the American College and University Presidents' Climate Action Plan and, in August 2009, created the Environmental Stewardship Committee to assist with the development of a Climate Action Plan. 86 The primary goal of the plan is for UB to become carbon neutral by 2030. In September 2011, UB created a new position, chief sustainability officer, to provide leadership and direction for sustainability initiatives. On April 23, 2012, UB energized a solar array with 3,200 photovoltaic panels that produce 750,000 watts of energy to power hundreds of on-campus student apartments. UB also has partnered with Zipcar Inc. to provide students with the opportunity to share high-efficiency cars on an as-needed basis.
- **Digital Communication Transformation:** This transformation has resulted in a more mature, consistent and well-branded Web environment with shared tools, templates, standards, documentation, information architecture and staffing models.
- Human Resources (HR) Strategic Transformation: The HR Strategic Transformation attempted to change the way that HR services are delivered to the campus community. The approach was to collapse 61 separate HR units into three divisional service centers covering business services, student affairs and the academic enterprise. This concept encountered many obstacles and was not successfully completed. However, the HR Strategic Transformation was successful in creating the Organizational Development and Training Unit to oversee professional development and training opportunities for the entire campus community. Finally, PeopleAdmin was adopted to provide automated service delivery and reporting, with automated personnel transaction forms (PTFs) making personnel changes more efficient.
- Sponsored Programs Improvement Initiative: This initiative involved the merger of Sponsored Programs (pre-award services) and Grants and Contracts Services (post-award services) into one integrated unit, Sponsored Projects Services. The key objective of the merger was to improve services to principal investigators, creating a seamless process from a project's conception to the final close-out. This initiative has met with some success, but continued improvements are required. The university has taken steps in the past 12 months to bolster grant-development infrastructures with the creation of the Office of Research Advancement.

Building UB - The Comprehensive Physical Plan

In 2004, UB did not have a current physical master plan, and even if one existed, the scope of the UB 2020 vision would have required a new plan. UB engaged Beyer, Blinder and Belle Architects and consulted with many campus and external stakeholders over a two-year period in an extensive capital planning process. The resulting plan — "Building UB: The Comprehensive Physical Plan" proposed a capital development strategy that would enable UB to realize its planned faculty, staff and student growth. The plan proposes new and more collaborative research facilities to support

the multidisciplinary effort of the strategic strengths. It calls for the simultaneous and integrated development of UB's three campuses and emphasizes the effective development of public and shared spaces and the building of memorable places to attract the best faculty, staff and students. The principles that guide the plan include:

- Promoting academic excellence, the interdisciplinary exchange of ideas and the development of vital intellectual communities;
- Enabling a united and accessible university campus with three distinctive and seamlessly interconnected campus centers;
- Reflecting the university's responsibility to its community by respecting and being shaped, in part, by public plans and policies;
- Providing the basics for long-range capital programming and the prudent management of university resources;
- Establishing UB as a leader in environmental stewardship and sustainable development and design; and
- Creating great and memorable places contributing to a high quality of campus life by fostering design excellence in campus architecture, landscape architecture and interiors.

"Building UB" recommended public-and-private campus development of more than \$5 billion in 2009 dollars. It serves today as the guiding document in the consideration of specific capital plans and investments. The major capital priorities of the university specified by this capital plan include:

- Relocating the School of Medicine and Biomedical Sciences to the Downtown Campus;
- The Clinical and Translational Research Center on the Downtown Campus within the Buffalo Niagara Medical Campus;
- The Heart of the Campus project South and North campuses;
- The Student Recreation Center on the North Campus; and
- Reimagining the South Campus as UB's Graduate and Professional Education Center (relocating the Graduate School of Education, the School of Social Work and the Law School to the South Campus).

The Building UB plan could be implemented in various phases based upon the university's ability to grow and fund capital development. The plan also specified the campus policies required to manage the design and execution of projects contained in the plan.

The Impact of UB 2020 — The 2005-2010 Period

Reflecting on the formative period of UB 2020, it is now clear that the scope of the first UB 2020 plan could not have been implemented in the political and fiscal context of that time. UB 2020 required an extraordinary investment of funds from outside the university and also significant changes in the relationship between UB, SUNY and New York State government that these institutions were not ready to allow. The enrollment growth plan was proposed at a time when state, national and regional high school graduation rates were beginning to decline. SUNY did not express support for a growth plan of this magnitude, and the state was not interested in funding a larger SUNY. Moreover, UB had long recognized the difficulty in attracting out-of-state students, and there were no indications that this would soon change. UB leaders also experienced vigorous resistance from other SUNY campuses to

UB plans that increased its enrollments and potentially diverted students from enrolling at other SUNY campuses. Without enrollment growth, there would be no financial engine to fund the full-scale plan. Perhaps even more devastating was the global financial collapse in 2008, which caused UB to shift from managing growth to intelligently distributing reduced funding to preserve quality and program breadth.

Even if the plan was not fully realized, the original UB 2020 planning process gave UB a bold and hopeful view of the future and of the obstacles it faced. The process uncovered institutional weaknesses and produced recommendations for addressing those weaknesses and measuring improvement. It offered a new academic strategy that was innovative when compared with peers and suggested areas of administrative transformation to be implemented whether enrollment growth occurred or not. The Building UB capital plan strengthened campus resolve to grow UB's downtown presence while also strengthening the North and South campuses. Finally, UB 2020 gave university leaders a message for the Western New York community about how and why UB's development would help the entire region. The UB 2020 plan became the region's highest priority, and community leaders and the Western New York delegation offered unrelenting and increasing support for UB 2020 through three legislative cycles. When Andrew Cuomo became the governor of New York State on January 1, 2011, he made UB 2020 an early priority for his administration.

Realizing UB 2020 — The 2011-2013 Period

Shortly after taking office, Governor Cuomo approached President Tripathi and asked UB to work with his team to create an immediate, achievable implementation plan for UB 2020. These deliberations — which were expanded to include the SUNY Chancellor's Office and the presidents at SUNY Stony Brook, Albany and Binghamton — resulted in the announcement of NYSUNY 2020 in early 2012. 88 Under this act, UB and the other three SUNY university centers were given the assurance that New York State would authorize an increase in tuition for all programs at predictable rates over the next five years while maintaining state tax support at 2011 levels. This decision gave these campuses the ability to make recurring investments in support of strategic budget priorities. The state also offered a challenge grant that would match campus funds to build their highest-priority capital project. 89

NYSUNY 2020 gave UB the opportunity to move forward with major aspects of the UB 2020 plan without having to grow enrollment. Under NYSUNY 2020, UB would have the funding to add more than 250 faculty members in key fields and strengthen the infrastructures that support their work. UB also would relocate the School of Medicine and Biomedical Sciences to the Downtown Campus within the Buffalo Niagara Medical Campus, bringing it together with key partners in a comprehensive Academic Health Center modeled after similar health centers in Cleveland and Pittsburgh. UB's application for NYSUNY 2020 support indicated that UB would reduce the student/faculty ratio and increase six-year graduation rates to peer AAU levels and increase externally supported sponsored research funding by as much as \$60 million per year by 2016. If it achieves all of these goals, UB will realize much of the original UB 2020 initiative and its promise to its communities.

The negotiations and resulting passage of NYSUNY 2020 took place during the time UB was experiencing a presidential leadership change. In April of 2011, Satish K. Tripathi was named UB's 15th president. In the succeeding months, he made a number of leadership changes, including a new provost and a new chief financial officer. He also initiated a reexamination of UB's mission, vision and goals (provided in Chapter 1) to guide the next phase of UB 2020 implementation.

In June 2012, President Tripathi appointed Charles F. Zukoski as provost. In October 2012, in his annual State of the University Address, the president asked Provost Zukoski to lead a campuswide effort to formulate an implementation plan for UB 2020 following the passage of NYSUNY 2020.90 Since October 2012, the provost has engaged the entire university community in a dialogue resulting in the publication of a document entitled "Realizing UB 2020: Achieving Academic Excellence" in October 2013. Figure 2.4 provides an illustration of the extent to which the Realizing UB 2020 process engaged the campus community in developing the final report.

A New Academic Strategy

Realizing UB 2020 proposes a new academic strategy with two core elements. The first is that UB will build Communities of Excellence with faculty, staff and students engaging with complex issues facing mankind and our built and natural environments. These communities will be immersed in select thematic areas with the goal of delivering education, scholarship and engagement

President's
Cabinet
VP Staff

Vice Provost
Vice Provosts

Campus Advisory
Committee

Professional
Staff Senate

Faculty Liaison
Committee

Faculty Staff
Student
Consultation
Consultation

Figure 2.4Realizing UB 2020 Strategic Planning Process

to improve significantly the human condition. This concept extends well beyond the Strategic Strength Initiative in its attempt to integrate meaningful educational programming, original scholarship and engagement in and around key thematic areas. Second, UB's curriculum will be restructured to provide students with traits that will prepare them for productive and

fulfilling life experiences. These traits reflect the core values guiding the education we offer to our students (see Chapter 4).

Implementation Plan

The Realizing UB 2020 implementation plan focuses on achieving UB's goals through five key initiatives (See Table 2.1). The first is a plan to build faculty strength. UB has pledged to grow tenured/tenure-track faculty by 250 by 2015, and thus, the Realizing UB 2020 initiative is in large part a hiring plan. UB will grow with a clear sense of where added strength will produce the greatest impact and with a desire to increase faculty diversity. Furthermore, every effort will be made to increase the impact of existing faculty. The university will conduct a complete assessment of faculty performance and develop new compensation strategies to incentivize excellent faculty performance.

Core Learning Traits for the UB Graduate:

- Possess deep domain knowledge and critical thinking.
- Collaborate in teams on complex problems.
- Experience and appreciate the diversity of many cultures, people across the world and life experiences.
- Cultivate a desire and skill to navigate the world.
- Exhibit excellent communication, information and digital literacy skills.
- Build a personal capacity for resilience and perseverance.
- Create a desire to engage in community affairs.
- Have pride in UB and contribute to the university's welfare throughout life.

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Second, faculty growth will help strengthen the impact of the university's research, scholarship and economic-development efforts. New and existing faculty will form the Communities of Excellence. At the same time, there will be concerted effort to strengthen the core academic disciplines and their doctoral programs since these are vital to a thriving research enterprise. UB will provide educational and research experiences to make it an increasingly attractive destination for doctoral study. The influx of faculty and more intensive programs will attract the best doctoral students.

Table 2.1 Realizing UB 2020 Goals and Implementatio	n
Implementation Initiative	Goals Targeted
1 — Tenure-Track Faculty Growth Plan	 Faculty Strength and Scholarly Leadership A Diverse Community Enriching Education and Scholarship Through Community Engagement Better Partnerships for Health-Care Outcomes
2 — Communities of Excellence	 Faculty Strength and Scholarly Leadership A Diverse Community Enriching Education and Scholarship Through Community Engagement Better Partnerships for Health-Care Outcomes
3 — Curricular Innovation	A Global University
4 — A Fuller Community Engagement Agenda	 Enriching Education and Scholarship Through Community Engagement Better Partnerships for Health-Care Outcomes
5 — An Infrastructure Strengthening Plan	 Faculty Strength and Scholarly Leadership Great Students Achieving Expectations Support Structures for Faculty and Student Success A Global University Enriching Education and Scholarship Through Community Engagement Better Partnerships for Health-Care Outcomes

Third, UB will engage in meaningful curricular innovation and expand investments to promote student success. UB has focused all educational-program delivery and assessment around the promised student traits. The plan identifies new curricular requirements and commits the resources to implement: an experiential learning program, a global experience, a capstone course, a General Education Program that fits the needs of today's student, and an interprofessional program that helps students in professional programs understand how their work intersects with that of those in other professions.

Fourth, UB will expand and more effectively coordinate its community and economic-engagement agenda. UB already engages many community partners, but these engagement activities are not connected by an effective and encompassing institutional strategy for engagement. The university will invest in programs, coordinating structures and communication strategies that align engagement strategies with institutional goals. UB will build partnerships that help our communities and add richness and purpose to the educational and scholarly activities of faculty and students inside the university.

Finally, university leaders understand the need to invest in infrastructures that enable all Realizing UB 2020 initiatives. These activities are dependent upon efficient and appropriately resourced support systems. UB will further increase operational excellence, the effective balancing of efficient operation with great service. This will entail new ways of delivering services and organizing staff and infrastructure funding.

During Fall 2013, the university conducted several parallel efforts to compile information needed by leadership to make decisions among competing priorities for hiring, investment and support programming to best achieve Realizing UB 2020 objectives. These activities will culminate in early 2014 in a retreat where senior leadership will make decisions about Realizing UB 2020 priorities for the next three years. The information-gathering activities currently underway include:

- Realizing UB 2020 Task Forces: Realizing UB 2020 calls for specific initiatives in areas that cut across the organizational structure of the university. There are more ideas than the university has the capacity to implement in the next three to five years. Over the summer of 2013, university leadership identified the need to form groups focused on specific areas related to Realizing UB 2020 to recommend priorities, costs, timelines and implementation strategies. These task forces are focused on the following areas: curriculum and assessment, research and innovation (this group will develop the ideas for operationalizing the Communities of Excellence concept), engagement, the student experience, advocacy, alumni engagement and philanthropy, and infrastructure. Each task force has been assigned a leader, membership representing perspectives from across the university, a charge and specific deliverables.
- The Unit Impact and Standards Analysis: UB is designing a more systematic program for assessing progress in achieving institutional and unit goals. There are three planned elements of this program. The first is the creation of an institutional scorecard that measures university progress over time in achieving each institutional goal. This scorecard will compare university improvement over, and achievement with, peer AAU institutions where appropriate. The second is a review of unit (including both academic and academic-support units) performance in key educational, scholarship, engagement and service-delivery areas that will be compared with national and discipline or service-specific standards. The third is a review of individual faculty-members performance compared with disciplinary specific national and UB standards in each academic unit. This analysis will support an institutional effort to better understand faculty strength and also where and how faculty productivity might be improved across the university.
- A New Budget Model and the Realizing UB 2020 Funding Plan: UB has undertaken a thorough examination of current resource-allocation methods to create a funding approach that aligns resources with institutional goals and strategies. It is likely that a new feature of this funding approach will be a performance-based allocation system that links some fraction of a unit's budget to that unit's performance in key areas related to achieving university goals.

UB 2020 — An Enduring Vision

The features of the original UB 2020 vision continue to guide university decisions despite major changes in university finances, senior leadership and the higher-education landscape. With Realizing UB 2020, the university will grow its faculty base and implement initiatives to enable the institution to achieve the expectations promised to Governor Cuomo in UB's NYSUNY 2020 proposal. Throughout UB 2020's evolution, UB has kept focus on its mission as a major public research university. The UB 2020 vision has permeated the campus and helped the entire SUNY system achieve the passage of the NYSUNY 2020 bill. This accomplishment has enabled UB the opportunity to finally align the UB 2020 vision with sufficient resources to realize its promise.

Institutional Resources

The original UB 2020 plan required large increases in enrollment, tuition revenue and state allocations for capital improvement to achieve its stated goals. These increases were not forthcoming. In fact, the university absorbed an extraordinary reduction in spending capacity of \$85 million over a four-year period beginning in 2009. Described here are the revenue and spending trends since 2005 and the impact of changing financial fortunes on efforts to implement UB 2020, which has yet to reach its full promise. This section begins with an overview of the university's core financial operating condition for the fiscal year ending June 30, 2012 and prior years. Sources of core operating revenues include: state tax support, tuition and fees, service revenue, residence halls and apartments operations, endowment income and unrestricted gifts administered in the University at Buffalo Foundation, Research Foundation facility and administrative cost recovery and other revenue, and Campus Dining and Shops (CDS) agency revenue. While there are concerns about the extent to which UB relies on income from student enrollment and the position taken by New York State on capital funding, the NYSUNY 2020 program and university efforts to diversify revenue streams will enable UB to make progress in achieving institutional goals over the next several years. The section concludes with an examination of resources and trends in staffing, facilities and information-technology capacity.

Operating Revenues

In FY 2011, UB earned \$627 million in operating revenues across all sources. These revenues have increased 6.8 percent from FY 2006 levels but only 1.0 percent from FY 2007 levels. Revenues appropriated from New York State make up the largest fraction of funds available to the university.

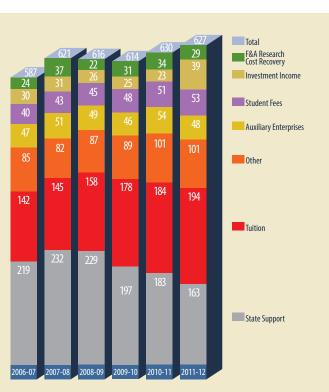


Figure 2.5Operating Revenue by Source, in Millions

These appropriations come in two forms — those supported by tax dollars and those supported by revenue targets, the largest of which is tuition paid by UB students. As Figure 2.5 indicates, New York State has reduced tax support from \$219 to \$163 million over this period and authorized large increases in tuition rates at the same time. With the passage of the NYSUNY 2020 agreement, tuition revenue will grow significantly and current levels of state support will be maintained over the next four years.

UB is also generating more income from student fees for particular services (e.g., health, transportation, technology) than in 2006-2009. Student tuition and fee revenues have been the only operating revenue streams to increase significantly for the university over this period. Facilities and administration (F&A) cost recovery from research programs has fluctuated, as have other income sources (such as sales and services, trademarks and licensing, athletics income, auxiliary services). Also, the value of UB's endowment has fluctuated significantly over this period, due largely to changing Wall Street fortunes (see Figure 2.6).

UB relies heavily upon income generated by student enrollment tuition, fees, dorm and dining revenues, and state tax allocation

per student — to operate the institution. UB does not have the authority to set tuition or comprehensive student-fee rates. The university is subject to the authority of New York State government for continued state tax fund allocations and payment of fringe benefits, as well as significant debt service costs for capital programs, and the formulation of tuition and fee policy. The resourcing of university and unit plans is largely dependent upon the policies and ongoing support of SUNY and New York State government officials.

Looking forward, a major goal for UB is to diversify its operating revenue portfolio and reduce dependence on income from students and parents. The most urgent priority is to build fundraising capacity. Investments in the development organization have begun to realize a greater return in the form of increasing gift collections and commitments, but UB is not currently raising gift, corporation and foundations revenues at the rate enjoyed by many peer AAU universities.

With passage of the NYSUNY 2020 legislation, UB is assured of five years of stable state tax support (through FY 2015) at FY 2011 levels and the ability to increase tuition at predictable rates for all degree programs. Since UB tuition and fee rates are and will continue to be relatively low compared to peers (see Figure 2.7), we do not expect reduced enrollment or student quality resulting from predictable tuition increases during this period. In addition, baccalaureate degree recipients enjoy one of the lowest student debt levels in the country, and UB will continue to offer significant need- and merit-based aid programs to ensure that all qualified students can afford to enroll. The most important factor for UB's financial fortunes is the achievement of its enrollment goals. If UB meets enrollment goals in 2016, it will experience an increase projected to be from \$90 million to \$100 million greater than 2011 levels. The enrollment forecast for the next few years is positive and institutional effort to meet and exceed enrollment goals is vigorous (see Chapter 5). The NYSUNY 2020 program also authorizes UB to create an Academic Excellence and Success Fee that can be used for targeted academic and academic support program improvements. 93 This fee will grow from \$75 per student in FY 2011 to \$350 per student by FY 2015, generating nearly \$10 million in new recurring funds.

UB has emerged from a period of financial challenge and is at a point where operating revenues will increase substantially through FY 2015 and longer if rational tuition policies continue. The university has the base of resources needed to deliver its mission and an opportunity

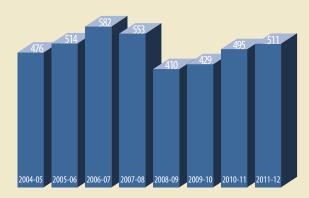


Figure 2.6

Endowment Market Value, in Millions, Date of Endowment Value Required End of Each Fiscal Year (Ending Market Value)

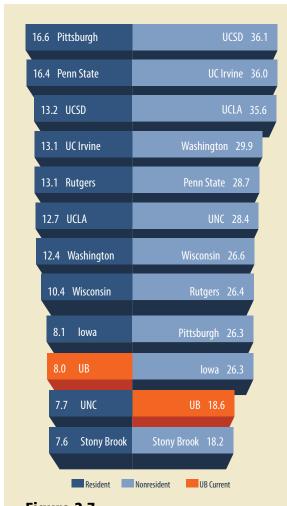


Figure 2.7AAU Public Undergraduate Tuition and Fees, in Thousands

afforded by NYSUNY 2020 to invest in the capacities to enable UB to improve its position among major public research universities. Investments in faculty strength made possible by NYSUNY 2020 will enable the university to improve the student educational experience while adding significant scholarly capacity to compete more effectively for research grants from federal and private sources.

Financial Condition — Operating Budget

Despite the financial stresses of the years from FY 2008 to FY 2011, the university has managed its budget to maintain fiscal health and build sufficient reserves to make key investments where required

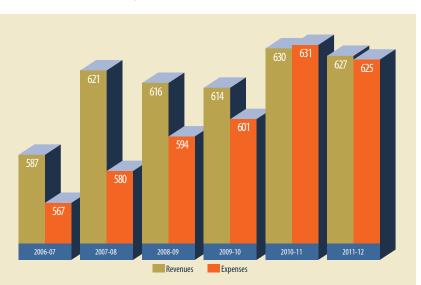


Figure 2.8 Operating Revenues and Expenditures, in Millions

and respond to financial risk when needed. The NYSUNY 2020 program has replenished recurring fund losses and given the university the opportunity to invest in the UB 2020 vision.

As Figure 2.8 illustrates, UB has spent no more than its annual operating revenues in any year except 2010-2011 when the university was experiencing the most acute impacts of the state tax budget reductions. Reserve funds have grown steadily since 2006-2007, with the exception of FY 2010 (see Table 2.2).

The university spends nearly 65 percent of its operating revenues on the salaries of faculty, staff and student employees (see Figure 2.9). This is relatively low compared to peer universities responsible for funding fringe benefit costs from campus-managed appropriations. The remaining

35 percent funds the nonpersonnel operating costs of the institution – utility contracts, other contractual services, supplies, equipment and travel. UB does not have the authority to negotiate collective bargaining agreements, manage fringe-benefit costs/contracts/service agreements, or issue and manage debt for capital projects. Instead, this authority rests with the state, which limits campus flexibility.



Figure 2.9 Percent of Operating Expenditures by Expense Category

The impact of changes in New York State policies and approaches in these areas may result in cost overruns that are passed on to the campus in the form of state-tax budget reductions. UB has maintained sufficient financial reserves for unforeseen contingencies. UB does not expect spending patterns to change unless the capital-funding responsibility shifts significantly to the university (see Capital Budget section below).

The university's financial health is strong in consideration of the four ratios that make up the Composite Financial Index (CFI). Over the past several years, the mandatory requirement of recording Government Accounting

Standards Board (GASB) statement number 45⁹⁴ — Other Post Employment Benefits expense —is the major contributing factor to the lower than normal Primary Reserve Ratio, which prevents the university's composite score from being in the 6.0-7.0 range. Even with the recording of this expense, the composite score is 3.0-4.0, which reflects a relatively strong financial condition.

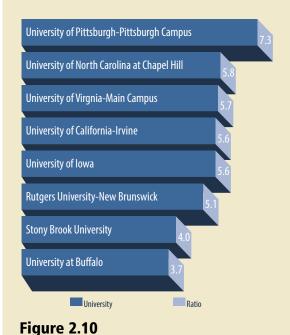
In summary, UB exhibits financial health and disciplined spending. It has developed a financial plan to enable significant strategic investment, although the capital budget issue is a looming policy question. The NYSUNY 2020 program provides a momentary opportunity for visionary academic and financial leadership to create the institutional renewal envisioned by the UB 2020 plan.

Table 2.2 Available Balances 2007-2	2008 through 2011	-2012 (\$ in Thousa	ands)		
Funding Source	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
F&A Cost Recovery	\$28,904	\$28,164	\$37,762	\$51,522	\$59,192
State Operating	45,801	51,826	51,814	32,972	-4,918
State Reimbursables (IFR, SUTRA & DIFR)	33,302	41,942	31,555	39,528	61,970
UB Foundation	74,345	79,868	89,226	84,148	93,522
Other	6,680	6,884	3,650	4,473	5,351
Total	\$189,032	\$208,684	\$214,007	\$212,643	\$215,117
\$ Change	NA	\$19,652	\$5,323	-\$1,364	\$2,474
% Change	NA	10.4%	2.6%	-0.6%	1.2%

Human Capital

The university's greatest asset is its human capital. More than 5,400 FTE faculty and staff (excluding student employees) work at UB across all of its payrolls: 1,571 FTE faculty and 3,845 FTE staff. Across all units, the standards for becoming an employee of UB are high — 95 percent of full-time faculty members have doctorates or terminal degrees in their field, most from peer or better institutions. These faculty members are acknowledged in many disciplines as leaders in their fields. The staff at UB is among the most highly trained and sought after in the region.

Over the past 10 years, UB's changing finances have impacted the ratio of staff-to-faculty levels. Figure 2.10 indicates that UB's staff-to-faculty ratio is lowest among AAU peers. Faculty strength has been preserved at 2009 levels while staff FTE has declined by 150 FTE. Preserving the faculty base has been a major accomplishment, but UB has not made progress in right-sizing the faculty base to comparable peer AAU levels. The NYSUNY 2020 legislation allows the university to replenish faculty and staff lost in the period of budget reductions. UB plans to add 250 faculty and 250 staff by FY 2015 and is on pace to achieve staff growth targets as of Fall 2013. Faculty growth is likely to occur at a slower pace



AAU Peers Staff to Faculty Ratios

Publication Date: 2/1/2014

than desired and may not reach expected levels in this same time frame. When UB does achieve this level of growth, the student-to-faculty ratio will be comparable to AAU peers (See Figure 2.2).

The Capital Budget, Facilities and Space

The university owns 146 buildings across three campuses and seven off-campus sites, representing more than nine million square feet. A description of each building — including total square footage, construction completion date and architect — is available on the Facilities Planning and Design website. The university also has more than 1,200 acres of undeveloped land and many available building sites, one of the university's most valuable assets.

The largest category of assigned space is for student living, comprising 16 percent of the total. Residence halls have a total capacity for 7,570 students. Offices (14 percent) and labs (13 percent) take up significantly more space than classrooms (three percent). Based on the UB results of a 2010 SUNY-wide space needs analysis, ⁹⁶ the majority of academic units have space deficits. In all nonresidential buildings, there was a total deficit of 614,407 square feet. The projections for 2018 and 2023 suggest that as the number of faculty members increases, space needs will become more acute, making adherence to the university's space-management principles and processes even more critical.⁹⁷

For the past 15 years, UB has enjoyed a steadily increasing New York State investment (bonded funds backed by New York State personal-income-tax revenues) to build new facilities and address critical infrastructure-repair and building-renewal needs. During the period from 2008-2009 through 2012-2013, the university was allocated more than \$500 million in capital funds for these purposes. This capital fund allowed for the commencement of the following projects:

- Clinical and Translational Research Centers (Downtown Campus, new construction);
- Purchase and renovation of the UB Gateway facility (Downtown Campus);
- The Educational Opportunity Center Building (Downtown Campus, new construction);
- Hayes/Crosby Hall School of Architecture and Planning (South Campus, renovation);
- Wende Hall School of Nursing (South Campus, renovation);
- School of Medicine and Biomedical Sciences Building (\$50 million match) (Downtown Campus, new construction);
- Barbara and Jack Davis Hall School of Engineering and Applied Sciences (North Campus, new construction);
- John and Editha Kapoor Hall School of Pharmacy and Pharmaceutical Sciences (South Campus, new construction);
- William R. Greiner Hall (North Campus, new construction) sophomore suites residence hall funded through the University Residence Halls Association auxiliary services enterprise at UB;
- Classroom renovations (all campuses) technology upgrades, life cycle replacements; and
- More than \$250 million in critical infrastructure projects across all three campuses.

In 2011, UB engaged a master planning firm, RTKL, to help develop a Facilities Master Plan⁹⁸ and implementation strategy, drawing on the earlier Building UB plan, which identifies needs for capital improvements through 2023. These improvements will remedy the shortage of space identified in the space needs analysis. The cost of the full need totals nearly \$2.5 billion. In 2012, UB submitted its highest

priority needs — totaling more than \$600 million for the next five years for consideration in the SUNY capital planning process. The New York State budget for 2013 has not included funds for a new five-year capital plan for SUNY or UB. The governor has made the New York State capital-debt issue a priority state policy question and is examining alternative approaches for New York State capital budgeting in the future. Until this issue is resolved, UB must defer investment in capital programs or redirect operating funds for these purposes. Even if UB chooses the latter course of action, the university cannot issue its own debt or enter into public/private partnership agreements, lease/purchase agreements or similar legal structures. Without these authorities, large-scale capital projects will be difficult to move forward.

Under the NYSUNY 2020 program legislation, New York State approved UB's plan to construct a \$375 million School of Medicine and Biomedical Sciences building (on the Downtown Campus within the Buffalo Niagara Medical Campus). The state has given UB a challenge grant of \$35 million, authorized the borrowing of \$215 million of state-bonded funds and approved a reallocation of \$50 million in UB capital funds for the project. UB must provide a cash match of \$75 million and pay the debt service for the \$215 million of financing provided by the State. This agreement between New York State, SUNY and UB suggests possible modifications to the capital budgeting approach that the state may contemplate in the future. The principle of campus match is at the heart of that approach, together with the notion that the state would offer capital financing with the campus paying all of the costs of that debt for priority capital projects. This is an important financial issue. If New York State is shifting financial responsibility for capital improvement to SUNY campuses, state leaders also should rethink tuition policy and the use of tuition revenue to pay for capital projects as well. If these policy changes are not made, and the responsibility for capital funding devolves to the campus, UB will face serious trade-off decisions to meet its operating and capital budget needs.

Information Technology Resources

The Office of Information Technology (UBIT)⁹⁹ reflects the complexity and variety of a large research university, providing centralized academic and computing infrastructure as the foundation for school and divisional information-technology organizations throughout campus. The collaborative nature of these organizations provides the university with stable, consistent and reliable services, while enabling nimble and responsive innovation at the departmental level. UBIT develops, maintains and supports information technology, instructional technology and telecommunications, including maintenance of the campus wired and wireless network, public computing sites, research computing, email, Web hosting, online file storage, remote access, computing alerts, business systems across the university (HUB, SIRI, MyUB, UB*learns*, etc.) and telephones.

UBIT engages in regular strategic planning¹⁰⁰ that is informed by assessment results, including surveys of needs and satisfaction, peer benchmarking and active participation in meetings and collaborations with campus and regional partners. As a result, UBIT very effectively manages information technology resources in an ever-changing technology environment. UBIT helps the institution fulfill its mission in several important ways, including:

• **Virtualization:** As a direct result of UB's IT transformation, UBIT has virtualized nearly 700 physical servers. Virtualization drastically reduces time to deployment, simplifies adding resources to address service demands and contributes to energy-efficiency goals. "My Virtual

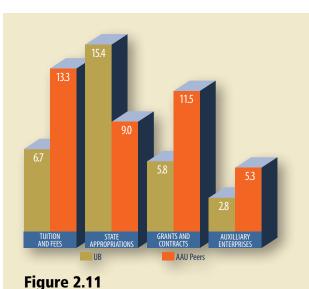
- Computing Lab" provides students access to expensive analysis and synthesis software anywhere, on their own devices, and it reduces workstation administration costs.
- Mobility: Students report an average 2.5 network-connected devices, which means teaching and learning can take place anywhere. UBIT provides mobile access to information resources, applications and services through the UB Mobile and Blackboard apps, mobile-friendly Web pages and UBIT's ubiquitous secure Wi-Fi networks. Cellular providers participate in a distributed antennae system to increase services in all learning spaces.
- Instructional technology: There are 149 centrally scheduled classrooms equipped with technology ranging from basic video projection to multimedia capture. Academic departments also provide technology resources to support local curricular needs. Recent upgrades to classroom digital recording and distribution technology and implementation of virtual conferencing further expand instructional capacity beyond temporal and physical boundaries. UB's program to similarly equip informal learning spaces encourages student collaboration.
- Network: A great university must have a stable, reliable and robust data communication network. UBIT is a leader in municipal, university, school and hospital regional networking. Its investments in redundant, fault-tolerant, high-speed campus networks continue to meet ever-growing service demands. Wi-Fi networks span all three campuses, and a wired residence halls network, ResNet, ensures high-speed access for resident students while conserving Wi-Fi spectrum for mobility demands.

The Overall Resource Picture — Looking Forward

UB has a base of human, financial and capital resources appropriate to its mission as a public research university. These resources have been well-managed by university leaders and the university is in good fiscal health. Despite significant financial duress over the past five years, the university has preserved its range of academic programs and faculty base, and it has been blessed with a significant historical state investment to maintain existing facilities and build several new facilities. The state continues to pay fringe-benefit costs for personnel funded by state appropriation and all of the debt service for facilities. The campuses' physical plant is expansive and land is plentiful and constitutes an extraordinary asset for the future. But the age of facilities and the impending relocation of the medical school give university leaders concern about the vibrancy of the South Campus if the next phases of the UB capital plan cannot be implemented in a timely manner. Further, the faculty continues to be too small, as was observed in 2004 at the outset of the UB 2020 discussion. Although UB is recruiting excellent faculty and overall the faculty is very strong, the strategic need still exists to grow the faculty to peer AAU levels and strengthen the infrastructures — human, technological and physical — that enable these faculty members to perform at their best. The quality of the IT infrastructure remains uneven. While UB has great research computing infrastructure and smart, capable IT staff around the university, administrative systems are not sufficiently reliable and educational technologies supporting instructional innovation have not been deployed to the extent available at AAU peer universities.

When compared with nearly all peer AAU universities, state-taxpayer investment in UB is larger, but overall UB gross revenue is well below the levels earned at those universities (see Figure 2.11). The major differences include tuition revenue (because of UB's low tuition rates), grants and contract revenue, gift revenue, sales and services revenue, and investment return from much larger endowments held by these institutions. In short, UB's peers have been much more successful in diversifying their revenue streams.

Looking forward, the NYSUNY 2020 legislation provides an opportunity that UB must supplement with significant growth in revenues from other sources. Hiring the very best faculty is an essential prerequisite for fundraising from private and governmental sources. If the rational tuition policy component of NYSUNY 2020 is extended after its first phase ends in 2015-2016, the university can continue to invest a margin of recurring funds for strategic priorities. The investment of these new tuition funds will determine UB's ability to achieve university goals over time. While making these investments, the university is mindful of the dependence on enrollment revenue to operate and grow. Effective and strategic enrollment management will be increasingly important in the years ahead. Finally, the current state position on capital funding needs to be watched very closely. The longer the state delays in conceiving a new policy for the future, the more acute will be the need to divert operating funds to capital needs.



AAU Average Revenue Per Student FTE, in Thousands

Disciplined Resource Management — Financial Controls and Audits

UB's administration is very conscious of its financial stewardship responsibility and seeks timely and continuous feedback from audits of its financial-management disciplines. The university is subject to regular audits by SUNY System Administration and the Office of the New York State Comptroller. The Office of Internal Audit¹⁰² examines the financial controls in individual units, including timely and accurate recording of financial transactions; efficient use of university resources; safeguarding of university assets; compliance with applicable laws, regulations, policies and procedures; and effectiveness in achieving departmental goals and objectives.

The following types of audits may be conducted by the Office of Internal Audit:

- Operational Audit: Examines an operating process to determine if resources are being used in the most efficient and effective way to meet the unit's mission and objectives. Activities such as human resource services, cash handling, procurement and equipment inventories generally are subject to this type of audit.
- **Financial Audit:** Reviews the recording and reporting of financial transactions. The purpose of this type of audit is to provide management with assurances that financial information is recorded accurately in the university's financial records and that these records support the information shown in the financial reports.
- Compliance Audit: Evaluates the university's adherence to laws, regulations and internal
 and external policies governing the activity being reviewed. Examples of these requirements
 include state and federal laws, NCAA and OSHA regulations, and SUNY and UB policies and
 procedures.
- **Information System Audit:** Reviews the internal control environment and use of an automated information and transaction processing system. These audits typically evaluate system input, processing and output; data and physical security; backup and recovery plans; and system administration.
- Investigative Audit: Focuses on alleged civil or criminal violations of state or federal laws
 and alleged violations of university policies and procedures that may result in prosecution or
 disciplinary action.

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Each spring, the Office of Internal Audit presents an audit plan to the university administration for review. Units may be selected for an audit based on requirements by state, federal or other regulatory agencies, or at the request of university management. They also may be selected as a result of other considerations — such as degree of risk of exposure to loss, results of the ongoing examination of internal controls, results of audits by external auditors, results of previous internal audits, extent of compliance with standard university policies and procedures, random selection on a rotating basis to ensure periodic contact with campus units, and/or changes in operations and/or personnel. In addition to performing audits, staff members in the Office of Internal Audit also provide consulting services for the university community to help units develop appropriate policies and procedures.

UB 2020 and Institutional Effectiveness — Assessment and Renewal

The University at Buffalo is a complex, decentralized organization comprised of three campuses, 12 decanal units and numerous programs and administrative units. Assessment of institutional effectiveness is complex, yet essential to university success. This section describes how the university has assessed effectiveness in the UB 2020 era, highlights the university's institutional accomplishments over the past 10 years and indicates new directions for this assessment in the future.

UB's effectiveness as a whole is determined by the collective efforts of faculty, staff, and administrators in units and programs to achieve university goals. Assessment of the efforts of individuals, departments and decanal units help identify where improvements can be made to increase effectiveness at each level. Improvement in any of these three levels increases the university's overall effectiveness.

The origin of the UB 2020 plan and its evolution through leadership change, fiscal disturbance and the opportunity now afforded to realize much of the promise of the UB 2020 vision was described earlier in this chapter. During this period, the goals of the university were reviewed continually and updated. In 2011, President Tripathi published the seven goals that currently guide the university's course of action. The strategic intent of these goals is summarized below:

- Goal 1: Build faculty strength, productivity and impact.
- Goal 2: Recruit great students and fulfill their educational expectations.
- Goal 3: Provide support structures ensuring faculty and student success.
- Goal 4: Create a diverse campus community.
- Goal 5: Become an increasingly global university.
- Goal 6: Engage our local community to enrich our student experience and regional well-being.
- Goal 7: Strengthen partnerships for improved regional health-care outcomes.

To assess effectiveness in achieving each of these goals, key indicators have been identified. These key indicators register improvement or decline based on unit and individual actions. Wherever possible at all levels, metrics include performance over time, improved performance relative to program standards and performance compared with peers. Two sets of peer institutions serve as institutional level benchmarks. The first set — Pittsburgh, Iowa, Stony Brook, Rutgers and UC Irvine — are similar in

size but higher-ranked public AAU universities. The second set — Washington, Michigan, Wisconsin, UCLA, UC San Diego — represent the type of institution UB hoped someday to emulate in size and stature with the fulfillment of the original UB 2020 vision. However, in light of the rescaled UB 2020 plan, comparisons with the first peer group provide the most appropriate indicators of institutional progress in key areas.

Key Indicators of Institutional Effectiveness

Goal 1 — Faculty Strength, Productivity and Impact

At the heart of the UB 2020 vision is the intention to build faculty strength comparable in size and capability with peer institutions. Key indicators of faculty strength include: total faculty size base and the number of ladder faculty; the student/faculty ratio and the student/ladder faculty ratio; and changes in the percentage of faculty with tenure over time. Since faculty compensation levels determine success in faculty recruitment and retention, comparison with peer faculty salary levels is another key indicator.

Standards of faculty productivity and impact vary across disciplines. At the institutional level, NSF Federal R&D expenditures, corporate and foundations research expenditures, honorific awards, publications, citations, conference proceedings, patents awarded, licensing income earned from patents and other intellectual property, number of doctoral degrees awarded, and number of postdoctoral fellows working with the faculty are primary metrics. Instructional impact and productivity typically have been measured in terms of undergraduate and graduate credit hours delivered and by the percentage of undergraduate credit hours taught by ladder, clinical and adjunct faculty.

The perceived strength of UB's faculty influences national and international rankings. Despite their methodological limitations, these rankings influence the choices of prospective faculty and students, donors and research sponsors. At UB, the rankings of most import are The Center for Measuring University Performances among public universities, U.S. News and World Report's Academic Peer Assessment Score and the Times Higher Education World University Rankings.

Table 2.4 illustrates measurable progress and achievement with respect to Goal 1. Several important conclusions can be drawn from a review of these data. The first and most important is that faculty size has been retained despite financial downturn; however, entering year three of the NYSUNY 2020 period, the faculty growth trajectory is lagging behind the goal of adding 250 net new tenure-track faculty. This is a key factor in planning and budget discussions with the academic units.

The university's faculty salary competitiveness improved in the 2004-2009 period when New York State was preserving state tax budgets and funding generous salary increase programs. Since 2009, this has changed and UB's rank among AAU peers for salary compensation has fallen. The provost is pursuing internal strategic compensation programs under Realizing UB 2020.

Federal and corporate research expenditures have grown since 2004 although federal expenditures do not yet match peer levels. Despite this growth, UB has not yet built a culture fully supportive of faculty entrepreneurship. Patent and licensing activity is short of peer levels despite large and growing amounts of corporate sponsorship. Much of that sponsorship is earned through relationships with

affiliated organizations such as Kaleida Health and the Roswell Park Cancer Institute and is, therefore, a somewhat misleading indicator of effectiveness as currently reported. Overall scholarly output is substantial, but not yet approaching peer AAU university levels. Understanding scholarly impact indices and standards of scholarly productivity in particular disciplines is becoming a more prominent aspect of unit assessment programs (discussed in greater detail below). UB faculty members on average, as evidenced by high student/ladder faculty ratios, teach more credit hours than peer AAU university faculty, yet UB also has a large number of teaching faculty and adjunct instructors generating a significant percentage of credit hours. As the Realizing UB 2020 curricular reforms take shape, the instructional expectations of tenured/tenure-track and nontenure-track faculty are under serious review.

Table 2.4				
Build Faculty Strength				
	2004	2010	Current	Peer Group
Formular Cine	2004	2010	Current	reer droup
Faculty Size Total UB Faculty	2.200	2,268	2 270	3,188
Total Ladder Faculty	2,309 1,159	1,137	2,270 1,126	1,366
Student/Faculty ratio (non-medical)	28.9	30.7	28.9	26.6
% Credit hours Taught by Ladder Faculty	20.9	30.7	47%	42%
Faculty Salary Ranks (out of 34 AAU Publics)			47 /0	1270
Professor	17	10	13	12
Associate Professor	10	9	10	14
Assistant Professor	23	17	19	21
Research & Development NSF Federal R&D expenditures (in thousands)				
	\$147,607	\$167,099	\$193,613	\$269,734
Corporate/Foundation R&D expenditures (in thousands)	\$35,451	\$59,538	\$51,896	\$37,451
US Patents				
Issued	12	18	11	33
Licensing Income (in dollars)	\$271,526	\$727,240	\$592,976	\$5,381,404
Scholarly Output Journal Articles				40.445
Citations			7,031	10,115
Books			79,645 438	160,663 626
Conference Proceedings			126	178
Faculty Honors/Awards		166	189	352
Postdocs	328	285	299	368
Doctorates	299	279	305	414
Rankings			- 500	111
MUP Ranking among Public Research				
Universities	35	33	42	27
U.S. News Undergraduate Rank	120	120	109	69
U.S. News Academic Reputation	3.1	2.9	3	3.4
Times Higher Education World University Rank	200	200.	176	122
IWIII	200+	200+	176	123

Journal articles include those from 2008-11. Citations include those from 2007-11. Books include those from 2003-11. Faculty honors/awards include various time frames (10 years in most cases; 20-50 for more prestigious awards such as National Academies or Nobel Prizes)

Based on UB's rankings, there is improvement over time in the Center Ranking, U.S. News and in the Times Higher Education World University rankings. If UB hires faculty at the pace envisioned in the UB 2020 plan, these rankings will improve further, as our overall performance levels improve compared with AAU peers. The UB 2020 hiring plans at the unit levels are reflective of these expectations and are informed by a continual review of these indicators.

Goal 2 — Recruiting Great Students and Fulfilling Educational Expectations

Chapters 4 and 5 provide descriptions of the university's efforts to educate for excellence and to foster learning and achievement. Numerous measures of the quality and preparedness of recruited students are presented in Chapter 5, along with the extent to which UB supports timely degree completion. Key indicators of effectiveness of achieving this goal include achievement of enrollment goals with improved quality of incoming student cohorts measured by median scores on standardized tests (SAT, GRE, LSAT, MCAT, PCAT), high-school average, transfer GPA, percentage of freshmen in the top 10 percent of their graduating class, acceptance rate for freshman applications, and yield rates of freshman admits. At the graduate level, the quality indicators other than the standardized admissions test scores are program-specific and do not easily lend themselves to a summary measure at the institutional level.

Further evidence of effectiveness is related to meeting students' educational expectations, such as their expectations for learning relevant knowledge and skills, completing a degree program in a timely manner and participating in an enriching educational experience. Key indicators include the number of degrees awarded, time to degree, four- and six-year cohort graduation rates and cohort retention rates from year-to-year, especially the critical first-to-second-year retention. Chapter 4 describes how the university is strengthening its efforts to assess and improve student learning. Until the mandated Office of Educational Innovation and Assessment is fully functional, staff within the offices of the Senior Vice Provost of Academic Affairs and University Accreditation and Assessment have been working with all academic program coordinators to implement comprehensive student learning assessment to inform curricular change and improve UB's educational effectiveness over time.

Beyond these typical measures, results of surveys of student perceptions, most notably the Student Opinion Survey and the National Survey for Student Engagement, indicate students' satisfaction with their educational experience (described more fully in Chapter 5). Surveys of student perceptions will be used in conjunction with assessments of student learning to evaluate the effectiveness of the new curricular requirements included in Realizing UB 2020, such as the global experience and the revamped General Education Program.

UB has made important advances over these 10 years in the attainment of this goal. Enrollment has grown steadily, largely because of an expanding presence in Singapore and the marked growth in interest in the STEM and health fields. While the freshman and transfer cohorts are growing, quality indicators, such as the median SAT, the percentage of freshmen in the top 10 percent of their high school graduating class, and transfer GPA, also are improving significantly, indicating that UB is a destination for high-achieving students. UB now is larger than the institutions in its identified AAU peer group, with a significant graduate/professional population. UB's comprehensive array of post-baccalaureate offerings represents a signature strength, and quality of graduate students has increased since 2004, as measured by GRE scores.

Part	Table 2.5				
Procession	Recruit Great Students and Fulfill Their Educational Expectations				
Total Enrollment 27,276 29,048 29,940 27,180 New Freshmen 3,183 3,388 3,701 4,398 New Transfer 1,695 1,945 1,923 1,487 New Graduate and Professional 2,501 2,791 3,658 1,942 Student Quality 3,658 3,70 3,7 3,8 Freshmen in Top 10% of HS Class 21% 25% 30% 51% Freshmen Acceptance 56% 52% 57% 56% Freshman Yield 31% 29% 28% 28% Transfer GPA 3,07 3,11 3,09 NA GRE Median 1163 1167 1222 NA Student Satisfaction (NSSE) 1=Poor, 2=Fair, 3=Good, 4=Excellent How would you evaluate your entire educational experience at this institution? 3,02 3,08 3,24 To what extent has your experience at this institution contributed to your acquisition of a broad general education? 3,05 3,08 3,20 To what extent has your experience at this institution contributed to your ability to write clearly and effectively? 2,78 2,80 3,02 To what extent has your experience at this institution contributed to your ability to speak clearly and effectively? 3,22 3,27 3,38 To what extent has your experience at this institution contributed to your ability to think critically and analytically? 3,22 3,27 3,38 To what extent has your experience at this institution contributed to your ability to analyze quantitative problems? 3,06 3,13 3,11 To what extent has your experience at this institution contributed to your ability to analyze quantitative problems? 3,06 3,13 3,11 To what extent has your experience at this institution contributed to your ability to analyze quantitative problems? 3,06 3,13 3,11 To what extent has your experience at this institution contributed to your ability to analyze quantitative problems? 3		2004	2010	Today	Peer
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Transfer GPA 3.07 3.11 3.09 NA	Freshmen in Top 10% of HS Class	21%	25%	30%	51%
Transfer GPA 3.07 3.11 3.09 NA GRE Median 1163 1167 1222 NA Student Satisfaction (NSSE) 1=Poor, 2=Fair, 3=Good, 4=Excellent How would you evaluate your entire educational experience at this institution? 3.02 3.08 3.24 To what extent has your experience at this institution contributed to your acquisition of a broad general education? 3.05 3.08 3.20 To what extent has your experience at this institution contributed to your ability to write clearly and effectively? 2.78 2.80 3.02 To what extent has your experience at this institution contributed to your ability to speak clearly and effectively? 2.71 2.75 2.85 To what extent has your experience at this institution contributed to your ability to think critically and analytically? 3.22 3.27 3.38 To what extent has your experience at this institution contributed to your ability to analyze quantitative problems? 3.06 3.13 3.11 To what extent has your experience at this institution contributed to developing an understanding of other racial and ethnic backgrounds? 2.67 2.69 2.59 Degree Completion Backelor's degrees 3505 4111 4363 <t< td=""><td>Freshman Acceptance</td><td>56%</td><td>52%</td><td>57%</td><td>56%</td></t<>	Freshman Acceptance	56%	52%	57%	56%
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Student Satisfaction (NSSE) How would you evaluate your entire educational experience at this institution? To what extent has your experience at this institution contributed to your acquisition of a broad general education? To what extent has your experience at this institution contributed to your ability to write clearly and effectively? To what extent has your experience at this institution contributed to your ability to speak clearly and effectively? To what extent has your experience at this institution contributed to your ability to speak clearly and analytically? To what extent has your experience at this institution contributed to your ability to think critically and analytically? To what extent has your experience at this institution contributed to your ability to analyze quantitative problems? To what extent has your experience at this institution contributed to developing an understanding of other racial and ethnic backgrounds? Degree Completion Bachelor's degrees 3505 Freshman Retention 84% 88% 88% 90% Time to Undergraduate Degree (years) 4.34 4.13 4.Year Graduation Rate 60% 67% 71% 76% Master's degrees 1901 2043 2240 1726 Research Doctorates	Transfer GPA	3.07	3.11	3.09	NA
How would you evaluate your entire educational experience at this institution? To what extent has your experience at this institution contributed to your acquisition of a broad general education? To what extent has your experience at this institution contributed to your ability to write clearly and effectively? To what extent has your experience at this institution contributed to your ability to speak clearly and effectively? To what extent has your experience at this institution contributed to your ability to think critically and analytically? To what extent has your experience at this institution contributed to your ability to analyze quantitative problems? To what extent has your experience at this institution contributed to your ability to analyze quantitative problems? To what extent has your experience at this institution contributed to developing an understanding of other racial and ethnic backgrounds? Degree Completion Bachelor's degrees Time to Undergraduate Degree (years) 4.34 4.13 4.Year Graduation Rate 60% 67% 71% 76% Master's degrees 1901 2043 2240 1726 Research Doctorates	GRE Median	1163	1167	1222	NA
institution? To what extent has your experience at this institution contributed to your acquisition of a broad general education? To what extent has your experience at this institution contributed to your ability to write clearly and effectively? To what extent has your experience at this institution contributed to your ability to speak clearly and effectively? To what extent has your experience at this institution contributed to your ability to think critically and analytically? To what extent has your experience at this institution contributed to your ability to think critically and analytically? To what extent has your experience at this institution contributed to your ability to analyze quantitative problems? To what extent has your experience at this institution contributed to developing an understanding of other racial and ethnic backgrounds? Degree Completion Bachelor's degrees 3505 Freshman Retention Time to Undergraduate Degree (years) 4.34 4.13 4.Year Graduation Rate 60% 67% 71% 76% Master's degrees 1901 2043 2240 1726 Research Doctorates	Student Satisfaction (NSSE)	1=	Poor, 2=Fair	r, 3=Good, 4	=Excellent
acquisition of a broad general education? To what extent has your experience at this institution contributed to your ability to write clearly and effectively? To what extent has your experience at this institution contributed to your ability to speak clearly and effectively? To what extent has your experience at this institution contributed to your ability to think critically and analytically? To what extent has your experience at this institution contributed to your ability to analyze quantitative problems? To what extent has your experience at this institution contributed to developing an understanding of other racial and ethnic backgrounds? Degree Completion Bachelor's degrees Freshman Retention 84% 88% 88% 90% Time to Undergraduate Degree (years) 4-Year Graduation Rate 34% 43% 47% 54% 6-Year Graduation Rate 60% 67% 71% 76% Master's degrees 1901 2043 2240 1726 Research Doctorates			3.02	3.08	3.24
ability to write clearly and effectively? To what extent has your experience at this institution contributed to your ability to speak clearly and effectively? To what extent has your experience at this institution contributed to your ability to think critically and analytically? To what extent has your experience at this institution contributed to your ability to analyze quantitative problems? To what extent has your experience at this institution contributed to developing an understanding of other racial and ethnic backgrounds? Degree Completion Bachelor's degrees Freshman Retention Time to Undergraduate Degree (years) 4-Year Graduation Rate 6-Year Graduation Rate 6-Year Graduation Rate 6-Year Graduation Rate 60% 67% 71% 76% Master's degrees 1901 2.28 2.80 3.02 2.85 2.85 2.85 2.85 2.85 2.85 3.02 3.27 3.38 3.11 3.11 3.11 4.363 5.036 5.036 Freshman Retention 84% 88% 88% 90% 4.11 4.363 5.036 Freshman Retention 84% 88% 88% 90% Time to Undergraduate Degree (years) 4.34 4.13 4.76 6-Year Graduation Rate 60% 67% 71% 76% Master's degrees 1901 2043 2240 1726 Research Doctorates	acquisition of a broad general education?		3.05	3.08	3.20
ability to speak clearly and effectively? To what extent has your experience at this institution contributed to your ability to think critically and analytically? To what extent has your experience at this institution contributed to your ability to analyze quantitative problems? To what extent has your experience at this institution contributed to developing an understanding of other racial and ethnic backgrounds? Degree Completion Bachelor's degrees Time to Undergraduate Degree (years) 4-Year Graduation Rate 6-Year Graduation Rate 6-Year Graduation Rate 6-Year Graduation Rate 1901 2.71 2.75 2.85 3.32 3.27 3.38 3.11 4.11 4.363 5.036 5.036 6.769 4.111 4.363 5.036 6.796 7.106 7.106 7.106 Master's degrees 1901 2.043 2.240 1.726 Research Doctorates	To what extent has your experience at this institution contributed to your ability to write clearly and effectively?		2.78	2.80	3.02
ability to think critically and analytically? To what extent has your experience at this institution contributed to your ability to analyze quantitative problems? To what extent has your experience at this institution contributed to developing an understanding of other racial and ethnic backgrounds? Degree Completion Bachelor's degrees Freshman Retention Time to Undergraduate Degree (years) 4.34 4.13 4.14 4.15 4.15 4.16 6.Year Graduation Rate Master's degrees 1901 2.67 2.69 2.59 2.59 2.59 2.69 2.59 2.69 2.59 2.69 2.59 2.69 2.59 2.69 2.	ability to speak clearly and effectively?		2.71	2.75	2.85
ability to analyze quantitative problems? 3.06 3.13 3.11 To what extent has your experience at this institution contributed to developing an understanding of other racial and ethnic backgrounds? 2.67 2.69 2.59 Degree Completion Bachelor's degrees 3505 4111 4363 5036 Freshman Retention 84% 88% 88% 90% Time to Undergraduate Degree (years) 4.34 4.13 4-Year Graduation Rate 34% 43% 47% 54% 6-Year Graduation Rate 60% 67% 71% 76% Master's degrees 1901 2043 2240 1726 Research Doctorates 299 279 305 401	ability to think critically and analytically?		3.22	3.27	3.38
developing an understanding of other racial and ethnic backgrounds? 2.67 2.69 2.59 Degree Completion Bachelor's degrees 3505 4111 4363 5036 Freshman Retention 84% 88% 88% 90% Time to Undergraduate Degree (years) 4.34 4.13 4-Year Graduation Rate 34% 43% 47% 54% 6-Year Graduation Rate 60% 67% 71% 76% Master's degrees 1901 2043 2240 1726 Research Doctorates 299 279 305 401	ability to analyze quantitative problems?		3.06	3.13	3.11
Bachelor's degrees 3505 4111 4363 5036 Freshman Retention 84% 88% 88% 90% Time to Undergraduate Degree (years) 4.34 4.13 4-Year Graduation Rate 34% 43% 47% 54% 6-Year Graduation Rate 60% 67% 71% 76% Master's degrees 1901 2043 2240 1726 Research Doctorates 299 279 305 401			2.67	2.69	2.59
Time to Undergraduate Degree (years) 4.34 4.13 4-Year Graduation Rate 34% 43% 47% 54% 6-Year Graduation Rate 60% 67% 71% 76% Master's degrees 1901 2043 2240 1726 Research Doctorates 299 279 305 401		3505	4111	4363	5036
4-Year Graduation Rate 34% 43% 47% 54% 6-Year Graduation Rate 60% 67% 71% 76% Master's degrees 1901 2043 2240 1726 Research Doctorates 299 279 305 401	Freshman Retention	84%	88%	88%	90%
6-Year Graduation Rate 60% 67% 71% 76% Master's degrees 1901 2043 2240 1726 Research Doctorates 299 279 305 401	Time to Undergraduate Degree (years)			4.34	4.13
Master's degrees 1901 2043 2240 1726 Research Doctorates 299 279 305 401	4-Year Graduation Rate	34%	43%	47%	54%
Research Doctorates 299 279 305 401	6-Year Graduation Rate	60%	67%	71%	76%
Research Doctorates	Master's degrees	1901	2043	2240	1726
Professional Doctorates 557 640 591 348	Research Doctorates	299	279	305	401
	Professional Doctorates	557	640	591	348

Indicators of student success are improving as well, which may reflect the enrollment of students who are better prepared to succeed. UB's four- and six-year graduation rates have improved substantially since 2004, decreasing the gap in performance as compared with peers. The number of degrees awarded also has increased. With the Realizing UB 2020 curricular and student-services initiatives already underway, UB expects to completely close the AAU peer gap in these areas over the next 16 years. Finally, it appears that there is a growing appreciation of the student experience as reflected in student

responses on the National Survey of Student Engagement. Students express increasing satisfaction with their educational experience, the General Education Program and the development of writing, critical thinking and quantitative analysis skills.

Goal 3 — Provide Support Structures that Ensure Faculty and Student Success

The breadth of infrastructure supporting faculty and student success is large and difficult to capture with institutional-level indicators. Thus, assessment occurs at the unit level and through the resource-allocation process (described below). In the future, the portion of the operating budget that is directed to university infrastructure will be examined closely. This measure, when compared with spending patterns at peer institutions, will indicate whether UB has invested sufficiently in infrastructure and realized the appropriate level of efficiency from that investment. In addition, surveys of faculty (e.g. COACHE) and students (e.g. SUNY Student Opinion Survey) will be more routinely conducted and the results used to determine satisfaction with the support systems they rely on to study, teach and do scholarship. In past surveys, students have expressed a high level of satisfaction with most university facilities and services.

Goal 4 — Create a Diverse Campus Community

Table 2.6				
Create a Diverse Campus Community				
	2004	2010	Today	Peer
Gender Female full-time faculty	NA	34%	35%	379
Female full-time staff	NA	53%	53%	59%
Female full-time students	47%	47%	47%	509
Race/Ethnicity Underrepresented Minority full-time faculty	NA	7%	6%	69
Underrepresented Minority full-time staff	NA	NA	9%	169
Underrepresented Minority full-time students	10%	10%	12%	159
Student Success Underrepresented Minority 4-year graduation rate	16%	24%	29%	429
Underrepresented Minority 6-year graduation rate	47%	57%	59%	689
Economic Undergraduate Pell	NA	31%	30%	299
Geographic Western New York	48%	40%	38%	N.
Metro New York City	13%	15%	19%	N.
Other New York State	23%	22%	18%	N.
International	12%	18%	22%	N.
Campus-based	12%	16%	16%	N.
Overseas	4%	3%	6%	N.
Out-of-State	3%	5%	4%	N.
Student Experience To what extent has your experience at this institution contributed to developing an understanding of other racial and ethnic backgrounds?		2.67	2.69	2.5
To what extent does your institution encourage contact among students from different economic, social, and racial or ethnic backgrounds?		2.47	2.61	2.4

UB is building a diverse campus community. The measures used in the past to track progress are summarized in Table 2.6. It should be noted that our focus on diversity is not restricted to race or gender. The university seeks to attract faculty, staff and students from diverse geographic locales, socioeconomic backgrounds and intellectual perspectives. UB enrolls a very significant percentage of low-income college students. Further, UB is focused on understanding the comparability of success among diverse groups of students. In examining the success of students from different ethnic and financial backgrounds, graduation rates of students from underrepresented groups and from financially disadvantaged backgrounds has shown improvement since 2004. While their success has not yet reached the institutional norm, the success gap for these groups has closed significantly.

The gender and racial/ethnic diversity of faculty, staff and students has not changed markedly over the past 10 years, which points to insufficient progress toward the goal of increasing the representation of women and members of underrepresented groups at UB. The formation of the Commission on Academic Excellence and Equity in 2009 reflected this desire for increased diversity and concern about lack of tangible progress. The commission's final report, published on April 20, 2012, provided recommendations to help the university achieve this goal. ¹⁰⁴ A significant action item resulting from this report was to create and fill the position of vice provost for equity and inclusion. ¹⁰⁵ This search will be completed in early 2014. Another recommendation was that the vice provost work together with the Office of Institutional Analysis to create a more comprehensive dashboard of indicators measuring the impact of new and existing initiatives to increase campus diversity, work that also is scheduled to commence in early 2014. These recent efforts are expected to help increase diversity over the next 10 years.

Goal 5 — Become an Increasingly Global University

Key indicators of global impact include international enrollments at the Buffalo campuses, the percentage of students participating in study abroad opportunities, the number of offshore affiliation agreements, and the numbers of students enrolled in offshore programs. An additional indicator of global impact is the extent to which faculty collaborate with international colleagues.

Table 2.7				
Becoming an Increasingly Global University				
	2004	2010	Current	Peer
Students International Freshmen	5%	15%	12%	6%
Scholarship Journal Articles with International Co-Authorship			31%	33%
Citations from International Journals			39%	42%
International Student Enrollment (Western New York Campuses)				
Undergraduate	1,108	2,239	1,777	NA
Graduate	2,109	2,273	3,030	NA
International Student Enrollment (Overseas Programs)				
Undergraduate	0	644	1,507	NA
Graduate	98	178	157	NA

The metrics that best capture UB's leadership position in global impact are provided in Table 2.7. The data highlight UB's leadership among AAU peers in attracting and serving an international student population. UB is well-known as a destination for international students seeking a high-quality education. UB enrolls a very significant and growing number of international students, particularly at the graduate and professional level. While international freshmen are a smaller percentage of a much larger freshman class in 2013, international freshman and transfer enrollments are near record levels. At the graduate level, we are serving more international students than at any time in our history on our campuses in Western New York. Further, a large number of UB undergraduates participate in studyabroad opportunities.

What may be less well-known is the extent to which the university has built educational and research partnerships with institutions of higher education around the world. In 2012, UB maintained active partnerships with 83 leading universities in 30 countries. UB's branch campus in Singapore is the largest operated by a U.S. institution in that country, delivering seven programs and enrolling nearly 1,500 students. UB is also a leader in delivering programs in India, with two dual master's degrees offered at Amrita University. With the growing Singapore program and small, but vital graduate programs offered in India and in other locales, UB's presence is growing around the world. UB's faculty have many international scholarly collaborations as reflected in the peer-AAU level percentage of journal articles co-authored with faculty in other universities outside the U.S. Realizing UB 2020 further raises UB's level of commitment in this area with its intent to require that all students have a global experience and its call for an expanded global engagement agenda for the university.

Goal 6 — Engage the Local Community to Enrich Student Experience and Regional Well-Being

Although historically the university has established many contacts with the local community through a wide variety of programs and services, these activities have been fragmented and have not been sustained through a coordinated university engagement agenda. Realizing UB 2020 commits the university to an expanded community and economic-engagement agenda. The provost has appointed a UB 2020 Task Force to offer recommendations and an action plan to respond to this goal. Possible metrics of effectiveness that may be employed include: number of students involved in service or experiential learning; number of external outreach/public service/public engagement activities reported by faculty; number of active outreach/public service/public engagement programs. The university also continues to offer a rich array of cultural events, workshops and invited speakers that are well-attended by the campus and broader community.

Goal 7 — Strengthen Partnerships for Improved Regional Health Care Outcomes

As indicated above, UB is in the midst of a \$375 million project to relocate the School of Medicine and Biomedical Sciences from the South Campus to the Downtown Campus within the Buffalo Niagara Medical Campus. The relocation will position the school in close proximity to its most important health-care partners: Roswell Park Cancer Institute, Kaleida Health's Buffalo General Hospital, Gates Vascular Institute and the Hauptman-Woodward Institute. This is a critical step in the creation of a

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comprehensive Academic Medical Center in Buffalo and is the first phase in a long-range plan to locate the five UB health sciences schools together on the Downtown Campus. The impact of the medical school relocation and build-out plan will include the addition of more than 100 new faculty practicing and conducting research in more than 20 new specialty areas, the capacity to train 160 new medical students per year, \$100 million in new annual clinic income, \$25 million in new annual research income and \$30 million in new annual gift income by 2020. This expanding medical center also will have broader economic and community impact in the City of Buffalo. Over the next year, a scorecard will be developed to track effectiveness in this goal area. These same metrics will be incorporated in the three-year planning process for each health-sciences school.

Aligning Unit Goals to Achieve University Goals: Strategic Resource Allocation and Assessment of Unit and Program Effectiveness

UB's effectiveness in goal attainment depends on the work of individuals and units across the university. In the UB 2020 era, the university has improved its effort to determine how each unit and program contributes to these goals and what actions and resource decisions are needed to improve their effectiveness. Since 2004, the university has evolved planning and budgeting processes and introduced new forms of unit assessment, including periodic comprehensive program reviews, continual examination of space and capital development needs, and requirements for student learning assessment (see Chapter 4). Many academic units also are subject to national, regional and specialized accreditations that provide opportunities to assess their effectiveness against external standards. The results of these assessment processes are used to improve programs, services, planning and budgeting. The standards and self-study requirements for specialized accreditations and comprehensive program reviews incorporate the assessment of educational effectiveness and student learning. In addition, all of the individual units/programs have developed planning, budgeting and assessment processes, and many academic units have identified their own peer institutions/groups for benchmarking purposes.

Resource Allocation for Strategic Purpose

Over the past 10 years, university leaders have used resource allocation processes to assess unit activity and direct resources to those units and programs to improve overall university goal attainment. Prior to 2005, the university allocated funds to the academic departments based on credit hours. In addition, the provost maintained a central fund for strategic investments. In the years from 2006 through 2011, the provost abolished the credit-hour formula and required every academic and support unit to enter into a compact agreement with the university. In this agreement, the provost and unit leaders reached a shared understanding about unit plans, goals and performance expectations over a three-year period, as well as the budget necessary to achieve these expectations. The original compact agreements measured performance in the following areas: enrollment levels, retention rates, plans and funding for program innovation and revenue generation, sponsored research goals, external fundraising goals, and diversity goals. The compact process gave the president and the provost the opportunity to allocate and reallocate funds as necessary to reward performance, invest in emerging opportunities, and downsize underperforming programs and services. This process also was a mechanism to allocate new resources for implementing or achieving strategic UB 2020 goals. With built-in annual assessment, the leadership could track unit and university progress, accelerate initiatives and make midcourse corrections as necessary.

As part of the initial launch of this process, the provost sequestered two percent of unit base budgets and invested those funds in the Strategic Strength Initiative. The president and provost also funded various administrative transformation initiatives, the formation of the Biomedical Engineering Department, and the strategic build-out of the medical school faculty through this process. This process did not result just in investment decisions. In 2006, the provost decided to close the School of Informatics because it was not meeting its expectations and its benefits no longer justified the university's continued investment. By the end of the decade, it was increasingly clear that the State and SUNY would not approve the changes necessary to launch any significant aspect of the UB 2020 plan. The compact agreement process had been designed to manage the new funds for UB 2020; but with the financial collapse in 2008 and the budget reductions ensuing over the next four years, the process became the mechanism to administer budget reductions.

In April 2011, President Tripathi was named UB's 15th president, and he appointed an interim provost shortly thereafter. In those same months, the outlines of the NYSUNY 2020 program took shape. NYSUNY 2020 made increased tuition revenue available for campus investment. Rather than pooling those funds for central allocation, the new interim provost implemented a revenue-sharing program to give deans significant fractions of the tuition revenue increase for unit initiatives. Instead of a compact agreement, each unit was required to develop a three-year plan with the understanding that it would receive 52.5 percent of the research and tuition income from enrollments generated beyond an established baseline level. Academic support units would receive 22.5 percent of the pooled revenue growth prorated to the size of their base budget and the provost and president would retain 25 percent of the income growth for discretionary strategic investment. Units were required to develop three-year plans to identify strategic priorities, enrollment, research and staffing goals, and a spending plan for the projected marginal tuition revenue.¹⁰⁷ The provost's central fund would be a competitive fund.¹⁰⁸

Proposals expected to have a significant impact in achieving university goals not funded by unit budgets would be funded through the competitive fund.

This new approach has been in place for nearly two years. Each unit has an active three-year plan. The competitive funding pool has been formed (the E-Fund) and two rounds of awards have been made. Over the first two cycles, 26 initiatives involving \$19 million in central funds have been committed to 22 units over the next three years. When these programs reach maturity, it is projected that 77 faculty and 33 staff members will be hired across academic and administrative units and these programs will generate \$36.7 million in additional sponsored research funding. Each award was given on a contingent basis for no more than three years, and the proposing units are required to identify annual performance expectations and describe an evaluation program. In each of the first three-years of funding, the programs will be reviewed for satisfactory progress toward the stated goals of the initiative. Longer-term recurring support will be provided if the initiative meets the test of its evaluation plan.

Recently Funded E-Fund Proposals:

- A Human Capital Agenda for Educational and Economic Development
- Institute for the Strategic Enhancement of Educational Diversity (iSEED)
- Joining Forces: The UB Partnership for Excellence in Veteran Care (UBPEVC)
- Center for Leadership and Organizational Effectiveness (CLOE)
- Economic Justice Studies Project
- Built Environment, Health Behavior and Health Outcomes; A Transdisciplinary Research Initiative in Urban Planning and Public Health
- UB Center for Home Health and Well-Being Through Adaptive Smart Environments (Home-BASE)
- Institute for Bridge Engineering (IBE)
- Institute for Sustainable Transportation and Logistics (ISTL)
- Computational and Data-Enabled Science and Engineering (CDSE)

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In August 2013, the president and provost held individual meetings with every major administrative officer (dean, vice president, vice provost) to review their progress in meeting three-year plan goals. The provost has prepared a summary report and presentations, shared with deans and vice presidents, describing the key findings of these reviews:109

- UB headcount enrollments have exceeded plan levels, but a number of units are not meeting enrollment goals while other units are enrolling well beyond plan. This enrollment volatility must be addressed as soon as possible;
- Tenure-track faculty hiring is well below planned levels and must be accelerated if we are to meet UB 2020 hiring goals;
- Sponsored research proposals and expenditures (planned and actual) also are well below planned levels. The lack of proposal growth is particularly concerning and requires examination and remedy as soon as possible. While sequestration is a reality, new tactics are required to increase proposal activity. Unit hiring plans should be examined to determine whether the mix of hiring should be adjusted so that more mid-level-career faculty bringing established research programs are hired in areas where research funding is on the rise; and
- Staff hiring is on pace with expectations, but the university should invest greater energy in staff development programs and opportunities.

Each unit leader has received a letter identifying institutional and unit-specific issues that require action as observed in the review. Three-year plan agreements will be modified after further discussions with unit leaders where issues have been identified. The results of the review also will influence decisions made in the annual senior leadership retreat and the new annual budget and planning process now under development.

Assessment of Unit and Program Effectiveness

The Capital Planning Process and the University Planning Board. The University Planning Board was formed in 2008 and charged with the role of directing the strategic and tactical efforts needed to develop and implement the university's capital plan. 110 The board is responsible for the formulation of the vision, policies, processes, projects and funding plans for priority university capital-facilities projects. It creates the faculty-staff project teams responsible for each individual project, works with external partners to ensure coordination on other capital projects and defines the process and metrics for evaluating plan implementation success.

The board reports regularly to the president, deans, Faculty Senate and Professional Staff Senate, and collaborates with each as appropriate. The board also reports to and works closely with the University at Buffalo Council and with the governing boards of UB affiliates, such as the University at Buffalo Foundation, the Research Foundation of the State University of New York, UB|MD and medical practice plans affiliated with UB, UB Associates Inc., and the Buffalo 2020 Development Corporation.

Authority and responsibility include priority state-funded critical maintenance projects; strategic initiatives for campus development; all projects funded through campus-based revenues; and all capitaldevelopment initiatives funded through UB affiliates. The University Planning Board reviews and recommends to the president one-, three-, and five-year capital plans; approval of capital projects greater than \$1 million; resolution of approaches to capital acquisition, management, finance, budget, partners, and advocacy; and evaluation of progress toward project implementation.

The board presided over the completion of all of the major projects completed since 2008. Examples include Greiner Hall, Davis Hall, Kapoor Hall and the Child Care Center projects on both campuses as well as other significant capital projects. It also commissioned the development of the Facilities Master Plan. This plan, informed by a rigorous space needs assessment and by unit academic plans, identifies the facilities needs for the implementation of the 250 faculty hiring plan and the relocation of the medical school to the Downtown Campus within the Buffalo Niagara Medical Campus. With the transition in presidential leadership and a new executive leadership team, the board went into hiatus at the end of 2011, but there are plans to restart board activity in 2014.

Comprehensive Program Reviews. Through the Comprehensive Program Review process, UB conducts a well-developed periodic review of its academic programs on a five-to-seven-year cycle.82 This practice provides structured opportunities for units to undertake thorough self-examination, identify needs and challenges and receive constructive evaluation from the review team. The self-study document is prepared by the department according to standard guidelines. The process begins with the self-study template that was expanded in 2010 to include descriptions of program learning outcomes, a plan for assessing those outcomes, assessment results and a description of any changes that have been made to the program based on assessment findings. Between Spring 2006 and Fall 2013, 292 degree programs have undergone review (out of 293 degree programs offered at UB as of the end of Fall 2013). Numerous recommendations made by the respective review teams have been implemented.

Student Learning Outcomes Assessment. The university's commitment to student learning is reflected in the following two institutional goals:

- UB will enhance the overall student educational experience while raising the academic profile of its undergraduate, graduate and professional students and significantly improving its undergraduate four- and six-year graduation rates; and
- UB will improve academic support infrastructures to provide state-of-the-art educational and research environments that advance faculty and students in their ongoing pursuit of excellence.

The assessment of student learning outcomes is the direct responsibility of the academic unit delivering the course or program. Each unit is expected to have:¹¹¹

- Clearly articulated written statements, expressed in observable terms, of key program and unitlevel goals that are linked to institutional goals and mission;
- Objectives and strategies to achieve those goals;
- A process for the collection and interpretation of assessment evidence for the achievement of those goals; and
- Documented use of the assessment results to improve programs and services with appropriate linkage to the institution's ongoing planning and resource-allocation processes.

The methodology and results relating to the assessment of student learning outcomes are described in detail in Chapter 4.

Unit-Initiated Budgeting, Planning and Self-Assessment. All major divisions of the university have established budget and planning processes within their unit. Although the extent and sophistication of these processes vary, these processes connect to the institutional budgeting and planning process effectively. Most units, because of external accreditation requirements or internal motivation or

both, conduct periodic reviews of strengths and weaknesses and use the results to implement course corrections or new initiatives. Perhaps the most impressive example of self-initiated assessment occurs in the University Life and Services division (described in greater detail in Chapter 5) where the many services offered through that unit undergo continuous and systematic review.¹¹² Although there is considerable time and energy given to unit assessments, UB is not centrally leveraging the information collected and lessons learned to facilitate unit and overall university improvements.

Assessing Institutional Effectiveness in the Future: A New Structure and New Approaches

This self-study process has confirmed that UB has made good progress in defining institutional effectiveness. The key indicators of institutional effectiveness identified above constitute a scorecard

Spotlight on Assessment: Current Status of Effectiveness of Academic Program Assessment

Over the past year, information about student learning assessment in academic programs has been collected to assess overall effectiveness of student-learning assessment activities. Sources of evidence included accreditation reports, program assessment plans, and annual academic assessment reports. A rubric was used to rate the quality of these assessment efforts, that is,

how informative are these assessment efforts in informing relevant changes to programs, courses, and teaching methods?

As of June 2013, all undergraduate programs have established program learning outcomes, and 76 percent of programs are either excelling or achieving in this area. Seven percent of programs are still developing well-written measurable outcomes, and 17 percent have outcomes that require substantial revision. Among graduate/professional programs, 58 percent are excelling or achieving in the area of program learning outcomes, 24 percent are developing, 13 percent require substantial revision and six percent had not submitted outcomes for review.

As shown in the table, many programs at both the undergraduate and graduate/professional level are working toward effective assessment plans

Assessment Results: Annual Program Assessment Plans Undergraduate Graduate/Professional **Rubric Step:** Assessment 20 47 35 13 Methods Assessment Results Suggestions in Response to **Findings** 36 29 36 0 34 38

that include feasible, direct measures; meaningful methods for analyzing and reporting results; and use of results to inform program and/or course improvements. These findings reveal that there is still much work to be done to promote effective student learning assessment at the institution.

To move UB to the desired level of student-learning assessment, the following initiatives are being pursued:

- Greater capacity for assessment facilitation and support through the newly formed Office of Educational Innovation and Assessment:
- Regularly scheduled professional development opportunities in the areas of writing learning outcomes, curriculum mapping, feasible methods for collecting direct evidence, methods for analyzing and presenting evidence, and tying assessment results to improvement;
- Facilitation of peer networking and support in the area of academic assessment;
- Creation of an online resource library for assessment materials and sample assessment plans and reports; and
- Recognition programs to spotlight those programs with exemplary assessment work.

of measures to examine continually goal achievement and how units and programs are contributing to institutional progress. However, there is a need for assessment efforts to be more systematic, and results need to be used more effectively in decision-making processes. An examination of the evolution of resource allocation and capital planning mechanisms in the UB 2020 years reveals that assessment efforts have, at times, been discontinuous and underutilized in priority-setting and investment-making at UB. However, key decisions in the past three years signal the recognition that a more systematic assessment effort is essential to UB's future success.

The first step, in 2010, was to create the Office of University Accreditation and Assessment (UA&A) to provide central support for assessment and to coordinate campus accreditation activities. Much of the emphasis of UA&A has been on student learning assessment, including helping academic programs design and implement assessment plans, working with the Office of the Dean of Undergraduate Education to formulate an assessment plan for the General Education Program, compiling assessment results related to general education learning outcomes from across all undergraduate programs, and collaborating with the Teaching & Learning Center in the identification of appropriate assessment workshops and resources.

The same year, the Institutional Standing Committee on Assessment¹¹⁵ was formed as an advisory group to review, develop and implement assessment processes related to instructional effectiveness and learning outcomes. Some members of the committee also served on the MSCHE Self-Study Team devoted to examining the university's progress with regard to assessing institutional effectiveness and student learning. The term of membership is two years. However, many of the original members have remained on the committee for a second term (starting Fall 2012), and the membership has been broadened to include staff from administrative units.

The "Realizing UB 2020: Achieving Academic Excellence" report lists as a key institutional value a "passion for continuous improvement." Concurrent with the beginning of the Realizing UB 2020 process, the provost asked the senior vice provost for academic affairs to convene a committee to examine central university efforts in supporting teaching effectiveness, the assessment of student learning and institutional effectiveness, and accreditation reporting. The Committee on Accreditation, Assessment and Pedagogical Innovation (CAAPI) was formed to examine a more integrated organizational structure for these three functions. 116

Acting on the recommendations of CAAPI, the provost announced a revised organizational structure on July 26, 2013. The newly formed Office of Educational Innovation and Assessment (EIA) and the Office of Academic Planning, Budget and Evaluation (APBE) were designated as the two units charged with monitoring and support for assessment in administrative units and academic programs. Although APBE is charged with assessment of overall institutional effectiveness and accreditation reporting and EIA will monitor and support academic assessment and overall assessment of student learning, there will be a strong collaborative relationship between these two units that will be enhanced and supported in the future by the creation of a coordinating committee or council.

The Office of Educational Innovation and Assessment. The Office of Educational Innovation and Assessment, a new division within the Office of Academic Affairs, ¹¹⁷ is responsible for catalyzing pedagogical innovation and the introduction of new forms of educational delivery. This office also

will provide greater oversight, guidance and direction to the teaching/learning assessment processes conducted in academic units across the university. To build a foundation for both of these efforts, the Teaching & Learning Center (TLC) was moved from Faculty Affairs to this new division, bolstering the linkage between the university curriculum development process and current university expertise in pedagogical delivery. The TLC works with faculty, students and staff to promote instructional excellence at UB through the use of emerging technologies, evidence-based pedagogy and the latest research on learning, engagement and instructional innovation. In addition to providing one-on-one support for instruction, the TLC collaborates with academic departments and divisions across campus to sponsor workshops, seminars and peer-to-peer mentoring groups on all aspects of the teaching-learning process. UA&A and TLC have forged a strong partnership to deliver high-quality seminars and workshops related to program assessment. The committee continues to work closely with UA&A and EIA to promote a culture of continuous improvement. This group will serve a key role in ensuring that administrative and assessment activities remain integrated within the new organizational structure. The Institutional Standing Committee on Assessment will continue to serve as an advisory group to this unit.

The Office of Academic, Planning, Budget and Evaluation. Beginning August 1, 2013, APBE assumed responsibility for two key functions, accreditation reporting and the oversight of institutional effectiveness assessment, in addition to its function as the coordinator of resource-allocation processes and institutional analysis. 118 UA&A has moved into APBE, and the existing director of UA&A is continuing as the accreditation liaison to MSCHE under the supervision of the vice provost for academic planning, budget and evaluation. APBE will work closely with the vice president for finance and administration under the supervision of the provost in the coordination of the three-year budget planning and resource-allocation process, and the assessment activities embedded in that process. In addition, APBE will recommend to the provost the annual and long-range institutional effectiveness agenda and the strategies and tactics that will encompass the pursuit of that agenda. Within APBE, the Office of Institutional Analysis (OIA), will be the repository for all program accreditation information and has the primary institutional responsibility for the collection and analysis of quantitative and qualitative information regarding the institution, students, faculty, programs and services. The office provides analytical support for the planning, evaluation and policy initiatives of the provost and senior leadership; serves as the institution's strategic reporting office; and will support all new efforts to assess institutional effectiveness.

Unit Impact and Standards Analysis. The Realizing UB 2020 report concluded that university leadership must come to a better understanding about the different and unique contributions each academic and administrative unit makes to the achievement of institutional goals. This understanding can better inform how best to invest and encourage improvement across the university. There has been an explicit recognition that the typical metrics of effectiveness are not sufficient for this task for many academic units and all academic support units. The provost and APBE have designed a new process, the Unit Impact and Standards Analysis, to engage each academic and administrative unit in an information-rich interaction to identify the most appropriate ways to measure unit and individual effectiveness for units with very different missions.

Beginning in February 2014, APBE will share a profile of information with each unit indicating its contribution to the achievement of university goals. For academic units, the profile will include general unit characteristics at the decanal level and the department level, such as student-quality data, student

demographic information, faculty size and demographics and other basic indicators. Another section of the profile will be devoted to productivity measures, including instructional workload in total and per faculty member, degrees awarded, tuition revenue generated, research expenditures per capita and per assigned square foot, publications, citations, honorific awards and conference proceedings. Research and instructional workload levels will be compared with AAU universities using multiple sources of information, including the Delaware Study of Instructional Productivity, Academic Analytics and SCOPUS where appropriate. In addition to unit-level summaries, the profile reports on the productivity of every individual faculty member in the unit using most of the metrics referenced above.

For academic support units, APBE will share best-practice performance assessment techniques conducted at peer universities and standard metrics of performance where available (e.g., APPA benchmark data for facilities management). These profiles will be more skeletal than the academic unit profiles and will be developed in collaboration with the unit in an iterative manner.

Each unit will be asked to respond to its profiles in a number of ways. First, determining strengths and weaknesses of the available profile information in assessing how and how well the unit is contributing to institutional goals. Second, what alternative measures or qualitative assessments can and should be added or substituted for the metrics in the initial profile? Third, what are the standards that define effective performance in the unit using these metrics, and how well are the unit and its faculty and staff performing relative to that standard and compared to peers? The response to this question will help identify in a more concrete way strengths and needed improvements. Finally, what actions do unit leaders recommend to increase the overall performance of the unit?

This process will be implemented over a six-to nine-month period, and results will be used in several ways. First, a performance-funding component will be incorporated into the new resource-allocation methodology. This Unit Impact and Standards Analysis process will conclude with the formulation of a performance agreement with each unit. Unit funding will be linked to effective unit performance as defined in the agreement. The process will provide a more-informed basis for the targeted use of strategic investment funds to improve goal attainment. Not every unit contributes equally to every goal. This process gives university leadership better information to inform priority choices. It also will provide the information base to determine how to implement a compensation program for faculty and staff based on performance. Finally, this analysis can help to better inform stakeholders about UB's impact and effective stewardship of institutional resources.

Conclusion: Aligning Resources to Improve Effectiveness

UB is making significant modifications to the resource-allocation model. The current three-year planning process and revenue-sharing model places inordinate attention on credit-hour production as the primary measure of goal attainment when our mission and goals require a more diverse set of incentives and strategic choices. The Unit Impact and Standards Analysis will provide an empirical framework for this new approach. New indicators of effectiveness will be added, and the use of these

indicators in judgments about where and how to invest for the future will become more systematic. Improving the connection between assessment results and improvement efforts is the principal objective of the new planning and budgeting model. This improved connection is an essential next step to becoming a more effective university.

Evidence

Examples of evidence that the University at Buffalo meets Middle States Standard 2 are summarized below.

- Goals, objectives and strategies are clearly stated to reflect lessons from assessments, are linked to mission and goal achievement, and are used for planning and resource allocation. For example, the evolution of the UB 2020 plan and its relationship to the university's mission has been highly public, including speeches, advocacy briefings, grassroots processes eliciting constituent feedback and the publication of plan elements in all forms. This same approach has been used with the Realizing UB 2020 initiative.
- The evolution and scaling of UB 2020 from a 10,000-student growth plan to a "right-sizing" of the faculty to the current enrollment plan reflects a continual tuning based on financial assessments, unit performance assessment and external assessment. The assessment mechanisms embedded in the former compact-agreement resource allocation process and the current three-year plan process continually refine the performance expectations of particular units in service to the goals of the university as a whole.
- The essential processes of UB 2020 strategic strength identification, revenue and costs
 assessments, administrative transformation initiatives and formulation of the Building UB
 Physical Plan were highly "bottom up," constituent-based processes. The same is true for the
 Realizing UB 2020 planning process.
- The annual resource allocation process involves the strategic and financial leadership of every administrative division of the campus. The built-in assessment mechanisms of these processes allow for a continuous feedback loop from plan development to resource decisions to an assessment of impact to a reformulation of plan and unit strategy.
- Assigned responsibilities for improvement, as well as mechanisms to assure accountability,
 provide sufficient oversight of these processes. For example, three-year plans and E-Fund
 awards include mechanisms to report and review milestones. For cross-unit initiatives, such as
 HUB system implementation, Finish in 4 and the Strategic Strengths Initiative, a lead dean or
 senior officer is designated to coordinate the initiative and conduct annual-review and reporting
 activities to ensure that it reaches key milestones.
- Periodic assessment of the effectiveness of planning, resource allocation and institutional
 renewal processes, and the use of institutional resources is evident in the adaptability of the
 institution in refining the vision of UB 2020 in response to changing realities, as well as in the
 evolution of resource-allocation processes from an overly simplified enrollment formula in 2004
 to the existing three-year plan model. Further, the adaptation of the Build UB Comprehensive

Physical Plan to the UB Facilities Master Plan 2013-2023 shows a sensitivity to the need to scale capital plans and capital-planning delivery mechanisms to changing needs and external realities.

Examples of evidence that the University at Buffalo meets Middle States Standard 3 are summarized below:

- The resource-allocation process has attempted to identify, recognize and reward effective, efficient and quality performance. The UB 2020 transformation initiatives are specific examples of this effort, and the Realizing UB 2020 unit assessment initiative will ensure continuing quality-improvement efforts for academic and nonacademic units across the campus.
- The evolved resource-allocation processes are rational and clear in their rules of resource distribution and require convincing plans that define staffing and financial needs for unit initiatives, cross-unit initiatives and reserves for emerging opportunities and contingencies. Given the uncertainties of New York States' fiscal climate, tuition policy and the changing higher education landscape, the institution has chosen a rolling, three-year plan-development process.
- From "Building UB" to the SUNY/UB Facilities Master Plan to the UB capital request submitted for the 2013-2017 five-year SUNY capital planning process, the institution has created a comprehensive master plan that reflects all aspects of campus needs, from student living to classrooms to research and library spaces and infrastructure.
- The physical plan builds upon a complete review of facilities' condition, campus infrastructure condition and space needs assessment, which is based on assumptions of faculty, staff and program growth associated with UB's NYSUNY 2020 application and anticipated faculty research and growth equal to 250 FTE and \$60 million in research expenditures.
- The physical plan features the Heart of the Campus project on both North and South Campuses, which involved the complete overhaul of library facilities to accommodate the changing teaching/learning strategies being implemented in today's higher-education landscape.
- The facilities master plan anticipates educational equipment acquisition classroom technology, classroom renovations and new learning spaces.
- Adequate institutional controls have been put in place to provide stewardship of institutional resources, and the university undergoes an annual independent audit to ensure that these controls are working effectively.

Examples of evidence that the University at Buffalo meets Middle States Standard 7 are summarized below:

• The UB 2020 strategic planning blueprint has reshaped and publicly acknowledged a widely-shared mission statement and seven goals that all institutional activity will seek to meet. Through annual leadership retreats and a variety of consultation strategies to assess constituent perspectives, the university has engaged the campus community in shaping the mission and goal statements. The mission and goals are the guide posts that are used in the assessment of institutional performance and inform the resource allocation management process, the identification of academic goals supported by comprehensive programmatic and operational reviews, and the annual planning process which provides a coordinated, cross-university mechanism for institutional and unit assessment and continuous improvement. Individual units are responsible for assessing outcomes and progress toward their respective

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- goals. Accountability is ensured through documented annual reporting procedures and the connectivity of planning, assessment and resource allocations.
- The university is committed to build a comprehensive and coordinated institutional effectiveness agenda and has put in place the organizational structure dedicated to this objective.
- The university has conducted multiple facilities condition audits and other mechanisms to inform strategic decisions with regard to infrastructure investment, including facilities, information technology, student services and libraries, among others.
- The university employs several formal procedures to evaluate academic programs and services. These processes have resulted in meaningful changes across schools and programs.
 Comprehensive program reviews and external accreditation have been used to assess program effectiveness, improve curricular planning, inform faculty hiring and guide resource decisions.
- The university uses a variety of metrics and survey instruments to collect feedback on faculty and student needs, perceptions and satisfaction. The surveys provide opportunities for commentary on what is working, as well as opportunities for improvement. This information has been used to inform strategic planning and improve services.
- Regular performance evaluations have helped to identify areas for leadership change and professional development.
- A wide range of workshops and other resources relating to assessment are made available to faculty and staff through the Teaching & Learning Center.
- Nearly one-third of UB students are enrolled in programs with specialized accreditation, further ensuring these students are being taught to the highest standards of the relevant discipline/profession and that student learning outcomes and their assessment are well-established.
- Organizational restructuring will promote greater integration of student learning assessment with assessment of overall institutional effectiveness.
- The General Education Program is being revised and a comprehensive assessment plan is being implemented to guide program improvement.

Future Directions

UB 2020 is the university's plan to improve its standing among public AAU research universities, and UB is committed to achieving its full promise in the next 10 years. The following actions will help the university reach this aspiration and improve already effective planning and resource-allocation processes:

- Formulate a multi-year university implementation strategy that sequences Realizing UB 2020 priority initiatives and other university needs consistent with unit and institutional capacities (staffing, financial, ability to implement in parallel, etc.).
- Complete the Unit Impact and Standards Analysis and reach performance agreements with each unit of the university that connect their efforts explicitly with university goal attainment.
- Advocate with SUNY and New York State officials for new management tools and a
 continuation of key NYSUNY 2020 program features beyond 2015 (including the rational
 tuition increase program, TAP tuition credit program, capital planning and budget reform).

- Evaluate faculty and staff hiring practices to ensure the most efficient and highest-quality hiring possible in the years ahead.
- Complete the reformulation of the university resource allocation model to achieve the appropriate balance between centralized discretionary allocation and revenue-sharing principles to maximize the strategic impact of the university resource-allocation process.
- Evaluate the sustainability and desirability of the current university enrollment plan.
- Improve university efforts to develop the full capabilities of our human resources.
- Develop new strategies and investment proposals to enable UB to reach the levels of sponsored research growth, philanthropic growth and corporate/industry sponsorship projected in the NYSUNY 2020 program agreement between UB, SUNY and the State.
- Develop a risk management strategy that defines and monitors key risk indicators, and develops
 responses to uncontrollable circumstances that allow the university to manage or prevent
 oncoming financial or other risks.
- Work internally and with SUNY to examine the efficiency and customer-service aspects of shared administrative service models and creative forms of in-sourcing (e.g. SUNY IT Lab) and outsourcing (e.g. cloud computing).
- Require expanded equipment replacement strategies across the institution.
- Create more and better UB 2020 dashboards and progress reports to convey performance in key metrics as a central aspect of the university's institutional effectiveness agenda.

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Chapter three Educating for Excellence: Faculty

Addresses Standard 10

Standard 10 - Faculty

The institution's instructional, research, and service programs are devised, developed, monitored, and supported by qualified professionals.

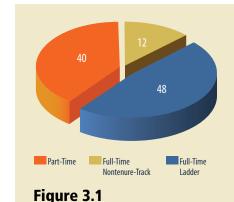


Faculty Size and Composition

As a comprehensive research university, UB's educational quality is tied to faculty being at the cutting edge of knowledge creation in their disciplines. UB has developed successfully the capacity to attract and nurture highly qualified and talented faculty and, as a result, employs faculty members who are passionate about teaching, mentoring and scholarship, offering a comprehensive range of rigorous academic programs at the undergraduate, graduate and professional levels.

The faculty is integral to achieving the goals of the university's mission with respect to teaching, research, public service and the assessment of its academic programs. Depicted in Figure 3.1 are the percentages of full-time ladder faculty, full-time nontenure track faculty and part-time faculty at UB for Fall 2012. Women represented 35 percent of full-time faculty, and underrepresented minorities comprised approximately 6 percent of full-time faculty. Faculty data corresponding to the more narrow definitions of the Common Data Set¹¹⁹ are published each year on the Office of Institutional Analysis website.

In addition to full-time, tenured/tenure-track faculty members, UB employs a variety of other types of faculty, postdoctoral associates, and graduate and professional students to achieve its research and teaching missions. These are described in the report entitled, Types of Faculty at UB.¹²⁰



Percent Faculty Head Count Fall 2012

In his inaugural address on September 23, 2011, President Satish K. Tripathi set a goal of growing the faculty by strategically adding 250 new professors over the next five years. ¹²¹ In 2013, UB made substantial progress by adding 95 new tenure-track faculty, which is well above the normal hiring rate of slightly more than 53 per year.

The UB 2020 planning process consistently has been a guiding force in strategic faculty hiring. The central academic strategy of the UB 2020 plan was to identify and invest in the UB 2020 Strategic Strengths. ⁷⁶ Each of the eight strengths developed plans that were designed to build on those strengths by identifying necessary hiring to enable the collective advancement of all participants. This was a significantly different approach than the traditional hiring process — strategic strengths would identify the needs and the hiring would be coordinated across departments. Coordinating committees of participating deans determined how to best allocate resources and hiring for strength operations and growth. Faculty Advisory Committees (FACs) were formed to lead and drive the strengths toward realizing their vision. This process, which began eight years ago, has resulted in 131 new faculty hires to date, which has added considerable depth and breadth to already strong programs. 77 UB is still building on these strengths through focused hiring and investments in research capability. These hires have produced strong interdisciplinary teams of faculty who engage in world-class, cutting-edge research. As we look to the future of realizing UB 2020, the Communities of Excellence, as described in Chapter Two, will build on these strengths and provide the structure for continued strategic hiring. UB procedures on faculty hiring, recruitment, retention, compensation/benefits and workplace environment are described in the report, Faculty Hiring and Compensation at UB. 122

Faculty Support for Student Learning

As a top-tier research university, UB embraces the principle that its faculty are actively involved in transferring knowledge through classroom, laboratory, mentoring and informal processes. At UB, faculty have primary responsibility for the educational excellence that is at the heart of the university. The university provides support for the development of teaching and scholarship excellence through a variety of programs. All new faculty members are invited to attend an orientation program sponsored by the Office of Faculty Affairs that includes such topics as promotion and tenure, research, graduate and undergraduate education, academic policies, career development, student services, educational technology and human resources. UB routinely offers workshops to enhance faculty grant-writing skills

UB supports faculty with student learning through its Teaching & Learning Center (TLC).¹¹⁴ The TLC works with faculty, students and staff to promote instructional excellence at the university through the use of emerging technologies, evidence-based pedagogy and the latest research on learning, engagement and instructional innovation. In addition to providing one-on-one support for instruction, the TLC collaborates with academic departments and divisions across campus to sponsor workshops, seminars and peer-to-peer mentoring on all aspects of the teaching-learning process.

Workshop offerings include syllabus and portfolio development, library/citation resources and use of various software packages focused on support of classroom and online instruction. Workshops also focus directly on pedagogical issues such as active learning in large classes, fostering discussion in larger and smaller classes, effective lectures and presentations, assessment, student learning and curriculum design. The annual Genteels Excellence in Teaching Conference is an opportunity for the staff of the TLC to identify and bring to campus an expert on pedagogy to present a half-day professional-development experience for the faculty. The 2012 Teaching Conference focused on learning goals and outcomes assessment. The TLC also offers SUNY Training Center workshops/conferences on a variety of topics, including assessment.

The TLC offers an annual "Target Your Teaching" workshop, delivered by UB faculty, to enhance the instructional skills of incoming and current teaching assistants. The one-day conference, typically enrolling 100 participants, includes such topics as classroom challenges, lecture organization, presentation techniques, active learning and syllabus development. Attendees have the opportunity to learn from, and make contact with, experienced UB teaching assistants and staff members. Students participate in micro-teaching sessions in which they can practice and improve their lecturing skills.

Currently, the Curriculum and Assessment Task Force of Realizing UB 2020 is evaluating the best way to expand the current TLC to be a more comprehensive center for pedagogical innovation. This center will insure that UB uses the most effective tools for evaluating teaching and assessing teaching and learning outcomes. In the face of a national push toward online education, this center is expected to establish standards and practices that result in quality education online and offline. Through these initiatives and centers, UB has embraced a culture of pedagogical excellence and assessment.

Blackboard on UB*learns*, administered by the TLC, provides a comprehensive course-management system, including audiovisual podcasting, course communication and collaboration tools, and online

surveys and quizzes. The rapidly changing nature of information technology and Internet access poses an ongoing challenge to faculty in terms of integrating new hardware, software and online materials into their teaching and research. Thus, the TLC provides assistance to faculty with information-technology issues. The TLC also houses a growing collection of resources related to teaching and learning, including videos, books and journals.

Network and Classroom Services (NCS)¹²⁴ provides enterprise network communications and classroom technology services. Part of NCS is the UB Information Technology Help Desk operation that serves as the customer-service front-end for incidents, problems and requests. The Innovative Instruction Technology Grants (IITG) program, sponsored by SUNY, is a competitive grants program open to SUNY faculty and support staff across all disciplines. IITG encourages development of innovations that meet the Power of SUNY's transformative vision. Grant recipients openly share project outcomes in the SUNY Learning Commons, enabling SUNY colleagues to replicate and build upon innovations.

Faculty Support for Research, Creative Activities and Scholarship

Impactful, groundbreaking research defines the University at Buffalo's mission as a premier, research-intensive public university dedicated to academic excellence. UB's faculties across all decanal units are engaged in research, creative activities and scholarship; these endeavors continually enrich and inform our teaching and public service missions. Indeed, total research expenditures at UB — one measure of a university's scholarly output — have averaged \$350 million/year over the past five years.

University-based research and scholarship are by nature an evolving landscape. New knowledge is created, new theories are tested and new innovations are introduced on a continual basis. This requires a research environment that is responsive, adaptive and supportive through many means. ^{125,126} The hiring of new faculty to bring new ideas to campus; the investment in new research tools that are necessary for academic inquiry and for promoting the state-of-the-art; and the building of a collaborative, intellectually stimulating environment in which new knowledge is created are some examples of a necessarily evolving research environment.

UB's strengths in scholarship and research begin with the quality of the faculty. Providing sufficient resources for the faculty in the course of their scholarly activities is both a centralized and decentralized function of the university. First, faculty are supported at the departmental level in the conduct of their scholarly activities. Second, centralized support of research activities falls under the responsibility of the Office of the Vice President for Research and Economic Development (OVPRED).¹²⁷ The mission of OVPRED is to support the research and scholarly productivity of the faculty, and to foster a conducive research environment and infrastructure to advance UB's faculty scholarship and the research enterprise as a whole. OVPRED provides the following:

• Support of UB research, creative activities and scholarship through seed-funding programs; new project/funding identification; proposal development and review; coordination of the pursuit of large-scale, multi-investigator, cross-disciplinary research grants and funding for institutional

priorities related to UB's research strengths, as well as emerging initiatives; proposal submission; and working in partnership with UB principal investigators (PIs) and sponsoring agencies to assure that UB's research proposals are well-presented and ultimately funded;

- Support to UB PIs and the research community over the life of a project;
- Support up-to-date policies and a research environment for UB PI's and the research community that delineates sponsoring agencies/university rules and regulations such that the UB research community can best function within a defined, but ever-evolving, regulatory environment. The ultimate goal is to provide an environment that enables faculty to concentrate on their scholarly activities while devoting minimal time to required administrative and compliance details; and
- Support UB's research enterprise, both physical (e.g., investment in shared equipment and facilities, modernization, etc.) and intellectual (e.g., assist with internal or external institutional collaborations and interactions, investigate and develop new strategic partnerships, communicate expertise and results to outside stakeholders).

Beyond the activities outlined above, an Office for Research Advancement (ORA) has been established and a new associate vice president for research advancement and strategic initiatives has been named. The ORA supports the faculty in the pursuit of major research funding, i.e., large-scale, multi-investigator, cross-disciplinary research grants and funding for institutional priorities related to UB's research strengths, as well as emerging initiatives. This new associate vice president will connect with funding agencies, identify possible upcoming calls for proposals, identify key faculty to lead the proposed activity, coordinate planning meetings, and identify strategies for advocacy, when appropriate, with state, federal, foundation or other sponsoring agencies. A key goal of these activities is to position university faculty to compete for more large-scale, center-type awards, like a Clinical and Translational Sciences Award (CTSA) from the NIH or Science and Technology Centers Award (STCs) from the NSF. These awards serve to recognize certain areas of excellence at the university, which through targeted investment can grow these research activities even further.

In addition to the focus on federal and state research funding, the OVPRED has named an associate vice president for economic development who leads an Office of Economic Development (OED). This office is working to provide support not only for technology transfer, but all aspects of the economic engagement and impact of UB scholarly work, whether through developing new technologies, launching new startups, training an educated and innovative work force, supporting the region's economic diversification and high-wage job growth, or contributing to the region's and nation's creative and cultural assets. OED works to position the university's key resources — our faculty, students, staff and facilities — to engage with industry or other partners to help drive regional economic growth.

Notable changes have become manifest in the sponsored funding portfolio of UB. In August 2012, UB was awarded its first ever grant from the Economic Development Administration (EDA) to foster innovation, job creation and private capital investment in 10 Western New York counties. The federal funds created the Innovation Hub (iHub), a two-year program that advances innovations emerging from State University of New York campuses at UB, Fredonia, Geneseo, Buffalo State, Alfred University and Brockport. Objectives are to accelerate the commercialization pipeline, connect entrepreneurs to university and community resources, and cultivate a highly skilled talent pool through education in the

Western New York counties of Allegany, Cattaraugus, Chautauqua, Erie, Genesee, Livingston, Monroe, Niagara, Orleans and Wyoming. These activities expose our students to key entrepreneurial activities, as well as to working with various industry partners, thus increasing their ability to compete in the global market upon graduation.

Besides the EDA grant, OVPRED is working in other ways to support UB's faculty and students in developing fruitful interactions with industry. A New York State Center of Excellence in Materials Informatics (CMI) was established in 2012 with funding from New York State. The new center leverages UB's cutting-edge materials science and informatics expertise, in concert with other institutions and industry partners, to drive innovation and critical R&D activities that directly impact private-sector growth in several industries — including advanced manufacturing, life sciences and energy. CMI is the university's second state-designated Center of Excellence — the first being the New York State Center of Excellence in Bioinformatics and Life Sciences designated in 2005. Both centers provide resources to UB faculty and students to further their research, but also have as part of their mission to foster economic development by connecting university resources with industry through funding, research and development support, programming and education, with the goal of helping companies find business solutions, accelerate new ideas and grow.

These activities are nontraditional from an academic perspective, but are important to the community. UB's faculty and students contribute to the region's growing knowledge-based economy, as well as to a rich arts and cultural heritage. Growing the university in breadth and depth enriches the region in similar ways. So that UB can continue to attract faculty and students from around the world, it is critical that our region also be an attractive destination. The partnership that UB has established with the local business community and state economic-development agencies will continue to have a positive impact.

Faculty Achievement

The university recognizes faculty achievements and encourages and rewards linkages between research and scholarship, teaching and service through the promotion and tenure process, as well as institutional and departmental awards. SUNY recognizes faculty for superior achievement and sustained pursuit of excellence through the Chancellor's Awards for Excellence in teaching, faculty service, and scholarship and creative activity. The university also has established awards for scholarship and teaching — the UB Exceptional Scholar Award, 129 UB Award for Teaching Innovation, 130 Martin Myerson Award for Excellence in Undergraduate Teaching and Mentoring 131 and an award for Excellence in Graduate Student Mentoring. In addition, the SUNY Board of Trustees has established prestigious system-level distinguished faculty ranks to recognize SUNY's most accomplished faculty. Considered promotions beyond full professor, these distinctions include SUNY Distinguished Professor, SUNY Distinguished Service Professor and SUNY Distinguished Teaching Professor. UB also has established guidelines for the rank of UB Distinguished Professor. Finally, the Undergraduate Student Association's annual Milton Plesur Award recognizes faculty members for their commitment to students and the quality of their teaching.

General Tracking of Faculty Achievement

Faculty members submit annual reports to their chair or dean describing their professional activities and accomplishments. Until Summer 2013, UB used an automated system (Digital Measures Activity Insight¹³⁴ for most faculty and eCV¹³⁵ for faculty in the schools of Dental Medicine and Medicine and Biomedical Sciences). Based on faculty feedback and consultation with deans and chairs, UB has discontinued the Digital Measures contract while retaining the stored data, and is building an electronic CV repository with searchable and analytic capabilities. In addition, the Office of the Provost subscribes to Academic Analytics,¹³⁶ a benchmarking service that assists UB leaders in comparing

Spotlight on Assessment: Effective Utilization of Research Space

To achieve maximum research productivity, it is important that available laboratory space is utilized most efficiently by assigning it to the faculty members with the greatest potential for research success. The Office of Institutional Analysis (OIA) prepares reports¹³⁷ for each department that include the assigned laboratory space by faculty member, along with the faculty member's research expenditures. These reports are essential to department chairs as they can identify unused and under-utilized space for reassignment. Space conversations can be difficult and these reports help maintain an objective discussion focused on the strategic priorities of the department, decanal unit and institution. These reports have had great utility in helping to locate laboratory space for new hires (increasingly important as the Realizing UB 2020 plan is implemented) and are very helpful for planning the space allocations for research laboratories in the design of the new medical school. faculty productivity at UB with the productivity of faculty at peer institutions. Various measures of faculty excellence and productivity reflect the exceptional talent and scholarship of UB faculty. These data allow comparisons with peer institutions and identification of high- and low-performing programs and individuals. Conversations between the provost and deans focus on creating a path to excellence for each faculty member and program. Through this performance analysis, in response to external pressures, expectations and fiscal concerns, UB has committed to a culture of assessment and accountability where expectations of performance established within each department and unit will be used to guide faculty and unit trajectories.

The review of institutional advancement as part of development of the UB 2020 plan revealed that the fraction of faculty with major societal awards is not at a level of our peers. This is an area that requires recognition that such awards are important, winning them is a collective process, and that they are important to advancing institutional ambitions. Unit assessment activities launched in Fall 2013 ask units to address how they will enhance their scholarly achievements and gain national and international recognition of these accomplishments.

Faculty Achievement in Student Learning

Academic units at UB use a blend of peer observation, mentoring and student course evaluations to assess and recognize outstanding faculty achievement in student learning. Of the current faculty, 92 are recipients of the Chancellor's Award for Excellence in Teaching and 29 faculty hold the rank of SUNY Distinguished Teaching Professor. Since 2004, 52 UB faculty have been awarded the Student Association's Milton Plesur Excellence in Teaching Award in recognition for their commitment to students and the quality of their teaching. Many UB faculty have been the recipients of national teaching and mentoring awards. 128

As highlighted above, student course evaluations are considered very important in assessing faculty teaching effectiveness. However, there are four different electronic platforms used across the 11 schools and the College of Arts and Sciences. To improve their impact in assessing teaching effectiveness, a new universitywide standard format for course evaluations is being developed by a Faculty Senate-convened

committee, which is working toward a Fall 2014 campuswide implementation schedule.

Over the past several years, UB also has recognized that excellent classroom teaching is not the only indicator of faculty teaching excellence. For example, the Graduate School's annual Excellence in Graduate Mentoring Award program, which was inaugurated in 2011, is designed to recognize truly exceptional faculty mentoring of graduate students. Two faculty members received the award in 2011, three in 2012 and two in 2013. At the undergraduate level, the President Emeritus and Mrs. Meyerson Award for Distinguished Undergraduate Teaching and Mentoring also was established in 2011. Eleven faculty have been recognized with this award since its inception.

In preparation for the decennial 2014 Middle States accreditation site visit, UB convened the Committee for Accreditation, Assessment and Pedagogical Innovation. One of the Spring 2013 committee recommendations is to establish a recognition program for faculty and staff engaged in high-quality assessment activities. This recommendation is being developed further through the Realizing UB 2020 Curriculum and Assessment Task Force.

In summary, UB recognizes faculty achievement in student learning through a variety of modalities. Some are long-standing teaching awards, while others have been developed or are being developed to recognize nonclassroom-based instruction and effectiveness.

Faculty Achievement in Research, Creative Activities and Scholarship

In alignment with its mission, UB has the expectation that faculty will engage in scholarship of substantial impact at the local, statewide and global levels. UB develops and sustains the research infrastructure necessary for its faculty to accomplish this objective.¹²⁷ At the same time as the campus develops resources to

enable and support research initiatives, success is the responsibility of the individual faculty member and teams of faculty who work together to advance their scholarship. In assessing the culture of research

Spotlight on Assessment: Using the Strategic Strength's Comprehensive Self-Studies to Guide Further Investment and Assess Impact

The Strategic Strengths (SS) have conducted recent self-studies (2010-2013), assessing the first five years of activity since each strength plan was approved. These documents have helped identify need and demand for new educational offerings and programs, as well as key challenges and solutions. For example, key findings of the review of "Molecular Recognition in Biological Systems and Bioinformatics" (MRBSB), an area of excellence that focuses on medically relevant research at the interface of chemistry and biology, include:

- In spite of exceptional strength in the areas included in MRBSB, these research groups were not well-connected. The SS infrastructure promoted conversations across disciplines and hires that led to new collaborative projects.
- These collaborations led to the development of new courses and a new cross-disciplinary graduate program in "Genetics, Genomics and Bioinformatics."
- A new department of "Biomedical Informatics" to support student demand for training was formed. The inaugural department chair has been hired. Additional faculty hires and graduate program development is underway.
- The new hires in MRBSB are among our most talented and successful faculty. However, our goal to secure large center-type grants has not yet been realized. The self-study was instrumental in identifying two key factors related to that goal. First, the report revealed that most of our MRBSB hires were at the assistant professor level. These hires are successful in obtaining R01 type funding. However their ability to secure center grants will take time as these young faculty further develop their careers. Second, support and expertise to facilitate submission of these large complex applications were limited. As a result of this second finding, a new Office of Research Advancement was established to support faculty in submitting these types of applications.
- Successful research programs are foundational to support the training and experience of both our graduate and undergraduate students. Strategic Strength hires are talented and engaged faculty who teach and mentor our best students, exposing them to cutting edge research.

Some other prominent examples of how the investments in other Strategic Strengths have led to new research and educational programs include the New York State Center of Excellence in Materials Informatics that builds on UB's strengths in computing, materials science and engineering; and the new Clinical and Translational Research Center that supports research from bench to bedside.

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at UB, there are many examples of excellence and a growing sense that the most interesting and impactful areas of research demand multidisciplinary approaches. There also are, however, areas where major improvements are required if UB is to meet its target of comprehensive excellence.

UB uses standard and measurable surrogates for research productivity, including external research funding and sponsored awards, AAU research metrics (e.g., research expenditures), program standing in widely read rankings such as the NSF Higher Education Research and Development Survey and U.S. News and World Report, and production of patents and licensing income. In the disciplines examined by Academic Analytics, the UB faculty is productive in research and scholarly publication, including books (on average, 49 per year), journal articles (on average, 1,800 per year) and new technology disclosures and patents (on average, 103 and 10 per year, respectively). In all disciplines, faculty are highly cited in professional journals and other literature. UB faculty members have earned national and international recognition for their research and scholarship. Notable awards to faculty include the Nobel Prize, the National Medal of Science, the National Medal of Technology and the Pulitzer Prize. UB faculty have been elected to the American Academy of Arts and Sciences, the Institute of Medicine, the National Academy of Education, the National Academy of Engineering and the National Academy of Science. Currently, 36 UB faculty are recipients of the Chancellor's Award for Excellence in Scholarship and Creative Activities, 58 hold the rank of SUNY Distinguished Professor, and 44 hold the rank of UB Distinguished Professor.

Spotlight on Assessment: Assessing Faculty Productivity According to Strategic Balance

The Office of Institutional Analysis regularly prepares reports¹³⁸ showing faculty teaching and research productivity in comparison to selected AAU peers. This information is used to inform the three-year plan and strategic hiring plan for each decanal unit. From the 2012 report, OIA was able to show that for UB's Department of Biological Sciences, 38 percent of credit-hour production comes from tenured and tenure-track faculty. Among biological sciences departments at selected AAU peers, the average credit-hour production from tenured and tenure-track faculty is 18 percent. Further, OIA included in the report a chart showing total annual research expenditures and credit-hour production, illustrating that, in general in biological sciences, the greatest research expenditures are coming from those faculty members with the lowest rates of credithour production. While not surprising, presenting the information in "black and white" helps units see the current balance of research and teaching among tenured and tenure-track faculty, allowing them to make hiring decisions to promote the achievement of strategic goals.

Faculty distinction also extends to membership in learned societies, serving on commissions or as officers of professional organizations, receiving national grants and research funding, and engaging in fundraising activities. Each year, several UB faculty are recipients of NSF Faculty Early Career Development Awards. UB faculty accounted for approximately \$360.2 million in research expenditures in 2012. Many departments and schools provide venues for showcasing and discussing current research and scholarship through colloquia, seminar series and research symposia. UB faculty research is highlighted in Discovery, the newsletter of the Office of the Vice President for Research and Economic Development. Many departmental, decanal and university newsletters and publications also highlight notable faculty research accomplishments.

Despite these strengths, UB faces the challenges of decreased state support and increased competition for students and external research support. The opportunity given to UB through the increased revenue associated with the NYSUNY 2020 legislation provides a once-in-a-generation opportunity to rejuvenate UB and enhance the impact of its scholarship and education. UB realizes that achieving institutional goals cannot come simply from the marginal increase in revenue, but requires that the faculty rethink how research and education are intertwined, and how the campus engages with the external

community. This creative rethinking process also is necessary to increase access to governmental and other sources for the research support required to sustain much of UB's research in engineering and the physical, social and health sciences. The result is a collaborative planning process fueled by growing faculty participation in multidisciplinary teams to develop programs of distinction and excellence that will drive students and funding to UB, while also producing a continuous outflow of ideas, technologies and superbly educated students.

Public Service and Outreach

Faculty service activities are diverse and typically include committee responsibilities or governance roles at the departmental, decanal and/or university levels, and participation in institutional planning activities. Faculty members also provide leadership and service to their respective professions at the local, national and international levels through peer review of scholarly publications or research proposals and participation in panels and study sections at federal funding agencies. UB faculty have earned recognition for outreach and mentoring, as well as for their professional and public service. Currently, five UB faculty members are recipients of the recently established Chancellor's Award for Excellence in Faculty Service and 18 hold the rank of SUNY Distinguished Service Professor. Faculty also are actively engaged in a variety of academic programs, research projects, internships and collaborative initiatives that support UB's many direct engagements and partnerships with social service, charitable, municipal, regional and business organizations. One of UB's strategic strengths, Civic Engagement and Public Policy, supports faculty who are engaged in research projects with community-organization partners, locally, nationally and internationally.

UB has a strong commitment to community engagement. Faculty members oversee those activities that are part of student education and experiential learning processes. In addition, faculty at UB increasingly are developing engagement activities to pursue their scholarship. For example, faculty from the School of Architecture and Planning, School of Public Health and Health Professions and the Department of Geography work on activities within the local community that focus on the links between sustainability and economic development, local production and distribution of fresh and healthy food, and urban renewal plans.

Faculty Mentoring, Review and Performance Evaluation

Faculty Mentoring Policies

In 2010, then President John B. Simpson approved a campuswide faculty mentoring policy, which provides for mentoring to enhance career opportunities and professional success. ¹³⁹ The program is implemented at the decanal or departmental level and is mandated for all tenure-track and clinical/research faculty and tenured associate professors within the first five years after tenure is granted. All faculty are assigned a mentor or mentoring committee. In addition, schools and departments offer a variety of mentoring programs tailored to the needs of their discipline and faculty members. In UB's

COACHE surveys from 2010 and 2012, faculty reported a high degree of satisfaction with both formal and informal mentoring at UB across the various disciplines.¹⁴⁰

Faculty Performance

Based on the annual report of faculty activities and accomplishments and in consultation with the faculty member, the department chair ascertains whether the performance of the faculty member is consistent with departmental guidelines and with the current needs of the unit. The basic considerations in assessing the performance of professorial faculty are mastery of subject matter, effectiveness in teaching, scholarly accomplishment, effectiveness of university service, and potential for continued professional growth. The decanal units evaluate teaching performance through student-learning assessment techniques and the administration of teaching/course evaluations each semester. Faculty performance also is reviewed in conjunction with merit-based discretionary salary increases, in which department chairs review the recent performance of all faculty in their departments and recommend to the dean which faculty should receive discretionary increases.

Faculty Promotion and Tenure

All full-time, nontenured faculty (tenure- or nontenure-track) have term appointments not to exceed three years, which is the maximum permitted by SUNY Board of Trustees policy. A possible sequence for tenure-track faculty is an initial two-year appointment, followed by a three-year appointment, followed by a two-year appointment with tenure review occurring during the sixth year. Reappointment reviews typically are conducted a year prior to the expiration of the current contract. Nontenure-track faculty generally receive two- or three-year appointments and are considered for renewal one year before expiration of their contracts. Reappointments are made following a performance review by the department chair and department faculty. For tenure-track faculty, the primary consideration is successful progress toward tenure; for nontenure-track faculty, the primary criterion is typically evidence of excellence in teaching.

Policies regarding promotion and tenure are delineated by the SUNY Board of Trustees.¹⁴¹ The university disseminates policies¹⁴² and practices regarding faculty affairs, including guidelines¹⁴³ and criteria relating to the promotion and tenure process, grievance procedures, etc. within the Faculty/Staff Handbook.⁶⁶ Policies related to the terms and conditions of employment and benefits are incorporated within a collective bargaining agreement between the State of New York and the United University Professions (UUP). A new contract agreement was approved by the membership in the summer of 2013.

Although promotion and tenure standards may differ across disciplines, all schools and programs follow universitywide guidelines for preparing promotion and tenure applications. At a minimum, these guidelines require an assessment of faculty performance that includes teaching, research and service. However, at all levels of review, the standards of the discipline guide the evaluation and assessment of the candidate, and hence there is considerable reliance on peer evaluation. The university recognizes collaborative scholarly efforts and cross-disciplinary activities. The prescribed timeline for tenure-track faculty hired as assistant professors calls for a promotion and tenure review by the sixth year, as established by SUNY. Well-defined guidelines have been established for tenure-clock extension requests.

The candidate's dossier for promotion and tenure includes a vita; personal statements from the candidate with regard to research, teaching and service; publications or examples of scholarly accomplishment; evidence of teaching performance; and both external and internal letters of evaluation. A minimum of four external, disinterested peer-review letters is required. The external letters are typically from accomplished scholars in the candidate's field, typically full professors at major research universities (preferably AAU institutions). Promotion and tenure cases are discussed and voted upon by the tenured faculty in the candidate's department. The department chair sends the package, together with a letter summarizing the case, delineating the expectations and standards of the discipline and providing an explanation of the faculty vote and his or her own recommendation to the dean. Typically, the case is then reviewed and voted upon by a schoolwide committee. The committee provides its recommendation to the dean. Deans review each recommendation for promotion/tenure and will consider how effectively the individual has met his or her academic duties and responsibilities and whether the individual has achieved scholarly and pedagogical excellence. The dean provides his or her own recommendation, along with the package, to the vice provost for faculty affairs.

The package then is reviewed thoroughly by the President's Review Board (PRB), comprised of a chair, who must be a senior professor or librarian (nonvoting), and nine tenured faculty holding the rank of professor or librarian (voting) drawn from multiple schools and disciplines. The PRB discusses and independently reviews the candidate's comprehensive dossier and conducts a secret vote on the case. The chair of the PRB writes a memo to the provost communicating the vote and recommendation of the PRB. The PRB thus serves as the faculty advisory body to the provost, and to the president, on matters of promotion and tenure. The provost receives the recommendation of the PRB and conducts his or her own review of the record and makes a recommendation to the president, who makes the final decision.

In the event of a negative recommendation at any level, the candidate has the opportunity for an advocacy meeting with the vice provost for faculty affairs. Through this process, the candidate may respond in writing to negative concerns, but the advocacy meeting itself involves only the vice provost for faculty affairs, the chair of the PRB, the dean, the department chair and the candidate's advocate to insure a full, frank and confidential discussion of the case. The vice provost for faculty affairs communicates a summary of the advocacy meeting along with his or her own review and recommendation to the provost. Under Article 33 of the UUP contract, the candidate also has the right to request a review by the SUNY chancellor if the departmental recommendation was positive, but the president's recommendation was negative. This is a very detailed and rarely invoked process. Each spring, the chair of the PRB and the vice provost for faculty affairs host an annual meeting open to all faculty and staff to discuss the criteria and procedures used by the PRB in the promotion and tenure-review process. Periodically, the vice provost for faculty affairs conducts similar workshops with particular decanal or departmental units or with pre-tenure faculty upon request.

Evidence

Examples of evidence that the University at Buffalo meets Middle States Standard 10 are summarized below:

- The university recruits appropriately prepared and qualified faculty through national searches, and 95 percent of full-time faculty hold a doctorate or terminal degree in their field.
- Standards for ensuring faculty quality are embedded in the university policies and procedures for recruitment, appointment, reappointment, promotion, tenure and review of faculty. These policies and procedures are framed within the "Policies of the SUNY Board of Trustees" and the "Agreement Between the State University of New York and the United University Professions", available online in the Faculty/Staff Handbook and on the website of the Office of Faculty Affairs.
- The university provides appropriate institutional support for faculty development through the Office of Faculty Affairs, Office of the Vice President for Research and Economic Development, Teaching & Learning Center, the Office of Organizational Development & Training, and individual decanal units and departments. UB's instructional, research and service programs are developed, supported and monitored by qualified professionals dedicated to UB's mission.
- The university adheres to the principles of academic freedom, intellectual freedom, freedom of
 expression and diversity of opinion. The university endorses the rights established by the SUNY
 Board of Trustees relating to academic freedom.
- The university assesses faculty quality through comprehensive program reviews, annual reports and course evaluations, and peer review from both external and internal experts as part of a thorough promotion and tenure review process.
- The university disseminates policies and procedures regarding faculty through the Office of Faculty Affairs and the Faculty Senate.
- The university recognizes faculty achievements through Chancellor's and university awards
 for excellence in teaching, faculty service, and scholarship and creative activity. In addition,
 distinguished faculty ranks for teaching, research, and service have been established by SUNY
 and UB.
- The university has well-established criteria for the appointment, supervision and review of parttime and adjunct faculty.
- The university has established a campuswide faculty mentoring program.
- The university maintains data on faculty performance and regularly assesses and analyzes data on scholarly and research activity for reporting and decision making.
- The university utilizes a variety of survey instruments to assess faculty needs, perceptions, satisfaction and attitudes.

Future Directions

Building on our current foundation, UB will continue developing programs that enhance the capacity of faculty to assess teaching and learning outcomes. A new Office of Educational Innovation and Assessment has been created under the direction of the senior vice provost for academic affairs to oversee and coordinate these campus wide activities. This is discussed in greater detail in Chapter 4.

UB is committed to developing programs that sustain and grow capacity to enhance the impact of faculty scholarship, engagement and economic development. To ensure that UB continues to refine and execute strategies for sustaining excellence, reward systems currently are being developed that foster alignment of faculty and staff activity with institutional goals.

Chapter **four**

Educating for Excellence: Instructional Programs

Addresses Standards 11, 12, 13 and 14

Standard 11 - Educational Offerings

The institution's educational offerings display academic content, rigor, and coherence that are appropriate to its higher education mission. The institution identifies student learning goals and objectives, including knowledge and skills, for its educational offerings.

Standard 12 - General Education

The institution's curricula are designed so that students acquire and demonstrate college-level proficiency in general education and essential skills, including at least oral and written communication, scientific and quantitative reasoning, critical analysis and reasoning, and technological competency.

Standard 13 - Related Educational Activities

The institution's programs or activities that are characterized by particular content, focus, location, mode of delivery, or sponsorship meet appropriate standards.

Standard 14 Assessment of Student Learning

Assessment of student learning demonstrates that, at graduation, or other appropriate points, the institution's students have knowledge, skills, and competencies consistent with institutional and appropriate higher education goals.



Academic Programs at UB

In line with UB's mission, academic programs¹⁴⁴ are designed to encourage academic excellence and provide a distinctive and transformative educational experience. This mission provides three guiding principles: all programs will encourage the development of research skills and an understanding of the importance of research for the advancement of knowledge; incorporate a global perspective; and advance community engagement. UB students, regardless of their level, are provided with extensive opportunities to attain these goals through formal degree programs and associated curricular and co-curricular activities.

Undergraduate Education at UB

In support of the university's mission, undergraduate education at UB offers exceptional programs taught by leading faculty. From general education to specialization in the major, the aim of undergraduate education is to provide a distinctive and transformative educational experience through excellent instruction and opportunities that provide students with the knowledge, skills and appetite for the lifelong learning necessary to become judicious and productive citizens, capable of rising to the challenges of tomorrow.

Undergraduate education is guided through the division of Undergraduate Education within the Office of Academic Affairs. Offerings draw from an extraordinary range of academic opportunities offering bachelor's degrees in arts, sciences and fine arts, with 100 active degree programs across the disciplines, plus numerous concentrations, minors, certificates and flexible combined degrees that allow students to tailor their programs. The College of Arts and Sciences offers a full complement of traditional arts and sciences programs, while nearly all the professional schools offer undergraduate programs of study. Among these are the School of Architecture and Planning, School of Engineering and Applied Sciences, School of Management, School of Medicine and Biomedical Sciences, School of Nursing, School of Pharmacy and Pharmaceutical Sciences, and School of Public Health and Health Professions. By combining liberal arts with extensive professional programs, UB offers a full educational spectrum that celebrates the value of creative expression and intellectual exploration while helping students meet the specific demands of the twenty-first century workforce.

Since the Middle States decennial review, UB has engaged in an ongoing discussion of the components and goals of undergraduate education under the auspices of the UB 2020 Strategic Plan. Out of this discussion, values have been identified that define certain key traits of a UB graduate, irrespective of major. As most recently articulated in the Realizing UB 2020 document, these include the cultivation of deep domain knowledge and critical thinking skills; excellent communication, information and digital literacy skills; the ability for interpersonal collaboration to solve complex problems; an appreciation for the diversity of many cultures, peoples, and experiences across the world; the personal capacity for resilience and perseverance; a desire to engage in community affairs; the skill to navigate the world; and lifelong pride in and engagement with UB.

Through its identity as a comprehensive research institution with global reach, UB endeavors to provide its undergraduates with a quality education to ensure development of these traits through the richness and breadth of its expertise, which afford many opportunities for distinctive programs, excellent classes, undergraduate research, global experiences and experiential learning.

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Undergraduate Programs

In line with UB's mission of academic excellence and groundbreaking research, the specific focus since the last decennial review has been on assuring excellent academic programs and a pervasive opportunity for research at the undergraduate level, including an emphasis on faculty mentoring in the areas of creative activity and scholarship, opportunities for significant cross-cultural learning and experiences, and an infrastructure that affords students creative options for community or global engagement. To ensure that students of many different backgrounds, interests and abilities can find a fitting avenue to pursue these goals, initiatives selected for implementation or redesign have included the University Honors College, the Undergraduate Academies, Residential Learning Communities, the Center for Undergraduate Research and Creative Activities, University at Buffalo First-Year Experience — UB 101, the Center for Student Leadership and Community Engagement, and Study Abroad.

University Honors College

The University Honors College (UHC), 146 formerly the Honors Program, was reorganized under

Spotlight on Assessment: UB 101 and the Undergraduate Academies

Systematic assessment plans have been developed for both UB 101 and the Undergraduate Academies to determine the effectiveness of each program in achieving stated goals and to suggest program aspects that might be targeted for improvement.¹⁴⁹ For both programs, overall student success at UB, specifically grades, retention and graduation rates, are key metrics for determining success.

The UB 101 program is assessed regularly, based on feedback from enrolled students, volunteer instructors and institutional data. Students rate the effectiveness of UB 101 highly, indicating that it is a valuable experience (more than 90 percent of respondents) and that they would recommend it to other first-year students (more than 87 percent of respondents). Successful completion of UB 101 also is related to retention and time to degree. Students who complete UB 101 are slightly more likely to either be retained or graduate by the fourth year as compared to the entire undergraduate population (69 percent compared to 66 percent).

With regard to the academies, it has been demonstrated that participating students achieve greater overall academic success at UB. Despite entering UB with an academic profile similar to the general UB population, retention to the second year is nearly 100 percent, and earned GPAs are higher than peers who are not involved. These students also are more likely to pursue subsequent campus engagement as resident advisors and/or academic assistants.

new administrative and academic leadership and moved into a newly designed space on the first floor of the Oscar A. Silverman Library. In 2006, and again in 2010, curricular requirements were revised and strengthened with greater reliance on more rigorous credit-based components. Then in 2011, a self-study and external review were conducted to assess the overall program. 147 The findings have guided significant changes in academic leadership, admissions, curricular enhancements, alumni relations and expanded diversity initiatives. 148 Emphasizing scholarship, a global environment and experiential learning, the college is aligned closely with UB's undergraduate principles through enhanced opportunities for very gifted students. Enrollment currently stands at 1,182 students, as each year approximately 325 new freshmen and 60-90 upperclass Advanced Honors students join the college. The academic preparation of incoming students has been impressively consistent with median combined SAT scores ranging from 1320 to 1420 and high school GPAs at or above 97. Honors students are offered a range of seminars capped at 24 participants that are exclusive to them and taught by faculty hand-picked from across campus, while the mandatory Freshman Honors Colloquium is taught in 14 sections and led by upper-class honors student teaching assistants.

Undergraduate Academies

Seeking to provide a learning laboratory supporting the three principles of a distinctive experience, the Undergraduate Academies were established as vibrant living-learning communities focused on Research Exploration, Global Perspectives and Civic Engagement as the means by which students could form connections with faculty members and students with similar interests. Expanding the opportunities for students and consistent with the traits of a UB graduate as outlined in the Realizing UB 2020 draft, two new academies — Entrepreneurship and Sustainability — were created in 2012 and 2013. Offerings include 20-25 seminars per semester, residential communities, service learning opportunities, campus activities and a physical location that serves as a hub for these programs and students. For the 2011-2012 academic year, 175 students were enrolled in seminars and 674 were otherwise affiliated with the academies as members. To date, a total of 2,000 students have participated in various academies experiences.

Another opportunity for all students (not just those who participate in the academies) is the Discovery Seminars program. These one-credit topical courses offered by faculty of all ranks provide a means to gain in-depth understanding of disciplines and a closer connection to faculty. To date, 3,623 students have enrolled in seminars. While entirely elective, beginning in Fall 2012, participation in the Undergraduate Academies' Discovery Seminars is now especially encouraged for undecided freshmen to offer an early mentoring experience with an accomplished faculty member.

With several years of successful programs and courses, it is UB's intention to expand undergraduate participation in the range of academies' programs. As of Fall 2013, new freshmen enrollment in the academies reached 300, the largest cohort ever, reflecting the keen and expanding interest in these extensive and vibrant learning opportunities.

Center for Undergraduate Research and Creative Activities

To further the goal of ensuring that undergraduates pursue mentored research and gain an understanding of the research process, the Center for Undergraduate Research and Creative Activities (CURCA) was created in 2005 as a nexus for students from all majors who are interested in finding challenging research and creative opportunities that match their academic interests and career goals. While many major programs require or encourage undergraduate research activity, CURCA serves as a resource for students and research mentors who may have specific ideas for projects, yet need assistance in forging mentor/student partnerships or overcoming other startup issues. Each semester, nearly 500 students are affiliated with the center.

CURCA offers support through workshops and coaching, and also administers an award program, through which eligible students can receive up to \$500 per semester to support their research and/or creative activities, as well as a poster session at the annual Celebration of Academic Excellence. During the celebration event, students and their mentors are recognized for their research and creative achievements. In Spring 2012, 120 students, 88 of whom were recipients of CURCA funding, with the assistance of some 120 faculty research mentors, prepared and presented their research posters at the event. 151

University Experience Seminar

The University Experience Seminar $(UB\ 101)^{152}$ is designed to provide freshmen with a guide for their transition to the university, and help prepare students to meet potential challenges that might impede their

academic success or full participation in educational pursuits, including research, global or engagement activities. The one-credit, small group seminar for freshmen offers an immediate connection with other freshmen (some sections are aligned with majors, student interests or residential living) through a small, interactive classroom environment focused on providing resources, fostering important relationships and helping students to understand their responsibilities and privileges within the university community.

Spotlight on Assessment: Closing the Loop in the Center for Student Leadership and Community Engagement (CSLCE)

Administrators of the CSLCE engage in regular assessment activities, not only to determine needs for programs, but also to determine effectiveness in achieving stated goals. Recent enhancements within CSLCE in response to assessment efforts include the following:

- Doubling the number of "Saturday of Service" opportunities for students (two per month), resulting in a 90 percent increase in participation;
- Documented student volunteer hours increased 89 percent, resulting in more than 39,000 hours of service contributed by UB students;
- A 40 percent increase in enrollment in the Torch Leadership Certificate Program;
- All participants in Leadership House (28 per year), a living-learning community for first-year students, persist to their sophomore year, and nearly all participants (96 percent) report greater campus engagement as a result of their participation;
- Alternative Break Programs expanded to include five intensive service experiences per year; and
- Multiple for-credit offerings to complement the programs and services of CSLCE include UBE 102
 Dynamics of Leadership, UBE 110 - Introduction to Peer Education and UBE 496 - Internship/ Practicum: Leadership Service Education.

A faculty or staff member and an undergraduate, upper-class peer mentor collaboratively teach the seminars. Each section of the course meets once a week for 50 minutes and is graded pass/fail. All sections of UB 101 cover a common set of eight core topics: time management, academic success skills, planning for the future, registering for classes and meeting with an academic advisor, personal wellness, alcohol and other drug education, appreciating cultural diversity and values exploration. The number of sections of UB 101 offered each fall continues to grow, with 66 sections in Fall 2011, 74 in Fall 2012, and 78 in Fall 2013. This, or other recognized freshman year seminars, is required of all Finish in 4 students. ¹⁵³

Center for Student Leadership and Community Engagement

The Center for Student Leadership and Community Engagement (CSLCE)¹⁵⁴ supports the community engagement principle by providing learning experiences that promote students' understanding and appreciation of self, others and community, while exploring a life of citizenship. Through its programs and services, designed to foster the development of leadership skills, students cultivate a personal philosophy to make a positive change within a group, community or global society.

Residential Learning Communities

To support students living on campus in their pursuit of the wider undergraduate mission, Residential Learning Communities¹⁵⁵ provide a bridge between academics, campus life and extracurricular interests. Students who participate in the communities perform better academically, due in large part to a

built-in support structure of peers living in close proximity and sharing academic and social interests. Each community employs a dedicated faculty member or advisor to provide direction and support. A flexible approach to adding residential learning communities allows new proposals to be implemented easily.

Graduate Education at UB

In support of the university's mission, graduate education seeks to: (1) promote excellence in graduate programs and in scholarly and creative activity; (2) promote interdisciplinary research and education; and (3) improve and preserve the academic environment that fosters graduate education and research.

The Graduate School, 156 through its constituent divisions, provides coordination, leadership and support to graduate education at UB through a broad range of services that encompass: (1) establishment and monitoring of admission criteria and standards; (2) student financial support; (3) student academic services to promote retention and graduation; (4) faculty governance and the functional arm of the University's Graduate Faculty; (5) curriculum/program development, approval and advocacy; (6) academic program review/assessment; (7) postdoctoral scholar affairs; and (8) service as a principal institutional liaison with various external agencies including regulatory authorities (e.g., SUNY System Administration and the New York State Education Department) and national organizations (e.g., the Council of Graduate Schools, the Northeastern Association of Graduate Schools, the Association of Public and Land-Grant Universities, the National Association of Graduate Admissions Professionals, the United States Electronic Thesis and Dissertation Association, etc.).

Breadth of Programs

UB's comprehensive offerings for graduate study include the full complement of programs in the College of Arts and Sciences, as well as graduate and professional degrees in 11 professional schools and Roswell Park Cancer Institute. ¹⁵⁷ There are 205 master degree programs, 84 doctoral programs, and 10 professional degree programs. Degrees granted include the MA, MS, EdM, MArch, MSW, MFA, MPH, MBA, MLS, LLM, JD, PhD, PharmD, AuD, MD, DPT, EdD, DDS, MM, ME, MUP and DNP, and numerous advanced certificates. In addition, there are 36 offerings that combine undergraduate and graduate or professional degrees, such as a BS/MS, BS/MBA,etc. ¹⁵⁸

Postdoctoral Fellows

There are approximately 300 postdoctoral scholars at UB, with approximately 100 at Roswell Park Cancer Institute. Postdoctoral scholars conduct research primarily with UB faculty. The Office of Postdoctoral Scholars (OPS)¹⁵⁹ provides a formal communication link among postdoctoral scholars, faculty and university administration. The office provides assistance for new postdoctoral scholars, including information for new employees at UB, and information regarding off-campus housing and life in Buffalo. All scholars are offered enhanced training opportunities through targeted seminars and research symposia. Special events, services and social functions also are hosted by OPS, and support and guidance for faculty who employ postdoctoral scholars is provided. The office maintains membership in the National Postdoctoral Association (NPA) and all UB postdoctoral scholars and faculty members may apply for a free affiliate membership.

Graduate Medical Education

The School of Medicine and Biomedical Sciences (SMBMS) sponsors all Accreditation Council for Graduate Medical Education (ACGME) accredited training for approximately 780 residents and fellows in Western New York. The designated institutional official (DIO), chairs the Graduate Medical Education Committee, and reports directly to the vice president for health sciences and dean of the SMBMS. Since UB neither owns nor operates a hospital, the institution relies on stable partnerships with hospital affiliates to deliver clinical training under the supervision of UB faculty. UB affiliated hospitals include: Kaleida Health and the Catholic Health System (two private not-for-profit health systems), the Veterans Administration Western New York Healthcare System (VAWNYHS), the Roswell Park Cancer Institute, the Erie County Medical Center Corporation (ECMCC), and Olean General Hospital. A

single Graduate Medical Education Committee (GMEC) with representation from clinical leadership in each of these major affiliates, department chairs, along with residency program leadership and elected resident representatives, oversees Graduate Medical Education (GME). SMBMS collaborates with UB's schools of Public Health and Health Professions, Nursing, Dental Medicine, Pharmacy, Pharmaceutical Sciences and Law on annual resident orientation. The Clinical and Translational Research Center, established in 2011, contributes curricula and research opportunities for residents and faculty.

Distance Education at UB

Development of courses and programs offered via distance learning is a responsibility of the decanal units, and they work to offer courses to serve the needs of their students and include online courses for academic credit and certain programs at both the undergraduate and graduate level. In most cases, distance-learning courses and programs are online versions of existing, traditional courses and programs, and they meet the same regulatory and rigorous academic standards as their classroom counterparts. The Faculty Senate has articulated a strong statement of requirements for such programs. ¹⁶⁰ Decanal units determine enrollment requirements and control the scheduling of online courses. These programs are supported financially through allocation of funds to the unit from the Office of the Provost. Unique noncredit distance certificate programs are dependent on self-generated revenue.

New courses and programs are developed under faculty and departmental supervision consistent with UB's instructional mission and goals. The dean of undergraduate education within the Office of Academic Affairs oversees all course and curriculum development for undergraduates to ensure compliance with campus, SUNY and New York State Education Department (SED) standards. The vice provost for graduate education and dean of the Graduate School, also within the Office of Academic Affairs, oversees graduate courses and curricula. SED requires the university to submit an application to add distance-education format to any registered graduate and undergraduate programs. The submission and review process requires statements addressing institutional commitment, learner support, learning design, outcomes and assessment, and program evaluation.

Distance learning at UB most commonly serves as an academic outreach service to students who may find it difficult to enroll in traditional seated courses. Students may be working professionals, those who are out of state or out of country, and those who are looking for more convenient course times. At this time, the majority of students who participate in distance learning reside in the Western New York area.

Offshore Programs at the University at Buffalo

UB maintains institutional affiliations with 83 universities worldwide and delivers its own degree programs in two foreign countries, Singapore (Singapore Institute of Management or SIM)¹⁶¹ and India (Amrita University). In Fall 2013, the Singapore program enrolled 1,511 students in six undergraduate degrees in business, communication, economics, psychology, sociology and international trade, and 43 students in the graduate Executive MBA program. The two graduate programs in Management of IT services and Embedded Systems at Amrita University in India enrolled 105 students in Fall

2013. During calendar year 2012, 114 UB faculty provided instruction in the Singapore program. A growing number of Buffalo-based students are going to these locations for a semester of study abroad, including 44 to Singapore in 2012. In reverse, 100 Singapore students came to Buffalo to study. UB's internationalization agenda, a strategic priority for the university, 162 critically depends on overseas programs to foster the internationalization of faculty, students and curricula. In this way, international programs vitally support UB's broader educational goals. In fact, overseas programs remain the single most important opportunity for UB faculty and students to acquire critical international experiences through study, research, teaching and service abroad. The vice provost for international education further assures the quality of these programs, with a program of assessment.

University Libraries Supporting Academic Excellence

The University Libraries¹⁶³ provide a strong foundation for the research and teaching missions of all UB academic programs. The primary role of the libraries is to support and collaborate with faculty and teaching assistants from all academic departments on campus, as well as major offices that serve undergraduates. Each department and program has an assigned liaison (the "subject librarian") who serves to address the research needs of affiliated faculty and students.¹⁶⁴ Each liaison is responsible for addressing department/program needs and requests, including information literacy initiatives, collection development strategies and implementation of new information technologies.

The University Libraries strive to develop collections that are relevant to the research needs of faculty and students and as accessible as possible. The UB Libraries' collections are the largest within SUNY, and the extensive electronic collections are used heavily by faculty and students. In 2010-2011, there were more than six million logins to the libraries' electronic resources, more than 10 million searches, and more than four million full-text article downloads. The subject librarians consult with faculty to determine which journal titles are no longer needed and which should be added. The libraries also conduct annual use studies of electronic journals and databases to ensure the most effective use of resources. The subject librarians also conduct periodic citation studies of faculty research to analyze their needs.

The libraries continually are expanding or altering services to meet the needs of faculty and students in an ever-changing technical environment. For example:

- For all print material, the libraries offer a service to faculty called Delivery+¹⁶⁵ through which scanned journal articles and book chapters are delivered within 24 hours of a request. This allows faculty and students to spend more time on their research and less time locating materials.
- The libraries recently joined RAPIDILL, which provides expedited interlibrary loans. This ensures faculty and students ready access to materials that the UB Libraries do not own.
- The libraries are moving rapidly toward an on-demand approach to collection building by automatically evaluating interlibrary loan requests for purchase based on cost/use ratios.
- The libraries conducted a highly successful e-book on-demand pilot project in 2010-2011, mapping selections to curricula with high circulation statistics, such as world civilizations, to enhance accessibility to in-demand items.

- For specific groups of students, the libraries have developed popular collections and services that create a welcoming culture. Examples include the international leisure reading collection with best-selling fiction and nonfiction in Chinese, Japanese, Korean and Spanish.
- The libraries have developed a digital institutional repository representing a public collection
 of full-text articles, technical reports, audio MP3 files, images and video clips produced by UB
 faculty and students to showcase their scholarship.¹⁶⁶
- The libraries subscribed to Summon, a search tool encompassing both the library catalog and the majority of online database subscriptions. Summon makes it possible for faculty and students to locate materials via a single search interface. The libraries continue to solicit feedback on this new tool to customize it to best serve the needs of UB faculty and students.
- UBdigit¹⁶⁷ provides centralized access to UB's diverse inventory of legacy and teaching collections for purposes of instruction, scholarship and archival preservation.
- In 2012-2013, the UB Libraries implemented three e-textbook projects that provided more than 3,650 e-textbooks for more than 1,500 students across multiple disciplines. In addition, the UB Libraries actively participate in open educational resources initiatives, such as SUNY Open Textbooks.¹⁶⁸

Promoting Information Literacy and Technological Competency through Collaboration

In addition to providing support for research endeavors, the libraries also provide instructional support. Services provided include in-class information-literacy instruction, ¹⁶⁹ creation of course- specific online tutorials and guides, management of faculty-requested course reserve materials and integration of information resources into Blackboard, the course-management system. UB librarians offer more than 40 workshops per year for faculty through the Teaching & Learning Center and support faculty who deliver online and distance learning through the creation of online videos and delivery of virtual reference services.

To reach a wider audience of students, the UB libraries have moved to an "embedded librarian" model, in which librarians move to where the students are — residence halls, Career Services, academic departments, clinics, in the libraries in the evenings and on weekends, and online 24/7. At UB, the libraries have a long tradition of providing information-literacy instruction — instruction in how to discover, select, analyze and synthesize high-quality information in the most efficient manner, as well as how to use that information effectively and ethically. UB subject librarians teach more than 700 individual information literacy classes per year. In 2010-2011, more than 23,000 students participated in librarian-taught instruction. Each semester, UB librarians offer a two-credit course, ULC 257 — Introduction to Library Research Methods, that enrolls approximately 50 students each year. In addition, all UB first-year students must complete the Library Skills Workbook.¹⁷⁰

Mission-Driven and Authentic Opportunities to Promote Student Learning Outcomes

The Realizing UB 2020 report provides a working roadmap for achieving the desired traits and learning outcomes of UB graduates, and the process has allowed UB to consider its academic programs and how they align with the institutional mission.⁹¹ UB's longstanding objective that academic program offerings provide a transformative educational experience including an emphasis on participation in groundbreaking research, the development of a global perspective, and community engagement and outreach — continues to be a focus of key campus advisory groups and academic units. For example, in parallel with the UB 2020 process, in May 2012 the Teaching and Learning Committee of the Faculty Senate14 recommended university-wide learning outcomes that build on those originally articulated in the interim UB 2020 report.⁷⁵ These currently are under review by the Faculty Senate Executive Committee for further consideration and alignment with those recommended in the Realizing UB 2020 report. Simultaneously, a Realizing UB 2020 University Task Force on Curriculum and Assessment, comprised of deans, vice provosts and senior faculty, is reviewing and making priority-implementation recommendations for

National Leaders in Graduate and Professional Education

Several of UB's graduate and professional programs are highly ranked, according to U.S. News and World Report. Programs in the top quartile:

- Aerospace Engineering (2013, 18th percentile)
- Audiology (2012, 22nd percentile)
- Chemical Engineering (2013, 22nd percentile)
- Civil Engineering (2013, 12th percentile)
- Clinical Psychology (2012, 17th percentile)
- Critical Theory (2012, 6th percentile)
 Environmental Engineering (2013, 21st percentile)
- Industrial Engineering (2013, 13th percentile)
- Nurse Anesthesia (2012, 16th percentile)
- Nursing (2012, 17th percentile)
- Occupational Therapy (2012, 23rd percentile)
- Online Graduate Education Programs (2013, 22nd percentile)
- Pharmacy (2012, 14th percentile)
- Physical Therapy (2012, 25th percentile)
- Psychology (2014, 17th percentile)
- Rehabilitation Counseling (2012, 23rd percentile)
- Social Work (2013, 13th percentile)
- Speech-Language Pathology (2013, 10th percentile)

the curricular components within the Realizing UB 2020 report. Finally, a provost/Faculty Senate appointed committee of two dozen faculty members is exploring new approaches for general education that align to best practices and are consistent with the articulated UB 2020 goals and characteristics of a UB graduate. Careful attention is being paid to how these traits will define the learning outcomes that appropriately map to the general-education learning outcomes of SUNY, as well as those expected by MSCHE.

Academic Offerings to Support UB's Learning Principles

Development of Research Skills and Participation in Groundbreaking Research

Many opportunities are provided that allow students to become involved in the research activities of faculty members. For example, to better track the student research goals defined in UB 2020, the university developed a standard Supervised Undergraduate Research course in 2006, which bears course number 498, with the course prefix indicating the disciplinary area in which the research is being conducted. This experience fosters research-skills development, depth of study in the discipline and an exceptional mentoring opportunity. For some academic programs, a capstone course encompasses research or creative activity, for which a course numbered 494 was created. Other types of student-developed investigations in discipline-based activity use Independent Study under a 499 course number. Table 4.1 below indicates the fairly sustained year-to-year participation by students in these endeavors.

Table 4.1									
Total Fall/Spring Enrollments in Experiential Learning Courses									
	2009-10	2010-11	2011-12	2012-13					
Capstone (Course Number 494)	327	343	321	379					
Internship (Course Number 496)	1,136	1,152	1,219	1,191					
Research (Course Number 498)	791	755	855	888					
Independent Study (Course Number 499)	958	942	955	813					

UB also created or enhanced significant programs to support student research activity. As described earlier, since our last decennial review, two new learning communities, the Undergraduate Academies⁸⁰ and the Center for Undergraduate Research and Creative Activities (CURCA)⁸¹ were created to focus on this type of opportunity. The Undergraduate Academies sponsor the Research Exploration Academy in which students are led by a faculty mentor to develop research skills and prepare themselves for completion of an independent research project. This participation fosters critical and constructive thinking skills and inculcates an understanding of research ethics. CURCA affords many opportunities for undergraduates, including identifying research opportunities, pairing them with a faculty mentor and potentially supporting their efforts with a research stipend. CURCA is open to students from all majors and assists students in developing relationships with faculty mentors in their field of interest. Participating students complete impressive experiences that can be highlighted on their resumes and learn lessons that last a lifetime. Some of these research experiences may provide course credit toward a student's degree program.

Another UB learning community, Cora P. Maloney College (CPMC),¹⁷¹ provides an array of research opportunities for students enrolled in its programs. These students are from unique backgrounds, many in underrepresented categories. The research opportunities, which enroll up to 90 students a year, are in UB's Science, Technology, Engineering and Mathematics (UB-STEM) programs, including the Louis Stokes Alliance for Minority Participation Program (LSAMP), UB's Bridge to the Doctorate and the National Science Foundation (NSF) Scholarships in Science, Technology, Engineering and Mathematics (S-STEM); the Collegiate Science, Technology Entry Program (CSTEP); and the U.S. Department of Education Federal TRIO Ronald E. McNair Post-baccalaureate Achievement Program, which is the host for a UB-sponsored national annual undergraduate research conference attended by more than 500 participants and attracting more than 50 graduate-school recruiters. This conference is one of the largest of its kind in the country, and it also facilitates efforts by UB's graduate enrollment-management office to enroll a diverse graduate student population, as described in Chapter 5.

In the graduate arena, most students become involved in faculty research at some point during their degree program. Further, the majority of graduate programs require students to complete an independent research project that contributes new knowledge to the discipline. In addition, research assistantships are available to many graduate and professional students, providing opportunities to earn money, and potentially a tuition waiver, while participating in a faculty member's research project. Faculty members with research funding also employ students as research assistants using grant funding, and scientists at the Research Institute on Addictions frequently hire students in the social and health sciences as research assistants and technicians. These paid positions allow students to gain experience

conducting research projects, including such activities as running experimental protocols, administering telephone surveys and engaging in research-participant interviewing.

Development of a Global Perspective

An emphasis on a global perspective is woven throughout many degree programs, general education, course work, and research activity of UB students. Traditional degree programs with an international focus include: International Studies (Social Sciences Interdisciplinary); History; Classics; Geography; International Business and World Trade; Asian Studies; Romance Languages and Literatures; Linguistics; Transnational Studies (including American Studies, African and African-American Studies, Global Gender Studies, Polish Studies, Caribbean Studies and Canadian Studies); and Political Science. In addition, UB's General Education Program (discussed more fully later in this chapter) has been designed to promote a global perspective. Aligned with SUNY General Education Requirements, UB's program requires greater depth and unique courses designed by UB faculty. The UB General Education Program requirements include:

- Foreign Language: For most undergraduates, foreign language courses or demonstrated
 proficiency are required. The languages regularly taught at UB are Arabic, American Sign
 Language, French, German, Modern Greek, Ancient Greek, Hindi/Urdu, Italian, Japanese,
 Korean, Latin, Mandarin, Polish, Portuguese, Russian and Spanish. Students who want to major
 in a language may choose Spanish, German, French and Italian, and there are minors in most of
 the other languages.
- World Civilizations: These courses provide an in-depth examination of worldwide history and cultures.
- American Pluralism: To ensure that students understand the American experience, the many cultures of American society and its increasingly international character, the American Pluralism course examines multiculturalism in the United States, exploring gender, religion, race, ethnicity and class. Students also may meet this requirement by completing a course in United States history.

The Undergraduate Academies sponsor the Global Perspectives Academy for students interested in developing into global citizens. Not only do participating students gain a greater awareness of international affairs, but they also are encouraged to explore the global challenges of the 21st century. This academy facilitates interaction with people from around the globe, and participating students are encouraged to enroll in a learning experience outside of the United States. Also under the Academies auspices, new in Fall 2013, is the Global Scholars Program, which helps students develop a portfolio of international experiences, both curricular and co-curricular, which will be added to their transcript as a permanent and official notation with their degree award. 172

Combining research and global issues, undergraduate and graduate students also have opportunities to conduct research with an international focus. For example, eligible undergraduates may utilize funding received from CURCA or the University Honors College's Research and Creative Activities Fund or International Study Abroad scholarships to support international research activity. In addition, many graduate students travel abroad to complete internship and/or field requirements or to conduct their dissertation research. Finally, a number of specific academic programs include the opportunity for student travel abroad with faculty members to complete course requirements; these include the Singapore Program, the London Program (Sociology), and Caribbean Studies MA.

Study abroad¹⁷³ experiences at UB are strongly encouraged and provide the vehicle for many students to gain a greater sense of the global community and perspective. At UB, 11 percent of undergraduates do so, which is more than eight times the national average of 1.3%. UB students may participate in three broad categories of study abroad programs:

- Direct enrollment by individual students at one of UB's exchange partner institutions overseas.
- Programs developed and directed by UB faculty who accompany and supervise a group of students overseas. In some cases, faculty-led programs are conducted at an exchange partner campus.
- Enrollment is possible in one of more than 600 study abroad programs offered through the SUNY Study Abroad Consortium, which includes nearly half of all SUNY campuses.

Study abroad experiences may range from a couple of weeks to a full year. The study abroad office assists students with funding and logistics, and provides long-distance support. Participation in study abroad programs has been increasing steadily since the 2001-2002 academic year. Since 2004-2005, approximately 400 undergraduate and graduate students each year have studied abroad under formal arrangements. A recently approved winter session included nearly 10 different study abroad programs in its inaugural term in January 2014.

Further supporting the development of a global perspective is the large population of international students who are enrolled at UB. For each of the past 10 years, UB has been ranked in the top 20 U.S. institutions enrolling the largest percentage of international students (17.2 percent of all students matriculated in Buffalo in Fall 2013). Domestic students interact regularly with people from other countries, and through co-curricular groups such as student clubs organized around international themes, many of which host cultural festivals and events throughout the academic year, UB offers a rich array of global activities and avenues for student growth.

The mission of UB's international and offshore programs is to expand the university's international engagement and global reach by leveraging collaborative partnerships with overseas institutions to develop and deliver UB programs abroad and to bring about "internationalization at home."

Community Engagement and Outreach

Community outreach is the focus of several academic programs at UB. One such example is the Health and Human Services major within the Social Sciences Interdisciplinary Degree Programs, but such engagement is integral to many other programs as well. Within the College of Arts and Sciences, the Chemistry Department hosts a \$9.8 million project funded by NSF to change how science is taught in Buffalo schools.

Professional schools such as Social Work, Public Health and Health Professions, Nursing, Pharmacy and Pharmaceutical Sciences, Medicine and Biomedical Sciences, Dental Medicine, Architecture and Planning, Education, Engineering and Applied Sciences, and Law either offer degrees that encompass components of community outreach by definition or have established community programs. Examples are the dental school's annual Give Kids a Smile Day, providing free dental care to Buffalo area children, and the School of Management's Volunteer Income Tax Assistance (VITA) Program, which has provided free income-tax preparation services to hundreds of individuals and families. In addition, the

University Honors College runs a mandatory service-learning course for all incoming freshmen that requires them to log 20 hours of community service in the fall semester, resulting in more than 6,500 hours of service to the City of Buffalo.

As with UB 2020's emphasis on research, in 2006 UB also developed and affirmed the use of a standard Internship/Practicum course number 496, with the course prefix indicating the disciplinary area in which the internship was being conducted. These applied external experiences within a student's major enhance the program and often provide excellent career preparation (Table 4.1 displays the sustained enrollment for these 496 courses). Departmental internship programs place students in positions throughout the community, and even nationally. Some examples include internships in the Buffalo Public Schools, in appropriate off-campus research labs, and with newspapers, radio stations, businesses and nonprofit agencies.

The Public Service Internship Program (PSIP)¹⁷⁴ will facilitate any qualified student's wish to develop an internship. Many of these internships combine community service with the student's academic goals, and are continually assessed and improved, so they are of maximum benefit to those participating. Many of the Social Sciences Interdisciplinary Degree Programs (SSIDP)¹⁷⁵ include internships as a program requirement, such as the Health and Human Services concentration in which nearly 60 percent of the students complete an internship in a health or social-service agency.

The newly developed Sophomore Internship Program (SHIP),¹⁷⁶ administered by Career Services, provides students with an opportunity to gain real-world leadership experience in a not-for-profit agency in Western New York while earning three academic credits. Targeting sophomores was an intentional effort to help them as they begin the developmental stage of affirming an academic and potential career direction. Initiated in Fall 2011 in collaboration with the United Way of Buffalo and Erie County with 20 placements, the program continues to grow. Objectives of the internship include the requirement that the student engages with the executive leadership of the agency, develop and use the skills involved in researching and acquiring an internship/job, and gain real-world work experience in the not-for-profit sector. Other popular internship programs include the School of Management's Frank L. Ciminelli Family Career Resource Center Credit-Bearing Internship Program (CBIP)¹⁷⁷ which provides opportunities for undergraduate and graduate students, and the UB Engineering Co-Op Program (EAS 496).¹⁷⁸

Other community engagement opportunities include:

- The Center for Student Leadership & Community Engagement (CSLCE), ¹⁵⁴ which helps students develop an understanding and appreciation of self, others and community by inspiring them to explore a life of active citizenship;
- The Civic Engagement Academy within the Undergraduate Academies⁸⁰ encourages students to become active, reflective and critically thinking citizens within their community with a primary focus to help students link concepts learned in their academic coursework to practical methods for improving the community;
- The School of Dental Medicine has hosted Buffalo Outreach and Community Assistance (BOCA)¹⁷⁹ for a number of years in which dental students provide care to underserved areas in such locations as Appalachia, Belize, the Dominican Republic, Ghana, Guatemala, Mexico and Vietnam, as well as in the Buffalo area; and

• The Office of Study Abroad Programs¹⁷³ provides access to international internships. For example, the Spring semester program in London includes a six-credit internship experience organized and administered by CAPA International Education – which works to tailor internships to students' academic and professional interests. In the past, interns have been placed with organizations such as British Water, Devonshire Hospital, FORWARD UK, The Enterprise Forum, the British Museum, Lambeth Council, the Liberal Democrats, the Conservative Party, the Labour Party, the Refugee Council, Transport for London, Domestic Violence Intervention Project, The Campaign Company and The Baytree Centre.

As part of the university's commitment to the principle of student community engagement, further efforts are being considered by the Curriculum and Assessment Task Force to incorporate more opportunities in general education and to provide a clearinghouse and assistance for any interested student.

General Education at UB

History and Overview of General Education

UB adopted and implemented the framework of its current General Education Program requirements in the late 1980s. The goals for the program were to: (1) provide an integrative university experience for all lower-division students and coherent upper-division programs for all students in the arts and sciences; and (2) design and teach a curriculum to enable students to develop intellectually by imparting knowledge, improving communication skills and encouraging critical thinking.

As approved by the faculty, the 1992 UB General Education Program focused "on a broad array of skills, knowledge and issues that the university's faculty considers to be particularly important for all college graduates. The program is intended to help students prepare for success and fulfillment in a continually changing world. General Education complements the departmental major, provides depth of study in an area of specialization and prepares students for particular careers and advanced study. The General Education Program prepares students for entering society as well-informed citizens: ready to grapple with complex societal issues, to research questions not yet sufficiently understood, to carry out critical analyses and make informed decisions, and to enjoy more fully the variety of arts and literature that can contribute significantly to the quality of life." As today, research, global understanding and engagement were integral to the program.

The program encompassed requirements for natural sciences, social sciences, and arts and literature, with special attention on uniquely designed courses: World Civilizations and American Pluralism, which purposefully engaged faculty from across many departments to ensure diverse perspectives. Required communication and critical-thinking skills were embedded in the major programs.

Since the inception of the program, the philosophical foundations have been stable, but changes have been adopted in response to availability of resources, transfer-student concerns and revisions mandated across the SUNY system. Following guidelines set forth by SUNY requiring the completion of 10 knowledge areas and three skills areas, UB's General Education Program was adjusted to some

degree, but the core of the original program, including World Civilizations and American Pluralism, was maintained. Until 2007, the General Education Program was administered by an associate dean in the Undergraduate College Office in the College of Arts and Sciences. Since then, administrative responsibilities have been under the purview of a team representing the college and the then vice provost for undergraduate education. Recent Academic Affairs reorganization efforts (Fall 2012) have led to the creation of the position of a dean of undergraduate education who has assumed oversight for matters relating to UB's overall undergraduate curriculum and general education policy, while the day-to-day management resides within the College of Arts and Sciences and its associate dean for undergraduate education.

SUNY General Education Requirements

As a SUNY campus, UB must ensure general education is compliant with SUNY standards requiring every undergraduate degree candidate to successfully complete at least 30 credits of general education coursework. These 30 credits are divided among 10 knowledge areas (mathematics, natural sciences, social sciences, American history, Western civilizations, other world civilizations, humanities, arts, foreign language and basic communication) and two competencies — critical thinking and information management. In 2010, in an effort to ease transfer of credit within the SUNY system and facilitate four-year degree completion, SUNY revised the requirements slightly. Students still are required to have at least 30 credit hours of general education, but the required categories were reduced to two specific knowledge areas (basic communication and mathematics), two competencies (critical thinking and information management) and five of the remaining eight knowledge areas. Individual campuses may require more credit hours and/or additional knowledge areas as long as students meet the minimum requirements.

Learning outcomes were established by the SUNY General Education Requirement Task Force for each General Education Requirement (SUNY-GER) category, followed by guidelines for review and approval of courses. These guidelines take into account the intentions of Board Resolution 98-241, and the recommendations of the SUNY Provost's Advisory Committee on General Education (PACGE) regarding the interpretation of the learning outcomes. The purpose of the guidelines is to provide transparency regarding the kinds of courses that may be approved in each of the SUNY-GER categories.

At regular intervals, SUNY performs a thorough review of all syllabi for courses that satisfy general-education requirements, most recently in 2010. In a new initiative to provide for a seamless transfer experience within the system, SUNY students are required to complete the GER in their first two years of study unless a specific curricular waiver has been granted.¹⁸³

Current UB General Education Requirements

UB's general education requirements, unlike the SUNY GER, retain all 10 knowledge areas, two competency areas, as well as one additional category. These include: writing skills, library skills, mathematical skills, World Civilizations (combines the SUNY knowledge areas of Western civilization and other world civilizations), natural sciences, American Pluralism (acknowledged by SUNY as an alternative to the American history requirement), social and behavioral sciences, foreign language, humanities, arts, oral communication, critical thinking and a depth requirement. The number of credit hours typically earned in general education courses at UB ranges from 40-48.

With an emphasis on a broad array of skills, knowledge and issues important for all college graduates, UB's general education is intended to complement the departmental major. Every UB undergraduate must fulfill the general-education requirements. However, certain requirements may differ by major, if they transferred, or prior degree status as indicated in detail in the Undergraduate Catalog. Students are provided a degree audit report that reflects their general-education progress and also are referred to an academic advisor for clarification of their general-education requirements.

Not all of the general-education knowledge/competency areas are delivered through discrete courses. The oral communication and critical thinking components are embedded within the student's major. As a result, students learn how to communicate orally and think critically within their disciplines. Assessment of each of these components is within courses or experiences in each academic program. Similarly, information-management competency beyond the basic first-year Library Skills requirement is within the major so that students become proficient with the technology and informational resources specific to the discipline. During the first year of enrollment, students are expected to complete the introductory information-management experience, the Library Skills Workbook, an online self-paced tutorial delivered via UB*learns* (a Blackboard Tool) that addresses basic information competency skills.¹⁷⁰

Transfer Students and General Education

A Transfer General Education Committee directed by the Office of the Registrar's Transfer and Articulation Services¹⁸⁵ under the Office of Academic Affairs meets annually to review student transfer policies and make any recommendations to ensure they continue to accurately reflect UB's and SUNY's general-education requirements. The Transfer Articulation and University Requirements at UB System (TAURUS),¹⁸⁶ an articulation website, is maintained to assist applicants with understanding how their transfer work will fulfill either general-education or other requirements. In addition, newly admitted transfer students receive a transfer-credit report that displays this articulation.

UB General Education Course Approval

Any new course within one of the subject prefixes included in the foreign language, humanities, arts, or social sciences categories automatically satisfies general-education requirements. However, if a proposal for a new course indicates a request to satisfy requirements with specifically delineated courses (mathematics, natural sciences, American Pluralism, or World Civilizations), it must adhere to the same review and approval as any other campus curricular proposal to ensure the appropriate SUNY GER learning outcomes are satisfied. Once approved by UB, the proposal is submitted for SUNY approval.

Future Directions for General Education at UB

In 2009, the provost and Faculty Senate recommended a task force to examine the General Education Program to determine the degree to which existing requirements embody and promote the overall campus mission and goals of UB 2020, as well as its distinctiveness and ability to address realities of an increasingly changing and global community. Included in the task force's charge was a directive to consider the creation of a new signature program for UB to define the role of a new General Education Program within the larger mission of UB while complying with the existing general-education requirements.

The General Education Task Force was composed of distinguished faculty representing all schools and divisions, the UB Libraries, and undergraduate and graduate students. After 11 months of intensive self-study, the task force released a report, "The UB Core Curriculum: Learning for Life¹⁸⁷", with its recommendations for the redesign of the General Education Program, which included maintenance or modest revision of existing knowledge areas and the inclusion of two new ones. The recommendations in the task force report were tabled until the organizational oversight for the General Education Program was complete. In January 2013, the newly appointed dean for undergraduate education took office and has assumed responsibility for providing direction for the future of all of undergraduate education, including general education. In May 2013, the provost charged the dean to direct a new committee to review and revise general education using the 2010 report and Realizing UB 2020 principles. In December 2013, the preliminary report was presented to the Realizing UB 2020 Task Force on Curriculum and Assessment.

Additional Formal and Informal Learning Opportunities

UB provides many educational opportunities beyond the delivery of traditional degree programs. These include pre-college initiatives, adult and continuing education, certificate programs, noncredit offerings, experiential learning and internships, and co-curricular learning. Most of these programs represent collaborations with the greater Buffalo community to encourage educational pursuit in both young learners and adults. Middle-and high-school students are offered opportunities for both college readiness and a science focus, all aimed to promote higher education. In addition to UB's degree programs, adult learners are served by the Educational Opportunity Center¹⁹¹ and Millard Fillmore College, both of which offer educational options for employment and career enhancement.

Ensuring the Quality of Academic Programs and Curricular Offerings

Course and Program Proposal Requirements

From course and program design through assessment of student learning outcomes, the university takes many steps to ensure the quality of its academic offerings. Educational offerings at all levels are developed, vetted and approved through a multi-level process to ensure that they meet the appropriate level of rigor. New proposals, or revisions of existing programs, are initiated by faculty and then must meet the requirements of the department, decanal unit and the institution through the vice provostal level of review. The dean of undergraduate education and the vice provost for graduate education have responsibility for overseeing all curricula.

The long-standing final step in the process for all decanal proposals for undergraduate course and curriculum proposals is a review conducted by the Council of Associate Deans of Undergraduate Education¹⁹³ to consider university-wide impacts, and SUNY and SED requirements. In addition to the representation by the associate deans from all undergraduate decanal units, the council includes representatives from International Education and Millard Fillmore College. For graduate course and program offerings, the VPGE adheres to the curricular review policies delineated in the Graduate School Bylaws.^{194,195}

Certain new or revised curricula approved at the campus level must then be approved by the SUNY Central Office and SED.¹⁹⁶ All proposals must be consistent with system and state standards for degree level and appropriateness. In addition, the review considers the extent to which the new or revised curricula maintain the statutory requirements, including minimum standards for credits, liberal arts and sciences, and consistency with state initiatives such as student mobility, general education, allowable credits outside the career (e.g. graduate work for an undergraduate degree), shared credits for combined programs, applications of courses to multiple majors and minimum grade achievement.

Campus-approved revisions to all licensure and graduate curricula must be re-registered. For those disciplines where graduates must be licensed, an additional layer of review is conducted by the state board that oversees licensing in the relevant profession. Once approved at this level, a new curriculum is registered as an approved program authorized to be offered by the campus. Courses and programs that are delivered via distance technology or taught in remote locations are subject to the same processes of review and approval as those taught on campus, but must be authorized by SED before they can be offered online. In addition, some courses and programs also are reviewed by external accrediting agencies that affirm academic programs.

Comparability of Quality

Transfer of Credit

UB's policies related to the consideration of transfer credit from other post-secondary institutions, as well as policies pertaining to the evaluation of credit once it has been transferred, are available publicly on the UB website. Proposed to UB's articulation policy, faculty are responsible for the review and articulation of transfer credits as UB course equivalencies. In addition, students can request articulation of new courses during the admission process. Current searchable lists of articulated course-to-course equivalents for the many institutions from which UB students have transferred credit are available publicly through TAURUS. UB also maintains formal dual-admission program agreements with its primary transfer community colleges within the SUNY system. These agreements provide program-to-program guides that prepare participating students for transfer to UB in specific degree programs. The recent SUNY Seamless Transfer initiative promotes streamlining the process, but will require significant campus effort and advocacy. Seamless Transfer initiative promotes streamlining the process.

Accelerated Programs

For very capable, ambitious students with well-defined academic or professional goals, UB offers combined degree programs that allow students to accelerate the completion of their academic

endeavors. These programs may include an undergraduate and graduate degree within the same department or across departments or decanal units. Graduate and professional degree combinations also are defined among certain disciplines. These disciplines delineate the degree requirements for both components and require approval from UB, SUNY and the State Education Department and where applicable, licensing agencies. In the case of bachelor's/master's combinations, the undergraduate portion is reduced while still maintaining the full requirements for the master's level. Nevertheless, the student must complete all requirements of the General Education Program and achieve a higher GPA than those in the stand-alone undergraduate major. The oversight for these programs is shared between the undergraduate education division in the Office of Academic Affairs and the Graduate School. In addition, students may complete undergraduate double or joint majors, as well as double degrees, according to UB and state guidelines. At the graduate level in some disciplines, UB allows students to complete the requirements for two graduate degrees simultaneously, thereby reducing the amount of time it would take to earn both degrees separately.

Several unique programs acknowledge that some students enter the university with educational backgrounds that prepare them to complete traditional programs in a significantly reduced amount of time. Examples include the Accelerated BS in Nursing, ¹⁹⁸ the Law School's LLM program, ¹⁹⁹ the International Dentist Program, ²⁰⁰ as well as the many Advanced Certificate Programs offered by the Graduate School of Education. ²⁰¹ In addition, the university acknowledges that many adult learners are enrolling with significant life and work experience for which UB has established a detailed and consistent policy regarding alternative methods for earning university credit that is available publicly. ²⁰²

Distance/Online Instruction

As mentioned above, UB's Faculty Senate has established policies to ensure that courses and programs taught via distance or using online technologies are held to the same standards as traditional offerings. The review process for all courses, whether seated or distance, is the same. Programs that are modified or designed to be taught exclusively online also must be approved by the New York State Education Department.

In Spring 2013, an assessment was conducted of UB's overall delivery of distance and online offerings. Through the auspices of the Teaching & Learning Center, a group was convened consisting of faculty from across campus, engaged in distance and online learning to complete the Sloan-C Scorecard, an online tool comprised of 70 quality indicators related to an institution's delivery of distance and online education. Based on this analysis, Technology Support was the area of greatest strength, while the areas of Institutional Support, Course Development and Instructional Support, Social and Student Engagement, and Student Support were identified as needing improvement. The final report of the group's assessment, submitted to the senior vice provost for academic affairs, included recommendations for improving distance and online learning experiences at UB. The results of this assessment will be used for benchmarking purposes, and this assessment will be repeated periodically to gauge progress toward increased quality in distance and online offerings.

A follow-up assessment of additional oversight of these offerings was conducted in Fall 2013. Since these programs and courses are decentralized within each decanal area, a survey was completed to catalog these approaches, focusing on what supplementary oversight and quality assurance is administered by

academic units. While distance offerings are not extensive at UB, five professional schools and seven departments within the College of Arts and Sciences responded to the survey, indicating that oversight and quality assurance occurs at the unit level in the following ways beyond the university oversight:

- Distance/online course approval process (33 percent);
- Ensuring content equivalence to seated offerings (25 percent);
- Decanal oversight of distance/online offerings (17 percent); and
- Chair oversight of distance/online offerings (25 percent).

Policies related to oversight and quality assurance of such opportunities are included in general policies related to course offerings. With regard to faculty training for distance/online course delivery, 58 percent report technology specific training in teaching techniques, with 33 percent reporting training in assessing learning in distance/online courses. At the institutional level, the Realizing UB 2020 Curriculum and Assessment Task Force currently is reviewing the need for more comprehensive oversight, resources and support for distance/online offerings. In this effort, the Graduate School of Education's Online Education Office²⁰⁴ provides a good model for oversight and support of distance and online offerings, as well as for assessing delivery of these offerings.²⁰⁵

Offshore Programs and Study Abroad

Simple metrics, such as the number of international students enrolled and the number of students studying abroad each year, provide an overall measure of the effectiveness of international education. Specific, unit-level measures of effectiveness have been identified for each functional area within the office of the Vice Provost for International Education (VPIE), allowing each area to evaluate its performance and its overall contribution to UB's internationalization agenda from year to year.

Off-Shore Programs. Quality assurance mechanisms typical of UB's home-campus programs apply fully to programs delivered at other locations. Course and program curricula are determined by the home-campus department and delivered by instructional staff approved and evaluated by that department. Course evaluations are conducted at the end of each course/semester for review by resident staff and the home department. Depending on the program, there also may be class observations and meetings with participating instructors to aid the assessment process and ensure quality. As early as mid-semester, appropriate interventions occur in cases where instructional effectiveness is in question. In the event of problems in the classroom, instructors are advised on improvements needed, or, in some cases, dismissed from the program. To the extent allowable by cultural differences, program and course learning outcomes in offshore programs are comparable to those taught at the home campus. In the case of the Singapore programs, for example, VPIE confers each semester with the resident UB staff in Singapore and the participating UB departments regarding course and instructor evaluations, student performance and learning outcomes, course selection, curricular changes, etc. Based on these ongoing reviews, changes are made to courses, textbooks and course materials, instructors, instructional formats, and library and IT support with the aim of continuous program improvement. Each semester yields new insights into ways to improve and enhance the program for the benefit of the students. This culture of continuous improvement is strongly endorsed by the Singapore Institute of Management and is one reason for the strong enrollment growth that has occurred in the UB programs there.

Study Abroad. Assessment of study abroad programs generally involves two major components, the program director's final report and student evaluations. Both of these sources of feedback are carefully

reviewed to determine whether the program should be offered again in future years and/or to identify changes to improve and enhance the program. At the end of a faculty-led study abroad program, a final report must be prepared by the program director and submitted to the assistant vice provost for study abroad programs. These reports detail the actual events and operations of the program, including both positive and negative experiences, and itemize a set of recommendations for future improvements in the program. Final reports are archived for future reference, either by the program director or by a new faculty member previously unfamiliar with the program. Student evaluations of study abroad programs are invaluable to the program director, UB Study Abroad Office and potential program participants. There is both an immediate, on-site evaluation and a more reflective, subsequent evaluation provided after students return to UB.

Comprehensive Program Review

UB conducts a well-developed periodic review of the effectiveness of existing programs through the Office of Comprehensive Program Reviews (OCPR).²⁰⁶ These reviews, conducted on a five-to seven-year cycle, are designed to provide structured opportunities for the unit to undertake thorough self-examination, demonstrate future needs and receive constructive evaluation.²⁰⁷ The self-study document, prepared by the department according to the standard guidelines,⁸² is the first step in the process and represents the unit's principal opportunity to provide background information regarding the program under review to external evaluators and administration. Once the self-study is complete, the program is considered by an external peer-review team that typically is comprised of two or three distinguished faculty from other leading research-intensive universities. The team is brought to campus for a two-day visit. During the review process, the academic dean, dean of undergraduate education or the vice provosts may pose specific questions for special consideration by the external evaluators. The final report from the external evaluators is shared with the department, academic dean, vice provosts and the provost and is used as a means of determining the strengths of the program under review and possible modification in the resources allocated to support the program.

The CPR self-study template²⁰⁸ has been expanded to include the learning outcomes of the program, the plan for assessing those outcomes, results of the assessment and a description of any changes that have been made to the program based on assessment findings. Once all programs have cycled through CPR using the new template, every program at UB will have been reviewed regarding their identified student learning outcomes, a plan for assessing those outcomes and a plan for using the results to make improvements to programs and courses. For example, undergraduate programs in engineering are accredited by the Accreditation Board for Engineering and Technology (ABET). For the 2008 CPR self-study,²⁰⁹ these programs outlined learning outcomes for their graduate students and began to address the assessment of those outcomes.²¹⁰

Graduate Faculty Approval Process

To ensure the quality of educational programs and specifically the direction of graduate student research, only faculty members with graduate faculty status as full members or associate members can serve on or chair thesis/dissertation committees, respectively. Tenured or tenure-track faculty members are eligible automatically for appointment as full members of the graduate faculty. Nontenure-track faculty members are nominated for approval by divisional or area committees comprised of

representatives of the graduate faculty in the respective school or unit who have been given the authority to act upon issues relevant to graduate students and appropriate curricular matters. The nominees are required to demonstrate their research qualifications to ensure that they can properly supervise research activity among their students. Nominees are then approved by the vice provost and dean of the Graduate School.

Assessing Student Learning

Spotlight on Assessment: Using Results of the Comprehensive Program Review to Inform Program Change

The CPR self-study process and the accompanying site visit and report provides much detailed information about the areas in a program or department where improvements are needed. Academic units at UB have been very proactive about embarking on such improvements. A few specific examples of significant decisions and actions that were undertaken as a consequence of the program reviews include:

College of Arts and Sciences:

- The Department of English and the dean's office conducted a review of the composition program based on the comprehensive program review structure. Those recommendations have been provided to the provost's team studying general education changes.
- The Department of Mathematics has changed its workload policies after urging from the dean and in response to the comprehensive program review.

Graduate School of Education:

- The Department of Educational Leadership and Policy is undergoing a thorough re-examination of its overall goals and program strengths from cross-disciplinary and researchmethodology perspectives.
- The Department of Counseling, School and Educational Psychology is undergoing a detailed examination of its various degree offerings to address the imbalance between departmental resources and its administrative, research, teaching and supervisory loads.

School of Engineering and Applied Sciences:

 Concerns among the faculty regarding promotion standards, teaching-load policies and indirect-cost recovery policies were addressed.

School of Medicine and Biomedical Sciences

- Admission to the BS in Biophysics Program was suspended effective Fall 2008 as a result of concerns regarding the demand for, and sustainability of, the program.
- A major commitment was made to bolster the leadership and faculty strength in the Department of Pharmacology and Toxicology.

An assessment ethic and commitment has not been endemic to UB's instructional culture, and initiatives to develop and implement comprehensive direct assessment are relatively recent. In the past, on an institutional basis, UB relied largely on indirect assessment methods, including national, state and local surveys; student course evaluations; and faculty grading to obtain measures of learning success and inform program revisions.²¹¹ Within certain professional schools, external accreditation ensured significant and authentic assessment, but these efforts were not campuswide. 106 Since 2010, as the result of diverse efforts, there has been a considerable increase in campus awareness that continuously appraising student learning and reviewing program outcomes is intrinsic to the university mission. By both encouragement and mandates, the culture is changing and concrete processes now are in place to make assessment an essential part of the educational enterprise. A recent example of this changing culture is the participation at the second Annual Assessment Day held on November 22, 2013 in which more than 200 faculty and staff participated, including a special session with 43 faculty from the College of Arts and Sciences.²¹² With a keynote from national expert, Linda Suskie, the event has set a positive tone for continuing and future assessment endeavors.²¹³

A significant means of ensuring instructional and program quality, assessment of student learning is required for all programs and courses. On each syllabus, the course objectives must be linked

to specific program learning outcomes, and the instructor must illustrate how these course objectives will be assessed on the course syllabus.²¹⁴ Proposal requirements for new courses and programs have been revised to require learning outcomes to be clearly delineated, along with a description of how student achievement of these outcomes will be assessed. This syllabus policy was promulgated in July 2013 and was immediately in effect. Most professional programs, to receive full accreditation, also have mandates for achieving student-learning outcomes, assessment methods, and utilization of results, all of which must be communicated transparently to students.

To ensure that programs in which studentlearning outcomes and course objectives were previously not required (e.g., nearly all of the programs in the College of Arts and Sciences, and graduate programs in engineering) now include them, UB and SUNY have revised programproposal policies. All new proposed programs must include specific learning outcomes and an assessment plan for determining if students are achieving these outcomes. At the campus level, all new graduate²¹⁵ and undergraduate¹⁹³ course proposals must include specific course objectives, an indication of how the objectives help students achieve program learning outcomes and how achievement of the objectives will be assessed. In addition, the self-study template for UB's comprehensive program review has been revised to include sections on student-learning outcomes and the assessment of these outcomes²⁰⁸. Further, in the College of Arts and Sciences, the dean's office requires each program to develop an assessment plan that includes program learning outcomes, a curriculum map, revised syllabi and a plan to collect, interpret and review assessment data to suggest program improvements. In December 2012, the provost formalized the university process for the submission of annual

Spotlight on Assessment: Syllabi Development for Clear Communication of Learning Outcomes

As part of recent revision to the university's course-proposal and syllabus requirements policy, all syllabi now are required to include course-level learning outcomes, the course requirements that will allow students to demonstrate achievement of these outcomes, and how the course-level outcomes map to program-level outcomes. The syllabus for CIE 341, Environmental Engineering Science, proposed for Spring 2015, provides an excellent example.

Catalog Description:

CIE 341 covers basic concepts of microbiology and chemistry and their links to applications in environmental engineering, including, but not limited to, water and wastewater treatment, hazardous waste management and ecology. Content is closely coordinated with CIE 340 Environmental Engineering, taught in fall semester of the sophomore year, which serves as the introduction to CIE 341.

Course Learning Outcomes:

Upon successful completion of the course, students will be able to:	SOs	Assessment Tools
identify and describe fundamental principles of environmental microbiology	e,g	Homework and Exams
identify and describe fundamental principles of environmental chemistry	e,g	Homework and Exams
employ knowledge of fundamental scientific principles and formulate several environmental engineering problems	e,g,k	Homework and Exams
apply knowledge and solve source water and wastewater treatment problems	a,e,g,k	Homework and Exams
demonstrate knowledge of bioremediation and apply knowledge of bioremediation to environmental engineering	a,e,g,k	Homework and Exams
solve environmental engineering problems that include combustion chemistry and photochemical smog	a,e,g,k	Homework and Exams
conduct laboratory experiments in environmental microbiology and chemistry	b,g,k	Lab Reports and Exams

Contribution of CIE 341 towards fulfillment of Student Outcomes (SOs) 3(a-k)²¹⁶.

assessment reports, over and above the requirements for the CPR.¹¹¹ All academic programs are expected to submit an annual assessment report describing program learning outcomes, how these

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Spotlight on Assessment: Using Results to Inform Program Improvement

As the Office of Accreditation and Assessment works to facilitate assessment efforts for academic-program improvements, the focus has been on developing assessment plans that provide useful results to inform program revision. Several undergraduate programs in CAS serve as exemplars of "closing the loop:"

History BA Program

Faculty members in History were anecdotally noting student difficulties with writing and oral communication skills and with critical reading in the senior seminars. In Spring 2013, the director of undergraduate studies worked with program faculty to develop a rubric for assessing the common term paper assignment in these sections. Once the results were compiled across the sections, it became evident that these areas were indeed among the weakest areas. As a result, the faculty members recommended that the program be modified to require more coursework at the upper division level (seven courses instead of five).

Communication BA Program

As part of a departmental self-study conducted in 2011, focus groups were held with juniors and seniors. Discussion items included quality of instruction, student preparedness for careers and administrative aspects of the program. Results of these focus groups suggest that students have questions about the application of course content to the private sector and for enhancing their marketability to employers. As they engage in a complete curriculum audit, program faculty are using this information to strengthen for students the linkage between course content and professional applications.

Romance Languages and Literatures BA Programs

As part of its ongoing assessment plan, faculty members in Romance Languages and Literatures held a retreat to identify achievement benchmarks for the 200-level courses in French and Spanish, which are the gateway courses for these majors. During this retreat, faculty members identified "ins," the competencies which students are expected to have upon entry into these courses, as well as the "outs," the competencies to be developed within the courses, i.e., the learning outcomes. The resulting document informed significant content revision of the 200-level courses and for advising students in these two majors. This information also will be used to develop valid assessments for incoming and exiting students in these courses.

are assessed, the assessment results and a brief discussion of any program or course modifications to be made in response to the results. As a consequence of these various initiatives, academic programs now have clearly delineated student-learning outcomes, an assessment plan to determine student achievement of these outcomes, and course syllabi with well-defined course objectives that are linked to both program learning outcomes and methods of assessment within the course.²¹⁷

Three units provide examples of evidence of significant achievements in this effort: the departments of History, Communication, and the Romance Languages and Literatures (see sidebar). The History programs had no explicit learning outcomes prior to the directive from the dean in January 2012. Currently, all three programs (BA, MA, PhD) have clearly stated and measurable learning outcomes. Each outcome has been mapped to the relevant coursework within each program, an assessment plan is in place that calls for the evaluation of a written "capstone" assignment, and a rubric and success criteria have been developed for each program.²¹⁸ The first round of data collection occurred in Spring 2013 and an annual assessment report was submitted in June 2013.²¹⁹ These programs provide clear examples of the progress that has been made to enhance a culture of authentic assessment within the College.

To further the culture of assessment and ensure that faculty are fully supported

in fulfilling their assessment responsibilities, a new program and organizational structure has been implemented to create a center for pedagogical innovation and assessment within the existing Teaching & Learning Center. With professional assessment assistance, UB can better meet this need. An early initiative for this effort has been to standardize the template for program outcomes and begin the buildout of a website to house these universitywide. ²²⁰

Assessment of General Education

Student learning outcomes and competencies have been identified for each of the knowledge areas within UB's General Education Program. From 2004 through 2010, SUNY required that institutions participate in Strengthened Campus-Based Assessment (SCBA)²²¹ as a way to demonstrate that learning outcomes are being achieved. This plan was submitted by the director of assessment in the Office of the Vice Provost for Undergraduate Education in February 2005.²²² The plan was approved by SUNY, but budget cuts and changes in leadership prevented the plan from being fully implemented. In addition to direct measures of student learning (e.g., course rubrics and the practice form of the Graduate Record Exam), the plan involved several indirect measures of student learning, including the SUNY Student Opinion Survey (SOS) and the National Survey of Student Engagement (NSSE). The SOS is administered every three years by ACT testing services on behalf of SUNY, and the SUNY general education learning outcomes were included in the survey from 2003-2009. The ratings of UB students on the degree to which the university has contributed to each of their learning outcomes have increased steadily over a six-year period.²²³ In addition, for the 2009 administration, average ratings were higher on 14 of the 15 learning-outcomes items as compared to students at the other SUNY research centers.²²⁴

In 2010, SUNY decided that the SCBA plan was adding unnecessary administrative work for campuses since the assessment requirements for accreditation by MSCHE are designed to ensure that learning outcomes are being achieved. As a result, a new policy relating to assessment procedures was established, stating that the assessment of general education that is being done in compliance with Middle States Standards 7, 12 and 14 is sufficient to meet SUNY requirements.

The dean and associate dean of undergraduate education have collaborated recently with the associate director of accreditation and assessment to complete a three-year assessment plan for general education. The first year of implementation of this plan was 2012-2013, and six assessment activities were conducted. These are outlined in Table 4.2 and encompass pilot assessment efforts in Writing Skills, Humanities and Foreign Language Knowledge Areas, as well as Information Management, Oral Communication and Critical Thinking. At the end of spring semester 2013, the dean of undergraduate education met with general education faculty to identify the next steps in implementation of years two and three of the general education assessment plan and identify faculty leadership for each knowledge area. Currently, faculty are leading efforts in each of the remaining knowledge areas to develop pilot assessments to be implemented accordingly in the three year plan. Faculty in the Social Sciences area piloted a pre/post-assessment in Summer 2013, and faculty in Mathematics and Natural Sciences planned pilots for Fall 2013. Faculty who teach in the Arts, World Civilization, and American Pluralism courses are working on plans for assessment in the third year.

Table 4.2 General Education Assessment Three-Year Assessment Summary: Year 1 (2012-13)									
General Education Area	Assessment Method	Next Steps							
Writing Skills ²²⁶	Research papers scored with rubrics	36% of students exceed standards; 40% do not meet standards	Refine the assessment to better distinguish between research skills and writing skills for a clearer understanding of the deficit areas.						
Oral Communication ²²⁷	Environmental scan of embedded program assessment efforts	Nearly all decanal units with undergraduate programs provided some evidence of program learning outcomes addressing oral communication and a method that is systematically used to assess skills.	Identify programs where gaps exist and provide assistance in developing an assessment plan for these skills.						
Critical Thinking ²²⁸	Nearly all decanal units with Environmental undergraduate programs provide some		Identify programs where gaps exist and provide assistance in developing an assessment plan for these skills.						
Information Management ²²⁹	Examination of mastery exam subscores	More than 80% of students master all outcomes on their first attempt except for finding articles.	Review the instructional materials in this section to identify areas requiring clarification and/or additional resources.						
Foreign Language ²³⁰	Survey of student skills among German majors Students in the more advanced course (151) rate their skills higher than those in lower-level courses (102/104) showing a perceived progression in skills.		Pilot of direct assessment methods to determine students' skill levels.						
Overall General Education Program ²³¹ Survey to all undergraduates Survey to all of critical coral c		In general, 70-80% of undergraduates who had completed each requirement believed that general-education goals for that requirement had been covered through relevant coursework. These rates were much lower for coverage of critical thinking and especially oral communications goals. Nearly 20% of undergraduates felt that oral communications goals had not been	In addition to providing assistance to programs in identifying appropriate learning outcomes in oral communication and critical thinking, best practices for teaching these skills within these majors need to be identified.						

covered at all in their general-education

Evidence

Examples of evidence that the University at Buffalo meets Middle States Standard 11 are summarized below:

- UB offers a wide range of courses and coherent programs conducted at levels of rigor
 appropriate to the programs offered in alignment with its mission to provide a transformative
 educational experience.
- The multi-layered process for curriculum proposal review or revision ensures adherence to standards that are aligned with degree-level expectations.
- All academic programs have stated program learning outcomes.
- UB's Office of Comprehensive Program Reviews provides a regular, systematic, external
 assessment of academic programs. UB's professional programs are reviewed internally and are
 externally accredited, providing an objective determination of appropriate degree content, rigor
 and effectiveness.
- Classroom and Network Services, the Teaching & Learning Center and the University Libraries
 provide adequate support to ensure that facilities, technologies and library services are at the
 appropriate level for programs and courses.
- Information-management skills are promoted in a collaborative approach between the staff of the University Libraries, the general-education requirement for completion of the Library Skills Workbook, and the embedded nature in which information-management skills are taught within each academic program.
- Published policies are available readily to illustrate how transfer credit is assigned based on
 course equivalencies. TAURUS has been designed to allow potential transfer students to
 determine easily the transferability and UB equivalency of their courses. Courses and programs
 not previously articulated are evaluated for equivalency by appropriate faculty in a fair and
 consistent manner.
- Combined programs, and other accelerated programs, are held to the same rigorous standards as those of traditional programs.
- Faculty Senate policy requires that all course syllabi include course specific learning outcomes, as well as the means through which student achievement of these outcomes is assessed within the course, and how these outcomes relate to the overall program outcomes in the discipline.
- Graduate curricula provide for the development of research, creative expression and
 independent thinking relevant to the degree. The university encourages and provides
 opportunities for undergraduate research and creative expression through the Center for
 Undergraduate Research and Creative Activity, departmental opportunities and other
 specialized programs.
- The required annual assessment report ensures that all academic programs are assessing at least one program learning outcome every year.
- The Office of International Education, with the relevant academic unit, ensures comparable quality of teaching, instruction, rigor, support and effectiveness for offshore locations.

Examples of evidence that the University at Buffalo meets Middle States Standard 12 are summarized below:

- The UB General Education Program encompasses 40-48 hours of coursework and the Library Skills Workbook; students in unique categories may be waived from certain components.
- The General Education Program, both within the prescribed specific curriculum and across the majors, is designed for students to learn basic communication skills, quantitative methods, scientific reasoning, information management, critical thinking, and research and creative methods that are then applied and further developed within the academic major. The university is committed to instilling skills and traits to help students build their sense of self and future. Through their major and the General Education Program, students are prepared to think for themselves, ask and answer insightful questions, and respond to challenges in meaningful and thoughtful ways.
- Through the World Civilizations and American Pluralism knowledge areas, the institution assures that students are able to learn about the history of the world and how cultures impact tolerance of diversity, as well as the values and ethical beliefs of peoples within American society.
- UB's learning outcomes for general education have been mapped to UB's institutional learning outcomes, as well as to the SUNY mandated learning outcomes and specified Middle States outcomes: oral and written communication, scientific and quantitative reasoning, and technological competency appropriate to the major program of study. Thus, students who achieve the learning outcomes of UB succeed with SUNY and Middle States expectations.
- The requirements of the General Education Program are provided to students via the Undergraduate Catalog, new student orientation, academic advisement, and in the electronic Academic Advisement Report (degree audit), including information relating to waivers of requirements and completion progress. Students confer with their academic advisors if they have additional questions or concerns.
- Guidelines for program assessment distributed by the provost in December 2012 apply to the General Education Program. Further, the division of Undergraduate Education in the Office of Academic Affairs and University Accreditation and Assessment have collaborated to develop and implement a three-year plan to assess learning outcomes, and a mechanism is in place to share assessment results and foster discussion of the use of results for program improvement.

The examples of evidence that the University at Buffalo meets Middle States Standard 13 are summarized below:

- The university meets the needs of adult learners in a variety of ways, including two educational programs (Educational Opportunity Center and Millard Fillmore College) that are designed to offer career-based courses to individuals both in the community or enrolled in academic programs. The university also has policies relating to the acceptance of experiential learning opportunities or alternative methods of earning credit as college-level transfer work.
- University policies and procedures ensure that, regardless of location or delivery mode, all
 courses reflect the same high quality expected of a world-class institution. All policies governing
 instruction including but not limited to those pertaining to course approval and review,
 faculty and staff workload, class size, course evaluation, admissions criteria, and faculty and
 student responsibilities apply to all credit-bearing activities, regardless of the medium

- through which instruction takes place. Any extant courses to be offered as distance education must be evaluated and approved by the appropriate academic unit committee. All course and program offerings, including those at other locations and those offered via distance/online technology, are held to the same standards of quality, including assessment of student learning, as traditional courses and offerings. All distance programs must be authorized by the State Education Department.
- The university uses a secure login, a unique UBIT name and strong password for student identity verification. Proctored exam sites and other means sometimes are used to ensure that the student taking an exam or participating in the class is the same individual who is registered and receives academic credit.
- The university has adequate technological infrastructure and facilities to support various distance-education modalities.
- All additional program offerings, experiential learning opportunities, noncredit and distance
 offerings are designed to be consonant with the institution's mission and goals. Such certificate
 programs offer intensive and specialized training that is delivered and managed by qualified
 academic professionals.
- All courses and program offerings are reviewed periodically to ensure that they are fulfilling
 institutional mission and goals, and that there are adequate sources of support, including
 funding, to sustain them.

Examples of evidence that the University at Buffalo Meets Middle States Standard 14 are summarized below:

- The university has clearly articulated educational and learning outcomes that reflect the core institutional values inherent in a UB education and are consonant with the university's mission.
- Individual programs and schools are responsible for the assessment of student learning with
 oversight by the appropriate chair, dean, vice provost and, ultimately, the provost. UB has
 instituted a systematic assessment process that is focused on continual improvement. All units
 and programs are required to assess student learning and submit assessment reports to the
 provost on an annual basis. These annual reports include unit/program mission, program
 learning outcomes, assessment methods, key assessment results and the implication of the
 assessment results for the unit or program.
- Regular course and teaching evaluations have provided informed feedback to enhance course delivery and curricular development.
- UB programs that do not require accreditation are required to undergo a recurring cyclical Comprehensive Program Review, which has been revised to explicitly include student-learning outcomes and assessment. Through this process, well-developed student-learning outcomes and assessment plans are sustained and ensured for all programs.

Future Directions

UB has adopted a plan and structure that will ensure that the campus continues to build a culture of assessment throughout all academic programs and with significant levels of oversight and support for faculty in the newly organized Office of Educational Innovation and Assessment. Furthermore, the faculty and academic support personnel will develop opportunities for curriculum enhancement that are consistent with the expected traits of a UB graduate as articulated in Realizing UB 2020. In General Education, faculty will review the assessment results of the current General Education Program and use them to develop and implement a new signature program. As annual assessment reports are reviewed and utilized for consideration of any potential program revisions, the assessment process also will be amended as appropriate.

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Chapter **five**

Fostering Student Learning and Achievement: Admissions, Retention and Student Support Services

Addresses Standards 8 and 9

Standard 8 - Student Admissions and Retention

The institution seeks to admit students whose interests, goals, and abilities are congruent with its mission and seeks to retain them through the pursuit of the students' educational goals.

Standard 9 - Student Support Services

The institution provides student support services reasonably necessary to enable each student to achieve the institution's goals for students.



Strategic Goals for Excellence in New Student Recruitment

In support of the University at Buffalo's strategic goals, delineated in Chapter 1, the university has made major efforts to enhance its enrollment strategies, retention and graduation rates, and student support services since the last MSCHE decennial review. Each of these is described in this chapter.

Consistent with its mission, the University at Buffalo seeks to recruit students who possess the attributes and aptitude to be successful academically at the university, and to provide them with the skills necessary to be leaders in the workplace, as researchers and as productive citizens. UB's holistic admissions review process considers various dimensions, including strong academic preparation, demonstrated aptitude, special talents and student interests. At the time of the 2003 MSCHE decennial review, the goal for undergraduate admissions was to maintain the existing class size while increasing the academic quality and diversity of incoming students. For graduate admissions, the goal was to increase enrollment and expand programs. However, in the following academic year (2004-2005), revised enrollment goals were put in place to aid in the achievement of the UB 2020³ strategic plan. As discussed in Chapter 2, significantly increasing university enrollment was one of four pillars of UB 2020.

This planned increase in overall enrollment was identified as key to becoming a top-tier university with sufficiently large faculty made possible by a larger and more highly qualified student body. Thus, to achieve the goals of UB 2020, undergraduate and graduate enrollments were to be increased strategically, along with enhanced academic quality of students, and greater ethnic, racial and geographic diversity. However, major economic factors severely impacted New York State finances with the fiscal crisis beginning in 2008. These events undercut the original plan's foundation, and required a rethinking of this UB 2020 pillar. With sustained effort by UB's senior leadership and the Western New York legislative delegation, a new plan was forged and resulted in the successful passage of NYSUNY 2020⁸⁸ in 2011. NYSUNY 2020 allowed re-evaluation of enrollment goals based on a new plan and landscape. Under NYSUNY 2020, enrollments would be maintained at 2011 levels for five years. However, because of enrollment-incentive structures, current academic unit three-year plans are projecting higher enrollments than called for in NYSUNY 2020.

Total enrollment at UB is comprised of regular and external enrollment. Regular enrollment is funded by a prescribed state-tax appropriation and income from a prescribed tuition price specified in the State

Education Law. Regular enrollment generally reflects enrollment resident to the university's three campuses. External enrollment is funded through special contractual arrangements negotiated between a third party and the university and is generally offshore. The majority of UB external enrollment is associated with the Singapore Program. Fall 2013 total enrollment headcount, as of December 16, 2013, was 29,850 and regular

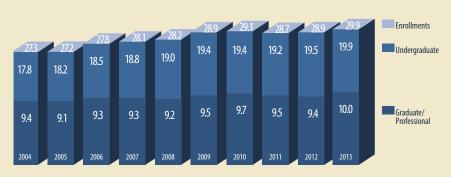


Figure 5.1Trends for Total Enrollment 2004-2013, in Thouands

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enrollment headcount was 28,055. Since 2004, UB's total enrollment has increased by nearly 10 percent; the undergraduate level growing by 11.6 percent and graduate level by 10.4 percent (Figure 5.1). More detailed data for enrollment patterns are provided in Table 5.1, which highlight increased diversity particularly with regard to Asian, Hispanic and international student populations. In 2013, international enrollment at the Buffalo campus hit a new high of 16.1 percent.

Table 5.1										
University at Buffalo Total Enrollment Trends										
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Total Enrollment	27,276	27,220	27,823	28,054	28,192	28,881	29,048	28,749	28,952	29,940
Undergraduate Enrollment	17,838	18,165	18,506	18,779	19,022	19,368	19,396	19,181	19,507	19,915
Graduate/Professional Enrollment	9,438	9,055	9,317	9,275	9,170	9,513	9,652	9,568	9,445	10,025
Geographic Diversity Percentage	50. 4	40.1	47.0	46.1	15.6		41.0	41.0	20.0	20.1
Western New York	50.4	49.1	47.2	46.1	45.6	44.1	41.9	41.8	39.9	38.1
Other New York	33.3	34.1	34.7	34.0	33.3	33.4	34.1	35.5	36.7	37.1
Out-of-State	3.5	4.0	4.3	4.7	4.8	4.9	4.8	3.5	3.4	3.1
International (at Western New York Campuses)	11.8	11.7	12.3	13.2	14.1	15.0	15.5	13.7	14.3	16.1
External (off shore)	1.1	1.3	1.7	2.2	2.3	2.6	3.7	6.4	6.4	6.3
Ethnic Diversity Percentage African American	6.1	6.0	5.7	5.7	6.0	5.6	5.7	5.5	5.5	5.6
Asian or Pacific Islander	7.2	7.4	7.6	7.9	8.1	8.4	8.5	8.9	9.9	10.6
Hispanic	3.1	3.1	3.0	3.1	3.2	3.0	3.2	5.3	4.9	5.1
Native American or Native Alaskan	0.4	0.4	0.4	0.4	0.3	0.4	0.5	0.4	0.4	0.3
White	61.7	61.3	60.5	58.7	57.4	57.1	55.8	52.7	51.3	48.4
Nonresident Alien	12.1	12.2	13.1	14.4	15.5	16.8	18.4	19.1	19.9	21.6
Not Reported	9.3	9.6	9.7	9.7	9.4	8.8	8.0	7.1	6.9	6.9
2 or more races	NA	NA	NA	NA	NA	NA	NA	0.9	1.2	1.5

While many enrollment goals are currently being met, or exceeded, UB's history in this area has been episodic, often for understandable reasons. For example, enrollment dipped in 2011 during the development and implementation of UB's new student information system (HUB). While expected, the challenges in the first years of a new admissions software system and the inability to prepare standard admissions reports throughout the first full admission cycle presented a distinct disadvantage in managing recruitment and enrollment progress. The surge in Fall 2013 enrollment occurred with a renewed focus, system expertise and campuswide attention on enrollment.

To help plan for campus enrollment, UB submits an annual rolling enrollment plan to SUNY. The overall themes of the current SUNY enrollment plan are to increase incoming student quality and reduce the number of special admits; maintain regular enrollment at current plan levels (27,550); maintain external enrollment levels; admit more freshmen in response to anticipated faster times to degree achieved through the Finish in 4¹⁵³ program and a declining pool of transfer students; and a continued diversification of the student body through aggressive recruiting throughout New York State, nationally

and internationally. To help manage enrollment challenges and opportunities, UB has made it a priority to reestablish a more robust enrollment-management structure as described in the next section.

Status of Strategic Enrollment Efforts

Historically, admissions at UB have been managed by three separate and independent organizations focused on domestic undergraduate (Undergraduate Admissions²³² within the Office of Undergraduate Education), graduate and professional (Graduate Enrollment Services²³³ within the Graduate School), and international (International Enrollment Management²³⁴ within the Office of International Education). Enrollment goals for each of these separate populations were developed jointly with limited enrollment-management oversight from the Office of Academic Planning and Budget. This process ensured a strong connection between academic-unit enrollment plans and budgets as administered by the provost through Academic Planning and Budget. Prior to 2007, the budgeting model was largely enrollment-based with changes in allocated unit budgets driven largely by generated credit hours. As

explained in Chapter 2 between 2007 and 2010, every academic and academic support unit entered into a three-year compact with the provost. Although there was a focus on the strategic goals of UB 2020 throughout the compact process, there was not a direct one-to-one relationship between funding levels and specific unit performance in key areas such as enrollment. In July 2011, a new campus resource-allocation model that incentivized enrollment directly was implemented and academic units were required to project three-year enrollment plans. In response to this new budget model, a number of factors affecting campuswide recruitment and retention were discussed and recommended at the university senior leadership retreat in September 2011.²³⁵ A primary recommendation from this discussion was the need to

UB Attracts the Brightest

UB continues to be an attractive choice for the most academically talented students in the area. Since 2008, Business First has tracked the college choices of its annual Western New York 25 First Team members. Since that time, students have chosen 57 different institutions to pursue higher education. As of June 2013, UB was the top choice with 16 First Teamers. Cornell (15), Yale (11), Harvard (10) and MIT (6) round out the top five.

In response, the consulting firm Noel-Levitz Inc. was engaged to provide a preliminary assessment of undergraduate enrollment processes at UB and to provide advice on a strategic enrollment-planning process. In support of these efforts, an E-Fund proposal (as described in Chapter 2) was funded that called for the development of a coordinated campus strategic enrollment-management structure. To start this process, an Enrollment Planning Council was formed in January 2012 with then vice provost and dean for undergraduate education, the vice provost for graduate education and dean of the graduate school, the vice provost for international education, the chief information officer, the vice provost for academic planning and budget, the vice provost for libraries, and the vice president of university life and services as the membership. Meeting biweekly, the Enrollment Planning Council was charged by the provost to create an enrollment culture on campus, guide the university in development of a comprehensive strategic enrollment-management structure and a strategic enrollment plan beginning with the Fall 2013 recruitment cycle.²³⁶ The Enrollment Planning Council represented a major shift in efforts at UB by bringing together, in a formal structure, the senior leadership responsible for university

improve UB's current situation regarding its enrollment-management and retention strategies.

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enrollment. To encourage the shift to an enrollment culture on campus, nearly every academic and service unit was visited to present and describe enrollment trends so all could understand the university's successes and where more effort is required.²³⁷

Through budget allocations made possible by the E-Fund, ¹⁰⁸ the university committed to hiring a vice provost for enrollment, and the Enrollment Council, augmented by selected academic deans, served as the search committee. This search was successfully concluded in July 2013. ²³⁸ Concurrent with this new position was the development of an Office for the Vice Provost for Enrollment within the new Academic Affairs structure. This enrollment organization consolidates Undergraduate Admissions, Graduate Enrollment Management Services, Financial Aid, Student Accounts, University Registrar, Student Response Center and a new division on Student Academic Reporting. International enrollment was not included within the Office for the Vice Provost for Enrollment due to the highly specialized requirements; however, close collaboration with International Enrollment Management is assured through participation in joint strategy sessions and oversight of the Enrollment Planning Council.

The Enrollment Planning Council thus far is making important inroads toward UB's more conscious enrollment strategy with the successful search for the vice provost for enrollment, the establishment of a coordinated enrollment structure within Academic Affairs, a greater awareness and engagement of enrollment across campus, and increased enrollments for Fall 2012 and 2013. What is not yet complete within the Enrollment Planning Council charge is the development of an overall long-term strategic enrollment plan for the university. With the arrival of the new Vice Provost for Enrollment, such a plan can be achieved for the Fall 2015 recruiting cycle.

Enrollment Operations and Success by Sector

The foundation of all successful enrollment programs is the structure and effectiveness of the offices responsible for student recruitment. As described earlier, Undergraduate Admissions is responsible for the recruitment of domestic undergraduates, Graduate Enrollment Management Services is responsible for the recruitment coordination of graduate and professional school students, and International Enrollment Management manages the recruitment and admissions procedures for all international students at UB.

Undergraduate Admissions Operations and Success

Consistent with its mission, UB envisions a community of undergraduate scholars who partner together in the intellectual enterprise. UB admission professionals look for students with strong credentials and for a concrete demonstration of their love of ideas and likely enthusiasm for research and other creative endeavors. At the undergraduate level, holistic review of applications allows for a broader set of variables for consideration in the admissions evaluation process. The measure of a student's motivation and drive can extend beyond an applicant's academic classroom performance or scores on standardized tests.

Applications, admissions and enrollment reports are generated and reviewed on a weekly and daily basis at various stages during the recruitment cycle to assess progress. Outcomes are assessed against

established goals and targets. As shown in Tables 5.2 and 5.3, UB has been successful in realizing its undergraduate admissions goals, particularly with regard to the increase in the number of enrolled freshmen and transfer students. In Fall 2013, the university enrolled a record 3,701 total freshman and 1,923 total transfer students. While not shown in this level of detail in Tables 5.2 and 5.3, the domestic freshmen enrollment goal of 3,150 students was exceeded by 99 students and the domestic transfer goal of 1,525 students was exceeded by 52 students.

Table 5.2										
University at Buffalo New Freshmen										
·	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
SAT Median	1150	1145	1140	1150	1135	1165	1160	1155	1155	1160
High School 1-100 Average	90.6	90.3	90.6	91.1	91.3	91.6	92.0	91.1	91.3	91.
General Admissions Outcomes Applications	18,207	18,391	19,351	19,831	19,784	21,137	21,985	21,357	22,009	23,089
Admits	10,187	10,466	10,655	10,245	10,268	10,913	11,298	11,363	12,525	13,05
Admit Percentage	56	57	55	52	52	52	51	53	57	5
Enrolled	3,183	3,230	3,471	3,272	3,390	3,194	3,345	3,254	3,650	3,70
Yield Percentage	31	31	33	32	33	29	30	29	29	2
Special Admit Percentage	19.4%	19.7%	19.1%	16.2%	15.5%	13.7%	14.2%	10.5%	9.6%	8.39
Geographic Diversity Percentage Western New York	36.6	37.3	35.4	34.1	33.1	30.5	29.4	29.1	29.0	25.
Central New York	24.9	19.6	21.7	21.2	19.1	19.0	18.3	18.1	14.9	14.
Eastern New York	6.6	7.1	7.3	7.5	6.1	7.0	6.8	6.8	6.8	6.
Metro New York	23.5	23.4	23.3	22.2	22.5	24.8	25.6	29.8	31.4	37.
Out-of-State	3.7	6.3	5.0	6.0	6.4	5.2	5.0	4.5	4.0	4.
International (Buffalo campuses)	4.6	6.3	7.3	9.0	12.8	13.5	14.9	6.1	7.6	7.
External (off shore)	NA	NA	NA	NA	NA	NA	NA	5.7	6.3	4.
Ethnic Diversity Domestic Freshmen Percentage	6.0	7.0	6.0	7.0	7.0	5.0			6.5	
African American Asian or Pacific Islander	6.8 8.3	7.0	6.0 10.7	7.0	7.0	5.9	6.1	5.7 17.3	6.7 17.4	6. 19.
Hispanic	4.6	4.2	3.2	4.3	4.1	3.9	5.3	6.0	6.7	19. 8.
Native American or Native Alaskan	0.4	0.5	0.4	0.3	0.3	0.6	0.9	0.0	0.2	0.
White	71.0	68.2	70.2	67.7	67.7	70.7	68.8	59.6	58.9	54.
Not Reported	8.9	9.8	9.4	9.7	9.3	5.7	5.2	8.8	7.8	9.
2 or more races	NA	NA	NA	NA	NA	NA	NA	2.3	2.3	2.

Note: SUNY defines all applicants to the system using a combination of SAT and HS averages. Applicants are designated as G1, G2, G3, G4 or G5. Special admits at UB are those students below G1 or G2. The SAT and HS Average bands for each designation are given elsewhere.²³⁹

Median SAT scores, defined as the average of the sum of the 25th and 75th percentiles for critical reading and math, among all admitted first-time freshmen over the period 2004-2013 are presented in Table 5.2. There has been a slightly increasing trend over this 10-year period, with 2009 having the highest median SAT score for entering freshmen in UB's history. Over the same period, high school averages have been relatively constant. The admittance of special-admit students, defined as those

having an SAT and high school average below a prescribed threshold,²³⁹ has been declining intentionally for several years. This trend is expected to continue as the university looks to improve the overall profile of recruited students. Conversations with the offices that provide academic support to these groups is ongoing to facilitate this change. The university continues to work toward building greater diversity and has increased both geographic and ethnic diversity over the past 10 years.

Table 5.3										
Admissions Profile: New Transfer St	Admissions Profile: New Transfer Students									
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Entering GPA	3.07	3.05	3.08	3.08	3.10	3.09	3.11	3.09	3.07	3.09
General Admissions Outcomes Applications	4,548	5,068	5,094	5,404	5,436	5,535	6,107	6,083	5,903	5,862
Admits	3,028	3,158	3,127	3,220	3,442	3,367	3,623	3,672	3,814	3,882
Enrolled	1,638	1,628	1,579	1,745	1,796	1,735	1,850	1,910	1,929	1,923
Yield Percentage	54	52	50	54	52	52	51	52	51	50
Ethnic Diversity Domestic Transfers Percentage African American	7.0	8.3	8.0	8.9	10.0	10.3	11.0	11.7	11.9	12.5
Asian or Pacific Islander	8.5	7.7	8.0	8.6	7.9	8.4	9.1	9.8	11.6	10.0
Hispanic	2.9	4.3	3.6	4.6	4.8	4.3	5.3	5.6	6.5	7.4
Native American or Native Alaskan	0.7	0.4	0.7	0.5	0.4	1.0	1.6	0.6	0.3	0.3
White	65.9	64.0	66.7	64.2	62.7	67.4	67.7	64.1	62.0	62.8
Not Reported	15.0	15.5	13.0	13.1	14.4	8.6	5.3	5.5	4.9	4.1
2 or more races	NA	NA	NA	NA	NA	NA	NA	2.6	2.9	3.0
International Transfers Percentage Buffalo	9.0	11.2	13.0	13.3	16.5	18.0	17.3	9.3	9.0	9.8
External	NA	NA	NA	NA	NA	NA	NA	7.2	10.1	8.5

International Transfers Percentage Buffalo indicates those international transfers with regular state funding. No internal/external funding breakdown is available for 2004-2010 due to UB policy at that time.

Recently the State University of New York (SUNY) administration initiated statewide discussions, including the seamless transfer initiative, which emphasize the importance of transferability of course work, and reduced time to degree to enhance affordability. Transfers represent 32 percent of the UB undergraduate population and are a part of our tactical thinking and assessment. UB has made it a goal to be the destination of choice for high-quality transfer students. A task force has been working for about six months to identify unnecessary barriers and where better admission processes can be employed for this group of applicants. In the state of the destination of the course of the universe of transferability of course work, and reduced time to degree to enhance affordability. Transfers represent 32 percent of the ubbarriers and undergraduate population and are a part of our tactical thinking and assessment. UB has made it a goal to be the destination of choice for high-quality transfer students.

General attainment of undergraduate admission goals has been facilitated by the university establishing an excellent learning environment, rich diversity of undergraduate areas of study and excellent support programs, while stabilizing costs through planned and modest tuition increases. The Finish in 4^{153} program, which continues to be a central part of our messaging strategy to prospective and enrolled students, helps mitigate family concerns about higher tuition and overall costs for higher education. This story presents a university that is growing in quality and reputation, but addresses access with a promise to help all students graduate on time.

Graduate Enrollment Management Services Operations, Goals and Success

Graduate Enrollment Management Services (GEMS) is a unit within the newly formed Office of the Vice Provost for Enrollment. The primary role of GEMS is to support UB's academic units in attracting the most academically gifted graduate students and meet increased enrollment goals as established in three-year plans in academic units.

In 2006, recognizing that universitywide admissions standards were needed to improve the overall quality of graduate students and academic programs, a series of institutional policies and procedures were put into place to address this issue. To implement these changes while still allowing appropriate autonomy within academic units, UB's online graduate application system (GrAdMIT) was enhanced to ensure compliance with established admission minimums. GrAdMIT also was enhanced to enable the importation of all professional school applications thereby creating a single source for all graduate and professional application data across the institution. As a result of these changes, the institution now is able to uniformly report graduate admissions data for both numbers and quality to internal and external sources without the need to request or obtain additional data from academic departments. Academic units also are able to assess quickly and easily their progress toward enrollment targets and quality improvements in their incoming graduate student cohorts.

On a weekly basis, for each admissions cycle, GEMS produces a series of uniform institutional reports on graduate and professional-school admissions and enrollment to provide a monitoring mechanism on progress toward both individual and institutional enrollment goals.²⁴² This approach assists academic units in proactively monitoring their continuing student population, thus enabling them to utilize admissions waitlists strategically to fill gaps where necessary.²⁴³

The effectiveness of these policy and process implementation changes is evidenced in Table 5.4, which illustrates the significant improvements in institutional quality and diversity of our newly enrolled graduate student cohorts. The project was recognized nationally by our peers and was awarded the 2011 Council of Graduate Schools (CGS) Northeastern Association of Graduate Schools (NAGS)/ Educational Testing Service (ETS) Award for Excellence and Innovation in Graduate Education.

GEMS is leading a national research project for the National Association of Graduate Admissions Professionals (NAGAP), the Leader in Graduate Enrollment Management, to develop a formal definition of graduate enrollment management, or "GEM" as it often is called, and a best practice model based on the most current research of the profession. The goal of the project is to assist institutions in bridging the gap between operational needs and strategic planning aspects to enable a more cohesive and effective approach to the graduate educational enterprise. UB's leadership role in NAGAP and the GEM national research project places UB graduate enrollment in the forefront for establishing a "best practice" model, positioning the university as a visible leader in the profession and providing ready access to an extensive network of data resources.

To facilitate improvements in the overall graduate application process, GEMS conducts an annual admissions survey. As an example of the outcomes from this survey, it became apparent that a growing number of both domestic and international applicants reported inefficiencies in processing their applications and communicating progress to the applicants. In response, UB implemented a 100 percent paperless, self-managed graduate application process within the existing GrAdMIT system. This allowed

Table 5.4										
Admissions Profile: Graduate and Professional Students										
	2004	2005*	2006	2007	2008	2009	2010	2011	2012**	2013*
General Admissions										
Total Applications	21,642	21,282	24,351	25,875	27,304	28,712	29,060	28,614	28,316	28,943
Completed Applications	17,316	17,031	19,766	20,710	21,823	22,185	22,808	22,122	21,988	23,061
Admits	6,059	5,965	7,737	7,804	7,336	7,794	7,622	7,772	8,023	8,985
Enrolled	2,727	2,696	3,022	2,756	2,839	3,030	3,009	3,280	3,332	3,791
Yield Percentage	45%	45%	39%	35%	39%	39%	39%	42%	42%	42%
Graduate Admissions Outcomes Enrolled	2,161	2,116	2,452	2,178	2,273	2,454	2,438	2,762	2,742	3,210
College GPA	3.4	3.31	3.32	3.37	3.36	3.40	3.40	3.38	3.40	3.37
GRE Verbal (AVG)	502	498	498	494	502	481	481	500	509	519
GRE Quantitative (AVG)	675	665	684	673	680	685	686	686	701	703
Dental Medicine Admissions Enrolled	85	86	88	89	85	84	89	90	91	90
College GPA	3.44	3.57	3.54	3.61	3.40	3.61	3.62	3.55	3.55	3.51
DAT Perceptual Ability Test	17.98	17.43	19.11	19.40	20.67	20.01	19.69	20.45	20.75	20.53
Law School Admissions Enrolled	243	249	234	237	234	232	229	175	225	215
College GPA	3.43	3.44	3.44	3.45	3.48	3.52	3.48	3.57	3.38	3.36
LSAT Median	155	155	156	156	157	157	158	157	155	153
Medical School Admission Enrolled	131	130	136	136	134	142	137	128	144	146
College GPA	3.59	3.57	3.6	3.62	3.67	3.65	3.7	3.71	3.75	3.72
MCAT Median	28.05	29	29	30	31	31	31	32	32	31
Pharmacy Admissions Enrolled	106	115	112	116	113	118	116	123	126	130
College GPA	3.48	3.50	3.40	3.40	3.50	3.50	3.60	3.50	3.43	3.46
PCAT Average Scaled Score	396	427	425	427	425	428	425	421	418	420
Ethnic Diversity of Domestic Students (Percentage)	5 00/	5.20 /	5.10 /	6.20/	4.00/	5 00/	5.20/	5.40/	4.00/	5 60/
African American	5.0%	5.3%	5.1%	6.3%	4.9%	5.0%	5.2%	5.4%	4.0%	5.6%
Asian or Pacific Islander	3.7%	3.8%	4.3%	3.6%	4.5%	6.2%	6.0%	7.9%	8.2%	8.3%
Hispanic Native American or Native Alaskan	0.2%	0.5%	2.9% 0.2%	0.8%	2.9% 0.3%	0.8%	0.9%	2.0%	2.7%	0.4%
White	73.2%	73.6%	70.1%	68.7%	69.9%	70.3%	64.0%	72.5%	73.1%	71.3%
Not Reported	14.8%	13.7%	17.4%	17.4%	17.5%	15.3%	21.3%	11.2%	10.9%	10.0%
International	26.1%	25.7%	30.4%	29.9%	28.1%	30.8%	30.8%	27.8%	29.9%	38.4%
Notes: Acceptance data are ret										

lotes: Acceptance data are retrieved from weekly Admission Activity Reports. Enrollment data source for Fall 2004-Fall 2013 are retrieved from ISI_STUDENT_OFFICIAL_HIST. Enrollment data source for Fall 2004-Fall 2013 is retrieved from PS_RPT_STIDEMTTERM_V.

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faculty to review and assess academic credentials more efficiently for each of the institution's nearly 300 graduate and professional-school programs (domestic and international) in a highly customizable environment. Moreover, the Office of International Admissions is now able to review credentials and distribute I-20 decisions much earlier via GrAdMIT's enhanced completely electronic workflow system. For Fall 2013, these efficiencies contributed to a significant improvement in applicant satisfaction with the admissions process with nearly 90 percent of all accepted applicants indicating that the process was good or very good, improvement in the completion rate of applications from a previous five-year annual average of 72 percent to nearly 80 percent, and 30 percent more I-20s being issued during the typical peak admissions time in April. This new method contributed to UB experiencing both record high new and continuing international student enrollments.

International Enrollment Management Operations, Goals and Success

International Enrollment Management (IEM), a unit of the Office of the Vice Provost for International Education (VPIE), seeks to enroll high-quality, self-funded international freshmen and transfers from both the United States and overseas. IEM also represents the university overseas in recruiting graduate and professional students and works closely with GEMS to enhance graduate and professional enrollment in keeping with institutional and unit goals.

The quality profile of UB's international undergraduate prospects is comparable to that of the university's domestic prospects: we seek international applicants who have strong academic preparation, excellent English proficiency, who have potential to take maximum advantage of UB's distinctive learning opportunities — in research, global education and experiential learning — and who will enhance the cultural and ethnic diversity of the student body. In general, international students must meet the same admission standards and criteria as domestic applicants. All international students must submit official high school or college transcripts and meet the established admission GPA requirements (or the equivalent). In addition, international students must demonstrate English language proficiency by submitting scores that meet UB's minimum requirements for TOEFL, IELTS, PTE, SAT I CR or ACT.

Since the mid-1990s, UB has pursued a strategic international-enrollment plan focused on increasing the number, quality and diversity of its international undergraduate enrollment. Due to its traditionally strong value proposition of excellent academic quality and low cost, UB has long been successful as

a magnet for international students from across the globe, although until relatively recently these have been primarily graduate and professional students enrolling in UB's highly ranked programs. These standards bring distinctive perspectives, learning styles and cultural experiences to the university's intellectual community. Moreover, throughout its history UB has relied to a far greater extent on

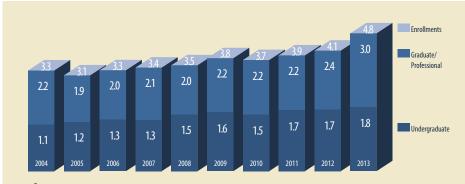


Figure 5.2 International Enrollment at Western New York Campuses: Growth 2004-2013, in Thousands

Integrity of some applicant and yield data in 2005 is questionable.

Converted GRE score range with ETS concordance table due to change in scale from 200-800 to 120-180 point scale due to change in GRE.

international students for geographic diversity than on students from other states in the United States. Data highlighting the international applicant pool and enrollment is presented in Table 5.5.

Table 5.5
Admissions Profile (International):
Undergraduate, Graduate (Includes Professional) Students

Ondergraduate, Graduate (Increases i Foressional) Students										
	Fall 2004	Fall 2005	Fall 2006	Fall 2007*	Fall 2008	Fall 2009	Fall 2010	Fall 2011	Fall 2012	Fall 2013
Completed Apps Undergraduate	1135	1,517	1,617	2,347	2,533	2,956	3,076	3,347	3,464	3,760
Graduate	4955	5,335	6,549	7,370	7,448	7,720	7,852	8,300	9,436	10,653
Total	6090	6,852	8,166	9,717	9,981	10,676	10,928	11,647	12,900	14,413
Admitted Undergraduate	767	1,043	1,114	1,572	1,542	1,986	1,914	1,686	1,967	2,174
Graduate	2564	1,889	2,718	2,898	3,166	3,360	3,473	3,415	3,666	4,676
Total	3331	2,932	3,832	4,470	4,708	5,346	5,387	5,101	5,633	6,850
Enrolled Undergraduate	295	463	503	691	754	779	849	804	884	912
Graduate	562	735	970	875	872	1,019	973	919	1,034	1,469
Total	857	1,198	1,473	1,566	1,626	1,798	1,822	1,723	1,918	2,381
Yield Percentage Undergraduate	38%	44%	45%	44%	49%	39%	44%	48%	45%	42%
Graduate	22%	39%	36%	30%	28%	30%	28%	27%	28%	31%
Total	26%	41%	38%	35%	35%	34%	34%	34%	34%	35%

Notes: Acceptance data are retrieved from weekly Admission Activity Reports. Enrollment data source for Fall 2004-Fall 2013 are retrieved from STU_SEMESTER. Enrollment data source for fall 2011-fall 2013 is retrieved from PS_RPT_STUDENTTERM_V.

*Integrity of applicant, admit and yield data in 2007 is questionable. PharmD and DDS data are missing.

This international enrollment plan has paid off handsomely with a six-fold increase in international undergraduate enrollment in the past 17 years, from a little more than 300 in 1996 to nearly 1,800 in 2013, as shown in Figure 5.2. During the same period, UB's overall international enrollment has more than tripled, from a little more than 1,600 to more than 4,800. UB stands out among comprehensive public research universities in terms of the percentage of regular enrollment that is international, which has grown from six percent in the mid-1990s to 16.1 percent today. This impressive growth has been achieved entirely through UB's own international enrollment-management operation and has not relied on highly compensated agents paid to represent UB overseas. As a result of UB's prudent approach, the integrity of the admission process and overall quality assurance have been maintained and protected.

Working with senior leadership, the vice provost for international education sets specific enrollment goals each year for the next year's incoming freshman and transfer classes. In keeping with its strategic internationalization plan, UB enrolls students from more than 115 countries. These students diversify the student body, and they contribute to UB's mission and to the campus community in a variety of important ways. Fall 2013 enrollment goals were 300 international freshmen and 175 international transfers. The transfer target was exceeded by eight students while the freshmen enrollment fell short by 16 students.

Seventy-seven percent of UB's international students come from six countries, China, India, Korea, Canada, Malaysia, and Turkey. Several emergent countries are helping diversify enrollment, with students coming from Iran, Vietnam and Brazil. UB's international enrollment mix reflects the profile for peer institutions in the AAU for the past 15 years. To recruit an internationally diverse class, UB targets recruitment activities in select regions where there is potential to attract qualified self-funded applicants and whose students are underrepresented at UB — including emerging countries in Latin America, the Middle East and Central Asia. UB does not actively recruit in certain regions of the world, most notably Western Europe and Africa, where even a long-term investment of substantial resources would not generate significant enrollment.

Marketing and Recruitment Efforts

UB employs a variety of traditional and emerging modalities to assist in its marketing and recruitment efforts for graduate and undergraduate programs, international education and for underrepresented students. In all cases, efforts are focused on building a larger applicant base by which more selective and targeted admissions can be made in response to university goals. In the undergraduate arena, a plan to convey UB's distinctive experience was commended in 2012 by the consulting firm of Noel-Levitz.²⁴⁴ In addition, UB's undergraduate web-based Undergraduate Catalog²⁴⁵ is used extensively by prospective students to review program

Nationally Recognized Undergraduate Catalog

In 2010, the University at Buffalo's online Undergraduate Catalog was named as one of the best in the country by .eduGuru, a respected Internet marketing company focused on higher education.²⁴⁵ The catalog was cited for its core navigation ease, information structure, tools like course search, and prior catalog archive. In 2012/13 academic year, the catalog had 655,268 visits, 331,722 unique visitors, and 3,455,568 page views.

descriptions and requirements and has been recognized nationally. Finally, institutional funds and endowed scholarships of more than \$16 million are available annually.

GEMS efforts have been recognized for annual UB Graduate Admissions²⁴⁶ and Enrollment Factbooks²⁴⁷ which were lauded by Noel-Levitz as a "best practice" in data in the field of graduate-enrollment management at the 2013 NAGAP National Graduate Enrollment Management annual conference. International marketing relies on extraordinary expertise in Asian languages and worldwide educational systems in all of the major sending countries. To attract academically accomplished underrepresented students at both the graduate and undergraduate levels, unique learning environments are supported and targeted financial assistance is available. Graduate assistantships further support student recruitment. A more complete picture of the university's recruitment efforts are described in the report, University Student Recruitment.²⁴⁸

Strategic Goals for Excellence in Student Retention and Degree Completion

At the undergraduate level, there has been a strong focus on initiatives designed to increase persistence and completion rates. Each fall, the Office of Institutional Analysis prepares Student Success Profiles²⁴⁹ showing the retention and graduation rates for students entering the institution as first-time freshmen. UB has been building staff and expertise in this area over the past 10 years, and its four-, five- and six-year graduation rates among undergraduates have shown annual increases since Fall 2002 (see the Common Data Set ¹¹⁹), with UB's four-year graduation rate increasing from 32.9 percent (Fall 1997

cohort of entering freshmen) to 45.9 percent (Fall 2007 cohort). Academic advisors and other UB student-support personnel have been evaluating retention and graduation rates of students, and while there has been impressive improvement, graduation rates are not yet where the university would like them to be.

In the original UB 2020 plan, two retention and completion goals were established: increase student persistence to the second year to 88 percent, and improve time to degree, as measured by six-year graduation rate, to 62 percent. This retention goal has been achieved. The six-year graduation rate goal also has been achieved and has increased steadily, reaching 71 percent in 2012 for the 2005 entering cohort. UB exceeded its expected U.S. News and World Report six-year graduation rate by eight percentage points in the 2014 survey and by seven points in the 2013 survey. As part of UB's successful NYSUNY 2020 application in 2011, goals for undergraduate retention and completion were raised as UB seeks to achieve levels consistent with its peers among AAU public research institutions. These goals are: improvement of first-year retention to 91 percent, improvement of four-year graduation rate to 55 percent and improvement of six-year graduation rate to 75 percent.

Finish in 4

These new goals, combined with the long-standing concerns about graduation rates, became the impetus for UB's Finish in 4 program, which is a university commitment to provide students with the curricular and advising support needed to ensure timely graduation. This campuswide initiative was based on an effort led by the senior vice provost for academic affairs, along with committee members from across the institution, who examined all of the factors that might be contributing to the challenges to retention and four-year completion rates. It was catalyzed initially with successful funding from the E-Fund campus challenge. However, additional funding sources were required and significant monies achieved through NYSUNY 2020 were allocated toward this effort. Some elements of the initiative are:

- A substantial increase in seating in core required courses. For 2012 (the first year of the initiative), approximately 10,000 total seats and 30,000 total credit hours were added. This has ensured new and continuing students better access to courses to achieve timely progression in their majors. Much of the expansion has been in introductory courses in biology, chemistry, composition, mathematics and foreign languages. Expansion of core-course seating will continue in future semesters at these levels.
- Additional hiring of academic advisors across the institution. One of the commitments made
 to students who sign up for Finish in 4 is a more proactive relationship with academic advisors,
 essentially mandating that each student in the program meet with his or her academic advisor
 each semester. To keep up with the increased demand, additional advisors and support staff are
 being added. Further increases are under active consideration.
- Active monitoring of all students in Finish in 4 to ensure they are taking and completing courses
 in a timely manner and consistent with the guidelines provided. Communications let students
 know that they are taking the necessary steps at the correct times. While this information has
 always been and will continue to be readily available to all UB students, there will be an even
 more vigorous effort for students in Finish in 4. In 2013-2014, a similar course capacity was
 maintained for the new freshman class, as well as increases in monitoring for each subsequent
 level of courses.

Freshmen entering UB in Fall 2012 were the first students eligible for Finish in 4, and half of them signed up for the program. The initial impact of this program on first-year retention is still being analyzed, but preliminary data are available for the Fall 2012 freshman cohort showing that an 89 percent retention rate was achieved for the Finish in 4 cohort as compared to an 86 percent retention for non-Finish in 4 students. While that is a positive indicator, completed credit hours for both cohorts were below the needed threshold of 30 for the academic year, suggesting that many factors beyond course availability and more intensive advising are at play. The UB Finish in 4 team continues to analyze the data to make recommendations on program improvement. One of these efforts is a task group to explore better utilization of the Academic Advisement Report within HUB for tracking student degree progress.

While graduation rates have been on the rise for 10 years, retention to the second year has remained relatively stagnant over this period. Restructuring the summer orientation programs to provide a greater emphasis on academics, greater focus by advisors, a full support program for undergraduates admitted near the margins of UB's acceptance criteria (see Programs for Under-Prepared Students below), freshman seminar classes and mandatory advisement for first-semester freshmen have kept the level stable, but have not been sufficient to increase first-year retention rates. The new enrollment management office, the initiatives in Finish in 4 and the Student Success program are intended to change the culture on campus to improve freshman-sophomore retention and eventually graduation rates.

Finish in 4 also has resulted in institutional commitments to address retention broadly. First, the Division of Student Success

and Retention was created within Academic Affairs in 2013 to provide oversight of the Finish in 4 program, as well as universitywide academic advising, tutoring and other student success programs. Another initiative is the establishment of a data analytics team in 2013 to better inform retention efforts. Started in Fall 2012, the Second-Year Experience (SYE)²⁵¹ led by personnel from Student and Academic Affairs, works to better orient second-year students to the targets and opportunities most helpful and appropriate for their persistence and timely progress. More broadly, initiatives impacting undergraduate retention and completion rates include a commitment by the institution to providing an affordable education and the provision of a vast array of student services, including advisement, continued commitment to mid-semester and end-of-semester academic review and follow-up, and a plethora of academic support services to help meet the academic and nonacademic needs of students.

Spotlight on Assessment: Designing Finish in 4

Early in 2011, after periodic review of retention and graduation comparisons between UB and AAU peer institutions, senior leadership concluded that UB needed to improve its four-year graduation rate, and the senior vice provost for academic affairs was charged with designing an initiative to improve that rate. A targeted assessment effort was begun that involved a task force charged with identifying reasons for lower-than-desired fouryear graduation rates. Analytical support for these efforts was provided by staff members in the Office of Institutional Analysis and the College of Arts and Sciences. The results of this intensive assessment process suggested that availability of seats in high-demand courses was a significant factor in extending the time it takes students to earn a fouryear degree. Not only was there a problem with students frequently resigning from these courses and re-registering in a later semester, but also seat availability had decreased with the onset of the fiscal crisis of 2008. University policy was changed to require students to get approval for course resignations. In addition, students who resign or fail a required course must re-take the course during a summer session. Beyond this, for academic year 2012-2013, 10,000 seats were added in high demand courses of all types (e.g., lectures, labs, recitations, etc.). The Finish in 4 Advisory Group continues to meet to review student progress and identify additional needs. UB recently was recognized by the New America Foundation for embracing key strategies to expand enrollment and achieve higher graduation rates.

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Student Success for Graduate and Professional Students

The retention and degree completion of UB graduate and professional students primarily is the concern of the academic program in which they are enrolled. Most students who enroll in a graduate or professional program persist through degree completion: 81 percent of graduate students and 93 percent of professional students earn a degree within the seven years allowed for these programs. On average, master's students are completing degrees within 2 years (4 semesters), while doctoral students are completing degrees within approximately 6½ years (12 semesters).

Because many students enrolled in graduate and professional programs have more external demands than undergraduates (employment, marital and family responsibilities, etc.), they sometimes take the minimal allowable credit hours to balance competing demands for their time. Many departments work closely with students who are approaching the seven-year time limit, offering them more time to complete degree requirements as long as reasonable progress is demonstrated.

Programs for Under-Prepared Students and/or Academically At-Risk Students

Under-prepared students are those not eligible for regular admission to the university. These students may be admitted through individualized admissions programs recognizing talented students who may not have reached their full academic potential due to barriers in their educational, economic or personal backgrounds. Students are chosen for these programs based on a holistic review of their application and academic credentials by UB's Office of Admissions. The Cora P. Maloney College (CPMC), ¹⁷¹ overseen by the dean of undergraduate education, within the Office of Academic Affairs, is a unique supportservice network designed to provide students with the advice, guidance and support they need to help realize their potential and achieve academic success. There are three CPMC programs that serve underprepared students:

Access to College Excellence (ACE) Program

The ACE Program (formerly the Academic Challenge and Enrichment Program)²⁵² serves as an integral part of the university's effort to promote access and enhance diversity by welcoming a broad range of academically talented students and providing support services to students for their first two years to help them maximize their abilities, facilitate the transition from high school to college and ensure successful entry into an academic major at UB. Students receive individualized academic and personal advising, peer mentoring, tutoring and career guidance, and they also may utilize many of the other services and programs that CPMC has to offer. The program is designed for freshmen identified during the admissions process who show great potential for academic success, but who lack strength in one or more of the standard admissions criteria. Following committee review, a limited number of students are offered admission as participants in the ACE Program.

Arthur O. Eve Educational Opportunity Program (EOP)

EOP²⁵³ provides an avenue for admission and means of support for talented students who have not reached their full academic potential. Applicants must be New York State residents who qualify under EOP financial eligibility guidelines. The EOP Summer Program is a four-week residential program designed to help students prepare for their freshman year of study and adjust to UB's environment and culture. EOP services are provided statutorily to students for up to five years.

Student Support Services (SSS)

SSS²⁵⁴ is a TRIO program targeting qualified students who are first generation in college, have lower income status and/or have a documented disability. Assigned advisors help students chart academic and professional goals and overcome obstacles. Members may participate in CPMC programs, including the Tutorial Lab; workshops on academic, career and personal topics; cultural events with other SSS students; access to laptop computers for four weeks at a time; work within the Peer Mentoring Program and Public Service Internship Program; preparation for graduate and professional school; and SSS grant aid.

Tutoring and Academic Assistance

UB provides a variety of undergraduate tutoring and mentoring services for those who are either under-prepared or seek additional help in a particular subject area. Numerous units on campus provide free tutoring to certain target populations of students or to any undergraduate; students are referred to several accessible websites in the University Libraries and Academic Advising that catalog these. The newest service, opened in Fall 2013, is the Center for Excellence in Writing²⁵⁵ developed to provide writing assistance across all levels of the institution and coordinate quality assurance to all related

tutoring programs. While access to free tutoring has increased significantly in the past five years, the institution recognizes that there is still a need to expand these services.²⁵⁶

Commitment to Affordable Education

As shown in Figure 2.7 (Chapter 2), UB ranks third lowest in resident undergraduate tuition and fees among its 12 current and aspirational peers, and second lowest in nonresident undergraduate tuition and fees. In terms of freshman net price, UB is ninth lowest among AAU publics and eighth lowest among SUNY institutions. UB was ranked among the top 75 in Princeton Review's 2013 Best Value Colleges. In the most recent U.S. News and World Report rankings, UB was ranked ninth overall among 270 research universities and 3rd among publics for least amount of student loan debt upon graduation. More than half of students graduate from UB debt-free, and the average amount of debt for students who graduate with debt is \$17,425. In comparison, U.S. universities with the most debt may have up to 94 percent of students who graduate with debt, and the average amount of debt at these institutions ranges from \$35,000 to \$47,000.

The Office of Financial Aid (OFA)²⁵⁷ strives to remove financial barriers to student enrollment and retention. Its goal is to ensure that any qualified student who desires to pursue and complete an education at UB can obtain the appropriate resources to do so. Specific implementation procedures to accomplish this goal include:

• Establishment of essential manual and automated processes to support awarding of financial aid in a timely manner;



National Spotlight on UB's Commitment to Affordability and Graduation

On August 22, 2013, history was made at the University at Buffalo when President Barack Obama visited campus to kick off a national conversation about college affordability. The President said, "But I wanted to start here at the University at Buffalo"... "You are focused on the future"... "and there is great work being done here at the university." ... "I know that the young people here are committed to earning your degree, to helping this university, to make sure everyone of you finishes in four, making sure you are prepared for whatever comes next and that is what I want to talk about today."

- Awarding financial assistance to qualified students according to institutional and federal requirements with a focus on individual student need;
- Establishment of regular communication between OFA and students and parents;
- Publication of required consumer information concerning financial-aid program expenses, requests for reconsideration of financial-aid results, application requirements, eligibility criteria, award procedures, student rights and responsibilities, important deadlines and other pertinent information;
- Maintenance of regular contact with university administrators to support essential policy development and revision and to evaluate institutionwide needs related to financial aid;
- Maintenance of a flexible, open-door operation for students who need adjustment in financial assistance or assistance in seeking, obtaining and retaining appropriate levels of financial aid;
- Provision of individual student/parent assistance in completing necessary applications and managing personal resources as they are needed to augment financial assistance in covering educational expenses;
- Maintenance of active working relationships and communication with external agencies, organizations and individuals, and all university offices involved in the provision of financial assistance to students;
- Provision of up-to-date training and information opportunities to all financial-aid office staff
 through in-house training and attendance at professional organization meetings and workshops;
 and
- Internal program evaluation activities that contribute directly to enrollment services or universitywide research efforts that require OFA input.

Excellence in Student Services at UB

The delivery of student services at UB can be divided into three main categories: student infrastructure services, academic support services and student affairs. Student infrastructure services include all operations necessary to support the functional aspects of a student's interaction with the institution, including financial and financial-aid activities, registration and access to records, and technology support for learning and transactional activities. Academic support services include academic advisement, tutoring and mentoring, and educational enrichment activities. Student affairs provides services and experiences that help students succeed, including campus living, student activities, leadership and community service, intercultural and diversity education, career services, university police, new student programming, judicial affairs, health and wellness education and services, transportation, accessibility services, veterans services, campus dining and special events.

Student Infrastructure Services

Student infrastructure services are supportive in nature and are designed to provide necessary functions without intruding on the student academic pursuit. They support students in their understanding, access and utilization of university resources. These services include the Registrar's Office (Records &

Registration, Financial Aid and Student Accounts)²⁵⁸ and Information Technology.⁹⁹ There have been several significant upgrades in UB's ability to provide these services over the past few years.

A wide range of stand-alone and institutionally designed computer software systems were replaced with a single integrated system from PeopleSoft/Oracle. Final implementation was completed in Summer 2011, and the system was named HUB.²⁵⁹ It includes admissions, records and registration, degree audit, student accounts and financial aid. It not only has improved services to students, but it also provides a full range of self-service options not available previously. Students at all levels can check their admissions status, accept financial aid, register, access their records and pay their bills online. It is available daily from 7 a.m. to 2 a.m. Although the initial adjustment to any new system is challenging, student satisfaction with HUB has increased according to the annual Student IT Experience Survey.²⁶⁰ Immediately following implementation, the majority of students reported being somewhat or very dissatisfied. In 2012, more than half reported being very or somewhat satisfied with the service. In addition, in-person service requests have dropped each year since HUB implementation. A central HUB Support Team within the vice provost for enrollment area partners with functional offices to ensure continuous assessment and improvement.

The Student Response Center was created approximately 10 years ago, and brought together under one organization student customer-service functions (phone, email and walk-in) for financial aid, bursar, records, registration, and class scheduling. There were obvious efficiencies gained through the restructuring, but more importantly, students saw a streamlining of services and experienced less frequent "bumping" from one office to another. Recently, there have been additional changes. Greater access by students to their records through HUB has made for more focused interactions, prompting UB to separate the call and email center function into three distinct areas: Student Accounts, Registrar's Office and Financial Aid. This has enabled students to better target their inquiries and receive more timely and accurate responses. UB recently opened a central walk-in office for financial-aid assistance. Using a caseload model, each student has an assigned financial-aid advisor, identified to the student through his or her HUB site, who can handle all financial-aid questions. As mentioned above and reported in the Common Data Set, 119 more than 50 percent of full-time undergraduate students receive some form of need-based financial aid.

UB continues to provide strong support in the area of information technology. All services, offices and programs have an online presence (streamlined for students, faculty and staff via our portal, MyUB²⁶¹), and UB personnel regularly handle a significant load of email inquiries from students. Students, faculty and staff have access to high-speed connectivity, both wired and wireless, throughout each of the three campuses. UB's highly connected infrastructure allows distance-learning students and students enrolled in UB abroad to integrate fully into the university's learning environment. All instructors easily can mount learning resource materials online through UB*learns*, ²⁶² where students can access materials for courses in which they are enrolled from anywhere in the world. Students living on campus can have technical support personnel come to their dorm rooms or residence-hall apartments to help them with connectivity problems. There also are walk-up service desks where students can receive help with their personal computers. Through a wide variety of licensing agreements, UB students can obtain software from a variety of vendors for Windows, Apple or Linux computers and mobile devices for free or for a small fee.

Security of student and all personnel records is important to UB, and the university has developed a carefully considered balance between ease of authorized access and the need to maintain confidentiality. Faculty, staff and students have secure IDs and strong passwords to ensure access only to the sources and tools for which they are authorized. Training is required for all who have access to student or personnel data through the use of mandated tutorials²⁶³ and Standards for Securing Regulated Private Data.²⁶⁴ This protocol outlines the rules regarding storage, disclosure, access and transmission of private data, and the associated information security and privacy standards.

Academic Support Services

Academic Services include advising functions, as well as services for academically under-prepared students and tutoring and academic-enrichment activities, described earlier in this chapter.

Advisement

Academic advising²⁶⁵ at the University at Buffalo is delivered through a network of professional advising centers. Students are assigned to an academic-advising unit based upon their declared or approved major (in a professional school or the College of Arts and Sciences). Professional students are advised within their academic areas (e.g., medicine, pharmacy, social work). Graduate students normally are advised and mentored by faculty in their academic departments.

Undergraduate students have several avenues through which they receive academic advisement. Each decanal unit has a central advising office, with a staff of professionals trained specifically in academic advising. There also is a centralized advising center for undecided and transitional students. Most academic departments have a combination of staff and faculty advisors who assist students in their majors, especially juniors and seniors. The central offices are very active in assisting new students; those directly admitted from high school and transfer students. After initial enrollment, most advisement is voluntary, but strongly recommended, and some units mandate advisement for first-semester freshmen, students on academic probation or other groups of students identified in some way as being "at-risk". There are additional advising centers, staffed by trained professionals, who provide assistance to special populations such as student-athletes, students in EOP and other TRIO programs, and students in the Undergraduate Honors College (UHC). Many academic advisors participate in regional and national activities of the National Academic Advising Association (NACADA). A university wide advisor training website provides a wealth of information regarding policies, procedures, academic requirements and other student-advising issues.

The introduction of the Finish in 4 initiative in Fall 2012 has resulted in serious examination of undergraduate advising and the issue of how well UB is meeting this essential need. A campuswide Academic Advising Self-Study²⁶⁶ was initiated in Fall 2012 among the advising units across campus, including professional advisors and faculty undergraduate directors. With the help of consultants from NACADA, the study concluded with an external review and those recommendations currently are under study by an advising working group charged by the senior vice provost for academic affairs. Among several helpful recommendations are the suggestions that more advisors are needed in certain centers, especially those that assist students not yet in a major, and that the campus adopt a mission statement for advising, consistent standards for who should provide advisement, advising recognition

awards and appropriate preparation for that role. Immediately stepping up to the task, the academic advisement leadership presently is crafting a mission statement and has launched an annual award process.²⁶⁷

The HUB Academic Advisement Report (AAR) and Transfer Credit Report are electronic advising tools that track progress toward graduation by showing how UB and transfer coursework meet graduation requirements for all approved undergraduate programs. In individualized reports, the AAR summarizes all general-education and program requirements, indicating those that have been satisfied; computes the cumulative GPA; totals all credit hours taken; lists repeated courses and those taken satisfactory/ unsatisfactory; notes incomplete courses; indicates test scores and credits granted such as AP and CLEP; and lists all transfer and UB courses taken. AARs are sent to all prospective transfer students and are available for all matriculated undergraduate students and graduate students in some programs via HUB.

Advisor Trac is an academic advising database and appointment scheduling system that advisors use to record and maintain notes with regard to advising sessions and to generate reports for assessing advising contacts. Effective Spring 2013, the system has been provided to every advising office and allows for effective "hand-off" between and among advisors in cases where a student may change major or where the student may not see the same advisor every session. The system greatly enhances continuity in advising assistance to students with this permanent and accessible record.

Academic Review

To maintain academic standards and determine eligibility for continued enrollment, financial aid and participation in university activities, UB regularly reviews the academic records of all undergraduate and graduate students. For undergraduates, this academic review is conducted at the end of each fall and spring semester. The criteria for satisfactory academic performance and a formal appeal process for dismissed students are described in the Undergraduate Catalog.²⁶⁸

As a result of a study in 2008 of academically dismissed students, UB revised its academic standards to provide more timely and comprehensible alerts to students and advisors. Changes included expanded use of academic warnings to alert students in good standing with poor recent semester GPAs; clear definition of probation and dismissal criteria based on quality point deficit (the only proven predictor of student recovery from academic difficulty); alignment of dismissal criteria for all students, regardless of class year; required consultation with an advisor as part of the dismissal appeal process; and inclusion of academic standing within HUB accessible to all academic advisors.

Additionally, to help undergraduate students achieve academic success, instructors are asked to provide mid-semester evaluations for students' coursework.²⁶⁹ Though this has long been the practice at UB, it initially was required only for first-semester students, student-athletes, and participants in the EOP program but was expanded to all undergraduates in Fall 2011. The information has proven to be very valuable for students and advisors as they determine the best course of action for current semester courses, as well as registration for the next semester, which typically begins just after mid-term grades are disseminated.

The Graduate School defines being in "good academic standing" as a student who is making acceptable progress toward a graduate degree and who is eligible to register for and pursue academic coursework at

the university for the current semester. All graduate students are expected to remain in good academic standing throughout the entire course of their study. Standards of student academic standing and expectations are described fully on the Graduate School website.²⁷⁰

Of particular note is that each doctoral student's academic progress must be evaluated annually by the departmental director of graduate studies and, if appropriate, the student's dissertation advisor. The most appropriate time for annual review is mid-May, thereby permitting appropriate academic planning for the following semester and allowing for timely responses to inquiries about students in jeopardy of losing federal and/or state financial aid. Alternatively, though not ideal, review can take place in mid-October. Additionally, each doctoral student's academic progress must be reviewed after his or her first semester of enrollment to identify any academic problems early in the program. Directors of graduate study are required to communicate the annual academic evaluation to students in writing.

Distance Learning

The Office of the Chief Information Officer (CIO) advances excellence in distance learning through the provision of high-quality information resources and technology. For example it has initiated a project to promote instructional excellence through the use of Virtual Classroom, which blends audio, video, Web collaboration, whiteboarding and instant-messaging capabilities into a single, comprehensive distance-learning solution. In addition, UB has developed and fully implemented My Virtual Computing Lab,²⁷¹ which allows students to virtually access most of the software available in UB's many campus

Spotlight on Assessment: Identifying Improvements to the Orientation Program

Past assessments of new students indicated that an area of concern was their understanding of the academic expectations of UB. In Summer 2012, a post-orientation survey asked students to indicate their level of agreement with this statement: "Orientation helped me to know what to expect academically at the University at Buffalo." Although on the five-point rating scale the mean was 4.4, only 52 percent of the respondents strongly agreed with this statement. To address this concern and increase the percentage of students leaving Orientation with appropriate academic expectations, several improvements were implemented in Summer 2013: the faculty presentation format was changed to focus more specifically on what to expect academically at UB (as a large, public, research institution); several faculty members delivered the presentation; student and academic advisor perspectives were also included in the presentation. A follow-up assessment mid-semester in Fall 2013 will help determine if this change was effective.

computing labs from off campus. Network and Classroom Services (NCS), under the Office of the CIO, provides support services for videoconferencing, WebEx services, and video and audio production. These services are available to faculty and academic units involved in the preparation of audio and video for presentation with online courses, synchronous Web conferencing and synchronous videoconferencing. Academic colleges, schools and departments continue to be innovators and incubators for new courses and programs, responding to market demand, and ensuring academic quality. In addition, core elements of the university's current strategic plan for educational technology involve the enhancement of online learning.

The Teaching & Learning Center (TLC)¹¹⁴,under the umbrella of the Office of Academic Affairs promotes instructional excellence through the use of emerging technologies, evidence-based pedagogy and the latest research on learning, engagement and instructional innovation. The TLC also serves as a help desk, providing online assistance to distance-learning students and faculty.

New Student Programs

The Office of New Student Programs²⁷² coordinates the summer orientation program for new undergraduate students and their

families. Information is provided by advising and other offices about academic policies and procedures; available resources and services; information regarding health, wellness, social conduct and academic integrity; and graduation requirements. These programs are designed to facilitate transition to the university and build a sense of community. At orientation, incoming students are enrolled in courses, in consultation with advisors, before they arrive for their first term. In support of the mission of the university and Student Affairs, the Office of New Student Programs also plays an important role in providing all new undergraduate students with a strong foundation for academic and personal development and success at UB. The office provides a supportive and informative environment that connects new students to faculty, staff and resources to establish a foundation for a successful university experience. To assist new students with their transition to UB, the office coordinates the UB 101 program (described in Chapter 4), which explains academic policies and procedures, and provides referrals to campus services.

Student Athletes

UB sponsors 20 sports programs that are a part of the National Collegiate Athletic Association (NCAA) Division I. There are 10 women's programs: basketball; cross country; rowing; soccer; softball; swimming and diving; tennis; indoor/outdoor track and field; and volleyball. There also are 10 men's programs: baseball; basketball; cross country; football; soccer; swimming and diving; tennis; indoor/outdoor track and field; and wrestling. UB is a member of the Mid-American Conference (MAC) in all sports except rowing, which competes in the Colonial Athletic Association. Currently, there are 293 male and 243 female student-athletes.

Athletics Academic and Student Development Services (AASD)²⁷³ emphasizes the importance of education to help student-athletes develop the skills necessary to become independent and successful learners. It provides programs and services to student-athletes to facilitate their academic and personal development and to promote scholarly pursuits and academic excellence with integrity. Opportunities are provided to all student-athletes to acquire proper study and learning skills and course-specific information through tutoring. Tutors and students work together to develop the independent thinking and learning skills necessary to achieve positive results without compromising the integrity of the educational process. AASD provides educational and study environments for its student-athletes in the form of learning centers, study groups, academic mentors and tutors. Athletics academic advisors regularly monitor student-athlete progress toward graduation and overall academic performance by maintaining frequent contact with departmental academic advisors, the Office of the Registrar, and Athletics Compliance Services to ensure compliance with NCAA, MAC and UB academic standards, rules and policies. AASD staff members work closely with UB Counseling Services and other academic, student and personal-support programs to assist student-athletes. The Division of Athletics also collaborates with the Psychological Services Center to assist with educational testing and assessments. Student-athletes with exceptional academic records are recognized at UB's annual Celebration of Academic Excellence attended by university administrators, faculty members and athletics department personnel. The director of AASD has a reporting liaison to the senior vice provost for academic affairs.

On February 28, 2013, the NCAA Division I Committee on Institutional Performance (formerly the NCAA Division I Committee on Athletics Certification) recertified the University of New York at Buffalo athletics program.²⁷⁴ A certified designation denotes that a member operates its athletics

program in compliance with operating principles adopted by the Division I membership. As part of the recertification process, UB must submit a report on retention and GPA data of student-athletes.²⁷⁵

Students with Disabilities

The Office of Accessibility Resources²⁷⁶ coordinates services and accommodations to ensure the accessibility and usability of all UB programs, services and activities by people with disabilities. Services include access to textbooks and other print materials; accessible campus transportation; assistive listening devices; course test accommodations; graduate and professional exams; information and referral; interpreting services and computer-assisted, real-time captioning (CART); lecture note taking; loaner equipment and assistive computing stations; read and write Gold Literacy software; student housing accommodations; snow removal services; training on accessible features of computing and information systems; and workforce recruitment programs.

Student Veterans

UB is an institutional member of Service Members Opportunity Colleges (SOC), a consortium of national higher-education associations and member institutions that functions in cooperation with the Department of Defense (DOD) and the military services to help meet the higher education needs of service members. UB has signed the voluntary Department of Defense (DOD) Memorandum of Understanding (MOU) Executive Order #13607 and adheres to the "Principles of Excellence". UB also is a participating institution in Concurrent Admissions Program (ConAP), a joint program of the Army Recruiting Command and participating colleges. ConAP's goals are to increase college enrollment of veterans and reservists, and help recruiters enlist college-capable men and women who are postponing college, usually for financial reasons. UB maintains an Office of Veterans Educational Benefits to assist veterans and eligible dependents with benefit options for which they may be eligible. UB participates in the Yellow Ribbon Program, which is an agreement with the VA to fund tuition expenses that exceed the highest public instate undergraduate tuition rate; this agreement extends from August 1 to July 31 each year.

In Spring 2013, UB's Office of Veteran's Services conducted a needs assessment of student veterans. Results suggested that there is a high need for a veterans center that is easy to access and provides services beyond processing benefits; veterans want to use resources, but need specific communications to help connect to campus resources; veterans need a place to connect with other veteran students and resources; and delays in benefits waste time and energy, cause financial stress and can negatively impact registration and good standing. To address these areas of need, UB's Offices of Veteran's Benefits and Veteran's Services joined together in one location to coordinate services and provide programming and resources that help better connect student veterans to the campus and to each other. This new location, on UB's South Campus across from the Veteran's Administration Hospital, will assist students with their needs and also includes a Veteran's Lounge and meeting space.

Academic and Student Services in UB's Offshore Programs

The Office of the Vice Provost for International Education works closely with the host institutions on student services and academic support services such as academic advisement, local library collections, IT support, class scheduling and provision for class texts and other materials. The spectrum of support services depends on the nature of the offshore/overseas program. In the case of graduate executive

programs such as UB's Executive MBA in Singapore or the master's programs in Amrita (India), course instruction is delivered in short, intense modules by visiting faculty from UB, the students are working professionals with full-time jobs; hence, support services typical of undergraduate programs are minimal. The students do not live on campus or engage in campus life, and thus their need for support services is very limited.

In contrast, UB's undergraduate programs at the Singapore Institute of Management (SIM) are supported by the full range of student and campus services provided by the host institution, SIM. When the undergraduate programs at SIM initially were evaluated by Middle States in 2004, one of the major recommendations was that SIM enhance its nonacademic student services to strengthen UB's program. Since that time, SIM has complied effectively with this guidance by implementing and strengthening a range of student services that support and enhance the experience of the students enrolled in UB undergraduate programs at SIM.

The SIM website provides an overview of campus and student life services.²⁷⁹ SIM's Student Life Portal²⁸⁰ serves as students' gateway to the information and services they need. These services, administered by SIM Student Life, include campus housing and residential-life programming, wellness/counseling, career services, internships, peer mentoring, study abroad, club-level athletics, and arts and cultural programming, among others. The UB program at SIM also has active student governance, with a seven-member elected Student Council leading the student body and organizing a variety of social and service activities. Students have a variety of opportunities to engage in service and leadership-development activities. As might be expected, these student services are organized and administered by UB's partner, SIM, and they serve all the students enrolled in SIM's "Global Education" programs. These services are subject to ongoing review/assessment not only by the SIM administration, but also by UB resident staff and the administration at UB. Surveys and focus groups are used to obtain student feedback so that services may be improved to better meet student needs.

University Life and Services

The array of services under "student life" is very broad at UB. Most of these services are offered under the umbrella of the Division of Student Affairs in University Life and Services.²⁸¹

Health-Related Services

UB provides services to help students maintain their physical and mental well-being. Its Health, Counseling and Wellness Services²⁸² are available to all enrolled students at any level, supported through their comprehensive fees. Programs also are provided to help students gain and retain healthy, balanced lives through a variety of wellness services activities, workshops and classes. To better understand the health and wellness repercussions of alcohol, new UB students participate in AlcoholEdu, a three-hour, online, science-based course that helps students understand the effects of alcohol. All new students attending orientation receive information about the program and are required to complete Part 1 of the course before arriving on campus for classes. AlcoholEdu is offered by Outside the Classroom, a Boston-based company that was founded to address epidemic-level, public-health issues affecting educational, corporate and government institutions. The course includes three surveys that gather information on student attitudes and behaviors. The goal of these prevention initiatives is to provide education aimed

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at reducing the incidence of high-risk alcohol consumption both on and off campus. Late Night UB is sponsored by the Office of Student Life. The mission of its programming is to make available quality late-night alternative entertainment during prime social times. Late-night programming provides an alcohol-free environment with opportunities for students to gain experiences in programming, leadership development and responsible social interaction.

Targeted Student Populations

Students with particular backgrounds and needs have many services available at UB. For example, students and faculty from other countries are served by International Student and Scholar Services²⁸³ for help with immigration issues and problems related to being away from their home countries. Residential students at UB are assisted by Campus Living.²⁸⁴ Students who live off-campus can find help with locating housing and support with tenants'-rights issues through the Office of Off-Campus Student Services.²⁸⁵ Judicial Affairs & Student Advocacy²⁸⁶ handles all disciplinary matters and maintains a student advocacy program to assist students in understanding their rights. This office also provides needed interventions for any student in crisis.

Student Activities

Student Life²⁸⁷ oversees and supports a wide range of student activities. By strict policy, all activities sponsored or approved by UB are open to all students. Representation of students in university governance can be found at all levels, professional, graduate and undergraduate. The Student

Spotlight on Assessment: Increasing Quality and Efficiency in Career Services

As the number of students needing career counseling increases, the Career Services staff needed to find ways to be more efficient while still providing highquality counseling to students and alumni. After tracking usage data for several years, counselors broke down the data by weekly usage, no-show numbers, and important demographic information. From this, it was clear that they were over-serving alumni and under-serving first- and second-year students. In addition, no-shows for traditional counseling appointments were increasing rapidly from 84 in 2009-2010 to 375 in Spring 2013 while demand for express appointments and wait time to appointments increased. Weekly trends also allowed staff to identify peak weeks during each semester. The staff used this information to adjust counselors' schedules to allow for more express appointments during peak times, shorten wait time to see a counselor and directing alumni to use more online tools/resources and summer (off-peak) appointments, freeing up time during the semesters to focus on first- and second-year students²⁸⁸.

Association (SA)¹⁸ provides direct governing authority for undergraduates through a representative legislature, and officers of SA serve on a variety of standing university governing committees and boards. SA also supports a large array of student clubs and organizations. All SA activities are supported financially through the mandatory student activity fee.

Recreation and Intramural Services

UB Student Life promotes a sustainable, healthy and active lifestyle for students, faculty and staff through campus and community engagement, while promoting lifelong learning. Committed to helping people make positive changes in their lives through a diverse wellness continuum, UB provides a variety of programs and services that meet creatively the needs of a diverse student body, faculty and professional staff. An array of programs and facilities cover a wide range of opportunities for fitness and team sports.

UB Recreation and Intramural (R & I) Services ¹⁹ provides an opportunity for students, faculty, staff, alumni and the community at large to use their leisure time constructively to improve themselves both physically and emotionally. In addition to open recreation, R & I Services offers a Structured Recreation Program enabling the UB community to participate in a variety of activities

designed to keep its constituency on the cutting edge of the latest developments in the world of physical fitness. Currently UB does not have designated recreational facilities for students who are not student-athletes and has engaged Brailsford and Dunlavey to conduct a feasibility study focusing on improved recreational facilities at all UB campuses.

Thousands of UB students play intramural and club sports each year, competing in everything from floor hockey and ice hockey, to softball, squash and skiing. UB recreation and intramural activities include open recreation, instructional activities, club sports, outdoor pursuits, special events, health and wellness, and more.

Academic and Career Planning Services

Career Services²⁸⁹ provides a comprehensive career development center that provides extensive services to undergraduate and graduate students across all academic disciplines, as well as lifetime resources for alumni. It supports the objectives of the university and other departments/offices through educational programming and the promotion of knowledge in the area of career development. UB places a high value on the importance of career planning and a unique career-planning tool called "My Plan" is part of the Finish in 4 requirements.

Career Services provides help with career and major exploration, locating internship opportunities, obtaining part-time jobs, taking entrance exams for post-secondary programs, writing resumes, and interviewing and networking with prospective employers. It educates students in the areas of self-assessment, career exploration and job-search techniques with the goal of helping them achieve lifelong career satisfaction and success. Alumni can continue to access the wealth of career resources through lifetime services. Career Services engages employers through interactive and educational partnerships, introducing them to high-quality candidates from all major academic departments. Through the Mentor Network, UB alumni and professionals in any field may become mentors and provide career advice and guidance to current students. UB faculty and staff partner with Career Services to help students make educated decisions regarding careers, graduate school and job/internship opportunities. Self-assessment tools are available to help students evaluate personal qualities and identify values, skills, personality characteristics and career interests to assist in making decisions regarding choice of major and career goals. This office also plays a key role in efforts to track alumni in their subsequent career pursuits.

Residential Life

Each year, more than 7,500 students call UB's residence halls and apartments home. Students immerse themselves in lively, dynamic communities with plenty of opportunities to learn, explore and meet new friends. Offering housing on two campuses, UB's residence halls and apartments include abundant dining options, residential programming and high-speed Internet and cable television connections. Safe and convenient living areas house students with a wide range of interests and diverse cultural backgrounds, which help broaden students horizons and enhance the UB experience. ¹⁵⁵ Special housing opportunities and communities are described below.

• Students participating in the Undergraduate Academies have the option of living together on the same residence hall floor in Richmond Hall in the Ellicott Complex, although it is not a requirement for participation in the program.

- Students in the Daniel Acker Scholar program have the opportunity to receive services, including individualized advisement and counseling services, research-skills courses, tutoring and community-service activities. Housing in the first-year Acker Scholar area is located in Dewey Hall in the Governors Complex. First-year Acker Scholars are required to live in this area.
- Students in the University Honors College (UHC) have a residential community that offers them the opportunity to live and study in an environment that facilitates advanced independent learning. Services include special seminar courses, access to faculty mentors, and undergraduate research and creative activities. Housing in the first-year honors area is located in Roosevelt Hall in the Governors Complex, but honors students are not required to live in this area.
- Leadership House is a residential learning community for first-year students where students are provided with an environment to polish their skills as leaders and become active citizens at UB and in the community. Students apply for Leadership House through the Center for Student Leadership and Community Engagement. Leadership House is located in Dewey Hall in the Governors Complex.
- Shared Interest Housing (SIH) communities are designed for upper-class students who share common interests and a desire to enhance their university experience, and contribute to their community. These communities are organized around specific interests or themes that have an academic focus. SIH areas may be student-initiated or may be coordinated by an academic department or office. These small-scale units occupy designated residence halls or sections of residence halls. Each SIH community has a floor leader (designated by the group) and a faculty/staff advisor who works with the residence hall staff to organize educational, social and community-service programs. Examples of SIH Communities include Honors Corps, architecture, Acker LEADS, MORE House and UB Scholars.
- The First-Year Residential Experience (FYRE) program is designed to provide a focused environment for first-year students living in the residence halls. While the experience of living in the halls is invaluable, participants in the FYRE program have the unique opportunity to live and learn with students who share similar needs in a smoke- and alcohol- free environment designed for first-year students. Residence hall staff help foster strong communities to help connect these students to the UB community and to one another. Some have a faculty/staff advisor. There are seven FYRE housing areas: architecture, engineering, fine arts, first-year explorations, health professions, management, and social sciences.
- The Gender Neutral Housing community is for first-year and returning students who wish to live in a mixed gender housing environment. Room placement and roommates are not selected on the basis of gender.

Assessment of Student Support Services

The historical and ongoing efforts to assess student services are divided into the three areas: student infrastructure services, academic support services and student life.

Student Infrastructure Services

The desired outcomes of students' access to student infrastructure services can be measured at a base level by their ability to accomplish the tasks required of them. That students are enabled to provide necessary documents and be admitted, enroll in classes, receive financial aid, pay their bills,

advance through curricular requirements, and graduate is an indicator that the services supporting these activities are utilized successfully. This does not, however, measure ease of use, nor does it directly indicate if students are able to take full advantage of the resources available to them. Since students access most business-related services through the new software system (HUB), evaluation of that system's use and students' satisfaction with it are critical as UB continues to fine-tune its implementation. Changes have been made over the past year in response to particular issues (for example, the registration subsystem now includes a notation of seats in particular sections that are open, but reserved by the department, rather than simply indicating these as "open" seats). The users — i.e. students — will indicate what further changes may be useful and/or necessary.

UBIT has a long history of administering needs assessment and satisfaction surveys to students and faculty to determine what additional services might be provided, as well as the level of satisfaction with existing services. Table 5.6 illustrates how results of various surveys have been used to design new initiatives that have made a positive impact.

Table 5.6 UBIT's Use of Survey Results to Improve Services									
Survey Data Drivers	Major Initiative	Impact							
Student and parent need for 24/7 access to student information (course planning and registration, financial aid, online bill payment).	The Student Services Transformation Project, branded "HUB," emphasizes an online self-help interface to enable academic career planning and advisement, secure online bill payment, accept/reject financial aid packages, and provide course scheduling and registration from 7 a.m. to 2 a.m. daily.	Students, parents, faculty and administrative support staff now have extensive, self-service access to systems and a reduced need for real-time staff consultation, with associated reduction in wait times. Improved accuracy of student data facilitates more efficient institutional planning and data management (both within UB and SUNY).							
Bandwidth needs for large research datasets, gaming, VoIP phone service and videoconferencing.	Academic and residential housing network infrastructure upgrade to 1 GB backbone.	Significant savings in phone-system costs. Increased student satisfaction with both academic and residential application management.							
Student and faculty need for increased collaboration in an enterprisewide learning management system (LMS) to enable more interactive and social network features.	Major platform migration to support UB <i>learns</i> by moving from Blackboard version 8.0 to 9.0 and launched pilot migration to mobile apps for LMS.	Students and faculty report increased collaborative tool use in coursework and virtual "group work."							
Overcrowded computing labs, long wait times and slow printing turnaround.	MyUB Virtual Computing Lab to enable student access to software and storage on campus or from remote locations.	Increased productivity and use of research software that previously required purchase.							
Websites are confusing and difficult to navigate, often containing dead links and outdated information.	Digital Communication Transformation launched to transform, update and migrate departmental-level content into new websites.	Departmental-level editors now use plain-text tools to keep websites current.							
Students desire 24/7 access to Webbased lectures and course content.	Upgraded and refurbished centrally scheduled classrooms to include lecture capture, videoconference and videostreaming equipment.	Faculty who choose to make their course material available online may use UB branded iTunes U, or other distribution options.							
Cloud computing to support mobile applications.	UB mobile applications developed for Android and Apple devices.	Access to commonly used UB websites that are formatted for mobile device iOS.							

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Academic Support Services

Individual offices providing academic support services are assessed through a variety of approaches. In the advisement realm, this is due in part to the fact that advisement is distributed, with undergraduates seeing advisors in decanal centers, the central university advising center, academic departments, special programs and through meetings with individual faculty members. Most academic advising centers prepare reports on the volume of usage of their services, either as part of annual reports to the cognizant deans, or as part of accreditation efforts through their national professional organizations. The most recent annual report of the College of Arts and Sciences Student Advisement and Services office is included as an example.²⁹¹ For the period July 1, 2011 through June 30, 2012, that office completed 6,741 in-person and phone appointments (one-on-one between an advisor and a student) and an additional 1,181 students were seen on a walk-in basis. The enrollment of undergraduates in CAS is about 8,400 students. For comparison purposes, the School of Management Advising office, in calendar year 2011, had 3,959 student appointments and saw 1,478 walk-ins. Its enrollment is approximately 2,700 undergraduates. No information is kept on how many students see an advisor more than once in a given year, but in fact many do. A group of administrators representing the various advising units (e.g., decanal, EOP, Athletics, Honors College) meets monthly to discuss problems, potential solutions and new initiatives concerning academic advising. UB has begun to evaluate systematically the various assessment tools available through the National Academic Advising Association (NACADA).

UB has used self-studies of academic advisement to guide development of these services; these were completed in 1998, 2003, and 2006^{292} and most recently in the $2012-2013^{266}$ academic year. The latest resulted in a working group to develop recommendations to the provost.

Financial Aid services utilized a formal external review. Committed to a continuous-quality-improvement model, the Office of Financial Aid contracted with the National Association of Student Financial Aid Administrators (NASFAA) to conduct a voluntary review of institutional financial-aid operations. This review took place in April 2008, with the goal of implementing student-centered best practices to expedite the delivery of financial aid while maintaining overall federal, state and institutional compliance. As part of the review process, NASFAA selected a customized peer-review team comprised of experienced financial aid administrators who performed an in-depth, on-site three day assessment of all financial-aid operations. After the review, NASFAA's team compiled and delivered a comprehensive report outlining institutional strengths and weaknesses in administering federal aid programs. The Office of Financial Aid has been very proactive in correcting compliance deficiencies and aggressively implemented the recommendations of the review team. While the migration to a new student information system in 2010 brought significant changes to daily office operations, the implementation of national best practices has been an ongoing effort for the office.

Student Life and Services

University Life and Services uses attendance data and student satisfaction surveys to assess the effectiveness of its programs and events. The assessment coordinator has led the effort to establish divisionwide student-development outcomes, as well as unit-specific goals, that are mapped back to divisionwide goals. Each unit reviews its existing programs and activities to determine how each helps to achieve the goals of the unit and of the division as a whole. Key programs are identified for which assessment evidence is collected on an annual basis as a means to monitor goal achievement. An annual

report is prepared at the end of each year to present assessment results, highlight strengths and identify weaknesses, and suggest any necessary changes for the upcoming year. As new programs are developed and mapped to outcomes, they are included in this assessment effort and the end-of-year report. In general, student satisfaction with events and programs is quite high. Of course, students tend to self-select activities that fit their individual interests, although some of the programs sponsored by University Life and Services are required of all undergraduates (e.g., student orientation). The type of goal-centered assessment regularly undertaken by the division should serve as a model for student-services assessment by other student-service providers at UB.

Evidence

Examples of evidence that the University at Buffalo meets Middle States Standard 8 are summarized below:

- The university has reviewed systematically its current status and developed a more robust and holistic campus enrollment-management structure.
- The university sets admission goals at all levels that support and reflect its mission, tracks the attainment of those goals and modifies its procedures when these are out of alignment.
- Admission websites for all levels are engaging and serve as an outstanding resource for
 - marketing the educational opportunities provided by UB. Accurate information is provided with regard to academic programs, admissions requirements, estimated costs and financial aid. To date, publishing of program educational outcomes has not been consistent on either departmental websites or the Web-based Undergraduate Catalog, but initiatives have begun to address this effective with publication of the next catalog.
- The Undergraduate Catalog and department websites provide accurate and comprehensive information on UB's many academic programs.
- Distinctive undergraduate learning opportunities, such as the Undergraduate Academies, University Honors College, Discovery Seminars, undergraduate research opportunities, study



We're #1!

Every three years, the Division of Student Affairs within University Life and Services collaborates with the Office of Institutional Analysis to administer the SUNY Student Opinion Survey. On the most recent administration, the following UB Student Services were rated #1 in student satisfaction as compared to all other SUNY campuses:

- College food services
- Campus Center/Student Union
- General condition of the residence halls
- Educational programs regarding alcohol and substance abuse
- Sexual assault prevention programs
- Recreation and intramural programs
- Student Health Center
- Health and wellness programs
- Personal counseling services (excluding academic advising)
- New student orientation
- Career planning services
- Job search assistance (regardless of whether you found employment)
- College help in finding part-time jobs
- College social activities
- Cultural programs (art, dance, film, music, theater)
- Guest speakers outside of class
- Opportunities for involvement in campus clubs/activities
- Opportunities for community service
- Opportunities for leadership development
- Residence hall services and support
- Clarity of residence hall rules/policies
- Student input in college policies/plans

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- abroad and special interest housing, are key components of the undergraduate recruitment strategy. They have produced positive results in terms of improving entering student quality and continuing student retention.
- The university supports programs and services to encourage specially admitted students to participate in UB's distinctive undergraduate experience and make timely progress toward degree.
- The institution effectively identifies upon admission those students who may require additional academic support. These students are referred to a variety of support services designed to support student success.
- The Office of Graduate Enrollment Management Services has improved the application process for graduate and professional students regarding clarity of requirements and criteria.
- The Office of International Enrollment Management successfully supports the recruitment of a diverse international student body consistent with university goals.
- Published policies are readily available to illustrate how transfer credit is assigned based on
 course equivalencies. The TAURUS Web tool has been designed to allow potential transfer
 students to determine the transferability and UB equivalency of their courses. Courses and
 programs not previously articulated are evaluated for equivalency by appropriate faculty in a
 fair and consistent manner. Alternative/exam credit is available on a public website for the most
 common examination programs.
- Consistent with assessing student success, the university has allocated significant resources through its Finish in 4 initiative, resulting in reduced course bottlenecks, greater advising capacity and a focus on better tracking of student progression.
- UB efficiencies designed to foster degree progress are making inroads on campus and in the national discussion of effective improvements, as seen in the recognition as a next-generation university based on implementation of Finish in 4 by the New America Foundation and during a recent visit by President Obama.

Examples of evidence that the University at Buffalo meets Middle States Standard 9 are summarized below:

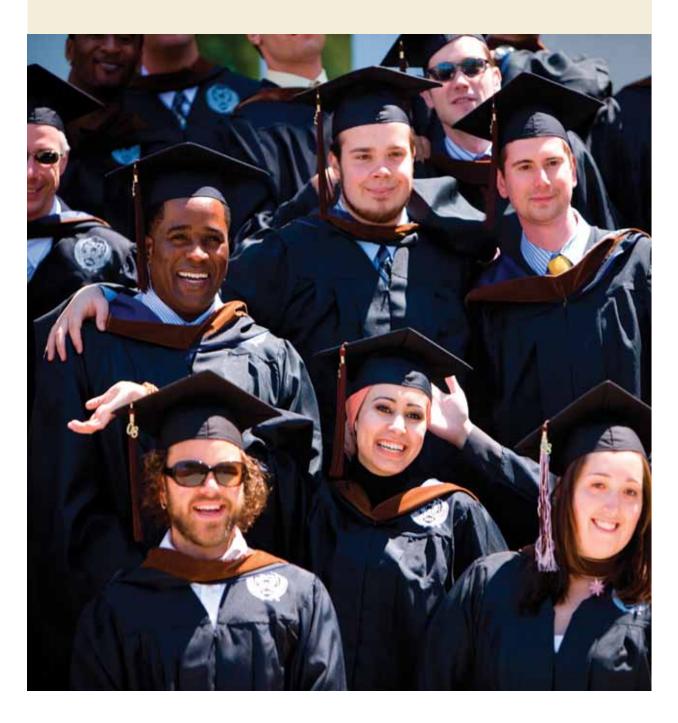
- Through a highly professional staff, UB provides a wide variety of services to assist students.
 The university offers students academic support, tutoring, mentoring, counseling, wellness
 programs, recreational and fitness facilities, and intellectual enrichment. The university
 accommodates students with disabilities and is committed to meeting the social and emotional
 needs of all students.
- Advising is provided to every new undergraduate student and available to all continuing students with ongoing efforts to track their progress and initiate interventions when necessary. Enhancing academic support services based on continuous self-studies (most recently in Spring 2013) and national advising principles is a consistent effort at UB.
- UB offers a wide variety of cost-free academic programs and services for under-prepared students, pre-college students and adult students (described more fully in Chapter 4).
- To support student success, UB 101 provides an effective transitional/first-year experience for freshmen (described more fully in Chapter 4).
- University websites, including those in departments, the Graduate School, and the Undergraduate Catalog, provide clear policies and define procedures for students to grieve

- university decisions. Databases are maintained for university academic-integrity, dismissal, grievance and conduct cases.
- UB student-athletes adhere to all UB academic and conduct policies. UB athletic programs adhere to the same principles, norms and procedures that govern other institutional programs, as confirmed in recent NCAA recertification.
- The university complies with the Family Educational Rights and Privacy Act (FERPA), and has internal policies and procedures to safeguard and secure student records.
- University Life and Services is a leader in the area of assessment of divisional effectiveness and co-curricular learning. An annual assessment of all of its programs is conducted and reviewed.

Future Directions

With the development of a campus culture of enrollment management that will provide a plan to enroll qualified and diverse students, the university will continue to emphasize the alignment of its enrollment goals with the campus mission. Beyond enrollment, UB will sustain the Finish in 4 initiative and other efforts to enhance retention and four- and six-year graduation rates. Such retention must be supported with assurances of affordability and strategic financial aid awards, professional excellence in advisement, and overall attention to the quality of UB academic services and the student experience.

Chapter SIX Conclusions



Over the past several years, the UB 2020 strategic plan has aided the refinement of the university's mission and vision, and the establishment of goals for the immediate and long-term future. The self-study process and Realizing UB 2020, the implementation plan for the realization of UB 2020, have followed somewhat parallel timelines. This fortunate coincidence has helped the institution clarify and focus its discussion on mission, values, goals, and meaningful experiences and outcomes for all students — undergraduate, graduate, and professional.

It is important that stakeholders and taxpayers understand the role and value of a major public research university. Through the efforts of UB 2020 and NYSUNY 2020, UB has endeavored to elucidate the advantages of a research university for educating its students and for the community at large through the scholarship, research and creative activities of the faculty. UB has made significant investments across all academic sectors of the institution, including programs, facilities, academic support and student services. Despite the financial challenges over the past several years, UB continues to invest in academic priorities and is in sound financial condition.

An important element of UB 2020 is the recruitment and retention of the highest-quality faculty. The current faculty can be considered successful by any conventional academic measure, including academic honors and awards, publications, citations, and external funding, and UB's new faculty members show outstanding promise. UB is on track for meeting its goal of adding 250 new faculty by 2016, moving the institution closer to its aspiration of reaching the highest ranks of the major AAU public research universities.

The university recently has created a new organizational structure to better coordinate assessment efforts at all levels and establish standards to monitor progress toward the achievement of institutional goals. A comparable structure has been mandated to strengthen the assessment of student learning in academic programs and to ensure that assessment results are used effectively.

UB remains strongly committed to the principles of academic freedom, accessibility, diversity and excellence in education and scholarship. In the coming years, the university will continue to develop and strengthen partnerships within and beyond New York State, engage with various constituents both on and off campus, and strengthen its many outreach programs.

Although UB may face daunting future challenges, this self-study demonstrates that the university has the requisite faculty, staff, organizational framework, facilities, infrastructure, resources and support to realize its mission and vision as a major public research university. UB has developed planning processes, mechanisms, open discourse and assessments of institutional effectiveness, including the assessment of student learning, to accomplish its goals and objectives in the face of unforeseen obstacles. The evaluation of progress and institutional effectiveness through UB 2020 and Realizing UB 2020 has informed strategic-planning efforts, decision making and the development of new initiatives.

This comprehensive self-study has served to sharpen our vision of the roles and responsibilities of a major public research university serving a diverse population of students in the 21st century. Framework for Excellence has helped UB identify, assess and address ways to enhance the educational experience of our undergraduate, graduate and professional students. This in-depth, open and wide-ranging self-examination has reaffirmed our vision, direction and commitment to providing all students with an excellent education that meets their highest aspirations and expectations.

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SOURCESSource Documents Listed in Order of Appearance

Sources and Document Roadmap Web Site

Sources for the self-study and the Document Roadmap can be referenced online at the following URL: http://www.provost.buffalo.edu/Accreditation-and-Assessment/

Each endnote is linked to the appropriate source. Clicking on the endnote will open that source's information page and provide details to its linkage within the Document Roadmap.

If reading a printed version of the self-study, enter the endnote reference number into the document locator at the URL above to display source's information page.

- 1. UB web site
- 2. SUNY web site
- 3. UB 2020 web site
- 4. Realizing UB 2020 web site
- 5. SUNY Board of Trustees
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Framework for Excellence

A Self-Study Submitted to the Middle States Commission on Higher Education February 2014

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