University at Buffalo: SUNY Excels Performance Improvement Plan – Section 1

University at Buffalo Overview
Impactful research, scholarly distinction, transformative student experiences, and far-reaching service to local, state, national, and international communities define UB’s mission as a premier research-intensive public university. UB is the largest and most comprehensive public research university in New York State, the primary center for professional education in SUNY, and an internationally renowned center for academic excellence. In 1989, UB was among the first public universities in the Northeast to be admitted into the Association of American Universities (AAU), joining North America’s other leading research universities.

UB offers nearly 400 exceptional degree programs at the baccalaureate, master’s, professional and doctoral levels across its 12 decanal units that attract close to 30,000 students (approximately 2/3 undergraduate and 1/3 graduate and professional students). UB is a global community of scholars, consistently ranking among the nation’s top 20 universities for the enrollment of international students. The university enjoys a strong international presence, maintaining affiliation agreements with over 80 universities in Asia, Europe, Latin America, and Africa. UB’s more than 240,000 alumni live in 146 nations worldwide.

UB boasts a distinguished faculty of approximately 1,600 full-time members and almost 750 part-time members. With more than 150 research centers and institutes, UB’s current annual research expenditures, including affiliated institutions, exceed $386 million. The Libraries hold approximately 4 million volumes in eight libraries and provide access to 100,000 full-text e-journals and 800,000 e-books.

With annual revenues that exceed $1.2 billion from all sources, UB and its affiliated entities generate an estimated economic impact of $2.18 billion annually in the state and region. For every dollar the state appropriates to UB, the university returns $13.9 back to the state in economic activity. The university’s total workforce of almost 6,800 full-time equivalent employees makes it one of the region’s largest employers.

UB 2020: Investing in our Vision
Since the beginning of the UB 2020 initiative, UB has invested carefully and thoughtfully in institutional transformations that allow us to expand our scope and reach even further, so we can strengthen and enrich the world around us. These strategic investments are closely aligned with the five priority areas identified through the SUNY Excels program: access, completion, success, inquiry, and engagement.

We have enhanced our research enterprise by building faculty expertise and fostering a culture of scholarly collaboration so we can better address the key challenges facing our world. We have transformed the educational experience by creating dynamic learning and research communities that bring classroom learning to life and provide a truly global perspective. And we have revitalized the physical environment by fostering a dynamic learning landscape such as the Heart of the Campus project that is integrating modern library spaces with teaching, technology, and student services.

Over the past few years, with the support of our elected leadership across the region and state, the NYSUNY 2020 program has enabled UB to invest directly in our students’ education. Through NYSUNY 2020, we have invested even further in opening the door to educational excellence—ensuring a world-class UB education is affordable for students with financial need. From 2011 to 2015, in total, over $35 million in aid was awarded to UB TAP recipients—on average, over 7,000 grants were awarded to UB students each year. UB has invested in student success through initiatives like our Finish in 4 program—ensuring our students have the courses and advisement they need to graduate on time.
As a result of our investments in academic excellence, educational opportunity, and student success, our student graduation rates are well above the national average, and UB is one of the most affordable AAU public universities, with among the lowest student debt in the nation. Our graduates are sought out in business, industry, the professions, the arts, and the public sector because employers know they bring with them the experience, expertise, and global perspective that are so valuable in the 21st century.

As we move forward with the next phase of the UB 2020 vision, we have embarked on a university-wide effort to revitalize the general education curriculum. The UB Curriculum, set to launch in Fall 2016, emphasizes thematic clustering—immersing our students in the interdisciplinary research enterprise. And this curriculum directly connects classroom learning to real-world experience, including internships, clinical education, and study abroad opportunities.

UB is also developing new academic programs at the graduate and professional levels, expanding inter-professional education opportunities, and creating cutting-edge new departments, like the cross-disciplinary departments of Materials Design and Innovation and Biomedical Engineering.

We are also pushing the boundaries further as we embark on the next phase of our interdisciplinary research paradigm. With the leadership of our provost, deans, and faculty across the disciplines, we have launched the Communities of Excellence initiative. These research and education-centric Communities bring faculty, staff, and students together in key areas of focus, revolutionizing how we think about and respond to urgent questions facing our world today—including pioneering advanced manufacturing solutions for the 21st century; transforming how we diagnose and treat human disease based on genomic research; and expanding global access to vital resources like healthcare, food, and water.

We recognize that if we are to tackle the biggest questions facing our world today; if we are to prepare our students to be the next generation of global leaders in these efforts; and if we are to expand our impact on the broader communities we serve regionally, nationally, and globally—we must provide the physical environment that supports this work.

We have set that physical transformation in motion across our three campuses, from the transformation of the Heart of the Campus living-learning landscape on the North Campus, to the revitalization of our historic South Campus, and the progress moving forward downtown with construction of the state-of-the-art new home for UB’s Jacobs School of Medicine and Biomedical Sciences. We anticipate holding the topping-off ceremony this December, and we are on track to open the medical school building in 2017. The relocation of the medical school is the centerpiece for an Academic Health Center that is bringing our region’s health care, clinical research, and medical education assets into alignment; expanding our role in addressing the health care needs of underserved populations; and driving economic and workforce development in our region, and the vibrancy of our surrounding communities.

UB 2020 and SUNY Excels: Goals and Commitments:
As UB embarks on the next phase of realizing our UB 2020 vision, we have articulated a number of immediate goals—strongly aligned with SUNY’s Excel Goals—focused on enhancing the educational experience, advancing the research enterprise, and strengthening our impact on our broader communities. Specifically, UB is pursuing the following among its institutional priorities over the next five years:

Access, Enrollment, and Selectivity:
- Explore an increase of over 2,000 in university enrollment by the year 2020
- Strengthen the diversity and cultural competence of our students
- Increase the number of NYS residents enrolling from underserved populations
- Increase the average SAT score of first-time, full-time students to 1200 by 2020
Completion:
- Increase the annual number of undergraduate degrees awarded to 6,014 and graduate and professional degrees awarded to 3,646
- Increase first-year retention to 91% by 2020-21
- Lower baccalaureate time-to-degree to 4.15 years by 2020-21
- Increase 6-year baccalaureate graduation rates to 75% by 2020-21
- Grow the number of graduate and professional degrees offered and continue our commitment to delivering an excellent education to future professionals and leaders

Success:
- Continue to strengthen student success at all levels and prepare our students to thrive in their future careers
- Provide all UB students the opportunity to participate in experiential learning activities
- Provide all students the opportunity to meaningfully engage with other cultures and societies through travel or sustained exposure in the classroom
- Ensure student loan default rates continue to remain among the lowest in the nation

Inquiry:
- Increase sponsored research activity by more than $30 million by 2020
- Continue to invest in faculty recruitment and advancement in support of the research enterprise
- Continue to enhance faculty diversity

Engagement:
- Increase fundraising by approximately $40 million per year by the year 2020
- Continue our effort to profoundly impact our local and global communities through groundbreaking research, transformative education, critical clinical care, meaningful engagement, and economic development

We look forward to sharing our progress toward these goals in the years ahead, and to our continued collaboration with SUNY in pursuit of our shared priorities for building even further upon our research and educational excellence and impact.
2.1 ACCESS

1. Full Enrollment Picture
The University at Buffalo is a premier global research university where the best and brightest minds from all over the nation and world come to learn, create, and discover. With nearly 30,000 students (approximately two-thirds undergraduate and one-third graduate and professional students), UB is a diverse and inclusive academic community recognized worldwide for breaking new ground in research and discovery, and for providing an excellent and affordable education.

As UB continues to grow in stature and impact, more and more of the best faculty and students want to be part of the energy and excitement we have created at the University at Buffalo. With this, we are experiencing growing demand that is translating to rising enrollment.

Accordingly, UB is actively exploring plans to grow by 2,165 students to 32,160 by 2020—a 7.2% increase from Fall 2014 enrollment—substantially advancing SUNY’s system-wide completion goal of 150,000 degrees by 2020. This effort is informed by a comprehensive five-year strategic enrollment plan and is benchmarked against overall SUNY system access metrics. UB’s Heart of the Campus capital project, for which UB is seeking support through the Investment Fund, will create the campus physical environment to support our enrollment and student success goals.

2. NYS Residents Served by SUNY
As SUNY’s largest and most comprehensive public research university, UB serves New York State by fostering a rigorous and relevant educational experience that prepares our students to be leaders in their professions and their communities; by educating the majority of professionals who deliver services in the state; by partnering with our local schools to strengthen the educational pipeline; and by generating knowledge and innovation that drive economic growth in our state and region. In order to better serve NYS residents, UB is:

- Partnering with community-based organizations to recruit more students from across NYS.
- Increasing visibility and recruitment in Buffalo and NYS high schools.
- Increasing its NYS admitted student programs to encourage more residents to enroll.
- Increasing NYS participation in summer/winter courses through new offerings and Open SUNY.
- Increasing collaborations and campus visits with community colleges.

3. Diversity
UB is strongly committed to enhancing the cultural competence of our students and to strengthening the diversity of our academic community as a whole. In support of these ongoing objectives, in 2013, UB created the Office of the Vice Provost for Equity and Inclusion (VPEI) to oversee, coordinate, and strategically align diversity and other cultural competence initiatives campus-wide. The VPEI is supported by an advisory committee composed of diversity experts, and has served as a member of the SUNY-wide committee on diversity. The VPEI, diversity officers in the decanal units, Office of Equity, Diversity and Inclusion (UB’s compliance office), Office of Accessibility Resources, and LGBTQ Wellness Center form a network of campus diversity and inclusion advocates and experts who work together to enhance diversity, equity, and inclusion at UB.

UB plans to further strengthen the diversity and cultural competence of our students, reflecting our area’s increasing diversity, by expanding the pipeline for low-income, first-generation and/or underrepresented minority students, and working to increase cultural education opportunities. Our plans include:

- Requiring undergraduates matriculating after the 2015-16 academic year to take a Diversity Learning course as part of the UB Curriculum, UB’s new general education program
• Establishing a living/learning community for international and domestic students that fosters relationships among students from varied cultures and strengthens connections to UB and NY
• Growing enrollment opportunities for students eligible for EOP, which UB has requested from the Investment Fund, and similar programs
• Promoting Seamless Transfer (facilitated by the UB-led Increasing Access, Completion and Seamless Transfer Success Investment Fund proposal) and other pathways to students attending community colleges
• Enrolling more students eligible for Say Yes to Education-Buffalo and assigning financial aid officers to this program
• Providing additional services to students residing in Buffalo Promise Neighborhoods, including the assignment of admissions counselors to support this program and implementation of a new Customer/Constituent Relation Management System to improve information services in those neighborhoods
• Assessing and coordinating UB’s pipeline programs to more successfully attract women into STEM fields and underrepresented minority students into undergraduate and graduate programs
• Promoting and providing potential STEM majors access to NYS STEM Incentive Program funds.
• Reorganizing the process by which Schomburg Scholarships are awarded by UB’s Graduate School to assist decanal units in attracting underrepresented minorities in UB graduate programs
• Increasing the scope of SafeZone and other LGBTQ training currently offered by Wellness Education Services

UB has ambitious plans to strengthen the diversity of its faculty and staff, using evidence-based strategies that are widely recognized as best practices, including:
• Cultivating a community of faculty members who research diversity, equity and inclusion, in order to leverage their expertise to enhance diversity, equity and inclusion at UB
• Leveraging our 2015-16 SUNY ODEI Explorations in Diversity Grant to create instructional modules on removing barriers to access and advancement and to promote a campus-wide culture of bias-free faculty and staff searches
• Enhancing faculty diversity through spousal accommodation whenever tenable through funding set aside for that purpose by UB’s provost (In 2014-15, 25% of the provost-subsidized dual hires were used to successfully recruit underrepresented minority faculty or staff to UB.)
• Utilizing data and analytics from the Vice President for Finance and Administration to assist senior administration in the campus-wide effort to diversify the faculty and staff, including developing strategies and measures of accountability to facilitate recruitment
• Building the capacity to support and promote the development of affinity groups on campus
• Initiating leadership training for department chairs that will incorporate diversity, equity and inclusion concepts and best practices
• Designing a signature onboarding process for women in STEM disciplines and underrepresented minority faculty and staff to ensure they have access to support networks from the outset, to find a cultural “fit” within the Buffalo area, and to increase retention

4. Capacity
UB plans to further address gaps between student demand and course, program, or university capacity through a variety of strategies, including:
• Increasing faculty and staff levels proportionate to increased student enrollment in order to maintain UB’s high course quality, low student-to-faculty ratio, and excellent student experience (This will require new resources.)
• Expanding our health sciences programs and opening classroom and lab space on the South Campus through the medical school move
• Expanding and enhancing the UB Finish in 4 program and encouraging it as a scalable model across SUNY, for which UB has requested support through the Investment Fund
• Increasing course offerings for high-demand classes in winter/summer sessions
• Evaluating UB’s existing digital course delivery initiatives, offerings available through OpenSUNY, and open and commercial education resources; piloting new digital offerings; and increasing online courses and degree offerings for all terms (The Increasing Access, Completion and Seamless Transfer and Professional Pathways Investment Fund proposals both help UB achieve this.)
• Increasing resources and faculty in targeted, high-demand fields through several Investment Fund proposals: RENEW, Biomedical Engineering, Computational and Data Enabled Science and Engineering, Smart Commons, and Data Analytics for Transforming Academics

2.2 COMPLETION

5. Completion
UB is committed to investing in student success and supporting our students in the achievement of their academic and professional goals. As a result of UB 2020 initiatives such as the Finish in 4 program, UB has increased the number of undergraduate degrees awarded by more than 35%—from 3,736 in 2003-04 to 5,029 in 2013-14. With our plan to expand enrollment and continuing efforts to improve retention and time to degree, UB projects 6,014 undergraduate degrees (19.6% increase) by 2020-2021 and 3,646 graduate and professional degrees (14.4% increase), which will contribute to SUNY’s completion goals. UB’s Heart of the Campus capital project, for which UB is seeking support through the Investment Fund, will create the campus environment to support these completion goals.

6. Student Achievement / Success (Student Achievement Measure)
Assessing and supporting student success is a key priority at UB. To achieve our student retention goals for both first-time and transfer students, UB has invested in personnel, programs, and technology. For some years, UB’s overall first to second year retention rate has been fairly constant at approximately 88%, which exceeds the national public university first-year retention rate of 79%. As a result of Finish in 4 and other campus efforts (see Graduation Rates/Time to Degree section), UB’s retention rates are even stronger. For the first two years of Finish in 4, 89% of the participants persisted to the second year, which exceeds the 84% retention rate of students eligible for, but not participating in, Finish in 4. Building on these early successes, we have launched the student success initiative and other support efforts to further improve our retention rate and meet our goal to reach 91% by 2020. We are also implementing programs that will allow us to reach our goal of 81% retention of our transfer students (our current level is 76.6%).

7. Graduation Rates / 8. Time to Degree
Graduation rates, like retention, have shown consistent improvement over time as UB strives to attain its ambitious goals of a 60% four-year graduation rate and 75% six-year rate. UB has already made significant improvements in graduation rates since launching UB 2020 in 2004. The cohort entering in 2000 had a four-year graduation rate of 36.2%, which has climbed to a 53.2% four-year rate (2010 cohort—estimated) and 71.9% six-year graduation rate (2008 cohort). Correspondingly, for the first-time students graduating in 2010 to 2014, UB has seen a noteworthy decrease—from 4.43 to 4.27 years—in undergraduates’ time to complete a degree. These improvements in graduation rates and time to degree result from UB’s nationally recognized and highly effective Finish in 4 program, as well as other programs targeting specific groups of students, and initiatives designed to improve retention and graduation rates. These are described here, along with new and developing programs that will help UB achieve its ambitious graduation and retention goals.

Finish in 4: Finish in 4 is UB’s commitment to provide students the curricular and advising support needed to ensure timely graduation. Launched in Fall 2012, Finish in 4 was initially funded from NYSUNY 2020 and one-time UB expenditures of $2.1 million. With these investments, UB was able to increase sections of high-demand gateway courses, add academic advisors and support personnel, and
purchase a career assessment tool. Annual UB resources dedicated to Finish in 4 have grown to nearly $2.5 million in 2014-15, including unit-based investments of approximately $250,000 for increased advising. Since its inception, more than $7.5 million is now funded through recurring permanent commitments. Finish in 4 has been lauded as a model for other colleges and universities across New York State and the nation. Finish in 4 students attempt more credit hours (e.g., in 2013 Finish in 4 students attempted an average of 15.5 credit hours vs. 14.4 for non-participants) and are retained at higher rates than non-participants. This year, 75% of incoming freshmen registered for Finish in 4, up from around 50% in previous years, which forecasts continued improvements in number of completions, retention and graduation rates. Critical for meeting our ambitious 2020 goals for these rates, UB plans to expand the program to all incoming freshmen, and as such has submitted to SUNY an Investment Fund proposal.

**Student Success Initiative:** While Finish in 4 addresses degree completion from an advising and course availability perspective, the student success initiative addresses the challenges affecting retention through cohesive coordination of retention support measures. To date, related initiatives include implementing a technology-based, campus-wide early alert system (EAB’s [Student Success Collaborative](https://www.studentsuccesscollaborative.org)); assessing and promoting student success in large gateway classes; defining and assessing attributes that affect students’ success, including identifying high-risk cohorts and their challenges; examining challenges experienced by freshmen, sophomores, juniors and seniors to foster more targeted support based on student level; and a concerted campaign to promote a university-wide culture change that supports coordinated retention efforts. Our retention rates will improve as these initiatives develop. The student success initiative will be greatly strengthened with the ability to access data to identify successes and problem areas, as described in our DATA SUNY Investment Fund proposal.

**Transfer Students:** Typically, UB enrolls more than 2,300 transfer students per year. UB has long promoted transfer student success through specific program articulation agreements and a publicly accessible electronic transfer course articulation system, [TAURUS](https://www.ub.edu/transfer/). More recently, UB created the position of Director of Transfer Experience to address issues of concern regarding transfer transition, retention, and success as well as to enhance relationships with major transfer institutions. Furthermore, UB faculty provided tireless support to the implementation of SUNY Seamless Transfer. Installation of [Degree Works](https://www.doweb.org/) is in progress, and UB has 18 degree programs and 563 classes available on Open SUNY. Finally, UB is leading a SUNY University Centers’ Investment Fund proposal, “Increasing Access, Completion and Seamless Transfer Success,” aimed at helping our transfer and first-time students in STEM and other high-demand fields succeed in finishing their degree programs in a timely manner.

**Underrepresented Minorities:** Narrowing the gap between graduation rates for the majority population and underrepresented minorities is a large focus of UB’s [Cora P. Maloney College](https://www.ub.edu/cpmc/) (CPMC), which supports over 2,200 students in the completion of their bachelor’s degree. CPMC’s units include: Access to College Excellence Program, Daniel Acker Scholars Program, [Educational Opportunity Program](https://www.ub.edu/eop/), Collegiate Science and Technology Entry Program, Louis Stokes Alliance for Minority Participation, McNair Scholars, and Student Support Services. UB’s EOP has a history of effectively supporting academically underprepared student populations. However, we aspire to reduce the gap between EOP and the general population graduation rates. Thus, additional efforts have been developed for these promising students, including a Transfer Bridge Summer program with intensive advisement, programming, and early outreach and encouragement to participate in experiential learning opportunities; EOP Freshmen STEM Bridge for EOP students in STEM fields and licensed professions; and EOP Summer and Winter Persistence Programs for EOP students identified as at-risk or off-pace. UB is seeking Investment Fund support for the persistence programs and an EOP Higher Achievers program that will significantly improve EOP’s graduation rates and average time-to-degree, and will require greater resources to meet our goals of narrowing the gap and expanding opportunities for underrepresented minorities.
**UB Curriculum and Enrollment Enhancements:** UB is also improving student learning outcomes by incorporating high-impact practices in the new UB Curriculum general education program. UB Curriculum includes small first-year seminars, an e-portfolio, a capstone experience, and integrative thematic pathways all designed to lead to greater academic and university engagement, which contribute to student retention and timely graduation. In addition, UB has enhanced enrollment processes with the implementation of Winter Session (allowing 78 students to graduate earlier) and a proposal for new registration tools, My Planner and College Scheduler, which will help guide student enrollment and allow advisors to focus on other critical student success issues. Finally, we streamlined administrative processes to ease deadlines and increase outreach to students for more timely degree conferrals.

**Graduate Degree Completion:** To increase the number of graduate and professional degrees, UB plans to grow programs that take advantage of curricular strengths and innovative trends in various economic sectors. In the College of Arts and Science, where several liberal arts disciplines are seeing enrollment declines that mirror national trends, UB has identified 41 new or enhanced programs that meet current and anticipated demand. These include 34 new Masters degrees (e.g., in Diversity and Intercultural Competency, Medical Humanities, and Interdisciplinary Addiction Studies); seven new combined degrees (e.g., BA/MA in Bioinformatics, BS/MS in Applied Social Science Research, and BA/MS Pre-Med for humanities majors), and eighteen Masters programs primed for expansion. The College is also exploring interdisciplinary certificate programs in fields such as Medical Ethics and Policy, Computational Linguistics, College Board Advanced Placement Teacher Training, Communication Skills, and Social Media developed to enhance educational outcomes for students pursuing other graduate degrees, adult learners, recent UB graduates, and employers. To make it possible to launch some of these programs and develop professional development modules leading to new Advanced Certificates, UB has submitted the Professional Pathways for the Arts and Humanities Investment Fund proposal.

**2.3 SUCCESS**

**9. SUNY Advantage**

UB provides a wide variety of programs, including applied learning, faculty-mentored research experiences, study abroad, multi-cultural experiences, career preparation, and support services (among others), to enhance our students’ current and future success.

**Experiential/Applied Learning:** UB recognizes the value of applied learning and aspires through UB 2020 to offer all of our students the opportunity to participate in experiential learning activities. UB offers a wide range of such learning opportunities (for more examples, see the “Inquiry” section). Below is a sampling of activities currently offered at UB, as well as those we are in the process of planning or developing:

- Internships are offered through the UB schools as well as the Honors College, Center for Undergraduate Research and Creative Activities (CURCA), and Career Services.
- CURCA provides students access to research and funding opportunities and faculty mentors.
- Cora P. Maloney College provides an array of research opportunities for students enrolled in its programs. These students are from unique backgrounds, many in underrepresented categories.
- UB’s new general education program (being launched in Fall 2016), UB Curriculum, includes integrated and applied learning across classes, e-portfolios and capstones.
- In order to meet our UB 2020 goals of offering all of our students the opportunity to participate in experiential learning experiences, we are adding opportunities across campus, assessing current opportunities, and developing communications and assessment tools. Several Investment Fund proposals help us achieve this, including Professional Pathways, Expanding and Enhancing UB’s EOP, Smart Commons, the Heart of the Campus, UB RENEW, and Increasing Access, Completion and Seamless Transfer.
**International/Multi-Cultural Experiences:** UB is a global university, situated on an international border, with one of the nation’s largest international enrollments and a distinguished faculty from around the world. Our students are graduating into a complex, globally connected, and diverse world, and UB is uniquely positioned within SUNY to help students develop an international perspective and prepare them to thrive as active global citizens. To accomplish this, **we have committed to providing all students the opportunity to meaningfully engage with other cultures and societies through travel or sustained exposure in the classroom.** International and multi-cultural experiences offered at UB or in development include:

- A wide range of study abroad and international study opportunities (UB students study abroad at more than eight times the national average). Through the EOP Investment Fund proposal, UB seeks to provide study abroad opportunities for higher performing students in EOP
- A Global Pathway cluster of courses and/or study abroad requirement included in UB Curriculum
- The Intercultural & Diversity Center, which offers high quality programs, events and activities that educate and celebrate UB’s diversity
- The Global Perspectives Undergraduate Academy, a living and learning community that facilitates interactions with people from around the globe

**Co-Curricular Support Services:** UB offers a wide variety of support services to students in support of our **continuing effort to promote student success at all levels and prepare our students to thrive in their future careers.** Current and planned services include, but are not limited to, the following:

- Career Services provides a comprehensive career development center that provides extensive services to students at all levels across the disciplines, as well as lifetime resources for alumni. The Heart of the Campus Investment Fund proposal will enhance UB’s Career Services Office.
- Finish in 4 participants must complete a career program, My Plan.
- UB is planning new career initiatives including using employer/student/labor data to assess new program demand and adding career exploration to UB My Planner.
- UB is enhancing advisement through technology and added in-person counseling. The Finish in 4 Investment Fund proposal is critical for our ability to provide this.
- We are exploring the use of college scheduler software to tie course selection to academic plans.
- UB’s recent enhancement of veterans’ services for our approximately 325 students who are veterans, active duty/reservists, or dependents of veterans led to a 2015 designation as a “Military Friendly Institution” by Victory Media.
- Since launching UB 2020 in 2004, we have been improving living and learning spaces across campus to enhance education and address student health, recreation, housing, and dining needs. UB’s Heart of the Campus and Smart Commons proposals contribute to this effort.

**10. Financial Literacy**

UB has implemented several strategies to educate students on financial responsibility, with programs designed to provide information that will assist them both during their college career and beyond, including both SUNY Smart Track Award Letter and Smart Track Financial Literacy Program. The Financial Aid Office considers outreach to students and families a priority. In addition to individual counseling, the office sponsors and participates in events focused on educating families on federal, state and institutional financial aid programs, along with prudent borrowing practices. Plans for expansion of literacy and financial aid awareness activities include:

- Development and deployment of a comprehensive financial literacy website
- SUNY Smart Track access for UB 101 instructors to incorporate into classroom content.
- Expanded tracking capabilities to further monitor program success
- Expanded outreach activities, including UB’s Sustainability Fair
- Inclusion of learning outcomes targeting financial literacy and responsibility in the UB Curriculum Math and Quantitative Reasoning required course.
UB monitors the success of financial responsibility efforts by comparing the three-year cohort default rate and the average loan indebtedness to other schools at both the state and national level. The UB default level and average indebtedness are considerably lower than comparable institutions. More than half of UB students graduate debt-free, and for those undergraduates who have debt, the average amount is $22,139, compared to over $28,400 nationwide and $26,381 in New York State, according to the Institute for College Access and Success 2014 Project on Student Debt (includes both federal and non-federal loan debt). UB has a current default rate of 4.5% which is considerably lower than the national average. UB’s highly competitive tuition and low student debt have earned UB a ranking among the top 75 in Princeton Review’s 2013 Best Value Colleges, and in the most recent U.S. News and World Report rankings, UB was ranked ninth overall among 270 research universities and third among public institutions for least amount of student loan debt upon graduation.

2.4 INQUIRY

11. Total Sponsored Activity

By the year 2020, the University at Buffalo projects a more than $30 million increase in total sponsored activities because of strategic research investments. These multi-disciplinary initiatives include:

- The **Communities of Excellence**, which will advance groundbreaking, interdisciplinary research addressing some of the most critical challenges facing our society today, and preparing our students to be future leaders in their fields. Three inaugural Communities of Excellence have been launched this year: Sustainable Manufacturing and Advanced Robotic Technologies (SMART); Global Health Equity; and the Genome, the Environment and the Microbiome (GEM). These Communities will each add upwards of five new research-active faculty over the next five years. Communities include an engagement component and will also provide students with unique experiential learning and research educational opportunities.

- UB’s interdisciplinary Institute for **Research and Education in eNergy, Environment and Water (RENEW)**, which is dedicated to research and education on globally pressing problems. RENEW plans to recruit upwards of 19 new faculty who will make a profound impact through their work in areas like renewable energy, clean environment, and environmental impacts on health and water. These research-focused faculty engage in socially relevant research and enhance undergraduate and graduate student research and education, thereby continuing to mark UB as a destination for academically ambitious and successful students. UB has submitted an Investment Fund proposal to help recruit world-class faculty for RENEW.

- The recently created **Department of Materials Design and Innovation (MDI)** is a collaboration between the College of Arts and Sciences and the School of Engineering and Applied Sciences. MDI will add 12 new research-active faculty over the next five years. UB’s Smart Commons Investment Fund proposal will provide vital state-of-the-art facilities for and facilitate collaborations among RENEW, SMART, and MDI.

- Through SUNY Investment Fund proposals, UB is seeking to build strength and productivity in several other key research areas, including Biomedical Engineering, Computational and Data Enabled Science and Engineering, and big data and Data Analytics (DATA SUNY).

- UB expects to see substantial growth in clinical trials, reflecting efforts by the Jacobs School of Medicine and Biomedical Sciences to recruit new clinical faculty engaged in clinical trials, as well as significant university investment in necessary infrastructure. A signature success of UB’s growing clinical research programs is the receipt of a prestigious four-year, $15.1 million NIH **Clinical and Translational Sciences Award (CTSA)**. This award, and the avenues it opens as part of the nationwide CTSA consortium, will have a profound impact on UB’s clinical and translational research environment.

- The **Office of Research Advancement (ORA)** provides specialized service to principal investigators in preparing and pursuing large-scale multidisciplinary research grants like the CTSA grant. In addition, ORA provides assistance to junior faculty in preparing applications for specialized early-career funding opportunities (NSF CAREER, NIH K awards, fellowships, etc.).
As a result of new economic development programs made possible through Governor Cuomo’s economic development initiatives, as well as UB’s investments in economic development programs and infrastructure, we expect to see increased industry collaborations and industry-sponsored research.

Using 2014 as the baseline and factoring in the previously described investments, UB projects increases in our sponsored activity of 18.4% by fiscal year 2018-19 and 21.5% by fiscal year 2020-21. The baseline uses the Research Foundation Revenue and Expenditure Forecasting data that was provided to the RF in February 2015. This anticipates that federal funding will remain generally flat (1% increase annually); a 5% increase going forward for NYS, plus additional one-time dollars in 2015 and 2016 for the Buffalo Institute for Genomics and Buffalo Manufacturing Works; and private funding will continue their trend of increasing (3% increase due to the push for PIs to submit more grant submissions).

12. Student hands-on research, entrepreneurship, etc.
SUNY’s focus on inquiry encourages and facilitates applied learning vital for technological and economic advancement. As previously described, UB provides students with many programs and opportunities for faculty-mentored research and entrepreneurship. For undergraduates, these include:

- **Cora P. Maloney College** is a scholarly community that seeks to provide access and opportunities to a diverse student body, including opportunities for internships, independent study and undergraduate research through programs such as CSTEP, the McNair Scholars Program, and the Public Service Internship Program.
- The **Center for Undergraduate Research and Creative Activities (CURCA)** matches students from all disciplines with faculty-mentored research opportunities and support.
- The **Undergraduate Academies** are a theme-based (Civic Engagement, Entrepreneurship, Global Perspectives, Research Explorations and Sustainability) living-learning community integrating academic exploration, field work, civic engagement, and personal growth.
- The **Honors College**, which annually enrolls more than 400 students, provides educational opportunities beyond the classroom that include service learning, internships, undergraduate research, study abroad, and independent studies.
- To meet our UB 2020 goals of offering all students the opportunity to participate in experiential learning, we are adding opportunities across campus, assessing current opportunities, and developing communications and assessment tools. Several Investment Fund proposals help us achieve this, including Professional Pathways, Expanding and Enhancing UB’s EOP, Smart Commons, the Heart of the Campus, UB RENEW, and Increasing Access, Completion and Seamless Transfer.

**UB’s Entrepreneurial Ecosystem:** UB is committed to advancing entrepreneurship within the Western New York community and beyond. Related programs and initiatives include:

- **Office of Economic Development**
- **Office of Science, Technology Transfer and Economic Outreach** (UB STOR), which manages several incubators
- UB School of Management Courses in Entrepreneurship
- **Panasci Technology Entrepreneurship Competition (Panasci Tec)**
- **Western New York Prosperity Fellowship Program**
- **Student Entrepreneurship Lab (eLab)**
- **The Entrepreneurship Academy**
- **Center for Entrepreneurial Leadership (CEL)**
- UB STOR Student Entrepreneur Fellowships
- **Elevator Pitch Competition**
- **Buffalo Student Sandbox** (WNY Innovation Hot Spot)
- Blackstone LaunchPad
UB will move to quantify the hands-on research and entrepreneurial opportunities for students and report this data to SUNY. For example, UB will report on the number of students engaged with CURCA, eLab, Student Sandbox, Panasci TEC, and the Elevator Pitch Competition, and other experiential learning activities. In addition, UB is prepared to report on the number of undergraduate and graduate students working in research laboratories and programs on an annual basis.

13. Scholarship, Discovery and Innovation
Consistent with SUNY metrics, UB measures its sponsored award activity by tracking the number and dollar value of proposals our faculty, students and staff submit to external sponsors in support of UB’s scholarship, research, training and public service; the number and dollar value of awards received; the expenditures on those awards; and the diversity of our funding portfolio. UB also tracks the impact of its discovery and innovation through the number of invention disclosures, U.S. patent applications filed and issued, and license and option agreements executed. However, with the significant focus on the role of universities as economic engines for their regions, we feel the focus on disclosures, patents and licenses does not provide a sufficiently robust indicator of UB’s regional impact. We recommend that, in addition to these metrics, SUNY also measure the number of new start-up companies a university can create, based on faculty and student innovation. As previously described, this would also point to the university’s strong entrepreneurial ecosystem that supports startup formation, investment and mentoring.

2.5 ENGAGEMENT

14. START-UP New York and beyond (businesses started / jobs created)
As a core element of its mission as a comprehensive public research university, the University at Buffalo has demonstrated a profound impact across broad and diverse areas through civic engagement with the many communities we serve. From our substantial economic impact on the Buffalo Niagara region and New York State and active partnerships with local and global businesses and industry to our more than 240,000 alumni around the world and far-reaching connections with the many communities the university serves worldwide, UB has enhanced and greatly deepened our civic engagement to become an integral part of our regional, statewide, national, and global communities.

UB has effectively leveraged state programs including START UP NY, the Centers of Excellence (COE), Center for Advanced Technology (CAT) and Innovation Hot Spot and secured other funding to support economic growth in the region. In the past year, UB has supported 110 companies with these programs. UB’s support resulted in the creation/retention of 479 jobs during this reporting period. In addition, the support received from UB helped companies achieve: $7,889,795 increased revenues, $1,221,987 cost savings, $7,451,225 federal funds acquired, $142,015,955 non-government funds acquired, and $2,289,254 capital expenditures.

UB is leading the START UP NY program with 54 companies sponsored by UB and approved by Empire State Development as of June 30, 2015. This program has been tremendously helpful in enhancing linkages between UB and industry. The START UP NY company partners are leveraging UB’s intellectual assets and resources and these linkages are supporting the academic mission of our campus in many ways by producing:
- 20 UB students have been hired as interns
- 46 UB graduates have been hired to fill jobs.
- 5 Technologies licensed
- 18 faculty engaged or in discussions
- 17 company principals are alumni or faculty at UB

UB is helping spur the entrepreneurial ecosystem in the region, driving growth of new start-ups. In the past year, 18 start-up companies were supported by UB through business planning, mentoring, funding and technology transfer.
UB has created or implemented a number of unique programs to support industry engagement and growth. The Pre-Seed workshop helped 10 teams of local entrepreneurs, including UB faculty/students/post docs/alumni, launch and/or grow (or even proactively halt) their companies by guiding them to develop and vet their business ideas with the help of teams comprised of industry professionals. The Student Sandbox was introduced during this reporting period and in summer 2015 accepted eight student teams from schools throughout WNY ready to develop and launch new businesses.

15. Alumni / Philanthropic Support

Over the course of the last three years, UB has undertaken a major effort to increase and strengthen its levels of alumni and philanthropic engagement. A new strategic plan for alumni engagement is being implemented to enhance campus activities, advocacy projects, and student support, as well as increase the level of alumni support and donorship by focusing on numerous elements including: building-out the alumni database, measuring alumni engagement and enthusiasm, creating a professional alumni volunteer service, providing robust alumni career support, establishing relationships with recent alumni and current student leaders, focusing resources on key domestic and international alumni markets, coordinating alumni engagement efforts across professional schools, and increasing alumni giving rates.

The viability of a comprehensive campaign was recently confirmed through an externally focused feasibility study conducted by campaign counsel Marts & Lundy. In alignment with, and support of, SUNY’s multi-year target of $5 billion by 2020 and in response to feasibility findings and counsel recommendations, UB has set a goal of $600 million in philanthropic support. The quiet phase of UB’s campaign began July 1, 2013 and will conclude in June 2020.

Projections for UB Alumni and Philanthropy are as follows:
Campus Alumni Giving Rate: FY18-19: 10.0%, FY20-21: 10.3%
Funds Raised ($mil.) FY18-19: $60, FY20-21: $70

16. Civic Engagement

In December 2013, the Realizing UB 2020 Task Force on Civic Engagement (with endorsement of university leadership) defined “community engagement” as “the partnership of university knowledge and resources with those of the public and private sectors to enrich scholarship, research, and creative activity; enhance curriculum, teaching, and learning; prepare educated, engaged citizens; strengthen democratic values and civic responsibility; address critical societal issues, and contribute to the public good.”

UB’s Vice Provost for Educational Collaboration and Engagement has developed an inventory to gauge current university engagement activities. We anticipate that UB’s initial engagement inventory will be completed by January 2016.

Currently, UB does not measure its engagement activities beyond a cumulative count. Engagement activities considered for this metric include both one-time events and sustained programs (for example, activities occurring for the duration of at least one academic semester). To gather information for the engagement inventory, the university collects the following data: the name of the university personnel on record for the project; project/activity name, description, and leader; university unit/department; location; internally or externally funded and the source; start and end dates; internal/external partners; and whether the activity is experiential learning.

If an identified engagement activity is also associated with a university credit or non-credit-bearing course, the following additional information is procured to better track student and course activity: course information—including department and course number, section, name, and term; type of service (service-learning, community service, civic engagement, or other); if the activity includes discovery (research, field work, entrepreneurship, experience abroad, intramural competition, or domestic travel); if the activity includes career preparation (internships—formal/informal, paid/unpaid, clinical placements).
UB recommends that SUNY follow a similar process to define, collect, and measure civic engagement.

17. Economic Impact
In June 2014, the consulting firm Tripp Umbach was retained by UB to measure the economic, employment, and government revenue impacts of the university. This economic impact analysis measured the effect of all of UB’s operations throughout our region and state. This analysis included:

- Business volume impacts (analysis included collection of information regarding capital expenditures, operational expenditures, salary data, and state and regional business volumes)
- Direct and indirect employment impacts—UB is the 4th largest employer in WNY with 6,788 full-time equivalent employees
- The government revenue impact of UB at the local and state levels
- The impact of university alumni on the economy (wage premiums, job creation, etc.)
- The economic impact of university research funding; including research commercialization, patents and licensing, and business spinoffs. UB’s current annual research expenditures are $386.6 million

Based on data for 2013-14, UB operations generate **$2.18 billion annually** in overall economic impact in New York State. In this same fiscal year, UB received $156 million in appropriations from the State of New York. Therefore, **for every dollar the state appropriates to UB, the university returns $13.9 back to the state in economic activity.** Additionally, UB leads SUNY institutions in spending on MWBE-certified businesses with more than $17 million in FY 2014-15.

Relocating the Jacobs School of Medicine and Biomedical Sciences downtown has long been a key element in UB’s campus master plan. And already, even before the new building for the Jacobs School of Medicine is officially online, this project is a catalyst for the City of Buffalo renaissance. It is the centerpiece for an Academic Health Center that is bringing our region’s health care, clinical research, and medical education assets into alignment. It is expanding our role in addressing the health care needs of underserved populations, and addressing the regional and statewide shortage of doctors through the growth of our medical student body. And it is driving economic and workforce development in our region and the vibrancy of our surrounding communities. Together with our health care partners, we are establishing Western New York as a global destination for the very best in patient care, research, and medical education.
Conclusion and Expected Impact

Since the beginning of the UB 2020 initiative, UB has been focused on the need to grow our faculty in order to ensure we create faculty strength across our academic programs; the need to provide academic and administrative support for our faculty’s scholarship; and the need to have a physical learning landscape that supports our educational and creative activities.

Over the course of the past four years, we have been doing exactly that. We have enhanced faculty strength across the disciplines. We have built out the research enterprise—from the Communities of Excellence to the Clinical and Translational Research Center. We are designing groundbreaking new academic programs and departments, and a cutting edge general education curriculum. And the world has taken notice. More and more of the best and brightest faculty and students want to be part of the energy and excitement we have created at the University at Buffalo.

The goals we have articulated for the next five years will enable us to build even further upon these achievements. Among these goals, as previously detailed:

- We will actively explore an increase of over 2,000 in university enrollment by the year 2020. At the same time, we plan to increase the diversity of our students as well as the average SAT score of first-time, full-time students to 1200 by 2020.
- To further support our students in the timely completion of their degrees, we aim to increase first-year retention to 91%, lower baccalaureate time-to-degree to 4.15 years by 2020-21, and increase 6-year baccalaureate graduation rates to 75% by 2020-21. Through increased enrollment, timely degree completions, and enhanced and new programs, we will increase the number of undergraduate and graduate degrees awarded annually, to 6,014 and 3,646 respectively by 2020.
- We will provide all UB students the opportunity to participate in experiential learning activities and significant international experiences.
- We remain committed to ensuring that our student loan default rates continue to remain among the lowest in the nation.
- As we continue to invest in student success, we also will continue to invest in our faculty in support of advancing the research enterprise. We plan to enhance faculty diversity, support faculty hiring, and increase sponsored research activity by more than $30 million by 2020.
- In support of our mission, we will continue our effort to profoundly impact our local and global communities through groundbreaking research, transformative education, exceptional clinical care, meaningful engagement, and economic development.
- In support of our ambitious goals, we also will continue to enhance our philanthropic and alumni engagement efforts, with the goal of increasing fundraising by approximately $40 million per year by the year 2020.

As previously stated, these goals resonate strongly with the SUNY Excel priorities of expanding access, enabling timely completion, ensuring student success, advancing scholarly inquiry and discovery, and enhancing our engagement with and impact upon the broader communities we serve regionally, statewide, nationally, and globally. In order to achieve these goals, UB will require new resources.

We look forward to working in partnership with SUNY to achieve our shared research, education, and engagement goals.
University at Buffalo: SUNY Excels Performance Improvement Plan – Appendix 1

Investment Fund Proposals Related to Focus Areas

Section 2.1 Access
- Building Enrollment, Completions and Enhancing Student Success: UB’s Heart of the Campus
- Expanding and Enhancing UB’s Educational Opportunity Program
- Increasing Access, Completion and Seamless Transfer Success through the Development of Common Student Learning Outcomes, Diagnostic Assessment and Supportive Digital Teaching Resources for High Demand/High Impact Gateway Courses
- Achieving a Universal Finish in 4 Program at UB and SUNY
- Professional Pathways for the Arts and Humanities
- UB’s Research & Education in eNergy, Environment and Water (RENEW) Institute
- Building Biomedical Engineering Phase II: Leveraging Success
- Computational and Data Enabled Science and Engineering
- Smart Commons for Materials, Manufacturing and Energy
- Data Analytics for Transforming Academics across SUNY (DATA SUNY)

Section 2.2 Completion
- Achieving a Universal Finish in 4 Program at UB and SUNY
- Building Enrollment, Completions and Enhancing Student Success: UB’s Heart of the Campus
- Data Analytics for Transforming Academics across SUNY (DATA SUNY)
- Increasing Access, Completion and Seamless Transfer Success through the Development of Common Student Learning Outcomes, Diagnostic Assessment and Supportive Digital Teaching Resources for High Demand/High Impact Gateway Courses
- Expanding and Enhancing UB’s Educational Opportunity Program
- Professional Pathways for the Arts and Humanities
- UB has also submitted proposals that will lead to increased enrollments, and thus completions, in several programs: RENEW, Building Biomedical Engineering Phase II: Leveraging Success, Computational and Data Enabled Science and Engineering, and Smart Commons for Materials, Manufacturing and Energy

Section 2.3 Success
- Building Enrollment, Completions and Enhancing Student Success: UB’s Heart of the Campus
- Expanding and Enhancing UB’s Educational Opportunity Program
- Professional Pathways for the Arts and Humanities
- Smart Commons for Materials, Manufacturing and Energy
- Achieving a Universal Finish in 4 Program at UB and SUNY
- Increasing Access, Completion and Seamless Transfer Success through the Development of Common Student Learning Outcomes, Diagnostic Assessment and Supportive Digital Teaching Resources for High Demand/High Impact Gateway Courses
- UB’s Research & Education in eNergy, Environment and Water (RENEW) Institute
Section 2.4 Inquiry
- UB’s Research & Education in Energy, Environment and Water (RENEW) Institute
- Smart Commons for Materials, Manufacturing and Energy
- Building Biomedical Engineering Phase II: Leveraging Success
- Computational and Data Enabled Science and Engineering
- Data Analytics for Transforming Academics across SUNY (DATA SUNY)
- Professional Pathways for the Arts and Humanities
- Expanding and Enhancing UB’s Educational Opportunity Program
- Building Enrollment, Completions and Enhancing Student Success: UB’s Heart of the Campus
- Increasing Access, Completion and Seamless Transfer Success through the Development of Common Student Learning Outcomes, Diagnostic Assessment and Supportive Digital Teaching Resources for High Demand/High Impact Gateway Courses

Section 2.1 Engagement
- Smart Commons for Materials, Manufacturing and Energy
- UB’s Research & Education in Energy, Environment and Water (RENEW) Institute
- Data Analytics for Transforming Academics across SUNY (DATA SUNY)
- Expanding and Enhancing UB’s Educational Opportunity Program