Excellence, Access, and Equity:

University of California Riverside's Institutional Report to the Western Association of Schools and Colleges, Senior College and University Commission

UC RUNIVERSITY OF CALIFORNIA

We Outline and Overview

Introduction	4
Campus Overview	. 6
Compliance with WASC Standards.	. 8
Part 1. Degree Programs and Educational Quality: Meaning, Quality, and Integrity of Degrees	9
A Research Faculty	10
Engaging Diversity and Inclusiveness	12
Interdisciplinarity	13
Engagement with the Community.	14
Core Competencies.	15
General Education	16
Graduate Education	17
School of Medicine	18
School of Public Policy.	19
Part 2. Student Success: Student Learning, Retention, and Graduation	20
Undergraduate Student Success	
Student Perceptions of the Campus	21
Retention and Learning Communities	
Graduation Rates and the "Finish in 4" Campaign	
Transfer Student Success	
Student Success Programs	
Success after Graduation	28
Graduate Student Success	28
Part 3. Quality Assurance: Program Review; Assessment; Use of Data and Evidence	29
Academic Program Review	30
Review Procedures – Undergraduate Programs and Graduate Programs	30
Results from Recent Program Reviews.	31
Assessment of Student Learning	32
Assessment of Undergraduate Student Learning.	32
Assessing Core Competencies.	34
Assessment in Student Affairs	36
Assessment of Graduate Student Learning	37
Assessment in Professional Schools	38
School of Medicine	38
Graduate School of Education.	38
Transforming Education	39
Institutional Research	40
Part 4. Sustainability: UCR's Role in the Future of Higher Education	41
	42
Reimagined Plans	
Forward Looking Analysis	43
Conclusion	45

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List of Commonly Used Abbreviations

AACSB	Association to Advance College Business Schools
AAMC	Association of American Medical Colleges
ABET	Accreditation Board for Engineering and Technology
ACS	American Chemical Society
ALEKS	Assessment and Learning in Knowledge Spaces
APA	American Psychological Association
APLU	Association of Public and Land-grant Universities
ARC	Academic Resource Center
ARPE	Annual Research Progress Evaluation
BCOE	Bourns College of Engineering
CEP	Committee on Education Policy
CHASS	College of Humanities, Arts, and Social Sciences
CIS	Center for Ideas and Society
CNAS	College of Natural and Agricultural Sciences
СТС	California Commission on Teacher Credentialing
DUCK	Diagnostic of Undergraduate Chemistry Knowledge
GE	General Education
GSOE	Graduate School of Education
IDP	Individual Development Plan
ILTI	Innovative Learning Technology Initiative
IR	Institutional Research; Office of Institutional Research
LACE	Longitudinal Ambulatory Care Experience
LCME	Liaison Committee on Medical Education
MAAPS	Monitoring Advising Analytics to Promote Student Success
MRB1	Multidisciplinary Research Building
NACE	National Association of Colleges and Employers
NASP	National Association of School Psychologists
NSF	National Science Foundation
PCRS	Physician Competency Reference Set
PRBS	Pre-business (undergraduate major)
SOBA	School of Business (recently changed from School of Business Administration)
SOM	School of Medicine
SPP	School of Public Policy
STEM	Science, Technology, Engineering and Mathematics
UCOP	University of California, Office of the President
UIA	University Innovations Alliance
USAP	University Student Aid Program
UWP	University Writing Program

Introduction (CFR 1.1, 1.4, 1.5)

The past ten years at the University of California, Riverside (UCR) have been marked by tremendous dynamism. By almost every metric, UCR is an institution on the move. Our student enrollment has grown by 36%, from about 17,000 students to 23,000 students today, including 57% Pell grant recipients and 42% under-represented minorities. Our full-time instructional faculty numbers have increased by 29%. Total research contract and grant funding has increased from \$120 million in 2010 to over \$144 million in 2017. We launched our first-ever comprehensive fundraising campaign and have raised \$191 million toward our \$300 million goal. Further, we've raised our four-year graduation rates by about 16% over the past decade, while achieving near-parity in graduation rates across income and racial/ethnic groups.

Since the WASC Senior College and University Commission last reaffirmed UCR's accreditation, our increasingly diverse undergraduate student body has benefitted from expanded access to high-impact programs (such as first-year learning communities) and is more likely to graduate in four years. At the graduate level, UCR opened the first public medical school on the U.S. West Coast in more than 40 years. We also launched a new school of public policy which, like our medical school, has a special focus on benefitting the residents of inland Southern California.

UCR continues to educate a large number of firstgeneration, historically under-represented groups, and Pell Grant recipients, with great success. Indeed, UCR frequently places highly (top 10-25 nationally, ahead of many traditionally "elite" institutions) in rankings like the <u>Social Mobility Index</u>, that emphasize the extent to which earning a degree from a particular institution improves students' social and economic standing. At the same time, we remain committed to innovative teaching as a way of challenging students and engaging them more directly.

In response to our last accreditation visit, we have strengthened institutional assessment practices and program-level learning outcomes. These activities were described in our 2015 interim report that focused primarily on undergraduate program assessment. At the graduate level, the Graduate Division is rolling out plans to link assessment to long-standing annual review processes for graduate students. In the professional schools, assessment practices are linked to disciplinary and professional associations (such as ABET for engineering). We have supported program review processes-especially at the undergraduate level-by investing in new staff in the Academic Senate and by increasing the frequency of program reviews. By extending our attention to assessment, we now have a focus on student achievement that is richer and more detailed than it had previously been.

In addition, we are implementing several new datadriven student-success initiatives, including predictive analytics, proactive advising, completion grants, and a more robust summer bridge program. These initiatives have been bolstered by our participation in the University Innovation Alliance — a coalition of eleven public research universities from across the country, committed to making quality college degrees more accessible to a diverse body of students. Meanwhile, we have reexamined our business practices, taking steps to align these processes with key campus goals. We have implemented an <u>incentive-based</u> <u>budget model</u> that promotes growth, encourages cost reduction, and moreover aligns resources with campus priorities of increasing access to higher education and maintaining high academic standards. Finally, we have embarked upon several major capital projects, such as the <u>Multidisciplinary Research</u> <u>Building (MRB1), North District</u> student housing, <u>UCR Health Outpatient Pavilion</u>, and Student Success Center, as well as many classroom, laboratory, and other renovations to modernize the campus.

In the midst of this growth and progress, inclusiveness remains a defining part of our campus. Our past achievements in this area have produced one of the most diverse undergraduate student bodies in the country, and our ongoing commitment to the success of all students continues to receive national recognition. Most recently, The Education Trust named UCR a "top-performing institution" we are one of only three campuses nationally to receive both recognitions. Moreover, we have redoubled our efforts to increase the diversity of our graduate student body and our faculty, and there are encouraging signs that we are making progress. Since 2013, the proportion of under-represented minorities in our incoming graduate student cohort has risen from 25% to 34%, and over the past two years, the proportion of under-represented minorities in our incoming faculty cohort has doubled to 23%. Additionally, women comprised 44% of this year's incoming faculty cohort.

UCR approaches this reaccreditation as an opportunity to reflect upon our steep upward trajectory of adding people, launching new programs, and reimagining key elements of our institution. While we have achieved many of the goals set forth in the previous strategic plan —<u>UCR 2020</u>— the time to engage in a new round of visioning is drawing near. This WASC institutional review has provided

National Rankings

UCR ranked #1 in awarding freshmen financial aid among public universities, according to The Student Loan Report.

UCR ranked #3 in producing the most altruistic students (#1 in California), according to Pillars of Academia.

UCR ranked #4 in the United States (#19 in the world) in Times Higher Education's ranking of Best "Golden Age" Universities, established between 1945-1966.

UCR ranked #7 among public research universities with the most low-income students by the Brookings Institution.

UCR ranked #13 among public research universities (#21 overall) in Washington Monthly's annual College Guide and Rankings.

UCR ranked #15 among public colleges and universities (#29 overall) in Money Magazine's Best Colleges for Your Money.

UCR ranked #15 in the Social Mobility Index.

UCR was named a **top-performing institution** for African American and Latino/a students (one of only three institutions in the nation) by The Education Trust.



a platform to engage in self-reflection, renewal, and rededication toward our shared goals as an institution. Any new plan must take into account the features that define UCR: ever higher levels of access and student success; sustained commitment to delivering the highest quality education at the undergraduate and graduate levels; gains in faculty research productivity and excellence; new ways of doing business that acknowledge the current reality of state support; and a lived commitment to inclusiveness.

With a world-class faculty, ample opportunities to continue our ongoing growth, and enviable diversity, UCR is uniquely poised to continue challenging the status quo and to serve as an exemplar to the nation. In the report that follows, we have taken some liberty in arranging WASC's components into the report's chapters to make UCR's story clearer. This introductory chapter also contains the section on Compliance with Standards as it helped to inform the writing process. Degree Programs and Educational Quality have been combined into the first chapter because both speak directly to UCR's educational mission. Student Success, Quality Assurance, and Sustainability stand alone as chapters two through four, respectively. Having woven the university's story throughout the report, we chose not to address the optional component of an Institutional Specific Theme. The report ends with a reflection on how the writing process has readied the campus for a new round of strategic planning. The report contains many hyperlinks; some provide important information that could not be accommodated in the report, while others simply provide more general context. Throughout, there are graphs and statistics that make clear the extent of UCR's achievements, and areas for improvement. The report emphasizes our growth, innovation, and inclusiveness, as these areas help us achieve new heights of excellence and create a model student-centered university for the 21st century.

Campus Overview (CFR 3.6, 3.7, 3.8, 3.9, 3.10)

UCR is one of ten campuses of the University of California, all governed by the Board of Regents. The campus is located in Riverside, the largest city in suburban, inland, southern California. The campus also has a small branch campus (housing a low residency creative writing program) in Palm Desert, California. UCR currently enrolls about 20,000 undergraduates and about 3,000 graduate and professional students (Table 1). The campus employs about 800 ladder-rank faculty, about 300 other instructional faculty, and more than 5,000 staff members.

Our campus is organized into seven colleges and schools. Two of these — the College of Humanities Arts and Social Sciences (CHASS) and the College of Natural and Agricultural Sciences (CNAS) -house the disciplines traditionally grouped together in a college of arts and letters and account for about 75% of undergraduate enrollments and about 50% of graduate enrollments. Two additional colleges, the Bourns College of Engineering (BCOE) and the School of Business (SOBA, formerly the School of Business Administration), offer both undergraduate and graduate degrees. The Graduate School of Education (GSOE) and, more recently, the School of Public Policy (SPP) and the School of Medicine (SOM), are primarily focused on graduate and professional education, though both GSOE and SPP now have undergraduate majors. The colleges-as well as the Graduate Division and UCR Extension—are each headed by a dean.

The campus is led by <u>Chancellor</u> Kim A. Wilcox and <u>Provost and Executive Vice Chancellor</u> Cynthia K. Larive. The campus administration is overseen by five vice chancellors (<u>Business and Administrative Services</u>, <u>Planning and Budget</u>, <u>Research and Economic</u> <u>Development</u>, <u>Student Affairs</u> and <u>University</u> <u>Advancement</u>); the Provost's Office also oversees a number of departments (<u>Academic Personnel</u>,

	Undergraduate		Graduate	
	2007	2017	2007	2017
Enrollment	14,973	20,069	2,214	3,209
CHASS	49.2%	46.2%	32.3%	22.1%
CNAS	28.3%	29.2%	34.6%	26.9%
BCOE	8.6%	12.9%	15.3%	26.0%
SOBA1	13.9%	11.7%	5.7%	8.9%
GSOE	-	-	12.0%	7.2%
SOM	-	-	_	7.5%
SPP	-	-	-	1.2%
Men	47.8%	45.7%	51.3%	55.8%
Women	52.2%	54.3%	48.7%	44.2%
Native American/Indigenous ²	0.4%	0.3%	0.6%	0.2%
Asian	41.8%	33.8%	10.4%	9.6%
Black/African American ³	7.4%	3.5%	2.1%	2.5%
Chicano/Latino	25.9%	41.3%	9.1%	15.4%
White	17.7%	11.5%	36.2%	29.9%
Domestic Unknown/Other ⁴	5.5%	6.8%	12.9%	10.8%
International	1.3%	2.9%	2 <mark>8.</mark> 5%	31.6%
First-Generation ⁵	49.0%	57.2%	-	-

Table 1: Enrollment and Demographics, Fall Terms 2007 and 2017

Source: Office of Evaluation and Assessment, with Institutional Research data

- 1 Includes undergraduate pre-business majors who are CHASS students for their first two years.
- 2 Includes students selecting Native Hawaiian and Pacific Islander for 2017, although these were not options in 2007.
- 3 The reduced proportion of undergraduate African American students resulted

Information Technology Systems, Administrative Resolution, Undergraduate Education, Palm Desert Center, and International Affairs).

The <u>UCR Library</u> maintains three separate facilities: the <u>Tomás Rivera Library</u> houses materials in the arts, humanities and social sciences as well as special collections; the <u>Raymond L. Orbach Science Library</u> houses materials aligned with the sciences (including medicine); and the <u>Music Library</u> is located in the Arts Building. The libraries provide essential support to both the <u>research</u> and <u>teaching missions</u> of the primarily from the change to new IPEDS race/ethnicity reporting guidelines; but has been identified as an area of concern, and has led to recent focused outreach and recruitment efforts.

- 4 Includes students selecting two or more races for 2017, although this was not an option in 2007.
- 5 Information on parental education collected only on undergraduate admission applications.

university. The UCR Library is also leading <u>critical</u> <u>conversations</u> about the meaning and mission of libraries in an increasingly digital world.

The University of California system is proud of its strong tradition of shared governance. UCR's <u>Academic Senate</u>, through its many <u>committees</u>, is responsible for determining academic policy; setting conditions for admission of students and conferral of degrees; authorizing and supervising curricula and courses; and advising on faculty appointments, promotions, and budgets.

Compliance with Standards (CFR 1.8)

The Office of Undergraduate Education — with the Vice Provost for Undergraduate Education (VPUE) as the campus's Accreditation Liaison Officer (ALO), the Director of Evaluation and Assessment, and a specially appointed Faculty Reaccreditation Director - facilitated the process of writing this report. The first step was assembling a group of about 20 faculty and administrators from across the campus in late 2016. At this meeting - an "accreditation kickoff" - WASC staff reviewed relevant policies and procedures and the group held its first conversations about how best to tell the campus's story in the Institutional Report. This group produced a short précis summarizing that conversation. Next, a reaccreditation workgroup of faculty, staff, and administrators (with some overlap from the previous group) was formed to execute a first draft of this report. This group was selected because of its deep and wide-ranging institutional knowledge. During the winter and spring of 2017, various members met with other groups and constituencies on campus to better understand the issues at hand (see membership of UCR's WASC Reaccreditation Workgroup). As a draft of this report began to emerge, the workgroup continued to revise it. Later, key offices on campus shared comments for another round of revisions.

Running parallel to this writing process was the self-assessment involved in the WASC Criteria for Review, involving about 25 key personnel across campus. This largely took place through a survey, although in some cases a single set of responses reflected the consensus of a committee or other group. The Reaccreditation Workgroup helped find patterns in these responses, particularly when various groups seemed to lack consensus. This also gave the workgroup a chance to reflect on common patterns and link them to the process of writing this report.

In the fall of 2017, a coherent, but still incomplete, draft of this document was circulated broadly around the campus. This draft was shared with the Academic Senate, and most of its committees reviewed and provided comments on the draft. The draft was also made publicly available with an opportunity for other members of the campus community to send comments and suggestions by email. In November of 2017, a town hall was held to provide an opportunity for the broader campus community to participate in the process. The structure of the town hall provided an opportunity for small group discussion about the core themes of the report and to offer input regarding relevant successes and shortcomings. These parallel, smallgroup discussions were facilitated by reaccreditation workgroup members, who also took notes. Feedback from these discussions proved valuable as it identified gaps in the report, as well as places where the report was already outdated due to rapid, recent progress in some areas. The Reaccreditation Workgroup used all of this feedback to revise and improve the draft.

A final WASC campus self-study was submitted in January 2018, after final approvals by the Reaccreditation Workgroup, the campus ALO, the Provost, and the Chancellor.

Part 1.

Degree Programs and Educational Quality: Meaning, Quality, Integrity of Degrees (CFR 2.1, 2.2, 2.5)



Students who have earned a UCR degree are poised to flourish. With the high-quality research faculty and diverse student body, our alumni are ready to take on the world. UCR students are transformed by the people they meet, the courses they take, and the projects they embark upon. Challenging majors and inspiring professors lead students from zones of comfort and convenience into areas of exploration that are as thrilling as they are new. Whether discovering a virus that threatens unprotected populations or looking at the ways in which gender conformity is undermined in Shakespeare's work; whether gazing into the heavens for unknown realms or exploring the lost cultures of the Americas, our students delve deeply into a universe that is more complex and more rewarding than they might ever have thought possible. As they leave UCR, our students have the tools to approach that universe: they know ways of investigating, studying, interpreting and translating that set them up for a life of engaging relationships with a universe they increasingly understand in all its complexity.

A Research Faculty (CFR 1.3, 2.0, 2.2, 2.2a, 2.8, 2.9, 3.1, 3.2, 3.3)

An active and engaged faculty is the bedrock of strength for a research university. UCR faculty members produce cutting-edge scholarship, inspire and mentor students, engage with their communities, and contribute to university governance in essential ways. They give specific shape to the richness of our university, and their scholarly contributions are the first measure of our achievement: scientific discoveries and patents, prized books in the humanities and social sciences, remarkable achievements in art and music, and award winning novels. Another measure is the financial support earned for these activities. In Fiscal Year 2016, our faculty received 866 contracts and grants, worth more than \$144 million — a larger amount than for any previous fiscal year. The research impact of our faculty is set to continue on an upward trajectory in the coming years due to a plan, initiated by Chancellor Wilcox, to recruit up to 300 additional faculty members to the campus. Since 2013, we have added 196 full-time instructional faculty (159 tenure-track), for a total of 867 full-time instructional faculty (813 tenure-track).

Our world-class faculty members are actively engaged in the design and delivery of undergraduate education. Our professors design their courses around best pedagogical practices, such as active learning principles, and pay particular attention to student success and learning outcomes. Campuswide, all first-year classes emphasize learning outcomes and use various educational models learning communities, flipped classrooms, and online discussion groups—to achieve their goals. We also have a special emphasis on involving undergraduates in faculty research activities (more details are below), thus more closely linking classroom activities with real-world applications and greater interaction with faculty mentors. Advanced scholarship also informs teaching, at even the first-year level, as programs like our award-winning CHASS Connect exemplify. In these classes, research is used to open up areas of investigation and study for students. In our science college, many first-year students in the life sciences enter the research laboratory after their first quarter through the course, The Dynamic Genome (BIOL 020). Because UCR has a robust climate of academic freedom, there is a great deal of flexibility in the various ways in which undergraduates may be introduced to the latest developments in advanced research. For example, an English professor might shape a course around disability studies, an emerging field in that discipline; or a neuroscientist might lead students in an exploration of nanotechnology.

UCR faculty are also involved in shaping and directing capstone projects that are required of many of our undergraduate programs. These projects require students to conduct their own original research under the guidance of a faculty member, which is the first step a student makes toward graduate-level research. The University Honors Program connects faculty members with students interested in a greater emphasis on instruction and research throughout their undergraduate careers. Honors students undertake directed courses, internships, and research projects with UCR faculty through meetings outside of class and during office hours. Our faculty then advise students on their final Honors thesis. At the more advanced levels, students engage in advanced research by working side-by-side with their mentors and find their footing as young professionals.

Overall, UCR has an unusually strong emphasis on undergraduate research, and has several programs that support it. Our Office of Undergraduate Education offers <u>small grants to undergraduate</u> <u>students</u> wishing to pursue their own research and recognizes those who have made outstanding achievements through the Chancellor's Research Fellowship. About half of our undergraduates report that they have participated in facultymentored research or creative activity during their undergraduate careers (UCUES, 2016) and institutional records show that about 20% do so in a given academic year (Undergraduate Research Tracking Report, 2014). Each spring, the campus hosts the Undergraduate Research Symposium, for which interested students apply to present the results of their research projects. The 11th annual symposium in 2017 featured almost 100 student talks and more than 200 posters. Faculty moderate sessions where undergraduates present their research, and the moderators provide the presenters with written feedback. Some undergraduate work ends up featured in our Undergraduate Research Journal, which evaluates student work through a regular peerreview process. UCR is also part of the Mellon Mays Undergraduate Fellowship Program, a select group of 48 institutions in the U.S. and South Africa invited by the Andrew W. Mellon Foundation to mentor talented students from under-represented groups for admission to graduate school in selected fields.

Faculty attention to student achievement is a distinctive feature of our undergraduate program. Distinguished faculty teach lower-division classes and bring introductory material to life by placing it in the context of current research. This early exposure to research provides a way to engage students in the excitement of discovery and encourages the involvement of undergraduates in faculty-mentored research. Internships augment research experiences giving students insights into the practical applications of their growing knowledge in the arenas of business, government, education or community service.

While specific approaches may differ across departments and programs, we make teaching central to our mission at every level. Through the <u>Academy of Distinguished Teachers</u>, faculty members receive resources and mentoring to improve their teaching and support to try out new ideas and pedagogies. Our campus celebrates teaching with awards from the Academic Senate, the Academy of Distinguished Teachers, and Undergraduate Education. Student evaluation of teaching is a regular feature of faculty reviews. Many colleges have their own teaching awards and organize workshops to encourage best practices in the classroom. Most departments also celebrate effective teaching among teaching assistants, with various awards and recognition for graduate student teaching. New classes are reviewed by committees, such as the Committee on Courses and the Committee on Educational Policy, and the catalog is continually revised as fields change and new approaches are introduced. For instructors who want to improve their teaching, we offer a variety of resources including the Instructional Design and Faculty Technology Support Group that provides access, training and support for instructors interested in using technology to foster student engagement and promote academic success.

Recently, we have further strengthened our commitment to teaching, now and in the future, by investing in a greater number of Lecturers with Security of Employment (LSOE) positions, as part of our ongoing faculty expansion. Moreover, we have changed their working title to Professor of Teaching to emphasize their coequal standing with other members of the Academic Senate and the importance of their expertise to our campus. As is fitting for a research university, these faculty members are appointed with an expectation for scholarship that often centers on engagement in discipline-specific issues of teaching and learning and dissemination of research findings to their peers. To date, we have already recruited more than a dozen Professors of Teaching to UCR.

In addition to their research and teaching activities, our faculty are actively engaged in a variety of professional service activities including: organizing conferences, giving invited talks, reviewing manuscripts, and serving on editorial boards, review panels, and in many other capacities. These activities often involve creating opportunities for students to meet visiting scholars, assist with conference or exhibit organizing, and learn how scholars bring their research into the local community, thus further strengthening the link between scholarship and teaching.

Our faculty evaluation procedures are consistent with best practices in performance appraisal: research, teaching, and service contributions evaluated by peers, faculty committees, and campus administrators. This regular cycle of review follows the <u>University of California Step System of Faculty</u> <u>Review</u>. With regard to the important actions of appointment and promotion, the <u>Academic</u> <u>Personnel Manual</u> states that "clearly demonstrated evidence of high quality in teaching is an essential criterion for appointment, advancement, or promotion" (page 4).

Engaging Diversity and Inclusiveness (CFR 1.4)

Diversity is deeply embedded in the fabric of UCR, and we are proud of our long and successful history of inclusiveness and accessibility. For decades, our campus has fostered centers for various groups that promote inclusiveness (and by extension, achievement) at UCR. The LGBT Resource Center and the Middle Eastern Student Center (founded more than twenty years apart) were both the first of their kind to be established at a public university in California. UCR also has offices for <u>African</u> <u>Student Programs, Asian Pacific Student Programs, Chicano Student Programs, Native American Student</u> <u>Programs, a Veterans Resource Center</u>, and both a <u>Women's Resource Center</u> and a <u>Women's Faculty</u> <u>Association</u>. Moreover, we have a strong record of attracting and supporting first-generation students on our campus. As of fall 2017, first-generation students comprise 57% of new and continuing students at UCR, compared to 34% in the most recently available national statistics. To increase support for firstgeneration students, we have engaged with the UC Office of the President to increase the visibility of first-generation faculty, staff, and alumni. We recently launched the faculty campaign and hope to roll out campaigns for staff and alumni in the coming year. Faculty whose parents did not earn a baccalaureate degree were invited to participate by wearing shirts, buttons, and stickers that say "#FIRSTGEN COLLEGE GRAD". This campaign is just the first step in a larger plan to build a strong network of firstgeneration undergraduates, staff, and faculty. Support for first-generation students is a key rationale for our freshman learning communities, providing new students with the guidance and peer support they need to make a successful transition to college.

Another recent effort places UCR on a national stage. In 2014, we joined ten other public research universities as founding members of the University Innovation Alliance (UIA), a partnership committed to accessibility in higher education for low-income and first-generation students. The eleven member universities are committed to exploring, scaling, and sharing innovative best practices for improving degree completion rates for traditionally underserved students. Recent and ongoing projects include predictive analytics, proactive advising, completion grants, and college to career pathways. A national convening focused on dissemination of lessons learned, and greater engagement with like-minded higher education leaders from other universities, will take place in April 2018.

Meanwhile our campus strives to further increase our diversity and enhance our culture of inclusion. While we are known mainly for the diversity of our undergraduate student body, the profiles of our graduate student body and our faculty and staff are relatively less diverse. Recent efforts have focused on these groups. On the faculty side, campus leadership noted the opportunity presented by our ongoing expansion to accelerate efforts to further diversify our faculty, and made it a priority to do so. Some faculty hires focused on areas thought to have more diverse pipelines of applicants. Changes were made to hiring procedures and now require evaluation of an applicant's contributions to diversity, access, and inclusion. Faculty serving on search committees now receive training to make these evaluations effectively, and to avoid implicit bias in the search process. These and other efforts have begun to bear fruit: markedly higher percentages of faculty hires in AY 2015-16 and 2016-17 were from historically underrepresented groups (at 22-23%), compared to recent historical incoming cohorts (around 10-13%) and to faculty already on campus (at just 10%).

Staff and graduate student diversity also has been a focus of our recent efforts. We are now in our tenth year of the Chancellor's Making Excellence Inclusive staff diversity training program, with a similar graduate student pilot program now successfully installed. The Graduate Division offers the Eugene Cota-Robles Award to under-represented students who might otherwise find it difficult to pursue graduate education. The Graduate Division also provides programming — like GradEdge and the Jump Start Summer Program — designed to increase the participation of under-represented students in STEM and, generally, promote student retention. The appointment of a Diversity and Inclusion Academic Liaison (DIAL Officer) for the past two years has bolstered relevant programming across the campus, and since 2013 we have made sustained efforts to improve campus climate, both as part of UC systemwide efforts and locally with leadership from the Associate Vice Chancellor for Diversity and Inclusion.

Interdisciplinarity (CFR 2.2)

Interdisciplinary programs allow students to make connections among different fields of study. These connections catalyze the creation of new ideas and the discovery of new approaches and solutions to problems because they encourage students to look beyond a particular disciplinary lens and approach an issue from a variety of perspectives. UCR offers strong interdisciplinary programs in every college. A concern about college-based budget processes, which are shaped around their departmental structures, is the potential that they could work against interdisciplinary hiring and program advancement, however, these limitations are being regularly overcome, with several notable achievements, such as those listed below.

In CHASS, examples of interdisciplinary programs include Global Studies; Peace and Conflict Studies; Labor Studies; Latin American Studies; LGBIT Studies; Asian Studies; Southeast Asia: Text, Ritual, and Performance; and Middle East and Islamic Studies. These are administered by the Office of Interdisciplinary Studies and housed in the Multidisciplinary Programs Unit, which also oversees departments that are highly interdisciplinary in their focus, such as Media and Cultural Studies, Gender and Sexuality Studies, Religious Studies, and Ethnic Studies. Some of these programs extend into graduate study, and as a result, heighten the synergy between undergraduate and graduate students.

In the STEM colleges and schools — CNAS, BCOE and SOM — interdisciplinarity is integral to contemporary research. Majors such as neuroscience span colleges and involve Molecular, Cell and Systems Biology (MCSB) faculty in CNAS, and Psychology faculty in CHASS. In engineering, programs such as Bioengineering and Materials Science and Engineering are interdisciplinary in conception and span BCOE and CNAS. Interdisciplinarity is integral to the professional schools as well. Business students, who first take pre-business courses as lower division students in CHASS, experience a highly interdisciplinary range of courses and approaches in their major. Public Policy is, fundamentally, interdisciplinary and our SPP has a diverse group of faculty whose areas of expertise span economics, sociology, health, political science, immigration, geography, and spatial science. The main areas of emphasis for the Master of Public Policy program are health, inequality, crime, immigration, and environmental policies. GSOE houses the SEARCH (Support, Education, Advocacy, Resources, Community and Hope) Family Autism Resource Center, which brings together research from psychology and education on autism with resources and support to help families navigate the often overwhelming varieties of services and treatments available for individuals with autism spectrum disorders. Finally, our new program in Medical Humanities brings together faculty from the social sciences (especially anthropology and sociology) and the humanities (from creative writing, English, and history), with students in SOM. Our medical students are able to take courses in the arts and humanities as a way of breaking down barriers and making them better practitioners.

Engagement with the Community (CFR 2.4, 2.8, 2.11)

Engagement is one of four pillars of the UCR strategic plan. Our campus is intent on opening its classrooms, study centers, and laboratories to the world in all its many social, political, and cultural forms. In practical terms, this means creating opportunities for our students to engage with their communities, seek learning opportunities off campus, and interact with the wider world. Perhaps one of the most obvious ways that we engage with the community is through UCR Extension. Located adjacent to the main campus, UCR Extension provides professional certificate programs, credentials, and non-credit programs year round in areas like business, technology, education, and criminal justice, to students in all stages of their professional lives. This diverse array of programs is taught by dynamic, career-focused, real-world expert instructors, many of whom are UCR faculty, utilizing innovative course formats that work for today's learners. UCR Extension has annual enrollments in excess of 20,000 students per year and provides a unique gateway for members of Inland Southern California, as well as visiting international students from more than 40 countries, to access the University of California and to achieve their professional and personal goals.

In the sciences, there are opportunities for community engagement through the CNAS Science Ambassador program, which gives high achieving undergraduate students opportunities to serve as liaisons to the various communities that CNAS serves both on and off campus, with an emphasis on recruiting events and activities. Ambassadors are knowledgeable about their majors and UCR, and are easily able to communicate their passion for both prospective students and their families. In the arts, the Gluck Fellowship Program provides programing to schools and cultural centers in Riverside and inland Southern California, and offers opportunities to outstanding UCR graduate and undergraduate students to present their research through artsrelated presentations, performances, and workshops. Recent presentations and workshops have included dance troupes, musical and theatre ensembles, improvisation groups, singers, actors, poets, and art historians. Additionally, SPP hosts over 90 events per year, bringing experts, elected officials, and administrators at the state and local level to campus to highlight a variety of issues relevant to our region. Learning off campus often takes the form of internships. The Educational Initiatives program supports faculty who want to embed service-learning in their courses, and provides internships in the local community. The UC in Washington, D.C. and UC in Sacramento programs facilitate and support students seeking internship opportunities in and near centers of government. The Career Center provides robust support for internships, including workshops for students seeking such opportunities, resources to connect potential employers to students, and awards for students completing projects summarizing and reflecting on their experiences. SOBA draws on professional knowledge and understanding of specific career pathways to design internship programs for its students. SPP's required student internship program was spearheaded by former Riverside Mayor Ron Loveridge (currently a UCR faculty member) and maintains partnerships with a number of organizations and government agencies.

Other colleges engage with the community by inviting the community to campus. BCOE promotes an <u>Engineering Day</u> featuring, among other activities, a chance for local Girl Scouts to earn a merit badge. Students and faculty from SOM, and other medical education institutions in the area, offer a <u>free</u> <u>medical clinic</u> to the local community. At UCR, news and politics are integrated into the curriculum and supported by a host of guest speakers, workshops, and other special events, many of which are created and sponsored in connection with the <u>Center for</u> <u>Ideas and Society (CIS)</u> and other research centers.

UCR is also engaged with the broader community. The <u>UCR Arts Block</u>, opened in 2010 and located in downtown Riverside, serves as a cultural anchor for both the university and the broader Inland Empire community. The UCR Arts Block organizes provocative and timely art exhibitions, performances, screenings, and other programs with the aim of invigorating the cultural life of the artists and residents of Southern California, nurturing creative and critical thinking on campus and in the community, and promoting the importance of the arts for a healthy society.

Our campus also recently created the position of Vice Provost for International Affairs. This office houses many of the traditional study abroad programs, promotes research on critical global issues, and facilitates the movement of researchers and students across international boundaries. Recognizing UCR's location in Southern California, the campus has a long established UC MEXUS program dedicated to encouraging binational and Latino/a research and collaborative academic programs and exchanges with Mexico.

Core Competencies (CFR 2.2, 2.2a)

We see the core competencies as doing more than shaping an undergraduate curriculum. They are an indispensable foundation for lifelong learning. Each of the skills represented in the core competencies, moreover, serves students as they move into their professional careers. Critical Thinking is a powerful tool in every area of work or study, and its increasing importance in undergraduate programs means that UCR students are better able to challenge the status quo and think for themselves. Quantitative Reasoning is not just a specialty of mathematics or science; it is a skill set actively used in a wide range of fields. The rapid pace of technological innovation means that early-career professionals in a variety of fields find that they depend more and more on the quantitative skills they learned as undergraduates. Information Literacy, central to every area of advanced research and many different modes of employment, has increasing importance in an ever more virtual world. Written Communication, central to success in almost every field at UCR, is also indispensable in every endeavor beyond the university. Oral Communication is a professional skill that enables

clarity in the exchange of ideas. In competitive academic and professional settings, the ability to interview successfully, present ideas clearly, and make convincing arguments often distinguishes a successful candidate from an unsuccessful one. Recognizing the importance of oral communication and public speaking, we have developed and expanded the classroom, workshop, and application possibilities of oral communication, including coursework specifically focused on oral communication. (Also see the section on core competencies in chapter three.)

General Education (CFR 2.2, 2.2a)

The <u>General Education (or GE) Curriculum</u> is a core part of the UCR undergraduate experience. It includes requirements that students demonstrate basic competencies in writing and mathematics (as appropriate for their major) as well as in a range of other fields. This model assumes that exposure to a broad range of fields enables students to gain a foundation in general knowledge.

Core writing requirements are overseen by the University Writing Program (UWP). Incoming students take a placement exam to determine where in the sequence of writing courses they should begin, or they demonstrate an appropriate level of writing proficiency through AP credit, high SAT scores, or other means. As a result of the UWP's outreach efforts and the steadily improving caliber of UCR applicants, there has been impressive growth in the portion of our entering class that has passed the University of California's Entry-Level Writing Requirement upon matriculation. In the fall of 2017, 62% of our entering freshmen had satisfied the requirement before registering as full-time students. A large and growing number of freshmen (31% in fall 2017) came to UCR with AP credits that placed them in advanced portions of the writing program. The structure of writing coursework provides support for

students who are not able to demonstrate college-level writing upon matriculation, and then focuses on a core series of three courses that satisfy the university's writing requirement. The final course can be replaced with a writing-intensive course in a students' major (or in another department) that embeds writing instruction in a discipline-specific context.

All students are expected to take courses in mathematics or a related area, although requirements vary considerably by a student's discipline. For many students in the arts and humanities, their quantitatively intensive coursework may be only one course in mathematics, statistics, or computer programing. Students in STEM and some social science fields are required to take a number of sequenced mathematics courses. The Department of Mathematics has recently rethought, and significantly changed, how it structures and delivers this content. An older introductory course sequence that compressed key concepts into two courses near the middle of the sequence has been redesigned so that content is now covered in three courses. The first year calculus sequence is now split into tracks for life science or physical science/ engineering majors covering similar concepts, while placing mathematics into a specific context. To support this effort, more than 100 micro-tutorials have been developed, each consisting of a short video lecture focusing on a specific example problem and using a "learning glass" smart board. The examples focus on concepts from the physical and life sciences and provide concrete contexts to help students in those majors stay engaged. The mathematics department has further created and opened a Math Emporium that provides a study space staffed by teaching assistants for 40 hours per week. Students are encouraged to come to the Math Emporium in groups so that they can learn from each other, as well as preview or review concepts from other courses in the sequence.

Our GE curriculum also asks students to undertake studies in fields outside their majors to encounter different ways of thinking that challenge their assumptions. <u>GE includes a range of classes</u> in natural sciences and mathematics, social sciences, humanities and the arts: up to 20 units in natural sciences or mathematics (at least one course in each of mathematics/computer science/statistics, life science, physical science, and two additional courses); up to 20 units in humanities (one course in world history, one in fine arts, two from literature, philosophy or religious studies, and one additional course); 16 units in social sciences (one course in political science or economics, one course in anthropology/sociology/ psychology, and two additional social science courses). In addition, students are required to take one course in ethnic studies and, at least in some colleges, to study a foreign language.

Recently, there has been interest in restructuring GE. Around the time of our last reaccreditation, a special committee of the Academic Senate developed a policy for students to select their GE classes around pre-approved "concentration options" (e.g. California, climate change/sustainability, ecology/ biodiversity), culminating with a capstone course. This policy was approved and adopted on a five-year trial basis as an alternative option for students to satisfy GE requirements. However, very few students expressed interest in this approach, and ultimately the policy was not renewed after the initial five-year trial. Regardless, interest remains strong in revising GE, and campus leadership recently requested the Academic Senate to produce a discussion paper on the subject. While we do not know where this nascent process may lead, we offer a few comments on how our system could be made to work even better than it does now. One potential adjustment to the present system would be to ensure that all "breadth" courses also incorporate a broader approach to their topic, so that it might have a deeper resonance with a student's major course of study. A typical breadth course, At Home in the Universe (GEO 012), states that "Fundamental questions of human existence can be expressed in the following manner: where do we come from, and what things matter? These questions

are intimately connected because our view of the collective past influences the choices we make in our individual lives. Human societies offer diverse answers to the question of where we come from including varied religious traditions, philosophical systems, and the particular way of knowing called science." Such a class is perfect for an enlightened General Education program; it asks questions that students from every major will want to try to answer, and it asks them in ways that students will be able to apply to whatever work they are already doing within their major.

Another possibility would be to revisit the concentration options, determine why they were not more popular with students, and consider revisions to the previously approved policy. A more wholesale restructuring of GE might be built around a reassessment of the nexus of critical career skills and our comparative strengths as a research university, resulting in a common curriculum that helps define what it means to hold a UCR bachelor's degree. Regardless of the chosen approach, development of GE-specific learning outcomes remains an area in need of attention, and will be addressed as part of this nascent effort.

Graduate Education (CFR 2.2b)

The Carnegie Classification of Higher Education Institutions classifies UCR as a "research-intensive university." Strong graduate programs that train students in advanced research, creative activity, and professional skills are integral to UCR's identity. UCR currently offers about 45 master's degrees and 55 doctoral degrees; in the fall of 2017, total enrollment in UCR master's programs is 935 and in doctoral-level programs 2,040.

Like other research universities that train students at advanced levels, UCR sets a high standard for success. Our graduate programs attract some of the greatest minds in the sciences and the arts, incubate new ideas, contribute to our local quality of life, and educate future leaders. UCR is a place where bold ideas flourish, and where people from different walks of life come together to pursue their interests and their dreams. We offer our students and faculty the support, resources, and inspiration to explore, discover, and contribute new knowledge and the opportunity to go on to fulfilling, relevant careers and rewarding lives as citizens and leaders.

Inclusiveness is as central to graduate education as it is elsewhere on campus. With regard to graduate education, the university seeks to promote excellence in research and in teaching by supporting an undergraduate student population that ranks highly in terms of racial diversity and socioeconomic mobility. Graduate Division offers training and workshops around diverse and inclusive pedagogy - important for the success of teaching assistants on our campus and for future educators everywhere. Further diversifying our graduate student body also is key, and various strategies for recruitment, financial support, and mentoring are implemented both by the Graduate Division and by individual programs, depending on the type of degree (PhD, master's and professional) and the discipline. Every graduate program at UCR shares the commitment to the highest standards of inclusive excellence that an institution of this kind can offer.

Since UCR's last WASC review, our professional education options have multiplied. We have added schools of medicine and public policy (more on each of these below), both of which have been recognized for their much-needed focus on local issues and their global implications. SOBA has gone through a successful reorganization and strategic planning process, and the GSOE faculty has expanded by nearly 50% (from 21 to 30) since 2013 due to our ongoing hiring effort. In 2016, BCOE formally launched its first online <u>master's degree in</u> <u>engineering</u>, designed to allow working professionals greater access to further developing their knowledge and skills. This new program appears to be on a great trajectory, rising 10 spots in the latest U.S. News and World Report rankings to <u>#51 nationally</u>.

School of Medicine

In 2006, the UC Board of Regents approved a plan to build a medical school at UCR. SOM is dedicated to expanding and diversifying the physician workforce in inland Southern California. SOM was built upon the strong foundation of UCR's biomedical sciences program that connected UCR undergraduates to UCLA's medical school. With SOM's commitment to diversifying the physician labor force, 24 seats in each incoming cohort are reserved for UCR undergraduates. These seats typically see about 180 applicants from our diverse undergraduate population, establishing a pipeline of well-qualified and diverse students into SOM. By way of comparison, there are over 5,000 applicants for the other approximately 40 remaining seats in each cohort.

In 2009, SOM's founding dean was named, groundbreaking occurred for the SOM research building, and renovations were initiated to create classroom and administrative space. In 2011, WASC's structural change panel approved the offering of a Doctor of Medicine degree, and, in 2012, the Liaison Committee on Medical Education (LCME) approved SOM for preliminary accreditation, opening the door for a multistage process on the way to full accreditation in 2017. SOM's first class donned white coats in 2013; the inaugural class graduated in 2017 and had a <u>100%</u> <u>match rate for residency programs</u>, a noteworthy accomplishment for so young a program.

UCR's medical school is uniquely structured. With the goal of training community-minded physicians for the region, SOM's students work in primary care at a variety of facilities throughout inland Southern California. This strategy integrates students into communities that are desperately short of physicians. By design, there is no single hospital specifically affiliated with SOM. Instead, our school embeds hands-on medical training in local clinics, hospitals, and other health care centers with a focus on primary care; the goal is to train medical students in underserved communities in the specialties most needed. In addition, the Longitudinal Ambulatory Care Experience (LACE) program places students in clinical settings during their very first year of medical education. The early translation of classroom concepts from a problem-based curriculum to skills in clinical settings provides a robust student training experience that enhances learning.

School of Public Policy

Plans for UCR's School of Public Policy began in 2004, drawing on a public policy initiative and an undergraduate major, then housed in CHASS. The UC Board of Regents approved plans for a new school in 2008, with a mission to create a curriculum that provides interdisciplinary understandings of, and ways to think about solutions to, the unique set of problems faced by inland Southern California. SPP currently offers a Master of Public Policy, a concurrent Master of Public Policy and Doctor of Medicine program (in conjunction with the School of Medicine), and, as of December 2017, a bachelor's degree in public policy since our Academic Senate has approved the transfer of the undergraduate degree program from CHASS to SPP. Meanwhile SPP is developing both a master's degree in Global Health and a PhD in Public Policy.

Part 2.

Student Success: Student Learning, Retention, and Graduation

SVZ

UCR is committed to the success of all of our students. We think about student success in a number of ways. From a student's perspective, success means finding a welcoming environment in which to study and develop, persisting through their studies, growing and recognizing their potential, and graduating on time. From the perspective of parents and recent alumni, success is likely to focus on affordability, career success, and quality of life. One manifestation of this commitment is our ongoing effort to augment our instructional facilities with a new \$60 million Student Success Center. The Student Success Center will employ an integrated space strategy designed to improve and expand instructional spaces on campus by 2021. The building will include approximately 900 classroom seats, a student activities component, and dedicated space for student advising. Classrooms will have flexible designs to allow for a variety of uses, enhance student learning (e.g. through active learning pedagogy), and increase seat utilization. We view this building as an opportunity to help chart the future of instruction at UCR, so in 2017 we conducted a campus-wide visioning workshop with 150 stakeholders, and two campus-wide surveys to better understand current and future instructional needs. Currently we are working with a master architect to develop the building program, and awaiting a positive response to our \$50 million request from the state.

Undergraduate Student Success

Student Perceptions of the Campus (CFR 2.10)

Students often report selecting UCR both because of its rigorous and rich academic experience and because it has a reputation for welcoming diverse students. On the most recently available <u>UCUES</u> <u>survey</u>, more than 82% of students agree that "knowing what I know now, I would still choose to enroll at this campus," slightly higher than the UC system-wide average. The same survey also shows that, in comparison to respondents from other UC campuses, UCR students consistently report higher agreement levels with items asking about important aspects of campus climate (see Figure 1). As just one example, a recent CNAS commencement student speaker stated in his speech that as one of only two turbaned individuals at his California high school, he felt extremely welcome at UCR when he saw the number of Sikhs among his fellow students.

Retention and Learning Communities (CFR 1.2, 2.13)

UCR has shown steady gains in one-year retention rates over the last ten years and, just as importantly, these gains largely remain when campus level data are disaggregated for a number of groups (Figure 2). For students entering campus in the fall of 2006, the one-year retention rate was about 83%; that figure is now 89%. Importantly, the same upward trend is evident for both men and women, those on Pell Grants and those not on Pell Grants, students in each of the three colleges that house freshmen students, and across major racial and ethnic groups.

A major driver of increased retention rates has been the first-year learning communities. These learning communities are organized in different ways in each college, but all focus on fostering a sense of community by grouping incoming freshmen into the same discussion sections or labs for their courses, or into workshops led by peer-mentors, and then pairing these groups with academic-support services, such as supplemental instruction. Learning communities provide a sense of belonging, boost confidence, and help make the classroom experience more meaningful for students. Such structures are known to play an important role in ensuring student success at UCR. Participation in learning communities has risen, and a majority of students in all colleges (and over 90% in both CHASS and BCOE) now participate in learning communities.



Source: UCUES 2016

Participants generally have <u>one-year retention rates</u> <u>that are about 5% higher than nonparticipants</u>. In CNAS, learning communities have been a central part of <u>efforts to increase retention and academic</u> <u>engagement</u>, particularly for students historically under-represented in STEM fields.

As a way to build on the successes of learning communities, we have plans to further develop livinglearning communities. This means taking the excellent results of learning community groups in large lectures and applying them to the experience of student life in the dorms and beyond. These plans would expand on similar programs that are already in place for <u>some college-based "living-learning communities"</u> (Engenuity residence hall for BCOE, SIMS residence hall for CNAS) and will be a significant focus of new residence halls currently being planned as part of our North District development. Our rising popularity as a campus of first choice for many students has contributed to at least one challenge that we can observe in the retention data. In the fall of 2016, we overshot our enrollment targets and brought in an exceptionally large freshmen class. We worked to ensure that the classes these students would need were offered in sufficient numbers (our Math department was especially helpful in this regard) and that these students were welcomed to the campus like every other incoming class. At the time of this writing, it is now clear that this cohort experienced a 1-2% decrease in overall one-year retention rates (although when rates are disaggregated, some groups saw larger or smaller declines). There are some indications that much of the growth in this admissions class came from students with relatively lower test scores and high school GPAs, and this may be the reason for the slightly lower retention rates.

Figure 2: One-Year Retention for Freshmen Admits by Gender, Financial Aid Status, College, and Ethnicity (by students' year of entry)



Source: Office of Evaluation and Assessment, with Institutional Research data



Figure 3: Four-Year Graduation Rate for UCR and Comparison Groups (for students entering in 2010)

* Regional comparison group includes nearby four-year institutions, specifically CSU San Bernardino, California Baptist University, La Sierra University and University of Redlands.

** University Innovation Alliance members include Arizona State University, Georgia State University, Iowa State University, Michigan State University, Ohio State University, Oregon State University, Purdue University, University Texas at Austin, University of Central Florida, and University of Kansas. *** UC comparison group excludes UC San Francisco and UC Hasting, which are primarily graduate institutions.

Source: Office of Evaluation and Assessment with IPEDS data

Graduation Rates (CFR 1.2, 1.6, 2.10, 2.11, 2.12)

The four-year graduation rates for most cohorts of students entering UCR in the period since the last accreditation visit have been in the low- to mid-40% range. While this compares favorably to other fouryear institutions in the region and to peer institutions in the University Innovation Alliance (see Figure 3), it lags behind the overall average for all UC campuses by more than 10 percentage points.

The last several years have seen a sustained focus on four-year graduation rates as a metric for student success. In the summer of 2013, our provost convened a <u>Graduation Rate Task Force</u> to study current patterns of student progression towards degrees, identify barriers, and then work to address them. At that time (as shown in Figure 3), UCR's graduation rates compared favorably to some peer groups but not to the overall UC average. In January 2014, this task force identified a number of factors related to inadequate or insufficient course planning on the part of the university as well as a group of factors related to student academic preparation, behavior, and perceptions. Regarding the role of academic preparation on four-year graduation rates, the task force wrote, "These data suggest that, given students of similar academic quality, [UCR] performs as well or better than other UC campuses." While encouraging, this was not used as a reason to avoid taking action. Rather, to address the structural issues, a coursedemand workgroup convened to identify and address bottleneck courses, ensuring that high-demand courses were offered frequently enough to meet student need, including during both the summer and the traditional academic year. Steps were also taken to target student support services in courses that have historically had a high rate of student failure, with the aim of reducing the number of students repeating these courses.

On the student side, a "Finish in 4" cultural challenge has encouraged students to take steps to complete their degrees with their matriculating peers within four years. This project is a far-reaching messaging campaign focused on encouraging behaviors that facilitate timely graduation, including in various advising centers, many campus websites, and the student course catalog. The project also features video



Figure 4: Four-Year Graduation Rate for Freshmen Admits by Gender, Financial Aid Status, College, and Ethnicity (by students' year of entry)

Source: Office of Evaluation and Assessment, with Institutional Research data

testimonials from UCR students and serves as an information hub to help students locate resources, such as their advisor and the <u>Academic Resource Center</u>. There is also messaging encouraging students to enroll in <u>summer courses</u>. This messaging emphasizes that through summer enrollment, students can maintain a higher average number of units, retake sequenced courses they may have dropped or failed so as not to fall further behind in those sequences, or free up time during the academic year to engage in high-impact practices without sacrificing timely progress to degree.

Relatedly, a UC system-wide program—the Challenge 45 initiative—asked departments to examine their majors and assess if more than 45 upper-division units in the major were necessary. The result has been that many departments have revised their requirements and made it more feasible for students to finish their degrees in four years. Another similar system-wide program—Three-Year Pathways—led to the creation of three-year degree plans for our most popular majors to help interested students pursue accelerated degrees.

These efforts built on, and contributed to, a trend of improving four-year graduation rates on our campus: while 39% of UCR students who entered in the fall of 2006 graduated in four years, 56% of those who entered in the fall of 2013 did so. This overall improvement in graduation rates was recognized by the Association of Public & Land-Grant Universities (APLU), which awarded UCR its prestigious <u>APLU</u> Project Degree Completion Award in 2016.

A real point of pride for our campus, however, is that there are improvements for all of the most salient student demographic groups and that gaps between many groups, like between Pell and non-Pell students, are small (as shown in Figure 4). (The gap between men and women's graduation rates narrows when one looks at six year grad rates.) In 2017, UCR's success at raising four- and six-year graduation rates and



Figure 5: Two-Year Graduation Rate for Transfer Students by Gender, Financial Aid Status, College, and Ethnicity

closing graduation gaps for students from historically under-represented groups was recognized in two publications from the Education Trust (<u>here</u> and <u>here</u>), showing that UCR's six-year graduation rates for black and Latino/a students exceed the national averages by around 28% and 13%, respectively.

Despite our recent progress, we are not yet satisfied with our current degree completion rates. The average time to degree is about 4.25 elapsed calendar years for recent cohorts of students. This indicates that many students are taking just a bit longer than four years to graduate and that there are a large number of students who could likely graduate in four years with more encouragement or support. We are working on ways to identify when and where students are likely to struggle and how best to intervene when they do. We are in the process of adopting two third-party technology solutions-EduNav and Illume-that will help students monitor their own progress and help advisors and others identify students who are off track and could use additional support. We are also examining our advising practices through

funding from the Department of Education for a UIAcoordinated project to support a robust evaluation of the effects of more active advising for populations likely to be at risk.

Transfer Students

(CFR 1.2, 1.6, 2.10, 2.11, 2.14)

UCR has long had a commitment to serving students who transfer after beginning their education at a community college, and transfer students currently make up about 15% of all undergraduate student enrollments. This group has been supported by transfer student-specific outreach programs, orientations, and peer mentoring programs on campus. These students typically earn their degrees quickly, with about 60% of the most recent cohorts doing so within two years. While there have historically been some differences in this completion rate across academic programs, the campus has worked deliberately to address, and in some cases, eliminate gaps by gender, financial aid status, or ethnicity (as shown in Figure 5). UCR has recently and dramatically increased efforts to recruit transfer students as part of a larger UC system-wide initiative to reduce the ratio of matriculated freshmen to transfer students to no less than 2:1 at each UC campus. To help increase the number of transfer students, we accepted a transfer cohort in winter quarter 2018. This is the first time a transfer class was admitted in a winter quarter since 2010, and (as of this writing) 200 new students have since enrolled. Increased recruiting efforts include visits by UCR admissions counselors to every California community college and visits to regional community colleges by the Provost, Vice Provost for Undergraduate Education, Associate Vice Chancellor for Enrollment Services, and Chair of the Transfer Student Task Force to build connections with administrators, faculty, and students. There has been a particular focus on STEM majors due to historical barriers resulting from restrictive major-specific admissions requirements and many sequenced courses. We also have emphasized building relationships between advising and admissions staff to help transfer students seamlessly transition to UCR. To help transfer students succeed once they arrive on campus, a Transfer Success Zone (housed in the Academic Resource Center) has recently been created. We have also taken additional steps to help transfer students feel welcomed as part of the campus, with specialized programming like the new transfer student convocation.

Student Success Programs (CFR 1.6, 2.11, 2.13)

UCR offers a wide variety of student success programs, targeting these potentially overlapping groups: those who may arrive at campus underprepared, those who wish to make the most of their college experience, and those who wish to engage with the university's truly exceptional faculty even more intensely.

For undergraduates who may arrive on campus underprepared or who struggle as they move through their coursework, the <u>Academic Resource</u> <u>Center (ARC)</u> provides a number of student support services. These include drop-in <u>tutoring</u>, <u>Highlander</u> <u>Early Start Academy</u> (a program designed to give students a head start in the summer between high school and college), <u>supplemental instruction</u>, <u>early</u> <u>assist programs</u>, and <u>writing support</u>. All have been recently evaluated by the <u>Office of Evaluation</u> <u>and Assessment</u>, and, in many cases, modifications have been made in light of evaluation findings. For example, supplemental instruction was found to have a positive impact on grades, and efforts have been made to expand offerings and more tightly link the supplemental instruction program to specific courses and learning communities.

As another example of our commitment to helping students begin their college career on the best possible footing, we recently piloted a project that allows students who are not satisfied with their math placement exam scores to work with the online learning software (ALEKS) to review basic college level mathematics and then retest, potentially gaining eligibility to enroll in a higher level math course. Evaluations of this project have been very favorable: in each of the first two years of the program (falls of 2016 and 2017) about 100 additional students moved into college-level mathematics courses and, at least in the first year have already, earned grades comparable to those of students who placed directly into those higher math courses.

There is also a group of programs designed to further engage some of our strongest undergraduate students. The <u>University Honors Program</u> fosters a sense of community, focused on intellectual development and community engagement for about 500 of UCR's highest performing students. The <u>Mellon Mays Undergraduate Fellowship Program</u> provides cohort building and mentoring for a select group of students from under-represented groups who want to become professors in the humanities and related fields. The campus also offers guidance for students wishing to pursue prestigious awards and scholarships through the <u>Office of Student</u> <u>Engagement</u>. In recent years, UCR undergraduate students have been awarded Goldwater Scholarships, Coro Fellowships, Strauss Scholarships, and NSF Graduate Research Fellowships.

Success after Graduation (CFR 2.10)

Many students and their families understand success in terms of translating an undergraduate degree into employment quickly after graduation. By this metric, UCR is meeting the needs of a large majority of our students. Results from the <u>2015 NACE First</u> <u>Destination survey</u> show that 69% of those who had graduated in the previous six months were employed, and 21% were in post-graduate school, with just 9% reporting they were still seeking employment.

Graduate Student Success (CFR 2.10, 2.11, 2.12, 2.13)

UCR's Graduate Division provides a variety of services aimed at success and retention for our diverse graduate community. The GradSuccess program includes the Graduate Student Resource Center, which provides assistance related to research, funding, and teaching, through personal and professional development. GradSuccess also contains the Graduate Writing Center and GradQuant, which provide graduate students with opportunities to develop their writing and quantitative skills in one-on-one and group settings. One of the most innovative aspects of GradSuccess is the Graduate Student Mentorship Program (GSMP), launched in 2010 with funding from the U.S. Department of Education, that pairs first-year students with a mentoring "family" that includes one to three other first-year students and a peer mentor from a closely-related field. Two or three families form a "team" that is connected to a faculty mentor. The peer-mentoring groups meet regularly at various levels (sometimes as a team, sometimes as a

family, etc.) and their engagement is monitored by the GradSuccess staff. This structure allows mentees to develop a strong network of support to facilitate their success in the early years of their program.

UCR also participated with UC Davis, UC Berkeley, and UCLA in a Mellon workgroup on graduate recruitment and outreach, admissions, retention, and holistic application review. In addition, the Chancellor's Making Excellence Inclusive training program, originally designed for staff diversity and cultural competency, has been reassessed for curricular enhancements, resulting in a newly piloted program for Graduate Division cohorts.

Completion rates for graduate students in master's programs are around 70-80% for recent cohorts, although some programs (like education and management) have completion rates over 90%. Completion rates for PhD students are around 50-60%. A survey of students earning PhDs between summer 2014 and spring 2015, with an 85% response rate, found that virtually all respondents (99%) were employed. Forty-five percent of respondents were employed by four-year universities (including 20% in tenure-track academic placements), and an additional 7% were employed at community colleges. About one third (32%) of all respondents reported being employed in a business or industry not connected to education. The Graduate Division is taking steps to help students, particularly in the humanities and some social sciences, seek and obtain non-academic positions in the business and non-profit sectors. These include workshops on professional development and preparations to join the Imagine PhD initiative.

Part 3.

Quality Assurance: Program Review, Assessment, and Use of Data



UCR has several processes in place to ensure quality in core educational activities. We implement parallel program review processes for undergraduate and graduate programs, and make robust efforts to assess student learning. The Office of Institutional Research provides data analysis to support a variety of initiatives and routine institutional functions.

Academic Program Review (CFR 2.4, 2.7; 4.4)

Both graduate and undergraduate programs are regularly reviewed with the aim of improving programs or closing those found to be undesirably weak. See table 2 for a list of graduate and undergraduate programs reviewed in the most recent academic year. (A list of <u>all programs reviewed</u> since WASC's last visit is available online, and a few examples of self-studies and documentation generated in the follow-up process have been included in the Box.com folder.) In recent years, we have expanded program review at the undergraduate level by increasing the number of programs reviewed each year, partly in response to feedback from previous WASC visits. Because this process of program review is one of our most important mechanisms for ensuring educational quality, it is presented in detail below and links are provided to additional documentation.

Table 2: Programs Reviewed in Academic Year 2016-2017

Undergraduate	Art History Ethnic Studies Microbiology Religious Studies Mechanical Engineering
Graduate	Comparative Literature Evolution, Ecology and Organismal Biology Electrical Engineering Environmental Toxicology Mathematics Music Sociology

Source: Academic Senate Records

Review Procedures—Undergraduate Programs and Graduate Programs

The Committee on Educational Policy (CEP)

establishes the sequence of <u>undergraduate program</u> <u>reviews</u>, which happen every eight to ten years, and reviews the sequence annually. Programs to be reviewed are notified at least one year in advance. At the time of notification, the program is asked to produce a self-study document to be shared with the external review team. The self-study is a thoughtful and thorough self-evaluation of the program that includes a description of the program and its educational goals, a narrative detailing the program's understanding of its own strengths and weaknesses, program learning outcomes and assessment results, information on instructional facilities and institutional support, and student and faculty data derived from campus databases and surveys.

Each graduate program undergoes an external review every five to seven years. The Graduate Council reviews graduate programs. Graduate programs are notified by the Senate Office of an impending review at least 12 months prior to the scheduled review. The program is asked to develop a reflective self-study that describes the scope of the graduate program's endeavors, its philosophy, and short- and long-range educational goals. The self-study also details the program's strengths and weaknesses and major changes since the last review, as well as instructional facilities and institutional support. Student and faculty data derived from campus databases and surveys are also provided, and data is synthesized by the program. Since the establishment of graduate program learning outcomes in 2012, learning outcome assessment results are also evaluated and discussed.

Both undergraduate and graduate reviews invite assessment teams comprised of three members, including at least one UC faculty member and one non-UC faculty member, each of whom is screened for conflicts of interest. The program's self-study is provided before the visit. During the visit, the review teams meet with program faculty, chairs of associated programs/departments, and deans. Reviews also include meetings with groups of students.

The preliminary review team reports are offered to programs for comment, and the final review is sent to the Graduate Council or CEP, as appropriate. Once reviews are received, departments write a response and work with deans to consider actions to be taken as a result of the review. For undergraduate programs, CEP works with the program to develop action steps to be taken. A timeline is set and resources needed to accomplish the goals are identified. All of this is summarized in an Action Implementation Plan drafted by CEP and sent to the program. Each spring, CEP reviews the program's progress in addressing the action items in the Action Implementation Plan. If the program is successful in implementing all aspects of the plan, the review is closed. If not, the review remains open and CEP may recommend follow-up actions to the program and appropriate campus administrators.

In the case of graduate program reviews, a subcommittee of the Graduate Council prepares a Findings and Recommendations document that provides a plan of action for program improvement to the program and administrators. Where appropriate, excellence in programs is acknowledged and mechanisms for improvement are indicated. When the Findings and Recommendations appear to be non-controversial, the document is discussed at a full meeting of the Graduate Council. When the Findings and Recommendations document finds what the subcommittee considers serious problems, the department chair, graduate program director/graduate advisor, selected faculty from the program, and/ or deans may be consulted. The Graduate Councilapproved Findings and Recommendations document is submitted to the program and a final response is required within 30 days. Once the recommendations have been addressed and/or implemented, the

Graduate Council closes the review. In some circumstances, the Graduate Council may request a progress report three to four years after the review has been closed. When programs have significant inadequacies, concrete steps to repair deficiencies and enable a return to an acceptable standard are provided. In some extreme cases, the Graduate Council may recommend closure of a program.

Results from Recent Program Reviews

Program reviews are not mere exercises, but rather they serve as opportunities for faculty to work together to implement substantive change. For example, during the 2015-16 undergraduate review of the Department of Economics, external reviewers identified an "urgent need for new faculty lines" as their top concern. The external reviewers pointed out that although the department expected three new faculty members in the coming year, the program was serving twice as many students with fewer faculty than it had in 2009. Subsequently, the department submitted faculty-hiring requests that broadened its curriculum and, in addition to the faculty lines that were already allocated, pursued a joint appointment of a faculty member with another department to quickly address the low faculty count identified in the review.

Similarly, during its 2013-2014 review, the Business Administration undergraduate program quickly closed the loop on several recommendations. CEP's primary recommendation was to revisit the School of Business's strategic plan with the undergraduate program in mind. The program responded by embarking on a new strategic plan for 2015-2020 with a clear trajectory and specific milestones for developing the program and recruiting undergraduate majors. The Business Administration program also provided the first draft of their new strategic plan to CEP which included plans for a brand assessment, a recommitment to teaching and research excellence, and a renewed emphasis on organizational culture to foster "inclusion, mutual respect, and collegiality."

During its 2013-2014 review, the chemistry graduate program also responded quickly and thoughtfully to a number of recommendations. The Graduate Council recommended an increase in faculty in targeted areas and an emphasis on increasing graduate enrollment. By 2014, the Department of Chemistry was already recruiting five new faculty members and had requested a 15% increase in its graduate enrollment from Graduate Division. The chemistry graduate program also began the process of developing online course offerings through grant funding and increased the formality of the process by which graduate students joined labs in response to Graduate Council recommendations.

These are just a few examples of the ways in which units consistently responded to feedback and used the opportunity to examine and strengthen their programs. This feedback often results in the transformation of teaching as well. Recently, the Department of English was asked to consider varying its large upper-division classes with smaller classes to enhance the undergraduate experience. From that suggestion, a capstone class was devised, and that class is now required of all English majors. In some larger departments in CHASS, online learning has been introduced as a way of coping with large enrollments, but at the same time, it has become an opportunity for reimagining what can transpire in the classroom space.

Assessment of Student Learning

Assessment of student learning at UCR is a facultydriven process that occurs within a disciplinary framework. Assessment of student learning at the graduate and undergraduate levels was a major focus of UCR's 2015 Interim Report. Since that time, assessment efforts at the undergraduate level have been further developed and Graduate Division has taken on a major project to link graduate assessment to pre-existing policies and related efforts, and to streamline the overall process. The graduate professional schools (SOM, SOBA, and GSOE) have assessment processes linked to disciplinary accreditation or state licensure requirements. At the same time, it is also fair to say that there is some unevenness in assessment. Programs that have professional or disciplinary accreditation typically have more developed assessment practices, and opportunities exist to leverage these practices to raise the overall level of development across the campus.

Assessment of Undergraduate Student Learning

(CFR 2.2a, 2.3, 2.4, 2.6, 2.7, 3.3, 4.1, 4.5)

At the undergraduate level, all departments or degree-granting programs have developed program learning outcomes. Departments collect, analyze, and report on evidence of student learning for at least one outcome on an annual basis. (Several recent examples of these annual assessment reports have been uploaded to the Box.com folder to accompany this document.) This disciplinary-based approach creates space for faculty in each department to identify processes and metrics that are reasonable for their students and meaningful within the context of their disciplines. Two examples highlight the variety of methods employed. The Department of Biology uses questions embedded in homework, lab reports, and exams to assess general biological knowledge and critical thinking in a scientific context. The Department of History has most recently analyzed student papers in capstone courses with rubrics to assess both students' ability to work with historical sources and their writing proficiency.

Departments use what they learn in the assessment process to make improvements to their curricula. For example, the biology department has largely focused on making adjustments at the course level by adjusting course content and emphasis and, more recently, updating manuals for key lab courses. The history department, meanwhile, has used assessment results to inform conversations about improving their capstone course. In addition to an annual assessment reporting process coordinated by the Office of Undergraduate Education, in 2015, the Academic Senate adjusted guidelines for program review to highlight the importance of assessment. Further examples of outcomes, assessment processes, and uses of assessment results can be found in the Inventory of Educational Effectiveness Indicators.

For some undergraduate departments, assessment activities are largely oriented towards disciplinary accreditation. This is true for the departments in the Bourns College of Engineering (BCOE), which are accredited by the Accreditation Board for Engineering and Technology (ABET). All programs have adopted outcomes corresponding to ABET criteria, and they assess all outcomes each year using a variety of direct and indirect evidence. The assessment process also includes periodic surveying of alumni and employers of recent graduates. There is a strong emphasis on "closing the loop" with course-level assessment results passed between, and discussed by, the current instructor and subsequent instructor for each course. At the program level, assessment results are a standing topic of discussion at annual faculty retreats.

Assessment is linked to disciplinary groups in other parts of the campus as well. The assessment process in our undergraduate business programs is driven by the Association to Advance Collegiate Business Schools (AACSB). Biochemistry and chemistry are either pursuing accreditation, or are currently accredited, by disciplinary associations. In chemistry, this connection to discipline-specific accreditation also means discipline-specific assessment techniques. The American Chemical Society (ACS) has developed the Diagnostic of Undergraduate Chemistry Knowledge (or DUCK) exam, a standardized, content-focused exam that allows for comparisons with other students taking the exam across the country. Our chemistry department has administered this exam for several years and, upon determining that most students were not meeting their benchmark of performing in the 60th percentile or better, is reexamining teaching practices in content areas that the DUCK exam showed were most difficult for chemistry majors.

The Office of Evaluation and Assessment supports assessment efforts at the program level, including offering workshops on a variety of assessmentrelated topics each year and has developed an online assessment handbook. The Office of Evaluation and Assessment promotes assessment through small grants, which provide departments up to \$4,000 to further develop and strengthen program-level assessment. In one recent example, the Department of Earth Sciences used funds to purchase ruggedized laptops and other supplies for a fieldwork-based capstone course. After spending several weeks in the field, students are asked to draw on skills and knowledge gained across their undergraduate studies to produce geological maps; these maps then become a key piece of evidence for assessing student learning at the program level.

The Office of Evaluation and Assessment has also developed a process to give feedback to departments and programs on the quality of their assessment work. This process involves an assessment workgroup, comprised of faculty and key staff from across campus. The workgroup uses a standardized rubric to give feedback to individual departments as well as to develop a campus level snapshot. (As examples, see recent feedback to the mathematics and history departments.) Feedback to departments focuses on the assessment process and is offered in the spirit of constructive criticism of the assessment process (not its results). The campus-level undergraduate assessment snapshot is circulated to deans' offices and used by the Office of Evaluation and Assessment to plan workshop topics for the following year. The workgroup itself is also a key site for faculty development as it brings together faculty

who work on assessment from across the campus and gives them a space to share their experiences and learn from each other.

Assessing Core Competencies (CFR 2.2a)

Assessment of core competencies at UCR happens in a few different ways. There is indirect evidence of student learning from the <u>University of California</u> <u>Undergraduate Experience Survey (UCUES)</u>, which asks undergraduates across the UC system about a variety of issues including how they rate themselves on each of the five core competencies both at the time they started college and at the time they complete the survey. Undergraduates, on average, report gains of about one point on a five-point scale, and typically report the largest gains in information literacy (Figure 6).

We also have worked to assess core competencies at the campus level using direct evidence. Written Communication was assessed at the campus level in 2013 using a random sample of students in preparatory English courses. These students showed a significant increase in writing quality (as judged by two trained readers) from the placement exam to the final paper, indicating success at mastering the basics of written communication. As students near the end of the required writing coursework (that is, after passing ENGL 001A and ENGL 001B), students in most colleges have a choice of satisfying their final writing requirement either through a standard composition class (ENGL 001C) or a writingintensive course embedded in a particular discipline. This same assessment also found no significant difference in writing skills across these two types





of courses, suggesting that UCR has identified two distinct but comparable pathways to help students improve their writing skills.

Quantitative Reasoning was assessed indirectly in 2013-14, with a survey of instructors finding that most of these courses gave students an opportunity to develop relevant skills by working with equations and/or interpreting the meaning of numbers presented in tables or as the result of others' calculations. However, this proved to be our most challenging assessment so far, with many departments in the arts and humanities reporting that this was not relevant for their students. Nonetheless, many departments in the sciences reported that their students developed basic quantitative skills in mathematics, physics, and chemistry courses, but that students struggled to express "in mathematical terms what they see in nature" (Biochemistry, 2013-14).

Building on this experience, when Oral Communication was included in assessment reporting the following year (AY 2014-15), the Office of Evaluation and Assessment held workshops for faculty, and Undergraduate Education partnered with the Department of Theatre, Film, and Digital Production to expand course offerings relevant to oral communication, as well as to develop a rubric that could be used to assess oral communication in other courses. As a result, engagement with assessing oral communication became more robust. For example, the Department of Statistics assessed students' knowledge of, and ability to apply, statistical theories and techniques to real world situations through oral presentations in their capstone course. The department found that almost all of their students (93%) were performing at a level that was satisfactory or better. At the same time, several departments reported that developing oral competencies in languages other than English was at the core of their undergraduate education.

The request to report on assessment of *Information Literacy* in 2015-16 was preceded by workshops and collaboration with the UCR Library, which already works with some departments to embed information literacy training in introductory level courses. As one example, the biology department developed an outcome specifically linked to information literacy that they initially assessed using a short quiz in introductory courses with library workshops focusing specifically on information literacy, and again using the same short quiz in an upper division course. Students' performance was similar at both the upper- and lower-division levels, and the biology department deemed this as evidence that students' skills in information literacy persisted over time.

Critical Thinking was assessed in 2016-17, with departments taking disciplinary-specific approaches to defining critical thinking. The Department of Dance, for example, looked for evidence of students' critical thinking skills in writing assignments in two separate classes, which asked students, in different ways, to reflect on the relationships among the people, space, and customs of particular institutions and their related dance genres. The Department of Botany and Plant Sciences, in turn, assessed students' critical thinking skills in terms of their abilities to identify and articulate strengths and limitations in experiments, both of their own design and in published works. All departments or programs have at least one learning outcome that emphasizes critical thinking (Figure 7).

Written communication will be assessed in 2017-18 after this report is submitted to WASC, but before the on-site visit. Almost all departments have learning outcomes that directly emphasize the importance of written communication, often in ways that align with disciplinary-specific practices or conventions (Figure 7).

Since 2013-14, there has been a focus on assessing core competencies within each discipline as part



Figure 7: Departments with Undergraduate Learning Outcomes Aligned with WASC Core Competencies

of the annual reporting process. The Office of Evaluation and Assessment asks departments and programs to report on one core competency each year, and rotates through the competencies in a fiveyear cycle. As shown above (Figure 7), the majority of departments have developed disciplinary specific outcomes that align in some way with the core competencies.

Assessment in Student Affairs (CFR 2.3, 2.13)

The Division of Student Affairs assesses student success, co-curricular activities, student learning, and program evaluations with assistance from <u>Student</u> <u>Affairs Research and Evaluation (SARE)</u>. Now under the direction of Institutional Research, SARE provides survey research, assessment support, program evaluations, and data analysis to many student affairs departments to identify areas of student success, opportunities for improvement, and assess the overall undergraduate experience. All student affairs departments have established key performance indicators (KPIs) to outline department goals, outcomes, and measurement methods that align with the Student Affairs Strategic Plan. These KPIs ensure that student affairs departments are fulfilling their individual missions and meeting the needs of UCR students and the university. The Division of Student Affairs is working to develop assessment plans consistent with <u>CAS Standards</u> to take a proactive and holistic approach to assessment. The Division of Student Affairs has tasked itself with improving its assessment efforts to provide improved outcome measures and methodologies that will better serve the departments, the division, and the university.

The Division of Student Affairs participates in several national surveys, such as the American College Health Association's National College Health Assessment, the Cooperative Institutional Research Program (CIRP) Freshman Survey by the Higher Education Research Institute, and the First Destinations Survey by the National Association of
Colleges and Employers. SARE also serves as the campus coordinator for the University of California Undergraduate Experience Survey (UCUES) and provides campus research support for many UC system-wide surveys. In addition, SARE administers many campus-specific annual surveys including: the Student Intent to Register (SIR) survey for Undergraduate Admissions, the Post-Graduation Survey, and the Student Life Highlander Orientation Program Evaluation Surveys. In addition, SARE conducts annual program evaluations of the Ethnic & Gender Peer Mentor Programs to assess program effectiveness. These surveys and evaluations serve as a means to collect benchmark and longitudinal data to compare performance across student demographic groups. Student affairs departments use the results of these surveys to improve their programs and to better serve the UCR student population.

Assessment of Graduate Student Learning (CFR 2.2b, 2.3, 2.4, 2.6, 2.7, 3.3, 4.1, 4.5)

Graduate Division mandated that all graduate programs undertake assessment plans in 2012, in a process based on the model for undergraduate programs, however, the process proved inefficient for graduate programs. Graduate students are already evaluated annually for their academic and research progress, teaching assistants are evaluated each quarter, and graduate programs assess their effectiveness during the rigorous external review process.

In light of this, Graduate Division is re-evaluating the methods used for graduate-student learning assessment across the campus with the goal of finding a process that makes more sense for graduate education and developing a streamlined system to integrate current mechanisms for assessing graduate students. This system would allow assessment data to reinforce program review processes (rather than to stand alone and be archived in a non-accessible manner). By designing a system that captures and stores critical assessment data, graduate student assessment will become part of the university's routine business practices. This will streamline and make assessment and evaluation routine, thereby ensuring that the assessments conform to best practices. (The campus can provide a fuller update of this process during the campus visit in 2018; in the meantime, a few examples of the older assessment reports have been uploaded to the Box.com folder to accompany this document.)

The centerpiece of the new integrated system are the campus-wide Annual Research Progress Evaluation (ARPE) forms. These ARPE forms were developed in 2014 by the Graduate Council with one version for the STEM disciplines and one version for the humanities, arts, and social sciences. They are based on graduate program learning outcomes developed in 2012. Therefore, as ARPEs are completed annually for each student, the program will be evaluating the students using the metrics of the program's learning outcomes. In order to deploy the APREs to the campus, Graduate Division is developing a database to store these data and make them available to faculty online. Currently, ARPEs have seven learning outcomes/performance assessments in common. As the system is developed, Graduate Division will provide support for each program to build on this core of assessment criteria and customize the ARPEs for specific disciplines. Under this new system, it will be easy to generate reports for individual students and for programs in a way that is comparable over time and across programs. Online ARPE forms are currently being tested in several STEM graduate programs.

The new system for acquiring and using learning outcome assessment data will further have a mechanism to track graduate student individual development plans (IDPs). The development of the online system will be guided based on <u>best practices</u> <u>as outlined by AAAS</u>. Each fall students will complete their IDPs indicating their plans and aspirations for the upcoming year. They will document the steps and resources needed to meet their aspirations, including educational, funding, and mentoring needs. In the IDPs, students will provide additional professional data that is not easily captured in the ARPE and could include: acquisition of external grants, honors, and awards; published manuscripts; speaking engagements; meeting participation; mentoring of undergraduates, high school students, and visiting academics; engagement with the public; and promoting diversity in academics and research. In the spring, students will complete year-end IDPs that captures students' assessments of whether they were able to achieve their aspirations, and if not, why not. As the IDPs will be completed online, their results can be captured systematically in a database. Through the IDP, students will enable programs and the campus to capture additional professional data that cannot be captured in the ARPE forms that are currently manually collected.

The development of the IDP module also provides a mechanism for candid and reflective student input into their annual evaluation. It is a mechanism for students to plan for and achieve success. The completed IDP will be routed to the student's major professor, who can review the IDP and then complete the ARPE for the student's annual evaluation based on, and in dialog with, the student's own self-assessment and committee member recommendations. The IDPs should provoke thoughtful career-planning discussions between students and advisory committee members.

As online IDPs and ARPEs are deployed, the system will capture and store these data in a central, secure repository. The database will be connected to the current student information system thereby allowing complete integration of student information. The campus will develop standardized yet flexible reporting tools to enable generation of reports as needed. The system will be easy for students and faculty to use, robust and flexible for rapid acquisition of accurate data sets, and fundamentally aligned with UCR's aspirations for adopting "green" strategies of data management.

Assessment of Graduate Learning— Professional Schools

School of Medicine

The SOM curriculum is delivered in eight-week blocks with five blocks per year. SOM has embraced the philosophy of continuous practice improvement. Both students and faculty are assessed throughout each block. While faculty are assessed twice during the block, student learning is assessed four times during each block. SOM uses the Association of American Medical Colleges' (AAMC) Physician Competency Reference Set (PCRS), which defines SOM's student learning outcomes. Eight higher-level outcomes focus on the core areas of medical education. Embedded within these groupings are 74 outcomes that specify exactly what students are expected to learn. Students are evaluated two to four times per eight-week block. Reports detailing student performance are generated for each block and discussed among senior leadership. Where appropriate, suggestions for curricular changes are brought to the Medical Education Committee for evaluation and subsequent curricular reform. The Longitudinal Ambulatory Care Experience (LACE) provides the framework for assessment of learning in the clinical setting.

Graduate School of Education

The GSOE has worked in recent years to develop and implement an efficient assessment system to support program improvement. It chose to focus first on a comprehensive assessment system for GSOE's two credential programs: the Teacher Education credential program and the School Psychology program. The rationale for this assessment system was twofold. First, both programs are guided by clear student expectations dictated by each of their accrediting bodies. The California Commission on Teacher Credentialing (CTC) accredits both the Teacher Education Program and the School Psychology program. The School Psychology program is also accredited by the American Psychological Association (APA) and the National Association of School Psychologists (NASP). Second,

both programs were preparing for CTC accreditation and were already primed for implementing newly revised assessment processes.

The GSOE assessment and evaluation process links program-level assessment and review to unit-level review and feedback. This process allows programs to collect meaningful data on enrollment, operations, and student achievement of desired outcomes; gain valuable feedback on program-level findings from the entire unit; and then use that feedback and reflection opportunity to make meaningful changes. Once the program receives feedback from the GSOE Unit Leadership, feedback is then taken back to the individual programs and changes are implemented as needed. The process then cycles through outcomes again in an ongoing process of program improvement.

Transforming Education (CFR 3.1, 3.2)

UCR not only is committed to quality assurance by implementing well-established processes like assessment and program review, but is also actively working to improve the quality of education in other ways. Indeed, as a nationally recognized researchintensive university, it is only appropriate that the work of faculty in their classrooms is shaping the discussion around teaching and learning at the national level.

Across our campus, there are many instructors who are "flipping" their classrooms. For example, in the chemistry department, a flipped classroom approach has been used to incorporate case studies, highlighting the real world significance of chemistry knowledge, into the large-enrollment general chemistry lectures. This practice has greatly increased the amount of collaborative group work done by the students in the lecture meetings, and a <u>quasi-</u> <u>experimental study</u> found that the grades of students in the flipped classroom improved. **R'courses**, which are small classes led by undergraduates on topics of their own devising and under the supervision of a UCR faculty member, offer another approach to student engagement. These classes provide students a chance to develop a new course on topics of interest to them that are not adequately covered in the existing course catalog. Recent topics have included the literary phenomenon of Harry Potter, the linguistics of emojis, Frida Kahlo, and the physics of super powers. By giving highly motivated students the support they need to develop solid pedagogical approaches to novel topics, this program leverages and deepens student engagement.

In the humanities, the history department has begun to use technology and tech-enabled classroomsincluding Twitter-to engage students, to generate collaboration among them, and to test their comprehension in class. Some instructors are also using online course platforms to increase student participation, initiative, and success. Faculty in this department have also developed a learning game promoting "digital citizenship" by engaging students in missions to defeat "digital zombies" making the library, library research, and digital literacy an essential component of some courses. One history faculty member is even using virtual reality to better engage students with historical events. The dance department offers an online course platform, and the theatre, film, and digital production department houses an interactive website, with links to Instagram, Facebook, and other social media platforms to enhance opportunities for learning and networking among students and alumni.

The UCR Library has also engaged in a round of strategic visioning of how best to empower students to develop the skills, literacies, and experiences necessary to be successful in the increasingly digital marketplace of ideas. This has meant not only partnering with departments and instructors to support information literacy, but also rethinking how to best use the libraries' physical spaces. Library space has been provided to house the campus's new Center for Teaching and Learning, a health professions advising center, a very popular and highly successful <u>MakerSpace</u>, as well as collaborative study spaces.

Finally, UCR's first entirely online degree, BCOE's <u>Online Master of Science in Engineering</u> <u>Program</u>, is designed to enable fully employed engineers to advance their professional education and enhance their value to employers. This unique program, delivered over the internet, gives engineers the opportunity to learn a specialization in depth and to renew and update their knowledge of technological advances.

Institutional Research (CFR 2.10, 4.1, 4.2)

The Office of Institutional Research (IR), with four full-time staff, is responsible for reporting the official statistics of the university and maintaining access to data in support of campus planning. IR fulfills reporting mandates, strives to make data about the university and important student outcomes publicly available, and fulfills data requests to support longterm campus planning and decision-making.

IR makes data available to the campus and the public through its website (http://ir.ucr.edu). This website is updated frequently to include information on student enrollment, retention, and graduation rates as well as data on staff, faculty, and faculty workload. The IR website supports sets of dynamic tables that allow users to examine data at the college, organization, department, and program level. In addition, data can be filtered by key background characteristics, allowing the campus and the public to monitor UCR's equity in student outcomes. These data are often leveraged for campus program reviews. IR is also able to respond to ad-hoc and special requests.

IR is also well-positioned to help with campus-level planning. IR, as a department in the Planning and Budget organization, collaborates with the Offices of Capital Asset Strategies and Financial Planning and Analysis. These three offices together connect campus data to financial resources and physical infrastructure. IR updates the campus enrollment projection model to inform and support space-planning initiatives for Capital Asset Strategies and budget planning for Financial Planning and Analysis. IR data are connected with campus space data to help track space utilization to ensure best use of current resources and inform plans for the future. IR also supports the annual admissions process for undergraduate students by serving on the planning committee and providing modeling of applicant yield to ensure that UCR meets our enrollment targets to both serve the state's needs and sustain our campus budget.

Part 4.

Sustainability: UCR's Role in the Future of Higher Education



Through prudent management after the recession, UCR has been able to embark on a period of renewed growth. At the same time, the campus remains cognizant of the shifting realities of American higher education and is focusing on importance of both excellence and equity.

Renewed Growth (CFR 3.4)

UCR's fiscal conservatism during and coming out of the recent recession positioned the campus to pursue an aggressive faculty expansion program and to move forward with some critical major capital initiatives. We continue to actively model our sources and uses of funding to ensure that the campus remains fiscally solvent. One of the most visible manifestations of this practice is the Multidisciplinary Research Building 1 (MRB1), a five-story building containing 125,510 square feet of assignable space that will accommodate up to 60 principal investigators and their research teams. The space will include both research labs and spaces for computational research, opportunities for collaboration and shared equipment, and shell space for future growth. MRB1 will be funded entirely from indirect cost returns at the rate of \$14 million annually over 30 years.

UCR's research enterprise has also grown dramatically, even as research productivity at other UC campuses and peer institutions has not. UCR's federal research awards increased by 43% between 2012 and 2015, while total federal research funding dropped by 8% during the same period. Between 2013 and 2015, UCR faculty had 17 active NSF Career Awards; the campus now has <u>35 active</u> <u>Career Awards</u>, which is more than any other public university in California. This increase in federal funding also allows UCR to fund more graduate students, increases funds produced by facilities and administrative (indirect) cost rates, and allows more central funding to be utilized for faculty salaries.

In addition, UCR has strategically allocated funding for a major faculty expansion to improve studentfaculty ratios, build critical mass in 34 major areas of vital research, and further diversify our faculty. Forty million in recurring dollars and \$110 million in accumulated savings were earmarked for this faculty expansion through 2020.

Reimagined Plans (CFR 1.7, 3.5, 4.3, 4.6, 4.7)

In 2016, UCR implemented an incentive-based budget model that promotes growth and encourages cost reduction. Previously, our incremental budget model was based on marginal change. The new budget model decentralizes funding, allowing individual colleges to make budget decisions and encouraging cost reduction by allowing units to roll over savings from year to year. The funding model for undergraduate education aligns with teaching efforts by distributing tuition dollars to "revenue generators" (i.e., the individual colleges) based on number of credit hours taught, number of majors, and through incentives that track reduced time to degree across separate colleges. Colleges can increase their budgets by recruiting and instructing additional students, thus the model rewards undergraduate growth and promotes our mission of access. The model also prioritizes quality instruction by incentivizing student success in the form of additional funding for colleges that increase four-year graduation rates. Not only does the decentralized budget model put undergraduate student instruction at the center of the process, it is also much more transparent than the previous model which, through accretion, had become almost impenetrably complex. The new model enables campus stakeholders to better understand and better utilize available resources, and further promotes UCR's financial health by ending the former practice of rewarding colleges and programs that run deficits.

UCR's recent growth also highlighted limitations in our home-grown student information system (generically called "SIS"). After discussions of what capabilities were needed and what products were available, the campus decided to <u>transition</u> <u>to Banner</u>, with much of the migration activity happening in fall 2016 and winter 2017. This was more than just a systems update, however, as our Information Technology Systems Office (formerly Computing and Communications) is also actively engaged in a <u>comprehensive review of information</u> <u>technology services</u> to support optimization of campus business operations.

Moreover, campus leadership has consciously created more space for collaboration and input from the campus community. The Business and Administrative Services division launched a series of speakers, roundtables, and a reading group as part of its Organizational Excellence initiative. These events invite broader conversations about how the campus can streamline and standardize business processes as well as foster collaboration across units. In addition, the Chancellor's Office recently conducted a number of <u>campus conversations</u> to create a space for the Chancellor to listen to input from across campus on topics like infrastructure, student success, and human resources. In 2016, the Provost's Office began sending periodic updates to the entire campus and, in 2017, providing online updates on major projects.

All of this progress and change has produced a number of "growing pains" that have manifested during the last couple of years. The implementation of Banner required not only learning new processes and systems, but in some cases the roll out was more challenging and time-consuming than had been anticipated. Staffing levels remain relatively low when compared to student and faculty numbers, which has led to increased frustration by staff (who experience higher workloads) as well as by faculty and students (who experience longer waits for basic business processes to be completed or to see an advisor). The growth in undergraduate enrollment and the diversification of graduate programs also has placed physical strain on the campus, with some of the campus's older buildings showing their age.

Forward-Looking Analysis

While UCR has laid the groundwork for financial sustainability for the long-term, we are aware of significant challenges that might impede both our financial goals and our ability to achieve our vision of inclusive excellence in research and teaching. A major concern is the continuation of the historical decline in state support, both in California and throughout the United States, for higher education funding. The 2016 UC Accountability Report points out that "prior to 2010-11, state funding was the largest single source of support for the education function of the University. Over the past ten years, state educational appropriations have fallen more than \$1 billion in inflation-adjusted dollars despite UC's enrollment growth. State educational appropriations constituted only 10 percent of UC's revenues in 2014-15 compared to 23 percent in 2001-02." UCR remains disproportionately reliant on state support, which still comprises around 25% of our <u>campus budget</u>. Thus we are relatively more vulnerable to the impacts of further decreases.

Initially, reductions in state support (in California and other states) were met largely by increases in tuition. These tuition increases do not generally affect low-income students who qualify for Cal Grants, Pell Grants, and the need-based University Student Aid Program (USAP). However, there is a risk of <u>fee intimidation</u> that will increase low-income students' tendency not to apply to competitive colleges. Further, a recent report by the <u>Public</u> <u>Policy Institute of California</u> shows that low-income students have been disproportionately affected by increases in tuition without similar increases in grant and scholarship funding. Thus, over-reliance on tuition impacts our commitment to equitable access and to our strategic growth plan. Such concerns have changed the national conversation around tuition, which has now moved in the other direction. Just as the UC system has come to rely on an ever-increasing tuition stream, both lower tuition and <u>free college education</u> <u>have become mainstream ideas</u>. Faced with this new reality of smaller annual tuition increases, many campuses have turned to out-of-state tuition payers to backfill declining state support. However, California lawmakers have recently capped the percentage of out-of-state students on each UC campus at around 20%. Although UCR currently remains well below this cap, we nonetheless face increased competition for out-of-state and international students.

Consistent with declining state support for university operations, the state also has provided almost no funding for capital needs since 2006. While our MRB1 project is a sign of UCR's overall financial stability, the entire building will be funded by indirect cost returns, in stark contrast to massive state investments in capital projects on older campuses in years past. There is also currently <u>no</u> <u>state funding dedicated to deferred maintenance</u> on UC campuses, despite the many years of budget decreases during and after the recession. Thus, campuses like ours that practiced austerity during lean budget times have had no subsequent state investment to help upgrade aging infrastructure.

Although student tuition has become the primary form of revenue in the UC system, there has been increased pressure from the state to graduate students more quickly without due consideration of the increased resources required or the budget ramifications. UCR is incredibly proud of its improvement in four- and six-year graduation rates and that its graduation rates are similar for students from different ethnic backgrounds and economic classes. However, the increased pressure to graduate a greater number of undergraduate students at faster and faster rates has produced a variety of pressure points for course scheduling, degree planning, and academic enrichment.

Just as the future viability of tuition as a revenue source is becoming uncertain, the landscape for federal funding for scientific research also has become much more uncertain. There are deep concerns that the new U.S. administration may cut federal funding to areas that are crucial to UCR's research productivity. Similar concerns can be echoed for the arts and humanities, where deep cuts have been proposed for the federal-funding agencies that support these disciplines. To mitigate this, UCR's faculty expansion has, in part, focused on hiring in areas of cutting-edge, interdisciplinary research that should attract various forms of external funding from federal and state agencies.

Conclusion

UCR will soon embark upon a new strategic plan, as the previous strategic plan, "UCR 2020," focused on the period 2010-2020, and the planning process for such a document will require several years to develop. This report will serve as a foundational document for the new strategic plan. But, having accomplished many goals from the previous plan, we are currently imagining our future in a more constrained budgetary environment that will require more creative and entrepreneurial approaches moving forward. Opportunities to increase student enrollment, faculty research productivity and funding, and public private partnerships provide different avenues to address anticipated gaps in state funding.

Any new strategic plan must find ways of turning the university's central priorities – excellence, access, and equity – into a working plan that transforms the institution into a more vibrant and more productive version of itself. This is a grand challenge that UCR accepts eagerly; the next step in higher education innovation will likely come from just such a crucible of innovation and restraint. Innovation will keep UCR searching for the newest and most effective ways to achieve its goals, and restraint will make sure that the university remains responsible. This report offers a springboard for the aspirations that will distinguish UCR as a campus of the future. As described throughout this report, UCR is an institution on the move. Over \$1 billion in new capital projects are currently underway, and our Chancellor and Provost have set ambitious targets for further improving graduation rates, increasing undergraduate and graduate student enrollments, identifying organizational efficiencies and opportunities to leverage new technologies, and importantly, achieving higher levels of research excellence - all while reinforcing the diversity and inclusiveness that define our campus. Moreover, we are committed to improving the quality of life for those in inland Southern California and beyond through educating the next generation of leaders and catalyzing economic growth within our region. Hence, through our continued self-reflection, programmatic assessment, and broad stakeholder engagement, this report helps to frame UCR's next stage of strategic planning and institutional transformation. With this in mind and with the evolving landscape of higher education in the 21st century, we look forward to developing a new strategic plan that further positions UCR to define what it means to be a student-centered research university in America, now and well into the future.

UC RIVERSITY OF CALIFORNIA

UCR budget, projections, and expenditures



Cash-Based Operating Performance Model

(dollars in thousands) As of Nov. 2017

			Forecast													
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Operating Revenues																
Student Tuition and Fees	239,071	246,454	257,259	275,070	282,745	294,889	315,370	335,793	358,476	377,152	392,190	408,034	424,512	444,232	467,392	493,
State Educational Appropriations	146,928	165,014	200,188	212,823	232,243	253,816	260,923	270,660	282,817	293,242	303,822	315,438	327,744	341,765	357,534	374,
Federal Pell Grants	51,276	47,595	50,205	50,123	49,652	52,357	60,583	64,138	68,595	72,421	75,663	79,283	83,188	87,866	93,366	99
Federal Grants and Contracts	66,754	61,531	61,691	69,693	76,459	81,825	91,644	109,973	131,967	151,762	169,974	186,971	201,929	212,026	222,627	233
Other Grants and Contracts	35,858	35,174	35,238	36,480	36,687	40,314	41,290	42,294	43,327	44,390	45,483	46,608	47,766	48,957	50,183	51,
Educational Activities / Auxiliary Enterprises	63,422	73,335	77,094	92,719	103,005	108,619	116,046	121,975	129,078	136,992	144,931	153,477	162,683	172,604	183,305	194,
Private Gifts	20,379	10,805	13,915	12,798	11,694	15,017	16,519	18,171	19,988	18,988	19,368	19,755	20,150	20,553	20,965	21,
Other Revenues and Adjs	17,926	19,189	22,891	29,286	29,806	33,145	33,476	33,811	34,149	34,491	34,836	35,184	35,536	35,891	36,250	36
TOTAL	641,614	659,097	718,481	778,992	822,291	879,982	935,851	996,816	1,068,399	1,129,439	1,186,267	1,244,751	1,303,509	1,363,894	1,431,622	1,506
Expenses																
Salaries and Wages - Academic	144,113	146,294	152,947	176,253	193,916	215,696	234,052	247,072	262,080	277,009	289,758	302,161	315,476	329,939	345,961	363
Salaries and Wages - Staff	149,337	152,259	160,652	170,061	178,762	193,172	199,791	209,471	222,611	239,328	257,544	274,045	292,044	309,041	329,540	353
Salaries and Wages - Other	(901)	3,367	4,398	2,200	557	1,848	1,866	1,885	1,904	1,923	1,942	1,962	1,981	2,001	2,021	2
Benefits (excluding retirement)	86,581	85,938	92,634	96,663	104,732	113,918	122,440	127,573	134,580	141,844	148,655	156,304	164,565	172,904	182,527	193
Retirement Contribution	17,673	24,492	30,450	38,192	41,129	47,007	50,415	57,813	63,037	68,827	75,058	79,017	83,301	87,620	92,631	98
Scholarships and Fellowships	52,107	52,944	54,060	60,166	62,867	62,007	62,548	66,374	71,360	75,389	78,520	82,064	85,886	90,644	96,395	103
Utilities	15,883	16,283	17,588	16,328	17,829	18,591	20,403	24,072	24,794	27,223	26,610	27,918	29,277	30,692	32,072	33
Supplies and Materials	58,847	49,697	48,136	54,098	50,708	55,569	59,783	64,385	69,700	74,479	78,741	83,028	86,370	91,371	91,177	87
UCOP Assessment	8,014	8,622	8,587	15,055	15,594	(898)	23,791	25,726	27,923	29,610	27,223	28,924	30,346	25,459	26,689	27
Other Operating Expenses	50,672	58,357	69,416	80,395	86,046	111,567	115,027	123,695	133,674	142,947	150,405	157,985	163,818	171,867	181,067	191
TOTAL	582,326	598,253	638,868	709,411	752,140	818,477	890,116	948,065	1,011,663	1,078,579	1,134,458	1,193,407	1,253,065	1,311,537	1,380,081	1,455
Income (loss)	59,288	60,844	79,613	69,581	70,151	61,505	45,734	48,750	56,735	50,860	51,809	51,344	50,443	52,357	51,541	53
Income (loss) as % of revenues	9.24%	9.23%	11.08%	8.93%	8.53%	6.99%	4.89%	4.89%	5.31%	4.50%	4.37%	4.12%	3.87%	3.84%	3.60%	
Debt Service	22,217	22,246	25,605	26,777	37,359	37,410	38,078	49,284	49,291	50,852	51,035	51,008	49,803	49,746	49,021	2
TOTAL REALIZED INCOME (LOSS)*	37,071	38,598	54,008	42,804	32,792	24,095	7,656	(534)	7,444	8	774	336	640	2,611	2,520	

*Total realized income (loss) adjusts the cash reserve balance. Cash Reserve of 6/30/2017 was \$587.4M.



Cash-Based Operating Performance Model As of Nov. 2017

<u>Revenue</u>

\$100M in federal contracts & grants by 2020
Enrollment increases to 25,000 & NRT payers to 975 by 2020
Annual Fee Increases:

Tuition 2.5%
Student Service Fee 5%

-Non-Resident Tuition 5%

•State revenue base increases of 3% & per student growth of \$5,852

•Private gift annual increases of 10% during campaign

•Clinical Revenue doubles between 2017 & 2022

•Moderate annual growth in auxiliary revenue at 2%

Expenses

Faculty salary increases of 4% annually
Staff salary increases of 3% annually
Employee benefits is an average of 26% of salaries
Retirement contribution increasing from 15.2% (2017) to 17.6% (2021)
All non-salary expenses increase based on historical averages
Non-salary expenses include UCPath costs
\$100M in federal research direct expenses by 2020
Add 300 new faculty FTE between 2015 and 2021