

# Draft, September 15, 2020

## Sustainable Infrastructure, Operations and Finance Committee Report

### Committee Members

Juliann Allison, Associate Professor, Gender and Sexuality Studies  
Gerry Bomotti, Vice Chancellor, Planning, Budget & Administration  
Amy Boyd, GSA Finance Officer, Genetics, Genomics and Bioinformatics, PhD student  
Monica Carson, Chair, Division of Biomedical Sciences  
Lisa Cusick, Budget and Operations Manager, University Communications  
Camila Fisher, Political Science, 4<sup>th</sup> year student  
Gloria Gonzalez-Rivera, Associate Dean of Social Sciences and Professor, Economics  
Ryan Julian, Professor, Chemistry  
Jeff Krynski '81, President, UCR Alumni Association  
Michelle Luu, Psychology, 4<sup>th</sup> year student  
Peggy Mauk, Director, Agricultural Operations  
Robert Ream, Interim Associate Dean and Associate Professor, Graduate School of Education  
Philip Roberts, Distinguished Professor, Nematology  
Jason Rodriguez, Project Policy Analyst, Financial Planning & Analysis  
Brian Siana, Associate Professor, Physics and Astronomy  
Yelda Serin, GradQuant Coordinator, Graduate Division  
Christian Shelton, Professor, Computer Science & Engineering  
Georgios Vidalakis, CE Specialist and Plant Pathologist, Microbiology and Plant Pathology  
Yunzeng Wang, Dean, School of Business  
Weiwei Zhang, Associate Professor, Psychology

## Introduction

For UC Riverside to continue to positively impact the people of California and the world, it must be able to sustain its infrastructure and efforts. We must assure that the university and its projects, initiatives, and efforts are structured to perpetuate and withstand change. UC Riverside will, through its practices, research, education, and outreach, promote and support the sustainability of itself, California, and the World.

There are four main aspects that need to be sustained: Finances, Operations, Physical Resources, and the Global Environment. This report addresses each of these subareas in turn, but also draws connections between them. We are cognizant that, over the span of the strategic plan, the sustainability priorities will shift as the World and the UC System change. While some of the more specific initiatives in this plan may be less relevant in a decade or two, we believe the overall goals and strategies will prove more timeless. Over the past few decades, UC Riverside, like most public research universities, has faced consistent challenges

to its own and the World's sustainability. That we have grown and improved despite previous obstacles clearly demonstrates that we can meet future sustainability challenges. We hope this document provides a foundation that will ease UCR's efforts in future challenges and allow the campus to be a leader in sustainability so that it can expand and improve its research, education, and outreach.

Both the current activities of the campus and those activities promoted by the strategic plan should adhere to the goals put forth below. As tempting as it is to initiate new projects as "pilots" whose long-term details will be sorted out later, the resulting patchwork threatens our ability to reach even higher. The proposed goals and strategies in this report will help set a good foundation for UC Riverside as we start to implement the strategic plan, and serve as principles for future strategic initiatives.

## Vision

UCR is a campus where sustainability is mainstreamed, embraced, and supports our research, teaching and service missions. UCR is recognized as a good steward of the finances, environment, and resources entrusted to the University. UCR invests in and sustains the expertise and talents of the faculty, staff, and students who contribute to the University and its missions.

Within each of the four areas of sustainability, this vision is focused:

### Financial Sustainability:

UCR is a campus that is financially sustainable, promotes good stewardship of the current resources, plans for the generation of future resources, and makes investments for the long term viability of the research and teaching missions of the institution, and the required infrastructure to support them. We aspire to a financial structure that protects or mitigates the effects of state-wide and national business cycles.

### Process Sustainability:

UCR is recognized as a national model for implementing efficient, streamlined, integrated, user-friendly, customer service-oriented processes that are focused on enabling and fostering UCR's unique research, teaching and service missions. By embracing a culture of change and innovation in processes and operations, UCR is recognized as an exceptional, effective, and mission-focused steward of all of its resources (money, environment, people).

### Physical Resource Sustainability:

The physical resources of UCR are carefully managed to ensure they can sustainably support the missions of the University for all populations. In doing so, they contribute to the healthy, vibrant, and diverse community served by our education, research, and service missions.

## Environmental Sustainability:

Principles of environmental sustainability are embodied by all campus administrative units, organizations, so that UCR initiatives, academic curricula, programs and activities (1) occur within limits imposed by available resources and without compromising the ability of future generations to meet their own needs, (2) reflect the interconnections among the economy, social well-being, and the environment; and (3) support equitable distribution of resources and opportunities across the campus and in our community.

## Strategic Goals

We first note that a few of our strategic goals are shared across the four areas. In particular,

- I. Diversifying Revenue: Addressing many of the goals of this document and of the rest of the strategic plan will require not only increased funds, but less volatile revenues. This is key to much of the sustainability of UCR and its plans.
- II. Increasing Green Transportation: UCR must enable transportation beyond a single rider in a single car, both for its own infrastructure and for global environmental concerns.
- III. Operationalize Strategic Goals: We call for environmental sustainability to be mainstreamed (as diversity has in hiring and promotion, for example), for the budget process to reflect the strategic goals, and for many of the operations of the Campus to be revisited in light of the strategic goals and budget realities.

Below are the more specific strategic goals in each area.

## Financial Sustainability:

For the Core budget of the campus, currently UCR is dependent on two major streams of revenues: tuition and state funding. The university does not have much direct control over these two sources, which are subject to the economic and political cycles of the state. Consequently, we aim to

1. Diversify the revenue streams to ensure a sustainable and less volatile generation of funds to maintain and improve the quality of research, education, and outreach.
2. Implement an annual budget process that is driven by the priorities specifically identified in the Strategic Plan to the extent they are clear and focused priorities that align with a resource allocation process, so that we can be very focused on the investment of our limited resources.
3. Set specific attainment goals in key areas, and account and assess periodically the performance of current investments by benchmarking to target areas.

## Process Sustainability:

Among UCR's talented and dedicated community, there is a sense of great pride in our mission and in UCR's ability to "hit above its weight," even though by some measures we are over 750 core staff below the UC average per number of students. However, this situation is not

sustainable. The staffing shortage is a source of many symptoms across the campus: Overworked staff cannot respond to changes, actively help improve systems and processes, or lead and train new talent. As a result, we paradoxically have processes and operations that are more costly and inefficient.

There is still the sense in the community that UCR can do better by engaged collaboration of all stakeholders (from administration, faculty, staff to students) and integration of a focus on accountability, defined metrics and long term sustainability/renewable with a focus on excellence in UCR's research, teaching and service missions. Here we suggest four Strategic Goals aimed at bringing into being processes and operations that would embody our vision statement. Implicit in all of these strategic goals is the requirement to align development and investments in infrastructure, processes and operations across campus units such that systems can communicate and processes are not in conflict between campus units. Rather, a baseline of standardization and/or compatibility allows processes to seamlessly bridge across campus units. Particularly, we propose the following goals.

4. Provide staff who can supply capabilities, numbers, and training matching strategic goals and appropriate metrics for all aspects of UCR's missions.
5. Simplify business processes and operations to eliminate redundancy and focus on needs of end users and alignment with fulfilling the mission/purpose of the unit as part of the larger UCR research, teaching and service missions.
6. Create and invest in supported, integrated digital/online systems (centrally and across departments) that are sustainable, adaptable and scalable to future growth and needs of the UCR.
7. Broaden delegation of authority as appropriate, with clear, explicit processes and guidance aimed at eliminating bottlenecks, redundancies and conflicts in oversight and authorization.
8. Create a standing Operations Committee to ensure that recommendations in the overall UCR Strategic Plan are operationalized in effective, efficient and sustainable protocols.

### Physical Resource Sustainability:

UCR main campus sits on approximately 1,200 acres in Inland Southern California. Having contributed more than \$2.7 billion to the U.S. economy during the fiscal year 2015-16 alone, UCR's impact on economic growth of Inland Southern California is substantial. With more than 25,000 students and 1,100 faculty, UCR is known for its diverse and inclusive community. While UCR currently benefits from a relative abundance of open land, compared to other UC campuses, these assets must be curated and preserved to assure their sustainability.

To maintain our mission of good stewardship of the resources afforded to UCR, and to assure these resources support the quality of our missions, we put forth the following goals.

9. Commit to and maintain ratios of building space to present graduate and undergraduate students.
10. Maintain benchmarks of square footage of green space, transportation infrastructure, and research infrastructure available per student.
11. Provide physical facilities and other infrastructure that are safe, inviting, and allow for equitable, universally accessible physical spaces on campus.

## Environmental Sustainability:

Environmental sustainability is central to much of faculty research and campus courses and educational programs at both the graduate and undergraduate levels (e.g., Sustainability Studies B.S. and Environmental Science B.S., Chemical and Environmental Engineering M.S. & Ph.D., Environmental Physics M.S. & Ph.D., Environmental Toxicology M.S. and Ph.D.). UCR's commitment to local campus-communities, the UC system, and the World has been evident in our rankings (#16 US greenest universities, top 35 Sierra Club Cool Schools, #2 UC systemwide for renewable energy). Our participation and leadership in national initiatives and standards (e.g., the Sustainable Integrated Grid Initiative, SIGI, and participation in the National Center for Sustainable Transportation, NCST) will help propel the sustainability efforts of our campus and others. We are further bound to the UC Carbon Neutrality Initiative to have zero net carbon emissions by 2025.

To these ends, we propose two goals for sustainability on campus:

12. Mainstream sustainability in personnel decisions; support for interdisciplinary, community-based, and applied research; and development of opportunities for undergraduate experiential learning.
13. Develop processes for ensuring sustainability in conservation of (especially potable) water; purchasing and waste management; sustainable food procurement and availability; transition to renewable energy sources; and travel and commuting.

## Strategies and Initiatives

### Financial Sustainability:

To achieve the stated goals, we envision short term and long term initiatives.

#### Strategic Goal #1

*Diversify the revenue streams to ensure a sustainable and less volatile generation of funds to maintain and improve the quality of research, education, and outreach.*

In the short term, the campus should advocate for a more equitable allocation of state funds asking UCOP for rebenchmarking changes so the UCR campus is treated at par with other

campuses. It should also focus on longer term tuition adjustment plans so the budgetary and planning processes are subject to less uncertainty.

In the long term, UCR should leverage its strength and brand identities on building distinctive, competitive, and strategic post-undergraduate (MA, MS, Professional Certificates, etc.) and online programs that are self-financed and bring new and reliable streams of income.

UCR is well below the 10% goal of non-resident undergraduate enrollments (less than 4%). A major and sustained effort should be undertaken to allure full paying international (and national when possible) students to UCR. Non-resident tuition could be an important source of revenue.

Philanthropy is comparatively a small source of revenue at UCR. Though we have experienced a big increase in the latest years, UCR must expand its efforts on reaching alumni, industries, and foundations that are aligned with the social mission of UCR at the national and international level and promote faculty engagement in this effort. It may be necessary to review the rules of disposal of endowments.

UCR should foster a grant culture across colleges so that grant writing becomes a regular professional activity across all disciplines not just in science and engineering. There should be an increased campus effort in promoting research collaboration and shared resources and infrastructure for collaborative grants and large-scale training or center grants. We should regularly share data on grants and contract success.

UCR should reinforce and incentivize collaborations of the faculty with industries at the campus and the system levels to foster long-term partnerships that bring revenues in royalties, patents, licensing, start-ups, etc. The Office of Technology Partnership is eager to have more involvement of the faculty with their efforts to reach local, national, and international industries.

### Strategic Goal #2

*Implement an annual budget process that is driven by the priorities specifically identified in the Strategic Plan to the extent they are clear and focused priorities that align with a resource allocation process, so that we can be very focused on the investment of our limited resources.*

For strategic priorities to become realities, finances must be allocated. Unless the annual budget process is driven by the Strategic Plan, the goals of the Strategic Plan will be unimplemented, or implemented as “pilot,” “one-off,” or otherwise unsustainable programs.

### Strategic Goal #3

*Set specific attainment goals in key areas, and account and assess periodically the performance of current investments by benchmarking to target areas.*

Quantifiable goals can be assessed and achieved. For informed budgetary decisions, the Strategic Plan must have specific goals against which to compare current performance and, thereby, evaluate the allocation and reallocation of resources.

## Process Sustainability:

Our operational and process goals ask for major commitments of self-evaluation with coordinated planning and integrated implementation across multiple campus units. While initially daunting, these large goals can be broken down into a series of more feasible phased initiatives led by specific smaller workgroups.

### Strategic Goal #4

*Provide staff who can supply capabilities, numbers, and training matching strategic goals and appropriate metrics for all aspects of UCR's missions.*

Key in all of the process goals are the staff at UCR. Staffing levels were reduced during the Great Recession and have not returned to previous levels since then. This has resulted in the inefficient (and generally unsustainable) burden on staff and faculty to fill roles they may not be suited, trained, or have time to do.

Staff levels may ebb and flow with budgetary pressures. However, if staff levels are reduced during lean times, they must be compensatorily increased when budgetary pressures ease. These decreases and increases should be made strategically, guided by the Strategic Plan. Further, staff positions vary greatly in duties, responsibilities, and relationship to missions. Appropriate staffing metrics, again paying heed to strategic goals, should be applied to guide decisions in reviewing and modifying staffing levels across the University.

### Strategic Goal #5

*Simplify business processes and operations to eliminate redundancy and focus on needs of end users and alignment with fulfilling the mission/purpose of the unit as part of the larger UCR research, teaching and service missions.*

UCR Policies should support our missions and be as clear as possible for those responsible for and affected by their implementation. UCR's policies should be reviewed with an eye to the necessities, clients, and those who must implement them. In Appendix A, we list some specific examples of possible changes. Obsolete and conflicting policies add to confusion on actual implementation of tasks. They can foster users to ignore policies as unreliable, impractical or uninterpretable leading to a culture of unpredictable non-compliance. We encourage rethinking policies, particularly when the original policies were developed under different circumstances.

When considering UCR policies, there is a expressed campus view that UCR policies are primarily risk-averse rather than goal-oriented or mission-serving. While we affirm the need for being compliant with UC, federal and state policies and regulations, the focus should equally be on supporting and facilitating UCR excellence in research, teaching, service. Therefore, policies should be examined for where and how they can be appropriately less risk adverse to appropriately facilitate units fulfilling their campus missions.

The best processes and operations are unused, bypassed or sporadically modified without a strong commitment to ongoing training (initial and ongoing updates/refreshers) that is accessible and relevant to the users as well as being available in a timely manner. Therefore, it is

recommended that there is a commitment to develop training that is available continually online as well as training within interactive in-person options.

#### Strategic Goal #6

*Create and invest in supported, integrated digital/online systems (centrally and across departments) that are sustainable, adaptable and scalable to future growth and needs of UCR.*

Currently, UCR has multiple online systems with incompatible file systems, which do not communicate with each other. Some systems are no longer supported and/or their continued function is dependent on the expertise and skills of steadily decreasing individuals. Therefore, a high priority recommendation is to inventory current systems (ex. Facilities, Purchasing, Accounting, etc.) for usability, functionality, proximity to end-of-life? Rather than create our own solutions, use benchmarks and resources utilized by successful entrepreneurial research universities.

When considering how to simplify UCR business operations, a major focus should be on the use of standardized business practices that can be modified for UCR. Rather than create multiple poorly or unsupported home-grown systems, UCR should prioritize using and adapting to standard off-the-shelf digital systems. While initial costs may be high, the costs in lost productivity and incorrect products from non-standard or home grown systems has been largely ignored.

A major focus should be on similar design across systems for ease of use (visual and functional). (Ex. Integrate Purchasing, Travel, Accounting systems, and Procurement Card reconciliation process for smooth flow from purchasing to payment.). To provide consistency across the board, campus should create online knowledge databases by system, service or department. Where appropriate, policy should be embedded into systems to make both more intuitive.

While obvious, it is essential to identify funding streams over the long term to keep systems current and up to date (ex. Ebuy Purchasing system was last supported by vendors in 2005 and has since become “home grown” and highly customized to meet current needs).

Finally, as noted in the previous strategic goal, it is essential to implement regular, ongoing training sessions (online and in-person) to ensure proper usage.

#### Strategic Goal #7

*Broaden delegation of authority as appropriate, with clear, explicit processes and guidance aimed at eliminating bottlenecks, redundancies and conflicts in oversight and authorization.*

It is a truism that the more “touches” on a process, the more time the process will take and the greater the chance of error. Therefore, it is recommended that we evaluate what approvals are actually needed when and to broaden the delegation of authority. Relieve pressure on bottlenecks by reserving the more time consuming process of multiple or higher level approval to those items with specific triggers.



Development and implementation of better online tools may facilitate such a process as well as simplifying journal entry approval processes.

Strategic Goal #8

*Create a standing Operations Committee to ensure that recommendations in the overall UCR Strategic Plan are operationalized in effective, efficient and sustainable protocols.*

Launching an Operations/Implementation Committee is critical and essential if UCR's strategic plan is to move beyond a high level theory to on the ground practice and if it is to remain relevant with changing external events and climate. Appropriate implementation of an Operations committee will also take careful planning in membership and organization. It is recommended that this committee function as an executive committee perhaps with subcommittees each having specific focus and expertise and thus tasked with overseeing specific UCR Strategic Plan workgroups. One of the key charges of the Executive Operations Committee would be to cross-pollinate and serve as a liaison between workgroups and to foster core solutions bridging multiple domains/units that might be further customized within specific units (but still retaining backward compatibility with core solution/operation/infrastructure).

## Physical Resource Sustainability:

Strategic Goal #9

*Commit to and maintain ratios of building space to present graduate and undergraduate students.*

It is critical that increased enrollment be linked to increased completed buildings. This will require diversifying revenue streams for capital projects so that tuition dollars are not the primary financial resource for repaying capital loans. In conjunction with the office of budget and planning, the campus should develop a reasonable target by which the percentage of tuition dollars to total capital investment is reduced every year. This further necessitates Strategic Goal 1 of diversifying campus's revenue streams.

Similarly, UCR must require that increased enrollment be linked to increased support services and staff. To do so effectively, we must identify support services utilized by the population to be increased. International students, undocumented students, graduate students, and parenting students will utilize distinct specific sets of support services. To aid in this, we recommend implementing an annual survey of support services that collects usage data. Analysis of these data will identify the populations represented in the usage data for each support service.

Strategic Goal #10

*Maintain benchmarks of square footage of green space, transportation infrastructure, and research infrastructure available per student.*

We propose focusing on building up, instead of out, as a primary way of maintaining green spaces and transportation access. Coupled with efforts to incorporate green spaces within new

buildings and employing vertical spaces (such as building rooftops), this will allow UCR to continue to grow in a sustainable fashion.

UCR must also provide for transportation infrastructure to match environmental necessities and an increasing campus population. We also recommend surveys to analyze parking usage, particularly with the aim of reducing enforcement on nights and weekends to achieve safety initiatives outlined below. UCR should also improve its bicycle infrastructure and grow it with the campus population.

#### Strategic Goal #11

*Provide physical facilities and other infrastructure that are safe, inviting, and allow for equitable, universally accessible physical spaces on campus.*

The purpose of creating a sustainable infrastructure and investing in operations and capital is to create a space that is equitably and universally safe and inviting. This is uniquely important given UCR's efforts to distinguish itself as an educational bastion for underrepresented groups. New buildings and existing buildings, signage, maps, lighting, and pathways should be maintained to support this goal. UCR should go beyond legally mandated measures and adopt more universally welcoming and accessible standards.

### Environmental Sustainability:

#### Strategic Goal #12

*Mainstream sustainability in personnel decisions; support for interdisciplinary, community-based, and applied research; and development of opportunities for undergraduate experiential learning.*

Sustainability must be a core value of UCR. UCR should improve on its successes in institutionalizing diversity by committing to embedding sustainability into expectations for personnel (hiring, in-service training, and advancement) and for administrative and instructional units (conservation of resources and ecologically conscious operations).

Most colleges and schools at UCR support a center, office, or other official body devoted to research on the environment or sustainability to facilitate sustainability research, education, outreach, and policy. Centers include the Center for Conservation Biology (CCB), the Environmental Dynamics and GeoEcology Institute (EDGE), the College of Engineering-Center for Environmental Research and Technology (CE-CERT), the Inland Center for Sustainable Development (ICSD), and the Center for Health Communities (CHC). UCR will strive to ensure that *all* faculty and students may access research opportunities and related activities sponsored, organized and/or administered by these centers and those that might be established in the future. These centers and their activities will increasingly be linked across colleges and schools to facilitate interdisciplinarity and increase inclusivity.

Undergraduates need experiential learning opportunities to develop and practice sustainability competencies suited to future careers and workplaces, including tolerance for ambiguity and uncertainty; empathy and capacities to change perspectives; strategic decision-making and collaborate change-making; integrated problem-solving and mediated communication. Many students, including those outside majors connected to sustainability, lack the training and

experience that would relate classroom learning and scholarly research to their post-graduate lives. UCR should commit to supporting existing campus resources and, as may be necessary and appropriate, establishing a central office for matching undergraduate students with faculty/community mentors and experiential opportunities on and off campus.

### Strategic Goal #13

*Develop processes for ensuring sustainability in conservation of (especially potable) water; purchasing and waste management; sustainable food procurement and availability; transition to renewable energy sources; and travel and commuting.*

While Western Riverside County enjoys a Mediterranean climate, most of the region is desert. Water conservation is critical — both for preservation of landscapes and ecologies, and for sustaining UCR operations on increasingly tight budgets. Water conservation includes reducing unnecessary water use, and increasing the efficiency of necessary water use. UCR should continue to minimize turf grass, protect existing and plant new shade trees, and transition to native and drought tolerant landscapes.

Agriculture and food processing and distribution are cornerstones of modern economies. In the context of sustainability, these processes are interrelated with many issues, including labor standards, animal welfare, toxics, water conservation, soil conservation, climate change, wilderness and wildlife protection, food quality and safety, and health. UCR's contribution to local and higher level efforts to improve sustainability in food procurement and availability should ensure that foods made available on campus include options that are healthy, organic, local (where possible) and include vegetarian options. Dine-in options should be encouraged to minimize packaging, and packaging should minimize plastic use. These guidelines should be enforced for both UCR-run dining options as well as outside vendors operating on UCR properties.

UCR must mainstream sustainability in the organization of campus initiatives, programs and activities to ensure the acquisition of products that: are made from recycled content; environmentally preferable, bio-based, or energy- and water-efficient; use alternate fuel and renewable energy; and offer alternatives to hazardous or toxic chemicals whenever possible. These measures will contribute to the aims of sustainable waste management: reduction of natural resources consumed; reuse of materials as many times as possible; and waste minimization.

UCR is a higher education leader in the ongoing transition to lower-carbon and renewable energy sources. UCR is ranked in the Sierra Club's top 35 campuses based on energy sustainability and ranked second in the UC system for renewable energy. Still, the campus currently relies on natural gas to heat most buildings via a central steam plant. A transition to efficient electrified heating is required for better air quality and climate change mitigation.

UCR should commit to identifying appropriate guidelines and administrative procedures for increasing faculty, staff, and student reliance on public transportation, all modes of active transportation, carpooling, and all methods of ride-sharing. Additionally, UCR should commit to supporting efforts by faculty, students, and their professional organizations to reduce and offset professional travel, which may include investments in time, space, and equipment to facilitate distance participation as well as consideration in merit and promotion processes.

# Methodology

Initial committee discussions identified four areas with differing approaches or interpretations of sustainability: the finances of the University, the physical resources of the University, processes and operations of the University, and the global environment and the University's role in its preservation. We divided into four subcommittees along these lines. Many members had direct lines of communications with relevant groups on campus. The subcommittees methodologies are as below. Regular entire-committee discussions provided sharing of ideas across subcommittees. Subcommittee reports were combined to produce a first draft of this document, which was then revised to provide a more integrated view.

## Financial Sustainability:

Gerry Bomotti and his staff provided the information on budget and finances in general. Subcommittee members met with the assistant vice-provost for international education, the development group, the admissions staff, the associate vice-provost for technology transfer and partnerships, and the associate provost.

## Process Sustainability:

### Material Collected from

- Each Subcommittee member collected information from their units
- Town Halls (some material from Provost Search Townhalls)
- Department FAOs
- Research Analysts
- Faculty Meetings
- College/Dept workgroups

## Physical Resource Sustainability:

Subcommittee members comprise individuals from various user groups of the physical space at UCR. Subcommittee members informally consulted individuals from user groups not represented within the subcommittee. These informal consultations enhanced the initial concepts drawn directly from the long range development plan and subcommittee members' experiences interacting with UCR as a physical resource. The resulting vision, goals, strategies, and specific actions were presented to the general committee and then further augmented resulting in the proposals presented in this report.

## Environmental Sustainability:

Subcommittee members are committed to environmental protection and preservation, practice a wide-range of conservation behaviors, and engage in scholarship concerning

sustainability in science, policy, and social/spatial justice. Consequently, we have served on numerous campus and system-wide committees related to sustainability, taught courses on issues and subjects relevant to sustainability, participated in community actions around sustainability, and cultivated ongoing relationships with like-minded individuals for decades. We drew on this experience and on our connections to propose a vision, goals, and strategies, and then checked in with our colleagues, students, community partners, and other campus stakeholders to revise and refine our suggestions for this report.

## Appendix A

### Specific actions for process improvements:

Some policies do not reflect current practice and cause confusion by remaining “on the books.” Two examples: UCR Policy 100-30 on “How to Use Campus Administrative Policy Website” and UCR Policy Number 750-87 on “Storehouse Ordering Procedures” which is dated 1993.

Multiple units on campus plan events with different levels of efficiencies, cost/item, ability to reserve venues, and quality of UCR branding to the community. By establishing a campus-wide event planning office could provide a centralized venue scheduling system (for UCR and non-UCR venues) able to assist staff/faculty with finding venues and planning large conferences. Efficiencies in time and cost might be expected outcome metrics as well as increased quality in UCR branded events. This might also encourage faculty and others to organize more such events, further increasing UCR’s reputation.

For travel and purchasing, the establishment of one UCR direct-billed credit card for both travel and purchasing could lead to a simplified and standardized reconciliation process.

Increased use of self-service portals, automated, templated reporting (ex. financial) but with well supported software and computing resources is essential to facilitate operations from all locations (remote/on campus) and to minimize delays in processing between linked steps/processes.

## Appendix B

### Specific actions for infrastructure improvements:

To allow for increased bicycle transportation, UCR should include secured bicycle spaces in all campus development efforts and retrofit existing secured spaces to maximize capacity. To increase their usage and thereby reduce parking stress, UCR should increase the number and

safety of dedicated bike lanes within campus and leading to campus. For extreme downhill slopes that end at intersections on campus, we recommend paving the bike lane with retarding material. Deploying bike buttons at major intersections surrounding campus will allow time to safely cross the intersection.

Relaxing restrictions on mixed (faculty-staff-student) carpooling, provision of additional, secure spaces for bike/scooter parking, and installation of bike/scooter lanes to connect key campus locations would also help to improve alternative forms of transportation.

Continue to serve our mission of inclusion, all new buildings should be built according to universal accessibility guidelines which go beyond those mandated by the ADA. We recommend implementing an annual survey of usage data of physical spaces to identify priority areas for renovation. These spaces should be renovated according to the same universal accessibility guidelines.

Campus signage and internet resources should be accessible for language groups that are represented in a significant fraction of the UCR population. To provide infrastructure that is safe and inviting to the entire campus population, UCR should set up or expand (1) campus safety escorts, (2) fire monitors, (3) social workers, and (4) homeless student support that are separate from UCPD. For safety escorts, we encourage expanded hours of operations and mandatory racial bias training. These are particularly important if campus is to grow in a sustainable fashion: increased population requires a more uniform, equitable, and independent approach to safety.

To further improve safety, we recommend improving access to nighttime and weekend parking in all lots, possibly by making such parking free. Individuals working on campus will be able to park near their buildings. Further, visitors to campus will not need to figure out campus parking when the campus office answering parking questions is closed.

We also strongly suggest developing a comprehensive app with a map of campus that includes buildings, parking lots, water stations, bathrooms accessible without building access, bus stops, campus bike routes and announcements related to campus such as security alerts, construction, and building closures.

We encourage new building plans, foundations, and locations to be chosen to allow for future expansion, including vertically.