5.D - The institution works systematically to improve its performance.

Assurance Evidence

1. The institution develops and documents evidence of performance in its operations.

CSU documents evidence of its performance in many different ways. The Office of Institutional Research is designated as the official reporting unit for the University to state and federal agencies. Many other tools and systems are used to gather evidence and evaluate performance, especially as discussed in Criterion 4.

Institutional Research (IR) is a service office for the University community; primarily to support the executive leadership team. Its mission is to support strategic planning activities and continuous quality improvement at the institution through data-informed decision-making. IR accomplishes its mission by:

- Collecting, maintaining, and preserving institutional data;
- Providing data analysis to inform executive decision-making and strategic planning initiatives;
- Serving as the official reporting office for the institution;
- Ensuring validity and reliability of the data and research methodologies utilized;
- Responding to federal and state mandated reporting requirements as well as requests from other external agencies as appropriate;
- Engaging in systematic, continuous, and integrated research activities related to student/applicant, finance, and human resources data;
- Facilitating program review and institutional assessment activities;
- Supporting regional and professional accreditation activities; and
- Providing expertise in research methods and other higher education issues.

The following non-academic programs have obtained certification and/or accreditation as evidence of performance that exemplifies best practices:

<table>
<thead>
<tr>
<th>Accrediting Agency</th>
<th>College Or Division</th>
<th>Department Or Unit</th>
<th>Program</th>
<th>Renewal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Association for Assessment and Accreditation of Laboratory Animal Care (AAALAC)</td>
<td>Vice President for Research</td>
<td>Laboratory Animal Resources</td>
<td>Animal Care Program</td>
<td>2014</td>
</tr>
<tr>
<td>Accreditation Association for Ambulatory Health Care</td>
<td>Vice President for Student Affairs</td>
<td>CSU Health Network</td>
<td>CSU Health Network</td>
<td>2014</td>
</tr>
<tr>
<td>Colorado Association of Chiefs of Police</td>
<td>Vice President for University Operations</td>
<td>CSU Police Department</td>
<td>CSU Police Department</td>
<td>2016</td>
</tr>
<tr>
<td>Academy for Early Children Center Accreditation (NAEYC)</td>
<td>College of Health and Human Sciences</td>
<td>Human Development and Family Studies</td>
<td>Early Childhood Center</td>
<td>2016</td>
</tr>
<tr>
<td>Commission on English Language Program Accreditation</td>
<td>College of Liberal Arts</td>
<td>English</td>
<td>Intensive English Program</td>
<td>2014</td>
</tr>
<tr>
<td>National Collegiate Athletic Association (NCAA)</td>
<td>Office of the President</td>
<td>Athletics</td>
<td>Intercollegiate Athletics</td>
<td>Ongoing</td>
</tr>
<tr>
<td>American Psychological Association</td>
<td>Vice President for Student Affairs</td>
<td>CSU Health Network</td>
<td>Internship Program in Counseling Services</td>
<td>2018</td>
</tr>
<tr>
<td>American College of Veterinary Internal Medicine (ACVIM)</td>
<td>College of Veterinary Medicine and Biomedical Sciences</td>
<td>Clinical Sciences</td>
<td>Residency Program: Large and Small Animal Surgery, Medicine, Oncology, Neurology, Ophthalmology, Critical Care and Emergency Medicine</td>
<td>2015</td>
</tr>
<tr>
<td>The American Association of Veterinary Laboratory Diagnosticians (AAVLD)</td>
<td>College of Veterinary Medicine and Biomedical Sciences</td>
<td>Veterinary Diagnostic Laboratories</td>
<td>Veterinary Diagnostic Laboratories (Fort Collins, Rocky Ford, Western Slope branches)</td>
<td>2017</td>
</tr>
</tbody>
</table>

Individual units gather additional data to document performance and inform decision-making at the unit level. Many units construct a variety of surveys for assessment and planning purposes. In 2012, the Campus Labs Baseline application was used to administer 437 surveys to more than 53,000 respondents. Projects include surveys of incoming students, current students, program exits, alumni, employers, and many other constituents. Examples of academic uses of Baseline include the following:

- CSU Extension offers surveys that improve programming for community clients.
- Construction Management learned about its internship program performance and student job placement through these surveys.
- Environmental Health and Radiological Health Sciences use Baseline to learn about their curriculum and inform planning.
- The College of Business MBA program sends program exit surveys to graduating students for continuous improvement purposes.

2. The institution learns from its operational experience and applies that learning to Colorado State University
improve its institutional effectiveness, capabilities, and sustainability, overall and in its component parts.

Evidence that CSU learns from its operational experience is best demonstrated through a few examples of changes that have been implemented to better fulfill its mission and effect improvements. Each of these examples illustrates how challenges and opportunities to improve performance were identified, changes were made in organizational operations, and positive impacts have been made on institutional performance.

**Student success.** One of the most all-encompassing institutional quality-improvement initiatives implemented by CSU is the SSI that was introduced in Component 1.A.3, further defined through the student support services described in Component 3.D and many other sections, and demonstrated to have a positive impact on overall institutional performance through the evidence in Component 4.C.

**Advancing learning and teaching.** TILT was established to complement the SSI, as described in Component 3.C.4, and has become centrally and fully institutionalized within 6 years. TILT contributes significantly to enhancing curricular and co-curricular learning as demonstrated in Components 3.B.5 and 4.C.

SSI and TILT have contributed to CSU becoming recognized as a national leader in efforts to advance undergraduate learning and persistence to graduation. As a result, CSU has become the new home in 2013 of The Reinvention Center, a national consortium of 65 research universities focused on supporting excellence and innovation in undergraduate education. This is the only national organization specifically focused on undergraduate education at research universities, and it will now be headquartered here on our campus. The presence of the Reinvention Center on our campus will create a number of unprecedented opportunities for CSU faculty and staff to be involved – at a high level – in important national discussions related to innovation and reform in undergraduate education. It will also be a great complement to the work of our team in TILT, which has been exploring ways to apply research related to the science of learning to classroom instruction across many disciplines. An anonymous donor who learned about The Reinvention Center’s move to CSU has provided a $150,000 gift – matched by funds from our existing Course Redesign Competition -- to create a new TILT/Reinvention Center Science of Learning Course Development Competition. These efforts are expected to transform the quality of our undergraduate experience and help us systematically deepen student understanding and improve student success in foundational courses.

**Course capacity.** In 2011, the Course Capacity Committee was established, as described in Component 3.C.1, to reduce the problem of student turn-away from full classes during registration. This operational enhancement has improved the efficiency of institutional management of resources and has increased the efficiency of students’ timely progress to fulfilling graduation requirements.

**Summer Session enrollment.** A lack of efficient use of Summer Session enrollment to enhance undergraduate graduation success was recognized as part of the institutional culture that might be targeted to contribute to fulfilling SSI goals. So in 2012, the Summer Session funding model was restructured to more closely represent a revenue-sharing model similar to that of the Division of Continuing Education. The purpose of this change was to provide incentives to the colleges for maintaining and growing their summer session resident instruction programs. This funding model replaces the previous base budget allocations with annual, one-time revenue sharing distributions. Entrepreneurial programs that anticipate and cultivate market demand for their courses in Summer Session will be sharing the financial rewards from increased enrollment. Summer Session enrollment will be monitored to evaluate the success of this new funding model.

**Serving students with complex needs.** Efforts to support the wellness of students through the CSU Health Network were briefly described in Component 3.D.1. In July, 2008 the leadership of the Hartshorn Health Service and the University Counseling Center began a journey of integrating two collaborative, but separate campus health agencies. Soon it became clear that integration was just one part of a much larger mission: to change the way our community provides healthcare and defines health. Consistent with national trends, CSU’s data revealed an increasing number of students entering college with varied and complex mental health needs.
and high risk behaviors. Campus rates for mental health hospitalizations, emergency care visits and risk and threat consultations had reached all time highs, with similar trends in regards to alcohol and other drug misuse and related concerns. National benchmarking data related to mental health and substance abuse showed concerning trends and behaviors from CSU students compared to their peers. The planning process and recommendations are presented in detail in Strategic Priorities: CSU Health Network and the CSU Comprehensive Mental Health and Alcohol and Other Drug Program Plan.

Through implementation of the recommendations and prioritized initiatives, CSU has invented or adopted several initiatives that have become national best practices on college campuses:

1. I-Team: a multi-disciplinary treatment team working with students experiencing acute mental health crisis or complex mental health issues.
2. Case management: coordinated management of individual cases which might include medical, mental health, personal or family crisis, illness, or injury; a student might benefit from a needs assessment, appropriate referral, and follow-up.
3. Student and Employee Consultation Teams: multi-disciplinary risk and threat assessment teams to identify distressed or disturbed individuals and determine appropriate interventions.
4. At Risk: an early identification strategy aimed at increasing faculty skills at recognizing and referring distressed students to appropriate University resources. This process of early identification is a best practice supported by a commercial product obtained to facilitate the process. We have the highest faculty participation of any university in the country.
5. Back on TRAC is a mandated, abstinence-based, drug court program for students with serious alcohol or drug violations who would otherwise be dismissed from the University.

Through Goal 9: Undergraduate Student Well-Being Outcomes of the Strategic Plan, supporting students with complex needs continues to be an institutional priority. In 2012, a committee was appointed to focus on supporting students on the autism spectrum, with traumatic head injuries, and other complex needs. Recommendations and new initiatives are being crafted by this group.

Diversity and Equal Opportunity organization. Diversity planning and its organizational structure have been changed to encourage additional progress toward fulfilling diversity goals. In the 2006 draft of the Strategic Plan, diversity goals were included. Previously, colleges and divisions engaged in the development of diversity plans, which were collected and compiled as an institutional Diversity Plan which was separate from the Strategic Plan. The resulting plan seemed to lack a central institutional focus. While some units were diligent about tracking the various elements contained in their plan and assessed progress, others successfully completed the planning exercise but didn't follow through with tracking the progress of initiatives. With the establishment of the Diversity area of the Strategic Plan, containing broad institutional goals, and an assigned SPARC to assess progress, all units are now asked to identify at least one initiative that would forward the institutional diversity agenda. Each initiative must tie back to an element in the Diversity section of the refreshed Strategic Plan, and progress is expected to be monitored centrally.

In 2010, the combination of diversity and equal opportunity operations within a single office was noted to be creating unworkable tensions between these responsibilities, and perhaps, was slowing progress across the institution in achieving its goals. As described in Components 1.C and 2.A, an Office of Vice President for Diversity, separate from the Office of Equal Opportunity (OEO), was established. OEO now operates as a compliance-focused administrative unit within the Office of Vice President for University Operations. The successful improvement of operations in these areas is described in the respective components cited above.

Research. Research, discovery and creative scholarship are major aspects of CSU's mission. Therefore, active institutional assessment, planning and improvement in this area benefits overall institutional performance, as introduced in Component 3.B.5. In 2011, the Office of Vice President for Research (OVPR) surveyed approximately 300 faculty and staff to (1) measure attitudes and opinions of the CSU research community; (2) solicit new ideas for improved practice; (3) detect emerging areas of importance: and (4) inform the OVPR strategic plan, SPARC, refreshed CSU strategic plan and budget initiatives. The findings of the 2011 survey emphasized:

Colorado State University
• **Building Internal and External Relationships.** The important OVPR role in identifying potential connections, fostering new relationships (and funding opportunities), and establishing new funding mechanisms was recognized.

• **Growing Human Resources.** Graduate students, postdoctorals, and non-tenure track research personnel were seen as research drivers. More professional research and project management resources are desired. Availability of mentors is critical.

• **Providing Training and Professional Development.** A strong desire was expressed for grantsmanship training (or grant writers) as well as help identifying and developing individuals to lead team science and collaborative efforts.

• **Increasing Internal Funding.** Pilot and major strategic initiative funding is needed to grow the research base.

• **Enhancing Incentives.** Practices around research incentives and recognition—e.g., like salary buy-out, access to the tenure and promotion process, and Research Administration/Resources for Scholarly Programs (RA/RSP) process—can be improved.

• **Continuously Improving Administrative and Physical Infrastructure.** Reductions in the administrative burden and increased transactional support were often requested, as well as promotion of best practices, templates, and transparent processes. The need for continuously addressing specialized equipment and other scholarly resources were also noted.

• **Emerging research areas** emphasized in the responses included the following points:
  - Taking a more global approach was a dominant suggestion. Many topics aligned with existing CSU thrust areas: energy, clean technologies, health and infectious disease, water, cancer, etc.
  - Many respondents mentioned systems and synthetic biology, the intersection of chemistry and biology, and bioinformatics.
  - Social, human, and environmental topics were prominent: human impact, health and safety, human performance over the life span, adaptation, environmental sciences, sustainability, climate/climate change and health, food systems, ecology, invasive species, governance, and policy.

A three-pronged strategy has been employed to grow CSU’s research programs in the current funding climate, characterized by declining federal research budgets and an emerging preference for federal grants to include corporate partners for funding matches, commercialization, and product development. First, we will continue to be competitive through retaining and hiring the best faculty and aggressively pursuing proposal opportunities from federal agencies that have historically funded our researchers. In addition, we will capitalize on untapped opportunities in a broader set of federal agencies. Finally, we have launched the OVPR Industry Partnerships Initiative.

CSU’s Industry Partnership Council includes representation from the OVPR, the Office of Engagement, the Office of Advancement, CSU Ventures and representatives from the College Deans. In addition, the OVPR has hired an Assistant Vice President for Research and Industry Partnerships to lead this initiative. The initiative will involve working with faculty to be more effective partners for industry-sponsored research; optimizing our contracts and grants processes to accommodate industry-sponsored research; and managing industry research relationships. The era of corporate research laboratories has all but ended. Universities around the country are recognizing higher potential Facilities and Administrative Cost (indirect costs) returns for colleges and the University by charging market rates for corporate research. They are also seeing expanded experiential learning opportunities for students and greater corporate development opportunities, initiated through research agreements. To this end, OVPR has taken a leadership role in building a funding ecosystem to facilitate industry partnerships.

The federal regulatory climate also presents challenges to growth of our research enterprise. The Council on Government Relations and the AAU have documented unprecedented growth in regulatory compliance requirements since 1991. Our response, described in Component 2.E.1, was to build a program through RICRO to track compliance, measure progress in developing a culture of responsible conduct (a database of who’s trained, what training, and how many hours of training), and to train the next generation of research scientists.

The focused efforts to grow research programs over the past five years by University investments in three research Superclusters, and efforts to promote technology transfer and...
commercialization have resulted in marked increases in all relevant metrics compared with the two, five-year increments prior to these efforts. Superclusters are multidisciplinary alliances that integrate experts from many fields with the goal of improving quality of life - by taking research innovations to the global marketplace more efficiently and at an accelerated pace. Superclusters focus on overlapping areas between CSU’s internationally competitive research and the great global challenges, such as infectious disease, cancer, and clean energy.

Global Sustainability. In recognition of societal interest in global sustainability and the University’s land-grant obligation to address the corresponding issues throughout the components of its mission, the following examples of institutional change have been implemented to improve responsiveness to these issues: (1) School of Global Environmental Sustainability (SoGES), (2) Department of Ecosystem Science and Sustainability (ESS), (3) Office of Energy and Environment (OEE), (4) Center for the New Energy Economy (CNEE), (5) Sustainability in Facilities Management, and (6) the Clean Energy Supercluster (CES) and Cenergy.

SoGES positions CSU to address the multiple challenges of global sustainability through broad-based research, curricular, and outreach initiatives. Areas of emphasis include food security, poverty, inequality, water management strategies and desertification, globalization, industrial ecology, sustainable engineering, population growth, and urbanization. This approach capitalizes on the University’s historic strengths in environmental research and education, and builds upon the education and research that exists within all eight colleges on campus. SoGES has successfully brought organizational structure to the cross-discipline area of sustainability, resulting in the development of a successful academic program and funding of cross-discipline research grants.

The mission of ESS is to understand the world’s ecosystems and the effect of human societies on ecosystem processes and their long-term sustainability. Research and education are central to that understanding by enhancing our ability to manage for the sustainability of ecosystems, societies and the biosphere. ESS currently offers comprehensive undergraduate and graduate programs in the discipline of watershed science, as well as an undergraduate program in ecosystem science and sustainability.

The OEE was formed to lead potential national initiatives, and increase the role of the public university in economic development. Led by the Vice President and Enterprise Executive for Energy and the Environment, OEE supports the integration of cross-cutting university functional areas through the Sustainability, Energy, and Environment Advisory Committee (SEAC), a University committee dedicated to advising the University President, the Provost/EVP, and the President’s Cabinet on the best methods of integrating energy, environmental stewardship, sustainability principles, and community action into campus operations. SEAC contributed to the Climate Action Plan in September, 2010, described below; and led the effort of reporting University data for the Association for the Advancement of Sustainability in Higher Education’s (AASHE) Sustainability Tracking and Reporting System (STARS) in September 2011. In the 2011 submission cycle of the STARS assessment, CSU was able to claim nearly all of the points for some of STARS’ largest credits in sustainability-related and sustainability-focused courses - a major accomplishment not shared by many other Gold Level STARS participants. These two credits were largely facilitated by CSU’s land-grant mission and our strengths in environmental and agricultural sciences. SEAC also works to advance the institution’s engagement in sustainability, energy, and environment at the community, state, national, and global level.

Founded in February 2011, CNEE is a privately-funded initiative to support the growth of a clean energy economy across the United States. The Center, as a part of CSU, is led by former Colorado Governor Bill Ritter and is assisted by some of the nation’s most important thought leaders in clean energy research, development and commercialization. The Center works directly with Governors, legislators, regulators, planners, policy makers, and other decision makers with technical assistance to help them create the policies and practices that will facilitate America’s transition to a clean energy economy. The mission of the Center is to incorporate best practices from around the nation and world to accelerate the development of a New Energy Economy. The Center defines “clean energy” more specifically as technologies and resources whose life-cycle impacts are beneficial to national security, economic vitality, energy supply sustainability, environmental health, public health, the reduction of greenhouse gas
emissions, the conservation and restoration of ecosystem services, social equity, high-quality jobs, and wise use of water and other critical natural resources.

Sustainability in Facilities Management operations led to development of the Climate Action Plan (CAP) in September, 2010, partially in response to the American College and University President’s Climate Commitment (ACUPCC). Some of the short- and medium-term CAP mitigation strategies have already demonstrated significant energy savings. The long-term CAP mitigation strategies are projected to reduce CSU’s net greenhouse gas emissions to climate neutrality by approximately 2050.

The CES, launched in 2008, has the breadth, depth, and entrepreneurial drive to make a global impact. Its mission is to deliver solutions in clean energy through more effective partnering with the clean energy industry, governments, investors, and the public to rapidly develop product opportunities emerging from CSU's world-class clean energy research. CES is comprised of more than 160 self-selected faculty members from all eight colleges at CSU. In addition, a growing number of students and industry leaders are tapping into its growing network. The mission of Cenergy, CSU's CES commercialization arm, is to bringing products and solutions to market through more effective partnering.

Space allocation. In 2007, a Space Committee was established to review all requests for allocation of space. Prior to that time, there was limited central oversight and review resulting in re-allocation of space having evolved into a bartering system among units. The Space Committee membership includes representation from the Provost's Office, Office of Vice President for Research, Office of Vice President for University Operations, Facilities, and the Council of Deans. The committee initiated a process whereby all requests for space must be submitted and reviewed by the Space Committee before approval. Also, a University database for space information called the Facilities Asset Management Information System (FAMIS) was established as the official record for all space utilization audits as a resource to inform the committee's reviews. After reviewing requests for space, the committee makes a recommendation to the University Operations Committee which makes the final decision. The process of space-request review has greatly increased the efficiency of space utilization at the institution as a whole and the process for meeting the needs of growing programs. As the University continues to grow, space demand is expected to increase the need for the operations of the Space Committee.

Sources

- Center for New Energy Economy
- Clean Energy Supercluster
- Climate Action Plan 2010
- CSU Comprehensive Mental Health and Alcohol and Other Drug Program Plan 2012
- Department of Ecosystem Science and Sustainability
- Office of Energy and Environment
- School of Global Environmental Sustainability
- STARS 2011 Submission Report
- Strategic Plan 2012 (Page 12)
- Strategic Priorities: CSU Health Network 2013
- Sustainability in Facilities Management
- The Science of Learning and CSU’s 2020 Graduation Goals