

# University of Colorado Boulder Assurance Argument

## Criterion 1. Mission

The institution's mission is clear and articulated publicly; it guides the institution's operations.

**1.A. The institution's mission is broadly understood within the institution and guides the institution's operations.**

- 1. The mission statement is developed through a process suited to the nature and culture of the institution and is adopted by the governing board.**
- 2. The institution's academic programs, student support services and enrollment profile are consistent with its stated mission.**
- 3. The institution's planning and budgeting priorities align with and support the mission. (This sub-component may be addressed by reference to the response to Criterion 5.C.1.)**

**1.A.1.** The mission of the University of Colorado Boulder (CU Boulder) as a flagship state university is established in the state constitution and in law. [Article VIII of the Constitution of the State of Colorado](#) establishes "the university at Boulder, Colorado Springs, and Denver" as a state institution of higher education. CU Boulder's distinct statutory role and mission is to offer graduate as well as undergraduate programs and to focus on research excellence. Colorado law defines CU Boulder as "a comprehensive graduate research university with selective admission standards," requires CU Boulder to "offer a comprehensive array of undergraduate, master's, and doctoral degree programs," and gives CU Boulder "exclusive authority to offer graduate programs in law" ([C.R.S. 23-20-101](#)).

[Article 1 of the Laws of the University of Colorado Board of Regents](#) (see 2.C.1. and 2.C.2.) states, "The University of Colorado is a public research university with multiple campuses serving Colorado, the nation, and the world through leadership in high-quality education and professional training, public service, advancing research and knowledge, and state-of-the-art health care. Each campus has a distinct role and mission as provided by Colorado law." The Board of Regents [2017 Strategic Vision Framework](#) recognizes those distinct campus roles and missions, and sets out how measurements, assessments and goals set for the University of Colorado as a whole apply differently to the four campuses.

[Board of Regents Policy 1.B.](#) further defines the mission of the University of Colorado as a whole: provide an excellent education for all qualified students; uphold ethical standards and steward the university's resources responsibly; build an educational community in which diversity is a fundamental value; support innovation and entrepreneurship; and strive to meet the educational and workforce needs of Colorado and its residents. The specific mission of CU Boulder, then, is to bring these actions into practice through education and through engagement in scholarship, creative work, research and discovery. CU Boulder's status as one of 34 public universities among the 60 U.S. members of the Association of American Universities (AAU) demonstrates its commitment to its mission of excellence in research and creative work, as well as its commitment to both graduate and undergraduate education.

Bringing CU Boulder’s mission into practice requires guiding principles. To that end, the chancellor established the [CU Boulder strategic imperatives](#):

Strategic Imperative 1: Shape Tomorrow’s Leaders. Recruit, retain and graduate students committed to demonstrating honor, integrity, accountability, respect and contributions to the common good; understanding, sharing and engaging diverse perspectives; and developing critical thinking and creative problem-solving skills by fully participating in CU Boulder’s academically rigorous programs and community. Recognize and engage graduates who consistently demonstrate CU Boulder values and apply intellectual curiosity, rigor and collaboration to creatively address complex issues and opportunities.

Strategic Imperative 2: Be the Top University for Innovation. Serve as the nexus for innovation by facilitating collaboration among universities, industry, laboratories and communities to elucidate and address complex issues and opportunities.

Strategic Imperative 3: Positively Impact Humanity. Broaden and expand research, scholarship and creative work, and articulate the positive societal outcomes they advance. Collaborate to produce graduates who apply their CU experience to make meaningful contributions to society.

The strategic imperatives complement the Colorado Creed, the university’s code of ethics and conduct [developed in 2004](#) by CU Boulder students and publicized through ongoing student organizations and affiliated student groups.

CU Boulder’s statutory mission, the Colorado Creed and the strategic imperatives explicitly underlie CU Boulder’s daily operations and its planning for the future (see 1.B.3.).

**1.A.2.** CU Boulder fulfills its mission as a comprehensive research university by [offering](#) 82 degrees at the bachelor’s level and 153 master’s, doctoral and professional degree programs in a full range of liberal arts and professional disciplines—arts, humanities, social sciences, mathematics and the sciences, engineering and applied science, music, business, education, environmental design and law—along with 87 undergraduate minors and 56 undergraduate and 85 graduate and professional certificates. New degree programs are added and existing ones revised to reflect new developments and directions in education and research/creative work. For example, [new degrees \(BS, MS and PhD\) in biomedical engineering have been approved to begin in fall 2020](#).

In accordance with its mission as a public university serving the state and by Colorado statute, the University of Colorado must enroll at least 55% Colorado residents ([C.R.S. 23-1-113.5](#)). International students and students enrolled solely in online courses do not count toward this total, and resident students whose academic merit earns them the designation of Colorado Scholars are double-counted for the purposes of this calculation. As of fall 2019, [58% of CU Boulder students were Colorado residents and 42% nonresidents](#). International students made up 8% of the student body in fall 2019.

Undergraduate admission is selective. [Undergraduate enrollment](#) in fall 2019 was 29,624 students (19% increase from 2010). Of undergraduates enrolled in fall 2019, [58% were Colorado residents and 42% nonresidents](#). [International students](#) made up 5.7% of the undergraduate student body in fall 2019.

In accordance with CU Boulder’s mission of graduate education, [graduate enrollment](#) also increased during the current decade, reaching 5,904 in 2019 (15% increase from 2010). CU Boulder is the primary contributor to the University of Colorado’s ranking [eighth among U.S. universities in numbers of graduate students in science, engineering and health](#). The elasticity of enrollment in doctoral programs and funded master’s programs is, of course, limited by funding, as well as by the availability of other

necessary resources for graduate student research and creative work (see 5.A.1. and 5.C.4.). Of the graduate students enrolled in fall 2019, [61% were Colorado residents and 39% nonresidents](#), demonstrating CU Boulder's commitment to serving the needs of Colorado residents for graduate education. International students made up 21% of the graduate student body.

Through their academic programs, both undergraduate and graduate students are involved in research and creative work that supports the mission of CU Boulder as a public research university (see 3.B.5.). National and international rankings such as the [Academic Ranking of World Universities](#) (the Shanghai Ranking) and the [U.S. News and World Report graduate programs](#) ranking place the university as a whole, as well as programs across the colleges and schools and in every disciplinary area, in the top tier. In FY [2018-19](#), the University of Colorado Boulder received a record \$574.4 million in sponsored project award funding, with 2,299 awards. Research and development expenditures in FY 2016–17 [ranked CU Boulder No. 48](#) in the nation, one of only seven universities in the top 50 that do not include a medical school. Areas of particular strength in terms of sponsored funding include aerospace, biosciences, earth and environmental sciences, energy, and fundamental sciences. The recently expanded [Research and Innovative Office \(RIO\)](#) assists CU Boulder faculty, staff and students in continuing the university's upward trajectory in research, scholarship and creative work.

Support services appropriate to the University of Colorado's mission to serve a diverse student population come in many forms and from many units at CU Boulder. The [Division of Student Affairs](#) provides a wide array of services to support the education, well-being and career preparation of both undergraduate and graduate students, including diverse communities (see 3.D. for more detail). Housing and Dining Services provides many options for dining on campus, and provides housing primarily for first- and second-year students and graduate students, as well as assistance to students in locating off-campus housing. New housing has recently been built to meet student demand (see 5.A.1.). Other support services for specific student populations as well as the student body as a whole are provided by the [Office of Financial Aid](#) and the [Registrar's](#) and [Bursar's](#) offices.

**1.A.3.** In 2017, CU Boulder launched a [set of five interlocking, large-scale strategic initiatives](#) to re-envision the university's educational goals and to set planning and budgeting priorities in explicit alignment with the university's mission and with the chancellor's strategic imperatives (see 1.A.1.). Each strategic initiative has engaged significant numbers of faculty, staff and students; taken together, they represent exceptionally broad input into designing CU Boulder's future. These strategic initiatives are in various stages of crafting their recommendations, but even as they are proceeding, university leadership and the leads of the initiatives have been working together to map how these efforts intersect and to plan and execute a process by which recommendations are implemented.

Unlike most "strategic plans" in higher education, these five strategic initiatives are not time-specific documents whose priorities and plans are not engaged or revisited until it is time to write a new plan a decade hence. Rather, CU Boulder intends the set of five strategic initiatives as a dynamic, ongoing process that, like the research and scholarship in which we engage, commits to ongoing review, assessment, analysis and reconceptualization. Similarly, the five strategic initiatives are not top-down dicta. Rather, each emerged from grass-roots ideas and discussions involving hundreds of constituents. We freely admit that, when the strategic initiative processes began, there was some concern about how they might conflict or overlap. As the process has continued, however, we have discovered shared goals, priorities and ideas among all five initiatives, and we have found they are not competing but rather mutually supporting. These five strategic initiatives thus constitute the CU Boulder community's shared and evolving conception of the university's aims and path forward.

1. The [Academic Futures](#) strategic initiative (begun in 2017) identifies key academic goals for the university and is guiding how we will achieve those goals. More like a small-town urban planning process than a typical academic task force, the Academic Futures process offered [department and unit-level discussions; ran facilitated and thematic conversations; welcomed white papers \(more than 150 were submitted\) and online comments; and featured town halls](#). The [Academic Futures report](#), submitted in October 2018, summarized CU Boulder’s overarching goal in this way: “The Future of CU Boulder as a Public University: Embracing the Core Mission of Furthering the Public Good.” The report’s recommendations stem from CU Boulder’s foundational values of diversity and inclusive excellence, and of sustaining, supporting and inspiring our community. They address specific actions CU Boulder should consider as it pursues its strategic imperatives of shaping tomorrow’s leaders, being a top university for innovation and positively impacting humanity.
2. The [Foundations of Excellence](#) strategic initiative (begun in 2017) was designed to improve the first-year student experience in ways that will support student success. Advised by the Gardner Institute, this comprehensive self-study and improvement planning process represented a partnership among the offices of Enrollment Management, Student Affairs and Undergraduate Education. Over 100 faculty, staff and students from across the university served on committees led by a steering committee. This process led to two further committees working in AY 2018–19 to make more granular recommendations on [academic advising](#) and on [transitioning the university to implementing the Foundations of Excellence recommendations](#), and also contributed to a separate committee on [facilitating transfer student success](#). Foundations of Excellence recommendations were explicitly included in the Academic Futures process, as well.
3. The [Inclusion, Diversity and Excellence in Academics \(IDEA\) Plan](#) (begun in 2018) is the strategic initiative that serves as the university’s working blueprint for achieving the diversity, equity and inclusive excellence goals that are crucial to CU Boulder’s mission. Nearly 40 faculty, staff and students participated in writing and revising a draft that received feedback through online comments and numerous open town hall sessions. The draft recommendations, which are under review by the provost and the executive vice chancellor and chief operating officer (EVC-COO), are designed to build on a previous three-year inclusive excellence initiative and to work in concert with recommendations from the Academic Futures and Foundations of Excellence initiatives.
4. The [Financial Futures](#) strategic initiative (begun in 2018) is designed to ensure that CU Boulder’s resources are in optimal alignment with its public teaching and research mission. It is also discovering and uncovering ways to support the Academic Futures, Foundations of Excellence, and IDEA Plan strategic initiatives that are setting the university’s planning priorities (see 5.A.1., 5.A.2., 5.C.1.). The provost and EVC-COO are employing Financial Futures to move recommendations from those initiatives toward implementation. Town halls and listening sessions continue and have involved several hundred participants who have offered ideas and feedback. More than 140 projects had been moved toward implementation by October 2019, and many more are on the way.
5. The [Strategic Facilities Visioning](#) strategic initiative (begun in 2018) is proceeding in alignment with the priorities established through the Academic Futures, Foundations of Excellence, and IDEA Plan strategic initiatives to ensure that campus facilities support the university’s mission and to improve the efficiency and resiliency of CU Boulder’s infrastructure well into the future (see 5.A.1.). An initial [deep dive](#) phase defined the space and infrastructure needs expressed by groups across the university, and a subsequent [scenario planning](#) phase has drawn on the ideas of more than 150 faculty, staff and student leaders.

In addition to the Financial Futures process, CU Boulder’s regular budgeting process is explicitly connected to the university’s research and teaching mission, both in internal planning and through

annual review by the Board of Regents, who ensure that each campus's initiatives are in line with University of Colorado goals (see 5.D.1. and 5.D.2.).

**1.B. The mission is articulated publicly.**

- 1. The institution clearly articulates its mission through one or more public documents, such as statements of purpose, vision, values, goals, plans or institutional priorities.**
- 2. The mission document or documents are current and explain the extent of the institution's emphasis on the various aspects of its mission, such as instruction, scholarship, research, application of research, creative works, clinical service, public service, economic development and religious or cultural purpose.**
- 3. The mission document or documents identify the nature, scope, and intended constituents of the higher education programs and services the institution provides.**

**1.B.1.** See 1.A.1. for websites that publish CU Boulder's state-mandated missions and CU Boulder's statements of its vision, values and strategic imperatives. The chancellor communicates CU Boulder's goals and their alignment with the strategic imperatives in the annual [State of the Campus address](#) as well as in other speeches, columns and e-communications. CU Boulder leadership and communicators continue to articulate to the university how the aims, conversations and recommendations of the five strategic initiatives (see 1.A.3.) dovetail with each other and are leading to decision-making and results. "[Leadership Corner](#)" columns and videos from university leadership communicate CU Boulder plans and priorities to faculty, staff, students and the public, as do emailed, web-based and social media updates from [CU Boulder Today](#). The universitywide [Strategic Messaging Alliance](#) ensures that university communication reaches the audiences that it should. Both the [Unified Student Experience project](#) to design a new student BuffPortal and the [End-to-End Student Engagement Communications](#) pilot, whose results will inform the BuffPortal Communication design, are working to increase technology-aided awareness of the aims, accomplishments and resources of CU Boulder among students and alumni.

**1.B.2. and 1.B.3.** The documents establishing the mission, values and strategic imperatives of the University of Colorado and CU Boulder are current. [Article 1 of the Laws of the Regents](#), which defines the University of Colorado's mission as a whole, was reviewed and revised in 2018, and the Colorado statute defining the specific mission of CU Boulder was last amended in 2011 ([C.R.S. 23-20-101](#)). CU Boulder updated its vision for achieving its mission in 2016 with the chancellor's establishment of the CU Boulder strategic imperatives. With the five strategic initiatives underway (1.A.3.), CU Boulder is bringing those strategic imperatives into the current moment, taking into account the most recent developments and changes in needs and opportunities for the university, and planning for the needs and opportunities of the future.

The five strategic initiatives have been deliberate and expansive in their thinking about the nature, scope and intended constituents of the higher education programs and services the institution provides. The key mission of CU Boulder is to serve the people of Colorado, and university law and policy reinforce that state identity. As a flagship university and as a graduate research institution, CU Boulder also extends its public mission to the nation and the world.

## **1.C. The institution understands the relationship between its mission and the diversity of society.**

- 1. The institution addresses its role in a multicultural society.**
- 2. The institution's processes and activities reflect attention to human diversity as appropriate within its mission and for the constituencies it serves.**

**1.C.1. and 1.C.2.** Board of Regents policy (see 1.A.1.) states that the mission of the University of Colorado includes (1) building an educational community in which diversity is a fundamental value and (2) striving to meet the educational needs of all of Colorado's residents. Annually, CU Boulder and the other University of Colorado campuses [report to the Board of Regents on diversity](#), one of the metrics through which the Board of Regents evaluates how each campus is supporting the [Strategic Vision Framework](#) of the University of Colorado as a whole.

The IDEA Plan, discussed in 1.A.3. and coordinated by the [Office of Diversity, Equity and Community Engagement \(ODECE\)](#), demonstrates CU Boulder's fundamental, universitywide commitment to addressing its role in a multicultural society and the multicultural nature of CU Boulder's own community of faculty, staff and students. Other signs of this commitment are the many university programs, services and other efforts devoted to improving CU Boulder's accessibility to and education of a diverse student population, and creating a welcoming climate for students, staff and faculty from diverse populations (see 3.B.4.). A final, important sign is CU Boulder's academic emphasis on human diversity, both within general education requirements and in the many disciplinary and interdisciplinary academic programs that address human diversity and multicultural societies (see 3.B.4.).

Social climate surveys for both undergraduate and graduate students have been administered since 1994. The most recent social climate surveys for [undergraduate](#) and [graduate](#) students in 2014 provided a wealth of data indicating areas of both success and needed improvement for diverse groups (see 4.C.3.). These surveys will be repeated in fall 2020 in the form of an expanded, comprehensive survey on climate and workplace culture that will also include faculty and staff. Improving the inclusive climate for all students is a pillar of the [strategic plan for the Division of Student Affairs](#) and of [a number of initiatives spearheaded by the dean of the Graduate School](#).

### *Student success: enrollment, retention and graduation*

A number of institution-supported [pre-collegiate outreach and engagement programs](#) work to recruit and prepare a diverse population of middle and high school students in Colorado and beyond to apply and succeed at CU Boulder or another postsecondary institution of their choice. Examples include the federally funded [CU Upward Bound Program](#), which supports students from 12 high schools in six tribal communities (Navajo, Ramah Navajo, Southern Ute, Ute Mountain Ute, Pine Ridge and Jemez Pueblo), and the [Pre-Collegiate Bridge Program](#), which supports the transition of recent high school graduates into CU Boulder before they arrive as first-year students.

Achieving diversity and equity in admissions and enrollment is an ongoing goal. In the current decade, 2010 to 2019, the [undergraduate student body](#) has seen increases in the diversity of students who are U.S. residents (from 17% students from diverse groups to 26%), of students from underrepresented minority groups (from 15% to 18%), and of international students (from 2% to 6%). However, the same years saw a decrease in the percentage of undergraduate students who identify as female, from 47% in 2010 to 45% in 2019. The percentage of first-generation college students remained the same, 17%. [The fall 2019 graduate student population](#) was 43% female and 57% male, about the same as in 2010; 11% were members of underrepresented minority groups, a significant increase from 7% in 2010; and 21% were international students, an increase from 17% in 2010.



CU Boulder's tilt toward a male student population may be influenced by the university's strong reputation in STEM fields and by the shift in enrollments toward the College of Engineering and Applied Science (CEAS), from 13% of the undergraduate student body in 2010 to 18% in 2018. It is thus significant that, in pursuit of the goals of its [2017 strategic vision](#), [CEAS has recently made impressive advances](#) in recruiting a diverse student population. Women were 25% of first-year students in CEAS in 2010, and 45% in 2019. Similarly, CEAS has made important strides in recruiting students who are members of underrepresented minorities, who made up 15% of first-year students in CEAS in 2010 and 27% in 2019. The university as a whole made similar progress toward parity. [First-year students](#) in fall 2019 were 48% women and 19% members of underrepresented minorities.

Equally important as recruitment is the success of students as they pursue their degree goals. [Undergraduate student retention and graduation rates](#) have improved significantly for CU Boulder's diverse student populations in the current decade, as they have for students as a whole. Comparing the cohorts entering as first-year students in 2010 and 2017 shows the difference. For undergraduate students who were members of underrepresented minority groups, [first-to-second-year retention](#) improved from 80.4% (2010 cohort) to 85.2% (2017 cohort); for women students, from 85.7% (2010 cohort) to 88.7% (2017 cohort); and for first-generation students, from 78.6% (2010 cohort) to 83.9% (2017 cohort). These improvements closely track the first-to-second-year retention rate for students as a whole, which improved from 83.8% (2010 cohort) to 87.5% (2017 cohort).

These improved retention rates bode well for a future improvement in [six-year graduation rates](#), which have already improved both for students as a whole and for diverse student groups. Taking the same eight-year span for comparison purposes, the percentage of total students in the 2005 entering cohort who graduated in six years was 68.5%, whereas by the 2012 entering cohort, the percentage of students who graduated in six years had increased to 70.7%. For students who were members of underrepresented minority groups, graduation rates for the same cohorts increased from 58.1% (2005 cohort) to 62.1% (2012 cohort); for women students, from 70.6% to 73.8%; for first-generation students, from 58.8% to 61.6%.

CU Boulder is proud of but not content with these improvements in student success. The [Foundations of Excellence strategic initiative](#) (see 1.A.3.) considered how to improve students' experience in their first year at CU Boulder and thus lay better groundwork for student success and graduation. This initiative's recommendations, many of which addressed diverse populations as well as first-year students generally, led to the recent recommendations of the [First-Year Experience Transitions Committee](#) and the [Foundations of Excellence Advising Committee](#) that are being reviewed for scope and budget through the [Financial Futures strategic initiative](#) process (1.A.3.). The Foundations of Excellence recommendations also informed the work of the [Provost's Advisory Committee on Transfer Student Success](#), many of whose recommendations have already been funded through the Financial Futures process and are being implemented.

### *Programs for students*

ODECE coordinates many of CU Boulder's diversity-related programs for students. When students matriculate, they are supported by myriad programs for student success both in universitywide resources such as in the [Student Academic Success Center](#), and in programs in each college and school that are affiliated through the [CU LEAD Alliance](#). Student support services for particular diverse groups—e.g., military veterans, students with disabilities, international students—are discussed in 3.B.4., 3.D.1. and 3.D.2. Many of the [500+ student groups](#) funded by the CU Boulder Student Government are directed toward specific populations of students (for example, the Multicultural Business Association and the Diverse Musicians Alliance).

### *Faculty and staff*

CU Boulder's recruitment practices, evaluation procedures and professional development opportunities for faculty and staff focus on diversity and inclusion as contributing to CU Boulder's strategic imperatives and as essential to CU Boulder's fulfillment of its mission (see 5.A.4.). Through [Diversity and Inclusion Summits held each semester](#), as well as through workshops on, for example, [inclusive leadership](#) and [inclusive pedagogy](#), ODECE supports faculty and staff in improving the climate for inclusive excellence for the entire university community. Workshops and trainings for faculty and staff as well as students are also offered by the [Center for Inclusion and Social Change](#). The results of a [2017 Faculty and Staff Engagement Survey](#) have helped CU Boulder's leadership understand how its employees do and do not feel connected to the university mission, both among diverse groups and overall.

[Faculty and staff diversity](#) unfortunately has not increased in the current decade (2010–18). Rather, flat trends are the norm. For instructional faculty, the gender makeup of the group has remained the same (41% female, 59% male in both 2010 and 2018), as has the percentage who were members of underrepresented minority groups (7.4% in 2010, 7.2% in 2018). Research faculty were 41% women in 2010 and 38% women in 2018, and 4.2% members of underrepresented minority groups in 2010 and 4.7% in 2018. Staff (both classified and university/exempt staff) were 57% women in 2010 and 56% in 2018; staff who were members of underrepresented minority groups were 17% of the total in 2010 and 16% in 2018. In terms of the representation of diverse groups among faculty and staff, then, CU Boulder has work to do to initiate an upward trajectory. At the leadership level, however, real change has taken place. Officers of the university were 20% women and 12% members of underrepresented minority groups in 2010, whereas they were 53% women and 17% members of underrepresented minority groups in 2018.

#### **1.D. The institution's mission demonstrates commitment to the public good.**

- 1. Actions and decisions reflect an understanding that in its educational role the institution serves the public, not solely the institution, and thus entails a public obligation.**
- 2. The institution's educational responsibilities take primacy over other purposes, such as generating financial returns for investors, contributing to a related or parent organization or supporting external interests.**
- 3. The institution engages with its identified external constituencies and communities of interest and responds to their needs as its mission and capacity allow.**

**1.D.1.** Through teaching, research, creative work and outreach, CU Boulder serves the public in the state of Colorado, the western United States, the nation and the world, fulfilling its mission as a research university committed to the public good.

#### *Scholarship, creative work and discovery*

Research and creative work are part of CU Boulder's statutory mission; they are also an essential part of the university's devotion to the public good. Whether or not it has immediate practical application, the increase of human knowledge and the addition to the world of original creative works benefit humankind. So does the transmission of knowledge and artistic craft to future generations in the form of effective teaching. We expect our students to leave CU Boulder fully equipped with the tools, the capacity and—perhaps most important—the desire to be informed, engaged citizens and thoughtful, curious human beings. We also hope they will impart this love of learning as they in turn mentor future generations. When a CU Boulder faculty member publishes a [Pulitzer Prize-winning history of North Dakota's Mandan tribe](#) or invents [lasers that pulse so fast they can capture the movements of electrons](#)



or receives [a major award for dance choreography](#) that intermingles technology, carpentry, science and history, the university celebrates not only their accolades but also their abilities to push research, scholarship and creative achievement past old boundaries toward new horizons.

Both basic and applied research tie CU Boulder to a network of research organizations that serve the public good in a national and international context. CU Boulder's 12 research institutes—the oldest two, the [Laboratory for Atmospheric and Space Physics \(LASP\)](#) and the [Institute of Arctic and Alpine Research \(INSTAAR\)](#), founded in 1948 and 1951, respectively; the newest, the [Renée Crown Wellness Institute](#), founded in 2019—are renowned for interdisciplinary research in the sciences, social sciences, engineering and education. Together, the research institutes generated almost 58% of [CU Boulder's approximately \\$574 million in research funding in FY 2018–19](#). Three research institutes exist in partnership with federal laboratories: [JILA](#), with the National Institute of Standards and Technology (NIST); the [Cooperative Institute for Research in Environmental Sciences \(CIRES\)](#), with the National Oceanic and Atmospheric Administration (NOAA); and the [Renewable and Sustainable Energy Institute \(RASEI\)](#), with the National Renewable Energy Laboratory (NREL).

While federal agency funding for research at CU Boulder is holding strong, industry, other universities, international partners and philanthropy also continue to be areas for growth. In keeping with a strong track record of collaboration with other institutions, [expenditures on subawards and subcontracts issued with CU Boulder industry partners in FY 2018-19 totaled almost \\$57 million](#). Furthermore, partnerships with federal agencies and industry are not mutually exclusive, just as basic and applied research are not mutually exclusive. For example, the [CUbit Quantum Initiative](#), founded in 2018 as a local triad of CU Boulder, the NIST Quantum Physics Division (a core component of JILA) and Front Range companies, advances fundamental science and builds a strong foundation for novel quantum technologies and their rapid dissemination, application and commercialization.

#### *Economic and workforce contributions*

Through its education of students across the spectrum of disciplines at the bachelor's, master's and doctoral levels, CU Boulder supports the Board of Regents' definition of the University of Colorado's mission to "strive to meet the educational and workforce needs of Colorado and its citizens." Proposals for new degrees take workforce needs into account (see 3.A.1. and 3.A.2.). [Postgraduation surveys of alumni careers and salaries](#) demonstrate CU Boulder students' success in the workforce.

CU Boulder's presence and activities have a robust positive impact on the health of the Colorado economy. A [Leeds School of Business 2017 study](#) demonstrated that, in FY 2015–16, CU Boulder had an impact (direct, indirect, induced) on the Colorado economy of \$3.85 billion. Part of that economic activity arises directly through CU Boulder's sponsorship of innovation and entrepreneurship, another component of the University of Colorado mission as defined by the Board of Regents (1.A.1.). [Venture Partners at CU Boulder](#), formerly the Tech Transfer Office, commercializes research breakthroughs to create economic and social impact. To better align with entrepreneurial strengths and strategy in Boulder, Venture Partners at CU Boulder was decentralized from the University of Colorado System office to CU Boulder in 2016. [According to a January 2019 economic impact report covering fiscal years 2013–14 through 2017–18](#), Venture Partners at CU Boulder recorded:

- \$10.1 million in licensing revenue to CU Boulder
- \$48.7 million in commercialization-specific grants to CU Boulder
- \$151.1 million in inferred sales of CU Boulder technology by licensees

- \$593.6 million in capital funding for startup companies that were founded on CU Boulder technology
- \$1.2 billion in Colorado economic impact, contributing to approximately 8,500 jobs and \$511.5 million in labor income for the state

In April 2019, CU Boulder completed the process to be designated an [Innovation and Economic Prosperity \(IEP\) University designation from the Association of Public and Land-grant Universities \(APLU\)](#). IEP designees demonstrate a significant, sustainable and universitywide commitment to economic engagement through (1) talent and workforce development; (2) innovation, entrepreneurship and technology-based economic development; and (3) place development via public service, outreach and community engagement.

### *Affordability and financial stewardship*

Creating greater public access to a first-class education is an important part of CU Boulder’s mission, and keeping tuition affordable is key to that access. In 2016, the Board of Regents set maximum tuition and mandatory fee increases for incoming University of Colorado first-year and transfer students for the upcoming four fiscal years: 5% for FY 2016–17, 5% for FY 2017–18, 4% for FY 2018–19 and 4% for FY 2019–20. Actual increases as approved by the Board of Regents and the Colorado legislature were smaller than these maximums, however. Tuition increases for fiscal years 2016–17, 2017–18, and 2018–19 were 3.97%, 4.82% and 3.61%, respectively, and the increase for FY 2019–20 was 0%.

CU Boulder has also made decisions as a financially independent university to maximize affordability and to maximize transparency around costs, allowing students and their families to plan ahead. CU Boulder is entering the fourth year of its undergraduate tuition and mandatory fee guarantee: the tuition and fee scales applicable to an entering undergraduate student pertain for four years of education, with no increases. In AY 2018–19, CU Boulder eliminated student fees related to particular courses and programs, retaining only mandatory fees.

CU Boulder directs financial aid toward the students who need it most. CU Boulder’s [Colorado Promise](#) grants guarantee Pell Grant-eligible students grant funding to pay for the student’s share of tuition and fees, plus work-study employment eligibility. [Although Pell-eligible students accounted for 18% of resident degree-seeking undergraduates in FY 2017–18, they received 50% of the grant aid. Grants and scholarships provided in FY 2017–18 totaled \\$89.8 million.](#) Federal student loan debt is relatively low. Of CU Boulder bachelor’s degree recipients in FY 2017–18 who were Colorado residents, [about half had student loan debt](#); among these students, average loan debt was around \$24,400, with a median of \$22,600. [About a quarter of nonresident bachelor’s recipients graduated with student loan debt that year](#); their average loan debt was \$32,100, with a median of \$25,000.

By far the largest contribution to CU Boulder’s general fund comes from student tuition. Using those tuition dollars wisely—like the wise use of public funding, sponsored research funds and donor gifts—helps CU Boulder fulfill the University of Colorado’s mission to “uphold ethical standards and steward the university’s resources responsibly.” See 2.A., 5.A.1. and 5.A.2. for details about CU Boulder’s fiscal standards and practices.

### *Higher education in Colorado, the West and the nation*

Both as part of the University of Colorado system and in its own right as an academically comprehensive research university, CU Boulder is committed to the good of public higher education in Colorado, the

western United States and the nation. CU Boulder engages with the Colorado legislature on matters affecting higher education, including advocating to maintain and increase state funding support, and CU Boulder administrators serve on [Colorado Department of Higher Education institutional groups](#). CU Boulder especially works in partnership with four-year public institutions serving rural western Colorado. A successful partnership offering CU Boulder engineering degrees at Colorado Mesa University is now being matched by a similar engineering partnership at Western Colorado University (see 3.A.3.). CU Boulder Chancellor Philip DiStefano serves on the [Board of Directors of the American Association of Universities](#), serves on the [NCAA Board of Governors](#), and chairs the Pac-12 athletic conference's CEO group, whose recent activities include a [landmark initiative to support on-campus mental health services](#).

**1.D.2.** As the University of Colorado's flagship, CU Boulder serves the state of Colorado and is focused solely on the university's educational responsibilities as defined in its statutory mission (see 1.A.1.) and on wisely using the dollars entrusted to the university by taxpayers and tuition-paying students and families. CU Boulder is not answerable or beholden to any investors, related or parent organization or external interest. CU Boulder is part of the four-campus University of Colorado System, but the chancellor of CU Boulder is responsible for operations, and CU Boulder faculty have the principal role in determining curriculum and other academic matters (see 2.C.4.). While CU Boulder participates in NCAA Division 1 sports as part of the Pac-12 conference, the Athletics Department and its [Herbst Academic Center](#) ensure that student-athletes understand that academics come first and are equipped with the tools and support systems for academic success. The [overall GPA of CU Boulder student athletes in spring 2019 surpassed 3.0](#).

**1.D.3.** CU Boulder serves the public in meaningful ways that bring the community together, provide needed services, and extend the university's mission of shared learning, scholarship, discovery and creative work.

Many academic programs at CU Boulder serve the community directly as an integral part of their mission and identity. The Department of Psychology and Neuroscience and the Department of Speech, Language and Hearing Sciences sponsor low-cost clinics in [psychotherapy; attention, behavior and learning](#); and [audiology, speech and language services](#). The law school [maintains nine clinics](#) that provide legal counsel to clients on topics ranging from juvenile and family law to water rights to legal matters affecting American Indians. The Leeds School of Business offers [tax preparation assistance for low-income community residents](#). Student teachers in the School of Education's teacher licensure programs [assist their mentor teachers with planning and classroom responsibilities](#).

CU Boulder has a number of programs offering educational opportunities directly to the public at little or no cost. Through the [Senior Auditor program](#), Colorado residents who are 55 or older may audit courses. Community members ages 18–54 may audit courses through Continuing Education's [Community Auditors program](#). Continuing Education also offers [noncredit professional certificates](#), free ["CU on the Weekend"](#) lectures, and [English language and U.S. culture courses](#) for both CU students and members of the community. Non-degree-seeking students are eligible for [scholarships through Continuing Education](#). Other educational opportunities are offered through the myriad lectures, symposia, panel discussions, concerts, performances and other events offered at CU Boulder, many of them free of charge. The [Center of the American West](#), the [Center for Humanities and the Arts](#), the [Byron R. White Center for the Study of American Constitutional Law](#) and the [College of Music Faculty Tuesdays](#) series are just a few of the university organizations that sponsor events that are free and open to the public. Many events are available for online streaming for those who cannot attend in person. Founded in 1948, CU Boulder's [Conference on World Affairs](#) attracts a diverse group of experts and

engaging panelists from around the world with the goal of inspiring students, faculty, staff, the greater Boulder community and the people of Colorado and the nation to exchange ideas, acquire knowledge and gain new insights. The [Conference on World Affairs week](#) each spring features over 200 events and more than 100 speakers and performers, attracting more than 70,000 attendees each year.

A current inventory shows no fewer than [260 programs and services at CU Boulder devoted to outreach and public engagement](#), extending to every region of the state of Colorado. Just a few examples include [education programs offered at Mesa Verde National Park](#) by the CU Boulder Museum of Natural History; the annual [Astronomy Day at the Sommers-Bausch Observatory and Fiske Planetarium](#); the [Communities Code](#) project to enhance computing literacy among underrepresented groups; and the [Colorado Shakespeare Festival's "Shakespeare and Violence Prevention"](#) tours in Colorado schools. Programs allied under the [CU Engage](#) banner in the School of Education focus on projects that integrate student learning in academic courses with community engagement. The [Office for Outreach and Engagement](#) provides resources and services to help faculty and staff as well as nonprofits, K–12 schools, colleges and universities, government agencies, and other community partners develop outreach partnership opportunities. These resources and services include workshops and trainings, network development, assistance with program and proposal design, and access to experts and outreach communications support, as well as [grants and seed funding for outreach projects](#).

CU Boulder faculty, students, staff and alumni demonstrate a spirit of public engagement that extends far beyond the confines of campus or of a particular degree program or job description. Every year, CU Boulder is one of the top universities for [graduates who join the Peace Corps](#) (see 4.A.6.). CU Boulder was the founding institution for [Engineers Without Borders](#). The [Boulder County Latino History Project](#), initiated by a team including community Latinx volunteers and a CU Boulder Distinguished Professor emerita, has grown into [a statewide project](#) to preserve and communicate Latinx history in Colorado communities. The [CU Boulder Natural Hazards Center](#) acts as a clearinghouse for research that will save lives and mitigate damage worldwide. These are just a few examples of how the CU Boulder community takes the university's mission of serving the public into the world.

**1. Summary.** In addition to the general mission of the University of Colorado as four campuses serving the state of Colorado and its residents, CU Boulder has a well-defined mission as Colorado's flagship public university for research and graduate education. To realize its mission in its vision and actions as a university, CU Boulder has articulated the CU Boulder strategic imperatives: shape tomorrow's leaders, be the top university for innovation and positively impact humanity. These strategic imperatives underlie the five strategic initiatives through which CU Boulder is currently planning its future. They also underlie CU Boulder's daily operations, including the efforts of faculty, staff and students to serve a diverse community in the state, the nation and the world through education, research, creative work, outreach and public engagement.

## Criterion 2. Integrity: Ethical and Responsible Conduct

**The institution acts with integrity; its conduct is ethical and responsible.**

**2.A. The institution operates with integrity in its financial, academic, personnel and auxiliary functions; it establishes and follows policies and processes for fair and ethical behavior on the part of its governing board, administration, faculty and staff.**

### *General policies and practices*

As part of the University of Colorado System, CU Boulder complies in its policy and practice with the Colorado State Constitution, Colorado state law and the laws and policies established by the University of Colorado Board of Regents. CU Boulder has also adopted additional policies, procedures and practices regarding fair and ethical conduct.

[Article 1, Part D](#) of the Laws of the Board of Regents requires that all members of the University of Colorado community be “responsible for understanding and upholding the highest standards of legal and ethical conduct,” and requires faculty members to act on and off the campus with integrity and in accordance with the highest standards of their profession. [Article 7, Part B](#) imposes a similar obligation on students to behave ethically and with integrity. Principles of ethical behavior are further elaborated in [Regent Policy 1](#). Section 1.B., “Guiding Principles,” requires the university to “promote and uphold the principles of ethics, integrity, transparency, and accountability.” Section 1.C., “Principles of Ethical Behavior,” includes the general principle that University of Colorado employees are expected to conduct themselves ethically. Section 1.C. addresses specific components of ethical conduct expected in an academic institution, including, among others: (1) research and academic integrity, (2) respect for others and nondiscrimination, and (3) avoidance of conflicts of interest. The principles in each of these areas are implemented through University of Colorado [Administrative Policy Statement \(APS\) 2027, “Code of Conduct”](#) and through other policy statements, discussed below, describing behavioral expectations, processes for obtaining assurances that the expectations are being met and procedures for remediating failures.

At CU Boulder, general ethical principles and standards of conduct are expressed for all levels of administration, faculty, staff and students. Ethical principles, duties and expected conduct for faculty and department chairs are laid out in the CU Boulder policy on [“Professional Rights and Duties of Faculty Members and Roles and Professional Duties of Department Chairs.”](#) [The Colorado Creed](#) is a social responsibility code for all members of the university community (see 1.A.1.). The Creed, born out of a student-led response to third-party university rankings, includes the pledge to “act with honor, integrity and accountability in my interactions with students, faculty, staff and neighbors.”

In 2017, following a three-year effort led by the chancellor to establish a campus culture of and administrative commitment to ethical decision-making, CU Boulder adopted a comprehensive [Ethics and Compliance Plan](#) that established an administrative and advisory framework for the maintenance, improvement and communication of campus policies, procedures and actions regarding ethics and integrity. The associate vice chancellor for integrity, safety and compliance (AVC) has charge of the Ethics and Compliance Plan and organizes three leadership groups that work in its support. (1) The

Executive Committee for Ethics and Compliance, consisting of the chancellor, provost, and executive vice chancellor and chief operating officer (EVC-COO) along with the AVC and the CU Boulder managing associate university counsel, creates a plan and action items that are then implemented by the AVC. (2) The [Compliance Working Group](#) advises the chancellor by identifying and prioritizing resource needs and educational/training needs, and coordinates the compliance communication plan. (3) The Chancellor's Values and Ethics Advisory Committee, comprising faculty, staff and undergraduate and graduate student representatives, meets regularly to discuss issues pertaining to ethics and integrity at CU Boulder, and advises the chancellor on its opinions and findings. In addition, the AVC hosts [a monthly education series](#) to share and discuss issues relating to ethics and compliance.

Paralleling the [CU system ethics hotline](#), CU Boulder provides the ["Report It" website](#) to receive reports of possible bias-motivated incidents, sexual misconduct, gender/sexual harassment, protected-class discrimination and crimes. The "Report It" website also provides access to additional reporting options and resources, including those regarding confidential assistance, reports to law enforcement and Sexual Assault Nurse Examinations.

### *Finances*

Financial responsibility at the University of Colorado ultimately resides in the Board of Regents, whose structure and procedures are described in 2.C. The Regents Finance Committee makes recommendations to the entire board concerning financial decisions. Like the meetings of the entire board, Finance Committee meetings are open to the public, and [agendas and minutes are published online](#). University investment and fiscal policy, processes and procedures are governed by the Colorado State Constitution and Colorado statute ([CRS 11-10.5-111](#)) and by the Laws of the Regents ([Article 13](#) and [Article 15](#)), and are implemented through [administrative policy statements](#) having to do with accounting procedures, procurement and travel, internal controls, audits, donations and fundraising, and fiscal roles and responsibilities.

The University of Colorado System has an independent, external firm conduct an annual financial audit of all four University of Colorado campuses as well as central administration. The resulting annual report is [submitted to the Colorado General Assembly via the Legislative Audit Committee](#). Annual reports are published both in PDF format and in a web format that [explains university assets, liabilities, revenues/expenses and net position](#) to the public in an accessible, easy-to-understand form. In addition, the University of Colorado Department of Internal Audit conducts internal operational and functional audits of all four campuses and central administration throughout the year. Another mechanism ensuring appropriate and ethical use of institutional resources is [APS 4058, "Budget and Net Position Internal Reporting,"](#) which requires an annual report from each University of Colorado campus detailing unrestricted net assets/reserves and which is implemented at CU Boulder through the [Unrestricted Net Position policy](#). The University of Colorado's most recent bond rating remained AA+ by Fitch and was upgraded to Aa1 by Moody's.

At CU Boulder, fiscal integrity and reporting are centralized in the [Campus Controller's Office](#), which was reorganized in 2018 in consultation with an advisory group of 13 campus representatives. Changes included (1) adding [a new compliance subunit](#) to serve as an internal control structure specifically for the CU Boulder campus, and (2) moving Sponsored Program Accounting under the controller's purview. These changes were designed to ensure fiscal integrity and to improve reporting, responsiveness and accuracy in regard to external funding agencies.



[Article 29 of the Colorado Constitution](#) imposes strict ethical principles, including restrictions on receipt of gifts by state employees, and establishes standards of conduct for employees and governing board members of public institutions of higher education focused on the avoidance of conflicts of interest between their personal financial interests and their performance of governmental responsibilities. These standards are enforced by the [Independent Ethics Commission \(C.R.S. 24-18.5-101 et seq.\)](#). CU Boulder officers must disclose outside financial interests and activities as required by [Regent Policy 3.B.](#), [APS 4013, "Officer Disclosure of Interests,"](#) and [APS 5012, "Conflicts of Interest and Commitment in Research and Teaching."](#) APS 5012 also governs CU Boulder's [Disclosure of External Professional Activities](#), which must be submitted annually by all faculty members, research personnel, students, volunteers and consultants who are responsible for the design, conduct or reporting of research. [Regent Policy 3.B.](#) requires avoidance and appropriate disclosure of conflicts of interest by university staff, and [Regent Policy 3.C.](#) details staff responsibilities regarding outside consulting and service on external boards.

Regarding fiscal transparency, CU Boulder administration makes frequent presentations on budgetary forecasts and plans to the Board of Regents; these are recorded in the [regents' meeting minutes](#), which are publicly available. As described in 5.C.3., the [Academic Affairs Budget Advisory Committee](#), comprising faculty and staff representatives, advises the provost on budgetary matters. The [Boulder Faculty Assembly's Budget and Planning Committee](#) has a similar advisory role to the chancellor, provost and EVC-COO. The EVC-COO holds multiple sessions of a "[Coffee and the Campus Budget](#)" event every semester, open to CU Boulder faculty, staff and students.

### *Academics*

Like all policies at CU Boulder, policies regarding ethics and integrity in academics are grounded in regent law and policy as described above. Education, teaching and research policies are included on the [campus policy website](#). CU Boulder's [Academic Integrity Policy](#) requires academic integrity of all faculty and students; the honor code and research misconduct policy and procedures are discussed below in 2.E. Campus procedures regarding grievances by or against a faculty member regarding unprofessional conduct in research, creative work, teaching and academic citizenship are also governed by the CU Boulder policy on "[Professional Rights and Duties of Faculty Members and Roles and Professional Duties of Department Chairs.](#)" Student academic grievances are handled first at the level of the academic unit and then at the level of the dean of the school or college, as detailed in "[Student Appeals, Complaints, and Grievances: A Brief Guide.](#)" The provost has tasked the senior vice provost for academic planning and assessment with reviewing college and school policies dealing with student academic grievances, to ensure consistency across campus and a clear appeals procedure. This review is part of a comprehensive review of academic policies that began in fall 2018 and will take several years to complete. For example, in AY 2018–19 the campus revised its [final examination policy](#) and established a new [grade replacement policy](#). Each fall and spring semester, the registrar notifies all students about their student privacy rights as guaranteed by the Family Educational Rights and Privacy Act (FERPA).

### *Personnel*

As discussed in 5.A.4., the practice of ethics and integrity in personnel matters begins with searching for and hiring faculty and staff, and continues with practices of employment for all instructional, research, staff and student employees. Faculty hiring is overseen by the [Office of Faculty Affairs](#), which manages offer letters for faculty positions and faculty-leadership positions (chairs, associate deans, etc.) in tandem with the [Department of Human Resources](#) (HR), which manages the search process. Hiring for research faculty positions is similarly jointly managed by [HR](#) and the [Research and Innovation Office](#)

(RIO). Faculty Affairs/RIO and HR work with colleges, schools and individual units to ensure that search procedures are followed fairly for all applicants; search committees receive individual training, including a review of the [Faculty Search Process Manual](#). Hiring for staff and for postdoctoral fellowship holders and other nonfaculty research personnel is [managed directly by HR](#). Hiring of faculty and university staff is governed by regent Law and University of Colorado policy (see [APS 5002](#) and [APS 5005](#) for faculty, and [APS 5056](#) for university staff). Hiring of classified staff is governed by [state law and policy](#).

In accordance with [Regent Policy 10J, “Nepotism and University Employment,”](#) and [APS 5003, “Nepotism in Employment,”](#) CU Boulder follows procedures ensuring that supervisors [recuse themselves from any personnel actions involving supervision of an immediate family member](#). [APS 5015, “Conflict of Interest in Cases of Amorous Relationships,”](#) defines University of Colorado procedures for removing a direct evaluative relationship between members of the university community involved in an amorous relationship (faculty/student, faculty/faculty, or faculty/staff).

As discussed in 1.C., diversity and inclusion are CU Boulder priorities and key to the fair treatment of all faculty, staff and students. The Faculty Search Process Manual, mentioned above, includes guidelines for gathering a diverse pool of qualified applicants and avoiding implicit bias in hiring; in addition, HR has developed an [online course](#) for faculty search committee members that focuses on best practices to ensure an inclusive search process and mitigate unconscious bias. A similar process manual and online course for hiring staff and research personnel should now be a campus goal, and HR is making plans in this direction. HR provides guidance on workplace accommodations and campus resources for, among others, [persons with disabilities](#), [nursing mothers](#) and [employees transitioning gender](#).

CU Boulder is ethically obligated to ensure the safety of the campus community as well as visitors to campus. The [CU Boulder Department of Environmental Health and Safety](#) works with the campus community and local, state and federal agencies to ensure that all environmental health and safety hazards for the campus and the surrounding Boulder community are appropriately addressed. The [Division of Emergency Management](#) coordinates and integrates activities to prepare for, mitigate against, and respond to threatened or actual natural and human-made disasters. Through training and consultation with campus personnel and local officials in accordance with the Clery Act, the [CU Boulder Police Department](#) (CUPD) makes public its [Annual Security and Fire Safety Report](#), notifies the campus community about crimes included in the Act and maintains a log of all crimes, among other actions. CUPD offers classes on workplace violence, active harmer training and [“Run. Hide. Fight.”](#) training, along with other [resources for crime prevention](#). The Department of Environmental Health and Safety maintains a comprehensive site for training and resources having to do with health and safety in laboratories, work areas and classrooms, including the [BioRAFT lab management and safety compliance application](#) in which researchers interact with information specific to their own laboratories.

The [Office of Institutional Equity and Compliance \(OIEC\)](#) is responsible for training, education and enforcement for CU Boulder’s policies on [discrimination and harassment](#); [sexual misconduct, intimate partner abuse, and stalking](#); and [conflict of interest in amorous relationships](#). The executive director of OIEC serves as the campus Title IX coordinator. OIEC publishes [annual statistical reports of its investigations](#) into incidents of discrimination and harassment and of sexual misconduct. In 2018, OIEC was reorganized on the recommendation of the [Campus Integration Committee](#) and was placed in the structure that reports to the EVC-COO; previously, OIEC reported directly to the chancellor. One goal of integrating OIEC fully into the same organizational structure as HR (among other offices) is to increase OIEC’s visibility and its commitment to proactive training and education. In AY 2017–18, the [Sexual Misconduct Policy](#), which applies to all CU campuses, underwent a systemwide review process, during

which the Campus Integration Committee gathered ideas from CU Boulder students, faculty and staff. The changes to the Sexual Misconduct Policy have helped align processes across all campuses and clarified areas regarding due process, adjudication jurisdiction and mandatory reporting. New students are required to complete a [Community Equity course](#) on Title IX and relevant campus policy and procedures before they can register for classes.

As mentioned above, the EVC-COO in 2018 created a new [Office of Integrity, Safety and Compliance](#) that separated these functions from the Office of Infrastructure and Sustainability, thus highlighting their importance to the campus. The office supports and facilitates a coordinated approach to ethics, integrity and safety in the conduct of campus operations, including the safety and security of information.

**2.B. The institution presents itself clearly and completely to its students and to the public with regard to its programs, requirements, faculty and staff, costs to students, control, and accreditation relationships.**

The CU Boulder Office of Data Analytics (ODA) maintains a [“Your Right to Know” website](#) for current and prospective students that provides a transparent view of the university, including costs to students, graduation and retention rates, financial aid, placement of graduates, transfer credit policies, campus safety and much more. Online access to [detailed campus-level institutional data](#), including survey results, course evaluation results and student data, is provided by ODA. ODA makes publicly accessible the campus’s [Common Data Set](#) provided to the publishers of college guides and [Integrated Postsecondary Education Data System \(IPEDS\) submissions](#) provided to the U.S. Department of Education. ODA also conveys information on [campus accreditation by the Higher Learning Commission and specialized accreditation for individual programs](#).

The [CU Boulder catalog](#) includes all program, curricular and course offerings and lists all faculty members and their credentials according to college, school and program. Each department and program also maintains a website showing faculty, courses, events and the like. The offices of the Registrar, Admissions, and Strategic Relations and Communications have recently worked together to integrate and make consistent all communications about programs and degree requirements.

**2.C. The governing board of the institution is sufficiently autonomous to make decisions in the best interest of the institution and to assure its integrity.**

- 1. The governing board’s deliberations reflect priorities to preserve and enhance the institution.**
- 2. The governing board reviews and considers the reasonable and relevant interests of the institution’s internal and external constituencies during its decision-making deliberations.**
- 3. The governing board preserves its independence from undue influence on the part of donors, elected officials, ownership interests or other external parties when such influence would not be in the best interest of the institution.**
- 4. The governing board delegates day-to-day management of the institution to the administration and expects the faculty to oversee academic matters.**

**2.C.1. and 2.C.2.** [Article IX, Section 12 of the Colorado Constitution](#) establishes the Board of Regents as the governing board of the University of Colorado. The Board of Regents is the only governing board of state institutions of higher education in Colorado that is constitutionally created or elected by the voters. The directly elected nature of the Board of Regents provides it with a degree of autonomy and independence rare among institutions of higher education. The Board of Regents is not subject to executive branch or legislative branch confirmation and is thus not part of the state executive or legislative branches.

Colorado’s constitution further provides the regents with the authority to govern the University of Colorado campuses and with “the general supervision . . . and the exclusive control and direction of all funds and of appropriations to [those campuses], unless otherwise provided by law” ([Colo. Const. Article VIII](#)). In their exercise of this authority, the regents are public officials and are subject to statutes that prohibit unauthorized uses of governmental power and prohibit an elected official from knowingly and maliciously refraining from performing a duty imposed upon them by law ([C.R.S. 18-8-404](#)). Colorado law also prohibits regents from performing any official act that gives direct economic benefit to an entity in which the regent has a direct or substantial financial interest ([C.R.S. 24-18-108.5](#)). Regents may not disclose confidential information to advance a private interest, accept substantial gifts that would influence a reasonable person in discharging a public duty, or accept loans or compensation for services that are not commensurate with normal market standards.

To ensure transparency and accountability, the University of Colorado and the Board of Regents are subject to the Colorado Open Records Act, which states that “all public records shall be open for inspection by any person at reasonable times” ([C.R.S. 24-72-203\(1\)\(a\)](#)) and broadly defines “public records” as including “all writings made, maintained or kept by the state, [or] any agency [or] institution” of the state. The Act specifically defines “the correspondence of elected officials” as a public record, with limited exceptions ([C.R.S. 24-72-202\(6\)\(a\)\(I\) and \(II\)](#)). The Board of Regents is also subject to the open meetings provision of the Colorado Sunshine Act, which states that “the formation of public policy is public business and may not be conducted in secret” ([C.R.S. 24-6-401](#)).

**2.C.3.** [Regent Policy 2A](#) states that “a regent is expected to serve the public trust and to exercise his or her powers and duties in the interest of the public, the University, and the Board.” This policy is designed to ensure that its members exercise “independent judgment in the discharge of Board responsibilities.” A regent who believes that they have a conflict of interest “shall disclose the conflict to the Board and shall refrain from participating in the matter to which the conflict relates.” A regent may not “use confidential information acquired in the performance of regents’ responsibilities to further the regent’s own financial interests or personal interests, or the financial interests or personal interests of

the members of the regent's family or associates." Notably, this policy not only applies to conflicts of interests that are clear and undeniable, but also requires a regent to "avoid the appearance of impropriety" resulting from conduct that "might lead members of the public to conclude that the regent is using his or her official position to further the financial or personal interests of the regent or the members of the regent's family, or . . . associates." Finally, this policy prohibits the University of Colorado from a business relationship with any entity in which a regent serves in an executive or policymaking position. While the board may waive this requirement for a particular business relationship that is advantageous to the university, the waiver requires an affirmative vote of six regents.

**2.C.4.** Although the Board of Regents is the ultimate source of authority in the University of Colorado System, it has delegated the day-to-day operations to the university's administration, primarily to the president of the University of Colorado System and the chancellors of its campuses. [Article 3 of the Laws of the Regents](#) vests several duties in the president as principal executive officer. The president (1) is responsible for CU's administration and its compliance with applicable Regent Laws and policies and state and federal constitutions, laws and regulations; (2) serves as CU's chief academic officer; (3) provides academic leadership for the university in meeting the needs of the state; (4) serves as CU's chief spokesperson and as interpreter of university policy and (5) represents and interprets the roles, goals and needs of the university throughout the state. Article 3 states that the chancellor of each campus is "responsible to the president for the conduct of the affairs of their respective campus in accordance with the policies of the Board of Regents."

The Board of Regents has adopted a model of shared governance with the faculty of the University of Colorado that recognizes the faculty's particular expertise in academic matters. [Article 5 of the Laws of the Regents](#) states, "It is a guiding principle of the shared governance recognized by the Board of Regents that the faculty and the administration shall collaborate in major decisions affecting the academic welfare of the university. The nature of that collaboration, shared as appropriate with students and staff, varies according to the nature of the decisions in question." At Board of Regents meetings, representative leaders from each faculty, staff and student governance group update the board on the governance groups' activities and the issues the groups are working on.

Under these principles of shared governance specified in [Article 5](#), "The faculty takes the lead in decisions concerning selection of faculty, educational policy related to teaching, curriculum, research, academic ethics, and other academic matters." Article 5 further specifies that:

- The faculty have the principal role for (1) originating academic policy and standards, including initial authorization and direction of all courses, curricula and degrees offered; admissions criteria; regulation of student academic conduct and activities; and determination of candidates for degrees; (2) originating scholastic policy, including scholastic standards for admission, grading (consistent with the University of Colorado Uniform Grading System), continuation, graduation and honors; and (3) the selection and evaluation of faculty, subject to the concurrence of the administration and the ultimate authority of the Board of Regents or its designee(s).
- The deans of the colleges and schools have responsibility for enforcement of admissions standards and requirements.
- The faculty collaborate with the campus and system administrations in developing recommendations to the president for submission to the Board of Regents regarding (1) policies and procedures for faculty appointment, reappointment, promotion, tenure and post-tenure

review, and establishing policies and procedures for the appeal of decisions in these areas; (2) selection and evaluation of department chairs and academic administrators; (3) establishing and reviewing budget policies and plans for resource allocation, including review for new academic degree program proposals, academic program review and program discontinuance; and (4) the making of other policy concerning the general academic welfare of the university.

- The administration has the principal role in the preparation of budgets, with early collaboration with the appropriate faculty governance unit(s) and subject to the ultimate authority of the Board of Regents or its designee(s).

## **2.D. The institution is committed to freedom of expression and the pursuit of truth in teaching and learning.**

[Article 1.E. of the Laws of the Regents](#) declares that “the University of Colorado is committed to the principle of freedom of expression embodied in the First Amendment to the United States Constitution and Article II, Section 10 of Colorado’s State Constitution.” [Article 5.D.](#) guarantees to university faculty academic freedom, defined as “the freedom to inquire, discover, publish and teach truth as the faculty member sees it, subject to no control or authority save the control and authority of the rational methods by which truth is established.” [Article 7.C.](#) similarly guarantees academic freedom to students and was revised in 2018 to require each campus to have policies and procedures to investigate student claims of violations of academic freedom and to provide remediation when called for. These three articles of the Laws of the Regents were revised effective September 2018 to make clear the distinction between academic freedom, which applies to the university context, and the right to free expression, which applies to members of the university community in their roles as citizens.

As the University of Colorado’s flagship and as a public university, CU Boulder is frequently asked to host events with guests holding diverse views, and the university strives to provide for an open discussion of current topics and issues. CU Boulder’s goal is to keep such events, including public protests against those events, safe and respectful for all participants. Speakers and events in the last few years include, for example, President Barack Obama, Ann Coulter, the Dalai Lama, Milo Yiannopoulos, one of the 2016 Republican presidential candidate debates, and a rally by Bernie Sanders during the 2016 presidential campaign. To clarify the rights and responsibilities of the campus community in regard to free expression, CU Boulder has developed [a website](#) gathering together the principles, history, campus resources and campus policies having to do with the free expression of opinion. One recent innovation facilitating such expression is the [Center for Student Involvement](#), a collaboration between student organizations, the CU Student Government and the Office of Student Affairs designed to coordinate student programming of events. Another is the establishment of the [Significant Events Team](#), which coordinates CU Boulder efforts to accommodate large, impactful events on campus while minimizing disruption to campus operations and maximizing community safety.



**2.E. The institution's policies and procedures call for responsible acquisition, discovery and application of knowledge by its faculty, students and staff.**

- 1. The institution has and enforces policies on academic honesty and integrity.**
- 2. Students are offered guidance in the ethical use of information resources.**
- 3. The institution provides effective oversight and support services to ensure the integrity of research and scholarly practice conducted by its faculty, staff and students.**

**2.E.1.** [Research](#) at CU Boulder encompasses thousands of scholarly, scientific and creative endeavors at any given time by the university's faculty, staff and students. The university's [research policies are posted online](#) and easily accessible by the research community, which includes not only faculty, postdoctoral fellows and graduate students, but also [undergraduate students working under faculty guidance](#). Research policies ensure that researchers have the information they need to comply with federal and state laws and regulations governing the conduct of research. The [Office of Research Integrity](#) in the Research and Innovation Office (RIO) is a centralized source for policies related to the ethical and legal conduct of research, including, for example, animal care and use, conflicts of interest, export controls, human research protocols, and the responsible conduct of research. In 2018, CU Boulder, through its Office of Animal Research, gained [accreditation status from the Association for Assessment and Accreditation of Laboratory Animal Care](#), whose mission is to serve as a bridge between research progression and animal well-being. The [Office of Contracts and Grants](#) (OCG) website includes research policies pertaining to sponsored project research, including property, travel, accounting and cost-sharing, among other areas. OCG's [Roles and Responsibilities Matrix](#), among other resources, clarifies the ethical and legal responsibilities of principal investigators and administrative staff in the life cycle of a sponsored project. As mentioned in 2.A., the [Controller's Office was reorganized in 2018](#) to strengthen fiscal integrity and reporting, including for Sponsored Project Accounting.

Allegations of misconduct in the research process are investigated by the [Standing Committee on Research Misconduct](#), whose findings and recommendations are forwarded to the provost.

**2.E.2.** Before registering for classes, new undergraduate students, including both first-year and transfer students, must complete [the Online Experience, an online orientation program](#) that includes training in academic honesty, avoiding plagiarism and proper citation of sources. Individual programs are responsible for training graduate students in the ethical use of information resources as part of their training in research and creative work. A [2018 survey of graduate students](#) found that 31% of respondents reported not knowing where to report research misconduct if they were to encounter it. In response, [the Graduate School instituted orientations for new unit directors of graduate studies](#) to train them in campus policies and procedures, including those involving research ethics and integrity, and added a research ethics and integrity component to the training given to [graduate students who serve as peer mentors](#). Graduate students supported by National Institutes of Health or National Science Foundation grants are required to complete formal [Responsible Conduct of Research training](#); CU Boulder leadership is considering expanding this required training to include all graduate students.

The [University Libraries](#) offers learning opportunities for faculty, staff and students in the form of course-integrated research seminars, workshops, online learning objects, individual research consultations and virtual or in-person research services. Typically, sessions cover concepts of the research process, [specific research tools, strategies, information literacy concepts](#), and [practices for evaluating news and information](#). In working with students and scholars, librarians emphasize ethical

responsibilities of properly crediting other authors and creators as well as an understanding of complexity of rights and ownership as related to information and knowledge.

**2.E.3.** The ["CU Boulder Honor Code and Procedures"](#) provides a process to adjudicate matters of academic integrity. It covers all students enrolled in credit or noncredit classes and applies to graduate as well as undergraduate students. Cases are adjudicated by an advisory board made up of faculty and students; the process is administered by the director of the Office of Student Conduct and Conflict Resolution. In the spring 2018 semester, [the structure and procedures of the advisory board were reorganized](#) to (1) include faculty as well as student representation and (2) clear a backlog of cases and shorten the time from reports of violations to resolution. While the newly restructured advisory board includes graduate student membership, additional graduate student representation may be needed to review cases involving graduate students in a timely fashion.

While the [law school maintains its own honor code and procedures](#), it reports violations to the Honor Code advisory board via the director of the Office of Student Conduct and Conflict Resolution.

**2. Summary.** CU Boulder seeks to adhere to the highest standards of integrity and ethical conduct in its research, teaching, and service to the campus community and to the public, and also seeks to improve practices that facilitate those standards. Indeed, CU Boulder understands its ethical responsibilities as crucial to the public good. Our task is not merely to conform to the ethics and compliance policies and procedures set by the University of Colorado System, the state of Colorado and the federal government, but also to guide, model and encourage students in engaging in ethical practice and ethical citizenship. To this end, the chancellor has established that the university's [strategic imperative of shaping tomorrow's leaders](#) (see 1.A.1.) involves educating students who are committed to demonstrating honor, integrity, accountability, respect and contributions to the common good. The [Academic Futures strategic initiative](#) (see 1.A.3.) calls for the university to renew its commitment to the democratic and civic purposes of public higher education by embracing the core mission of furthering the public good. Moreover, the top project resulting from Academic Futures, creating a common student-centered approach to learning, puts this value at the very heart of both undergraduate and graduate education at CU Boulder. As the Academic Futures report puts it, "When we ask students what kind of Buff they want to be, we cannot stop with 'I'm a history Buff,' for example, but must go on to state the ethical and intellectual qualities that should mark our graduates" (p. 41). The campus has thus publicly committed itself not only to behaving ethically but also to teaching ethical practice as an integral part of CU Boulder's civic engagement and civic responsibility.

### Criterion 3. Teaching and Learning: Quality, Resources, and Support

The institution provides high quality education, wherever and however its offerings are delivered.

#### 3.A. The institution's degree programs are appropriate to higher education.

1. Courses and programs are current and required levels of performance by students are appropriate to the degree, certificate or credential awarded.
2. The institution articulates and differentiates learning goals for its undergraduate, graduate, post-baccalaureate, post-graduate and certificate programs.
3. The institution's program quality and learning goals are consistent across all modes of delivery and all locations (e.g. on the main campus, at additional locations, by distance delivery, as dual credit, through contractual or consortial arrangements or any other modality).

**3.A.1. and 3.A.2.** CU Boulder ensures the currency and appropriateness of its courses, degrees, certificates and other credentials and of their learning goals through formal processes that govern new and existing courses and degree programs.

#### *New courses and programs*

Proposals for all new courses, certificates, minors, degrees and academic units, including planned curricula and student learning outcomes, originate with the faculty of a department or an interdisciplinary group and move through department, college and provost-level review processes.

- Proposals for new courses are reviewed and approved by each college/school's curriculum committee. Information required for new course proposals is submitted through a standardized process administered by the Office of the Registrar and includes how the course fits within the existing curriculum(a), principal topics covered, required readings, student learning outcomes, and overlap with, duplication of or impact on other courses.
- Following University of Colorado administrative policy, a proposal for a [new degree](#) (undergraduate or graduate) or [academic unit](#) is reviewed and endorsed by the relevant college/school dean(s) and curriculum committee(s) and by the vice provost for undergraduate education or vice provost for graduate education (or both) in consultation with their faculty advisory committee(s) before being reviewed and endorsed in turn by the senior vice provost for academic planning and assessment, the provost and the chancellor. The new degree or academic unit undergoes review and approval by the [Board of Regents](#). Student learning goals are a required element of proposals for new degrees, whether offered in an existing or a new academic unit, and those learning goals are examined at all levels of review. Workforce demand as a measure of likely degree outcomes is also a component of a new degree proposal.
- Certificates and minors comprise existing courses that have already been reviewed and approved. The curriculum and learning goals for a proposed new certificate are reviewed and approved by the [vice provost for undergraduate education](#) or [vice provost for graduate education](#), as appropriate, in consultation with their advisory committee. The curriculum and learning goals for a proposed new undergraduate minor are approved and reviewed by the curriculum committee and the dean of the relevant college/school according to college/school procedure.

### *Existing courses and programs*

- Revisions to existing courses are reviewed through the same process as new courses (see above). In addition, the Office of the Registrar annually reviews courses that have not been offered in the previous five years and works with the colleges/schools to determine whether they should be removed from the catalog.
- Existing academic programs, including existing degrees and minors, are reviewed on a seven-year cycle through the [Academic Review and Planning Advisory Committee \(ARPAC\)](#) program review. Program review includes unit self-study, review by a faculty committee external to the unit, review by a team of disciplinary experts outside the University of Colorado and review by the ARPAC committee itself, which comprises tenured faculty from all schools and colleges. In this process, units are reviewed in aggregated clusters (for example, social sciences or arts and humanities) that allow for comparison across cognate disciplines. After each review is completed, each unit must respond to the committee's recommendations for three years. In the fourth year, a team of external reviewers examines the aggregated units to assess their progress as a group of shared disciplines and set the agenda for progress toward the next review. [Examples of degrees recently flagged for redirection or new investments include the discontinuance of the PhD program in comparative literature and the creation of a new bachelors-accelerated master's degree in ethnic studies \(BA\) and education \(MA\)](#). One criterion of ARPAC review includes how the unit assesses whether students have achieved the learning goals that each program has established for its undergraduate and graduate degrees (see 4.B.1.). In addition to the ARPAC review, [many degree programs in professional fields are accredited externally by their disciplinary organizations](#). These accreditation processes typically include review of curricula and learning goals. Finally, CU Boulder uses its internally designed [Academic Prioritization process](#) to measure the effectiveness of degree programs in terms of their resource use, declared majors and graduates, research/creative work productivity and quality, contribution to educating nonmajors, and student surveys on teaching effectiveness (see also 4.C.3. and 5.C.2.).
- While minors are reviewed during the ARPAC program review, certificates have not been explicitly subject to a regular review process. The Graduate School and the Office of Undergraduate Education are working with the senior vice provost for academic planning and assessment to rectify this omission.

**3.A.3.** Regardless of location or mode of delivery, all courses and degree programs go through the approval process and program review detailed in 3.A.1. and 3.A.2.

CU Boulder is approved to offer both distance and correspondence degrees and programs. All such degrees and programs are planned, supervised and reviewed through the process described in 3.A.1. and 3.A.2.

- Under the distance model, fully online degree and certificate offerings include a [limited number of graduate degrees and certificates](#), a [postbaccalaureate degree in computer science](#), a [BA in interdisciplinary studies](#) (a degree completion program), and [two noncredit certificates](#). Continuing Education administers the delivery of these online courses, degrees and certificates, all of which are overseen by the relevant academic unit. CU Boulder has proceeded with caution in online education, reflecting the faculty's and administration's desire to maintain academic quality. Demand has risen for online courses, with the number of students taking at least one

online course and the total number of online credits taken each rising 20% from fall 2017 to fall 2018. However, in fall 2018, only 473 of 29,753 degree-seeking undergraduate students (1.6%) were enrolled exclusively in distance education courses, and only 1,975 (6.6%) were enrolled in at least one, but not all, distance education courses. The percentage of graduate students enrolled exclusively in online courses was higher and reflects enrollment in popular online graduate degrees and certificates. In fall 2018, 506 of 6,522 degree-seeking graduate students (7.8%) were enrolled exclusively in distance education courses, whereas only 221 (3.4%) were enrolled in at least one, but not all, distance education courses. As part of the Academic Futures and Financial Futures strategic initiatives (see 1.A.3.), in 2019 the provost convened an [Online Strategy Working Group](#), one of whose charges is to develop a strategy to ensure that enough courses are available online to effectively and flexibly enable students to participate, both as residents and remotely, while still maintaining teaching excellence. In September 2019, the provost took action on the working group's first recommendation, announcing that [CU Boulder will create a new organization to oversee teaching and technology, online and distance learning](#).

- Under the correspondence model, as discussed further in 3.B.4., CU Boulder has developed an online, MOOC-based professional master's program in electrical engineering delivered through the Coursera platform that began its for-credit offerings in October 2019.

CU Boulder is approved to offer degree programs at one additional location, CU South Denver in Lone Tree, Colorado, where offerings include the Leeds School of Business [evening MBA program](#) and a noncredit [certificate in personal finance planning](#) that prepares professionals to sit for the Certified Financial Planner examination. Courses are taught by CU Boulder Leeds School of Business faculty and are the same as courses offered at the main Boulder campus.

CU Boulder also offers undergraduate degrees in [select engineering programs in partnership with Colorado Mesa University](#); similar degrees are being developed for offering at Western Colorado University. These degrees follow a 2+2 model where the first two years of education are provided by the other campus and the second two years provided by CU Boulder, with CU Boulder curricula, instructors, advising and administrative supervision; however, CU Boulder's share of the course credits totals less than 50% of each degree.

CU Boulder does not participate in any consortial agreements. The university offers two dual credit courses for high school students: GRMN 1010 with Widefield High School, Colorado Springs; and EDUC 2800 with STRIVE Preparatory Schools (STRIVE-Prep), Denver. These courses are administered by Continuing Education.

**3.B. The institution demonstrates that the exercise of intellectual inquiry and the acquisition, application and integration of broad learning and skills are integral to its educational programs.**

- 1. The general education program is appropriate to the mission, educational offerings and degree levels of the institution.**
- 2. The institution articulates the purposes, content and intended learning outcomes of its undergraduate general education requirements. The general education program is grounded in a philosophy or framework that was developed by the institution or adopted from an established framework. It imparts broad knowledge and intellectual concepts to students and leads to the development of skills and attitudes that the institution believes every college-educated person should possess.**
- 3. All degree programs offered by the institution engage students in collecting, analyzing and communicating information; in mastering modes of inquiry or creative work; and in developing skills adaptable to changing environments.**
- 4. The education offered by the institution recognizes the human and cultural diversity of the world in which students live and work.**
- 5. The faculty and students contribute to scholarship, creative work and the discovery of knowledge to the extent appropriate to their programs and the institution's mission.**

**3.B.1.** In the [Academic Futures strategic initiative](#), the entire CU Boulder community—faculty, staff and students—came together to express common educational purposes for the entire university. Among these was CU Boulder's commitment to the principles of a liberal arts education.

Each of the seven colleges/schools/programs offering undergraduate degrees at CU Boulder is empowered to plan, implement and review its own general education requirements. As a result, the university does not have a single general education program. However, as the largest college and the home for liberal arts, the [College of Arts and Sciences \(A&S\)](#) effectively provides courses and a curricular framework for undergraduate skills and breadth requirements across the university. With only a few variations, A&S Gen Ed is also used as the general education curriculum of three other schools: the [Leeds School of Business](#), the [School of Education](#) and the [College of Music](#) (with the exception of Bachelor of Music students in music performance). The three remaining colleges/schools/programs—the College of Media, Communication and Information (CMCI), the Program in Environmental Design and the College of Engineering and Applied Science (CEAS)—make broader use of A&S's general education outline while maintaining their own requirements. (See 3.B.2. for details.) The new [Program in Exploratory Studies \(PES\)](#), which admits new students (including [pre-business](#) and [pre-engineering](#) students) who have not yet affiliated with a school/college, directs students into a general education curriculum that will match that of their likely major.

**3.B.2.** As described above, most undergraduate students at CU Boulder are covered by the Gen Ed curriculum of the College of Arts and Sciences, with the rest covered by the general education curricula of the College of Media, Communication and Information (CMCI), the Program in Environmental Design and the College of Engineering and Applied Science (CEAS). These four main general education curricula are outlined as follows:

1. The [Gen Ed curriculum in A&S](#), also used (with slight variation) by the [Leeds School of Business](#), the [School of Education](#) and the [College of Music](#) (with the exception of Bachelor of Music students in music performance), was implemented in 2018 after [a four-year faculty discussion, planning and approval process](#). Its distribution requirement includes courses in the natural



sciences, social sciences, and arts and humanities; two diversity-related courses are also required. Skills-related course requirements include written communication, quantitative reasoning and math skills, and foreign language. The curriculum is designed to provide a broad liberal arts education and ensure that students venture into diverse areas of learning. Its flexibility allows students to add minors or second majors.

2. The [CMCI Core Curriculum](#), established [in 2015 with the founding of the college](#), includes liberal arts learning with development of the skills needed for careers in communication, information and media. Its breadth and point-of-view requirements resemble the distribution requirements in A&S Gen Ed, with the additional stipulation that two courses must cover historical topics. Skills courses required include written communication, upper-division composition and expression, quantitative reasoning, and computing.
3. The [Program in Environmental Design Core Curriculum](#), which takes effect in fall 2019, includes liberal arts learning with preprofessional training for careers in architecture, sustainable planning and design, and related fields. The curriculum's breadth requirements resemble the distribution requirements in A&S Gen Ed, except that no courses specifically on diversity-related topics are required (see 3.B.4.). Skills required include written communication, quantitative reasoning and foreign language.
4. [General education in CEAS](#) requires 18 credit hours in social sciences, humanities and writing to provide a liberal arts background and writing skills to engineering students.

While distinct, these four general education curricula all respond directly to CU Boulder's stated [learning goals for all Boulder baccalaureate graduates](#). The [learning goals for A&S Gen Ed](#) are for students to (1) develop skills of communication, expression and reasoning, and (2) understand our world, in all its dimensions, through critical inquiry. These are mirrored by the [CMCI Core Curriculum's learning goals](#) to equip students "with the skills needed to produce, gather, archive, curate, analyze and evaluate the flood of information, messages, images, sounds and ideas that populate our complex and rapidly evolving global media landscape"; by the [Program in Environmental Design's goal](#) of educating "students [who] become adept at complex problem-solving, analytical thinking, and leadership through coursework in theory, history, ecological impact, materials and methods, and systems thinking"; and by CEAS's [Strategic Vision](#) goal of "producing well-rounded engineers with knowledge and skills in ethics, leadership, business and communication."

Significant overlap among these four general education curricula makes it possible for students to move between colleges/schools by means of [intrauniversity transfer](#), albeit with the aid of dedicated academic advising. The [Academic Futures strategic initiative](#), however, has recommended a campuswide common curriculum, with the goals of making it easier for students to move from one college to another, signaling a commitment to the liberal arts and affirming CU Boulder's mission as a public research university (see 1.A.1.). The provost has directed the formation of a faculty committee to begin discussing and developing a common curriculum in AY 2019–20. The very recent implementation (since 2015) of like-minded general education in A&S, CMCI and Environmental Design represents a big step toward this goal in that those three general education curricula are conceptually very similar.

The [Academic Futures strategic initiative](#), following upon the recommendation of the Foundations of Excellence strategic initiative (see 1.A.3.), also endorsed a one-credit "CU 101" academic skills course requirement for undergraduate students. Such a course is offered by the School of Business and was piloted in AY 2018–19 in CEAS and the Program in Exploratory Studies. A&S began piloting such a course in fall 2019.

**3.B.3.** CU Boulder’s degree programs, both undergraduate and graduate, undergo a rigorous development process (see 3.A.1. and 3.A.2.) to ensure that they meet both disciplinary and institutional standards for methodological (collecting, analyzing, communicating information), disciplinary (mastery of modes) and contemporary (developing skills for a changing environment) practices. Like the general education programs described above, undergraduate degree programs adhere to CU Boulder’s [learning goals for all Boulder baccalaureate graduates](#), which include critical thinking, communication, investigative analysis, argumentation and collaboration, as well as the formulation and investigation of research, creative work and open-ended questions. The goals are met through the general education curricula of each school/college (3.B.2.), as well as through the skills addressed in each undergraduate degree program, which teaches students the mastery of modes of inquiry or creative work as appropriate to that discipline or interdisciplinary study. For graduate students, the learning goals are set by the degree programs for students to master the critical thinking skills, reasoning skills, research or creative skills and modes of inquiry appropriate to that discipline or interdisciplinary study. Both undergraduate and graduate degree programs are regularly reviewed by the [Academic Review and Planning Advisory Committee](#) (see 3.A.1. and 3.A.2.), which provides critical direction in updating these learning goals for our changing environment (see 4.B.1.).

**3.B.4.** CU Boulder is committed to human and cultural diversity in its vision, its strategic imperatives, its curriculum and its ongoing strategic initiatives (see 1.C.1. and 1.C.2.). The [chancellor’s vision](#) for the university “to be a leader in addressing the humanitarian, social and technological challenges of the 21<sup>st</sup> century” involves the university deeply in the pursuit of inclusivity and of recognizing that difference is part of the world. Reflecting the chancellor’s strategic imperatives to shape tomorrow’s leaders and positively impact humanity, CU Boulder has prioritized cultural diversity through a major strategic initiative in progress, the [Inclusion, Diversity and Excellence in Academics \(IDEA\) Plan](#) (see 1.A.3.).

Three units within Academic Affairs focus on the teaching and learning of cultural diversity:

- The [Office of Diversity, Equity and Community Engagement](#) (ODECE) brings together a number of college/school and campus programs into the [CU LEAD Alliance](#) (Leadership, Excellence, Achievement, Diversity), which coordinates diversity, inclusivity and student success efforts, and supports students campus-wide as CU-LEAD Scholars. ODECE also houses a number of freestanding diversity efforts related to teaching and student success, such as the TRiO McNair Scholars Program and the annual Diversity & Inclusion Summit. ODECE is the sponsor of the IDEA Plan.
- The [Division of Student Affairs](#) brings together [a number of student support services](#) related to cultural diversity, and has established increasing students’ intercultural competence as one of the focus areas of its [current strategic plan](#).
- The [Office of Undergraduate Education](#) is the home for [Education Abroad](#), charged with student international experiences; [International Student and Scholar Services](#); and [International Student Academic Success](#), a separate office that develops coalitions among all units across campus that work with undergraduate international students.

Whatever their college or school, all undergraduate students learn to engage in diverse perspectives and become global citizens. As detailed in 3.B.2., diversity is an explicit part of the A&S and CMCI general education curricula, which apply to the vast majority of undergraduates at CU Boulder. Both A&S and CMCI require courses on diversity-related topics. The outliers are the general education curricula of Environmental Design and CEAS, which do not require such courses. Environmental Design, however, declares that [its mission](#) includes “integrating diverse perspectives into the ENVD curriculum . . . to

minimize ways design education disregards underrepresented perspectives.” Similarly, CEAS has articulated its [strategic vision through four pillars](#), two of which—“Embracing Our Public Mission” and “Increase Our Global Engagement”—directly focus on understanding human and cultural diversity as essential to the education of engineers and computer scientists. Further, CEAS is working to strengthen its educational support of a diverse population of students by, for example, consolidating the college’s diversity, gender equity and multicultural support efforts into one team, the [BOLD Center](#), and developing new 2+2 and transfer programs directed toward students from nontraditional backgrounds (see 3.A.3.).

A number of individual majors, minors and certificates emphasize human and cultural diversity: for example, the programs offered by [Ethnic Studies](#), [Women and Gender Studies](#) and [International Affairs](#); the [MA program in Educational Equity and Cultural Diversity](#) and the [PhD program in Equity, Bilingualism and Bilingualism](#); and the undergraduate [Minor in Global Engineering](#). Educational programs such as those offered by the [Mortenson Center for Global Engineering](#) and [Education Abroad](#) instill global awareness in students. In addition, the new [MOOC-based master’s degree in electrical engineering](#), designed as a series of stackable certificates, extends a CU Boulder education to the globe in an affordable fashion that addresses global need.

Slightly more than 8% of CU Boulder’s student body is international (see 1.A.2.). CU Boulder is committed to expanding its international education, a theme strongly developed in the [Academic Futures strategic initiative](#), which offered recommendations regarding internationalizing the campus. Recent nationwide declines in international student enrollments, however, have also been seen at CU Boulder, where the population of international students has declined from its high of 9.5% in 2016.

**3.B.5.** The [chancellor’s vision](#) for the university “to be a leader in addressing the humanitarian, social and technological challenges of the 21<sup>st</sup> century” and three strategic imperatives—to shape tomorrow’s leaders, be the top university for innovation and positively impact humanity—are drawn from CU Boulder’s mission as a major research institution committed to the discovery of new knowledge. The student experience is invested with this mandate. Some specific examples serve to illustrate how undergraduate and graduate student experience is intertwined in the university’s research and creative mission:

- *Research:* Undergraduates are directly involved in research projects through the [Undergraduate Research Opportunities Program](#) (UROP), which funds hundreds of undergraduate students each year to work with faculty mentors in every discipline through assistantships and individual grants.
- *Disciplinary knowledge:* Each department and college fosters research opportunities through which faculty and students connect to research within their field domain. To cite only two examples, the Ann and H.J. Smead Aerospace Engineering Sciences Department creates graduate and undergraduate research and industry connections for its students through the CU AeroSpace Ventures program, and the College of Media, Communication and Information supports research and entrepreneurial opportunities joining faculty and students through its [Media Enterprise Group](#).
- *Interdisciplinary knowledge:* CU Boulder is uniquely defined by its [12 research institutes](#), which bring faculty, students and postdoctoral fellows together in interdisciplinary groups around research areas such as climate change, renewable energy, aerospace and wellness. Although these institutes do not offer curricula (except for sponsoring certificates), they shape CU Boulder’s intellectual identity, powerfully focusing faculty and graduate students across

disciplines on the changing nature of knowledge. They also include research and professional opportunities for undergraduate students. For example, the Laboratory for Atmospheric and Space Physics (LASP) hires and trains undergraduate students to staff its [mission control center](#).

- *Artistic practice:* The creative arts programs on campus directly involve students in productions in the visual and performing arts that unite faculty and student creative work. For example, the [Colorado Shakespeare Festival](#), the only professional Shakespeare company in the United States that is hosted by a top research university, hires both undergraduate and graduate students as actors, interns, dramaturges and technical staff engaged in bringing scholarship and theatrical craft to life on the stage. Similarly, the [CU New Opera Workshop](#) of the [Eklund Opera Program](#) has CU student singers working with acclaimed opera composers on new operas on the way to professional world premieres.
- *Community engagement:* Discovery at CU Boulder extends beyond discrete knowledge production to a broader sense of knowledge production within the community. In many ways, this occurs on the disciplinary level, as students participate in artistic, social and human-centered research and creative work through their departments of study. It is also a specific focus of student participation in the outreach programs discussed in 1.D.3., for example, [CU Engage](#), which connects faculty and students to community-based learning and research.

Student involvement in research and creative work benefits not only their educational experience, but also the public good. The [Academic Futures strategic initiative](#) emphasizes [CU Boulder's mission as a research university as deeply connected to furthering our students' relationship to their world](#), and documents CU Boulder's dedication to public knowledge (see 1.D.1.). A CU Boulder education is defined by this spirit of contemporary public inquiry. It lives in the individual undergraduate and graduate curricula, but more broadly, we recognize this spirit of inquiry in our graduates' independence, their open-mindedness and their willingness to explore—a spirit fostered by the independence, open-mindedness and exploratory character of Colorado and the West.

### **3.C. The institution has the faculty and staff needed for effective, high-quality programs and student services.**

- 1. The institution has sufficient numbers and continuity of faculty members to carry out both the classroom and the non-classroom roles of faculty (including oversight of the curriculum and expectations for student performance; establishment of academic credentials for instructional staff; involvement in assessment of student learning).**
- 2. All instructors are appropriately qualified, including those in dual credit, contractual and consortial programs.**
- 3. All instructors are evaluated regularly and in accordance with established institutional policies and procedures.**
- 4. The institution has (documented) processes and resources for assuring that all instructors are current in their disciplines and adept in their teaching roles; these processes and resources support their professional development.**
- 5. Instructors are accessible for student inquiry.**
- 6. Staff members who provide student support services (e.g. tutoring, financial aid advising, academic advising and co-curricular activities) are appropriately qualified, trained and supported in their professional development.**

**3.C.1.** [As of fall 2018, CU Boulder had 2,528 instructional faculty](#), a 19% increase since 2010. This increase outpaces the [15% growth in the student body during the same period](#), demonstrating CU Boulder's commitment to improving the ratio of faculty who take on instructional and curricular supervision. Between 2011 and 2018, the student-faculty ratio fell from [19:1](#) to [18:1](#).

[Between 2010 and 2018](#), tenured and tenure-track (TTT) faculty increased from 1,143 to 1,271 (11%); full-time instructor-track faculty, who generally have multi-year contracts, from 316 to 432 (34%); and lecturers, who hold part-time contingent positions, from 666 to 825 (24%). It is noteworthy that CU Boulder saw a relatively small shift away from TTT faculty toward instructor-track faculty or lecturers during this period. TTT faculty made up 54% of the total in 2010 and 50% in 2018; instructor-track faculty, 15% of the total in 2010 and 17% in 2018; and lecturers, 31% of the total in 2010 and 33% in 2018. Research faculty, who are not in TTT positions but assist in student research supervision (see 3.B.5.), increased in this period from 1,773 to 2,211 (25% increase).

Faculty oversight over the curriculum is established by the [Laws of the Board of Regents](#). Faculty also have oversight over the peer evaluation intrinsic to faculty hiring, constituting the search committees for tenured, tenure-track and full-time instructor-track positions. Lecturer hiring is the purview of faculty serving as chairs, associate chairs or directors of programs; lecturers hired to teach courses in Continuing Education are subject to approval by the relevant department. Faculty and their departments/programs are the locus of assessment of student learning.

**3.C.2.** Tenured and tenure-track faculty have [the terminal degree in the field](#) and have met the requirements for the position as defined by their department and college/school. [Instructor-track faculty and lecturers](#) have an advanced degree in an appropriate discipline. These qualifications apply to all faculty, including those who teach in other locations (see 3.A.3.). Exceptions are made only when a faculty member's career expertise suits them for teaching craft-driven or professional courses such as in musical performance or business practice. Faculty numbers as of July 2019 included only six TTT faculty and only seven instructor-track faculty whose highest degree was a bachelor's degree. Continuing Education, which administers dual credit courses, adheres to the Higher Learning Commission policy on required qualifications for high school teachers offering college-level courses at a high school.

In collaboration with the schools and colleges, the Office of Faculty Affairs oversees the process to confirm that [TTT and instructor-track faculty have the credentials requisite to their positions](#) before they are hired. The department and school/college oversee faculty credentials for hiring lecturers. [Appointments and reappointments to the graduate faculty](#) are for a specified term and are reviewed by the Graduate School.

**3.C.3.** [Regent Policy 11.B.](#) requires that each primary unit develop explicit statements for criteria for assessing annual merit. [TTT and instructor-track faculty are reviewed annually](#) on their contributions to the teaching, research/creative work, and service missions of the primary unit and the university. Effort in each of these areas is weighted according to the workload assignment for the individual faculty member. Lecturers are evaluated by the hiring department.

Tenure-track faculty undergo comprehensive (pretenure) review and promotion and tenure review on a calendar established at the time of hiring; these reviews, along with reviews for promotion post-tenure, are conducted according to [procedures established by Board of Regents and University of Colorado policy](#). [University of Colorado policy](#) requires that each primary unit have a document that describes the criteria and procedures for reappointment, tenure and promotion in that unit. Tenured faculty are

reviewed every five years in a [post-tenure review process](#) established by [University of Colorado policy](#) and administered by the colleges/schools according to [CU Boulder guidelines](#). Instructor-track faculty are reviewed for reappointment in the last year of their contract according to criteria established in that contract. Procedures for instructor review are established by each college/school in conformance with [common features established by CU Boulder](#).

**3.C.4.** CU Boulder has in place numerous policies, reviews and resources that help ensure that faculty stay current in their disciplines and adept in their teaching roles. CU Boulder policy on the [Professional Rights and Duties of Faculty Members](#) requires faculty to keep abreast of developments in the subject matter being taught, cooperate in university-mandated student evaluations of teaching and participate in peer evaluation of teaching in accordance with academic unit policy.

According to [University of Colorado policy](#), assessments of faculty members' professional competence depend upon peer review. Faculty ability and currency in these regards is assessed, first of all, at the time of hiring. Annual performance review, as well as the comprehensive review, reappointment, tenure, promotion and post-tenure review processes (3.C.3.), assess faculty on the quality of their research, scholarship, creative work and teaching, and include extensive written feedback from all relevant levels of review. Annual merit review includes feedback from a faculty review committee and/or the chair of the primary unit. Instructor reappointment includes feedback from the primary unit review committee, the entire primary unit (usually represented by the chair/director), and the dean. Review processes specific to TTT faculty (comprehensive review, tenure, promotion) also include feedback from a dean-level committee, a provost-level committee and the provost. According to [University of Colorado policy](#), [multiple measures of teaching](#), including but not limited to student course evaluations, are included as part of all of these assessments as relevant to a faculty member's assigned workload.

Tenured faculty maintain a [professional plan](#) that is reviewed during post-tenure review. Tenured faculty members who receive an annual merit evaluation of "below expectations" must undertake a [Performance Improvement Agreement](#), and faculty members who receive two such evaluations in a five-year period or fail to meet the goals of a Performance Improvement Agreement undergo [Extensive Review](#).

[University of Colorado policy](#) requires that primary units provide untenured tenure-track faculty with mentoring opportunities and encourages that such opportunities be extended to tenured faculty and other faculty. [A number of mentoring and professional development resources](#) are offered centrally. Support for teaching innovation and improvement is provided as described in 3.D.4.

**3.C.5.** CU Boulder policy on the [Professional Rights and Duties of Faculty Members](#) requires faculty to keep posted office hours. Individual colleges and schools require all faculty/instructors to list those hours in their syllabi and post them on department/program websites. All instructors are provided with office space to meet with students. Canvas, CU Boulder's learning management system, provides both traditional and online students additional access to their instructors.

**3.C.6.** Position descriptions for staff members providing student support services, including duties, expectations and qualifications for the position, are [advertised online](#) and are screened for minimum qualifications by Human Resources (HR). The hiring and onboarding processes are further described in 5.A.4., as are the training and professional development opportunities available to all staff at CU Boulder. Staff performance is reviewed annually as described in 5.A.1.



Staff in student support areas are required to have the education, experience and, if applicable, professional licensure appropriate to their positions. For example, many staff members in [Health and Wellness Services](#) programs, including [Medical Services](#) and [Counseling and Psychiatric Services](#), are required to be licensed. The Division of Student Affairs and its offices provide [general and subject-specific trainings and professional development opportunities for student support staff](#). Financial aid counselors go through a wide variety of internal and external trainings, and they receive credentials by taking courses offered through the National Association of Financial Aid Administrators.

Professional staff members who have advising responsibility hold at least a bachelor's degree (usually a master's). These include academic advisors, who hold degrees in a relevant discipline; career advisors, who have relevant career experience (for example, business, law or health professions); and academic coaches, who are embedded within advising programs. Hiring for these positions is conducted within the relevant unit—academic departments, [Career Services](#), [Continuing Education](#), etc. A few advisors also have faculty roles, but faculty mentoring is distinct from academic advising. Advising staff are supported by their units for professional development opportunities at the regional and national levels, and training for newly hired advising staff is managed at the campus level by the [Office of Undergraduate Education](#). The [Campus Advising Executive Council](#) and the [CU Boulder Advising Council](#) facilitate cross-campus coordination and support professional development events and awards for outstanding advising.

Students who work for or with student support areas—such as [HealthBuffs](#) peer coaches, [Career Services student staff](#) or [student employees of Campus Recreation](#)—may be required to have experience or certifications as a condition of employment. Training and development opportunities are overseen by the relevant supervisor, a professional staff member. [Resident Advisors](#) in residence halls must meet minimum academic qualifications, go through an interview process to be selected and attend required trainings. Undergraduate and graduate students who work as tutors or learning assistants are supervised and trained through the program for which they work. Examples include the [Academic Success and Achievement Program](#), the [Writing Center](#), the [Learning Assistant Program](#) and the [Mathematics Academic Resource Center](#). Students who work as peer advisors within some advising units are trained by advising staff.

The [Assessment and Planning Office within the Division of Student Affairs](#) offers training to staff within the division on how to assess the effectiveness of programs within their units (see 4.B.2.).

### **3.D. The institution provides support for student learning and effective teaching.**

- 1. The institution provides student support services suited to the needs of its student populations.**
- 2. The institution provides for learning support and preparatory instruction to address the academic needs of its students. It has a process for directing entering students to courses and programs for which the students are adequately prepared.**
- 3. The institution provides academic advising suited to its programs and the needs of its students.**
- 4. The institution provides to students and instructors the infrastructure and resources necessary to support effective teaching and learning (technological infrastructure, scientific laboratories,**

libraries, performance spaces, clinical practice sites, museum collections, as appropriate to the institution's offerings).

**5. The institution provides to students guidance in the effective use of research and information resources.**

**3.D.1.** Student support services are provided primarily by the Division of Student Affairs. Incoming students are supported in their transition to campus through [New Student and Family Programs](#). All students are provided with a range of [health and wellness](#) services that include medical services, counseling and psychiatric services, an online mental health program, an office of victim assistance and a recovery center. All students have access to [career counseling](#), help with [off-campus housing](#) and [low-cost legal assistance](#).

Other services focus on particular student groups, for example, the [Office of Disability Services](#) and [Veteran and Military Affairs](#). [Student Support and Case Management](#) (SSCM) helps students manage academic and personal problems, and faculty and staff can refer students to SSCM if they see signs of student distress. Prospective and current international students receive services from [International Student and Scholars Services](#). In addition to the student support services outlined above, students enrolled in online courses and programs through Continuing Education have access to specialized distance-based support services in [career exploration](#) and [composition and writing](#), along with [academic advising](#).

The Division of Student Affairs provides undergraduate students with information on these various programs starting with the mandatory CU online orientation, the [Online Experience](#), and continuing with incoming email campaigns and print brochures for incoming students and their families. [New Student Welcome Days](#) offer new students the opportunity to visit campus before the fall semester. [Fall Welcome](#) introduces support programs to students when they arrive on campus; [transfer and commuter students have orientation events](#) tailored to their needs during Fall Welcome. A special edition of [CU Boulder Today](#) provides information on support programs for undergraduate students over the first six weeks of the academic year.

The Graduate School sends incoming graduate students a series of newsletters the summer before matriculation with information they need before arriving on campus. The [Safety & Support newsletter](#) has information on counseling and psychological services, victim assistance, mandatory training and the like, and the [Campus Business newsletter](#) provides information on [health insurance and immunization requirements](#). Representatives from support programs are present at the Graduate Student Orientation. The graduate student edition of [CU Boulder Today](#) regularly highlights these programs, and the [Graduate School web site lists resources](#).

Results from the 2016 Senior Survey show that seniors are aware of most of the student support services the university provides, and the majority rate their satisfaction with the services as medium or high. The [Unified Student Experience \(USE\) project](#) to design the new Buff Portal will unify the online student experience, including access to information about student services, and is expected to improve student access to and use of support services.

**3.D.2.** The [CU LEAD Alliance](#), a group of learning communities spanning the schools and colleges that provide scholarship opportunities, summer bridge programs, academic workshops, career exploration, tutoring services, peer mentoring, research opportunities and other programs, exists to ensure that all CU undergraduate students succeed (see 3.B.4.). [Tutoring services](#) are found across campus and through

CU LEAD Alliance programs, and the [Academic Success and Achievement Program](#) provides free peer tutoring for all first-year students. The [Writing Center](#) serves all undergraduate and graduate students, and the Anderson Language and Technology Center (ALTEC) supports the language learning community. Many academic departments provide free tutoring or help rooms for students in specific disciplines. Academic support for international students, including free tutoring in English as a second language and U.S. academic culture, is provided by the [International Student Academic Success Program](#), which also provides resources for faculty who teach international students. The Graduate School provides [academic support to graduate students](#) through its peer mentoring program, graduate writing program and professional development workshops, among other services. Starting in fall 2019, the Office of Undergraduate Education is beginning an initiative to coordinate tutoring services to share best practices in training tutors.

First-year students interested in exploring academic options available at CU Boulder, along with incoming first-year students who were not admitted directly to one of the limited-enrollment programs (e.g., engineering, business or environmental design), are admitted to the new [Program in Exploratory Studies](#) (PES), which is home to 25% of new first-year students. Students work with academic advisors and coaches to explore their academic options or to pursue admission to one of the more competitive academic programs. The Division of Continuing Education provides [advising support to nondegree students](#) who have enrolled in CU Boulder courses through the [ACCESS program](#), either for personal/professional development or to explore applying for admission to degree programs.

[Placement assessments](#) in math, chemistry and languages direct incoming students to appropriate courses, and [transfer credit evaluation](#) (see 4.A.2. and 4.A.3.) assesses equivalency of prior learning so that students can enroll in appropriate course levels.

CU Boulder is in the second year of a two-year pilot program using predictive analytics to identify high-priority students (previously referred to as at-risk students) to target interventions to those students. The first phase focused on students in CEAS and PES, and the second phase will expand to include examples from each school/college that is interested in trying predictive analytics to assess the impact of their programs for undergraduate students.. If successful and provided campus funding, this program will be expanded to all undergraduate students in fall 2020. The pilot is also testing the ability of predictive analytics to assess the impact or retention “lift” of individual student success programs.

**3.D.3.** Advising programs and services for undergraduate students are primarily housed in colleges and schools; exceptions include the [University Exploration & Advising Center](#), which serves students in PES who have not yet affiliated with a college/school, and [advising services in Continuing Education](#). Students are typically assigned to an advisor based on major, and advisors work closely with academic departments to remain abreast of curricular changes. The Office of the Registrar works closely with academic units on annual updates to curricular requirements that are mapped to degree audits and the catalog, two primary resources used by students and advisors that create transparency in what is expected for degree progress.

Two of CU Boulder’s strategic initiatives, [Academic Futures](#) and [Foundations of Excellence](#) (see 1.A.3.), identified unintended inefficiencies, inequities and barriers for students that result from CU Boulder’s decentralized advising model and recommended that additional coordination is needed. Efforts to centralize aspects of the advising model are underway, coordinated by the Office of Undergraduate Education. For example, each advising program is adopting a [common core set of four student learning outcomes](#) for advising, in which students (1) experience a sense of psychosocial belonging; (2) develop a

growth mindset; (3) engage in optimizing their degree planning process; and (4) engage in a process of career/life planning. These learning outcomes will give more specific and comparable grounds to all advising programs for assessment of advising, which to this point has primarily been in the form of student satisfaction surveys. Other reforms recommended by the Foundations of Excellence strategic initiative including reducing advisor caseloads and requiring advising in each of the first four semesters. Furthering the committee's recommended advising structure and advisor/student ratio, [a project to network first-year advisors](#) in colleges, schools and programs together under a common structure and to add a significant number of new advising lines has been funded through the Financial Futures strategic initiative.

Academic advising for graduate students is provided by the individual degree programs and is usually conducted by a unit's director of graduate studies, a designated graduate advising committee, and/or the student's thesis/dissertation director. The Graduate School provides [resources on effective mentorship](#) to both faculty and graduate students. Graduate advising is assessed through the campus program review (ARPAC) process, discussed in 3.A.1. and 3.A.2.

**3.D.4.** The campus infrastructure and resources necessary to support effective teaching and learning include a Center for Teaching and Learning along with research facilities, libraries, collections, and performance and studio spaces devoted to graduate and undergraduate education.

Campus-wide support for effective teaching has historically been centered in the Faculty Teaching Excellence Program (FTEP) and the Graduate Teacher Program (GTP), along with, for the relevant disciplines, the [Center for STEM Learning \(CSL\)](#) and the [Arts and Sciences Support of Education Through Technology \(ASSETT\)](#) program. A review of these four programs by the ARPAC (program review) committee (see 3.A.1. and 3.A.2.)—following on and reinforced by the recommendations of a provost-level [Teaching and Learning-Center Committee](#) as well as of the [Foundations of Excellence](#) and [Academic Futures](#) strategic initiatives—resulted in the former FTEP and GTEP being united under the banner of the new [Center for Teaching and Learning \(CTL\)](#), whose founding director was appointed in July 2019. CTL will organize teaching development opportunities for all instructional faculty and graduate students on campus, and has been tasked by the provost with building formal and informal alliances among other groups on campus that support teaching innovation and improvement. These include not only CSL and ASSETT but also the [Discipline Based Education Research](#) seminar series and the [Learning Assistant Program](#), among others.

The physical and research-collection infrastructure for teaching and learning is reviewed through ARPAC in the same process used for degree programs (see 3.A.1. and 3.A.2.), with recommendations then made to the university for improvement. Units reviewed include those that support teaching and learning even if they do not offer degree programs of their own, such as research institutes. The ARPAC process ensures that teaching and learning infrastructure—including the University Libraries; the Museum of Natural History; the CU Art Museum; the Sommers-Bausch Observatory; performance and studio spaces in the College of Music and the Departments of Art and Art History and Theatre and Dance; lab spaces for the degree programs and research institutes; instructional spaces such as the Anderson Language and Technology Center; and spaces for clinical programs in the School of Law, School of Education, and departments of Psychology (for clinical psychology) and Speech, Language and Hearing Sciences—is reviewed and assessed for how it is meeting the needs of both undergraduate and graduate teaching and learning. Examples of specific infrastructural improvements recently made as a result of ARPAC recommendations to the deans and provost include new, centralized [animal facilities](#) and increased coordination of [research computing](#). Programs that participate in [specialized accreditation](#) also undergo

review of teaching and learning infrastructure according to the processes of the accrediting organization.

Teaching and learning infrastructure related to the needs of students with disabilities is provided by the [Office of Disability Services](#). The need for a central accommodated testing center has become increasingly apparent across a number of reviews of academic and student support programs, and this center will open in the new Center for Academic Success and Engagement (CASE) building in AY 2020–21. Campus information technology related to teaching and learning is centered in the [Office of Information Technology](#), which is reviewed and improved through the strategic planning process described in 5.A.1.

**3.D.5.** The University Libraries provide widely used instruction in the effective use of research and information sources (see 2.E.2.), as well as [research guides](#) in specific disciplines and [research assistance](#) both in person and via online chat. Individual degree programs require courses emphasizing research specific to the discipline(s) involved in that program. Further development of research and information-use skills is afforded through the [Undergraduate Research Opportunities Program](#), the [Biological Sciences Initiative](#) in undergraduate research and the [Discovery Learning](#) apprenticeship program in engineering. Graduate students are trained in the effective use of research and information sources as an integral part of their completion of degree requirements.

### **3.E. The institution fulfills the claims it makes for an enriched educational environment.**

- 1. Co-curricular programs are suited to the institution’s mission and contribute to the educational experience of its students.**
- 2. The institution demonstrates any claims it makes about contributions to its students’ educational experience by virtue of aspects of its mission, such as research, community engagement, service learning, religious or spiritual purpose and economic development.**

**3.E.1.** Broadly defined, CU Boulder has three forms of co-curricular programs: academically organized programs, student-led programs and independent groups. Each category of program organically and significantly enhances the students’ education and relationship to the community.

Academically organized student co-curricular programs exist both on the departmental level and within Academic Affairs. Departmental programs are numerous and are largely thematically focused, such as the English department’s [18<sup>th</sup>- and 19<sup>th</sup>-Century Studies Network](#) or the Department of Communication’s [Center for Communication and Democratic Engagement](#). Offices within Academic Affairs house a number of programs. In addition to programs sponsored by ODECE and the Office of Undergraduate Education (see 3.B.4.), the [Division of Student Affairs organizes a number of co-curricular activities around cultural diversity and student support](#).

The funding model for and the sheer number of student-led programs set CU Boulder apart. The [CU Student Government](#) (CUSG) oversees student-led co-curricular activities through its own budget, which allocates approximately [\\$24 million per year derived from student fees](#) with the guidance of the [Center for Student Involvement](#). The [500 separate programs](#) under CUSG span everything from A Show of Hands, a club for ASL and Deaf Culture, to recreational sports to the Water Resources Book Club. One example of the ways these clubs operate as an organic part of the institution is CU International, a club that brings together international students in a community through a weekly coffee hour, international

food celebrations and other student-imagined and -implemented events. Because it is closely connected with the offices of [Education Abroad](#) and [International Student and Scholar Services](#), CU International enables information and ideas to flow both formally and informally between the students and the institution. In this way, CU Boulder is able to promote a free, student-led experience that is not separate from its institutional mission.

Finally, independent student organizations serve a very important co-curricular role at CU Boulder. One recent example is [BuffsUnited](#), which developed during 2017, as campuses across the U.S. were enmeshed in civil disobedience surrounding a speaking tour by Milo Yiannopoulos. The [CU College Republicans](#), one of the student-led groups mentioned above, invited Yiannopoulos to campus. BuffsUnited sprang up independently to offer an alternative event for different voices. The two events were held simultaneously and peacefully on the CU Boulder campus, demonstrating clearly CU Boulder's commitments to inclusivity and freedom of expression.

**3.E.2.** CU Boulder demonstrates its claims to contributing positively to its students' educational experience in many ways, especially through its excellent faculty, who own CU Boulder's curriculum and program oversight. Other indices include:

- Data gathered and analyzed by the [Office of Data Analytics](#), which makes available to both the university and the public analytic tools for CU Boulder's understanding of itself—for example, undergraduate retention and graduation metrics, and faculty, staff and student survey data (see 4.C.2.)—and which is developing [Analytics360](#), an integrated platform that promises to provide extensive ability to cross-reference these data sets intelligently.
- External ranking indexes such as *U.S. News & World Report's* [college](#) and [graduate program](#) rankings, and the [Academic Ranking of World Universities](#) (the Shanghai Ranking).
- Reports maintained by the [Office of Student Conduct and Conflict Resolution](#), which oversees the university's honor code along with restorative justice and conflict resolution programs (see 2.E.1.).
- Analysis and reporting conducted by the [Research & Innovation Office](#), which measures and monitors research development, contracts and grants, the economic impact of CU Boulder research, and compliance in research matters.
- The work of the [Office for Outreach and Engagement](#), whose [Civic Action Plan](#) and [list of campus programs](#) register the university's commitment to civic action through public discussion and civic engagement.
- The work of the [Academic Review and Planning Advisory Committee](#) (ARPAC), whose [reviews and assessments of the university's academic and academic-support units](#) are publicly available.

These multiple measures of student educational experience and societal impact provide the university with strong evidence of its performance in research, community engagement, service learning and economic development.

**3. Summary.** As one of only 34 U.S. public universities in the Association of American Universities (AAU), CU Boulder is dedicated to realizing the positive impacts of new knowledge. CU Boulder's core mission is to educate students and engage in cutting-edge scholarship and creative work, research and discovery. The success with which we carry out this mission determines our ability to accomplish our strategic imperatives to shape tomorrow's leaders, be the top university for innovation and positively impact humanity. We take pride in helping our students, faculty, staff and partners turn new ideas into productive outcomes that change lives. We also take pride in educating undergraduate students to



understand the breadth and diversity of human knowledge and human character. Both undergraduate and graduate students gain the knowledge and skills to contribute to their fields of academic and creative endeavor.

The faculty, staff, students and administration of CU Boulder recently reaffirmed the university's focus on teaching and learning through the [Academic Futures strategic initiative](#) (see 1.A.3.), which reiterates CU Boulder's commitment to the values of inclusive excellence, a student-centered campus and teaching excellence. Specific projects that are now being implemented because of Academic Futures, such as a new Center for Teaching and Learning (see 3.D.4., 4.B.1. and 4.B.3.), demonstrate that this commitment generates concrete action.

To accomplish these educational goals, CU Boulder hires, evaluates and supports a growing staff of qualified teaching and research faculty and student-services professionals. The university is committed to a program review process that addresses not only academic units but also co-curricular and infrastructural supports to student education. These rigorous and thorough processes lead to concerted and continuous improvement.

## Criterion 4. Teaching and Learning: Evaluation and Improvement

The institution demonstrates responsibility for the quality of its educational programs, learning environments and support services, and it evaluates their effectiveness for student learning through processes designed to promote continuous improvement.

### 4.A . The institution demonstrates responsibility for the quality of its educational programs.

1. The institution maintains a practice of regular program reviews.
2. The institution evaluates all the credit that it transcripts, including what it awards for experiential learning or other forms of prior learning, or relies on the evaluation of responsible third parties.
3. The institution has policies that assure the quality of the credit it accepts in transfer.
4. The institution maintains and exercises authority over the prerequisites for courses, rigor of courses, expectations for student learning, access to learning resources, and faculty qualifications for all its programs, including dual credit programs. It assures that its dual credit courses or programs for high school students are equivalent in learning outcomes and levels of achievement to its higher education curriculum.
5. The institution maintains specialized accreditation for its programs as appropriate to its educational purposes.
6. The institution evaluates the success of its graduates. The institution assures that the degree or certificate programs it represents as preparation for advanced study or employment accomplish these purposes. For all programs, the institution looks to indicators it deems appropriate to its mission, such as employment rates, admission rates to advanced degree programs, and participation rates in fellowships, internships and special programs (e.g., Peace Corps and Americorps).

**4.A.1.** CU Boulder rigorously reviews its academic programs on a regular schedule through the Academic Review and Planning Advisory Committee (ARPAC), which reports to the provost (see 3.A.1. and 3.A.2.). The program review process ensures that the degrees, minors, certificates and courses offered by academic programs and by other programs that sponsor academic credentials (such as institutes that sponsor certificates) meet CU Boulder standards and meet the needs of our students.

**4.A.2.** CU Boulder evaluates all the credit that it transcripts. [The criteria and processes for evaluating transfer credit are published in the university catalog](#) and on the [transfer student admissions information page](#). Essentially, transfer credit evaluation is a two-step process. (1) The Office of Admissions performs an initial evaluation of transfer credit after an applicant has been admitted. (2) Each college or school, in accordance with its policies, determines whether transferable credits are or are not applicable to graduation requirements for a particular college, school or major (see 4.A.3.). Colleges and schools also establish their own guidelines as to the maximum number of semester credit hours that may transfer; the minimum number of semester credit hours that must be completed on the Boulder campus to receive a degree; the minimum number of semester credit hours that must be completed as a degree student in residence on the Boulder campus to receive an undergraduate degree; the maximum number of semester credit hours earned through correspondence or in a similar format that may apply to degree or major requirements; and the content and the age (maximum: 10 years) of

credit hours that may apply to degree or major requirements. Coursework completed at other campuses in the University of Colorado System is treated as transfer credit, according to University of Colorado System policy ([APS 8005](#)).

**4.A.3.** As outlined in the [CU Boulder policy on transfer credit](#), coursework of comparable content and scope to the CU Boulder undergraduate curriculum will generally be transferred if it was completed at colleges or universities accredited by a regional accrediting body recognized by the Council for Higher Education Accreditation (CHEA). For international colleges or universities, the international equivalent of regional accreditation or Ministry of Education recognition will be considered. If coursework was completed at a school not regionally accredited, the student may request that coursework be considered for transfer. CU Boulder uses the factors recommended by the American Association of Collegiate Registrars and Admissions Officers when making its decision, including the educational quality of the sending institution, the comparability of credit to be transferred, applicability of the credit in relation to the programs offered at CU Boulder, and additional documentation that students may be required to provide. As described in 4.A.2., however, acceptance of transfer credit does not mean those courses will be applied to the degree requirements of a particular college, school or major. Colleges, schools and departments make these decisions by consulting with faculty with expertise in the relevant discipline or area. Students may appeal decisions on the transferability of coursework as specified in the policy on transfer credit.

Courses in which the grade earned was below a C– (1.70) are not accepted for transfer credit. Other course credits not accepted for transfer credit include:

- Courses identified as remedial/developmental
- Vocational-technical courses offered at two-year and proprietary institutions
- Courses in religion that constitute specialized religious training or are doctrinal in nature
- Credits earned for work experience or through a cooperative education program
- Credits earned through outdoor leadership education
- Credits earned through physical education activity
- Credits identified as college orientation

The Colorado Department of Higher Education (CDHE) has developed a [Guaranteed Transfer \(GT\) Pathways General Education Curriculum](#) for courses that will apply to most bachelor's degrees at every public Colorado college and university. CU Boulder participates in the GT Pathways program with a [specific list of courses](#) that are regularly reviewed for reapproval by the CDHE. The GT Pathways courses do not apply to [some degrees at CU Boulder](#).

In 2018, the CDHE instituted a [policy on prior learning assessment](#) to implement new state statutes. CU Boulder conforms to this policy by allowing students to obtain credit for CU Boulder GT Pathways courses through [examination \(AP, IB, CLEP, DANTES Subject Standardized Test or challenge exam\)](#). The same CDHE policy requires that military and veteran students be awarded GT Pathways credit for designated military schooling, including courses and occupations, and for qualifying scores on Defense Language Proficiency tests. CU Boulder has developed [a policy and guidelines for evaluating military credit](#) and applying transferable credit toward either general education requirements or elective credit. The applicability of both GT Pathways and military transfer credits to specific degree or major requirements is subject to the determination of the college or school and department, as described above.

College-level work taken during high school is evaluated in accordance with general guidelines for transfer credit at CU Boulder. Transfer credits for graduate degree programs are accepted by CU Boulder only after approval by the department/program and under the special conditions outlined in the [rules of the Graduate School](#).

In February 2019, a committee appointed by the provost to examine [policies and practices regarding transfer students](#) recommended that CU Boulder “create processes for faster early analysis of transfer credit for prospective, incoming and current transfer students, and for faster mapping of transfer credit onto CU Boulder college/school and major requirements.” This committee’s work was the first stage of a concerted effort to improve CU Boulder’s preparation, recruitment and advising of students who are interested in transferring to the university. [A number of projects in this regard](#) are being planned and implemented through the Financial Futures strategic initiative (see 1.A.3.). For example, additional pretransfer advisors are being hired to give students a better idea, before they enroll at CU Boulder, of how many of their credits will transfer.

**4.A.4.** In accordance with the Laws of the University of Colorado Board of Regents, CU Boulder faculty maintain authority over the curriculum, including all prerequisites for courses (see 3.C.1.). [Regent Policy 4](#) designates the dean of each college or school as responsible for academic and administrative matters, including curriculum. The ultimate authority over academic matters at CU Boulder is the provost, to whom the deans of the colleges and schools report. All of these levels of governance maintain academic rigor and set expectations for student learning. The quality of the education CU Boulder gives its students is ultimately assessed and confirmed on a regular basis by the process of program review (see 3.A.1., 3.A.2. and 4.A.1.), which also engages all of these levels of governance. Program review is based in and overseen by faculty assessment. A faculty committee, the Academic Review and Planning Advisory Committee (ARPAC), assesses a self-study provided by the faculty of a unit, an internal review by campus faculty outside the unit, and an external review by disciplinary experts at peer institutions. ARPAC makes recommendations to the provost for action on the part of the department and its college or school; those actions are then reported back to and assessed by ARPAC in subsequent years. This iterative process of self-improvement ensures that academic programs maintain a consistently high quality that meets the standards for academic rigor and effectiveness appropriate to an institution of CU Boulder’s mission and status.

Specific processes for course review, assessment of access to learning resources, and review of faculty credentials assist in maintaining academic rigor and effectiveness. The approval and review process for new and existing courses, academic programs, and other academic credentials is described in 3.A.1. and 3.A.2., and the approval and review process for CU Boulder’s two dual credit courses is discussed in 3.A.3. Access to and quality of learning resources are discussed in 3.B.5., 3.D.1., 3.D.2. and 3.D.4. The qualifications of and review processes for faculty, including instructors of dual credit courses, are discussed in 3.C.2., 3.C.3. and 3.C.4.

**4.A.5.** A number of [academic programs at CU Boulder maintain specialized accreditation](#). All specialized accreditations are up to date with no adverse actions. In 2018, the School of Education voluntarily declined to renew the accreditation of its teaching licensure program by the Council for the Accreditation of Educator Preparation (CAEP), the successor to the School of Education’s former accrediting agency, the National Council for Accreditation of Teacher Education (NCATE). The School of Education’s teaching licensure programs are [Approved Educator Preparation Programs](#) by the Colorado Department of Higher Education, as is the clinical audiology program in the Department of Speech, Language and Hearing Sciences.

**4.A.6.** In tracking and evaluating the success of graduates, CU Boulder uses indicators appropriate to its statutory mission as a flagship research university engaged in graduate education; its mission as a University of Colorado campus to meet the educational and workforce needs of Colorado and its residents; and its own strategic imperatives to shape tomorrow's leaders and positively impact humanity (see 1.A.1.). These indicators include data related to graduates' employment, satisfaction with their education, placement in graduate and professional schools, and engagement with improving the public good.

To better understand the postgraduation activities of CU Boulder undergraduate degree recipients, the Office of Data Analytics (ODA) has partnered with EMSI Labor Market Analytics to create alumni employment profiles for graduates from 1997 to the present. [Undergraduate alumni profiles](#) show salaries, job titles and employers and may be broken down by school, college or program, major, and also whether a student pursued graduate studies. [Graduate alumni profiles](#) show similar categories and offer similar categories for narrowing results. CU Boulder also tracks the first postgraduation destinations of all its degree recipients through the [Graduate Destinations Survey](#), administered six months after graduation. Results, which may be broken down by major and degree level (bachelor's, master's, doctoral) show in what industries/sectors recent graduates are employed, their geographical locations, their salaries, and where they are attending graduate school. A [2016 survey of alumni from all four University of Colorado campuses](#) garnered almost 11,000 responses from CU Boulder graduates and showed a very high rate of satisfaction (96%) with the education received at CU Boulder. Results broken down by year of graduation and by the ethnicity of respondents showed a satisfaction rate of 91% or higher for every group of alumni.

CU Boulder also tracks the success of its students in particular postgraduation programs and professional fields. As required by its accreditor, the American Bar Association, the law school tracks and publicizes [bar passage rates and employment outcomes](#) for its graduates. The Office of Top Scholarships tracks CU Boulder students' impressive achievements in becoming [winners or finalists for scholarships/fellowships](#) such as the Rhodes, Marshall, Truman and Fulbright, among others. The Peace Corps, which annually announces the colleges and universities producing the most Peace Corps volunteers, tracks [CU Boulder at No. 5 for total Peace Corps volunteers](#) since the organization was founded in 1961.

**4.B. The institution demonstrates a commitment to educational achievement and improvement through ongoing assessment of student learning.**

- 1. The institution has clearly stated goals for student learning and effective processes for assessment of student learning and achievement of learning goals.**
- 2. The institution assesses achievement of the learning outcomes that it claims for its curricular and co-curricular programs.**
- 3. The institution uses the information gained from assessment to improve student learning.**
- 4. The institution's processes and methodologies to assess student learning reflect good practice, including the substantial participation of faculty and other instructional staff members.**

**4.B.1.** CU Boulder has clearly stated [goals for student learning for all baccalaureate degrees](#) and is in the process of helping all academic programs articulate learning goals for all undergraduate degree programs. About one-third of undergraduate degree programs now state goals for student learning in the [catalog](#). Some programs, such as each of the programs in the College of Engineering and Applied

Science accredited by ABET, have articulated learning goals as part of specialized accreditation. Generally, but not always, these programs' learning goals are published in the catalog. For example, accreditation by the [National Association of Schools of Music](#) requires the College of Music to specify the purposes, content, and core competencies of each of its undergraduate degrees, but these student learning goals have not yet been included uniformly in the catalog. Other programs are in the process of articulating their goals for student learning, and others have not begun. The same spectrum of completion applies to the assessment of undergraduate student learning: many academic programs have a robust and effective assessment protocol in place, whereas others are beginning to do so and others have not begun.

Starting in AY 2017–18, CU Boulder began to commit the resources and design the processes necessary to make the articulation and assessment of student learning outcomes a university-wide norm rather than a practice that flourishes in some academic programs and not others. The following steps have been taken to date:

- In June 2018, the provost appointed a faculty member to a newly created university officer position, senior vice provost for academic planning and assessment, whose duties include coordinating an assessment network that will acculturate the university to the benefits and protocols of effective assessment.
- Starting in 2018, the Office of Institutional Research, in partnership with faculty involved in the [Discipline Based Educational Research](#) group, designed a “[major visualization](#)” data tool, which tracks how individual students and aggregates of students enter and leave academic degree programs. This tool tracks how students progress through the major and whether late entry into the major is likely to impede subsequent success. Deeper dives are possible that track the characteristics of students who enter and leave a major such as GPA, which courses they have taken, etc. This tool has been tested using data from two large degree programs and, rolling out in November 2019, will be made part of the data-analysis toolkit for departments assessing the effectiveness of their curriculum, both as part of program review and in followup or supplemental assessments.
- In 2018, the Graduate School and the Office of Undergraduate Education appointed an assessment specialist to help analyze the effectiveness of their programs and assess the need for proposed programs.
- In AY 2018–19, the senior vice provost for academic planning and assessment worked with the Academic Review Planning and Advisory Committee (ARPAC), the university's program review committee, to make the creation of student learning outcomes and an appropriate assessment process a mandatory part of program review.
- In early 2019, the Office of Data Analytics formed the ODA Assessment Team, consisting of an assistant director for campus assessment and two assessment analysts. The Assessment Team provides leadership and centralized support to CU Boulder in the assessment of student learning and program effectiveness. Through collaboration with campus partners, the team facilitates best practices that lead to data-informed decision-making to promote student success.
- In August 2019, the ODA Assessment Team launched the [ODA Assessment website](#), a centralized location where CU faculty and staff can access assessment resources such as information about assessment cycles and timelines, writing effective learning outcomes, direct and indirect methods of measurement, curriculum mapping, and guidelines and templates for assessment plans and reports.
- In AY 2019–20, following upon the recommendations of both the [Foundations of Excellence](#) and [Academic Futures](#) strategic initiatives, CU Boulder opened the [Center for Teaching and Learning](#)



[\(CTL\)](#), which unifies and coordinates a number of previously atomized programs for improving teaching and learning across campus (see 3.D.4.). The CTL will be the faculty-facing entity for educating teachers about how to assess student learning.

With this assessment infrastructure in place, CU Boulder now has the resources to help academic programs develop and assess meaningful student learning outcomes in a way that faculty can embrace, that can be tailored to the needs of individual programs, and that can be implemented on a campus-wide scale.

As mentioned above, one of the steps in acculturating assessment campus-wide is to implement the development and assessment of student learning outcomes through the program review process described in 3.A.1. and 3.A.2. This process begins with an academic program's writing a self-study. For several decades, the self-study guidelines have required that a program discuss its assessment procedures. Most programs in the past responded to this prompt in terms of the success of their students in completing their degrees, obtaining employment, gaining admission to graduate school, etc. Beginning in AY 2017–18, however, the self-study process became much more precise in terms of asking about assessment. Academic programs are now asked to describe their graduate and undergraduate degree programs, including (1) student learning outcomes and the process by which the faculty determine them (course level and program level), and (2) how the faculty and program assess whether these outcomes have been achieved. If the academic unit does not yet have student learning outcomes or an assessment protocol set up, it is asked to describe progress toward doing so. The ODA Assessment Team is now in place to help every program begin this project and develop an ongoing assessment plan.

[The complete cycle of program review](#) guarantees that all academic units will have learning outcomes and assessment protocols in place no later than 2024. With the assistance of the ODA Assessment Team and the other resources described above, however—and with many academic programs already leading the way—we hope that the full complement of academic units will have completed this project before 2024. Detailed course-level learning outcomes are one aim, but they are less crucial to us at this time than is curriculum mapping as a more holistic approach to determining how courses required within a degree program achieve one or more stated learning outcomes for the degree. Equally important, as discussed in 4.B.4., is that the faculty are the ones empowered to design the learning goals and assessment procedures for the curriculum they own and over which they have oversight.

The program review cycle also builds the scaffolding for keeping student learning outcomes and assessment plans up to date. Each academic program is reviewed every seven years. The ODA Assessment Team will provide annual assessment updates to academic units, ensuring evaluation mid-cycle. As the academic program begins the program review process anew, then, it will devise a revised assessment plan and reevaluate its student learning outcomes for its degrees.

As discussed in 3.B.2., the general education curricula pertaining to the colleges and schools at CU Boulder have all articulated student learning goals. In AY 2019–20, CU Boulder will begin the discussion of a common university curriculum and in the process will articulate the shared learning outcomes for which such a common general education curriculum would aim. Implementation of a campus-wide general education curriculum would then entail a campus-wide assessment program.

**4.B.2.** CU Boulder assesses the learning outcomes it has in place for both curricular and co-curricular programs. As mentioned above (4.B.1.), every academic program's learning outcomes and assessment of those learning outcomes are now part of CU Boulder's rigorous program review process, ARPAC, and

this aspect of program review was redesigned in AY 2017–18. Examples of the kinds of self-evaluation and improvement of assessment practices on the part of academic programs that have taken place or are in process since this redesign include:

- The academic programs in the College of Engineering and Applied Science (CEAS) were reviewed by ARPAC in 2018. Because almost all of CEAS’s programs are reviewed through the specialized accreditation process conducted by ABET, completed by CEAS most recently in 2017, the ARPAC review was an occasion for each program/department to reflect and report on what they had learned through the ABET process and on how they intended to revise both student learning goals and the assessment of those goals. The Department of Civil, Environmental and Architectural Engineering, for example, drew upon alumni surveys, student performance on the “Fundamentals of Engineering” exam and the input of faculty to [revise its Architectural Engineering undergraduate curriculum](#) to emphasize proficiency courses earlier in the curriculum and technical electives later.
- The Department of Geological Sciences is being reviewed by ARPAC in fall 2019. While geological sciences had program-level student learning outcomes in place for the knowledge and skills taught through its undergraduate degree, it did not have a formal assessment plan for student skills. In AY 2018–19, a departmental assessment committee worked to refine a curricular map of these skills and to design an assessment instrument to measure students’ competencies in observation, map and graph reading, data analysis, interpretation, synthesis, and research design. The department plans to administer this tool to undergraduate majors as they begin 2000-level courses and again before graduation.
- The academic programs in the social sciences are preparing their self-studies in fall 2019, in advance of fall 2020 program review. During the fall 2019 semester, the ODA Assessment Team will work with each of these programs to review their learning outcomes and assessment practices and provide necessary training and support as the program builds or revises its student learning assessment plan.

Other measures of student outcomes besides departmentally designed ones also apply to academic program review and other assessment processes. Every four years, CU Boulder assesses student satisfaction with their undergraduate degree programs by means of senior surveys. The results of these surveys are available in annually updated [unit profiles](#) and are one component both of ARPAC program review (3.A.1. and 3.A.2.) and of the [Academic Prioritization](#) assessment of academic program efficacy (3.A.1., 3.A.2. and 5.C.2.).

As described in 3.E.1., most co-curricular programs sponsored by Academic Affairs are housed within the Division of Student Affairs. The Student Affairs [Office of Assessment and Planning](#) was established in 2016 to support these programs in developing and implementing outcomes-based assessment practices, including the submission of unit-level assessment plans and reports. The programs follow an annual assessment cycle based on the academic year. The [most recent report](#) highlights the programs’ goals and assessment results; these in turn contributed to the division’s [2017–20 Strategic Plan](#). Student Affairs is also reviewed as part of Academic Affairs in the [ARPAC program review process](#) (3.A.1. and 3.A.2.).

Examples of assessment processes for other co-curricular programs include:

- Student organizations must declare their intended purposes at the time of registering for [recognition by the Center for Student Involvement](#), and must renew this registration annually.

- The [2018–20 Strategic Plan of the Athletics Department](#) describes not only goals for the department, the individual teams, and the success of student athletes, but also the methods and measures by which those goals are assessed.

**4.B.3.** CU Boulder has multiple venues in which it uses information gained from assessment to improve practices for teaching and learning.

- Foremost, and as discussed in 4.B.1., assessment measures are an element of academic program review and of strategic planning for both academic and co-curricular programs. These processes result in concrete action designed to improve student learning.
- In accordance with [University of Colorado policy](#), multiple measures of teaching are used as part of each faculty member’s annual evaluation as well as evaluations for reappointment, tenure and promotion (see 3.C.3.). One of these measures must be student evaluations of teaching. Currently, the instrument used for this purpose at CU Boulder is the [Faculty Course Questionnaire \(FCQ\)](#), which is also used at the Denver and Colorado Springs campuses. Recently, faculty governance at CU Boulder has raised concerns about possible bias in the FCQ and [called the faculty to action to move beyond the FCQ](#) in evaluating teaching; in addition, the [Academic Futures](#) strategic initiative recommended that CU Boulder undertake a comprehensive review of annual merit and reappointment, tenure, and promotion evaluation procedures to ensure that teaching excellence is appropriately evaluated and rewarded. As a pilot for the implementation of this Academic Futures recommendation, [the College of Engineering and Applied Science is working with the Academic Futures leads](#) to determine how to better identify and quantify teaching excellence as part of both annual merit review and promotion and tenure review. Another improvement initiative is the [Teaching Quality Framework Initiative](#), which has been working with selected academic units across the College of Arts and Sciences, the College of Engineering and Applied Science and the Leeds School of Business to develop multiple, evidence-based measures of teaching and learning that can help those departments improve student learning.
- The Center for STEM Learning sponsors a [Discipline Based Educational Research seminar series](#) to highlight recent research and tools in evaluating student learning and the effectiveness of teaching, courses and academic programs.
- The [Center for Assessment, Design, Research and Evaluation](#) in the School of Education collaborates with CU Boulder departments along with state agencies, districts, schools and other organizations to investigate the effects of programs and interventions on student learning and to improve upon assessment practices and design.
- A number of consultation and training services are available to help faculty improve their assessments of student learning and to take action to improve their teaching as a result. These services are available through the new [Center for Teaching and Learning](#) (previously the Faculty Teaching Excellence Program and the Graduate Teacher Program; see 4.B.1.) for [teaching faculty](#) and for [graduate student teachers](#); through the [Arts and Sciences Support of Education Through Technology](#) (ASSETT) program for faculty in the College of Arts and Sciences; and through [workshops](#) offered through the Center for STEM Learning. The Center for Teaching and Learning will serve as a hub and coordinator for all these services.

**4.B.4.** The University of Colorado adheres to principles of shared governance in which the faculty have the principal role in shaping and overseeing curriculum (see 2.C.4.). CU Boulder’s faculty thus also take the lead in establishing student learning goals for academic programs. CU Boulder professionals who are credentialed to develop student learning in co-curricular areas are similarly entrusted with establishing

learning goals in, for example, advising (see 3.C.6.). While CU Boulder is admittedly slow to have developed consistent, universitywide assessment processes, the deliberative nature of departmental and program curriculum development makes it important that the university proceed with only the deliberate form of speed. Establishing and assessing student learning outcomes simply cannot be a top-down decree—if it were, these would never be meaningful processes. It is for this reason that CU Boulder has elected to integrate the establishment of student learning outcomes and assessment procedures into academic program review as described in 4.B.1. The ARPAC program review process is not conducted by the administration. Rather, it is conducted by faculty, beginning with the faculty of each academic program and concluding with the recommendations of the faculty committee that is advisory to the provost. Using this long-standing, well-regarded, rigorous program review process means that the faculty will develop student learning outcomes and assessment procedures through the conversation and consensus that a self-study entails. Furthermore, it means that both student learning outcomes and assessment procedures will be regularly reexamined, even when a program has not undertaken a major curriculum revision.

At the same time, faculty need the support and assistance of professional staff in designing, testing and assessing how students learn. While these aspects of forming and evaluating curricula must emerge from the faculty, faculty cannot be expected to invent and administer student learning goals and assessment protocols out of whole cloth. With the professional staff and the technical expertise now or soon to be available through ODA and the Center for Teaching and Learning (see 4.B.1. and 4.B.3.), CU Boulder's academic programs and faculty will have the resources to undertake these commitments, and to use best practice while doing so. Similar resources recently put in place in the Division of Student Affairs ensure the same support and assistance for the evaluation of co-curricular programs (see 4.B.2.).

#### **4.C. The institution demonstrates a commitment to educational improvement through ongoing attention to retention, persistence, and completion rates in its degree and certificate programs.**

- 1. The institution has defined goals for student retention, persistence and completion that are ambitious but attainable and appropriate to its mission, student population and educational offerings.**
- 2. The institution collects and analyzes information on student retention, persistence and completion of its programs.**
- 3. The institution uses information on student retention, persistence and completion of programs to make improvements as warranted by the data.**
- 4. The institution's processes and methodologies for collecting and analyzing information on student retention, persistence and completion of programs reflect good practice. (Institutions are not required to use IPEDS definitions in their determination of persistence or completion rates. Institutions are encouraged to choose measures that are suitable to their student populations, but institutions are accountable for the validity of their measures.)**

**4.C.1.** One of the [strategic imperatives](#) through which CU Boulder articulates its mission (see 1.A.1.) is to recruit, retain and graduate students who have achieved the educational goals and who exemplify the values that are important to the university. In other words, the success of our students is not only a desired outcome for the university but also a moral imperative.

The chancellor has set, and the University of Colorado Board of Regents has approved, an ambitious but attainable set of [goals for undergraduate student retention and completion](#). CU Boulder reports annually to the Board of Regents on its progress in this arena. These goals use 2017 data as a baseline:

- 2017 six-year graduation rate (cohort entering as first-year students in 2011): 69%
- 2017 first-to-second-year retention rate (cohort entering as first-year students in 2016): 88%

The following goals have been set:

- 2023 six-year graduation rate (cohort entering as first-year students in 2017): 80%
- 2023 first-to-second-year retention rate (cohort entering as first-year students in 2022): 93%

Current data, which are from 2018, show how CU has progressed in one year toward those goals from the 2017 baseline:

- [2018 six-year graduation rate](#) (cohort entering as first-year students in 2012): 71%, a 2-point improvement from the 2017 baseline
- [2018 first-to-second-year retention rate](#) (cohort entering as first-year students in 2017): 88%, the same as the 2017 baseline

CU Boulder is pleased with the 2-point improvement in just one year of the six-year graduation rate, from 69% to 71%. In addition, the four-year graduation rate showed even more dramatic improvement. The four-year graduation rate for the class entering in 2014 was 50%, an all-time high and four percentage points above the previous year.

The first-to-second-year retention rate, which remained the same as the previous year, did not show the same positive movement; however, this retention rate was already an all-time high for CU Boulder and thus continues to represent real progress in the university's efforts to achieve an 80% six-year graduation rate. Colorado residents equaled the previous high of 90% first set in 2017, while non-residents equaled their all-time high of 85% for the third consecutive year. Racially/ethnically diverse students also set a new high, at 87%, and the two-year retention rate for first-year students entering in 2016 also set an all-time high in 2018, 81%. Together, these retention rates bode well for CU Boulder's being able to meet its [2023 graduation rate goals](#).

Furthermore, CU Boulder has initiated a number of significant changes to improve undergraduate student success. The recommendations of the [Academic Futures strategic initiative](#) and of the [Foundations of Excellence strategic initiative for first-year education](#) (see 1.A.3.) have led to the implementation of new projects to improve student success. A "CU 101" course to aid first-year students in developing college-level skills for success, already offered in the Leeds School of Business, is being piloted in the College of Engineering and Applied Science and the College of Arts and Sciences (see 3.B.2.). Advising is being restructured to provide advisors with more centralized guidance and to add staff, reducing advisor caseload (see 3.D.3.). And the university has established a new Center for Teaching and Learning to centralize, coordinate, and communicate methods of improving student learning (see 3.D.4., 4.B.1., 4.B.3. and 4.B.4.).

CU Boulder has not set specific goals for graduate student retention and completion. However, the university seeks to understand the factors that encourage or inhibit graduate student success and to make improvements (see 4.C.3.).

**4.C.2.** The CU Boulder Office of Data Analytics (ODA) posts [annually updated retention and completion rates](#) to the campus community and the public. This information is used by university constituents in analyses of unit performance conducted for academic program review (see 3.A.1., 3.A.2. and 4.A.1.); by

the CU Boulder Office of Undergraduate Education in planning initiatives such as the Foundations of Excellence strategic initiative; by the CU Boulder administration in reporting metrics on retention rates for various student populations to the Board of Regents; and by interested parties such as the Colorado Department of Higher Education, which measures retention and graduation rates statewide. Data for undergraduate retention and graduation rates may be [visualized using several different parameters](#), including, for example, information by entry cohort, school or college, and student characteristics. CU Boulder also collects and analyzes other information pertinent to factors contributing to undergraduate student success, including [retention and graduation rates](#) by student residence hall; retention and graduation rates for [students in residential academic programs](#); and results of [undergraduate surveys on social climate](#). These are used by the offices of Undergraduate Education and Student Affairs in planning academic and student life initiatives (see 4.C.3.).

Information on [graduation rates and time to degree for graduate students](#) and results of graduate surveys on [social climate](#) and [mentoring and research](#) is also available on the ODA website and is similarly used in analyses of unit performance conducted for academic program review and by the Graduate School in planning academic and student life initiatives (see 4.C.3.).

**4.C.3.** CU Boulder uses information on student retention, persistence and completion to make improvements through the regular program review and planning process (see 3.A.1. and 3.A.2.), which has recently been revised to emphasize the analysis of qualitative and quantitative evidence of student success. A [recent program review of the Department of Physics](#), for example, resulted in the recommendation that the department “examine the factors affecting student retention in the undergraduate major and determine what changes should be made.” Following upon that recommendation, and reflecting [earlier self-analysis of retention within the major](#), the department developed concrete steps for tracking and improving student retention a part of its [new strategic plan](#).

In addition, several of CU Boulder’s five strategic initiatives (see 1.A.3.) are using information about student success to propose and implement major changes in academic programs and student support services. Information on student retention, persistence and completion was an integral part of the Foundations of Excellence initiative, whose [“Improvement” committee made recommendations](#) on better ways to use assessment to understand student success at CU Boulder. Those recommendations are now being implemented as outlined in 4.B.3. The Foundations of Excellence [“Transitions” committee](#) used data on retention and graduation rates broken down by residence hall (see 4.C.2.) to make recommendations on changing the way student housing is assigned and how it corresponds with academic offerings; these recommendations were then taken up by a subsequent committee that fleshed out [detailed recommendations on such a restructuring](#), now being considered for implementation by university leadership. The IDEA Plan strategic initiative has used data on retention and persistence among diverse groups in [drafting many of its recommendations](#): for example, increasing numbers of staff in student support roles (see 3.D.1.).

The [IDEA Plan strategic initiative](#) also made use of data from the earlier undergraduate and graduate social climate surveys and follow-up [focus-group discussions on the African American student experience](#) at CU Boulder. One concrete action already completed as a result of that survey, for example, was the creation of [lounge/collaboration spaces in the University Memorial Center for veterans and for use by recognized student organizations](#). Surveys of students who left the university, conducted by the Office of Data Analytics in [2016](#) and [2018](#), showed that nonreturning students listed finances and the lack of a sense of belonging, along with personal issues, as primary reasons for not returning to CU. When accompanied by information obtained from these and other surveys, retention



and graduation data become not just statistical goals but also a way to understand students' priorities, values, successes and struggles as individuals. In response to these indicators of student well-being, the chancellor has made mental health and wellness services a priority. The FY 2019–20 budget includes [\\$1.5 million for the chancellor's Health and Wellness initiative](#), focusing on mental health.

Information on graduate student retention and time to degree is also used as part of the assessment of academic units in the program review process (3.A.1. and 3.A.2.). Efforts to reduce time to degree have resulted from these assessments, and these efforts are evaluated in follow-up reviews. For example, a [2016 review of the Department of Philosophy](#) noted a long time-to-degree for MA students, and the department in response created a new faculty advisor position specifically for the MA program. Responding to universitywide concerns about the level of graduate student financial support, heard through academic program review as well as via the United Government of Graduate Students, CU Boulder has invested over \$8 million in the most recent four academic years to increase graduate student base stipends by an average of 6.2% per year, and has also invested in other forms of support. To follow up on the most recent student Social Climate Survey (2014), the Graduate School conducted a [survey of graduate students in 2018 to explore issues surrounding mentorship as well as finances](#); the results showed both areas of great satisfaction and needed actions. A [Graduate School Task Force on Stipends & Benefits](#) was formed in fall 2018 to make additional recommendations, which were [completed in August 2019](#) and are being considered by university leadership in AY 2019–20.

In fall 2020, a new Campus and Workplace Culture Survey will be administered that will replace the undergraduate and graduate student social climate Surveys that were last administered in 2014. (This new survey is being piloted in selected units in 2019.) The results will be used both in the program review process described above and in carrying out the implementation of campus strategic initiatives. Many of the 2014 questions will be carried forward into the 2020 survey so that the university can track progress in creating and sustaining a welcoming environment for undergraduate and graduate students. This survey will also provide the data to comprehensively benchmark and track staff and faculty experiences at CU Boulder. The Campus and Workplace Culture Survey will also support the IDEA Plan strategic initiative by providing benchmarking data for all campus populations and evidence of progress toward meeting the goals of creating a more inclusive campus community.

More progress in using information on student retention, persistence and completion of programs to make improvements as warranted by the data will be aided by recent campus commitments to expanding technological and human resources for data collection and analysis. Examples include a current pilot program using predictive analytics to target interventions to high-priority students (previously referred to as at-risk students; see 3.D.2.); the Unified Student Experience project to understand and streamline how students access resources online (see 3.D.1.); and investment in new positions on campus such as a corps of assessment professionals in ODA and new positions in the Graduate School and the Office of Undergraduate Education: an [assistant vice provost for student success initiatives](#) and an [assessment coordinator](#) (see 4.B.1.). Building on work done by the former Faculty Teaching Excellence Program and Graduate Teacher Program, the new Center for Teaching and Learning (4.B.1.) plans to make assessment an explicit focus of their suite of offerings for faculty and graduate student professional development.

**4.C.4.** CU Boulder collects and analyzes retention and completion rates using methodologies outlined by IPEDS, and has done so since the campus began tracking these rates. This method meets the needs of the CU Boulder community, as it monitors student success over time and also breaks down aggregate student data by such categories as racial/ethnic identity, degree level and major.

**4. Summary.** CU Boulder demonstrates responsibility for the quality of its educational programs through a rigorous, regular process of program review that engages faculty at all levels of review and that results in recommendations acted upon by academic programs and college, school and campus administration; through well-established practices for transfer credit evaluation; through departmental, college/school and campus policies and processes for course and curriculum proposal and review; and through maintaining specialized accreditation for specific programs. The establishment and assessment of student learning outcomes, previously a somewhat inconsistent practice, is now being acculturated into university norms through the well-established and effective program review process in a way that is designed by the faculty and tailored to the nature of the wide range of disciplines at CU Boulder. Through its Foundations of Excellence and Academic Futures strategic initiatives (see 1.A.3.), both involving broad participation and campus input, CU Boulder is implementing recommendations for improving its evaluation of teaching and for improving the success of its undergraduate and graduate students, including special focus on the first-year student experience.

## Criterion 5. Resources, Planning, and Institutional Effectiveness

The institution's resources, structures and processes are sufficient to fulfill its mission, improve the quality of its educational offerings, and respond to future challenges and opportunities. The institution plans for the future.

**5.A. The institution's resource base supports its current educational programs and its plans for maintaining and strengthening their quality in the future.**

- 1. The institution has the fiscal and human resources and physical and technological infrastructure sufficient to support its operations wherever and however programs are delivered.**
- 2. The institution's resource allocation process ensures that its educational purposes are not adversely affected by elective resource allocations to other areas or disbursement of revenue to a superordinate entity.**
- 3. The goals incorporated into mission statements or elaborations of mission statements are realistic in light of the institution's organization, resources and opportunities.**
- 4. The institution's staff in all areas are appropriately qualified and trained.**
- 5. The institution has a well-developed process in place for budgeting and for monitoring expense.**

**5.A.1.** CU's educational programs owe their high quality to a team of faculty and staff whose contributions make it possible to support fiscal and human resources and physical and technological infrastructure at the level appropriate to a world-class university.

### *Fiscal resources and the Financial Futures strategic initiative*

Support for CU Boulder's educational and research mission comes from diverse sources, including tuition and fees, state appropriations, research contracts and grants, private fundraising, and auxiliary operations. Diversification of funding, focused enrollment growth and development of the research enterprise have enabled the campus to increase its overall budget by 76% in less than a decade, from \$922 million in fiscal year (FY) 2008–09 to \$1.69 billion in FY 2017–18. The diversification and growth of revenue sources are demonstrated by increased revenue during this same time span from domestic and international non-resident student enrollment (92% increase), research funding (32% increase), and private giving (165% increase). State funding also increased by 14% from FY 2008–09 to FY 2017–18.

In fall 2018, the university launched the [Financial Futures strategic initiative](#) (see 1.A.3.). Through a universitywide diagnostic analysis, collaborative solution design and rigorous implementation, Financial Futures is ensuring that CU Boulder's resources are in optimal alignment with its public teaching and research mission and is discovering and uncovering ways to support [Academic Futures and other key strategic initiatives](#). The [diagnostic phase](#) of Financial Futures began in August 2018 with information requests and targeted interviews. The [solution design phase](#) has engaged faculty, staff and students in developing projects focused on alignment of resources to mission. Over 400 ideas have been generated from the community engagement process, and over 140 projects have been approved for implementation so far. As Financial Futures continues, additional ideas will be developed into projects reviewed for potential implementation.

## *Advancement*

[CU Boulder Advancement](#) works with the [University of Colorado \(CU\) Foundation](#), a separate 501c3 organization that manages and invests the assets given by private donors and grantors and provides a budget to support each campus's advancement activities, and with [Central CU Advancement](#), which provides support for all four University of Colorado campuses. The CU Foundation's Annual Report to Investors reviews fundraising activity, investment performance and the financial condition of the foundation. The entire fundraising operation of the University of Colorado was restructured in 2013, moving some 200 advancement professionals to report to the individual campuses rather than to the CU Foundation. This restructuring, which corresponds with one of the recommendations resulting from CU Boulder's 2010 comprehensive evaluation by the Higher Learning Commission, has not only led to more efficiency and accountability but also fostered significant growth in philanthropic giving at CU Boulder. Total gift, charitable grant and pledge results for CU Boulder have grown from \$80.5 million in FY 2008–09 to \$147.8 million in FY 2017–18. (For comparison purposes, see the [2008–09 CU Foundation Annual Report](#) and the [2017–18 CU Foundation Annual Report](#).) Most of this growth has been experienced in the three most recent fiscal years, with results steadily improving from approximately \$110 million in FY 2014–15.

## *Human resources*

CU Boulder has seen its faculty and staff numbers rise significantly since 2010. [The headcount of nonstudent employees](#) (fall census numbers) rose from 7,260 in 2010 to 9,615 in 2018 (32% increase). Instructional faculty increased from 2,125 to 2,528 (19%) in this period, and research faculty increased from 1,773 to 2,211 (25%). Total staff headcount rose from 3,255 to 4,689 in this period (44%), and university officers increased from 25 to 36 (44%).

Hiring and retaining excellent faculty and staff hinge upon offering competitive salaries to new hires and compensating continuing employees fairly. The Office of Data Analytics provides faculty salary data to colleges/schools and to Academic Affairs to help identify equity problems and to aid in appropriate salary-setting for new hires and promotions. While salaries for assistant professors are, on average, higher than those in the comparison group of AAU public universities and salaries for associate professors are on par, [salaries for full professors are significantly lower than the comparison group](#). The university recently devoted a separate raise pool toward faculty salary compression and is considering further solutions. For staff employees, Human Resources (HR) sets a competitive market salary range for each position based on the duties and requirements of the job at the time each employee is hired or promoted. Equity concerns are brought forward to HR for review, analysis and appropriate resolution. In accordance with Board of Regents Policies [11B, "Faculty Salary,"](#) and [11C, "University Staff Salary,"](#) all compensation increases for faculty and university staff are based on merit. Compensation pools for these groups are recommended by each University of Colorado campus and approved by the regents. Compensation pools for state classified employees may include a cost of living adjustment and are generally determined by the Colorado Department of Personnel and Administration with approval from the Colorado General Assembly and the governor. In an annual merit review process, campus units determine faculty and staff performance ratings; recommend merit-based performance increases; and identify equity, retention and market issues for resolution. Academic Affairs (for faculty) or HR (for staff) reviews and approves merit and equity adjustment requests.

## *Physical infrastructure*

CU Boulder comprises 12,494,332 gross square feet in 372 buildings and 1,170 acres of land on five primary properties within or near the city of Boulder: Main Campus, Williams Village, East Campus, CU Boulder South Campus and the Mountain Research Station. The [vice chancellor for infrastructure and sustainability](#) oversees the divisions of Environmental Health and Safety; Facilities Operations and Services; Planning, Design and Construction; Real Estate Services; and Sustainability. Each division houses professional staff and building professionals with a variety of appropriate academic degrees and, when applicable, licenses to practice in the state of Colorado.

The [2011 CU Boulder Campus Master Plan](#), which was aligned with the 2007 CU Boulder educational master plan as approved by the Board of Regents, outlined physical infrastructure needs based on projected enrollment growth of 2,700 additional students, a projected annual growth in sponsored research of 3–5% and a projected 650 additional employees. The 2011 plan envisioned that Main Campus development would be limited in favor of the East and Williams Village campuses and also planned for new science facilities, repurposed vacated spaces, expanded utilities infrastructure and land banking of CU Boulder South. Subsequent facilities projects have in large part carried out the 2011 vision, although challenges remain in terms of state funding, with several high-priority building renovations delayed in the queue for years.

CU Boulder began in 2019 to develop the 2021 CU Boulder Campus Master Plan. The [Strategic Facilities Visioning](#) strategic initiative now underway is laying the foundations for that plan by aligning facilities development with the goals and objectives of the Academic Futures, Foundations of Excellence and IDEA Plan strategic initiatives (see 1.A.3.). In turn, the execution of the new master plan will be supported by the results of the Financial Futures strategic initiative (discussed above).

The capital construction process at CU Boulder is based on state and University of Colorado System policy, including capital policies of the University of Colorado [Office of Policy and Efficiency](#), the [Office of the State Architect](#) and the [Colorado Commission on Higher Education](#). Through this process, CU Boulder has completed many of the [projects listed in the 2011 master plan](#), including both construction and remodeling of significant instructional, research, athletics and student residence space as well as a major utilities system project. Projects are initiated when campus constituents work with the [Office of Facilities Management Campus Planning](#) to develop preliminary information, which is vetted through the Capital Governance Subcommittee, made up of a broad group of faculty and staff, before being presented to the Capital Governance Committee, comprising the provost and the EVC-COO. If the idea is approved, the proposal is further developed and presented to the same groups, and additional campus constituents are invited into the consensus-building process. If the project is approved and funding identified, it proceeds to review and approval by [the University of Colorado Design Review Board and the Board of Regents](#), and then to extensive design development and construction planning. The approved plan and budget request are then forwarded to the Colorado Commission on Higher Education and the Office of the State Architect for consideration by the Colorado General Assembly for final state funding or cash spending authority.

CU Boulder is a leader in [climate and energy research and education, interdisciplinary environmental studies and sustainability practices](#). CU Boulder had the first student-led campus recycling program in the country, the first student-led Environmental Center, and the first NCAA Division-I zero-waste athletics program, and was the first institution to achieve [Gold status in the Sustainability Tracking Assessment and Rating System \(STARS\)](#) of the Association for the Advancement of Sustainability in

Higher Education. Supporting efforts to achieve resource efficiency and further campus sustainability, the vice chancellor for infrastructure and sustainability recently formed a [Space Optimization Office](#) that has developed new [space allocation guidelines](#). Efficiency of classroom use is codified in the campus [Space Utilization Policy](#) and managed through the Office of the Registrar's [Academic Scheduling](#) unit.

### *Technological infrastructure*

CU Boulder's [Office of Information Technology \(OIT\)](#) partners with academic, research and administrative units to provide the university with core IT services and customer-focused IT support. Its security system analysts also provide guidance in implementing CU Boulder's [program to provide information security](#) for the university's communication and information systems. OIT is advised by a number of [campuswide governance boards](#) and develops regularly updated [strategic plans](#).

OIT supports CU's educational programs through [a variety of services](#) for all modes of teaching, whether face-to-face or online. OIT's support of online courses, which are offered through Continuing Education (see 3.A.5.), includes integrating the [campus learning management system, Canvas](#), with [Kaltura rich media streaming](#) and tailoring [Coursera technology](#) as a platform for CU Boulder's new [MOOC-based master's degree in electrical engineering](#) (see 3.B.4.). Information technology for educational programs is also provided and supported through the Office of the Registrar, which implements the student records system, CU-SIS, and integrates CU-SIS with tools to help students plan their education, including a robust degree audit system (u.Achieve), a degree planner tool (u.Achieve Planner) and a newly developed advanced class search and registration tool.

Among OIT's current major multi-year initiatives, two that affect educational offerings and student support are (1) the [Unified Student Experience project](#) to create a new student portal; and (2) the creation of a platform to support online programs that will (a) allow students to learn about online programs, apply and enroll, add/drop courses, request transcripts, and complete payment transactions in a single online space, and (b) encompass student academic support such as degree audit and advising assistance. OIT also remains committed to [physical classroom and learning space technology](#), including such innovations as [Kubi remote presence technology](#) to offer attendance and engagement options for students unable to physically attend classes.

**5.A.2.** Through its resource review and budget allocation processes, the [Office of Budget and Fiscal Planning](#) (BFP) coordinates CU Boulder's budget cycle and model, stewards its financial assets and liabilities, and facilitates the allocation of resources necessary for CU Boulder to fulfill its mission and excel as a major educational and research university.

All operating revenues are earned and collected at the campus level, meaning that while CU Boulder is a part of the University of Colorado System, its revenue is not disbursed to that superordinate entity. The University of Colorado System office, comprising the Office of the President and numerous shared services such as treasury and procurement, allocates its costs of operation to CU Boulder and the other campuses via a cost allocation formula. Apart from this cost-sharing requirement, resource allocation at CU Boulder is independent and unencumbered.

CU Boulder's resource allocation paradigm is best described as a modified incremental budget model. The General Fund comprises tuition revenue, indirect cost recoveries from sponsored activity, and state appropriations. When these revenue streams increase, they are allocated in three stages. The first stage is to fund enterprise-wide mandatory commitments such as merit-based salary increases, financial aid,



insurance, utilities, etc. The second stage is to fund any prevailing formula-based allocations, including the undergraduate enrollment growth allocations, tuition revenue sharing and research activity-based allocations. The undergraduate enrollment growth and tuition revenue sharing allocations allow schools and colleges to receive additional funding for enrollment increases, thereby aligning financial incentives with activities, reducing financial barriers to interdisciplinary instruction, and allowing all schools and colleges an opportunity for additional funding. The third stage for allocating new revenues is to fund new mission-enhancing initiatives focused on student success, research development, infrastructure sustainability, etc. BFP annually creates a variance report on the total yearly budget as a check of how well CU Boulder is adhering to revenue and spending plans and as an alert to potential issues. CU Boulder engages in an annual series of strategic budget meetings with all academic and administrative senior leadership and faculty governance, which assist the provost and EVC-COO in forming a comprehensive picture of the overall financial status and needs of the university. The dean or director of a unit presents to the provost and EVC-COO information on the unit's finances and its challenges, successes and strategic visions for the future, including funding requests.

**5.A.3.** Following its [strategic imperatives](#), CU Boulder incorporates its mission into all strategic planning activities to align that mission with practical realities. These values and strategic imperatives are also built into the strategic plans of operational units such as, for example, the [Division of Student Affairs](#). CU Boulder's [five strategic initiatives](#), including Academic Futures, the Inclusion, Diversity and Excellence in Academics (IDEA) Plan, and Strategic Facilities Visioning, are explicitly guided by the university's strategic vision to be a leader in addressing the humanitarian, social and technological challenges of the 21st century. As described in 5.A.1., the Financial Futures project is enabling CU Boulder to make investments aligned with its vision and strategic initiatives.

CU Boulder's statutory mission as the state's flagship university for research and graduate education is borne out specifically in its achievements in research and creative work. One of the most publicly prominent faces of that work is CU Boulder's connection with federal laboratories, entrepreneurs and industry. In fact, three of CU Boulder's 12 research institutes are joint institutes with federal agencies: [JILA](#) with the National Institute for Standards and Technology; the [Cooperative Institute for Research in Environmental Studies \(CIRES\)](#) with the National Oceanic and Atmospheric Administration (NOAA), and the [Renewable and Sustainable Energy Institute \(RASEI\)](#) with the National Renewable Energy Lab (NREL). According to a [2017 study](#), federal laboratories and institutes injected \$2.6 billion annually into the Colorado economy, including \$1.1 billion in Boulder County alone. Between 2008 and 2015, the Colorado Energy Research Collaboratory, comprising NREL, CU Boulder, Colorado State University and the Colorado School of Mines, netted the Colorado economy \$194 million, per a [2016 economic impact report](#). CU Boulder's mission to further the public good is also reflected in its contributing nearly \$2.6 billion annually in local economic activity and nearly \$3.9 billion to the state and in the economic contribution of startup companies that were founded on CU Boulder technology (see 1.D.1.).

**5.A.4.** The high caliber of CU Boulder’s faculty and staff is aided by processes that extend from recruitment and hiring through ongoing evaluation and professional development.

#### *Recruitment, hiring and onboarding*

The CU Boulder recruiting model starts with a rigorous review of position descriptions, proceeds through analysis to ensure that compensation is appropriate and competitive for the recruitment area, and then posts positions through a variety of recruiting websites, including sites that focus on areas of diversity and inclusion. A professional recruiter from HR is assigned to work with each hiring manager and search committee throughout the recruiting and selection process and provides guidance related to increasing diversity and mitigating bias in hiring. In addition to these practices, faculty hiring and faculty qualifications are governed by policies and procedures specific to the schools and colleges and overseen by the [Office of Faculty Affairs](#) (see 3.C.2.). Hiring for research faculty positions is jointly managed by HR and the [Research and Innovation Office \(RIO\)](#), whereas hiring for postdoctoral fellowship holders and other nonfaculty research personnel is managed directly by HR. [Onboarding of new employees](#) is conducted by the hiring manager, department HR liaison and HR. New tenure-track, tenured and instructor-track faculty are also required to attend [a daylong orientation](#) that covers onboarding issues. HR creates an affirmative action plan annually that includes statistical analyses and assessment of affirmative action efforts and identifies employment goals and potential barriers to equal employment opportunities. This plan is used to examine areas where women and ethnic minorities are underrepresented by comparing the CU Boulder workforce against estimates in relevant labor markets and internal advancement opportunities.

#### *Performance evaluation*

Evaluations for classified staff and university staff occur annually based on job-specific criteria as well as [core competencies](#), updated in 2019 to be explicitly aligned with [university values and the Colorado Creed](#), including integrity/responsibility/ethics, inclusive excellence, innovation and collaboration (see 1.A.1.). In 2019, a new tool, Cornerstone, was introduced to streamline and regularize performance management processes, facilitate conversations between employees and managers about performance and employee development and better align work in support of unit goals and the chancellor’s strategic imperatives (see 1.A.1.). Evaluations for faculty also occur annually and are based on each individual faculty member’s workload, which is distributed across teaching, research and service components (see 3.C.4.).

#### *Professional development*

[Open enrollment employee courses](#) offered by HR address professional development areas such as skills for difficult conversations, maximizing professional productivity, and diversity and inclusion. Several courses focus on leadership, management and supervision. [Organizational training](#) includes training in communication, conflict resolution and building teams, as well as assessments to improve team process, dynamics or skills. Training for targeted employee populations includes, for example, the [CU Employee English Program](#), [Career Development for Frontline Service Employees](#) and the [Faculty Diversity Search and Hiring online course](#).

CU Boulder provides [opportunities for employees to complete academic degrees](#) including the [Leadership and Management Graduate Certificate](#) and discounted tuition or scholarships for the [Master](#)

[of Science in Organizational Leadership](#) and the [Leeds School of Business Evening MBA](#). The [Employee Tuition Benefit](#) provides a tuition waiver for up to nine credit hours per year.

Offices across campus provide employee training on topics including skills in dealing with discrimination and harassment such as effective [bystander intervention](#), [skills related to accommodations, service animals and disability access](#), and skills related to diversity, inclusion and equity such as [supporting student resiliency](#), the [Intercultural Development Inventory](#), [reducing unconscious bias](#) and [LGBTQ+ safe zone training](#). Programs for personal and career growth and development include a [Faculty and Staff Assistance Program \(FSAP\)](#) providing one-on-one counseling as well as support groups and the [Staff Career Development Program](#). The [Ombuds Office](#) offers confidential assistance to employees who wish to explore options to resolve disputes, conflicts and concerns.

Development opportunities specific to faculty include the [Leadership Education for Advancement and Promotion program](#) for development at all stages of a faculty member's career; the [Academic Leadership Institute](#) series for faculty planning to enter leadership roles; [inclusive pedagogy workshops](#); and the [Faculty Teaching Excellence Program](#) (in the process of being incorporated into the new [Center for Teaching and Learning](#), discussed in 3.D.4., 4.B.1. and 4.B.3.). Academic units are required by University of Colorado System policy ([APS 1021](#)) to have mentoring programs for untenured faculty; these programs are assessed in the program review (ARPAC) process (see 3.A.1. and 3.A.2.). Services offered by the [Office of Faculty Relations](#) help faculty and academic administrators develop and maintain positive and productive working relationships, and include individual consultation, mediation, assessment of unit dynamics, and investigations of allegations of unprofessional behavior. The [Ombuds Office](#) houses three ombudspersons who are professors emeriti and who assist faculty.

**5.A.5.** CU Boulder uses the full fiscal year approach to plan, review, monitor and allocate budget across the campus. Each unit maintains its base budget each year, and new funding is awarded based on needs identified during the preparation of the new fiscal year budget. In addition, funding is allocated for inflationary needs such as utilities and salary increases and mission-critical needs such as financial aid.

Campus administration works directly with campus units to understand and evaluate existing budget levels and communicate thoughtfully about new funding needs. Additionally, both administration and campus units use a variety of reports to monitor and evaluate financial health. Campus administration provides a set of reporting tools monthly enabling early detection of variances, deficits or any other financial details that may need attention.

All new employees with fiscal roles must complete a financial training class presented by the Campus Controller's Office and the Office of Budget and Fiscal Planning. This class helps new employees understand the mechanics of the financial system, including how to perform budget journal entries. The entries are always approved by a different user to ensure separation of duties. Expenses are further monitored by internal and external audit as described in 2.A.

**5.B. The institution’s governance and administrative structures promote effective leadership and support collaborative processes that enable the institution to fulfill its mission.**

- 1. The governing board is knowledgeable about the institution; it provides oversight of the institution’s financial and academic policies and practices and meets its legal and fiduciary responsibilities.**
- 2. The institution has and employs policies and procedures to engage its internal constituencies—including its governing board, administration, faculty, staff and students—in the institution’s governance.**
- 3. Administration, faculty, staff and students are involved in setting academic requirements, policy and processes through effective structures for contribution and collaborative effort.**

**5.B.1.** As referenced in 2.C., Colorado’s Constitution establishes the University of Colorado’s governance, the [Board of Regents](#). Its nine members, one elected from each of Colorado’s seven congressional districts and two from the state at large, serve staggered six-year terms. The regents meet regularly in public session, typically on one of the University of Colorado System’s four campuses. [Board meeting announcements, agendas and minutes](#) are posted on its public web site.

As described in 2.A., the Board of Regents delegates day-to-day operations to the president of the University of Colorado System and to the campus chancellors, each of whom reports directly to the president. Campus policy must accord with University of Colorado System policy, which in turn must accord with the Laws and policies of the regents. Regular academic, financial and other reporting from each campus to the University of Colorado System (as described in 2.A.) facilitates the regents’ oversight.

**5.B.2.** The University of Colorado’s systemwide faculty governance body, the [Faculty Council](#), comprises representatives from each of the four campuses. Its primary function is to ensure that faculty governance plays a significant role in the decision-making processes of the university as a whole. Within the limits of its jurisdiction, the Faculty Council assumes the right to initiate advice and to make recommendations to administrative officials regarding educational policy and university operations. The present structure of the Faculty Council gives equal authority to each of the four campuses, despite their considerable differences in size.

CU Boulder communicates with the University of Colorado’s president and Board of Regents through the chancellor and the chancellor’s two chief officers, the provost and the executive vice chancellor and chief operating officer (EVC-COO). Together, the chancellor, provost and EVC-COO form the Chancellor’s Cabinet, the campus’s top decision-making body. The provost and the EVC-COO regularly meet with their own respective cabinets. To discuss initiatives and policies with a wide range of campus leadership, the Chancellor’s Cabinet meets approximately biweekly with the University Executive Leadership Team, consisting of the provost’s and the EVC-COO’s direct reports, and monthly with the [Shared Governance Group](#), consisting of the leaders of the CU Boulder faculty, staff, and undergraduate and graduate student governance groups (described below). The chancellor is also advised by [four standing committees on diversity and inclusion matters](#), each of which has faculty, staff and student membership: the Chancellor’s Accessibility Committee, the Chancellor’s Committee for Women, the Chancellor’s Committee on Race and Ethnicity and the Chancellor’s Standing Committee on Gender and Sexuality.

Other ways in which leadership engages internal constituencies include the chancellor’s annual [State of the Campus Address](#), monthly meetings held by the EVC-COO for all employees within her organization

and regular town halls held by the provost in each school and college. CU Boulder maintains [a faculty information web site](#) that includes updates on administrative leadership's meetings and initiatives, including [minutes of the provost's meetings with chairs and directors and with the Council of Deans](#) and [updates on ongoing and ad hoc CU Boulder committees](#). Communications to faculty, staff and students are coordinated by [Strategic Relations and Communications](#), whose Strategic Messaging Alliance (SMA) working group has recently developed an [integrated strategy to coordinate communications across CU Boulder](#). The campus news digest, [CU Boulder Today](#), is distributed to the campus community in several editions. The student edition, focusing on items of interest to students, and the faculty-staff edition, which contains more research, training and transactional information, come out daily during the academic year and on a limited schedule during breaks and holidays.

The [Boulder Faculty Assembly \(BFA\)](#) is the representative body of all CU Boulder faculty. The BFA informs and engages the faculty in issues of importance, and its guiding principle is that the faculty and the administration shall collaborate in decisions that affect the welfare of the University of Colorado and of CU Boulder in particular. The BFA is a primary initiator of academic policy and advises the administration on other policies. Similar faculty organizations on the Boulder campus serve the College of Arts and Sciences ([Arts and Sciences Council](#)) and the College of Media, Communication and Information (CMCI Faculty Council). These two assemblies meet regularly with their deans to provide counsel and advice, and they are responsible for curricular affairs in their colleges. The leadership of the BFA, Arts and Sciences Council and CMCI Faculty Council serve as ex officio members of one another's executive committees. The [Academic Futures strategic initiative](#) recommended that CU Boulder strengthen faculty governance by making sure that each school and college has a representative governance group body; the provost accepted that recommendation and in April 2019 directed that the schools and colleges lacking an appropriate faculty governance structure begin to design one.

Faculty governance is also integral to decision-making at the provost's level of the administration. The provost is advised by faculty committees on budget ([Academic Affairs Budget Advising Committee](#)), program review ([Academic Review and Planning Advising Committee](#)), reappointment, tenure and promotion of faculty ([Vice Chancellor's Advisory Committee](#)), faculty salary equity ([Salary Equity Appeals Committee](#)), and faculty grievance ([Provost's Advisory Committee](#)). The vice provost for undergraduate education and the dean of the Graduate School are advised on policy and curriculum by their respective faculty advisory committees. The vice chancellor for research and innovation is advised by the faculty [Research and Innovation Office Advisory Board](#).

The elected [CU Student Government \(CUSG\)](#) represents students across CU Boulder, with a focus on undergraduate students. Graduate and professional students at CU Boulder have their own elected governance body, [the United Government of Graduate Students \(UGGS\)](#). The interests of CU Boulder staff employees are addressed by representatives elected to [Staff Council](#). Together, the leadership of these three groups make up the chancellor's [Shared Governance Group](#), mentioned above, which is the conduit through which all shared governance on campus interacts with the top leadership of the campus: the chancellor, provost and EVC-COO.

Student governance groups within several of the schools and colleges are advisory to the relevant dean: the [University of Colorado Engineering Council](#) for undergraduate engineering students, the [Leeds Student Government](#) for undergraduate students in the Leeds School of Business, the [CMCI Student Government](#) for students in the College of Media, Communication and Information and the [Student Bar Association](#) for students in the law school.

**5.B.3.** [Article 5.E of the Laws of the Regents](#) assigns the faculty the principal role “for originating academic policy and standards, including initial authorization and direction of all courses, curricula, and degrees offered, admissions criteria, regulation of student academic conduct and activities, and determination of candidates for degrees” and “for originating scholastic policy, including scholastic standards for admission, grading, . . . continuation, graduation, and honors.” Article 5.E also specifies that “the deans of the colleges and schools shall have responsibility for enforcement of admissions standards and requirements.” Each school and college at CU Boulder has its own faculty curriculum committee to review and approve new and revised courses and curricula. The [CU Boulder Honor Code](#) specifies that faculty have the sole authority to levy grade penalties for academic dishonesty.

[Article 4 of the Laws of the Regents](#) and [Regent Policy 4](#) specify that new degree programs and academic units, as well as degree program and academic unit discontinuance, must be approved by the Board of Regents. At CU Boulder, proposals for new degree programs and academic units originate with the faculty and are developed and reviewed according to [campus review procedure guidelines](#) (see 3.A.1. and 3.A.2.). Requests for degree program discontinuance or academic unit discontinuance may originate from a number of sources (a dean, the campus program review committee [ARPAC], the provost, the chancellor, the University of Colorado president, the Board of Regents or a department or a chair with concurrence of the dean) and are reviewed according to the CU Boulder [Academic Program Discontinuance](#) policy.

Campus policy is developed according to the [Policy Proposal and Adoption](#) policy, which specifies review by faculty, staff and student governance bodies and by the Council of Deans and the University Executive Leadership Team. The Division of Academic Affairs follows a similar review process for academic policy. Cross-campus advisory committees for the Office of Information Technology (as described in 5.A.1.), the Research and Innovation Office (as described in 5.B.2.), and Strategic Relations and Communications review and advise on policy and processes for those offices.

### **5.C. The institution engages in systematic and integrated planning.**

- 1. The institution allocates its resources in alignment with its mission and priorities.**
- 2. The institution links its processes for assessment of student learning, evaluation of operations, planning and budgeting.**
- 3. The planning process encompasses the institution as a whole and considers the perspectives of internal and external constituent groups.**
- 4. The institution plans on the basis of a sound understanding of its current capacity. Institutional plans anticipate the possible impact of fluctuations in the institution’s sources of revenue, such as enrollment, the economy and state support.**
- 5. Institutional planning anticipates emerging factors, such as technology, demographic shifts and globalization.**

**5.C.1.** Planning and resource management at CU Boulder are guided by the university’s statutory mission as the state’s graduate and research institution, as well as by the chancellor’s strategic imperatives: shape tomorrow’s leaders, be the top university for innovation and positively impact humanity (1.A.1.). This mission and these imperatives explicitly guide the ambitious campus wide strategic planning exercise in which CU Boulder is engaged. CU Boulder’s five strategic initiatives, described in 1.A.3., represent CU Boulder’s commitment not only to engage in planning but also to align current and future resources to those plans. The [Financial Futures strategic initiative](#) is explicitly tasked



with locating savings and revenue opportunities that conform to the campus mission while also freeing up financial resources for that mission (see 5.A.1. and 5.A.2.). It is through Financial Futures' planning efforts that CU Boulder is able to move forward on the recommendations of the [Academic Futures](#) strategic initiative, which is guiding academic priorities; the [Foundations of Excellence](#) strategic initiative, which is guiding priorities specifically in first-year education; the [IDEA Plan](#) strategic initiative, which will guide plans for faculty, student, and staff climate and inclusiveness; and the [Strategic Facilities Visioning](#) initiative, which will guide infrastructure projects (see 5.A.1.).

In addition to the strategic initiatives, CU Boulder's longstanding planning processes ensure continuous attention to how resources should be aligned with the university's mission and priorities. The academic program review process (3.A.1. and 3.A.2.) ensures that academic units examine all facets of their programs and processes, and plan for the future in concert with units similar to themselves. The annual budget allocation process (5.A.2.) addresses the academic and nonacademic priorities developed through program review, as well as priorities developed on the campus and the college/school levels.

**5.C.2.** Through its program review process, CU Boulder links together assessment of student learning, evaluation of operations, planning and budgeting within the context of a regular evaluation of every academic program as well as every unit within Academic Affairs, including the Division of Student Affairs. We have emphasized the program review process throughout this assurance review because of its robustness: the provost has empowered program review with making recommendations that lead to change. These changes include linking the allocation of resources to effective planning.

As discussed in 3.A.1. and 3.A.2., academic programs and the divisions within Academic Affairs are [reviewed on a seven-year rolling basis](#) by the provost's [Academic Review and Planning Advisory Committee \(ARPAC\)](#), with annual follow-ups to review units' accomplishments and ongoing needs. ARPAC also conducts a comprehensive review of each college and school (or, for the College of Arts and Sciences, divisions within the college: life and earth sciences; physical sciences and mathematics; social sciences; and arts and humanities). The review process includes criteria for every unit's assessment of student learning (see 4.B.2.), its budget allocation process, and its resource needs in conjunction with its strategic plan and its support of CU Boulder's academic mission. The [Division of Student Affairs](#), which houses many co-curricular programs, is also evaluated by ARPAC, thus bringing Student Affairs' [assessment of student success for co-curricular programs](#) within the purview of program review. ARPAC's recommendations to units, deans and the provost frequently carry resource implications, and the fact that cognate units are reviewed together allows for strategic prioritization of resources to groups of units that share the same needs.

The ARPAC committee, in addition to undertaking regular program review, also supervises one other process that links planning, resources and evaluation of an academic unit's success. In 2013, the Board of Regents directed each of the campuses in the University of Colorado System to develop prioritization constructs that could provide insights into how individual academic and administrative units contribute to the core mission of the university and to the missions of the individual campuses. CU Boulder developed a two-part [Academic Prioritization process](#) that involves (1) an algorithmic quantification of each unit's costs and contributions to both research/creative work and student success, and (2) a qualitative evaluation by ARPAC, based on the program review process, of each unit's merit and efforts to improve. CU Boulder has found Academic Prioritization helpful to its academic planning and regularly updates this information to assist in campus decision-making and inform the Board of Regents.

In addition to these regular processes of program review, the Financial Futures strategic initiative includes [a workstream specifically devoted to student retention](#) whose projects will also link the budget and planning process to student success and the assessment of learning.

**5.C.3.** CU Boulder’s five [strategic initiatives for campus planning](#) encompass faculty, student, staff and, when applicable, external constituent groups. Town halls, listening sessions and invitations to submit white papers and feedback have garnered the participation of well over a thousand participants across these initiatives so far, with more to come (see 1.A.3.). Other campus efforts discussed in this assurance review, such as, for example, the [Unified Student Experience project](#) to create a new online/mobile student portal, involve similar constituent involvement and participation. The chancellor is advised by an [external advisory council](#), as are the deans of all the schools and colleges and many of the chairs and directors of departments, programs, centers and institutes—such as the [Department of Geological Sciences](#), the [College of Music](#) and the [Center of the American West](#), to name just three disparate examples. Student boards advise many academic units as well as student support and auxiliary units, such as, for example, [Medical Services](#), the [University Memorial Center](#) and the [Student Recreation Center](#).

To ensure campus input on budgeting, the provost is advised by the [Academic Affairs Budget Advisory Committee \(AABAC\)](#), composed of faculty and co-chaired by the deputy chief financial officer and the senior vice provost for academic resource management, and by the [Budget and Planning Committee of the Boulder Faculty Assembly \(BFA\)](#) (see 5.B.2.). The EVC-COO, the leadership of the Office of Budget and Fiscal Planning, and the senior vice provost for academic resource management make regular presentations to the BFA Budget and Planning Committee to learn their thoughts about budgeting decisions and processes.

**5.C.4. and 5.C.5.** As described in 5.A.1. and 5.A.2., CU Boulder takes enrollment projections and levels of state support (4.8% of the university’s [FY 2019–20 operating budget](#)) into account in its multi-year and longer-term budget planning. When CU Boulder and the University of Colorado System as a whole recommend tuition rates to the Board of Regents, they similarly take into account regional and national economic conditions, student demographics, fluctuations in state support and Board of Regents directives. Each campus plans for contingencies based on likely final decisions on tuition from the Colorado General Assembly. CU Boulder’s chancellor, provost and EVC-COO maintain active relations with state government, including the General Assembly, the governor and the Colorado Department of Higher Education. To cushion the university against future economic downturns and possible declines in tuition revenue, the Board of Regents in 2018 directed each campus to build an [Emergency Tuition Stabilization reserve](#) equaling 4% of annual operating budget. CU Boulder’s current reserve funds stand at [3.4% of annual operating budget](#), and the university has planned its [FY 2019–20 budget](#) to build more reserves toward the 4% target.

The Office of Enrollment Management predicts long-term enrollment trends based on Colorado, national and international student demographics, and social and geopolitical trends. Anticipating that first-year student enrollments will level off or decline whereas transfer student enrollments will continue to increase, the provost in 2018 appointed an [Advisory Committee on Transfer Student Success](#) to consider how CU Boulder might better recruit, retain and support transfer students. Many of the committee’s recommendations are now being funded and implemented through the [Financial Futures strategic initiative](#). CU Boulder is also planning for a future in which students seek alternative modes of earning a high-quality degree from a top research institution. Following the recommendations of the [Online Strategy Working Group](#), a collaborative project of Academic Futures and Financial Futures, CU

Boulder is creating [a new, unified organization to deliver online and distance education offerings](#) that are specific to CU Boulder’s mission (see 3.A.3.) and that adhere to the [provost’s philosophy statement on online education](#). This new organization will incorporate the [Office for Academic Innovation](#), which provides centralized support for faculty and staff who seek to develop large-scale programs or partnerships driven by education innovation, including large-scale (MOOC) courses (see 3.B.4.). The role of the Office of Information Technology in anticipating and implementing new technological contributions to research, creative work and education is described in 5.A.1.

#### **5.D. The institution works systematically to improve its performance.**

- 1. The institution develops and documents evidence of performance in its operations.**
- 2. The institution learns from its operational experience and applies that learning to improve its institutional effectiveness, capabilities and sustainability, overall and in its component parts.**

**5.D.1. and 5.D.2.** The University of Colorado Board of Regents assesses the performance of CU Boulder in the context of the University of Colorado System. The Board of Regents has set [metrics](#) for each of the University of Colorado campuses in the areas of affordability and access, student success, financial sustainability, and reputation and impact, and receives reports annually on all four campuses’ achievements and assessment in these areas.

As the flagship of the University of Colorado with a unique statutory mission as a graduate research institution, CU Boulder has developed [three strategic imperatives](#) to further that mission (see 1.A.1.). In support of those strategic imperatives, and as detailed below, CU Boulder employs a robust array of performance measures by which it documents its effectiveness in teaching, research and creative work and public impact and that it uses in regular evaluation processes designed to plan, benchmark and assess improvement.

*Strategic Imperative 1 has to do with student success: Recruit, retain and graduate students who are committed to the common good, to engaging diverse perspectives, to the productive use of critical thinking and creative problem-solving, and to the application of intellectual curiosity, rigor and collaboration to complex issues and opportunities.* Understanding and improving student success has led CU Boulder to engage in a number of efforts:

- Improving student retention and degree completion is a major focus and goal of three of CU Boulder’s five strategic initiatives—[Academic Futures](#), [Foundations of Excellence](#) (for first-year students) and the [IDEA Plan](#) (see 1.A.3., 1.C., 3.B., 3.D. and 4.C.4.). The [Provost’s Advisory Committee on Transfer Student Success](#) also created a planning framework for student success. The [Financial Futures initiative](#) has funded the implementation of a number of [projects having to do with the Transfer Committee’s recommendations](#), with more in the queue for review. Another set of projects having to do with student retention overall will soon be reviewed for feasibility and implementation. As detailed in 4.C.1., 4.C.2. and 4.C.3., measures of undergraduate student completion and retention rates are used to monitor and assess CU Boulder’s efforts to improve student success. These measures include detailed analysis of student demographics including gender, ethnicity, residency status, residence hall, etc. as well as the results of student surveys.
- As detailed in 4.B.1., 4.B.2. and 4.B.3., measures of student success are used to assess and improve the effectiveness of both academic programs and co-curricular programs.

- Student success is the focus and goal of targeted projects such as a pilot program using predictive analytics (see 3.D.2.) and the [soon-to-be-launched “BuffPortal”](#) created by the [Unified Student Experience project](#), designed to give students seamless access to support services (see 3.D.1. and 4.C.3.).
- As discussed in 3.A.1., 3.A.2. and 5.C.2., the [ARPAC program review process](#) is the primary method by which academic programs are assessed and improved. Undergraduate and graduate student success is one metric of program review (4.B.1.), and unit-level student satisfaction surveys are conducted as a part of this program review process.
- The [Academic Prioritization process](#) serves to reinforce program review in the area of student success by focusing on undergraduate student satisfaction as part of its metrics (see 5.C.2.).
- As part of a new Strategic Planning process to be launched in AY 2019–20, the Graduate School plans to develop new campuswide metrics of graduate student success.

Strategic Imperative 2 has to do with innovation through collaboration: *Serve as the nexus for innovation by facilitating collaboration and the sharing of diverse perspectives between universities, industry, laboratories and communities.* CU Boulder tracks its achievements and implements improvement in this area in several ways:

- The [Research and Innovation Office](#) facilitates research partnerships with industry, laboratories and communities, tracks results, and identifies opportunities for increased engagement (see 1.D.1.). It also jumpstarts and encourages innovation through such opportunities as the [RIO Faculty Fellows](#) leadership program and [travel funding for faculty to meet with extramural sponsors](#).
- [Faculty outreach activities](#) are tracked via the [Faculty Information System](#), whose public face is [CU Experts](#), an online resource for identifying faculty expertise and accomplishments. Outreach activities are an assessment measure in the ARPAC program review and improvement process as described above (5.C.2.). See 1.D.3. for more details about outreach.

Strategic Imperative 3 has to do with the production and impact of new knowledge and artistic works: *Broaden and expand research, scholarship and creative work and articulate the positive societal outcomes they advance.* The campus tracks achievements in this area and strives for improvement through a number of means:

- The [Faculty Information System](#) and the [Office of Contracts and Grants collection of data on sponsored research](#) track faculty achievements and funding in research, scholarship and creative work.
- Faculty members whose responsibilities include research, scholarship and creative work (tenured and tenure-track faculty and research faculty) are assessed for contributions to research, scholarship and creative work in the annual merit review process and in reappointment reviews (for untenured faculty and research faculty), tenure and promotion reviews (for tenure-track or tenured faculty), and post-tenure reviews (for tenured faculty). Needed faculty improvement in research, scholarship and creative work is addressed at the unit level in case of research faculty, department/unit and college/school levels in the case of tenured faculty who undergo faculty post-tenure review, and also at the provost level in the case of tenured/tenure-track faculty who undergo reappointment, promotion and tenure reviews (see 3.C.3. and 3.C.4.).

- Academic units are assessed for their faculty's achievements and funding in research, scholarship and creative work in the ARPAC and Academic Prioritization review processes as described above (5.C.2.).
- [CU Boulder holds a master license with Academic Analytics](#), a private firm providing data on faculty scholarly and research activity to PhD-granting universities in the U.S. and U.K., and uses those data as part of ARPAC program review and the Academic Prioritization process (see 5.C.2.) as well as academic decision-making at the college/school and campus levels.
- [Research is a workstream of the Financial Futures initiative](#), and projects are being developed for analysis and implementation.

**5. Summary.** CU Boulder supports its scholarly, educational and outreach enterprise with sufficient resources that are shepherded through prudent and forward-looking fiscal, infrastructural, human resource and academic planning. The university makes decisions regarding planning and resource allocation through processes that are explicitly aligned with CU Boulder's mission and strategic imperatives and that involve faculty, staff, students and external constituents in advisory and shared-governance roles. Through its strategic initiatives and its longstanding and effective program review process, CU Boulder has engaged the entire community of faculty, students and staff in planning the university's future and in making those plans come to pass. Past performance and explicit goals in research and creative-work excellence, student success and employee and student well-being help the university make its planning and resource allocation decisions responsibly. It is also important to make those decisions collaboratively, which requires that information and opinion flow freely between the university's leadership and the entire CU Boulder community as well as the residents of Colorado. To this end, CU Boulder has worked diligently to improve its communication strategies to match the magnitude and complexity of the university's enterprise and achievements.