A STRATEGIC PLAN FOR THE UNIVERSITY OF COLORADO AT BOULDER

Flagship 2030

Serving Colorado Engaged in the World







"At the University of Colorado at Boulder, we accept both the public role and responsibility of a flagship, including the expectations of leadership, excellence in all we do, and a commitment to the highest academic core values. We strive to promote the confluence of superb teaching, research, scholarship, creative work, and service that distinguishes a flagship university. In creating the following strategic plan, we have focused on our primary role as a national comprehensive research university. It is from this core identity that *Flagship 2030* has evolved."

> G. P. "Bud" Peterson Chancellor

> > Page]



Serving Colorado, Engaged in the World

The University of Colorado at Boulder will become a leading model of the "new flagship university" of the 21st century—by redefining learning and discovery in a global context and setting new standards in education, research, scholarship, and creative work that will benefit Colorado and the world.

Executive Summary

Planning for Flagship 2030

Overview. The *Flagship* 2030 strategic plan will serve as a long-term model for CU-Boulder to become the "new flagship university" of the 21st century. The plan will position the university for global leadership in education, research, and creative work by the year 2030. In this planning process, we are cognizant of CU-Boulder's remarkable history, having evolved with vision and determination from a fledgling frontier campus to a thriving university of 30,000 students. We recognize the university's exceptional strengths and contributions, and we honor the culture of excellence that has earned us international respect in a number of academic disciplines. At the same time, we also acknowledge the current and future challenges facing the university.

We chose *Flagship* 2030's quarter-century planning horizon to encourage creative thinking about the university's leadership potential, unencumbered by current issues. However, we have not overlooked the immediate need to achieve and maintain excellence in core areas and to remain competitive in the near term. Therefore, *Flagship* 2030 offers both short- and long-term directions for transforming the University of Colorado at Boulder into a leading model for the "new flagship university" of the 21st century.

The Planning Process. Led by Chancellor G.P. "Bud" Peterson, our strategic planning effort reflects the input of hundreds of faculty, staff, students, parents, alumni, business leaders, community members, government officials, and other university stakeholders. A 54-member steering committee guided the planning process, made up of individuals from all segments of the university, the local community, state leadership, and other constituencies. The committee was assisted in its work by many subject matter contributors. We received input through several university open forums; interviews with community, business, and government leaders throughout the state; a *Flagship 2030* website; and a variety of other local, statewide, and national efforts.





CU-Boulder's Vision for 2030

Vision Statement. Our strategic planning process has led us to a new shared vision for transforming CU-Boulder into one of the nation's leading public research universities. The vision includes the contributions of a variety of individuals, and it recognizes CU-Boulder's ongoing statutory mission as a "comprehensive graduate research university with selective admissions." In it, we challenge ourselves to become a "new flagship university" within the next quarter-century:

The University of Colorado at Boulder will become a leading model of the "new flagship university" of the 21st century—by redefining learning and discovery in a global context and setting new standards in education, research, scholarship, and creative work that will benefit Colorado and the world.

Central Themes. In the "visioning" process, six broad themes emerged for the "new flagship" CU-Boulder aspires to become.

First, the university environment will be intellectually inspiring, academically challenging, welcoming, supportive, and conducive to positive personal growth.

Second, CU-Boulder will become a dynamic global force for nurturing ideas and the uses of knowledge.

Third, the university will be a place that exemplifies diversity, intercultural understanding, and community engagement.

Fourth, CU-Boulder will help promote Colorado as a global crossroads of ideas and discovery.

Fifth, the university will provide students with a foundation of knowledge that will help them reach their full potential.

Sixth, CU-Boulder will be an agile organization supported by effective leadership, financial and operational models, and infrastructure.

These themes will provide guidance for realizing the *Flagship 2030* vision.

Investing in the Vision

We believe *Flagship 2030* requires a two-pronged approach to investment and decision-making. First, we must focus on near-term needs to sustain quality and remain competitive in our core service areas, and second, we must implement aggressive, far-reaching "flagship initiatives" for transforming the university. Moving the university forward through these important initiatives will depend on the availability of resources.

The Core Initiatives

We recognize the University of Colorado at Boulder's need to invest in core service areas to remain competitive in the short term, and we have identified a set of priorities for these immediate investments. Attending to these priorities is critical if the university is to maintain the visibility and leadership needed to become a global presence. The priorities are:

- 1. Enhancing Education and Scholarship. Increase the size and enhance the quality of our faculty by adding 300 new tenure-track faculty in the next 10 years; create a new model for undergraduate education to better prepare CU-Boulder students for a changing world.
- 2. **Fostering Research Excellence.** Support our research mission by increasing institutional funding and research expenditures by 5 percent each year; provide targeted investments in cutting-edge research and creative work.
- **3.** Enhancing Graduate Education. Increase the graduate student population from the current 15 percent of total enrollment to 20 percent.
- **4. Ensuring Access.** Double merit- and need-based financial aid within five years; initiate a statewide dialogue on expanding access to Colorado higher education.
- **5. Supporting the Mission.** Enhance the university's staff to support education, research and creative work, service, and operations.
- **6. Investing in the Tools for Success.** Increase investments in new technologies, new and existing campus facilities, and library collections.
- **7. Learning for a Diverse World.** Implement new strategies for improving diversity; foster a supportive and inclusive climate for all.
- 8. Serving Colorado, the Community, and Our Graduates. Expand outreach programming aimed at Colorado communities; enhance opportunities for lifelong and distance learning.



The Flagship Initiatives

Beyond staying competitive in the short term, our long-term aspirations call for visionary initiatives that will distinguish CU-Boulder among the very best public research universities. We believe our "flagship initiatives" lay a strong foundation for the university's transformation into the "new flagship" of 2030. These initiatives include:

- 1. **Residential Colleges.** We intend to build on our successful Residential Academic Programs (RAPs) by creating a new campus-wide emphasis on "residential colleges," offering a multi-year residential academic experience for every entering student.
- **2. Customized Learning.** We will launch the "Colorado Undergraduate Academy" as an ongoing incubator for innovative learning methods and customized learning experiences. The academy will provide mentoring, individualized advising, and career counseling, as well as help attract more of the nation's best-qualified students to the university.
- **3. Experiential Learning.** We will incorporate experiential learning programs more broadly in every student's education. These experiences may include research or creative projects with a professor, study abroad, honors or senior thesis projects, entrepreneurial initiatives, portfolios of creative work, full-time community service projects, or internships.
- **4. Colorado's Research Diamond.** We will initiate a "Colorado research diamond" as a collaborative enterprise among regional universities, businesses, government, and federal laboratories. The research diamond will draw upon existing strengths to develop new technologies, patents, and intellectual properties—and apply them to real-world needs in Colorado and the world.
- **5. Transcending Traditional Academic Boundaries.** We will build upon our excellent record in interdisciplinary research and creative work to become a global leader in ventures that span traditional academic fields. We will strengthen the university's advocacy, support, recognition, and financial incentives for faculty and students who engage and excel in interdisciplinary work.
- 6. Building a Global Crossroads. We will establish a "Colorado Center for Global Education, Research, and Advanced Studies" that will bring the world's best thinkers to visit, work, and study at CU-Boulder. The center's competitively selected "Colorado Fellows" will address specific global issues facing government, business, industry, communities, the state, and society at large. In addition, we will expand student and faculty exchanges around the world.

- 7. Creating University Villages. We will develop a new "university villages" concept to guide plans for the build-out of major university properties. Working in collaboration with community leaders, we propose creating mixed-use, education-related spaces that meet the needs of the university, the community, and the state.
- 8. Alternative Degree Tracks. We will expand the options for earning University of Colorado at Boulder degrees, providing greater emphasis on the master's degree as a primary track, greater support for students with advanced placement credits, and concurrent bachelor's/PhD degree programs in appropriate disciplines.
- **9. Year-round Learning.** Within the next three years, we will examine changing the university's academic calendar to a three-semester, year-round schedule. This significant change in academic culture would expand learning and research opportunities for both students and faculty—and make better use of our resources, including facilities, personnel, and equipment.
- **10. Making Enterprise Work.** We will seek greater operating flexibility and expanded resources to meet our role and mission. A new relationship with the state of Colorado will emphasize our public mission and our accountability under a more self-reliant and market-driven model. We will enhance our private fundraising efforts in support of university initiatives.



Our success in achieving the *Flagship 2030* vision will depend on expanding our resources, gaining new agility, and inspiring broad support. In this long-term endeavor, we seek the help and involvement of all of the University of Colorado at Boulder's stakeholders.

Implementing Flagship 2030

By the year 2030, CU-Boulder will become one of the nation's leading public comprehensive research universities, contributing to the future of Colorado and enhancing the well-being of humankind through excellence in teaching, research, creative work, and service. We believe *Flagship 2030* will help us accomplish that goal, through near-term actions and investments that will sustain our quality and competitiveness and through visionary "flagship initiatives" that will transform the university within the next quarter-century.

Following approval by the University of Colorado Board of Regents, our next steps will include assigning task forces to expand upon the initiatives, creating detailed action plans with performance measures, integrating the plan into the university's budget cycle, implementing specific initiatives, and providing regular progress reports and updates.

I. Introduction: Reinventing the Flagship

A. Building on a Remarkable History

The University of Colorado at Boulder's history is one of vision and determination—useful traits for pioneers dreaming of educational opportunities in the days of the Colorado Territory. Indeed, a state university was envisioned before Colorado became a state, when the territorial legislature passed an act in 1861 providing for a "University at Boulder."

In America's centennial year of 1876, both the university and the state of Colorado were formally established. Forty-four students formed the first class, taught by three instructors, including President Joseph A. Sewall (pictured). Situated on a "barren and wind-swept plain," Old Main Building housed not only the first classrooms, but the president's home, the library, and the janitor's quarters.

Thus, the stage was set for a remarkable future. Over the next 130 years, the university has blossomed in size and quality—attracting superb faculty, staff, and students to a breathtaking campus set against the Flatirons. Throughout the 1900s, CU-Boulder has built strong academic programs in the sciences, engineering, business, law, arts, humanities, education, music, and many other disciplines. Over the years, the university has claimed a number of Nobel laureates, "genius grant" MacArthur Fellows, and elected members of prestigious national organizations and academies.





Early on, the university recognized the potential benefits of interdisciplinary work and collaborative learning in both undergraduate and graduate programs. The rich interplay of ideas across academic boundaries has fostered a spirit of innovation and discovery, from space science to the American West to biotechnology.

Compared with some of the most venerable universities around the world, CU-Boulder is still young—but our vision and determination have brought us a maturity beyond our years. Much has been accomplished in a relatively short period, but we intend to further accelerate the pace through a bold strategic plan called *Flagship 2030*.

At the heart of this effort is the drive to create a "new flagship university" as the standard for the great comprehensive public research universities of the new century. With *Flagship 2030*, we have a unique opportunity to serve Colorado and enhance the well-being of humankind through excellence in teaching, research, creative work, and service.



Page 10

B. CU-BOULDER TODAY

University Profile in Brief. Today CU-Boulder enrolls approximately 30,000 undergraduate, graduate, and professional students and offers over 3,400 courses in more than 150 fields of study. Many of the university's programs are not available at any other institution in the state or, in some cases, the Rocky Mountain region. Eight schools and colleges provide academic homes to approximately 1,000 tenured and tenure-track faculty; approximately 1,100 other instructional faculty (including instructors, lecturers, adjunct instructors, and others); and 1,500 research faculty (including research professors, research associates, research assistants, and others). More than 3,000 staff members support the success of CU-Boulder's faculty and students.

The university campus is nationally recognized for its physical beauty and unified architectural style. More than 200 buildings feature sandstone and red-tiled roofs in the "Tuscan vernacular" design. CU-Boulder has grown to approximately 800 acres on the Main Campus, East Campus, University of Colorado Research Park, Williams Village, and Mountain Research Station, along with other properties, such as the South Campus, reserved for long-term needs.







Strengths and Contributions. By engaging in leading-edge research and scholarly work, our faculty and students are making a tangible difference in the world. They apply knowledge and creativity to solving some of society's most vexing problems, whether it be installing a water purification system in a remote African village, developing a more effective tool for identifying flu viruses, or producing a film to raise awareness of global child exploitation.

The world of 2030 will demand more, not less, engagement by universities in confronting the issues of humankind, and at CU-Boulder we are well positioned to meet these challenges.

Additionally, CU-Boulder faculty members have a remarkable record in competing for sponsored research, attracting more than \$266 million in federal and other support during the 2007 fiscal year. The number of annual patent applications by CU-Boulder researchers has tripled during the past five years, from 31 to 98. Ninety research institutes, centers, and laboratories contribute to the interdisciplinary strength for which the university is known. More than 11 million publications in our University Libraries provide the largest collection in the Rocky Mountain region. CU-Boulder is highly regarded among universities nationwide, and is one of only 35 public research universities in the prestigious Association of American Universities. We are closely affiliated with several nearby national laboratories, whose scientists and researchers work collaboratively with our faculty to push the boundaries of exploration and discovery every day.

As educators, we take pride in our innovative undergraduate and graduate education programs, including our 11 residential academic programs that provide shared undergraduate learning and living experiences and our concurrent bachelor's/ master's degree offerings that allow top students to complete two degrees in five years. Additionally, we honor teaching excellence as one of our core academic values through a wide array of faculty recognition programs and incentives.

The CU-Boulder community also plays an important role in the state of Colorado's economic vitality and quality of life, generating more than \$17 in gross state product for every dollar provided by the state in unrestricted general fund appropriations. In addition to attracting significant federal research dollars, we contribute thousands of graduates each year to an educated workforce that helps drive the state's economy. In addition, technology transfer fostered by our faculty and graduate students has led to many of the state's new businesses and industries; in fact, approximately half of the new biotechnology companies created in Colorado each year are the result of technology developed either exclusively at CU-Boulder or in conjunction with our sister institution, the University of Colorado Denver.

Our faculty and students further enhance Colorado's quality of life with a variety of ongoing artistic, musical, and cultural programs—like the nationally renowned Colorado Shakespeare Festival, now entering its 51st year. From museums to concerts to art exhibits to dance performances, CU-Boulder promotes creative expression and public appreciation of arts and culture.







C. THE CHALLENGES AHEAD

Excelling with Limited Resources. CU-Boulder's current financial model, with the lowest percentage of state funding among major public research universities nationally, poses a challenge to our future success. State financial support has not kept pace with university needs and now reflects less than 8 percent of the total university budget. Other resources, such as tuition and research grants, make up the majority of the remainder. Private fundraising continues to grow, providing critical funds for new investments.

In the *Flagship 2030* planning process, we focused first on creating a far-reaching vision for transformation without considering the impact of the constraints of current conditions. We wanted to decide *what* should be done before deciding *how* it could be done. This document emphasizes what is needed to become a leading 21st-century research university and outlines the general financial parameters necessary for success. More specific financial models will be developed as budgetary priorities are set in the implementation phase.

Clearly, our success in moving the university forward will depend on available funding. CU-Boulder will need strategic investments beyond the normal inflation rate—including higher levels of federal and private support for research, creative work, teaching, and student scholarships—to become the model for the "new flagship university" of the 21st century. Just as important, we must convince the state of Colorado to invest in the initiatives outlined in this plan.

Working to Inspire Confidence and Passion. In both word and in deed, successful universities earn the support of students, parents, alumni, citizens, leaders of industry, nonprofits, and government officials. People support organizations and institutions that are well managed, inspire confidence, and engender passion.

To increase support for CU-Boulder, we will continue to refine and strengthen our management strategies. We will continue to emphasize efficiency in our operations. We will listen and communicate effectively. We will tell the story of the university and our commitment to education, research, and service benefiting Colorado and the world. We will forge strong partnerships to help build the "new flagship university" of the future.



At CU-Boulder, we believe change represents opportunity-the opportunity to redefine the university in new and exciting ways. We see opportunities for leveraging our strengths, such as faculty achievements in research and discovery, to address the complex issues facing society. The prospect of change will encourage us to set new standards of excellence and emerge even stronger in the global community.

Thriving in a Changing World. In the coming decades, the best public universities will be those agile enough to anticipate and embrace change. All signs point to monumental changes in the world: shifting demographics, increased globalization, and heightened geopolitical tensions. We will see a growing dependence on technology, advances in medical science, and expanded quests for new energy sources. Environmental issues will capture the attention of people around the world. This will be the national and international setting within which we will seek to fulfill our mission.

How will the changing world affect the university? We expect the workforce will be more mobile and that retaining our most outstanding faculty and staff will be increasingly difficult. With the emergence of advanced information technologies, we anticipate that more students will be drawn to increasingly personalized, interactive, and visual ways of learning. We expect greater focus on emerging fields of study, some of which are most likely unknown today. We anticipate a heightened need for interdisciplinary approaches to education and research.



Global Competition. America's flagship universities have always played a vital role in helping the United States compete in the global economy. With a record of innovation and excellence, our nation's state universities have been called "the greatest system of higher education in the world." Public universities, including CU-Boulder, provide the majority of America's educated workforce, and many conduct groundbreaking research benefiting both America and the world in countless ways. Today, however, countries in Europe and Asia are investing in their own colleges and universities at levels that will challenge America's claim. As a nation, we must address this disparity if we are to remain competitive on a global scale. At CU-Boulder, we feel strongly that America's public universities should encourage a national dialogue on meeting this growing challenge.





We know that the most successful universities do not wait for circumstances to shape their destiny. Here at CU-Boulder, we will use *Flagship 2030* to chart our course for the future and position ourselves for global leadership in the next quarter-century.

D. PLANNING STRATEGICALLY FOR 2030

Thinking Long Range. *Flagship 2030's* long planning horizon was chosen because we wanted to challenge ourselves to consider the educational and developmental needs of students yet to be born—the generation beyond iPods, MySpace, and Blackberries. We wanted our faculty to think outside the constraints of next year's syllabus or next week's committee meeting. We deliberately devised our strategic planning process to provide ourselves the freedom to think beyond the encumbrances of more immediate problems and conditions.

Planning for a 25-year horizon is filled with unknowns. In a sense, one can argue that this strategic plan seeks to educate our students for jobs that do not yet exist, to solve problems we have not yet imagined, using techniques we have not yet developed. However, the university can reap great benefits from anticipating the broad directions learning and discovery will take as we prepare to become more agile in the face of change.



Our first strategic planning challenge was to imagine the characteristics of the leading national comprehensive universities of 2030. What will the flagships of tomorrow look like? Will they be more or less specialized? How will students best learn? Will they have a different curriculum? How will research projects be organized to find the best solutions? How will CU-Boulder promote the advancement of knowledge and understanding to benefit society? Many such questions emerged as we engaged in a number of discussions focused on how higher education will evolve during the next 25 years.

Our next task was to develop a vision for how CU-Boulder will look and act in 2030. To be successful, our entire academic community and its stakeholders must share an overarching vision for the university's future—a vision that will inspire and guide us in the decades ahead. Over the past year, we have collaborated to create a vision that articulates what we aspire to become and focuses on defining the flagship of the future.

In the coming months, the university community will hone this strategic plan into a set of action plans based on timelines of 12 to 18 months, 3 to 5 years, and 12 to 15 years. These action plans, including performance benchmarks, will point us toward realizing our strategic vision.



Flagship 2030 will play a central role in the university's future fundraising campaigns. The concepts developed here will provide guidance to our efforts to enhance private giving, and we are confident potential donors will find compelling reasons to invest in the university's future as we implement this strategic plan.



It is important to understand that *Flagship 2030* is a strategic framework-not intended as an exhaustive description of everything the university will strive to do over the next quartercentury. It represents the collective vision and thoughts of many constituents and experts who have provided guidance to the university's leadership. We anticipate the plan will be refined and amended over time, but that its core objectives will be realized-to excel in the performance of our role and mission, to support the people of Colorado, and to engage with the global community.

The Process. In the summer of 2006, the three campuses of the University of Colorado were asked by the CU Board of Regents and CU President Hank Brown to develop strategic plans. In this process, campuses were asked to focus on student success, quality and excellence, and resource development.

At CU-Boulder, our strategic planning process has taken both a top-down and a bottom-up approach; university leadership launched the effort, but the plan reflects the work of hundreds who have engaged in campus-wide, statewide, and nation-wide conversations about CU-Boulder's future. Chancellor G.P. "Bud" Peterson called on the university community to move beyond the typical five-year action plan and develop a global, long-range vision. We recruited a 54-member steering committee made up of faculty, staff, students, local community members, and other stakeholders to guide the planning process. Subject matter experts and other core contributors—representing faculty, community members, alumni, and staff—assisted the committee.

We believe that CU-Boulder can transform itself only if we engage and listen to everyone invested in the university's future. With this in mind, we organized a series of seven open forums to encourage campus conversations, providing opportunities for strategic dialogue on transforming CU-Boulder for the world of 2030. Hundreds of faculty, staff, and students participated in the seven forums. Questions were raised, ideas were shared, and voices were heard. We launched a *Flagship 2030* website to share information and promote participation in the planning process. We sought ideas and viewpoints from civic and government leaders across the state. We also sought feedback from the CU Board of Regents and conducted focus group interviews with Colorado business and community leaders. **Central Questions.** As part of the *Flagship 2030* planning process, members of the steering committee organized into subcommittees assigned to address six central questions that would help guide the plan's development. Those questions were:

- 1. What will students need to know in 2030?
- 2. What will the state of Colorado need from the university in 2030?
- 3. To what needs will our research, scholarship, and creative work respond?
- 4. What should our relationship be with the Boulder community over this period?
- 5. What will the university community be like in 2030?
- 6. What financial and operational models will be necessary for success in 2030?

Following a number of broad-ranging discussions, each subcommittee submitted a report that included projections, analyses, and recommendations for action. These reports played a central role in the overall development of the strategic plan. They also will help drive our next steps, including the development of detailed action plans.



Copies of the *Flagship* 2030 subcommittee reports are posted online at www.colorado.edu/ flagship2030. "Globalization has changed the paradigm of how we consider the future of Colorado." The LEAP Project. CU-Boulder's planning process benefited significantly from external input obtained from a statewide initiative. Six local leaders from each of 16 communities were interviewed in a project sponsored by the CU-Boulder Leadership Education for Advancement and Promotion (LEAP) program. LEAP is a National Science Foundation-funded effort to develop a cadre of effective leaders who will advance both their individual fields of study and the university as a whole.

The following Colorado communities, representing all areas of the state, were chosen for the project: Alamosa, Aurora, Colorado Springs, Denver, Durango, Fort Collins, Grand Junction, Greeley, La Junta, Lamar, Limon, Longmont, Pueblo, Steamboat Springs, Sterling, and Vail. The six leaders interviewed in each community included the mayor, the school superintendent, the publisher of the local newspaper, the chamber of commerce executive, an active high school parent leader, and a community representative.



During the interviews, we asked the local leaders two questions: "What will Colorado be like in the year 2030?" and "How can CU-Boulder best serve the state?" Interview summaries revealed a thoughtful and positive response to the university's effort to transform itself for the future. Overarching themes from the discussions included:

- 1. Support for CU-Boulder's role in preparing the workforce of the future
- 2. Recognition of CU-Boulder's role as the flagship university
- 3. High expectations of the university as a "public trust"
- 4. Recognition of difficult financial challenges, but expectations of fair access

Looking ahead to 2030, many Colorado community leaders believe the state will be operating in an increasingly global economy and expect dramatic changes in Colorado demographics. Some believe that natural resources management, especially air and water issues, will dominate Colorado's concerns and that renewable energy will be a leading economic and technological focus. Community leaders feel that CU-Boulder, as the flagship university, should be financially strong while providing affordable access to Coloradans. Some feel that CU-Boulder needs to reach out more to rural Colorado and help solve local problems.

"Our future is really intellectual capital, intellectual property, and our capacity to generate ... great critical thinkers."



A complete report of the LEAP interview project, with highlights of the discussions, is provided online at www.colorado.edu/ flagship2030.



II. The Vision for Flagship 2030

An important outcome of CU-Boulder's strategic planning effort is the articulation of a *shared vision* for the university's long-range future. There was equal value in both the process and the product of the "visioning" endeavor. The process brought people together for thoughtful discourse and, in and of itself, shaped the university in fundamental ways. The resulting vision statement will serve as an instrument for change and a mechanism for keeping the university focused on central objectives.

Our vision for *Flagship 2030* reflects the viewpoints of hundreds of faculty, staff, students, parents, alumni, business leaders, nonprofit organizations, industry representatives, government officials, community members, Colorado citizens, and a broad constituency of other friends and supporters. We listened to insightful ideas from a wide array of perspectives, all of which helped us synthesize and articulate a far-reaching CU-Boulder vision statement.





A. The Statutory Mission

CU-Boulder's vision is grounded in its statutory mission as a national public research university. In Colorado statute, the university is defined as the "comprehensive graduate research university with selective admissions standards..., offer(ing) a comprehensive array of undergraduate, master, and doctoral degree programs" of what is now designated the University of Colorado System.

At CU-Boulder, we recognize the exceptional opportunities associated with our role as a research university, and we value the unique strength and character research achievements bring to undergraduate education. We are keenly aware of our responsibility for educating the next generation of citizens and leaders, and for fostering the spirit of discovery through research. Indeed, we believe that our students, both graduate and undergraduate, benefit from the comprehensive mix of programs and research excellence that characterize a flagship university. Thus, we believe CU-Boulder's statutory mission is relevant today and will remain relevant tomorrow.



B. Envisioning 2030

CU-Boulder's new vision for 2030 reflects a strong commitment to serving the needs of Colorado while simultaneously becoming a global presence in education and discovery for the benefit of the larger world. These overarching concepts form the fundamental basis of our *Flagship 2030* vision statement.

Flagship 2030: Serving Colorado, Engaged in the World

The University of Colorado at Boulder will become a leading model of the "new flagship university" of the 21st century—by redefining learning and discovery in a global context and setting new standards in education, research, scholarship, and creative work that will benefit Colorado and the world.



C. Shaping the New Flagship: Central Themes

In the strategic planning process, we sought to identify the characteristics of successful flagship universities in the next quarter-century—and to apply those characteristics to CU-Boulder's future. Six broad themes emerged for how the "new flagship" will look and act in 2030. These themes reflect the university's legacy of accomplishment over the past 130 years, as well as our best projections of the long-range needs and conditions of Colorado and the world. They form the basis of our plan to transform CU-Boulder to serve Colorado and engage the world during the next quarter-century.



In 2030, we expect the **University of Colorado at Boulder** will be a place that:

- Is intellectually inspiring, academically challenging, welcoming and supportive, and conducive to positive personal growth, with the capacity to unleash the power of imagination, creativity, and discovery.
- Becomes a **dynamic global force** for the nurturing and development of ideas, the expansion of the frontiers of knowledge, the conception of creative work, and the dissemination and effective application of those ideas, works, and knowledge.
- Exemplifies the power and promise of **diversity**, **intercultural understanding**, **and community engagement** to promote a greater sense of multiculturalism and inclusiveness in the state of Colorado and around the world.
- **Promotes the state of Colorado** as a global crossroads of ideas and discovery—one characterized by academic excellence, economic vitality, environmental awareness, and artistic and cultural enrichment.
- Prepares students with a **foundation of cultural and institutional knowledge** that will help them reach their full potential by providing them with a broad understanding of the world around them, critical thinking and problem-solving skills, a sense of responsibility to others, leadership skills, and a recognition of the importance of lifelong learning.
- Is an agile organization supported by effective leadership, financial and operational models, and infrastructure to accomplish its vision and mission.





III. Investing in the Vision

We believe the *Flagship 2030* vision will require a two-pronged approach to investment and decision-making. The first prong addresses the need to sustain quality in research, creative work, teaching, and service by investing in eight core initiatives ranging from enhancing research and graduate education to improving campus infrastructure and increasing access. Investments in these core areas will be necessary to meet our commitment to serving Colorado and maintaining our position as a competitive research university. The second prong focuses on 10 innovative and transformational "flagship initiatives" that, taken collectively, will distinguish Colorado and our graduates from those graduating from the many other universities around the world. Through targeted investments in these initiatives, we will position CU-Boulder as a leading national comprehensive public university by 2030-one that applies its influence and resources to address pervasive human issues while educating future generations of global citizens and leaders. We aim to give our graduates a competitive edge in the workforce, and we want to lead the state of Colorado in becoming a new international crossroads of ideas.



Over the past 130 years, CU-Boulder has built an impressive record of success: a world-class teaching and research faculty; a strong pool of students attracted to excellent undergraduate, graduate, and professional programs; a dedicated and proficient group of professional and support staff employees; and a beautiful physical campus. These qualities have allowed the university to grow and excel-but staying competitive will require us to invest additional resources in several core areas outlined on the following pages.

A. THE CORE INITIATIVES

While developing a strategic plan for the next quarter-century, we also considered what is necessary for CU-Boulder to compete and succeed in the near term. Only by remaining competitive in our core mission today will we be able to maintain the visibility and leadership we will need to support Colorado's prosperity and become a global presence in the future.



1. ENHANCING EDUCATION AND SCHOLARSHIP. We plan to grow our faculty and rethink our undergraduate education model.

In order to offer a high-quality educational experience and foster research excellence, CU-Boulder will *increase the size and enhance the quality of our faculty*. During the next 10 years, we will add at least 300 new tenure-track faculty members who will help to improve undergraduate and graduate education and to enhance our research capabilities. To sustain these improvements in faculty numbers relative to enrollment, any significant increase in student enrollment will be accompanied by additional new faculty members.

With these investments, we will make substantial progress toward achieving a tenure-track faculty-to-student ratio comparable to our public research university peers. We will increase the number of tenured faculty teaching undergraduates and enhance opportunities for undergraduate research. In addition, we will review the appropriate use of instructors in contributing to the best possible educational experience for our students.

As we add new positions, we will also identify and implement strategies for enhancing our faculty diversity. A significant increase in new and diverse faculty will help us remain competitive in the quality of teaching and the educational experience for undergraduate, graduate, and professional students. Just as important, a robust body of tenure-track faculty will advance our research mission, creating new opportunities for research, scholarship, and creative work that will encourage our continued success in competing for contracts and grants from federal agencies, private industry, and other funding sources.

Many of the new faculty positions will be distributed strategically among the *core disciplines*, such as the humanities, the arts, the sciences, the social sciences, engineering, business, education, and journalism. Others will be assigned to our *distinctive areas*, ranging from our research institutes to music to law. Other faculty positions will be added in *emerging interdisciplinary fields*, such as biotechnology, sustainable and renewable energy, geosciences, environmental studies, technology, entrepreneurship, and the American West. In support of our faculty and student research and creative efforts, we also will increase investments in start-up needs, equipment, and summer research funds.



By understanding how students learn best—and adjusting our teaching methods accordingly—we can move forward on the broader initiatives. Taken together, these concepts will help form a new model for undergraduate education at CU-Boulder.

Beyond adding faculty positions, we must *redefine the way we deliver undergraduate education* to better prepare our students for the future. Through curricular and other learning experiences, we want our students to gain a broader understanding of the world, develop a sense of personal and global citizenship, and build leadership skills. By 2030, we anticipate dramatic changes in both the content and the mode of teaching. No one knows exactly how curricular needs will evolve in the next quarter-century, but we will start campus-wide conversations now to ensure our long-term ability to meet them.

We therefore propose initiating a process for examining CU-Boulder's current curriculum and teaching methodologies in light of a changing world. Curricular reform is a challenging, contentious undertaking, but the successful universities of the future will be most responsive to the changing landscape of learning and teaching. In our curricular planning for 2030, for example, we will include a focus on understanding and appreciating the foundations of diverse cultures and traditions. We also must examine our academic and administrative structure consistently over time to shape the most effective and agile university possible.

We believe our examination of curricular and teaching issues will lay the groundwork for the transformative "flagship initiatives" proposed later in this document (for example, the Colorado Undergraduate Academy, residential colleges, and experiential learning proposals).


2. FOSTERING RESEARCH EXCELLENCE. We will increase investments in research and creative work by 5 percent each year. We also will provide targeted investments in high-performance computing facilities, facilities that promote interdisciplinary discovery across the university, and facilities for cutting-edge research enterprises, such as nanotechnology and biomedical advances.

CU-Boulder's academic reputation rests in large measure on world-class research, scholarship, and creative work by our accomplished research faculty and graduate students. From their laboratories and studios, they bring honor and recognition to the university as well as exceptional learning opportunities for our students. We are committed to enhancing CU-Boulder's research mission, a mission that is critical to our standing as a flagship university.

By increasing the number of tenure-track faculty and remaining competitive in the recruitment of top graduate students from across the country and around the world, we will strengthen our reputation in research, scholarship, and creative work and provide greater support for graduate education.

For decades, CU-Boulder's research faculty have excelled at obtaining federal research contracts and grants. Since 2000, for example, total awards have increased by 24 percent. However, intense competition for finite federal dollars will present challenges for these growth rates. Clearly, we will need expanded institutional support to ensure continued excellence in research and creative work. We intend to become a global presence in research and scholarship by 2030. To realize this vision, we must make the right investments now in the discovery enterprise.

One of our most visible investments will be in the build-out of the University of Colorado Research Park, now an underutilized parcel just east of the Main Campus. This 200-acre space offers enormous potential for accelerating CU-Boulder's top-tier research enterprise. On this land, we will create a vibrant extension of the Main Campus that will further our achievements in science and technology research and development. In the tradition of academic spaces, the research park will feature mixed uses, including research, teaching, service, student support, residential spaces, and recreation. Several existing research-oriented facilities will form the nucleus of this new, more distinctive space for learning and discovery, with an emphasis on sustainability and environmentally sensitive development.



As a comprehensive research university, CU-Boulder must help ensure a robust pool of PhD and master's degree students from whose ranks the leaders of tomorrow will emerge.

3. ENHANCING GRADUATE EDUCATION. We will increase the number of graduate students to 20 percent of the total student population.

Graduate and professional education, including CU-Boulder's Graduate School, help drive the nation's competitiveness by preparing the intellectual leadership of tomorrow—the future professors, scientists, artists, scholars, lawyers, and policymakers who will shape our world.

Currently, graduate and professional students account for approximately 15 percent of the total student enrollment; we will increase that number to 20 percent by strengthening our recruiting efforts and enhancing graduate student incentives.

In addition, we will rethink CU-Boulder graduate degree programs. The landscape is changing for the traditional master's degree, for example, with a trend toward more professional master's degrees. The professional master's degree is a terminal degree with a specific and often highly specialized professional employment goal different from the traditional academic master's degree in many respects. We already have launched a number of professional master of arts degrees in the humanities and social sciences, as well as professional master of science degrees in the sciences and engineering. Interdisciplinary and professional certificates offer yet another way to prepare for tomorrow's specialized professions. We believe these nontraditional approaches, properly implemented and promoted, will help us substantially increase the number of CU-Boulder graduate students. **4. ENSURING ACCESS.** We will enhance student financial support by doubling both merit and need-based financial aid within the next five years; we will initiate a statewide dialogue on how Colorado can expand access to higher education.

CU-Boulder is committed to recruiting outstanding students from a diverse talent pool throughout the state, the nation, and the world. In particular, we want to provide access for qualified Colorado residents, regardless of their ability to pay. Although financial aid has been the fastest-growing budget item for the past four years, we still lag behind our peers in overall funds available to help attract the best students. Clearly, we need to increase our financial aid investment if we are to compete for outstanding undergraduate students. At the graduate level, we also must enhance stipends, health care, and housing to recruit top-tier graduate students. Our overall recruitment strategies must reflect our intent to build a diverse student body that is more representative of the world today and tomorrow.



While augmenting financial aid is critical to expanding access and equal opportunity, it is only one step toward the goal. We believe equal access to educational opportunities will become increasingly important to Colorado's future-and will require statewide commitment at all levels, with more attention given to preparing all of the state's primary and secondary students for higher education.

At CU-Boulder, we will play a leadership role in communicating the urgency of this issue—and we will lead discussions among Colorado's political and educational leaders to help evaluate needs, identify solutions, and develop action plans as a state. **5. SUPPORTING THE MISSION.** We will increase the number of talented and creative staff members to provide the necessary support for achieving the university's educational and research missions.

A talented and diverse staff is essential to the administration and operation of a major research university. Staff members play a critical role in the success of faculty engaged in teaching and research, and they are important partners in the development of innovative classroom pedagogies. We also know that student satisfaction and success is closely related to high-quality staff support for academic advising, career counseling, and other opportunities for student development. All areas of the university rely heavily on effective staff support, but personnel levels have not kept pace with the growth of faculty and students. Therefore, we will increase the number of staff members, helping ensure proper levels of support for our aspirations in teaching, research and creative work, and service.



6. INVESTING IN THE TOOLS FOR SUCCESS. We will increase investments in new technologies, campus facilities, and library collections to support outstanding education and scholarship.

Over the past 20 years, universities have seen a dramatic transformation in the use and study of new technologies, a trend we expect to accelerate during the coming decades. Already, technology has opened up new opportunities for global discourse, such as videoconferences with academic partners around the world.

Soon, it will be common for a single instructor to teach students on many continents, creating global classrooms made possible by technology. CU-Boulder will remain on the leading edge of new information and communications capabilities to support technology-enhanced learning, research and creative work, and campus operations. In a constantly changing technological environment, we will be flexible and visionary—able to respond to immediate needs and to lead in the development and adoption of the next revolutionary advances.

We also will invest in another kind of infrastructure: the sandstone-and-mortar variety. Our university has one of the most architecturally distinguished campuses in the nation, but a world-class university requires the constant renewal and enhancement of its physical infrastructure. To remain competitive, we will continue to expand and renovate existing facilities, creating more high-tech classroom buildings, state-of-the-art research facilities, innovative residence halls, and centers for the creative and performing arts. Our 10-year capital plan currently calls for new facilities supporting the performing and visual arts and the build-out of the University of Colorado Research Park with the construction of a new biotechnology building and a proposed geosciences facility.





In addition, we will address the need for new interdisciplinary research and educational facilities to accommodate existing and emerging initiatives, and our anticipated growth in enrollment and faculty numbers will require careful planning to accommodate new needs for classroom space, faculty offices, laboratories, and studios.

Libraries traditionally are at the heart of a university's education and scholarship, serving both as repositories for knowledge and as venues for individual learning. While we expect that role to continue in the coming decades, we anticipate a very different type of library by 2030. The CU-Boulder University Libraries strategic plan recognizes that library "clients' needs and expectations are changing rapidly, fueled by new technologies and new service models.... Students and faculty expect information to be available to them whenever and wherever they want to work." We envision our libraries as a more client-centered "intellectual commons," with instruction on discovery of networked information in both a physical and virtual space. In the coming decades, our investments will focus on digital resources for "virtual information spaces," as well as creating physical spaces that encourage individual and collaborative learning, research, and creative work.



 $P_{Age}40$

7. LEARNING FOR A DIVERSE WORLD. We will develop, implement, and assess university strategies to improve the diversity of faculty, students, and staff, as well as to foster a supportive, more inclusive community for all.

By 2030, CU-Boulder will be a model for the nation in applying best practices in support of diversity and inclusive excellence. Beyond the moral imperative, a world-class university cannot afford to pass up the contributions offered by different perspectives and backgrounds. To achieve this vision, we have renewed our commitment to a more welcoming and diverse community for learning, discovery, living, working, and service. We will build a university community that is more representative of the larger community, the state of Colorado, the nation, and the world and we will reach that goal through commitment and action.

As a first step, we will engage the university and external communities in developing an action plan with concrete measures for transforming CU-Boulder into a more welcoming and inclusive learning environment. This action plan will identify the initiatives we will undertake, along with the necessary resources to achieve them. The planning process will need to consider a number of key questions, such as how the university can better reach out to underrepresented students; how we can ensure that all students, faculty, and staff feel included and welcome; and what steps we can take to enhance the overall CU-Boulder campus climate.



While our commitment to action is necessary at all levels, it begins with our administration. In 2007, CU-Boulder created a new cabinet-level position to provide collaborative leadership and advocacy for our diversity efforts and to ensure that diversity-related issues are key considerations in our budgetary, administrative, academic, and governance decisions.



Our leadership has already begun building partnerships throughout the university to address issues of diversity in the faculty ranks, student recruitment and retention, staff development, and campus climate. A five-year plan will be developed in collaboration with academic leaders to recruit and retain a diverse faculty throughout our colleges, schools, centers, and institutes. Special attention will be given to assessing retention programs for first-generation college students and those from economically disadvantaged backgrounds. We will enhance recruitment of graduate students from diverse backgrounds, including establishing partnerships with colleges and universities that traditionally attract students of color. We also will work with various university offices to address the needs and goals of international students at CU-Boulder. Staff diversity efforts will focus on expanded professional development opportunities aimed at attracting and retaining a diverse and highly qualified staff as well as building a more welcoming and inclusive campus culture. As a university, we will work to eliminate physical, communication, and attitudinal barriers to access. We will enhance support for the offices and programs that serve underrepresented students, faculty, and staff. We will reach out to key civic constituents in the community, state, and nation, seeking their input and advice.

Additionally, an integral part of our diversity efforts for 2030 will be programs to ensure that all students have academic and experiential learning opportunities in the American principles of self government. CU-Boulder will be a model among its peers for programs in which students learn the rights and responsibilities of national, state, and local citizenship. This will include, but will not be limited to, understanding of the founding documents and the institutions and structures of federal, state, and local government.

By working together, both on and off campus, we intend to refocus and improve our strategies in order to build a more inclusive university community.

We recognize the challenges of affecting change in climate and diversity, but such change is fundamental to *Flagship 2030*—and to the core values of our university. With the active involvement of our students, staff, faculty, administrators, and community members, we will create a more welcoming and diverse campus environment.

8. SERVING COLORADO, THE COMMUNITY, AND OUR

GRADUATES. We will create a coordinated, targeted, and expanded outreach program that strengthens connections between the university and Colorado communities. Also, we will expand lifelong learning opportunities as an extension of a CU-Boulder degree.

Coloradans have told us they want a stronger CU presence in their communities. Clearly, we need to be there—and we need to do things that strengthen Colorado communities. Our faculty and students have the capacity and expertise to address serious community issues through research and to enrich lives with music, arts, humanities, and cultural offerings. The challenge is to find better ways of sharing that capacity with communities around the state.

We propose developing an action plan for outreach that would, for example, provide on-site learning and arts opportunities on the Western Slope, in rural Colorado communities, and at other locations outside metropolitan areas, in partnership with local institutions. We will seek new ways of applying research methods to solve critical problems facing communities around the state and we will explore new opportunities for faculty and students to engage in entrepreneurial efforts. Our action plan will be guided by input from the communities themselves. It will include bringing more Colorado teachers and high school students to campus for focused learning opportunities. The plan also will emphasize helping communities in economic development and cultural enhancement efforts. We also will establish a greater statewide CU-Boulder presence through regular visits to Colorado communities by our administrators, faculty, staff, and students.

As we look ahead to 2030, we expect that lifelong learning will be a growth component in higher education. The new flagships will need to provide a broad spectrum of educational options, including "just-in-time" skill upgrades and career retooling for alumni, professionals, and the community. CU-Boulder will begin by rethinking the structure and purpose of traditional continuing education programs given the speed of change in most professions. We will examine the potential of real-time "virtual learning environments" and nontraditional scheduling, as well as distance-learning opportunities made possible by technological advances. With these initiatives, we will be able to offer our graduates and community members timely access to the university's vast resources—for a lifetime.



We believe the "flagship initiatives" will help CU-Boulder become a university that others emulate, delivering a worldclass learning experience as a global leader in education and scholarship. Our success in transforming the university to train the innovators, scholars, artists, and leaders of the future will be our most enduring legacy.

B. THE FLAGSHIP INITIATIVES

Keeping CU-Boulder competitive in the short term is critical, but we have even higher aspirations for the next quarter-century. To that end, we have developed 10 "flagship initiatives" that go beyond traditional thinking and have the potential to truly transform the university. We intend for these strategies to lay the foundation for CU-Boulder's transformation.



Page 44

1. RESIDENTIAL COLLEGES. We will offer a multi-year residential academic experience for every entering student.

For many students at CU-Boulder, residential academic experiences have been a significant and positive aspect of university life over several years. We already know that residential colleges engage students as active participants in living and learning environments that foster diversity, community, and intellectual and personal growth. Now we want to offer that experience to every student—and we want to extend it beyond a single year.

CU-Boulder currently offers 11 one-year Residential Academic Programs (RAPs), ranging in topic areas from natural sciences, liberal arts, and the American West to international interests, fine arts, business, and global leadership. Many of the programs' seminars are taught right in the residence halls by some of our best faculty. In addition, students may participate in program-sponsored activities outside the classroom, such as informal discussions with faculty members, speaker series, social activities, and outdoor adventures. As part of the program, students have the opportunity to meet with representatives from government, private industry, nonprofit organizations, and community groups.

We believe CU-Boulder is well positioned to expand the residential college experience. By 2020, the university will complete a major renovation of all residence halls, adding additional capacity and creating environments more conducive to the focused and intensive residential academic experience. By implementing this initiative, CU-Boulder will become one of the few U.S. public flagship universities to offer the lifelong benefits of a multi-year residential college experience for all undergraduate students.





We believe the academy has potential for broader application to CU-Boulder's undergraduate population. As the program progresses, we will seek opportunities to expand the academy as appropriate.

2. CUSTOMIZED LEARNING. We will establish the Colorado Undergraduate Academy as a new education model featuring mentored, self-directed, and customized learning tracks.

CU-Boulder will build a nucleus for customized learning through a new program called the Colorado Undergraduate Academy. Aimed initially at the most academically accomplished undergraduates, this four-year academic program will help students acquire the abilities and attributes necessary for leadership through an approach customized for each participant. In the coming years, we anticipate the academy will serve as an ongoing incubator for innovation in curriculum, teaching, use of technology, and the personalization of education for the entire student body.

Rather than taking a prescribed set of core courses, each student will work with an advisor to construct a unified set of curricular and extracurricular activities, such as civic engagement and international experiences, that will offer a more personalized learning experience. We also will consider more customized scheduling for each student. Currently, we operate under a calendar-based rather than an outcome-based schedule. As a result, students are "finished" with a class when the semester is over, rather than when they have learned the material.

In the Colorado Undergraduate Academy, students will continue to receive the lifelong benefits of a solid liberal arts education, only more tailored to their interests. For example, a student might develop a curriculum around a societal topic and take humanities, social sciences, and science courses that address that topic from an interdisciplinary perspective. Advisors also will be available to help students prepare for potential careers within their major fields.

3. EXPERIENTIAL LEARNING. We will incorporate experiential learning opportunities more broadly into every student's education.

Because the world will be different in 2030, we can expect that graduating students will need new skill sets to succeed in their personal and professional lives. They will require more than a college degree and a command of traditional knowledge; they will need to cultivate core personal attributes and a level of global understanding not currently emphasized in most university catalogs.

By 2030, CU-Boulder proposes establishing a broad array of learning experiences to help students prepare for success in their chosen fields and in their personal lives. We will require at least two semester-long experiences tailored to complement academic coursework and cocurricular activities. Examples might include a research or creative project teamed with a professor or an entrepreneurial experience such as starting a small business. Students might undertake a study abroad experience, an honors thesis or senior project, or a portfolio of creative work. Other possibilities include full-time engagement in a community service project, an internship with a commercial or nonprofit enterprise, or clinical experiences in the University of Colorado Law School.

We believe these experiential opportunities will help our graduates stand out among their peers in the workplace and excel as ongoing contributors to their communities and society. These opportunities will not only enhance the undergraduate experience of our students, but will benefit external partners in the experiences, including small and large businesses, area schools, local communities, and nonprofit organizations.



Perhaps most importantly, experiential learning will provide our graduates with problem-solving skills, multicultural interactions, and a sense of responsibility that will serve them well in the world of tomorrow.

Specifically, we propose to collaborate with key partners on a "research diamond" in Colorado, which would create a new synergy among the state's research universities, businesses, government, and federal laboratories. Collaborators in this enterprise would address important state and national needs, drawing upon advances in such areas as neuroscience. atmospheric science, biotechnology, space science, energy, geosciences, and computational science, among many others.

4. COLORADO'S RESEARCH DIAMOND. We will initiate a "research diamond" enterprise, in collaboration with other regional universities, businesses, government, and federal laboratories, helping to advance the university's research mission as well as the state's economic future.

Colorado currently is home to many businesses and industries that sharpen the state's competitive edge in the growing global economy. Other states and regions, however, are offering attractive economic packages that could lure away tomorrow's knowledge enterprises and their highly trained, well-compensated workforces. We believe the time is ripe for an aggressive effort to form statewide research partnerships that will create and keep future industries at home in Colorado.





The research diamond would build upon existing strengths and research specialties at CU-Boulder and neighboring research universities such as Colorado State University in Fort Collins, the Colorado School of Mines in Golden, and the University of Colorado Denver. It would engage leaders of business and industry, government, and federal laboratories in entrepreneurial collaborations in the development and transfer of technologies, patents, and intellectual properties to real-world applications. We believe it would serve as a magnet to attract the brightest graduate students from Colorado, the nation, and around the world.

The simultaneous build-out of the University of Colorado Research Park in Boulder would add a powerful facet to Colorado's research diamond, further strengthening CU-Boulder's contribution to the partnership. By supporting and enhancing our university's stature in graduate research, we will be better able to advance the collaborative enterprise.

State and federal support will be needed to launch Colorado's research diamond, but the return on investment could be significant. We believe this initiative will help ensure a bright future for Colorado's economy and promote an entrepreneurial spirit of discovery statewide. We will immediately begin strategic conversations with the potential partners and stakeholders in this venture, aiming for the joint development of a strategic plan within the next three years.





Over the past 50 years, CU-Boulder has established a worldwide reputation for multi- and interdisciplinary approaches to biotechnology, space, atmospheric science, the American West, nanoscale materials, computational science, and most recently, globalization in the humanities and social sciences, among many others. A broad array of interdisciplinary institutes, centers, and laboratories in the sciences, social sciences, humanities and the arts, and engineering address state and global issues, often with federal and industrial partners.

5. TRANSCENDING TRADITIONAL ACADEMIC BOUNDARIES. We will build high-level advocacy and incentives for promoting interdisciplinary teaching, learning, research, creative work,

and scholarship. We believe the most successful universities in 2030 will be those that excel at spanning academic boundaries to address the complex and difficult issues facing society. CU-Boulder already has a strong tradition of interdisciplinary work—and



At CU-Boulder, we continue to forge new interdisciplinary initiatives that focus on resolving human issues both in America and around the world, such as the Renewable and Sustainable Energy Initiative launched in 2006. The energy initiative brings a wide range of academic expertise—history, political science, engineering, biology, economics, chemistry, public policy, business, law, sociology, and physics—to bear on the growing worldwide energy crisis, including the effects of climate change. Our other initiatives include interdisciplinary programs in environmental studies, technology, and entrepreneurship. Our acclaimed environmental studies program, for example, draws from nearly 20 departments and other units, including the earth and natural sciences as well as the social sciences and humanities. Through such initiatives, many of our faculty and students become engaged in helping solve the problems of our world, crafting practical solutions that make a tangible difference.

In the coming decades, we will build on our solid foundation of "interdisciplinarity" to advance the *Flagship 2030* goals and bring new focus to finding solutions to human problems. To that end, we will create a new framework for promoting interdisciplinary degree programs and rewarding faculty success in interdisciplinary teaching, research, and creative work. Strengthened advocacy and administrative support will help keep CU-Boulder at the forefront of interdisciplinary achievements for the next quarter-century.

As an initial step, we propose designating an officer-level academic administrative position to provide leadership for interdisciplinary teaching, learning, and scholarship. We also plan to extend our existing strengths in multi- and interdisciplinary engagement more fully into curriculum and degree offerings. Additionally, we will provide professional and financial incentives to recognize and reward interdisciplinary engry excellence and innovation.



The center will attract the world's best thinkers to visit. work, and study at CU-Boulder, forming collaborative teams to address the critical problems of our society. These "Colorado Fellows" will include world-class researchers, scholars, and academics, as well as policymakers, public officials, and entrepreneurs. They will be selected competitively, based on proposals that address global issues facing government, business, industry, communities, the state, and society.

6. BUILDING A GLOBAL CROSSROADS. We will bring the world to CU and CU to the world—through a new center for global studies and an expansion of student and faculty exchanges around the world.

Colorado has the potential to become a global crossroads for business, science, and higher education—and CU-Boulder can play a central role. With a well-educated workforce, worldwide businesses, and world-class university research, Colorado already is competitive in the global knowledge economy, but more can be done. CU-Boulder has the capacity to become a truly "international" university, but we need to focus our efforts and expand our vision to reach this goal. Therefore, we propose establishing a new center to be called the Colorado Center for Global Education, Research, and Advanced Studies.



We believe the center will provide the critical infrastructure for a greater CU-Boulder international presence, as well as offer our students extraordinary opportunities to interact with the world's leading thinkers. The center also will help bring a global dimension to graduate education at CU-Boulder, providing a platform for the Graduate School to expand its international partnerships.

With *Flagship 2030*, we will launch the process of further "internationalizing" CU-Boulder. A senior-level administrator will be designated to coordinate and advocate for expanded international studies, study abroad, student and faculty exchange programs, international sabbatical programs, and opportunities for visiting faculty. With strengthened leadership, we will be able to focus our international efforts in new and creative ways. For example, we will consider creating "CU-Boulder satellites" with program offerings at other U.S. and international sites, including collaborations with higher education institutions around the world. We believe such initiatives will foster the intellectual exchanges, interconnections, and relationships that will drive the world by 2030.





Under this new model. CU-Boulder will work with the Boulder community and the state of Colorado to create development alternatives that meet university, community, and state needs based on mixed-use concepts. Micro-master plans for "university village" properties will address such issues as affordable "green" housing, health care, recreation, diversity, and transportation, among others.

7. CREATING UNIVERSITY VILLAGES. We will develop a new concept for the build-out of university properties, emphasizing an education-related, mixed-use approach.

Just as barriers are falling between academic disciplines, so are the physical barriers that separate university campuses from their communities. Once cloistered behind walls, both literally and figuratively, universities now are more active partners in the life and well-being of their communities. Just as importantly, communities are playing key roles in the success of their universities.

We expect these interrelationships to become even more critical in the coming decades, and that our physical boundaries will be less and less distinct. By 2030, we anticipate the need for a new approach to the build-out of university properties, and we propose to start by collaborating with community leaders on a new concept called "university villages."



The "university villages" concept will feature a village square surrounded by spaces integrating student, faculty, and staff housing, along with educational, retail, and service facilities. In particular, the villages will be designed to embrace and create diverse, welcoming, and successful communities. All facilities will be constructed with materials and methods emphasizing sustainability and environmental awareness, consistent with the university's longtime commitment to the environment. The villages could include charter schools developed in partnership with the Boulder Valley School District, or even a Colorado community college satellite location. Health care facilities could serve the greater Boulder area as well as the university community. Arts and humanities spaces could offer cultural opportunities for campus and community enrichment.

Relationships between university campuses and their communities can be tense at times, and we are no exception in Boulder. Our shared history, however, underscores our need to work together for the common good. We believe the "university villages" model will foster a richer relationship between the university and the community, one that is based on mutual respect and active collaboration.







8. ALTERNATIVE DEGREE TRACKS. We will provide a range of options for earning CU-Boulder degrees, with greater emphasis on the master's degree as the primary degree track within 10 years.

At CU-Boulder, we will provide a more personalized education for our students, and that includes broadening the choices for earning degrees. By 2030, a degree beyond the bachelor's may well be the entry-level degree for the kinds of jobs we want our graduates to command in the global workforce. Also, we are seeing a growing trend of freshmen arriving at CU-Boulder with significant college credits already in hand.

In recent years, CU-Boulder has launched a number of joint degree programs in which students begin graduate work while completing their undergraduate requirements. In these programs, students are able to receive both bachelor's and master's degrees at the same time, often gaining a competitive edge in the job market. Over the next quarter-century, we propose a significant expansion of these optional tracks so our students will have more choices for achieving the master's degree.

We will begin developing alternative and creative degree tracks that will respond to our graduates' needs in a global workforce, while ensuring the quality of the degrees our students earn. For example, we will:

- Promote and expand our concurrent bachelor's/master's degree programs as formal tracks for students interested in a joint degree.
- Initiate an "advanced studies" program to facilitate academic planning for students enrolling with significant advanced placement credits.
- Add master's degree programs in law and enhance our existing joint degree programs in law.
- Develop concurrent bachelor's/doctoral degree programs for interested students in appropriate disciplines.

9. YEAR-ROUND LEARNING. We will examine the creation of a year-round campus with an academic calendar of three semesters.

Over the next quarter-century, Colorado expects to see a 30 percent increase in the number of high school graduates. Such growth will place pressure on access and excellence in the state's system of higher education. We know that more of our current degree-seeking students want to continue their education through the summer months. New experiential learning opportunities offered in *Flagship 2030* will create even greater pressure to broaden our thinking about what constitutes an academic year.

We will consider making a fundamental change in the university's traditional calendar, both to address projected demographic pressure and to make more efficient use of facilities and human resources. We will work with the university community to examine the feasibility of establishing a year-round operation with three full semesters each academic year, thus permitting modest growth while preserving the quality of the academic enterprise.



We believe a third semester would expand learning and research opportunities for both students and faculty. The new calendar would allow greater opportunities for students to take the classes they need and want, participate in cocurricular programs, engage in music and other arts activities, and conduct research. They would be able to participate in study abroad, internships, and service learning year-round, if they desire. Additionally, they would have greater choices for completing graduation requirements.

Faculty would be able to pursue professional development opportunities, fellowships, research abroad, and concentrated scholarly and creative work in any of the three semesters—while retaining full-time appointments. We believe this new academic calendar would offer greater flexibility and professional options for our faculty.

In addition, we expect the year-round academic calendar would result in better use of campus space. By making full use of existing classroom, laboratory, residential, and support space, the university would be better prepared to handle any modest increases in enrollment.

Converting to a year-round schedule would not be easy—or without the need for investment. For example, we would need to address the issue of maintaining current buildings that will see greater wear throughout the year. New schedules may be needed for maintenance projects that are currently conducted in the less-busy summer months. A change in the academic calendar would require careful planning for renovations, moves, equipment upgrades, and other projects. In addition, we would need to assess personnel needs, such as how many additional faculty and staff would be needed to support a year-round schedule.

Such a profound change in our culture would have substantial impacts on the Boulder community. There likely would be increased pressure on traffic, housing, and transportation—issues that will need to be examined in collaboration with community leaders. Overall, however, we believe a year-round academic calendar would have a positive economic impact on the community.



10. MAKING ENTERPRISE WORK. We will seek greater operating flexibility and expanded resources for meeting CU-Boulder's role and mission.

CU-Boulder's vision for serving Colorado as a global leader in education and discovery requires significant resources and operating flexibility. Given our current limits on funding sources we must develop a more entrepreneurial relationship with the state of Colorado—one that emphasizes our public mission and accountability under a more self-reliant and market-driven financial model. In addition, we are committed to enhancing our private fundraising record, working in conjunction with the CU Foundation and the CU System to make a compelling case for private investment in CU-Boulder's future.

We believe the state's designation of CU-Boulder as an "enterprise" offers an opportunity to establish this new relationship. Such a change may require legislation to delegate fiscal authority—either a relationship similar to the Public Authority status granted the University of Colorado Hospital two decades ago, or a new model for defining government—university relations and responsibilities. Enterprise status, when fully defined, could offer the flexibility and scope of support needed to achieve for us to achieve our *Flagship 2030* vision and meet our state role and mission.

Regardless of the model used, we will solidify our public compact with the state of Colorado—to provide an affordable education for state residents and to apply university resources to help address the changing needs of the state. For example, we plan to institute a financial aid access program aimed at minimizing or eliminating student loan debt for Coloradans. We will focus attention on providing an outstanding education to students from all segments of the state's population, including middle-class families. Also, we will continue to involve faculty and students in problem-solving partnerships to address such state issues as water management, economic development, energy, and a host of others.





This new entrepreneurial spirit will be applied to our internal operations as well. We will explore internal financial models that create greater incentives and accountability for fiscal health and excellence at the school and college level. We will examine a "responsibility center-based" budget management model, which places greater budgetary authority and accountability at the appropriate unit level, consistent with the overall mission of the university.

We will begin by appointing an advisory board or "board of visitors," made up of business and community leaders, to advise us on developing new operating and financial models. These external advisors will be asked to help guide the university and advocate for our success. We also will foster stronger partnerships with the CU Foundation, the CU System, state government, nonprofit organizations, donors, parents, alumni, and other stakeholders. Our *Flagship 2030* strategic plan will provide direction for CU-Boulder's next capital campaign and other private giving initiatives.

Clearly, our new relationship with the state must provide accountability and reflect CU-Boulder's public mission as the state's flagship university. At the same time, tomorrow's increasingly competitive environment will require greater management flexibility in order for the university to operate efficiently. Our new approach to enterprise status must strike the right balance between the two imperatives.

IV. Moving from Planning to Implementation

The *Flagship* 2030 strategic plan is intended as a living document that guides dayto-day tasks as well as long-range projects. Under the following implementation schedule, we will develop concrete action plans with specific benchmarks for assessing progress over time.

A. IMPLEMENTING THE CORE INITIATIVES. In the next stage of *Flagship* 2030, detailed action plans will be developed for the "core initiatives," including those related to access, staff support, infrastructure, diversity, and outreach. Individuals from appropriate units will be asked to help create the specific action plans. For example, the deans of the schools and colleges, in consultation with the provost, will be asked to review and refine their individual college strategic plans and capital campaign goals, aiming to align unit plans more closely with the university's "core initiatives." The deans will be asked to identify needed investments in such areas as faculty and graduate student recruitment, research infrastructure, and capital construction—drawing from multiple sources of revenue for maintaining and enhancing the academic reputation of the schools and colleges.

B. IMPLEMENTING THE FLAGSHIP INITIATIVES. Several task forces will be appointed to more fully develop the concepts identified in the 10 "flagship initiatives." Task force members will be drawn from throughout the university and its constituencies. "Action development grants" will be allocated to the task forces to ensure they have the resources needed to research and develop thoughtful and actionable plans to help move the plan forward. In addition, units across the university will be encouraged to submit proposals articulating how they might help to advance the initiatives outlined in this plan.

C. BUDGET INTEGRATION. Budget needs will be assessed in three general areas: supporting basic operations and infrastructure, ensuring competitiveness in core areas, and advancing "flagship initiatives." Financial models for enhancing the university's resource base will be developed and applied. Implementation of the strategic plan will depend on the availability of increased resources.

D. IMPLEMENTATION SCHEDULE. We will begin implementing initiatives in *Flagship 2030* as action plans are developed and approved, according to priorities established by the university. Action plans will be drafted and proposed by the various task forces and planning groups for final review and approval by September 1, 2008. Strategies will be specific, priority-driven, consistent with the goals of *Flagship 2030*, and informed by the work of the strategic plan subcommittees. Benchmarks, including performance measures, will be developed for each of the action plans. A senior administrator will be assigned oversight responsibility for implementing action plans emerging from the strategic plan.

E. REPORTING AND UPDATES. Regular reports and updates will be provided to the university community, the system administration, the CU Board of Regents, the local community, state leadership, alumni, donors, parents, and other stakeholders.



V. Enrollment and Financial Projections

The University of Colorado at Boulder typically enrolls between 6 percent and 7 percent of Colorado's high school graduates each year—and at this time we plan to maintain that share in the coming years.



A. ENROLLMENT SCENARIOS. Anticipating precise enrollment trends over 25 years can be difficult, but some general projections can be made. With the state's predicted population growth over the next 25 years, we expect the university will continue the same modest growth rate it has maintained over the past 25 years.

Under this model, the university will have approximately 6,500 more students in 2030 than it does today. We expect to manage the overall mix of residents and nonresidents within the state guidelines of 66 percent residents and 33 percent nonresidents. Additionally, our plan calls for an increase in the percentage of graduate and professional students in the student population from 15 percent to 20 percent. We also will increase the number of tenure-track faculty to enhance the quality of undergraduate and graduate teaching and to expand our research capacity.

Higher education enrollments are profoundly influenced by state policy. Our overall enrollment plans may need to be adjusted, for example, if new state policy modifies the respective enrollment goals for Colorado's community colleges, four-year colleges, and research universities.



Page 62

B. BUDGETARY PLANNING. Expanding our resource base, including increased state support, will be essential to the success of Flagship 2030. As in the past, enrollment trends will play a crucial role in CU-Boulder budget planning. We have constructed a budget model to assist in identifying the fiscal implications of this strategic plan. The model considers the change in enrollment size and mix by using revenue and expense data from past trends at CU-Boulder as well as student level expense ratios from our peers. These data include information about expected tuition and state appropriation revenues, average expenses per credit hour at the undergraduate and graduate levels, and the need for new facilities associated with overall enrollment growth.

Using this model, we anticipate that if the changes in overall size and the residency and graduate mix described above are fully implemented, there likely will be a budget shortfall of approximately 6 percent. This budget gap is created by the combination of an expected 2 percent increase in revenue capacity and an 8 percent increase in expenses. To address this shortfall, we will need to increase revenues by 0.4 percent per year over the next 15 years, or 2.6 percent per year if the enrollment changes are implemented over 23 years.

In addition to responding to enrollment changes, we project we will need to increase revenues by another 1.8 percent each year in order to implement the eight "core initiatives" in *Flagship 2030*. This projection is based on the levels of funding needed to make the investments outlined in the plan. Also, the university will need to identify additional resources to implement the 10 transformative "flagship initiatives" outlined in the plan. We believe these initiatives will require an investment of another 2 percent per year.

Thus, we estimate that CU-Boulder will need to increase revenues by a total of 4.2 percent per year, over and above mandated and operating cost increases. These revenue enhancements will be necessary to support our statutory mission, remain competitive, and emerge as a national leader among public research universities.

Clearly, our aspirations pose major resource challenges. In the next phases of the strategic plan, we will need to develop detailed feasibility and cost studies for each of the initiatives.

To reach our aspirations, we intend to explore all sources of additional revenues, including state tax support, tuition, fundraising, contracts and grants, entrepreneurial programs, technology transfer, and budget reallocations. Diversifying and expanding CU-Boulder's resource base will be essential to the success of *Flagship 2030*.







With your support and our resolve to act, CU-Boulder will be a model flagship university in 2030–serving Colorado and engaged in the world.

VI. Conclusion

Flagship 2030's quarter-century horizon offers a unique opportunity to "think boldly"—and we have attempted to do so while recognizing the need for critical short-term core strategies to meet our mission and stay competitive. In this plan, innovative and far-reaching ideas are juxtaposed with more immediate initiatives, but all are aimed at transforming the University of Colorado at Boulder.

Foremost is our determination to establish CU-Boulder as one of the leading national comprehensive research universities by 2030—with the capacity to improve the human condition through learning and discovery. We believe the flagship initiatives will place the state of Colorado and the University of Colorado at Boulder in a global leadership role within the next quarter-century. In the short term, CU-Boulder will make substantial investments in faculty, students, staff, and infrastructure to enhance our core services and to remain competitive among our peers. In the long term, the success of *Flagship 2030* will depend on expanding university resources, acquiring new flexibility for change, and gaining broad support for realizing our vision. We expect the strategic plan to evolve over time; today, however, it provides an important framework in setting our course for the future.

How You Can Help. There is a strategic role for each person invested in the future of the University of Colorado at Boulder, from the faculty member engaged in teaching and research enterprises, to the student developing a portfolio of imaginative creative work, to the community member helping craft a new campus development model. To achieve our vision, we need the active support of business partners, donors, state political leaders, university leadership, alumni, staff members, and multitudes of others who care about our future success.

How can you help? You can advocate on behalf of *Flagship 2030* wherever you live and work. You can support the university's vision for global leadership in education and research. You can participate in follow-up planning opportunities and provide input to help us achieve our goals. Your involvement will help bring our vision to reality.

List of Appendices (posted online at www.colorado.edu/flagship2030)

- A. List of steering committee membership
- B. LEAP report(s) and feedback
- C. Subcommittee reports
- D. Enrollment scenarios and strategies (based on slide presentation)
- E. Financial considerations (based on slide presentation)
- F. Investment strategies
- G. Report of the task force on international graduate education
- H. Slide presentation for CU Board of Regents meeting
- I. Action plans when finalized



