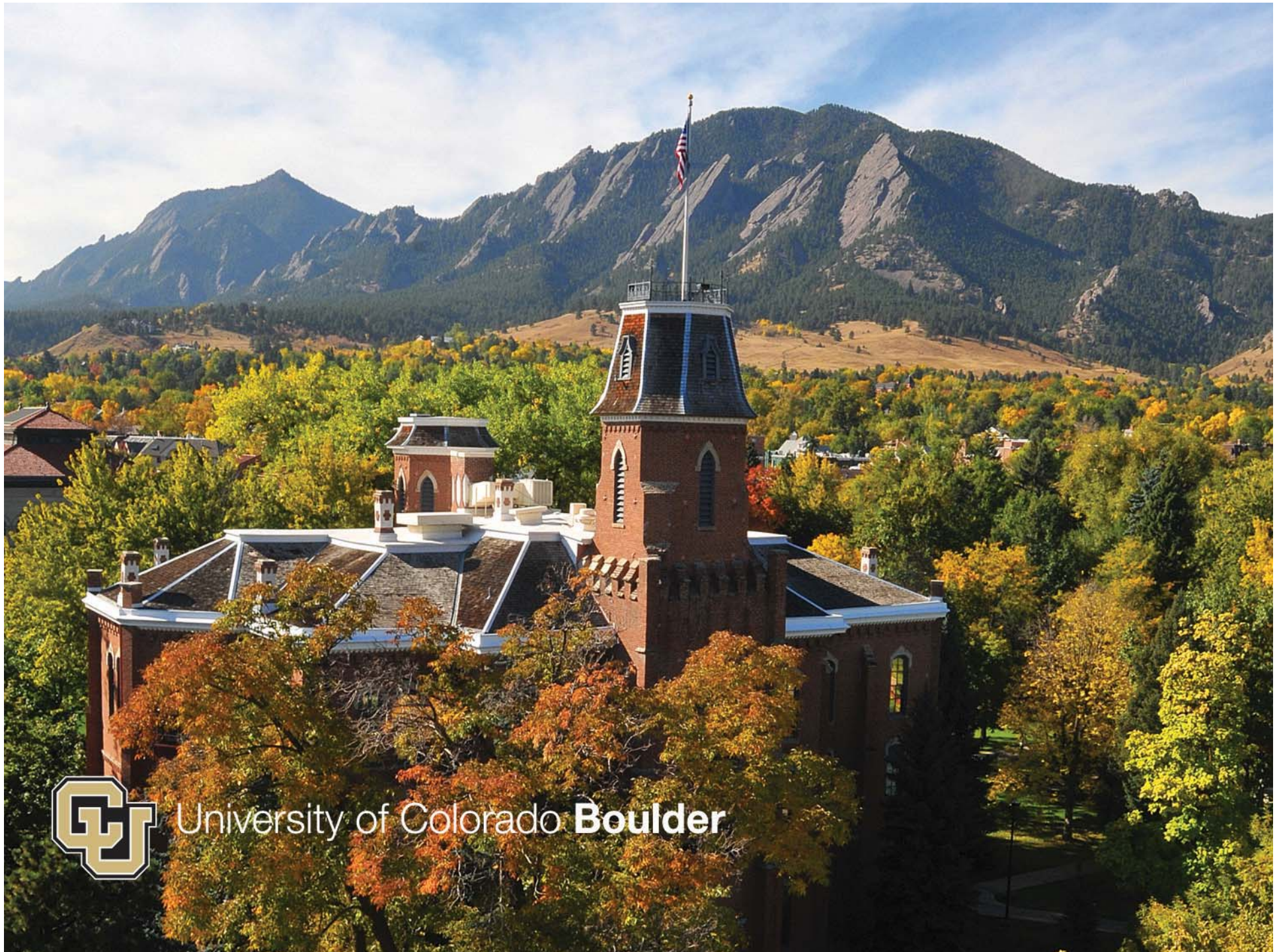




University of Colorado **Boulder**

Visioning Meeting

Key Themes

- ❑ CU is a National Comprehensive Research University with global reach. Our identity as such has value to students, faculty, staff, industry and the broader CU community. We must enhance the understanding of that value and communicate it to all stakeholders.
- ❑ CU-Boulder is using technology to drive more openness and collaboration to revolutionize how we engage our students in learning and critical thinking. We are able to present and assimilate knowledge to advance our scholarship, creative works and research. We must continue to assess the effectiveness of these tools and lead in efforts to adapt them to achieve our educational goals.
- ❑ The revenue and cost models used in the past will no longer sustain the university in its commitment to its vision. We must identify new and creative ways to generate revenue and reduce costs.
- ❑ CU-Boulder's leadership team must foster a culture that promotes collaboration and entrepreneurship and encourages new ideas and approaches to achieve our educational and research mission.



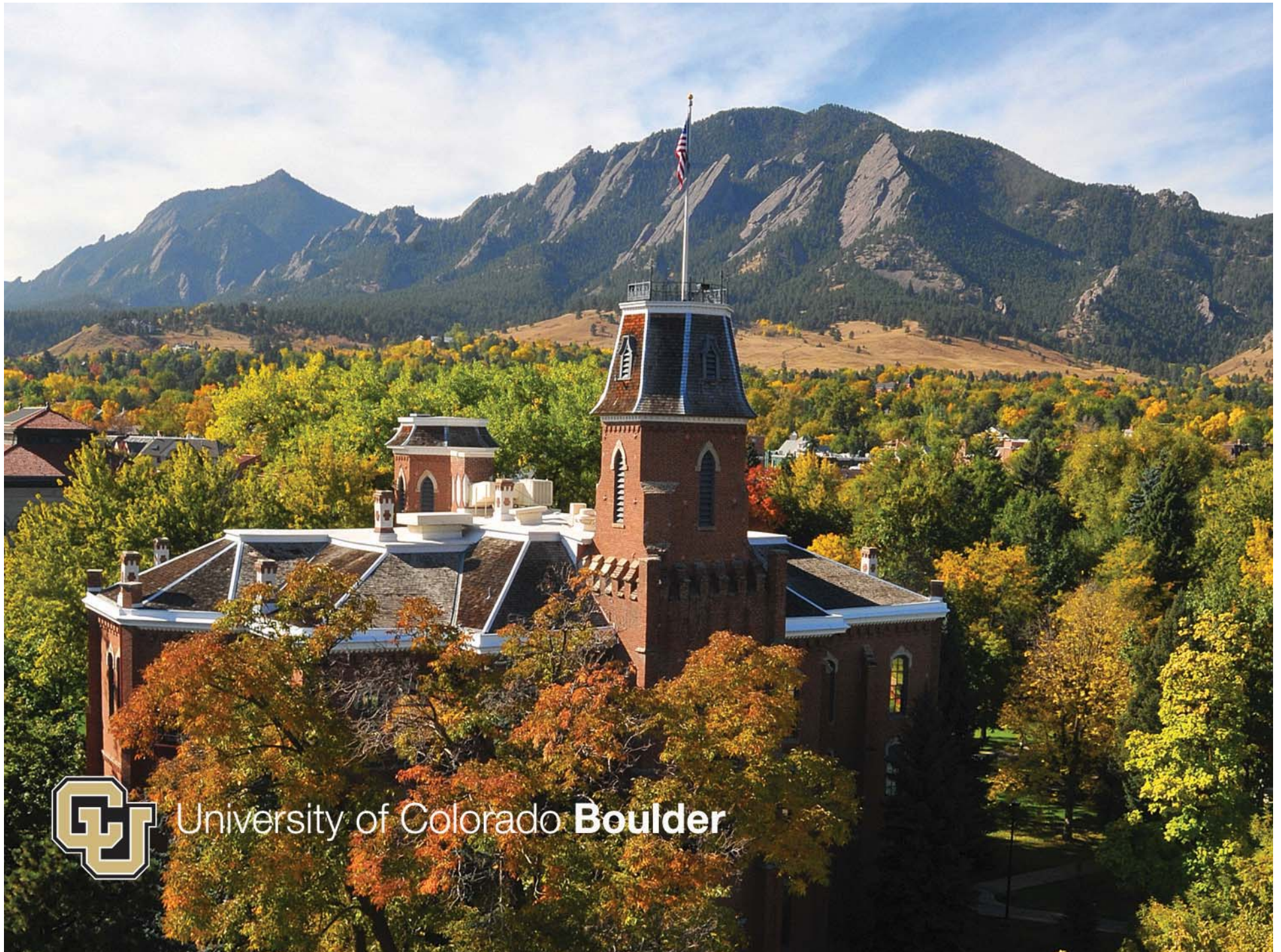
Insert Council Member Name

Please share your initial reactions and thoughts on the key themes

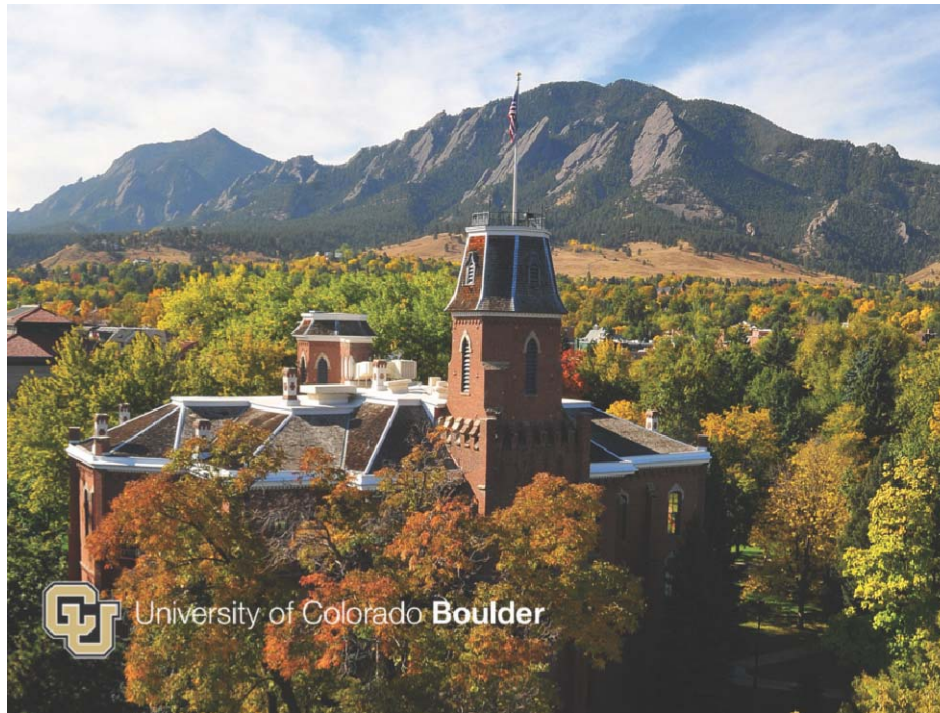


University of Colorado
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**Please map these themes to issues you are confronting
in their own organizations.**



University of Colorado **Boulder**



Vision

The University of Colorado Boulder will become 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.

Meeting Objective

Identify 4 actions the CU-Boulder Cabinet should take in support of the four key themes they are working to improve.

Time	Topic	Goal
8:00 AM - 8:30 AM	Breakfast	For those who wish, a chance to eat and mingle before the meeting.
8:30 AM - 9:30 AM	Kick-off & Introductions	Meet Cabinet and Advisory Council members and identify shared interests in the University's success.
9:30 AM - 10:00 AM	CU-Boulder Overview	Gain a common understanding of the role of CU-Boulder as a national comprehensive research university and why we are focusing on the 4 key themes that have been shared with the council.
10:00 AM - 10:15 AM	Break	
10:15 AM - 11:45 PM	Council Member Perspectives	Hear directly from each council member to learn how their organizations are impacted by similar themes and what they are doing to address those issues.
11:45 PM - 1:15 PM	Lunch outside with the Colorado Shakespeare Festival	
1:15 PM - 2:45 PM	Issue Identification	Identify 3-5 issues related to key themes where there is the most energy and potential for positive change.
2:45 PM - 3:00 PM	Break	
3:00 PM - 4:30 PM	Action Planning	Identify 4 actions to be taken by the Cabinet.
4:30 PM - 5:00 PM	Meeting Close	Clarify next steps and collect input for next meeting in September.
5:00 PM - 5:30 PM	Break	
5:30 PM	Dinner at the Residence	

Introductions: A Shared Commitment

3 Questions for Cabinet Members:

- What is your name?
- What do you do?
- Why do you choose to work at CU-Boulder?

3 Questions for Advisory Council Members:

- What is your name?
- What do you do?
- Why have you made the Advisory Council a priority?



Key Themes

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- The revenue and cost models used in the past will no longer sustain the university in its commitment to its vision. We must identify new and creative ways to generate revenue and reduce costs.
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CU Boulder

**A comprehensive national
research university**



University of Colorado
Boulder

	Arts/Scie nces	Engineering	Business	JMC *	ENV * Design	Law	Music	Education
Undergrad	17,007	3,136	2,848	648	535		247	98
Grad	2,288	1,340	282	81		533	254	303

~\$380 M per year in sponsored research awards

Tenure track (TT)	NonTT Instructors	Research Faculty
~1,100	~300	~650

US University Research Output

- 2,600 4 yr colleges/universities in the US
- 250 'highly active' research universities in the US
- 25 universities account for ~50% of nation's university research output

Source: Research Metrics: Handful of U.S. schools claim larger share of output. *Science*, Vol 330, pp 1032, 19 Nov 2010.

PUBLICATION OUTPUT					
Total papers 1981–1985	Share U.S. (%)	Institution	Total papers 2005–2009	Share U.S. (%)	
469,201	48.5	AAU	905,522	56.1	
25,630	2.65	Harvard University	68,146	4.22	
13,071	1.35	University of Michigan System	33,084	2.05	
10,567	1.09	Johns Hopkins University	31,503	1.95	
16,941	1.75	University of California, Los Angeles	31,108	1.93	
12,841	1.33	University of Washington System	30,320	1.88	
13,366	1.38	Stanford University	28,318	1.75	
10,248	1.06	University of California, San Diego	27,265	1.69	
15,176	1.57	University of California, Berkeley	27,021	1.67	
11,646	1.20	University of Pennsylvania	26,579	1.65	
10,691	1.10	Columbia University	26,427	1.64	
10,219	1.06	University of Maryland System	25,844	1.60	
14,419	1.49	University of Minnesota System	25,497	1.58	
13,919	1.44	University of Wisconsin, Madison	24,553	1.52	
14,222	1.47	Cornell University	23,483	1.45	
10,166	1.05	University of Florida	23,226	1.44	
7,483	0.77	University of Pittsburgh	22,457	1.39	
9,490	0.98	University of California, Davis	22,362	1.38	
7,880	0.81	Duke University	21,954	1.36	
8,715	0.90	Penn State University System	21,689	1.34	
11,150	1.15	Yale University	21,676	1.34	
8,792	0.91	Ohio State University	21,380	1.32	
8,889	0.92	University of Colorado System	21,066	1.30	
10,027	1.04	University of California, San Francisco	20,691	1.28	
11,651	1.20	MIT	20,609	1.28	
6,975	0.72	Texas A&M University System	19,432	1.20	

US University Research Impact

- Research citations are a key metric of 'research impact'
- 19 universities account for ~50% of nation's research citations



❖ CU Boulder ranks #8 on this list

Source: Research Metrics: Handful of U.S. schools claim larger share of output. *Science*, Vol 330, pp 1032, 19 Nov 2010.

CITATION OUTPUT			
Institution	1981–85	1993–97	2005–09
MIT	2.14	2.16	2.28
Caltech	2.13	2.02	2.18
Princeton University	2.19	2.07	2.11
University of California, Santa Barbara	1.75	2.28	2.04
Stanford University	2.05	2.08	1.96
Harvard University	1.98	2.14	1.94
University of California, Berkeley	1.79	1.77	1.92
University of Colorado, Boulder	1.67	1.65	1.86
University of Chicago	1.98	1.92	1.85
University of Washington System	1.78	1.76	1.82
University of Pennsylvania	1.62	1.73	1.77
University of California, San Francisco	1.86	1.89	1.76
Johns Hopkins University	1.69	1.85	1.74
Columbia University	1.70	1.83	1.74
University of California, Los Angeles	1.62	1.61	1.74
Northwestern University	1.62	1.69	1.73
Boston University	1.35	1.59	1.71
Yale University	1.91	1.89	1.71
University of Rochester	1.46	1.60	1.71
U.S. UNIVERSITY average	1.37	1.40	1.37



Academic Affairs Priorities

1. Sustain and enhance the stature of CU Boulder as a comprehensive national research university.
2. Identify and implement contemporary best practices to promote student success
3. Develop academic and educationally innovative programs of distinction that will further differentiate CU Boulder as a national leader in teaching, curricular, and scholarly innovation

What's new or changing on the Boulder campus?

- CU Foundation reorganization
- HR reorganization
- Industry relations office
- Formation of 3 new colleges/schools on campus
- Student advising changes
- New cross-college curricular offerings (eg Business Minor, BA CS)
- Business process analysis
- Education technology, distance education, MOOCs
- OCG and SPA process analysis and reorganization
- STEM Education Center, formation and expansion

Questions, Comments, Reactions

Let's Take a Break



University of Colorado
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Council Member Perspectives

2 Slides

- Your thoughts & reactions to the 4 key themes
- Similarity between CU-Boulder themes & areas of focus @ your organizations

Presentation order

Pam Drew	Brad Feld	Allison Keller	Denise O'Leary	Bill Reinert
Todd Rulon-Miller	Mark Sirangelo	Rob Strain	Phil Washington	Earl L. Wright

Things to keep in mind

- Please keep comments to 5-7 minutes
- We will be discussing the themes in more detail later
- Pay attention to which themes interest you the most

Pam Drew

Thoughts & Reactions to Key Themes

- Acknowledgement of CU's priority on research is positive, however the term comprehensive may imply the need for prioritization
- Global reach is an imperative, however to my knowledge CU has small or very modest efforts in this regard. More should be done.
- CU is one of the best universities in its class, and top ten in some domains, such as aerospace engineering, yet few consumers or decision makers really know this. More effective marketing should be a top priority.
- Technology use – I would like to know more about what all has been implemented. Again, may be a matter of marketing, but I am not aware of a lot of innovation in this regard. It is a good vision and is “table stakes” to attract the upcoming generations of students.
- Applaud the focus on the business aspect (revenue generation and cost savings); CU is facing a crisis in funding and this should be the top priority.
- It is imperative to align incentives and performance assessments with the desired culture of collaboration and entrepreneurship.

Pam Drew

Similarity Between CU-Boulder Key Themes & Areas of Focus @ Exelis

- Upon completion of spin out from ITT, Exelis has embarked upon a “Growth and Value Transformation” (GVT); this is directly aligned with the revenue generation and cost efficiencies mentioned in CU Themes
- GVT being executed against a backdrop of a clarified and prioritized strategic plan
- Top priority is global expansion as we seek to balance downward pressure from DoD customer toward growth markets internationally, e.g. Global aviation (6% CAGR); will give Australia example
- Exelis has put emphasis on marketing a new brand with the spin out; next step is to define specifics to growth platforms, e.g. Mission Critical Networks, and ISR and Data Analytics
- Exelis implements top end technology for gov’t customers, but has more to do in effective internal implementation
- As part of GVT, new incentives, performance assessments, and customer engagement management systems are being put into place to instill the desired culture of collaboration, cross-divisional pursuit and entrepreneurship

Brad Feld

Thoughts & Reactions to Key Themes

- **Theme 1: *What is a national comprehensive research university?*** What are the attributes of “national” and “comprehensive”? Why focus only on research? Asserting what you are is meaningless; what is the evidence that we are this by external measures?
- **Theme 2: *Technology isn't the only thing that drives openness and collaboration.*** It merely supports this activity. You have to have a culture of openness and collaboration. What are you doing to enable and support this? Why only mention students in Theme 2 when Theme 1 is all about all stakeholders?
- **Theme 3: *If the revenue and cost model doesn't work, why not change the vision instead of the revenue and cost model?*** What are the revenue and cost elements that don't work? What is the disconnect with the vision?
- **Theme 4: *This is the first time you are mentioning an educational mission.*** What is it in the context of being a national comprehensive research university? What are the attributes of the existing culture that need to change?

Brad Feld

Similarity Between CU-Boulder Key Themes & Areas of Focus @ Foundry Group & TechStars

- ***Words Matter***
 - Get Them Right
 - Be Precise
 - Use Them Consistently
 - Have Deeply Held Beliefs
- ***Asserting What You Are Is Meaningless***
 - Other People Stating What You Are Is Much More Powerful
 - External Measures Are Critical
 - Be A Thought Leader - And Act Like One
- ***Function Within The Constraints You Have***
 - Everyone Has Constraints
 - Be Realistic About Them
- ***PowerPoint Sucks***
 - If You Really Want People To Think, Make Them Write
 - Focus On What Matters, Not What Sounds Or Looks Good



Allison Keller

Thoughts & Reactions to Key Themes

- **Theme 1:** Enhancing Reputation – Recruit World Class Faculty; Confidently market your “assets” locally, nationally and globally
- **Theme 2:** Technology to Drive Openness and Collaboration – Balancing Coursera, etc. with on-campus interaction will be ongoing
- **Theme 3:** Generate Revenue and Reduce Costs – streamline technology transfer and industry partnerships; continue to develop economies of scale
- **Theme 4:** Foster collaboration, entrepreneurship and new ideas – capitalize on your STEM initiatives; promote interdisciplinary

Allison Keller

Similarity Between CU-Boulder Key Themes & Areas of Focus @ Keck

Theme 1: Enhancing Reputation -

- Rankings and Constrained Federal Funding are increasingly captured by the few – recruiting top faculty is the major driver to move this needle.
- Enhanced reputation drives revenue – funding and tuition.

Theme 2: Technology to Drive Openness and Collaboration -

- We like to fund collaborations of researchers across universities.
- Our funding does not include MOOCs, but does include funding undergraduate programs in Western States that:
 - Foster new levels of undergraduate student engagement and understanding, especially through active learning and collaborative curriculum development.
 - Expand interdisciplinary activities in balance with needs of each discipline.
 - Incorporate research activities into the curriculum and raise the bar of expectations regarding publications and presentations by undergraduates.
 - Enhance science and technology literacy for students in all disciplines.
- Develop new ways to stimulate critical thinking and other core competencies of a liberal arts education.

Theme 3: Generate Revenue and Reduce Costs –

- Streamline technology transfer and industry partnerships; continue to develop economies of scale.
- We are seeing that Public Research Universities are all becoming highly attuned to more creative revenue generation.

Theme 4: Foster collaboration, entrepreneurship and new ideas –

- Capitalize on your STEM initiatives; promote interdisciplinary research.
- We have even seen the Federal Government require mentoring of graduate students in non-professorial alternatives.
- Those universities that are leaders in STEM are garnering the most federal and other sponsored funding.



Denise O'Leary

Thoughts & Reactions to Key Themes

These themes begin to address some highly relevant and complicated issues facing most research universities. Strategic resource allocation – across not just the campus but the entire system – will be key to defining CU in the future. Additionally, I would add the following:

- What is the value proposition for educating undergraduates? What are the institution's strengths and weaknesses in attracting a diverse and qualified student body?
- What are the trends in federal research funding (and the accompanying indirect costs) and what are the strategic and financial implications for the institution?

Denise O'Leary

Similarity Between CU-Boulder Key Themes & Areas of Focus @ Denise's Organizations

Nationwide, our institutions of higher education are caught in a perfect storm of costs outpacing tuition and other revenue, changing federal research funding patterns, increased competition for students, and significant resource constraints, including space and billets, to name just two.

There is little doubt that navigating these shoals will be a formidable challenge for most institutions around the country, and what role technology will ultimately play in the outcome is a very big question.

Having been a trustee at Stanford for 15 years, I am well acquainted with the complexities of a research university, and hope to bring that experience to our current dialogue.



Bill Reinert

Thoughts & Reactions to Key Themes

- While somewhat lofty, these themes typify challenges faced by nearly all public universities
- The first theme resonates well with me. How does CU make it to the top of the research partner consideration list. How to benchmark with CMU, UCB, Stanford and MIT?
 - Private companies
 - Government
- On theme 2, is this more along the lines of how do we use social media to connect and further how does this impact our quality?
- Continuing on theme 2, what is the role of e-learning in a new connected world? “We are able to present and assimilate knowledge” but how do we differentiate from Google?
- Theme 3 is critical for successfully addressing the first two themes. Costs of education are increasing while some of the benefits of that education are being challenged – at the same time traditional funding sources are in retreat. Can we recover from the great recession or is this the new normal?
- I believe the seeds for theme 4 are within CU, but is the ground fertile? Can the individual colleges collaborate or will they compete? In a collaborative mode, how should the various funding sources be appropriated between the various schools?

Bill Reinert

Similarity Between CU-Boulder Key Themes & Areas of Focus @ Toyota

- Theme 1 has to do with the brand, CU's and how this applies to Toyota's. CU's brand is roughly excellence through research. That's not so far different from Toyota's view. This used to be an easily communicated message. With greatly enhanced competition from existing and emerging competitors, enhancing the brand is a daunting task.
- Increased use of technology is double edged. We try to use it to enhance our product, but this is not without challenges. The very technology intended to bring us together collaboratively may have the opposite effect. The case of Yahoo is interesting to watch.
- The revenue model is key for Toyota. Our profits are challenged by currency fluctuations; regulations cause the price to increase so we need to reduce costs and increase revenue, all while struggling to determine what the market wants.
- Toyota is well known as a consensus driven organization. But that shouldn't be confused as collaboration. Vastly different. We struggle with collaboration. We're trying new organization models as well as need designs for our facilities. Mostly we're removing barriers, not yet creating new space.



Todd Rulon-Miller

Thoughts & Reactions to Key Themes

- **Theme 1:** Add sub-bullet: We need to market more clearly, more broadly, and with more impact and measurable results.
- **Theme 2:** Do not believe the (current) second bullet deserves “thematic” highlight.
- **Theme 3:** Add sub-bullet: We need to increase revenues X% over Y timeframe.
- **Theme 4:** Add sub-bullet: Continue to energize and improve our professionals and students to be more creative, to help us succeed in our goals.



Todd Rulon-Miller

Similarity Between CU-Boulder Key Themes & Areas of Focus @ Todd's Companies

- I am on the board of six start-up technology companies. My companies must define a unique set of capabilities to have relevance, meaning, and to grow.
- We must constantly remind ourselves that to have impact, we need to evolve highly disruptive solutions and business models that define new ways to better the current economics of doing business. Clearly aligned with #2.
- We are constantly assessing new functional ways to affect more efficient ways of conducting business.



Mark Sirangelo

Thoughts & Reactions to Key Themes

- **University & Industry Collaboration**
 - Understanding the goals of each party involved and how collaboration can advance research and funding opportunities
 - Framework for CU to seamlessly interact with industry
 - Be proactive with industry in their planning process for research
 - Incentives should be provided for Faculty who accelerate cooperation
- **Cross Cutting Technologies & Programs**
 - How does CU interact with the industrial base they are trying to support?
 - Are core capabilities conveyed to industry?
- **Workforce & Curriculum**
 - Roadmap for jobs needed in the future with industry input
 - Industry advance for curriculum to provide maximum advantage for future hiring
 - Adaptive programs for diversified needs



Mark Sirangelo

Similarity Between CU-Boulder Key Themes & Areas of Focus @ SNC

- SNC strives to promote itself within the aerospace community as a leader of the industry
- SNC is constantly adapting to changing client needs and markets while implementing the most cutting edge processes and innovations
- New funding methods are being explored by industry and academia alike and can be obtained through collaboration
- NASA is a good example of an organization who is typically based on traditional operations and funding methods but adapting to new processes and public/private programs. Their partnership with industry is a good example of what can be achieved through collaboration



Rob Strain

Thoughts & Reactions to Key Themes

- Many organizations recognize the threat to current or traditional funding sources. Competition for resources will be fierce. How will CU position itself?
- CU's identity does provide value to industry and a number of broader communities—important player in aerospace as one example.
 - Clearly articulating the value proposition to each stakeholder community is essential to success (value proposition may differ among the groups)
- A potential value proposition is articulating the relationships that CU has with other entities along the Colorado Front Range (collection of labs, research institutions, technology-based industry in the region.)
 - Highlights the universities reach and relationships.

Rob Strain

Similarity Between CU-Boulder Key Themes & Areas of Focus @ Ball

- Like CU, Ball's traditional funding source (federal budget) is extremely challenged. Our approach has been to:
 - assess the entire market
 - determine how much of it can be addressed by our offerings
 - evaluate how much of the market we think we can capture
 - compare those findings to what we need to continue to grow
- Is it enough? Can we continue to grow by aggressively and creatively engaging our existing markets or do we need to look at something transformational?
 - Much of our growth over the previous decade came from a strategy of “focusing on our core capabilities” so making an adjustment is not trivial
- Also like CU, Ball is working with our leadership team to foster a culture of innovation and collaboration. We have traditionally had a very collaborative culture, but the nature of collaboration evolves over time (new tools and technology, changes in expectations of different generations etc.)

Phil Washington

Thoughts & Reactions to Key Themes

- As CU goes, so goes the State of Colorado.
- What is the CU Brand?
- Could Unsolicited Proposals/Ideas or what I call “Solicited Innovation” be a possibility?
- Can CU build a Risk Allocation Matrix and determine levels of risk if they do things differently? (Revenue and cost models)
- Who are CU’s stakeholders and how are they communicating with them?



Phil Washington

Similarity Between CU-Boulder Key Themes & Areas of Focus @ RTD

- Revenue and Cost Models  Unsustainable revenue models for public transportation (transit paradox)
- Institutional Identity  RTD public perception
- Collaborative and entrepreneurial culture  Demographic, land use, and diversity shifts occurring in the country and how it affects public transportation

Earl L. Wright

Thoughts & Reactions to Key Themes

- CU is an internationally acclaimed comprehensive Research University. Its basic mission is educating Colorado's best and brightest within a national and international student body.
- CU Boulder's objective must be to graduate the most prepared alumni possible in their chosen field. Enlightenment, critical thinking and being internationally sophisticated should be a cornerstone of their experience which builds upon the creative works and research of the institution.
- Change the higher education model for undergraduates to reflect "today's and tomorrow's" technology while building on the "student body" experience. Expect more preparation of undergraduates before returning each year, and during academic year. Allow extraordinary opportunities for undergraduate accomplishments, e.g., cross discipline majors, dual majors in different "schools", and majors from different academic institutions while registered as CU-Boulder undergrads.
- Yes!! Within CU-Boulder, all CU campuses, all state campuses, nationally and internationally



Earl L. Wright

Similarity Between CU-Boulder Key Themes & Areas of Focus @ AMG

Our world is:

- Constantly changing. Thus, only constant is continual learning. A strong “basic” academic base is critical for success and survival.
- International. Appreciation for cultural differences along with better understanding of our international friends is critical for our future success. Capital markets are foundation for growth of free enterprise and international trade. More than 60% of capital markets are outside of U.S. Fastest GDP/GNP growth is outside of U.S.
- Continually dependent on cutting edge research which enhances world economic order, i.e., a growing middle class. At the forefront of future research are the discoveries not contemplated today but are tomorrow’s venture capital investments which “risk takers” will finance and ultimately advance mankind.

Who's Hungry?

Issue Identification

Break out into theme groups

- Discuss the presentations from before lunch
- Identify 3-5 issues related to key theme
 - energy
 - potential for positive impact
 - issues will form the basis for action planning
- After 25 minutes rotate to another theme group (2 themes each)

Need 4 Council Member volunteers

- Will stay with 1 theme group, will not rotate
- Facilitate group discussions
- Take notes
- Report out to the larger group



You Deserve a Break!



University of Colorado
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Action Planning

Chancellor's perspective on what's been shared

- Thoughts on issues put forward
- Based on those thoughts, what actions should we drive

In your existing table groups

- Identify note taker & presenter
- Discuss key issues identified in last agenda item
- Discuss the Chancellor's proposed actions
- What actions does your group think the Cabinet should take
- How can the Advisory Council assist with those actions
- Report out

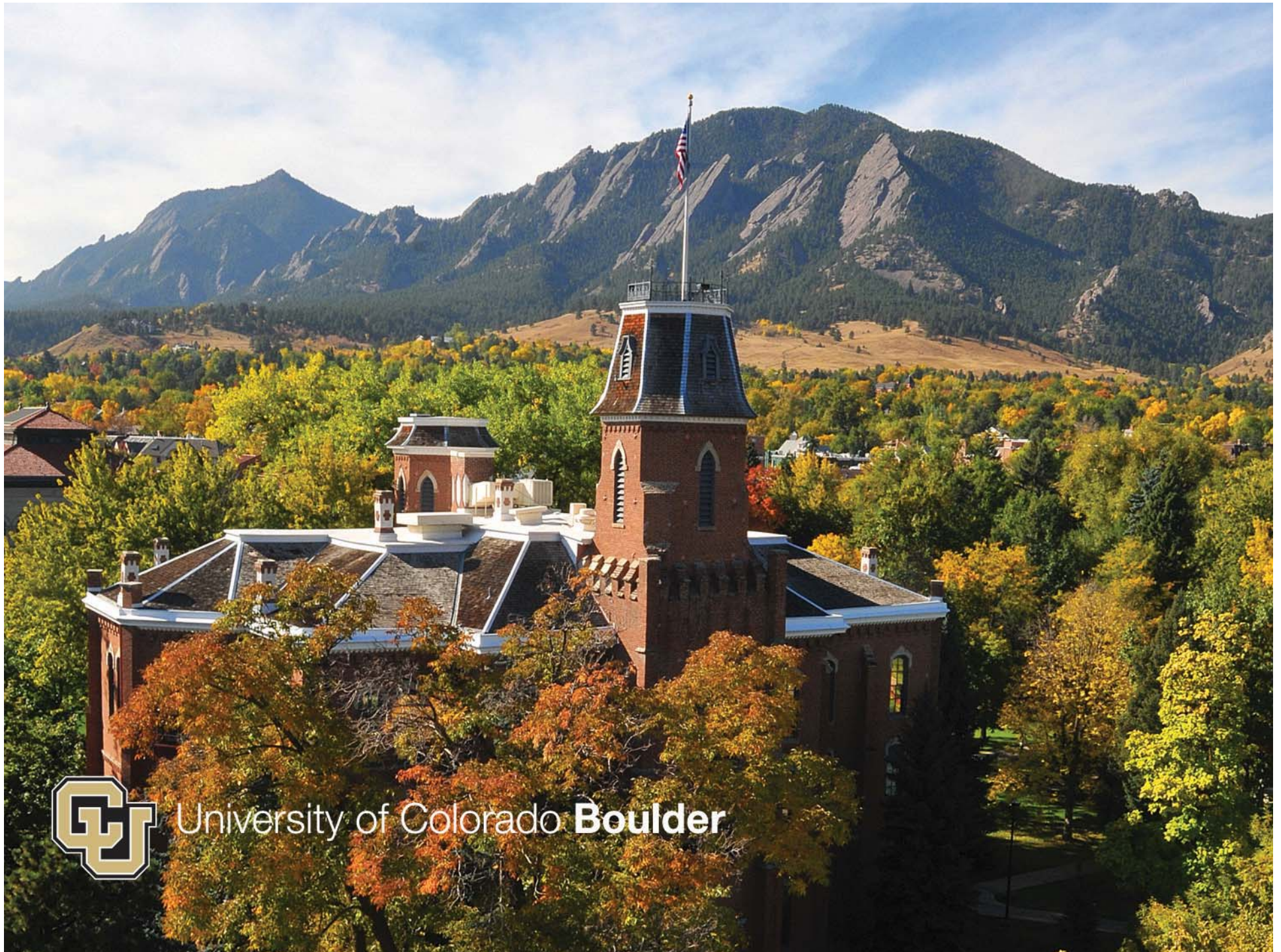
Commitment to act



Closing

- *Recap of the day*
- *Review of commitments*
- *What went well?*
- *What could have gone better?*
- *Closing remarks*





University of Colorado **Boulder**

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Denise O'Leary

Please share your initial reactions and thoughts on the key themes

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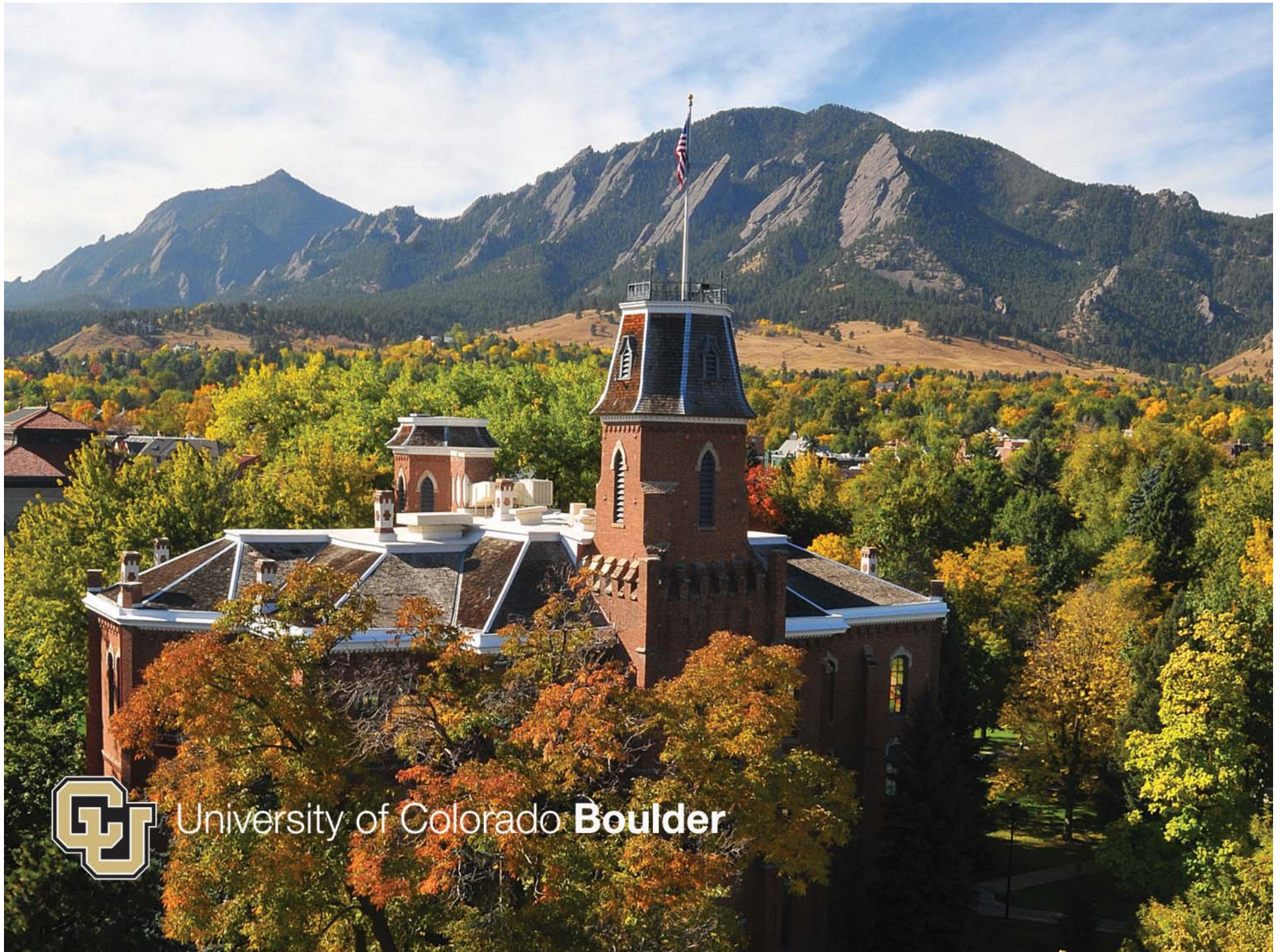
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Please map these themes to issues you are confronting in their own organizations.

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Bill Reinert

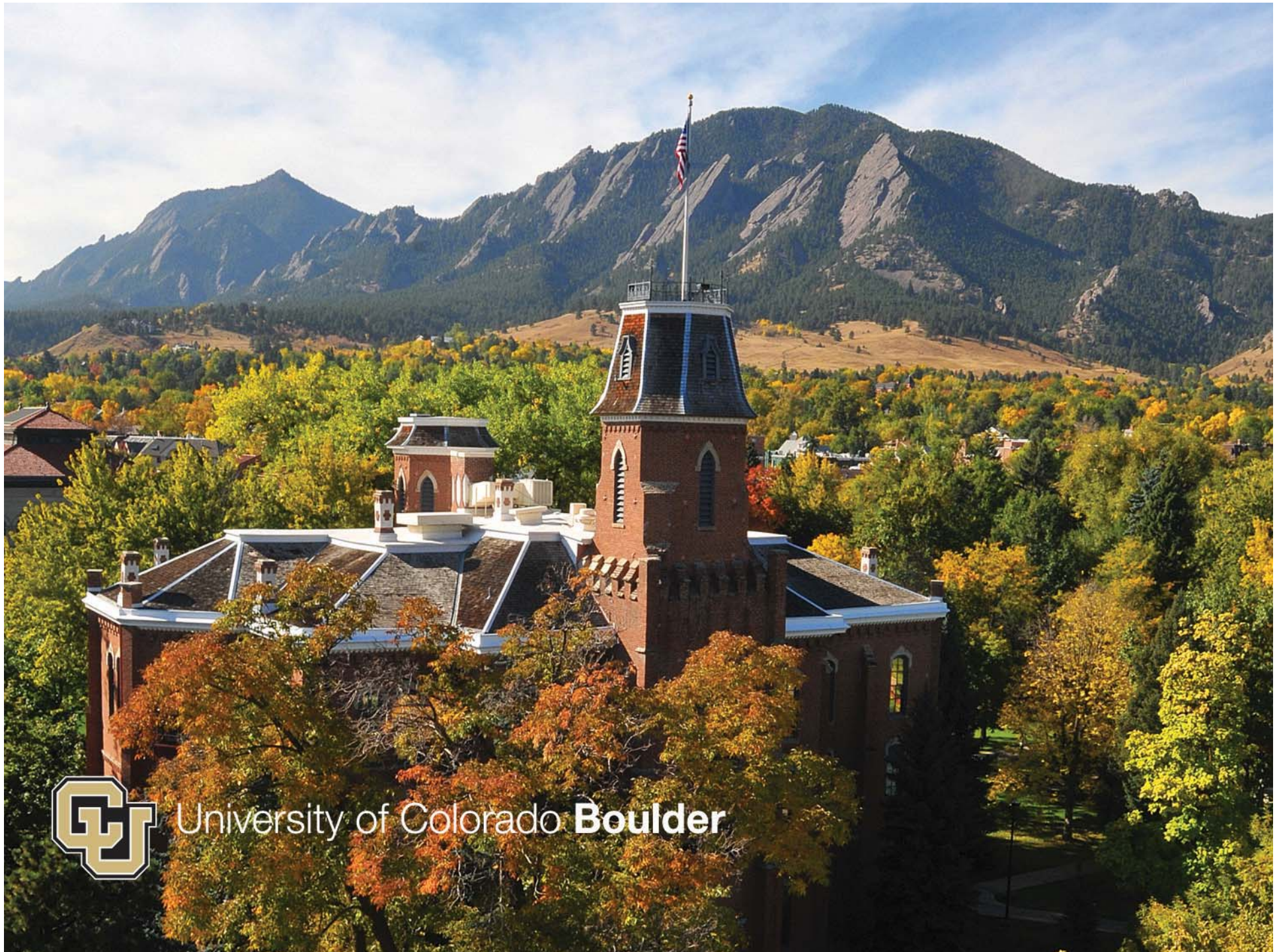
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- Theme 3 is critical for successfully addressing the first two themes. Costs of education are increasing while some of the benefits of that education are being challenged – at the same time traditional funding sources are in retreat. Can we recover from the great recession or is this the new normal?
- I believe the seeds for theme 4 are within CU, but is the ground fertile? Can the individual colleges collaborate or will they compete? In a collaborative mode, how should the various funding sources be appropriated between the various schools?

Please map these themes to issues you are confronting in their own organizations.

- Theme 1 has to do with the brand, CU's and how this applies to Toyota's. CU's brand is roughly excellence through research. That's not so far different from Toyota's view. This use to be an easily communicated message. With greatly enhanced competition for existing and emerging competitors, enhancing the brand is a daunting task.
- Increased use of technology is double edged. We try to use it to enhance our product, but this is not without challenges. The very technology intended to bring us together, collaboratively may have the opposite effect. The case of Yahoo is interesting to watch.
- The revenue model is key for Toyota. Our profits are challenged by currency fluctuations; regulations cause the price to increase so we need to reduce costs and increase revenue, all while struggling to determine what the market wants.
- Toyota is well known as a consensus driven organization. But that shouldn't be confused as collaboration. Vastly different. We struggle with collaboration. We're trying new organization models as well as need designs for our facilities. Mostly we're removing barriers, not yet creating new space.





University of Colorado **Boulder**

Visioning Meeting

Key Themes

- ❑ CU is a National Comprehensive Research University with global reach. Our identity as such has value to students, faculty, staff, industry and the broader CU community. We must enhance the understanding of that value and communicate it to all stakeholders.
- ❑ CU-Boulder is using technology to drive more openness and collaboration to revolutionize how we engage our students in learning and critical thinking. We are able to present and assimilate knowledge to advance our scholarship, creative works and research. We must continue to assess the effectiveness of these tools and lead in efforts to adapt them to achieve our educational goals.
- ❑ The revenue and cost models used in the past will no longer sustain the university in its commitment to its vision. We must identify new and creative ways to generate revenue and reduce costs.
- ❑ CU-Boulder's leadership team must foster a culture that promotes collaboration and entrepreneurship and encourages new ideas and approaches to achieve our educational and research mission.



Mark Sirangelo

Key Themes Supported by Industry Partnerships:

- University & Industry Collaboration
 - Understanding the goals of each party involved and how collaboration can advance research and funding opportunities
 - Framework for CU to seamlessly interact with industry
 - Be proactive with industry in their planning process for research
 - Incentives should be provided for Faculty who accelerate cooperation
- Cross Cutting Technologies & Programs
 - How does CU interact with the industrial base they are trying to support?
 - Are core capabilities conveyed to industry?
- Workforce & Curriculum
 - Roadmap for jobs needed in the future with industry input
 - Industry advance for curriculum to provide maximum advantage for future hiring
 - Adaptive programs for diversified needs



Please map these themes to issues you are confronting in their own organizations.

SNC strives to promote itself within the aerospace community as a leader of the industry

SNC is constantly adapting to changing client needs and markets while implementing the most cutting edge processes and innovations

New funding methods are being explored by industry and academia alike and can be obtained through collaboration

NASA is a good example of an organization who is typically based on traditional operations and funding methods but adapting to new processes and public/private programs. Their partnership with industry is a good example of what can be achieved through collaboration.

