

The following questions were posed to the University of Colorado at Boulder by members of the CCHE Capital Assets Sub-Committee and Department staff. All answers (in italics) from the University are provided without alteration.

### **I. Enrollment**

1. Have studies been done on the UCB enrollment capacity? Does UCB have a maximum enrollment capacity under current campus conditions?

*Current enrollment is within a relevant range deemed by the campus as reasonable while maintaining educational quality and under current campus conditions.*

2. The Master Plan discusses enrollment assumptions, but by statute the campus is “highly selective”. Is there a target enrollment that UCB wants to achieve? Why or why not?

*The campus has set goals to have about 2,900 more students in 2020 and 5,000 more students in 2030 than it does in 2010. Of the total increase, approximately 1,427 more students are expected to be realized through increasing graduate enrollment, and approximately 1,368 more students would be international enrollment growth (international students are both undergraduate and graduate students). These targets were deemed reasonable by the campus, given available resources.*

3. What relationship does the projected enrollment have to academic priorities?
  - a. Are certain majors/programs of study projected to have increased or decreased needs?
  - b. Do enrollment projections place any academic majors/programs in danger of outgrowing space before additional space can be provided?

*Flagship 2030 Strategic Plan and 2011 Campus Master Plan provide goals and projections for campus enrollment that are at the overall campus level and provides detail on student level (graduate vs. undergraduate) and international status. The plans do not project changes in enrollment by major or program of study. The Master Plan provides an integrated physical asset response that will not place academic majors or programs in danger of outgrowing space before additional space can be provided.*

4. The Master Plan states that the “average annual growth rate in CU-Boulder student boardings of RTD transit services over the 17-year period from 1992 to 2009 has been 7.0 percent per year. CU-Boulder student enrollment averaged 1.1 percent growth per year over the same period” (Section V, page 61). Given the projections for continued 1 percent enrollment growth and increasing campus density are there concerns about the community’s ability to absorb additional enrollment and usage? Has any cooperative planning occurred with the planning officials within the city of Boulder?

*The master planning process was highly inclusive and included City and County participation in addressing concerns to carefully of the community in which to live and learn. Representatives from the city and county were members of each of six master plan task forces for Transportation and Parking, Community Partnerships, East Campus Vision,*

*Sustainability, Recreation/Open Space and Athletics, and North of Boulder Creek redevelopment. Their participation was much appreciated and their input incorporated into planning goals and solutions. CU staff has also participated in the development of the Boulder Valley Comprehensive Plan. The executive leadership of the campus met with City Council on two occasions, one for a consensus building exercise and the second for the development of planning scenarios, such as the redevelopment of the area north of Boulder Creek and for the increased density on the East Campus. These meetings went very well.*

5. Has UCB identified a minimum enrollment amount that would be needed to support the existing infrastructure?

*No. The existing enrollment works well in supporting the existing infrastructure. The existing infrastructure also supports some additional enrollment growth.*

## **II. Facilities Needs**

1. The Master Plan alternates its needs analysis between CCHE Guidelines (repealed in 2006) and national peer benchmarking. Does UCB believe that the changes in methodology bias the findings of the analysis?

*We do not believe there is any bias in the quantitative findings of the space needs analysis.*

2. Does UCB have a standard methodology endorsed by the Regents or that they would want endorsed by the Regents or CCHE?

*No.*

3. Section IV, page 4 outlines the ASF surplus/deficit of several institutional units. Given the stated approximately 145,000 ASF deficit on classroom and service space facing the campus, is there a hierarchy or plan to how unit needs should be addressed?

*The deficit of classroom and service space does not reach **146,000 ASF** until **2030**. The plan identified a 2009 deficit of classroom and service space of 123,400 ASF growing to a deficit of 124,500 ASF by 2020.*

*Campus departments and units jointly schedule centrally-scheduled classroom and service space as it is provided via renovation of existing space or built as new space. Conversion of space to classrooms to address departmental needs is completed as resources allow either from departmental operating dollars or state capital construction funds.*

4. Are there specific plans in place to address the immediate needs from the classroom and lab shortages?

*The university can manage immediate space shortages through operational strategies that increase efficiency. Scheduling times can be extended into the evenings and weekends. Residential college/residential academic programs will shoulder a bigger portion of the*

*teaching load in the future. The use of technology sometimes reduces the need for students to be on-campus. When necessary, alternative facilities are sought on campus and in the surrounding community. Long-term solutions to the space deficits are found in the master plan capital list in section five, page 7, which provides a list of academic projects to address needs for classrooms and labs.*

5. Section IV, page 7 states: “Research laboratories (250s) are rooms used for unscheduled laboratory experimentation or training in research methods and observation. The research may be conducted by either faculty or students for both funded and non-funded research.” Given the current research laboratory deficit of over 635,000 ASF and the projected 2030 deficit of 966,000 ASF, is there any discussion of charging funded research for the use of space to help fund the maintenance and development of additional space?

*Sponsored research is already required to fund the proportion of the facility and maintenance expenses they use as part of the indirect cost overhead recoveries they are required to pay. The methodology for determining the overhead rate on grants is determined by the federal government and is negotiated between the University and the government every four years. The University already uses a proportion of the federal overhead recoveries to help fund the expansion of additional research facilities as well as help maintain existing research space.*

6. The Master Plan repeatedly references increasing the density of Main Campus housing. Given the analysis focusing on 275 ASF per student bed, what type of density is targeted for Main Campus and Williams Village?

*Campus housing will continue to increase the number of beds provided in each district and will likely continue to average the 275 ASF per bed. Density will also be increased with the residential academic space that is included in each new facility. In general, the density of housing areas is planned at an FAR=0.6*

7. What are the minimum, target, and maximum densities for student housing by type and campus location?

*As noted above, the overall target density is FAR=0.60. At Williams Village, there are 1880 beds of residential housing (Fall 2011) and 995 beds in student apartments. An additional 500 beds could be added plus 200 units of faculty/staff/family housing under the existing plan. The overall density is lower in this area due to the surrounding privately-owned, single-family neighborhoods. In the Kittredge district, there are 1256 beds which will be increased by 264 beds with the completion of the planned Kittredge Central residence hall. In the Engineering Quad district, there are 560 beds of residential housing that will be increased to 900 beds with redevelopment. The Farrand district has 1950 beds and Sewell Hall has 330. There may be some bed loss in these areas as the buildings are renovated.*

*Redevelopment of the area north of Boulder Creek offers the opportunity to increase the density of graduate and family housing. There are presently 650 apartments in the area.*

*The micro-master plan study indicates that the number of units can be easily doubled (1300 apartments) and could increased potentially to as many as 1900 units depending on development assumptions and size of units.*

8. Given the library trend to increase digital holdings instead of physical holdings, why is the library deficit expected to grow at such a pace?

*The library and its collections are heavily utilized on the Boulder campus. The demand for digital collections is expanding as well as the demand for printed copy. Students and researchers continue to heavily use physical library resources to conduct their research and academic assignments notwithstanding the media format shifting from print to digital.*

9. Why is the campus targeting enrollment increases when there is already a space deficit?

*The University of Colorado Boulder is a top Tier I research institution where students can interact and learn from some of the best faculty in the world. Thus, students seek the university's services increasingly as the institutional reputation grows. The state population is also increasing, resulting in more high school graduates that seek admission. The university must serve the residents of Colorado. The space deficit, while large, is not solely driven by enrollment growth. Growth in research endeavors also increases the space deficit, thus the need for additional space would continue even if enrollment was capped.*

10. How would a transition to year-round classes with three full semesters impact the facilities needs of campus?

*The campus accommodates summer enrollment now and participation during the summer continues to grow. However, many students seem to prefer to use the summer to work in order fund the regular semester expenses, travel, volunteer, or pursue other opportunities during the summer. An expanded summer program would cause a number of impacts including the need to hire additional faculty and staff to provide services to the campus. Facilities renewal and maintenance that occurs over the summer in tight windows of opportunity would become a year-round disruption to the campus.*

### **III. Land and Facilities Plan**

1. The Master Plan outlines a 953,000 ASF deficit in academic space, but Section V page 5 states that "most of the new construction on the Main Campus is focused on auxiliary enterprise functions". How will the deficit be addressed if the primary construction on Main Campus is auxiliary? Will additional classrooms be constructed on East Campus?

*The strategy for meeting the demand for academic space is three fold. First, there will be an increased reliance on residential colleges to teach core classes. Presently, 15% of freshmen credit hours are taught in residential colleges/residential academic programs. The university is seeking to extend the residential experience into the upper division levels.*

*Second, the campus is investigating ways in which existing classrooms can be used more efficiently. While CU-Boulder's classroom efficiency is among the highest in the nation, there are some identified classrooms, primarily located in buildings that are being re-purposed.*

*Third, new space will be constructed with new buildings on both the East Campus and Main Campus. The new Jennie Smoly Caruthers Biotechnology building has centrally scheduled classroom space in it and space is proposed in the new Geosciences complex.*

2. How will the campus achieve “interdisciplinary” programs when most all buildings planned in the next 10-year cycle are designated for specific areas of study?

*Most buildings, particularly the academic buildings listed, are interdisciplinary. The list contains Systems Biotechnology, Geosciences, Aerospace and Energy Systems, East Campus Multi-Tenant Office Building, Chemistry & Life Sciences, and Performing Arts Center are all envisioned to have more than one discipline included. Only one project, the Business Auditorium Addition, is a single program facility and that may be combined with a student services need to improve efficiency.*

3. The Master Plan states on Section V page 9 that a “consistent theme of people who participated in workshops, task forces, and review boards has been that the (main) campus is rapidly approaching the maximum density if not already exceeding it.” Has UCB identified a maximum density target or threshold? How does projected enrollment growth factor into this analysis?

*The maximum density is difficult to quantify since it is a subjective perception of urban design, building architecture, open space, environmental factors, congestion, and aesthetic concerns. Density across the campus varies today from FAR=0.30 north of Boulder Creek to FAR=0.92 in the heart of the campus. During the master planning process, the long-term development potential was examined and some assumptions about likely building sizes were made. Based on this a likely overall Main Campus density would be between FAR=0.63 and 0.68. This informed the decision to begin developing East Campus as an academic and research campus.*

*Increased student enrollment, particularly at such a low rate, is not a major component of the overall demand for space. The largest driver of space is increasing research funding and the demand for associated research space.*

4. How will the proposed increase to Main Campus density affect the existing structures on campus?

*As indicated in Section V-1, the university has identified areas for redevelopment in this plan. These are areas where buildings have reached the end of their useful life, are of unusually low density, or have substantial deferred maintenance backlogs. These areas will likely see removal and replacement with larger, denser buildings. Most of the rest of the campus*

*buildings are generally structurally sound (although systems within the buildings are frequently at the end of their life). These buildings will receive renovations as appropriate.*

5. Why is a higher density level deemed the best solution rather than holding enrollment to a number that can be supported by the current density level, which appears to be quite appropriate for the setting, the city and the users?

*Enrollment drives the need for classroom space, student services and housing. These are minor components of space on campus (e.g. classroom space comprises less than 4% of assignable space on campus). Research funding drives faculty office space, research laboratories, and administrative office space (e.g. office space comprises 20% of assignable square feet on campus). Thus, the research endeavors of the university will largely drive future space needs.*

*Secondly, limiting enrollment would be inconsistent with our Flagship 2030 strategic plan and with our obligation to the people of Colorado. The number of high school graduates in Colorado is projected to increase at 2% per year during this period. Other issues, such as funding reductions at institutions more dependent on state funds than CU-Boulder, may drive more students to seek admission. The Campus Master Plan represents the best analysis by which the university can meet the anticipated needs while being flexible to adjust to a changing environment.*

6. Why is the same architectural style of Tuscan vernacular present on Main Campus not emphasized for East Campus?

*The decision to move to a brick material palette on the East Campus was made 25 years ago and even before when the first buildings were built in the 1960s. The choice was made on costs and the long-term availability of materials. (Stone quarries have been closing.)*

7. Given the additional beds desired and the plans to increase density of housing, are there any plans to alter or renovate the high rise towers on Williams Village?

*The Williams Village towers are a part of the Housing renovation plan that extends out through 2026.*

8. Given that the Main Campus is considered a high demand area for parking, and the Master Plan discusses existing lots as potential development zones and relocating parking off site, how is the campus projecting to handle increased enrollment while reducing congestion?

*The Transportation Master Plan (TMP) prepared as a part of the campus master plan suggests many strategies for managing transportation on campus. Parking strategies are a part of the plan and include pricing incentives, physical improvements, remote parking with shuttle systems, and other options. The campus has also worked with the City of Boulder and Boulder County to align the regional transportation goals with the campus goals. We will*

*continue to work with these governmental agencies to implement programs to provide transportation demand management and reduce the need for on-campus parking.*

9. If the surface lots are developed to provide additional academic space as the plan suggest, where does UCB anticipate existing parking being located?

*The university has more than 11,000 parking spaces on campus, albeit many of which are not located in areas of high demand. Rather than construct more parking structures, the effort will be made to better utilize existing parking resources. The second strategy will be to reduce the demand of cars coming to campus, including building more proximate housing. The third strategy would include building additional parking structures if they are needed and can be afforded.*

10. Section V-E-6-e discusses alterations to existing RTD bus lines. Are these discussions under way with RTD?

*Yes. The first routes to be relocated are the Stampede and 209 that will be re-routed in January 2012. The university works with RTD regularly on transportation issues particularly as RTD is facing budget cuts.*

#### **IV. Funding**

1. Section IV, page 19 states the deferred maintenance backlog for campus exceeds \$300 million. What steps is UCB taking to address this growing backlog given that the state has not funded Controlled Maintenance beyond Level 1 for several years?

*The campus is attempting to use its limited funds to help correct the most critical and urgent deferred maintenance issues until the State is able to increase its funding again. Recent capital projects, such as the construction of the Wolf Law building, Visual Arts Complex, and Leeds Business addition and renovation, have also contributed to addressing this issue.*

2. Of the \$300 million in deferred maintenance what is the percentage split between: academic facilities; research facilities; and auxiliary facilities? Is deferred maintenance broken into different categories based on urgency? If so, what is that breakdown?

*The \$300 million deferred maintenance backlog quoted above is solely the backlog estimated for general fund buildings. Auxiliaries self-fund their deferred maintenance needs through renewal and replacement accounts established in their budgets and each auxiliary develops their own renewal programs. For example, Housing and Dining Services does a major building renovation each year as well as a major appearance upgrade through their Residential Annual Maintenance Program (RAMP) each summer.*

3. Discuss the UCB approach to prioritizing funds for maintenance of existing facilities.

*The campus conducts facility audits for its various buildings and utility systems. The campus stakeholders, who include Facilities Management and Auxiliary Enterprises that have*

*facilities, and campus departments, organize resource allocation needs according to health/life/safety and campus priorities identified in the facility audits.*

4. Discuss the campus internal maintenance fund. Is there one? How much does UCB allocate for maintenance each year? Where does the money come from?

*CU-Boulder spent \$3.8 million on deferred maintenance projects annual for the general funded building for fiscal year 2010-11. Theses dollars come from tuition revenues, indirect cost recoveries and state tax support.*

5. Exhibit V-A-3 outlines \$288 million in academic capital projects only over the next ten years and state that 67% may be achievable. Does UCB believe that the roughly \$193 million is realistic given that the UCB only received about one quarter of that amount (~\$54 million) in CCF and CM funds since 2001?

*The University understands that the \$288 million may not be fully achievable, but the master plan process should indicate the true needs not just what may be available based on state funding in order to ensure good long-term planning.*

6. Are there plans in place for the capital renewals and renovations if state funding does not return?

*The campus will have to consider alternative funding sources if state funding does not return. The campus will continue to review each capital project on its own merits for campus priority and feasibility of funding.*

*CU-Boulder's overall projection of implementation is that 67% of all buildings may be implemented. The bulk of this overall number will be in the auxiliaries and acknowledge that funding academic needs will be difficult given the current funding models for academic buildings.*

7. Explain the existing student capital fee. How is it structured? What does it pay for? Are rates projected to change?

*The student capital fee is has been in effect since Fall 2006 to support debt service payments associated with the ATLAS, Leeds Business, Wolf Law, Visual Arts Complex as well as IT infrastructure. In addition, 20% goes to need-based financial aid for resident students. The rates are now fixed at \$200 an academic term per student taking seven or more credit hours and \$100 for students taking six credit hours or less. This fee is in place until all debt service obligation associated with the fee is fully paid; this is anticipated to be in FY 2034.*

8. To what extent are research projects funded by outside grants charged for the use of UCB facilities?

*Capital projects for research are funded by indirect cost recoveries and rents directly charged for space occupied to conduct research. In addition, we do pursue direct federal appropriation and fund raising opportunities to help support these projects.*

9. Students are charged for an ECO pass. Are faculty and staff?

*CU supports the achievement of RTD's legislatively-mandated 20% fare recovery ratio by paying for student passes through student fees and for its employees' ECO passes through a funding formula drawing on parking revenues, a charge to all auxiliary departments, a fixed contribution from the General Fund, and reimbursement from the CU System for its employees.*

10. What are the current annual bond payments and outstanding capital debts that UCB pays each year? What are the plans to grow or shrink this amount? What enrollment is needed to accrue enough revenue to pay the bills?

*The FY2011 annual principal and interest payment for capital projects debt service was \$40M, and the total outstanding debt at the end of FY2011 was \$566M with final year of maturity at 2036. The campus plans to maintain its current practice of debt service being no more than 7% of operations, which is a Board of Regents requirement. Student enrollment generates tuition and fees, which is primarily used to fund the operations of the institution. These rates are set annually and consider many inputs such as projected enrollment, rate changes, external to campus authority granted, and operational cost changes.*