

TOPIC: FACILITIES MASTER PLAN REVIEW – COLORADO STATE UNIVERSITY – FORT COLLINS

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I. SUMMARY

Institutions are statutorily required to update and revise their Facilities Master Plans every ten years. The Master Plan is a snapshot of the campus's current facility use and capacity, as well as an outline and strategy for future facility use and layout. Specifically, it outlines institutional goals, campus settings, build-out capacity, academic, housing and student life needs, and implementation plans. The Master Plan process is intensive, involved, and often takes multiple years to complete.

The Colorado Commission on Higher Education (CCHE) is required by C.R.S. §23-1-106(3) to review and approve facility master plans for all state institutions of higher education on land owned or controlled by the state or an institution of higher education. The policy and process for the creation and review of a Facilities Master Plan is in the Commission's Policies Section III, Part D. Governing Boards must approve the plans, after which they are submitted to the CCHE for review and approval.

The Colorado State University System Board of Governors approved the Master Plan for the Fort Collins and affiliated campuses in February 2015. Colorado State University – Pueblo submits their own Master Plan, and is not included in this review. The plan was submitted to the Colorado Commission on Higher Education (CCHE) for review towards the end of February. The CCHE Standing Committee on Fiscal Affairs and Audit reviewed the Plan in May, conducted a site visit, and recommended the Facilities Master Plan for approval by the Commission.

For reference, the Master Plan is available online at:
http://www.fm.colostate.edu/files/forms/2014_Masterplan.pdf.

II. BACKGROUND

Colorado State University's history is traced back to 1870 when the Territorial Council and the House of Representatives of the Territory of Colorado created the Agricultural College of Colorado. When Colorado became a state in 1876, governance for the institution was given to the State Board of Agriculture, which is now the Board of Governors for the Colorado State University System. The institution became the State's land-grant college in 1879. As it grew over the decades, it became Colorado State University in 1957. It is a Carnegie classified Doctoral/Research University, and it has eight Colleges with over 250 majors, minors and concentrations.

In 2004, Colorado State University - Fort Collins (CSU-FC) submitted their last full Facilities Master Plan covering the decade between 2004 to 2014. The Master Plan was reviewed and approved by

CCHE in April, 2005. This document addressed bringing CSU-FC into the new millennium through aligning academic services and space needs. This plan outlined how the institution intended to meet growing demands and new educational environments.

The newly submitted 2015 Facilities Master Plan builds on the 2004-2014 Plan and aligns facility goals with campus growth and educational needs. The Facilities Master Plan is a living document guiding the college's next decade of growth and change. Three of the institution's "Sensible Growth" aspects highlighted in the document are: (1) Leadership in Energy and Environmental Design (LEED) certified buildings and landscapes, (2) sustainability, and (3) transportation. Similar to the Master Plan approved by CCHE in 2005, the current plan breaks down need by each of the CSU-FC campuses. CSU-FC's local campuses are used to fulfil their Land Grant mission. The plan goes into details for each campus, but the overarching themes extend to all campuses.

The Master Plan went through a robust development process. The Master Plan Committee, comprised of various individuals from across the campus community, guided the process. Staff members were asked to provide input in the particular areas of utility infrastructure, telecommunications, parking and transportation, campus planning, and space planning. The plan was presented at over 150 community outreach events, giving the campus and larger Fort Collins community an outlet for input. As the encompassing vision for campus development, the Master Plan incorporates the sub-area and system plans for specific campuses, the individual colleges, transportation and parking, housing and dining, bicycles, drainage, and the State Forest Service.

III. STAFF ANALYSIS

Keeping with the Master Plan's format, the staff analysis is broken into three sections: Mission and Strategic Goals, Planning Goals and Assumptions, and Campuses.

MISSION AND STRATEGIC GOALS:

This section outlines the institution's mission and the goals used in the Master Plan's development.

Mission

Inspired by its land-grant heritage, CSU is committed to excellence, setting the standard for public research universities in teaching, research, service, and extension for the benefit of the citizens of Colorado, the United States and the world.

Strategic Goals and Initiatives

Part of the role of the Facilities Master Plan is to align an institution's strategic plan with their building needs and goals. There are six CSU-FC strategic plan goals guiding the Facilities Master Plan:

1. Teaching and Learning;
2. Research and Discover;
3. Engagement and Outreach;

4. Faculty and Staff Development;
5. Infrastructure; and
6. Diversity

PLANNING GOALS AND ASSUMPTIONS:

The Facilities Master Plan is shaped by several planning goals and assumptions. The goals and assumptions fall across different instructional, personnel, and physical categories. Summaries are provided to give context for the specific campus plans.

Planning Goals

The goals motivating the Facilities Master Plan are outlined in chapter three of the document. The chapter particularly highlights physical development goals CSU-FC will focus on to provide the proper environment for instruction, research, and meeting the institution's mission. The physical planning goals are listed below:

- Provide adequate space and facilities to support the University's role and mission;
- Strengthen the physical organization of the campus environment;
- Create a campus image that is appropriate and memorable;
- Encourage, through the University facilities, a sense of community between the faculty, staff, and students;
- Maintain the health, safety, and well-being of all users;
- Demonstrate the University's leadership role in sustainability and wise stewardship of the land;
- Celebrate the legacy of Colorado State University; and
- Implement land use, urban design, architectural, and landscape design guidelines that are appropriate to the unique settings of each of the CSU - FC campuses.

Sustainability Planning

The Office of the State Architect established the U.S. Green Building Council Leadership in Energy and Environmental Design (LEED) level Gold as the standard for new and remodeled buildings in Colorado. CSU-FC has worked to meet those standards. The institution and other businesses partnered with Fort Collins in an effort to reduce greenhouse gas emissions. CSU-FC signed the American College and University Presidents Climate Commitment with a goal of reducing greenhouse gasses to the point of carbon neutrality. The campus's efforts for sustainability involve a multi-disciplinary strategy. Their efforts focus on: site selection, water efficiency, energy and atmosphere, mineral and resources, and indoor environmental quality.

Academic Instruction

The University will remain a doctoral-granting institution with a Doctoral/Research Carnegie classification. Currently, instruction occurs mostly between 8:00am and 5:00pm five days a week, but evening classes are taught Monday through Thursday. Expanded instructional hours are possible to help better utilize these facilities. Adequate library and research space

will be maintained to meet demand. Off-site campuses, including those mentioned in this Master Plan, will continue to be used to provide educational programs. Classroom environments need to be flexible in order to meet various needs and changing instruction styles.

Enrollment

In fall 2013, CSU-FC's student population was 27,034. A vast majority of these students are undergraduates, 22,885. The remaining 4,469 are split between graduate students (3,927) and professional veterinary medicine students (542). The Facilities Master Plan's basic element for determining space needs is changing enrollment. The Plan assumes that the University's population will grow from 27,034 students to 35,000. However, the growth-rate has averaged only 1-2% per year in recent years. CSU-FC acknowledges that 35,000 students is a goal, and that it will take time to achieve that goal. With that goal in mind, CSU-FC developed the Master Plan to alleviate space needs to meet their future enrollment goal. The table below illustrates CSU-FC's projected space deficiency based on their target enrollment of 35,000 students.

CSU space model: Analysis of Space Requirements for 35,000 student campus

| Space Type | GSF 2013 | 35K GSF Needed | Deficiency GSF |
|---|-------------|-------------------|-------------------|
| Classroom | 470,967 | 639,958 | (168,991) |
| Instructional Labs | 491,643 | 1,502,140 | (1,010,497) |
| research Labs | 1,131,829 | 1,175,190 | (43,360) |
| Office/Conference | 1,977,455 | 2,254,301 | (276,847) |
| Study/Library | 315,016 | 577,326 | (262,310) |
| Special Use (Media/Clinic/Demonstration) | 53,504 | 175,013 | (121,508) |
| Athletics/Physical Education | 345,393 | 380,585 | (35,192) |
| Field (Farm/Animal/Greenhouse) | 748,671 | 770,882 | (22,211) |
| General (Assembly/Merchandizing/Recreation) | 866,330 | 1,061,570 | (195,239) |
| Shops/Storage | 978,361 | 978,361 | 0 |
| Health Care | 22,199 | 38,064 | (15,865) |
| Veterinary | 145,556 | 203,081 | (57,525) |
| Housing | 2,063,439 | 2,173,369 | (109,929) |
| Totals | 9,610,363 | 11,929,837 | (2,319,474) |
| # of Students | 27,034 | 35,000 | |
| GSF per Student | 355 | 341 | |

In addition to assuming an increased student enrollment, the campus's growth projections also assume 400 additional faculty, 320 additional staff, and 301 research personnel. The plan assumes that these additional personnel resources will be distributed across all departments.

Research

As externally funded governmental and contractual research continues to grow (expenditures are increasing at a rate of 7-10% a year) research space must be flexible to meet a variety of needs. Core research programs will continue, and new research will focus on genomics and proteomics, environmental research, sciences related to information technology, food, health, and human nutrition, and policy analysis and economic impacts. There will also be a focus on research tied to homeland security. Traditional research space will be strained by interest in interdisciplinary research projects, which will require laboratory facility improvements to successfully compete for competitive awards and funding. The Center for Advanced Technology at the South Campus will be expanded, and the Foothills Campus will continue to be a resource for specialized projects.

In the mid-2000s, the University moved towards a "Supercluster" approach to enhance technology transfers by focusing on specific research areas. A "Supercluster" is a multidisciplinary alliance where researchers work to accelerate a product designed to improve life to the global market place. The "Supercluster" enterprises are governed by a separate board, and it is a subsidiary enterprise of the existing Colorado State University Research Foundation. Current "Superclusters" include cancer research, infectious diseases, and clean energy.

Technology

The Information Technology Executive Committee establishes and maintains the policy for and oversight of the IT environment at CSU-FC. This committee is staffed by university officers, and it reports directly to the Provost. The committee promulgates a set of guiding principles for IT at CSU-FC called the Information Technology Planning Principles. This document is reviewed annually and revised as needed. Key points include:

- The University shall make every effort to provide and use the most updated technology.
- Access to information services will be provided through a robust telecommunications network, and the mobile network will serve as an overlay.
- A continued promise to secured access to the communications network.
- Enhanced connectivity across all campuses.

Transportation and Parking

The University's parking program is a self-supported auxiliary enterprise financed through revenues collected from parking permits, tickets, and other parking revenues. No state funds or tuition revenue is used to support the enterprise. Revenues from permit sales, meter

collections, and fines go towards funding new projects, maintenance for existing facilities, signage, and enforcement. The Board of Governors develops regulations for parking services. There is a separate Transportation and Parking Master Plan that integrates with the Facilities Master Plan. The University is focusing on the following strategies:

- Continued promotion of bicycle use and pedestrian access in the academic core on main campus, and coordinating infrastructure needs to meet the increased use.
- Building new parking facilities located on the periphery of Main campus or other locations to provide increased availability. Transit options will be provided between remote lots and campuses.
- Explore alternatives to address the demand for on-campus parking.
- Coordinate with the City of Fort Collins to create alternative transportation modes to reduce the number of single-individual cars accessing campus.
- Improve access to campus in high traffic areas.
- Work with the City to address increasing Inter and Intra-Campus transportation demands.
- Continue provision of and improved accessibility for persons with mobility, visual, and auditory limitations.

Student Housing and Dining

First-year students at CSU-FC are guaranteed on-campus housing in the residence halls. Currently, the campus has 13 residence halls, and two new projects - Laurel Village which is under construction and Aggie Village North which is in the design phase - will add 1,600 new beds. CSU-FC offers reasonably-priced apartment housing for graduate students, veterinary medicine students, student couples, and single parent students.

The institution has a separate Housing and Dining Master Plan, which is integrated with the Facilities Master Plan, and outline areas of low-density housing on campus that should be redeveloped or renovated. The most recent plan was completed in 2009, and meeting the institution's enrollment growth needs is one of the main housing goals. Collegiate living space needs will shift in the future, and the Facilities Master Plan acknowledges the need for flexible living space.

Athletics

There are currently six men's sports programs at CSU-FC and ten women's sports programs. These programs require space and facilities. In 2013, the University invested resources to renovate and add additional space onto the Moby Arena. The work entailed an expanded concourse, additional restrooms, expanded training facilities, and new branding. In December 2014, the Board of Governors approved constructing an on-campus football stadium. Going forward, CSU-FC intends to support existing programs and expand facilities to meet the increased enrollment.

Campuses:

This section provides specific information for the campuses covered in this Master Plan.

Main Campus

The 451 acre campus is composed of three smaller campuses: Central, East, and West. Central Campus is the largest single component of Main Campus, and is the main focus in the plan. East Campus is home to the University Arts Center, and the apartment housing for graduate students and families is located at West Campus. As the heart of operations for CSU-FC, most of the enrollment growth will occur on Main Campus, particularly Central Campus, but there is a limited prospect for land acquisition to meet the growing demand.

Although the Master Plan is conceptual, not citing specific buildings or definite locations, the planning and design guidelines call for mixed-use buildings, preserving open spaces, strengthening the existing campus features, pedestrian and bicycle infrastructure improvements, and transportation improvements.

Academic Buildings:

The majority of Main Campus's academic buildings are along what is called the "academic spine". The Master Plan does not identify locations of specific academic buildings, but it calls for higher building density with formal open spaces and improved circulation patterns. The campus has identified academic infill sites along the academic spine to provide for future programmatic needs.

Transportation:

The Master Plan calls for ways to mitigate traffic congestion, with a focus on encouraging alternative transportation. One method is public transportation. CSU-FC uses the City of Fort Collins' transportation system, and students are about 37% of the system's ridership. The Master Plan also calls for improvements to pedestrian and bicycle infrastructure by creating new bicycle routes that connect to City paths, and improving secondary paths for pedestrians.

Auxiliary Buildings:

Auxiliary buildings include housing, athletics, and parking infrastructure. Housing development is highlighted by recent completion of the Academic Village. Designs for Aggie Village North are underway, and the institution anticipates development of Newsom Hall in the future. Athletic development primarily consists of construction for the new on-campus stadium. Parking infrastructure is at a premium on campus as the number of spaces decreased by 1,200 since 2006. The decrease is part of the shift towards transportation, but additional spaces are needed. Parking infrastructure projects have been recommended, and projects for surface lots and garages are expected to alleviate the need.

Pedestrian and Bicycle Improvements:

Bicycle and pedestrian traffic are common on campus. In 2014 a bicycle master plan was developed to address organization and growth of the cycling system on campus. New routes and covered parking were developed as part of the plan, and better connections with the surrounding area are desired. Intersection improvements for pedestrians and cyclists are part of the long-range plan at Main Campus. Pedestrians are served by a main set of paths connected to the rest of the campus through secondary paths. These paths are expected to be maintained.

South Campus

The 132 acre South Campus is located just south of Main Campus. The Veterinary Medicine facilities are on this campus. The campus also houses the Natural Resource Research Center, which is currently leased by the federal government. The floodplains on South Campus limit its development potential.

Academic Buildings:

To create a more formal atmosphere, the institution plans on using higher building densities, traditional campus landscapes, and better circulation patterns to improve the feel on South Campus. A signature building for the Veterinary Medicine is planned, and program plans have been developed for projects including a Community Practice Building and a Food Animal Building. An Equine Teaching Hospital is also being planned.

Additional Infrastructure:

Additional parking sites will be developed at South Campus to accommodate the campus's growth and the reduction of spaces on Main Campus. Special consideration will be given to spaces for large vehicles used to transport large animals. Additional recreation fields are planned. Circulation improvements are planned to address the different types of vehicles South Campus accommodates.

Foothills Campus

This campus provides additional research facilities including the Engineering Research Center, the Agricultural Engineering Research Center, Equine Reproduction Lab, and fisheries that promote the institution's land-grant mission. The campus continues to be a valuable resource for CSU-FC. The research-based nature of this campus makes it different than the other campuses. CSU-FC plans to continue the clustered development pattern on Foothills Campus, but a community center is needed to provide food and services. A centralized parking lot will eliminate the need for parking at each site on the campus.

Agricultural Research Development and Education Center (ARDEC)

ARDEC is a biological field facility allowing for integrated research, instruction, and outreach. This facility also serves the U.S. Department of Agriculture. There are no formal facilities plans for this campus, and any construction will be limited given its agricultural

nature.

Environmental Learning Center

The Environmental Learning Center is charged with a mission to advance environmental conservation and stewardship among students and the community. The facility provides for experiential learning. There is currently a Welcome Center and the Rocky Mountain Raptor Program birdcages. No formal master plan has been developed for this site.

CSU Mountain Campus at Pingree Park

The 1,177 acre campus at Pingree Park is open six months of the year. It supports summer courses and camps, providing field experience particularly in the fields of ecology and other natural sciences. The campus will remain a high-altitude teaching and research facility. There are plans to add new footpaths and lodging. Other improvements include adding and improving infrastructure for internet connectivity, sewer and fire suppression upgrades, moving to underground electrical lines, and bridge replacement.

Powerhouse Energy Campus

This campus is located in Fort Collins and houses the CSU-FC Energy Institute. The campus serves as the CSU-FC hub for energy innovation and research. There are currently no plans for construction, but any additions will be limited to facilities that meet the campus's academic and research mission.

IV. STAFF RECOMMENDATIONS

Staff recommends that the Commission approve The Facilities Master Plan for Colorado State University – Fort Collins as recommended for approval by the Fiscal Affairs and Audit Standing Committee.

V. STATORY AUTHORITY

C.R.S. §23-1-106(3)

(3) The commission shall review and approve facility master plans for all state institutions of higher education on land owned or controlled by the state or an institution and capital construction or capital renewal program plans for projects other than those projects described in subsection (9) or (10) of this section. Except for those projects described in subsection (9) or (10) of this section, no capital construction or capital renewal shall commence except in accordance with an approved facility master plan and program plan.