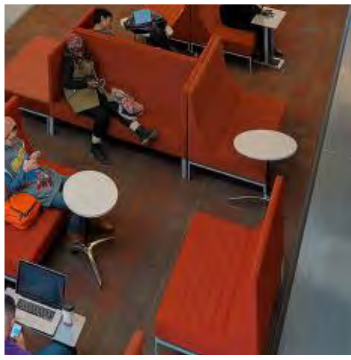










COMMUNITY COLLEGE OF DENVER

Neighborhood Master Plan

6/20/2016

RNL

MKTHINK
the IDEAS company for the built environment

RNL and MKThink would like to thank the Steering Committee and all of the CCD students, faculty, and staff who contributed to this project.

LETTER FROM DR. EVERETTE FREEMAN, CCD PRESIDENT

On the eve of our 50th anniversary it is fitting to take time to pause and think about our facility needs moving forward and to continue developing our identity on the Auraria campus.

Almost fifty years ago, the Community College of Denver began offering courses in a renovated auto showroom close to the downtown Denver Civic Center. Today, CCD occupies over 350,000 sq. ft. on our Auraria, Lowry and Advanced Manufacturing campuses.

In 2013, building construction was completed on Confluence, the first college owned facility on the Auraria campus and the location for our student-centered services ranging from financial aid to academic advising. An award-winning LEEDS design, Confluence serves as a showcase for continuing the CCD tradition of welcoming all who wish to pursue higher education.

The new Advanced Manufacturing Center, opened in 2015, made it possible for us to move our machining and welding programs closer to campus and tripled our capacity to provide certificate and associate degree programs focused on welding, machining and graphic engineering.

Through surveys, interviews, focus groups and open houses, our faculty, staff, students and external stakeholders provided their vision for the college. As I participated in many of these activities and heard feedback from others, it became abundantly clear to me that what has emerged is an exciting vision of CCD that is collaborative, creative, passionate and engaging; a vision that will firmly define CCD as a vibrant and vital educational partner on the Auraria campus and downtown Denver.

The master plan that follows provides CCD with a roadmap for placing and building our future facilities on the Auraria campus. It is an evolving document not set in stone. To be sure, as we move forward, this master plan provides us with a future direction but also allows us to take the road less traveled and to be trailblazers in the family of community colleges.

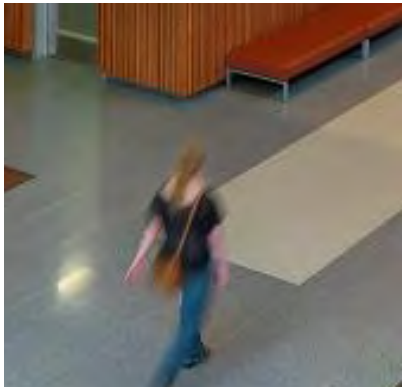
A lot of reflection, deliberation and innovation has gone into this master plan. I wish to thank the faculty, staff, students and business partners who participated in this process. This master plan is a wonderful shared vision of how the next 50 years for CCD should unfold.

Best,

Ee

Dr. Everette Freeman, CCD President

COMMUNITY COLLEGE OF DENVER



01 EXECUTIVE SUMMARY

1. INTRODUCTION

In the summer of 2015, the Community College of Denver (CCD) began the process of developing its Neighborhood Master Plan. This project grew out of several previous planning efforts conducted in 2007 and again in 2012 for the Auraria campus as a whole. Clear directions were defined, through a campus wide Master Plan and Strategic Implementation Plan, to establish and strengthen distinct neighborhoods for each of the three institutions that make up the Auraria campus: the Community College of Denver (CCD), Metropolitan State University of Denver (MSU Denver) and the University of Colorado, Denver (CU Denver), while also maintaining the tri-institutional core of the overall campus.

This Neighborhood Master Plan builds on those efforts to create a more refined roadmap for CCD's neighborhood within the context of the larger campus.

The purpose of any campus master plan is to support an institution's academic mission and strategic vision by developing a roadmap and tool to guide short term projects while also providing a framework for meeting long-term goals. The plan should be more specific in its short term objectives, with the flexibility to respond to the unknowns and variables that will change over time. For the Auraria Campus, the neighborhood master plans serve as that roadmap for each individual institution, but must fit within, and adhere to, the larger vision for the entire tri-institutional community.

This document maps out the vision, goals, objectives and specific recommended directions for CCD, identifying the short, mid and long term priorities that will help to shape and support the College's academic mission, distinct identity and unique sense of place within the campus at large.

2. PROJECT PROCESS

The planning process was an iterative one that involved multiple groups of stakeholders. CCD's Steering Committee was involved in all key meetings, workshops and document reviews. Ultimately, this committee was responsible for driving direction and approving the final recommendations. Their decision making was informed by input from a variety of other participants who were brought in during visioning, discovery/data collection and alternatives development. These stakeholders included additional faculty/staff representatives from each user group, student focus groups and at-large students, faculty and staff asked to attend an open house. A collaborative joint workshop held with MSU Denver also provided input relative to areas where the two institutions' action plans will impact one another.

Concurrently with the development of the Master Plan, a Program Plan has been completed for the Boulder Creek Building to explore more specific, primarily short-term, relocations and reconfigurations that will enable several key objectives to be met. The plan for the Boulder Creek Building also influenced some aspects of the Master Plan.

There are several key drivers of this Master Plan including defining the vision, quantifying facility space needs and identifying opportunities and constraints of the existing neighborhood site and building parameters. The methodology used to examine these components is described in more detail in the body of this document.

3. PROJECT BACKGROUND

In 2007, a campus wide master plan was developed that introduced the concept of "Institutional Neighborhoods". These neighborhoods carved out space for each institution to grow within an exclusive district defined by the clustering of their administrative uses and academic space for their unique programs. The neighborhoods would surround the campus core of common, shared facilities including the Tivoli, library, and shared classroom/instructional buildings.

In 2012 a Strategic Implementation Plan was developed that enhanced the Neighborhood concept, more clearly defining the areas each neighborhood would ultimately encompass and designating the distinct, most prominent edges and "gateways" for each. For CCD, this edge became Colfax Avenue with gateway and branding opportunities focused there. This Plan also examined build out potential for the campus at large and within each neighborhood to understand maximum capacities. Near term projects were identified in the 2012 study, many of which have been implemented or are in progress. Projects important to CCD include the new Confluence Building, and remodel of the Cherry Creek Building and its courtyard (formerly the South Classroom Building).

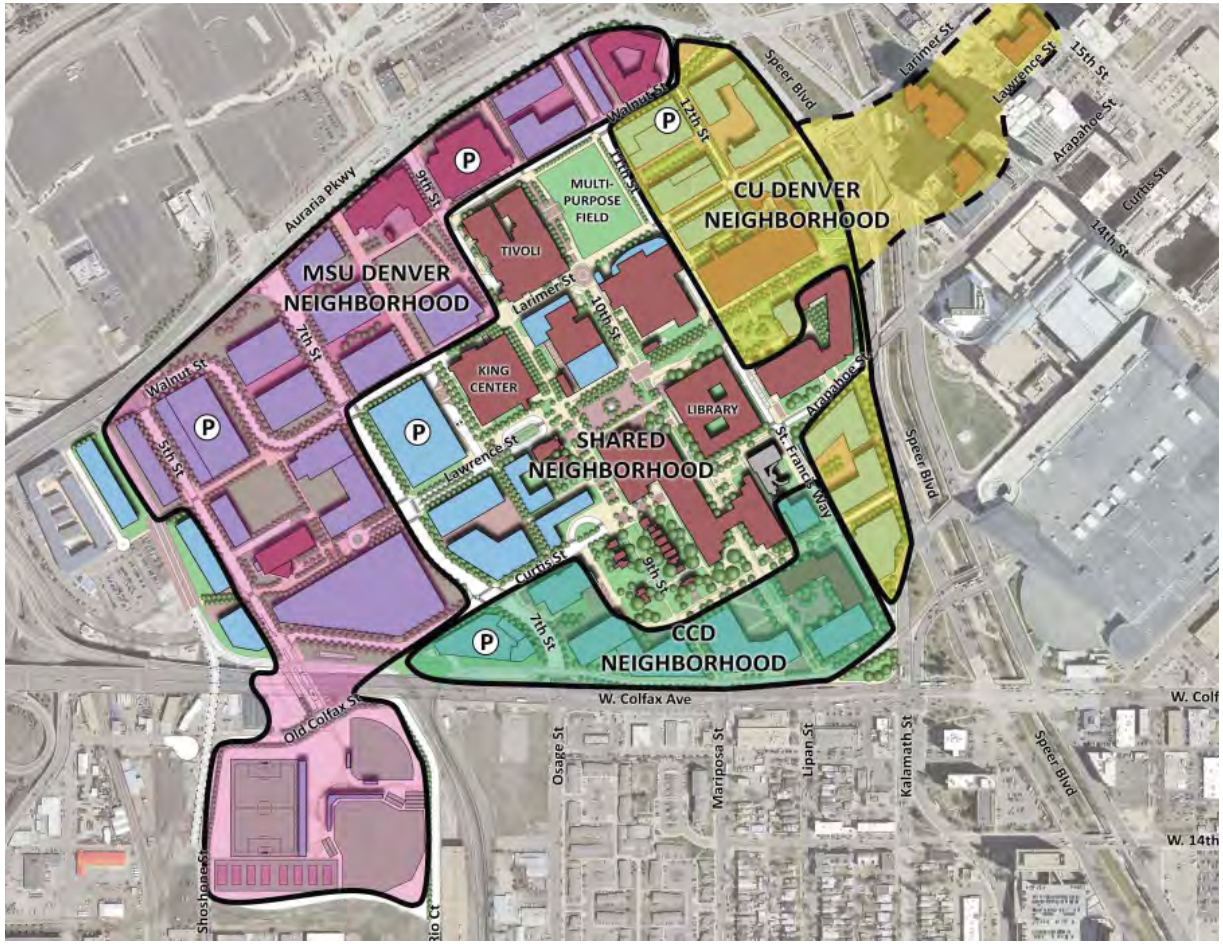


Figure 1.a - 2012 Auraria Neighborhoods

4. GOALS AND OBJECTIVES

The visioning process helped to define a clear set of goals and objectives that the CCD Master Plan needs to address. Four of these were identified as the highest priority:

- *Address current space needs issues*
- *Optimize flexibility and use of current space*
- *Identify the satellite program(s) most appropriate to relocate to the main campus, if any*
- *Improve ability to find academic departments and support resources more easily*

The remaining goals included improving a sense of place and distinct CCD identity, adhering to the overall campus master plan and strengthening the connection to the wider campus, and improving the sense of safety in the neighborhood and on campus.

5. FINDINGS

Enrollment

CCD's enrollment has fluctuated over the last decade, impacted by corresponding shifts in the economy. *Enrollment has declined in the last several years and only a modest increase of 1% is anticipated by 2030.*

All academic centers are projecting either status quo or slight growth. *The greatest growth is expected in the Math & Science and Arts/Humanities/Social Sciences.* There are regional and local demographics, economic and educational factors that will continue to impact enrollment and are not entirely predictable, so flexibility within the master plan is essential, as

Community College of Denver
Enrollment Projections By Center

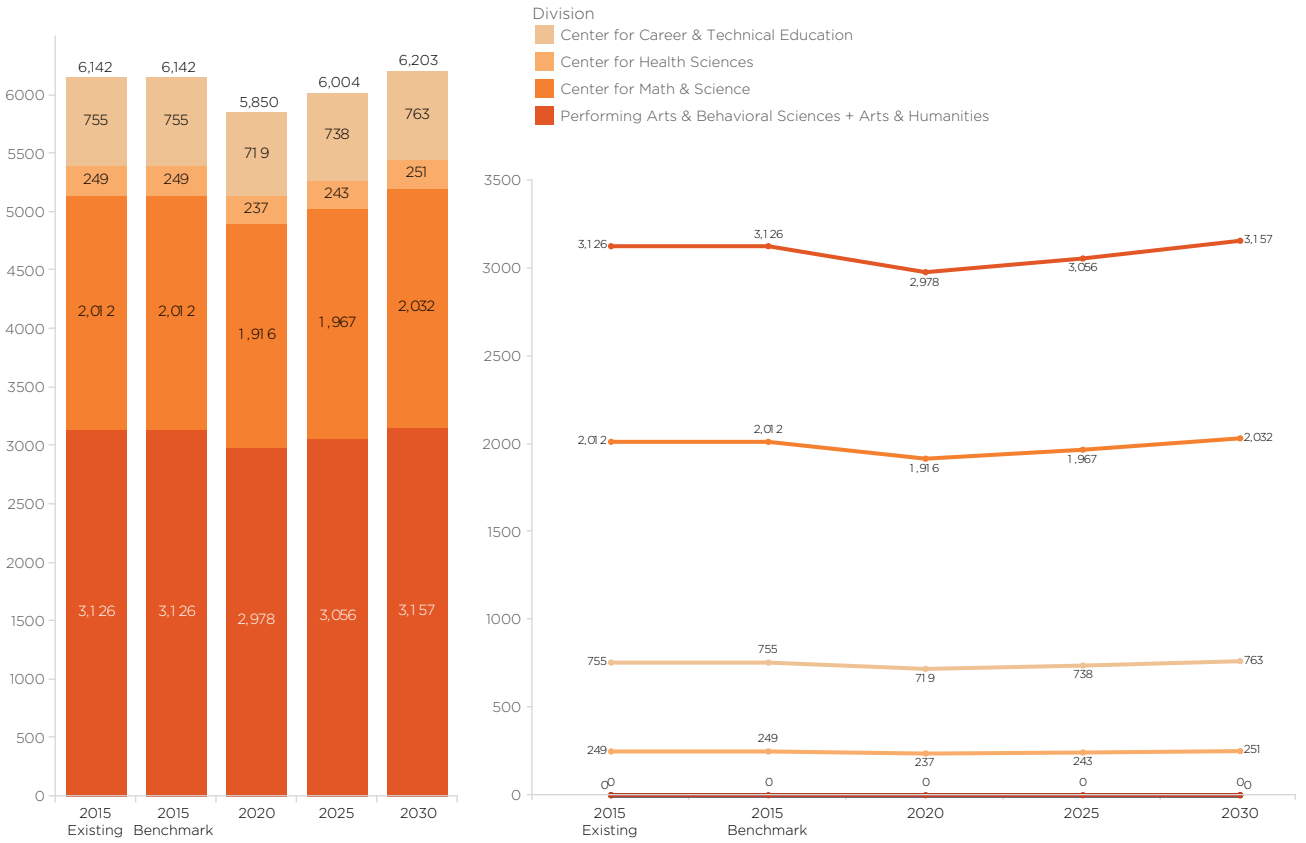


Figure 1.b - Enrollment Projections by Center

is the recognition that high enrollment growth is unlikely within the planning time frame.

Existing Conditions

Both site and facility existing conditions were assessed at a high level to inform the master plan. The key findings included the following:

Three primary topics were consistently identified by stakeholders as being important relative to site planning: *Safety, Identity and Connectivity.* Enhancing and/or improving conditions related to these concepts provides a filter through which specific project implementation can be viewed. Each of these areas is explored in this document to provide a baseline framework for the development of the neighborhood plan. Facility Conditions Audits were completed for buildings CCD occupies or uses either in 2007/2008 or in 2014. It was found that *a number of the key buildings are at or above the target* rating, however several are below that target including the Boulder Creek Building, PE Events Center, and Plaza Building. Any significant remodeling of these buildings for long-term use must consider the building condition upgrades that will be necessary to bring the buildings up to date. With the recent remodel of the Cherry Creek Building and construction of the Confluence Building, CCD's neighborhood buildings have improved.

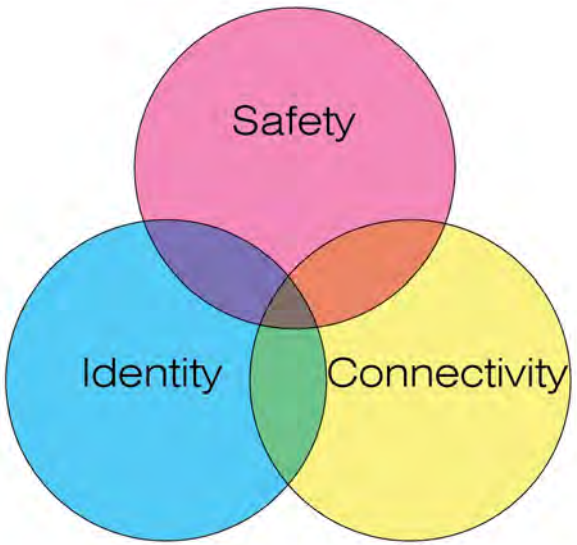


Figure 1.c - Site Themes

CCD currently occupies, or is the primary user of, close to 352,400 assignable square feet across the campus. Of that, approximately 46% is instructional space, 26% is office space, and the remainder is study, recreation, activity and support space. Specific to instructional space, findings include:

- *A more detailed classroom utilization analysis showed that classrooms of all sizes achieve a utilization rate of 54.5% approximately 75% of the time* Monday through Thursday, which is lower than the State's target rate of 65%. This target is only reached approximately 10% of the time.

- Occupancy rates also showed inefficiencies. *Small classrooms had the best occupancy rates* (meaning the capacity of the room matched the occupancy to a greater degree) at 80% full, 50% of the time. Overall the analysis showed that the larger the rooms, the lower the occupancy. The most efficiently used rooms were small and medium sized classrooms.

- *Findings indicate that there could be some "rightsizing" of instructional spaces so that classrooms are utilized at the target rate or better and are more fully occupied per class.* Should classroom space be are more of a premium in the future, this would be a strategy to consider to minimize constructing new instructional space.

5. ANALYSIS

Enrollment and Staffing Projections

- Current enrollment is approximately 14,822 student headcount, and 5,129 student FTE. *Projected enrollment by 2030 is 5,180 FTE, which equates to 1% growth equally distributed across all Centers.*

Staffing is projected to grow at a greater rate, initially declining, but growing by approximately 8% in the next 15 years. This growth is predominately in student services and administrative departments. Staff growth projectors will continue to fluctuate based on actual enrollment.

Benchmarks

A variety of sources were used to compile comparable benchmarks for CCD. General metrics that were considered were either assignable square footage per student or faculty/staff and/or percentage of total institution square footage by space type. After reviewing these metrics, consensus was reached with the Steering Committee about the most applicable metrics. Existing conditions were compared with these benchmarks, and further discussion determined where benchmarks were relevant and where other considerations should take precedence. For example, while benchmarks might indicate a shortage of special use space (such as recreation facilities where the PE Events Center is primarily assigned to MSU Denver), the reality is that space, while not assigned to CCD, is available to CCD for use. The Tri-institutional nature of the campus negates the relevance of the some of the benchmarks.

Space Needs

Findings indicated that while benchmarks would suggest CCD is marginally deficient in several areas, most of these space categories are within shared facilities where CCD has access to more space than is "assigned" to them and therefore, could be considered adequate. The instructional space analysis determined that CCD is only deficient by a few class/labs and could potentially address this shortage through scheduling and/or "rightsizing" inefficiently used rooms. *The analysis showed that overall, CCD actually has a small surplus of space currently.* This is predominately office space due to generous standards, vacant workstation areas, and inefficiently configured office suites.

The predominate space need for CCD on the Auraria Campus is finding more space within CCD's Neighborhood for administrative functions that currently reside elsewhere on campus, and for the Health Sciences program currently located at the Lowry Campus.

There are several buildings that have available space to consider. The Boulder Creek Building houses space slated to be vacated by CU Denver, and space by MSU Denver's Nursing and Aerospace programs. The Clear Creek Building has some vacant space on its second floor, and MSU Denver has plans to relocate the remaining program they have there. In addition, with some reconfiguration/remodel, there are opportunities to capture some additional space in the office areas within the Cherry Creek and Confluence Buildings.

Urban Planning

Looking more in depth at the concepts of safety, identity and connectivity revealed some specific issues that have bearing on the urban and site planning recommendations for the master plan.

<u>Safety</u>

Both students and employees of CCD have noted concerns with perceived safety on campus under certain circumstances or in specific areas. These concerns stem from a variety of conditions including less densely populated/built out areas on campus, dark spots where lighting is lacking, and non-student related activity, including drug use, between and within buildings. Crime statistics indicate that violations have been declining over the last few years and criminal activity is primarily theft/burglary or drug related vs. assaults. *Total crimes reported are lower than average compared with all the surrounding neighborhoods.*

Identity

Given that the primary edge of the CCD Neighborhood, with the greatest visibility long term, is Colfax Avenue, the branding opportunities are strongest in that location. The Confluence Building takes advantage of this, and any new development in the neighborhood should as well. *Redevelopment of the Boulder Creek Building is a critical opportunity for branding,* with its direct adjacency to both the public transportation hub and a primary gateway into CCD's Neighborhood as well as to the larger campus.

Connectivity

The 7th Street entrance onto campus is a crucial link between CCD's Neighborhood and the rest of campus in the north-south direction. Stronger connections are needed that link CCD's Neighborhood east-west with downtown. Strengthening the informal connections internal to the Neighborhood between the Confluence Building, Boulder Creek, Cherry Creek and Clear Creek, tying into 9th and 10th Streets will help realize this.

7th Street

6. RECOMMENDATIONS

Based on the findings, analysis, vision, goals and objectives defined for CCD, recommendations were developed based on priorities for short, mid and long term timeframes, within a recommended urban planning framework. Multiple options were explored to arrive at the solutions presented. These recommendations strive to strike a balance between meeting CCD's requirements and remaining true to the broader plan approved for the Auraria Campus as a whole, while providing enough flexibility to adapt over time as conditions change.

The timeframes are loosely based on five year increments, related to the 2012 Study's Phases I, II and III. However, the trigger for the implementation of some of the recommendations will be based more on when certain enrollment levels are reached and/or funding is available. The phasing plan provides a recommended sequence for implementation regardless of specific dates.

Short Term Priorities

Relocate Administrative functions from the Administration Building to the CCD Neighborhood.

The recommendation is to house the IT Department in the Clear Creek Building once MSU Denver relocates the Veterans Upward Bound program. In order to vacate the remaining space in the Administration Building within timeframes desirable for MSU Denver, it may be necessary to move HR/Finance to office space in the Modular buildings (and this may require a swap of space with MSU Denver.) The administrative functions will then move into Boulder Creek once CU Denver vacates the building.

Backfill the Boulder Creek Building

In order to accommodate existing and new programs slated for this building, several moves within the building are necessary. One addresses student and faculty desires to decentralize the large computer lab in the building. To do this, satellite computer lab space will be created in the Cherry Creek and Confluence Buildings using surplus office space. The second major move involves consolidating CU Denver's existing lab space in the building into space that will be vacated by MSU Denver.

Expand the Boulder Creek Building

There are two programs that need to be brought onto the main campus and into CCD's neighborhood. Through the moves described above and the construction of a small new addition to the Boulder Creek Building, these programs can be accommodated. The first is the Heath Sciences program currently located at the Lowry Campus. This relocation has multiple benefits including getting out of leased and underutilized space at Lowry, as well as increasing enrollment and public outreach for the services this program offers the community. In addition, the Nutrition Program could bring its teaching kitchen onto campus and expand the program to include a teaching cafe and a study space providing a highly visible CCD branding opportunity with the cafe occupying the corner of the existing building that faces the 10th Street Corridor and Cherry Creek Building Courtyard, both heavily trafficked entry points into the Neighborhood.

More details of the Boulder Creek plans are provided in the Program Plan document.

It is recommended that concurrently with the remodel of the existing building, an addition be constructed that can accomplish several additional goals and objectives. The addition would provide a new home for Health Sciences classrooms and faculty offices and a highly visible CCD branding opportunity. The addition would be created by infilling the Colfax facing courtyard, providing a welcoming new front door for the CCD Neighborhood at the 10th and Colfax gateway entrance. This has been detailed and illustrated in the Boulder Creek Program Plan.

Mid-Term Priorities

The mid-term priorities are less specific, and based upon opportunities as they arise rather than critical operational needs. These action items include relocating classrooms and administrative offices from the Modular buildings, and student resources from the Tivoli such as the book-lending program, into the Neighborhood as space becomes or is made available. Opportunities to

grab additional space include MSU Denver lab space in the Cherry Creek Building and Visual Arts moving to new space once the Arts Building is remodeled.

Long-Term Priorities

Longer term priorities focus on where the next new building would be constructed within CCD's Neighborhood for needs that will be defined over time and could include additional administration space, student support, academic programming growth and/or bringing additional off-campus programs (e.g. the Advanced Manufacturing Center) onto the Auraria Campus. The 2012 plan designates potential building sites for this new construction, which have been maintained as part of this plan.

Urban Planning Framework

Some of the key recommendations for urban planning in the neighborhood, in tandem with the facility related recommendations, include:

- Activate the "front door" to the neighborhood with transparency into the Colfax face of the new Boulder Creek addition. By doing so, enhance branding and visibility and a sense of safety through better "eyes on the street" exposure.
- Create a more pronounced entryway into Boulder Creek along 10th Street to activate that corridor and make a positive contribution to the life of the campus along an important pedestrian spine.
- Optimize the opportunity to create a more prominent and recognizable gateway with the improved Boulder Creek plaza and entryways.
- Enhance connections within the neighborhood by playing off the newly established public spaces in and around the Confluence Building.
- Explore the "center of gravity" of the neighborhood relative to future construction sites including the Bear Creek site and the Juniper Parking Lot site.
- Consider opportunities and constraints of each site based on proposed uses/occupants including parking, vehicular access, utilities, visibility and branding opportunities, creating or preserving active outdoor and green space, and enhancing connectivity.
- Conduct further study and develop a Connectivity and Safety Framework Plan that can help guide specific recommendations for lighting, wayfinding, signage, pedestrian friendly connections design.
- Coordinate with AHEC's planning efforts regarding strengthening and improving safe connections with downtown from the campus and the specific neighborhoods.

7. PHASING/ESTIMATES OF PROBABLE COST

Phasing

The proposed phasing plan is dependent upon available funding, cooperation between institutions for planning moves, and final approval of the recommendations. Regardless of start dates, the phasing represents a sequence of events that will allow the various user groups to relocate to their long term locations with few duplicate moves, thereby reducing cost and disruption. The most defined part of this plan is the short-term timeframe which proposes the initial remodels and relocations begin in 2018.

Estimates of Probable Cost

Based upon program information, phasing assumptions and preliminary renovation scope definitions, high level cost estimates were developed. The estimates for the Boulder Creek Building renovation and expansion, and any projects in other buildings associated with that are show in in detail in a Capital Construction Request format. Mid-term and long-term costs are based on benchmark data and are for construction costs only.

The total project cost estimated for Boulder Creek is approximately $21,934,240 with an estimated $521,131 of additional remodel construction cost for associated projects in the short term and $1,553,162 of final remodel construction costs mid-term (2021/22). This final phase of remodel may not occur until the mid-term depending upon UC Denver's ability to relocate its lab space from the building. CCD is planning on contributing 6% of the total project cost.

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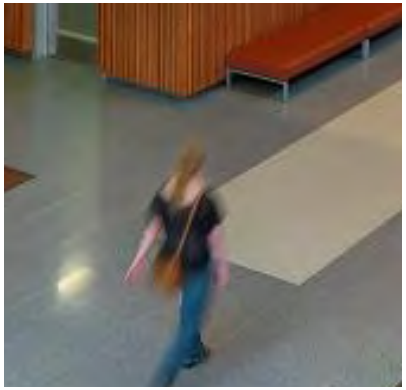

02

INTRODUCTION

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DEFINITIONS AND ACRONYMS

Assignable Square Feet:

In general, space models, standards and guidelines for institutions of higher education are analyzed in terms of "assignable square feet (asf)". This refers to space that is directly assignable to a particular end user in a building. Typically this does not include primary building corridors, stairwells, elevators, mechanical space, bathrooms, service spaces such as IT or janitor closets.

For new construction assignable square feet is translated to gross square feet (gsf)as an efficiency ratio, typically where the asf is 55-70% of the gsf. Where a net square foot (nsf) number is needed for proposed interior remodels, the factor used to convert asf to nsf is indicated.

Student and Faculty/Staff FTE:

Typically, space needs are based on full-time equivalents (FTE) for both students and employees. This is differentiated from "headcount" which accounts for the total number of people regardless of full time or part time status. For commuter schools that have a substantial number of part-time students and faculty, the difference between headcount and FTE counts can be significant. The current enrollment figures used for the master plan are a 'snapshot' of one semester's enrollment.

Key Acronyms:

AHEC – Auraria Higher Education Center

CCD – Community College of Denver

MSU Denver – Metro State University of Denver

CU Denver – University of Colorado, Denver

SSB – Student Success Building

HLC – Hotel Learning Center

B) PLANNING PROCESS

1. VISIONING AND STAKEHOLDER ENGAGEMENT

The project kicked off with two key stakeholder engagement activities. The first was a Visioning Session with the Steering Committee for CCD. The focus of this session was to review where planning efforts had left off in 2012, and begin to define the specific vision for the designated CCD Neighborhood. Facilitated activities with the committee included an exercise to define "Criteria For Success" for the project asking the question "What will make this a successful project for you?" Several mapping exercises were conducted as well, that included "Empathy Mapping" allowing participants to illustrate the campus experience from different points of view; and "Campus Mapping" in which participants placed icons representing activities and space types in their "ideal" locations on a map of the campus. "Pain and Pleasure Points" of these ideas were then summarized and prioritized to define those things that are working or not working that should be a focus of the master plan.

In addition, two student focus groups were conducted to capture the student perspective on similar issues to those discussed and explored in the Visioning Session. The outcomes of these combined efforts are summarized in the Appendix.

2. DISCOVERY AND DATA COLLECTION

The discovery process encompassed a variety of data collection activities including but not limited to:

- Collection of existing data from AHEC and CCD regarding staffing, enrollment, classroom use and scheduling, building locations, space occupancies and ownership, facility conditions ratings and standards.
- Collection and review of previous planning documents including: Program Plans for the King Center and Art Building; Feasibility Studies for the PE Events Center and Boulder Creek Building; Drawings for the AMC leased space; and a Space Plan Audit for the Administration Building.
- Collection and review of the 2012 Auraria Campus Master Plan Update and Strategic Implementation Plan.
- Distribution and review of completed on-line surveys regarding general preferences and conditions from Faculty and Staff within each Department.
- Conducting on site interviews with representatives from each Department, and brief tours of key facilities and spaces associated with those functions.

3. FACILITIES ASSESSMENTS

A Facility Assessment was completed in detail for the Boulder Creek Building, as part of the development of a Program Plan for the building. All other facilities included within the Neighborhood or used on campus by CCD were ranked in terms of overall condition based on Facility Condition Index information provided by AHEC.

Student in Action

4. SPACE NEEDS ANALYSIS

The space needs analysis had several layers to it, assessing both space utilization and key adjacencies that ultimately drove the development of specific alternatives. The ultimate goal of this analysis was to determine how much new or renovated space, of what kind, will be needed to support the institutional mission, academic plan and projected enrollment in the short and long term.

Projected space requirements by primary space types were calculated based on square foot per student FTE, or faculty/staff FTE, percent of total campus SF and other benchmarked metrics. These requirements were defined for the institution overall as well as by Center. Classroom utilization was analyzed at a more fine grained level that included looking at classroom usage by institution, building, week and day to assess how efficiently classrooms of different sizes and in different locations are being used. This informed programming for future classroom space needs. Likewise, a detailed analysis was conpleted for office space needs differentiating between administrative staff, full time and adjunct faculty.

A gap analysis was then completed, comparing currently available space to the projected need to understand where shortfalls and surplus spaces occur within different space types, departments and buildings.

5. DEVELOPMENT OF THE NEIGHBORHOOD MASTER PLAN FRAMEWORK

An overview of the campus history and master planning that has occurred to date was compiled to establish the framework within which this Neighborhood Master Plan needed to be developed. Specific projects that have been completed, or that are in progress since the 2012 study was published, are described.

6. DEVELOPMENT OF ALTERNATIVES

Three workshops were conducted to review the overall framework, refined campus site planning concepts and specific facilities' solutions for meeting desired space needs. The first two of these meetings was attended by CCD's Steering Committee Members and Department Deans. The third workshop was held jointly with MSU Denver's Steering Committee to discuss and achieve consensus of priorities each institution had that could potentially impact the other. These joint areas of overlap helped define the sequence and phasing of moves necessary for each individual institution to achieve their primary goals and objectives.

In addition, each institution shared those preliminary ideas and asked thought provoking questions with a broader audience through the use of a "graffiti wall" (see photo) made available to students, staff and faculty. Feedback solicited from this was sorted to identify the most frequently mentioned ideas, issues, likes and dislikes (see appendix).

Following the workshops and public input, several alternatives were developed further and evaluated with the Steering Committee to arrive a the recommendations.

"Wordle" (word cloud) generated from grafitti wall responses

7. ESTIMATES OF PROBABLE COST

High level cost estimates were developed based on program information, estimated scope of renovations and new construction with corresponding escalation factors based on estimated time frames for completion.

Construction costs are based on benchmarks and recently completed projects of similar scope and type in the region and on the campus.

A more detailed cost estimate for the Boulder Creek building is provided in the Program Plan document for that facility.

Students interacting with graffiti wall

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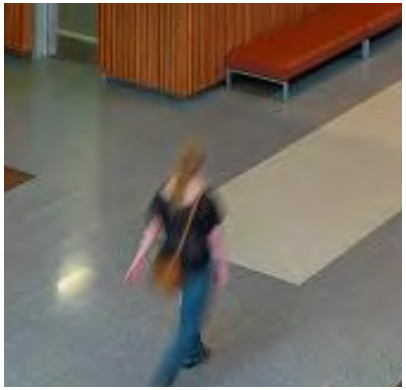

03
INSTITUTIONAL OVERVIEW

A) CAMPUS MASTER PLANNING FRAMEWORK - 2012 MASTER PLAN

Auraria 1977

Figure 3.a - Plat map of Auraria from Baists Real Estate Atlas

1. CAMPUS HISTORY

The area where the Auraria Higher Education Center now sits began its life as a settlement and town that predates both the founding of Denver and the establishment of the State of Colorado. Beginning in 1858, the town of Auraria began as a loosely-defined gold prospecting settlement that would soon be defined by a rigid, urban block and development plan. As the rival settlement of Denver City began to eclipse the prestige and success of Auraria, the two decided to merge and combine fortunes in 1860, becoming a single entity known simply as Denver.

As a newly formed neighborhood of Denver, Auraria quickly began establishing itself as a working class neighborhood built around a mix of industries, including mills, warehousing, and breweries (a remnant of which being preserved in the Tivoli Student Union – a former and recently re-established brewery). Following early floods that compromised much of the neighborhood, the neighborhood became largely populated by Central and Eastern European immigrants. Life for these European immigrants revolved around the St Elizabeth's Catholic Church. Following the departure of many of these inhabitants, the neighborhood was repopulated with Hispanic (predominantly Mexican) residents. This population founded and supported St. Cajetans Church as the center of life for the community.

Following major devastating flooding in 1965, the City began considering comprehensive plans for urban renewal. After a process that analyzed seventeen potential sites for a desired higher education campus, the Auraria neighborhood was selected as the most feasible site for such a facility. Leading up to a 1969 bond election to match federal funds for the creation of what would become AHEC, neighborhood residents attempted to organize to fight to save their community. The bond, however, was overwhelmingly supported by city residents and neighborhood residents were relocated – primarily to the Lincoln Park neighborhood to the south – by 1972. The newly enabled Auraria Campus brought together a satellite campus of both the University of Colorado and the Denver Area Community College (now the Community College of Denver) as well as the newly created Metropolitan State College (now the Metropolitan State University of Denver) and worked to clear the land that contained the buildings that defined the pre-existing community.

By 1976, the campus was open with the expectation of servicing approximately 13,000 students between the three institutions. New campus buildings were designed and built in a red brick language that still dominates the character of the campus. Due to the foresight of the residents of the original neighborhood, as well as city and campus leadership, several exemplary buildings were preserved, including the Tivoli, St. Cajetans and St. Elizabeth churches, the Emmanuel Chapel, and the Victorian-era homes that constitute the 9th Street

Historic District. City streets that originally defined neighborhood blocks remained after the opening of the campus – including Lawrence and Larimer Streets and their viaducts that connected the campus to Colfax and other areas. Many campus streets were eventually closed and replaced with pedestrian paths and open space with Auraria Parkway becoming a replacement for those early viaducts.

In recent times, the campus has begun a string of new construction that had not been seen since the beginning of the campus in the 1970s. To plan for a changing and growing campus, AHEC and its constituent institutions initiated master planning exercises in 2007 followed by updated plans in 2012. These documents have been used to guide the recent campus growth.

Auraria pre-1977

Figure 3.b - Original concept layout for Auraria Neighborhood ca. 1971

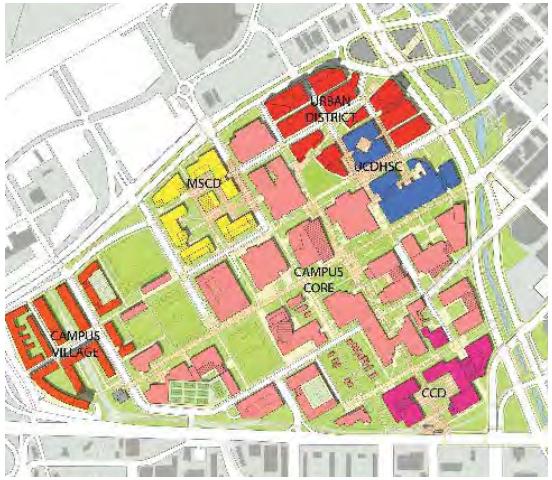

Figure 3.c - 2007 Plan neighborhood concepts

Figure 3.d - 2012 Plan neighborhood concepts

2. ESTABLISHMENT OF NEIGHBORHOODS

In its early stages, the Auraria Campus was conceived as a shared set of resources to be used by the three tenant institutions. As the institutions developed and changed over time, the three institutions recognized the need for opportunities to consolidate their individual administrative functions, create spaces for designated programs, and amplify their unique identities. Towards this end, the 2007 master plan created the concept of "Institutional Neighborhoods" that carved out space for each institution to grow within an exclusive district defined by the clustering of their administrative uses and academic space for their unique program set. According to the 2007 plan, these neighborhoods would surround a Campus Crossroads district that contains the uses that would remain shared, such as the library, Tivoli, King Center, and other academic and social buildings.

The 2007 plan also identified a campus village area that would expand on the existing Campus Village development at the western most end of the campus. This district would consist of residential and campus-life oriented uses and would grow towards 5th street – a street defined as a Main street in both the 2007 and 2012 plans. Lastly, an Urban District was defined on the northern-most point of the campus, close to the intersection of Auraria Parkway and Speer Boulevard. In the earlier plan, this district would be defined by uses that bridge the divide between the academic institutions and the business environment across Speer in downtown.

The 2012 plan maintained this idea of Institutional Neighborhoods and enhanced it. In the 2007 report, the neighborhoods lacked connection to each other as well as to the shared core. The 2012 plan provided enlarged neighborhoods, each with prominence along one of the three major arterial streets that define the campus (CU Denver along Speer, MSU Denver along Auraria Parkway, and CCD along Colfax). The enlarged neighborhoods allow for greater opportunities for developing institutional identity by granting each institution space on which they may develop new buildings as their needs arise. Within these neighborhoods, each institution would be allowed to define elements that speak to their unique identities, such as signage, landscape elements, architectural elements, and branding. The neighborhoods defined within the 2012 plan have been largely adopted by the institutions.

Though the urban district defined in the 2007 plan was not maintained in the later plan, MSU Denver's Hospitality Learning Center represents a use that bridges the divide between academia and business and several opportunities exist surrounding the HLC to further develop this concept (both within MSU Denver's neighborhood and CU Denver's neighborhood). Similarly, the campus village neighborhood was not maintained in the later plan, but opportunities to further develop residential and campus-life uses near the Auraria West lightrail station and 5th street remain – both on and off AHEC-owned land. Though the opportunities still exist, however, the desire for an increase in residential uses on and near campus is not universally supported by members of the institutions. Most of this land sits within MSU Denver's neighborhood and the use of it remains up for consideration.

3. NODES AND GATEWAYS

The 2012 master plan looked at the creation of several new gateway elements as well focusing design and redevelopment efforts to help support several key pedestrian open space nodes on campus. The plan identified three locations for the creation of unique entry plazas that would welcome users to the campus and help orient them to the sites within the campus. Two of these three gateways relate to the two primary light rail stations that serve the campus at Colfax and 10th Street and 5th Street just north of Colfax. The remaining entry plaza is suggested at the northern-most corner of the campus by the intersection of Auraria Parkway and Speer Boulevard. The plazas are intended to serve those people entering the campus either by foot or by light rail. Though the recent improvements to 10th Street have positively affected the connection at Colfax, all three of these plaza concepts will likely require further landscape and building development to help shape them into comfortable pedestrian spaces. For example, the Colfax and 10th plaza will have opportunities for further improvement should CCD decide to rebuild or renovate the Boulder Creek buildings as proposed in the 2012 plan.

The plan also recommended the creation or strengthening of several key public space nodes on campus. These include the renovation and redesign of a multi-purpose field in front of the Tivoli and refocused commitment to strengthening both the Lawrence Street Mall and the 9th Street Park within the 9th street historic district. Since the creation of the 2012 plan, the multi-purpose field in front of the Tivoli has gone through the design process and is, as of the time of this report, nearly complete. The Lawrence Street Mall has also seen investment since the 2012 plan in the redesign and renovations to the library building that will open up that building's façade towards the mall. The 9th Street Park has seen minimal improvement since 2012 though it remains a serene and valued open space area. In addition, each institution has the opportunity to shape their respective cores with further development of their neighborhoods.

Existing 10th Street gateway at Colfax

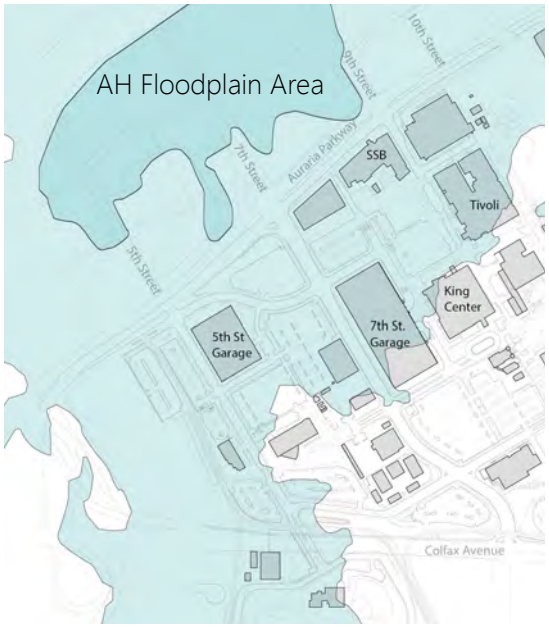

Figure 3.e - Floodplain Surrounding the Site

4. SITE UTILITIES

The 2012 master plan summarized the larger Infrastructure Master Plan (IMP) that was adopted in 2010. Within the IMP, many recommendations were made for upgrading sanitary sewer, water, communications, gas and steam, and storm sewer utilities. At the time of that report, it was deemed that many of the utilities were near or at capacity or will be in danger of exceeding capacity in most build-out scenarios within the 2012 master plan. Of the utilities that are most notably of concern are the aging or inadequate tele-communications network and sanitary sewer utilities. The 2010 IMP remains the primary source for needed utilities upgrades. A large portion of needed upgrades can take place over time and in phases as development takes place across campus.

One primary area of change between the 2012 plan and this report relates to the mapping of the FEMA mapped flood plain. According to data available in 2012, a large portion of the campus, especially within the northern and western portions of the campus, is within the 100 year regulatory floodplain. Based on more recent data, however, current FEMA maps show that the regulatory floodplain does not in fact enter the campus at any point. The current mapping shows the floodplain off of the South Platte River entering the neighborhood north of Elitches and covering a large area within the Pepsi Center Parking lot, but not crossing Auraria Parkway into the campus (see Figure 2.a). The Cherry Creek floodplain is completely contained within its channel. During heavy rain events, the existing storm water infrastructure may exceed capacity causing runoff across campus, according to the IMP. This represents the largest flood concern for the campus.

5. PARKING

The 2012 Master Plan shows a build-out scenario in which all surface parking on the campus is removed in order to create buildable sites for new campus buildings. The one minor exception to this rule is a small surface parking lot that is largely located under the Colfax viaduct and servicing MSU Denver's Colfax athletic complex. Both the 2012 Master Plan and the Strategic Implementation plan assume that the replacement of surface parking with buildable sites is feasible assuming that three new parking garages are constructed – one within each institution's neighborhood. Since 2012, several prominent changes have occurred that effect the parking situation on campus.

The most notable change since the 2012 report is the construction of the 5th Street Garage within the MSU Denver neighborhood. This garage replaced a large surface parking lot on the corner of Walnut Street and 5th Street with a four-story parking structure holding 925 parking spaces. Additionally, the Confluence Building built on CCD's campus (under construction in 2012) replaced a smaller surface parking lot. According to the 2012 plans, a parking garage is planned for just southwest of that building but no plans have been made for its construction. The final parking garage recommended in the 2012 plans is within the CU Denver neighborhood, just southeast of the HLC building. The timeframe for this building is also unknown at this time. The timing for these remaining structures will have to be considered based on the phasing of other development occurring within each neighborhood. It is also possible that the development of these structures may have to be coordinated across the institutions

and with AHEC to ensure that development in one neighborhood does not catalyze the need for a structure in another. The final recommendation from the 2012 plan is to extend Larimer Street in some form through the existing 7th Street Garage requiring the reconstruction of a parking structure to the south of Larimer Street. This proposed garage will be within the shared neighborhood.

6. TRANSPORTATION

Public transportation to and from the campus generally is located on the periphery of the campus with minimal service internal to it. Local bus routes are located on Auraria Parkway and Colfax Avenue that connect the campus primarily to points east and west of the area. The Auraria Parkway lines provide service at 7th and 9th Streets and the Colfax lines provide service at Osage Street and connecting to light rail at Lipan Street. The only transit service that is located internal to the campus is the 15 bus that provides service to east Denver along Colfax Avenue. The existing bus stop and turnaround on 11th street and Larimer is projected to be removed with buses routing along a rebuilt 11th street and connecting to Auraria Parkway to turn around, according to the 2012 plan, thereby creating a better pedestrian experience along Larimer Street.

Light rail service connects the campus to points predominantly to the south and west, as well as downtown. The primary light rail stations are located along Colfax at 10th Street in the CCD neighborhood and in the western portion of the campus near 5th street in the MSU Denver neighborhood. These stations provide service to a large number of campus users and the environment surrounding them should be improved as gateway experiences. The 2012 master plan also alludes to a potential circulator (potentially a bus or streetcar) that would travel from the western area of the campus along Larimer street, potentially to the 38th and Blake train station north of downtown. This circulator would connect the campus to downtown and provide service that currently doesn't exist. No concrete plans have been made concerning the line.

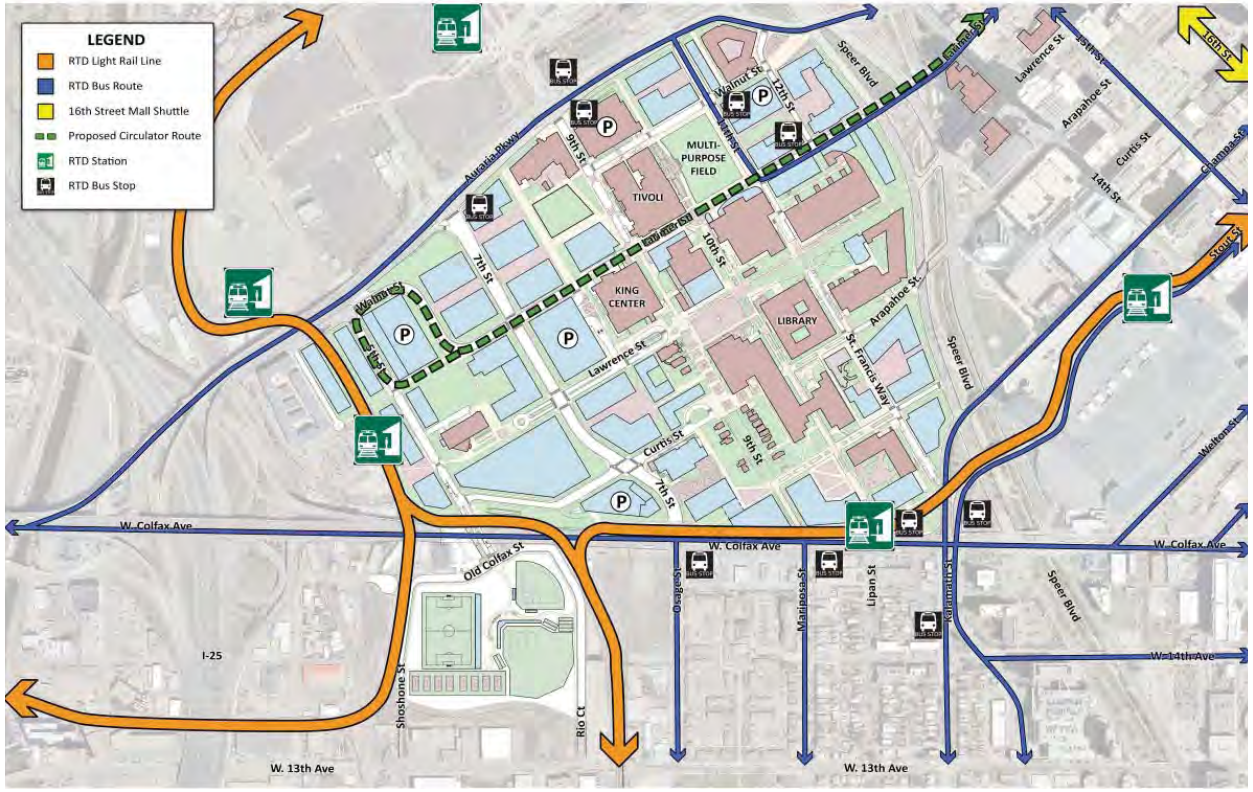

Figure 3.f - Existing and Proposed Transportation - As Proposed in 2012

Figure 3.g - Existing and Proposed Bike Infrastructure (2012)

Figure 3.h - Existing and Proposed Automobile Infrastructure (2012)

7. CIRCULATION

The 2012 plans recommend limiting vehicular circulation internal to the campus to only provide access to the parking structures and lots near the periphery. The only major exceptions to this are 5th and 7th Streets which are seen as important connections across campus. This does not represent a major difference from what can be found on site currently. The proposed improvements to the street network include the reconstruction of 11th Street through the CU Denver neighborhood, a realignment of Walnut Street to connect to the extended Larimer Street, and improvements surrounding the sports facilities south of Colfax. This last element is the only one to be implemented since 2012 with the other concepts likely to take place as development occurs around them. A loop street through the Pepsi Center parking lots connecting 5th and 7th Streets is proposed but has not yet been implemented – likely requiring a partnership with Denver and Kroenke Sports Enterprises, the owner of the Pepsi Center site.

Bike circulation is pushed in the 2012 plan as an increase in bike use was seen at the time of that report. Though no information was available to analyze the increase of use between the 2012 plan and this report, biking has increased city wide in that time. The 2012 plan recommends a greatly increased bike network, specifically along reconstructed 11th and and 8th streets proposed in the master plan and the existing 5th and 7th Street. The most requested path, according to the plan, was east-west through campus. That plan proposed an improved bikeway along Arapahoe/Curtis Streets. Since the 2012 plan, this connection has been made from Speer to 11th Street with bi-directional bike lanes connecting to downtown bike infrastructure.

Pedestrian circulation was also a major priority in the earlier plans. Improvements to Larimer Street as the campus's (and CU Denver neighborhood's) "main street" was a large priority. This connection was improved with the construction of CU Denver's Academic Building and will be further improved with development in that neighborhood. The other major pedestrian improvement to have taken place was a reconstruction of 10th Street from the Colfax at Auraria Light Rail station through campus to the Tivoli.

8. DESIGN PRINCIPLES

The design principles within the 2012 plan provide overall design guidance for new development within the campus and act as a simple summary of the more detailed Auraria Campus Design guidelines. The guidelines presented in the 2012 plan largely revolve around the goal of supporting more appealing street frontages and connections and creating an overall more urban structure. The primary guidelines relate to siting buildings directly along site edges and creating primary openings and retail spaces along major streets and pedestrian paths. Additionally, the quality of the public realm is recommended to improve with a consistent sidewalk size and improved landscaping.

Recent development within the campus responds to these guidelines by providing openings, retail spaces, and transparent zones along pedestrian connections and improving landscape treatments. Some examples of this are the creation of retail space (currently unoccupied) on the 5th Street frontage of the 5th Street garage in order to support a future pedestrian-oriented street. Similarly, the Confluence Building in CCD's neighborhood provided a greatly improved pedestrian zone along 7th and Curtis Streets with primary openings on Curtis. New development and renovations are encouraged to use sustainable design treatments. All guidelines should continue to steer the development of the campus into the future as towards a more accommodating environment.

Bikeway through Auraria Campus

Figure 3.i - Baseline Density (2012)

Figure 3.j - Downtown Density (2012)

Figure 3.k - Transit Oriented Density (2012)

9. GROWTH AND BUILD-OUT SCENARIOS

The 2012 Strategic Implementation Plan provided several examples of possible build-out scenarios based on the building and open space layout proposed in the 2012 master plan. Its baseline scenario looked at a build-out scenario that would cap new buildings at 4-6 stories. This scenario would allow for growth project out approximately 65 years. The implementation plan encouraged campus planners to aim for a density beyond this baseline scenario and looked at two options: 1) increased building heights adjacent to downtown and Speer and 2) increased heights adjacent to light rail stations in a transit oriented development orientation.

The former option is logical from an urban design perspective but prioritized growth in CU Denver's neighborhood and was deemed as unbalanced in their favor. The transit oriented development option was also deemed as an approach that adheres to good urban design standards but could be seen as unbalanced against CU Denver. As a result, the plan recommends a hybrid option in which increased densities can be shared between transit locations and along the downtown frontage. Development since the 2012 plans has not opted for increased building heights, with all recent structures within the 4-6 story range seen in the 2012 master plan.

10. KEY PROJECTS AND PHASES

The 2012 implementation plan broke down implementation of the various elements into three phases: 1) 0-5 years, 2) 6-10 years, and 3) 11+ years. Phase I projects include several buildings that had been proposed or were actively under construction during the creation of the 2012 documents. Largely, phase I projects have been studied or are completed. These projects include MSU Denver's Aerospace Engineering Sciences building (under construction), CCD's Confluence Building (completed), and CU Denver's Academic Building (completed), renovation of CCD's Cherry Creek Building (completed). Other projects in this phase that have not been completed include the proposed parking structures within CCD and CU Denver's neighborhoods. Interestingly, the 5th Street parking garage that is now complete is not proposed until phase II. A prominent project that has not yet been implemented is key expansion and renovation of the Boulder Creek building in CCD's neighborhood. The campus green in front of the Tivoli is also proposed in this phase.

Phase II can be characterized as guiding development towards strengthening key streets and gateway experiences. Much of the proposed development in this phase can be seen along Larimer Street near CU Denver's neighborhood and along 5th Street in MSU's neighborhood (with the 5th Street Garage already built), as well as key CCD neighborhood development at the gateway intersection of Colfax and 7th Street. Minor shared neighborhood development can be seen along the 8th Street corridor. This phase is geared towards the plan's design guidelines to make a more appealing and safe pedestrian zone internal to the campus.

Phase 3 looks at filling in the remainder of the proposed buildings within each neighborhood. Development along 7th street is saved for this phase in order to accommodate large infrastructural changes such as the rerouting of Walnut Street and the reconstruction of the 7th Street garage. Other large growth areas occur along Speer near its intersection with Colfax and the remainder of space between the Tivoli and Speer along the Auraria Parkway within the MSU Denver neighborhood. The gateway along 10th Street at Colfax will be developed with the reconstruction of the Boulder Creek building within the CCD neighborhood. Overall, all phases aim to strengthen key design guidelines while balancing growth in the neighborhoods.

Figure 3.l - Phase 1 (2012)

Figure 3.m - Phase 2 (2012)

Figure 3.n - Phase 3 (2012)

UC Denver Academic Building

CCD Confluence Building

5th Street Garage

11. WHAT HAS BEEN IMPLEMENTED

As mentioned in previous sections, several projects proposed in the 2012 plan have been implemented, are under construction, or are in design. Each institution has developed new buildings or are planning them within their own neighborhoods and several projects are underway within the shared district. These projects range from new administrative and academic space to parking structures, public open space improvements, and increased circulation. Figure 2.k on this page represents the projects either completed or in the works by the writing of this report.

Since the 2012 plan several new factors have been identified that will influence CCD's Neighborhood Master Plan. These include:

- The decision by UCD to build it's own Wellness Center leaving the PE Center to be used and potentially upgraded by MSU Denver and CCD if feasible
- The on-going movement towards fewer general classrooms and increased numbers of priority scheduled classrooms specific to each institution.
- The desire to further segregate space in certain buildings where multiple institutions currently occupy space. This includes:
- The ten year lease on the AMC, and the Lowry facility status
- Moving UCD and MSU Denver functions out of the Boulder Creek Building so that the building is entirely occupied by CCD
- Moving CCD and AHEC space out of the Administration Building so that it is entirely occupied by MSU Denver
- Moving MSU Denver functions out of the Clear Creek Building to dedicate it or the site it sits on, to CCD

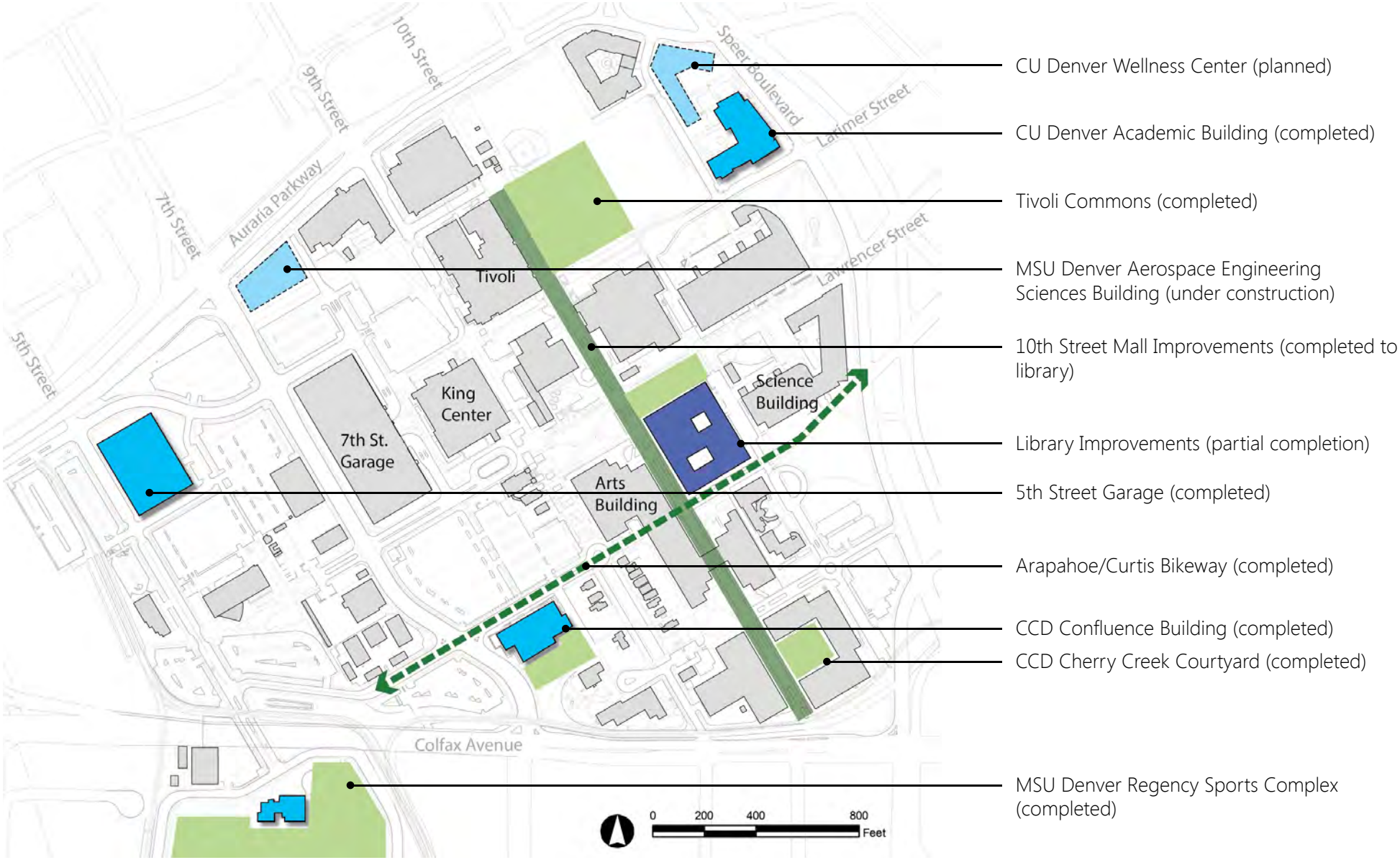

Figure 3.o Complete and 'In Progress' Projects on Auraria Campus

B) VISION/GOALS AND OBJECTIVES

1. VISION

The Community College of Denver's mission and vision for the institution as a whole are the fundamental drivers of the master plan which must support and reflect these overarching ideals. The Mission Statement for CCD is:

"CCD provides our diverse community an opportunity to gain quality higher education and achieve personal success in a supportive and inclusive environment." (College website)

The College's vision that "Every member of our community will attain the education he or she desires" is based on six key tenants and the inspirational statement "Start Here. Go Anywhere":

- "Involvement
- Student-Focus
- Integrity
- Lifelong Learning
- Excellence
- Healthy Work Environment" (College website)

To uphold the vision and mission, CCD has defined its foundation and goals as follows:

"Community College of Denver's educational programs are designed to enrich the social, civic, and economic fabric of our community, nation, and world. Through innovation, open exploration of ideas, and preparation of a well-trained workforce, CCD enriches our democracy and supports a vibrant local economy. Programs and strategies that promote access—as well as academic and personal success for underserved students—are the foundation of CCD operations.

CCD is dedicated to expanding access, particularly for underserved first-generation and minority students. Nearly 50 percent of CCD students are first-generation and over 60 percent qualify for financial aid. At CCD, students have the opportunity to become the person they aspire to be—to reach and strive to improve their lives and make their dreams a reality"

This Master Plan supports and ties back to the institutional mission, vision and strategies to ensure that where possible, facility and site related solutions will continue to support the institutional mission and goals.

Cherry Creek Courtyard

2. CRITERIA FOR SUCCESS

Specific goals for this project were defined during the visioning session for the Neighborhood Master Plan by the Steering Committee participants. Some of the key "criteria for success" of the project that were agreed upon in that session include:

- A plan that creates a sense of CCD identity and community
- A process and plan that is inclusive and reflective of all constituents whereby
  - » They see improved value and use
  - » There is consensus
- A plan that identifies potential issues with future solutions
- A realistic and workable plan that:
  - » Is not "pie in the sky"
  - » Is scaled appropriately for the best fit, and highest value
- A plan that optimizes existing facilities by considering:
  - » Flexibility to expand/contract and adapt
  - » Increasing efficiencies and utilization
  - » System wide issues
- A plan that reflects Tri-Institutional goals and embraces campus planning to date

Auraria Campus pedestrian pathway

3. GOALS AND OBJECTIVES

Six primary goals were defined by the steering committee and informed by input from student focus groups, user group interviews and workshop discussions. Each goal has multiple objectives as outlined. The top four priorities that were identified focus on optimizing efficiencies, flexibility and adjacencies. Several of these objectives generated early in the process were modified during alternatives development.

PRIORITY: Address current space needs issues

- Backfill Boulder Creek space with compelling program
- Backfill Clear Creek
- Find new home for HR, Finance, IT from Admin. Building

PRIORITY: Optimize flexibility and use of current space

- Align adjacencies more effectively
- Optimize use of inefficient classroom and office space

PRORITY: Identify the satellite program(s), if any, to relocate to the main campus

PRIORITY: Improve ability to find academic departments and support resources more easily

- Find home for all CCD Administrative functions within their neighborhood
- Consolidate admin/student support functions into one main location
- Consolidate all academic programs not in shared buildings in a single location.*

Placemaking - Create sense of CCD identity

- Create student hub within the CCD neighborhood with more student activity space
- More food options and user friendly outdoor spaces
- Accessible student study lounge space (e.g. move one in Confluence or change perception)
- Create clinic satellite within the CCD neighborhood*

Placemaking - Adhere to the campus master plan

- Create a clear gateway to the CCD Neighborhood
- Eliminate the Modular Buildings
- Create parking easily accessible from each neighborhood
- Identify near term vs. long term sites for new construction

Placemaking - Strengthen the connection to the rest of the campus – Not critical

- Integrate neighborhood with rest of campus – Auraria identity as well as CCD identity
- Improve wayfinding (including signage) within and to/from the neighborhood

Improve general feeling of safety

- Improve access to safe parking at night/early AM
- Improve lighting

*NOTE: These objectives were rejected later in the project process

C) INSTITUTIONAL BACKGROUND

1. INSTITUTIONAL OVERVIEW

The Community College of Denver was established in 1967. In 1975, CCD moved to the Auraria site. By 1977, the three institutions that make up the campus today moved to the newly established Auraria Campus. Since that time there have been a number of facilities constructed on campus that support CCD, and their growth in a number of key academic programs or support service areas that have increased space needs. In 1994 the Tivoli became the Campus Student Union. The Administration Building, a shared facility, opened in 1999. This building now sits within the MSU Denver Neighborhood. In 2010, the tri-institutional Science Building opened, housing several CCD departments. Most recently the CCD Confluence Building was constructed in 2013.

The CCD web site states, "As one of 13 institutions in the Colorado Community College System, CCD is the third largest with more than 10,000 students taking classes both online and in the classrooms. CCD is also the only community college in the nation to share a campus with two four-year universities—Metropolitan State University of Denver and University of Colorado Denver".

As of the fall of 2015, enrollment was close to 5,130 FTE students, and a student headcount of 14,800 with over 650 full time and adjunct faculty/staff. The demographics of the student body include an average age of 26 with 76% of those enrolled being part-time students and 50% first generation students. There are over 55 academic programs offered to obtain an Associate of Arts, Science, Applied Science or General Studies Degree. In addition 40 certificate, non-degree programs are offered.

Programs offered in the satellite locations from the main campus include the Advanced Manufacturing Center housing machining and welding currently located in a leased facility, and Health Science programs currently located at the Lowry Campus.

Currently, buildings on campus dedicated to, and/or solely occupied by CCD include the Cherry Creek (previously South), Boulder Creek, Bear Creek, Confluence and Clear Creek Buildings.

2. CURRENT POLICIES AFFECTING FACILITIES

Aside from curriculum changes and enrollment growth or decline, the primary policy issues affecting facilities have to do with maintenance, operations and ownership. Currently much of the maintenance and operations falls within AHEC's control for any shared buildings on campus. As the three institutions on the Auraria Campus continue their pursuit of individual identities, neighborhoods and dedicated spaces/buildings, there is a corresponding trend to control more of the maintenance, scheduling and upgrades of those spaces. An example of this is the significantly reduced number of general assignment classrooms, in favor of priority scheduled rooms by institution. Likewise, as new buildings have come on-line, they are being maintained by the "owner" institution (e.g. the Confluence Building). Classroom control (and the AV equipment within them), and building upkeep are two key areas where the individual institutions feel in-house ownership would be an improvement.

There continue to be advantages to Central services for some things however, such as a physical plant, site infrastructure (utilities, roads, landscaping). Potential space impacts of bringing more maintenance and classrooms under CCD's control is increased facilities management and maintenance staff needs, storage space needs, as well as budget increases.

3. INSTITUTIONAL FACTORS INFLUENCING ENROLLMENT

While overall enrollment has decreased for the Community College of Denver, there are some targeted areas where growth is anticipated for a variety of reasons including job growth in those areas, and changing organizational structures to allow new programs to develop. Other factors that may influence enrollment are successful achievement of some key strategic goals as defined by the Colorado Community College System in the 2015-2025 Strategic Plan which include:

- Increase the number of certificates and degrees awarded by 1% annually
- Exceed the national fall-to-fall retention rates
- Develop additional competency based course annually starting in FY 2017
- Increase online and hybrid course enrollment annually
- Develop competency based criteria to grant credit for prior experiences to expedite credential completion

4. REGIONAL FACTORS INFLUENCING ENROLLMENT

a. Population Factors

A recent report published by the American Association of Community Colleges[1] found that nationally, enrollments continue to fall. Citing data from the National Student Clearinghouse (NSC), "two year public institutions experienced the second largest decrease in enrollment for the previous two years" as reported in 2014. NCS data found that the highest rate of decline is occurring with older students (over 24 years old) and with those attending full-time. The likely explanation is the impact of an improving economy. Interestingly, findings also show that those students most likely to complete their degrees at community colleges are enrolled as full time students. Younger students who are part time are the least likely to complete.

"Findings show that those students most likely to complete their degrees at community colleges are enrolled as full time students"

b. Economic Factors

Nationally there has been a direct correlation between economic improvements and declining enrollments, particularly for institutions that have a higher percentage of non-traditional students. The Community College of Denver has definitely been impacted by this trend. This makes it imperative that higher education institutions be responsive to providing training and education in specific areas of job growth in the community, increasing their value to students looking for employment.

A recent (2015) report by The Georgetown Center on Education and the Workforce[2] projects that by 2020 the following issues will be prominent:

- "There will be 55 million job openings in the economy through 2020.....
- 35% of the job openings will require at least a bachelor's degree, 30% will require some college or an associates' degree.....
- STEM, Healthcare Professions, Healthcare Support, and Community Services will be the fastest growing occupations.....
- Most jobs will require some type of post-secondary education.....

- Employers will seek cognitive skills such as communication and analytics from job applicants……
- The US will fall short by 5 million workers with postsecondary education by 2020"

Statewide, according to the Colorado Department of Higher Education, 74% of jobs in the state will require some level of postsecondary education or training by 2020. CDHE also found that number of degrees awarded may not be meeting job demand in a number of areas including skilled trades, mid-level IT jobs, bachelor degree level finance jobs and professional level healthcare positions.[3] Colorado is currently ranked in the top five states nationally for population growth, and employment growth. According to CU Leeds School of Business, the top job growth sectors are professional and business services, leisure, hospitality, education and health services sectors. The current largest provider of jobs in the state is the trade, transportation and utilities sector.[4] As of June, 2015 the top ten occupations based on job ads placed included Registered Nurses, Retails Salespersons, Customer Service Representatives, Software/Applications Developers, Network and Computer System Administrators (Colorado Department of Labor and Employment).[5]

The January 2015 Legislative Report on the Skills For Jobs act prepared by the Colorado Department of Higher Education identified several occupational clusters where potential supply (degree and certificate completions by students) versus demand (job openings) gaps exist. Those broad clusters specifically applicable to the degrees and certificates offered at the community college level include Science Technicians, Installation, Maintenance and Repair, Computer Related Occupations, Transportation and Material Moving, and Construction/Extraction. Those related to degrees offered at four-year institutions include Air Transportation, Financial Specialists, Computer-Related, Healthcare and K-12 Educators. More detailed examination of the underlying data used to prepare the Skills for Jobs Act Report provides some insight on specific occupations and college programs which appear to need increased post-secondary completions.

- Data for several Business/Accounting occupations reflect a considerable gap between job openings and post-secondary completions. Accountants and accounting technicians make up the majority of this gap with marketing, taxation and real estate also contributing.
- In the overall Production occupations, a significant gap exists; some of this may be related to the fact that not all of these occupations require a post-secondary completion. However, in Machining occupations there is a significant gap. While the data for Welding occupations does not specifically show a gap, industry groups in close contact with CCD indicate otherwise.
- Science Technician occupations reflect a shortage of qualified post-secondary completers in a couple of areas, mainly those in the life, physical, and social science areas as well as forensic science.
- Although Health Care occupations overall do not show an unmet need by employers, there are numerous occupations within this cluster that do. Specifically home health aides, medical office supervisors and administrative assistants, medical and clinical technologists and technicians licensed practical and vocational nurses, medical records and health information technicians, and medical transcriptionists.

Specific to the City of Denver, job growth is significantly higher than the national average. High growth areas for the City include Aerospace, Healthcare and Wellness, IT/Software and Telecom[6].

1. "Trends in Community College Enrollment and Completion Data, 2015", American Association of Community Colleges, Jolanta Juszkiewicz, March 2015.
2. "Report: Recovery 2020 – Job Growth and Education Requirements through 2020", Georgetown University Center on Education and the Workforce, 2015
3. www.bizjournals.com/denver/news/2015/02/09/colorado-job-report-pinpoints-sectors-with-most.html
4. www.colorado.gov/pacific/cdle/node/42366
5. www.colorado.edu/news/releases/2014/12/08/colorados-broad-economic-expansion-continue-2015-says-cu-boulders-leeds
6. "Intersections: Metro Denver 2015 Economic Update, October 2015", Development Research Partners, October 2015

"Community college students do as well in hybrid classes as they do in face-to-face classes"

c. Education Factors

Non-traditional students

Accommodating more non-traditional students will positively impact enrollment as increasing numbers of higher educational students fall in this category. According to a recent article published in Contemporary Issues in Education Research, the average age of a community college student is 28. Sixteen percent are single parents, and 59% of community college students attend part time.[7]

Online Learning

A 2015 report by Babson Research, Tracking Online Education in the United States, summarizes extensive nationwide survey findings that show the number of college students learning online exceeds 7 million[8]. In 2013, there were 19.5 million college students, including 5.3 million in two-year colleges, 10.5 million in four-year colleges and 3.7 million in graduate school according to a September 2014 US Census Bureau Report (College Enrollment Declines for Second Year in a Row)[9]. That means that close to one in three students are participating in online learning. This report also found that "Leaders consistently rate the learning outcomes for blended or hybrid courses as superior to both online instruction and classical face-to-face courses."

Specific to community colleges, and article entitled "The Promising Role of Hybrid Learning in Community Colleges: Looking Towards the Future", cited multiple studies that found that "community college students do not fare well in online classes" but "do as well in hybrid classes as they do in face-to-face classes" for a variety of reasons specific to the diverse and non-traditional nature of community college student populations[10].

An additional benefit of hybrid courses is that while potentially contributing to increased enrollment they may also reduce classroom and other space requirements on campus as, for example, a single classroom can potentially serve two courses that alternate their on-line and on-site schedules.

7. "The Promising Role of Hybrid Learning in Community Colleges: Looking Towards the Future", Contemporary Issues In Education Research – Third Quarter 2014, Volume 7, No.3
8. "Grade Level: Tracking Online Education in the United States", Babson Survey Research Group, February 2015
9. "College Enrollment Declines for Second Year in a Row", US Census Bureau Report, Sept.24, 2014
10. "The Promising Role of Hybrid Learning in Community Colleges: Looking Towards the Future", Contemporary Issues In Education Research – Third Quarter 2014, Volume 7, No.3

d. CCD Specific Factors Influencing Enrollment

Academic leadership at the College has preliminarily identified several academic areas to be considered for strategic future growth. Those with the most overall interest include Health Programs, Machining and Welding, Transfer Programs, and Early Childhood. Additionally, the following programs were mentioned as having potential interest: Women's Studies, Paralegal, Theater, Human Services, Graphic Design, Research, Journalism, ESL, Accounting, Information Technology, Business, and Engineering Graphics. As part of its current Strategic Master Planning process, the College is considering which future new program offerings provide the best fit.

Machining and Welding Programs

With the recent revamping of the current programs at the College, these may be potential areas of additional expansion in the future. An expansion of specific skills training in welding via additional certificate programs may address the reported gaps by industry groups. Also, additional workforce training partnerships like the one with Burlington Northern, currently in its start-up stage, may provide opportunities.

Accounting and Business

Beyond the potential of expanding its current lower level accounting programs for accounting technicians related occupations, the College could also leverage such an expansion by taking a larger role as a transfer institution to both 4-year post-secondary institutions located on the Auraria Campus as each offers bachelor's programs in accounting.

Health Programs

With several very successful programs in this area already at the College, gaps existing for several related occupations, and the growing need by the overall population for health care services, this may be an area offering significant expansion opportunities to the College.

Transfer Programs

Because the College is strategically positioned on the Auraria Campus with two 4-year institutions and it holds a tuition price advantage over both, expansion of its current transfer programs in various areas could be a significant opportunity for growth.

AMC

5. TRENDS

There are a number of trends in higher education that may impact CCD's space needs in the future. The master plan needs to provide enough flexibility to accommodate both predictable and unknown outcomes that may be influenced by these trends. Several trends that may be of specific interest to CCD are highlighted below.

a. Campus Organization

Campuses are increasingly becoming organized around like-areas of curriculum, so for example, grouping the Sciences together in a single building (as Auraria has done), or in a particular zone on the campus. Carrying this further, those institutions that have multiple campus sites may have a particular focus for each campus (e.g a tech focus or engineering focus). This breaks a bigger institution into smaller pieces that carry their own unique character and identity within the overall campus or organization. This can influence how individual space types are distributed. As an example, recently Stanford University took the initiative to ensure that the right number and mix of classroom sizes needed to support each College or School are physically located in the buildings and area of campus that are dedicated to each of those curriculum areas rather than having general use classrooms used by a cross-section of departments. Currently this is exemplified by CCD by having the Advanced Manufacturing Center (AMC) and Health Sciences at separate satellite locations. Their unique identities could be preserved even if on the main campus.

Supporting the trend above, many campuses are also creating more interdisciplinary spaces that blur the lines between Departments and disciplines. "A growing number of higher ed institutions are looking to provide space where linked disciplines – biochemistry and bioelectronics, for instance – can be studied together....Co-locating several programs, departments and organizations under one roof....makes more efficient use of space and provides flexibility for future programs and facilities"[13]. This becomes more challenging when the interdisciplinary collaboration occurs across unrelated disciplines (e.g. health and law). For Community Colleges, the integration may come more in the form of sharing space with programs that support local industry and employers such as what has been achieved at the AMC.

Related to the interdisciplinary trend is the relatively recent appearance of "Maker Spaces" on campuses. "Makerspaces are actual, physical workshops where students have access to a variety of materials and tools, from computers to glue guns to 3D printers. In her 2013 piece for Hack Education, Audrey Watters argues that, 'Makerspaces give students – all students- an opportunity for hands-on experimentation, prototyping, problem solving and design-thinking'"[14]. According to Edtech Magazine 150 institutions committed to increasing "making" on their campuses in 2014. Many campuses are placing Maker Spaces in their libraries to be as central as possible to all students. This is an attractive new amenity to incoming students.

Precedent Photo - Maker Space

13. http://www.universitybusiness.com/article/outlook-facilities-campus-space-shapers

14. College Planning and Management Magazine, August 2015. "Learning Everywhere", by Amy Milshtein.

b. Student Attraction and Retention

A recent white paper put out by Smith Group cited a Nielsen survey showing that 62 percent of millennials prefer to live in urban environments. The paper concluded that this bodes well for urban higher education institutions that may be more viable in the future compared with other, more suburban or stand-alone institutions who will struggle to maintain enrollment[15]. Appealing to this growing, urban millennial generation will be critical for CCD.

Some of the key things that are important to these students coming in to higher education today are also what attracts and keeps them on campus. These include the following:

- Up to date and readily available technology in classrooms, study spaces, lounges, cafes and on-line.
- Advising and peer and faculty/staff mentoring beyond the first year.
- Flexibility to learn in a variety of modes: experientially, in active classrooms, in lectures and remotely.
- Affordable academic options and confidence that a degree with lead to a job.
- Amenities that support their preferred lifestyle including informal learning and studying spaces, appealing dining options and recreation/wellness facilities that are comparable to other campuses.

c. Online Learning

The Pew Research Center conducted a survey in 2011 that found 77% of College Presidents reported their institutions had some form of on-line courses offered. Since that time, there has been significant dialogue about the impact and/or need for MOOCs (Massive Open Online Course), hybrid classes, 100% on-line degrees or other non-traditional pedagogies. 60% of those they surveyed agreed with the statement below regarding the degree to which higher education will change by 2020:

"By 2020, higher education will be quite different from the way it is today. There will be mass adoption of teleconferencing and distance learning to leverage expert resources. Significant numbers of learning activities will move to individualized, just-in-time learning approaches. There will be a transition to "hybrid" classes that combine on-line learning components with less-frequent on-campus, in-person class meetings. Most universities' assessment of learning will take into account more individually-oriented outcomes and capacities that are relevant to subject mastery. Requirements for graduation will be significantly shifted to customized outcomes."[16] While CCD is not yet offering significant numbers of on-line courses, there has been a growing interest in, and implementation of, hybrid classes. As more of these are developed, it could begin to reduce the need to construct additional classrooms and labs, allowing more efficient use and scheduling of the existing classroom inventory.

d. Workforce Development

Colorado's Workforce Development Program was given a boost when the Governor's Office recently signed a package of bills aimed at enhancing workforce development by allowing high school students to transition more seamlessly into Associate degrees in technology, engineering, science and math, as well as health care fields. In addition, the state's Workforce Development Council and Business Experiential Learning Commission (BELC) are looking at the Swiss vocational education model as a "gold standard" for an alternative to the current conventional high school to Higher Education continuum. This model is an apprenticeship program in partnership with community businesses that benefits student career achievement, business employee pools and the local economy. The impact this could have on both two and four institutions in the State remains to be seen, but at a minimum it could potentially reduce the demand for classroom space. It may also drive growth in specific, more vocational oriented program enrollment, which would suggest that Community Colleges may grow at a greater rate than four year institutions.

15. http://smithgroujjrblog/the-competitive-advantage-of-the-urban-institutions
16. "The Future of Higher Education", Pew Res

E) EXISTING CONDITIONS AND ASSESSMENTS


Library

1. SITE ASSESSMENT

The Auraria Campus, taken as a whole, is a relatively well defined site with academic buildings positioned around shared services and amenities such as the library, Tivoli, and the central green spaces and corridors. Structured as a series of neighborhoods based around specific institutions, however, the disconnected nature of the campus begins to reveal itself. The CCD neighborhood – though not far in distance from some of the critical destinations around the campus – can seem separated from the elements that make the campus efficient, comfortable, and exciting for the people who use it every day.

Some of these elements are being provided by the institution (such as creating a new administrative and social center at the new Confluence Building) but other issues must be approached with cooperation from AHEC and the other campus institutions (such as safe connections to transit). As a result, CCD can seem as if it is neither benefiting fully from being part of the shared campus environment nor fully ready to act separately from it. It has become clear through the findings of our site analysis process, together with meetings with CCD students, faculty and staff, that all decisions made through the course of this master planning process must consider CCD as a fully contained neighborhood in its own right as well as a piece of a larger symbiotic ecosystem within the campus.

The recommendations for the CCD neighborhood take into consideration all previous planning exercises with weight given to the 2012 Master Plan and its subsequent Implementation Plan. In conjunction with this and with the needs of both the campus and CCD in mind, a series of meetings and focus groups with campus users within the CCD organization revealed a number of key themes resonated in response to the physical aspects of the Auraria Campus and the way in which users interacted with it. The students, staff, and faculty introduced a number of concerns and thoughts concerning the campus environment and several prominent themes rose to the surface.

a. Primary Concepts

After sorting through the feedback provided by these groups – in addition to site visits taken by the consultant team – the concepts were easily sorted into three primary subjects: 1) Safety, 2) Identity, and 3) Connectivity.

Safety was one of the most discussed topics within the meetings and group sessions. Both students and employees of CCD indicated that under certain circumstances and within certain places, there is a perceived lack of comfort and safety. The campus is seen by many as too dark, sparsely populated (especially at night), and having many areas where buildings and landscape elements turn their back on walkways and open spaces, forming

large expanses of space that feel unmonitored. Safety should be a primary driver of any decisions made within the scope of this master plan process.

The Identity of the institution was also an important topic that came up across multiple interviews. The concerns and ideas ranged from large-scale branding of the institution (such as high visibility, signed buildings along Colfax Avenue and, to a lesser extent, Speer Boulevard) to smaller, site based interventions (such as consistent materials and plants defining CCD's neighborhood). Opportunities to strengthen the identity of the institution through site-based decisions should be considered.

The Connectivity of CCD to the larger campus as well as to the surrounding city was a concern for many people within the discussion sessions. Several of the key issues identified were the connections from campus buildings to transit stations – specifically the Auraria West Station and its connection along Lawrence Street – and the linkage between the CCD neighborhood to the Tivoli and other shared uses further north on the Auraria Campus.

These three primary subjects can act as a filter or a matrix through which future decisions can be made. All site planning decisions (whether a new building or increased lighting, for example) should ideally achieve an improvement in more than one of these areas and, ideally, improve all three.

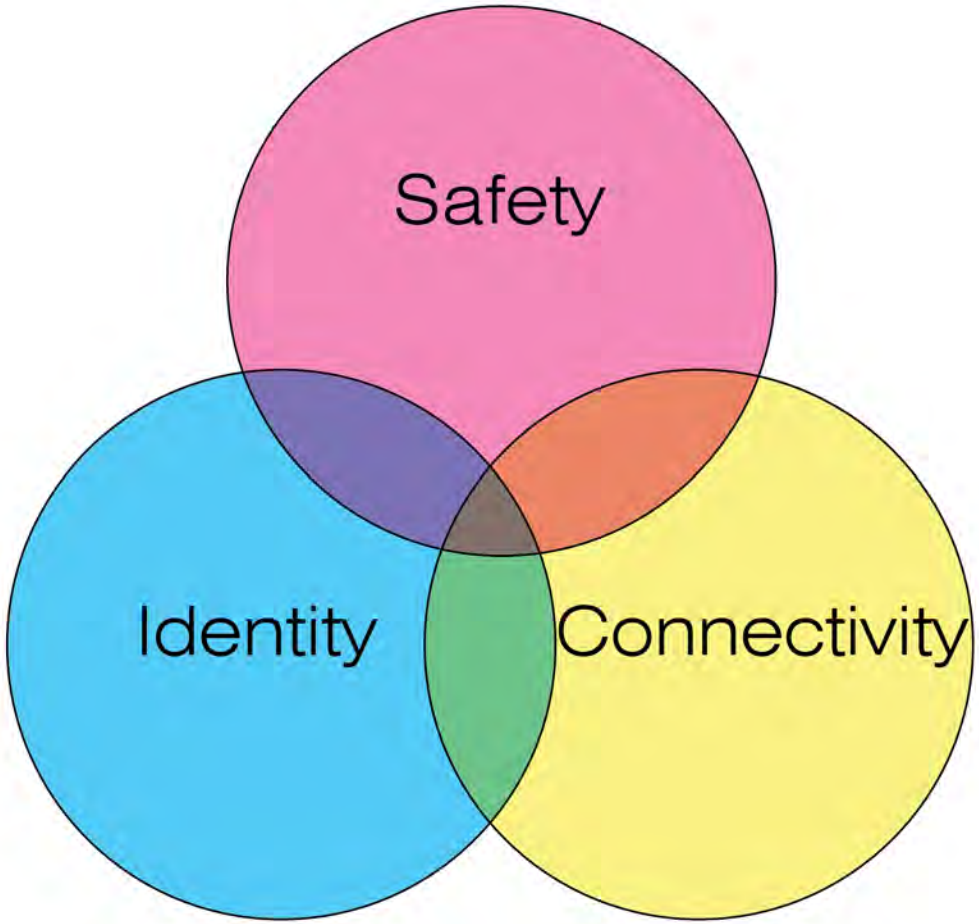

Figure 3.p - Site Themes

b. Safety Concern Zones

The issue of campus safety and security has been raised in a variety of contexts related to the master plan. The primary concerns have to do with drug use in some of the campus buildings and pedestrian safety on campus after dark. Both faculty and student representatives have noted these concerns based on their personal experiences and perceptions, but no comprehensive survey or data collection has been completed regarding these issues. While this master plan will not be developing a campus security plan, it can be sensitive to identifying opportunities to enhance a sense of safety, and potentially increase actual safety or security where possible through high level building and site recommendations.

One of the safety concerns for the campus and CCD in particular is the existence of large areas through which students, faculty, and staff feel unsafe passing alone and at less populated times (such as at night and on the weekends). The lack of buildings on the western edge of campus create a zone where there are few people and, as a result, few "eyes on the street" to enforce a sense of security. This is further compounded by insufficient lighting on this edge of campus resulting in poor visibility, and a heightened sensation of insecurity. Different and equally concerning issues occur at Colfax Avenue on the south side of campus, which functions as the "front door" to CCD. This edge has an infrastructure safety issue with a busy street and train tracks creating a hazardous pedestrian environment. The Colfax edge, especially at the 10th Street entry to campus is perceived to be one of the areas of greatest concern on the campus.

Unfortunately, these two hazards coincide with the primary pedestrian paths connecting the two Auraria Campus light rail stations with the body of the campus. These two stations are important commuter nodes that support a large number of students and employees travelling to and from the campus. A commuter arriving at the Auraria West station must pass through the large, vacant zone along the western edge of campus. This path at night be perceived as a safety concern. A sense of safety could be enhanced through improved lighting and increased activity in this area. Similarly, the connection to the Colfax at Auraria Station can be perceived as a safety concern due to the presence of loiterers at this gateway. Addressing safety concerns, even if only perceived ones, is crucial for the attraction and retention of students and staff for the CCD institution.

Crime statistics for the campus are maintained and reported on by AHEC. For the period 2012-2014 within the campus and surrounding public property, the highest numbers of criminal offenses were burglary and theft. The highest numbers of arrests were for drug and liquor law violations. These numbers have been declining since 2012, however. For example, drug and liquor law violation arrests went from 223 in 2012 to 25 in 2014. Assaults have been relatively low in number. There were five incidents reported for sex offenses or aggravated assaults in 2012 and three in 2014.

For comparison purposes, statistics available on the Denver Crime Map and Statistics site (http://crime.denverpost.com/# - actual data provided by the Denver Police Department), show total crimes reported on the Auraria Campus to be lower than average when compared to those reported in the seven neighborhoods immediately surrounding the campus. The table on the following page provides details of this comparison.

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Table 3.a - Neighborhood Crimes Reported

NEIGHBORHOOD	CRIMES REPORTED – 11/14 – 10/15	RANK	CRIMES REPORTED – 11/13-10/14	RANK
Auraria	926	3	995	2
Central Business District	3,710	8	5,813	8
Civic Center	1,793	5	2,389	5
Highlands	1,549	4	2,047	4
Jefferson Park	721	1	913	1
Lincoln Park	2,473	7	3,196	7
Sun Valley	766	2	1,026	3
Union Station	2,050	6	2,621	6

1. "Auraria Higher Education Center Annual Security Report Through 2014", Auraria Campus Police Department, Prepared for the Community College of Denver
2. http://crime.denverpost.com/#
3. "For the two periods 11/2013 - 10/2014 and 11/2014 - 10/2015 detailed in the table above, crimes committed against periods represented 4.2% and 3.5% of all crimes reported. In addition, .5% and .43%, respectively, for the two periods were reported as sexual assault crimes.", Auraria Campus Police Department, Prepared for the Community College of Denver
4. Information provided by Community College of Denver

c. Identity Opportunities

CCD has a valuable asset in the large expanse of continuous frontage along Colfax Avenue with some visibility wrapping around towards Speer Boulevard. The Confluence Building is the only recent structure to take advantage of this heavy exposure and this exposure could be partially obscured as new buildings are developed between this facility and the Colfax frontage. This edge should be prioritized for and given special attention to opportunities to establish an architectural and landscape language that will help solidify CCD's identity. Strategic signage opportunities should be considered in addition to the existing branding on the Confluence Building.

The gateway functions of key entrances (both vehicular and pedestrian), along this corridor should be strengthened and enhanced so that the identity of the institution does not only exist and present itself along the Colfax Avenue but invites people to enter the CCD neighborhood and campus. The future buildings along this corridor should be designed in a way that they draw attention to the existing and future gateways and make for a comfortable transition from the exterior of the site into CCD's core. This edge is the premier advertisement for the quality of the institution within and should be designed and treated as a comfortable "front door" for those looking to enter the campus.

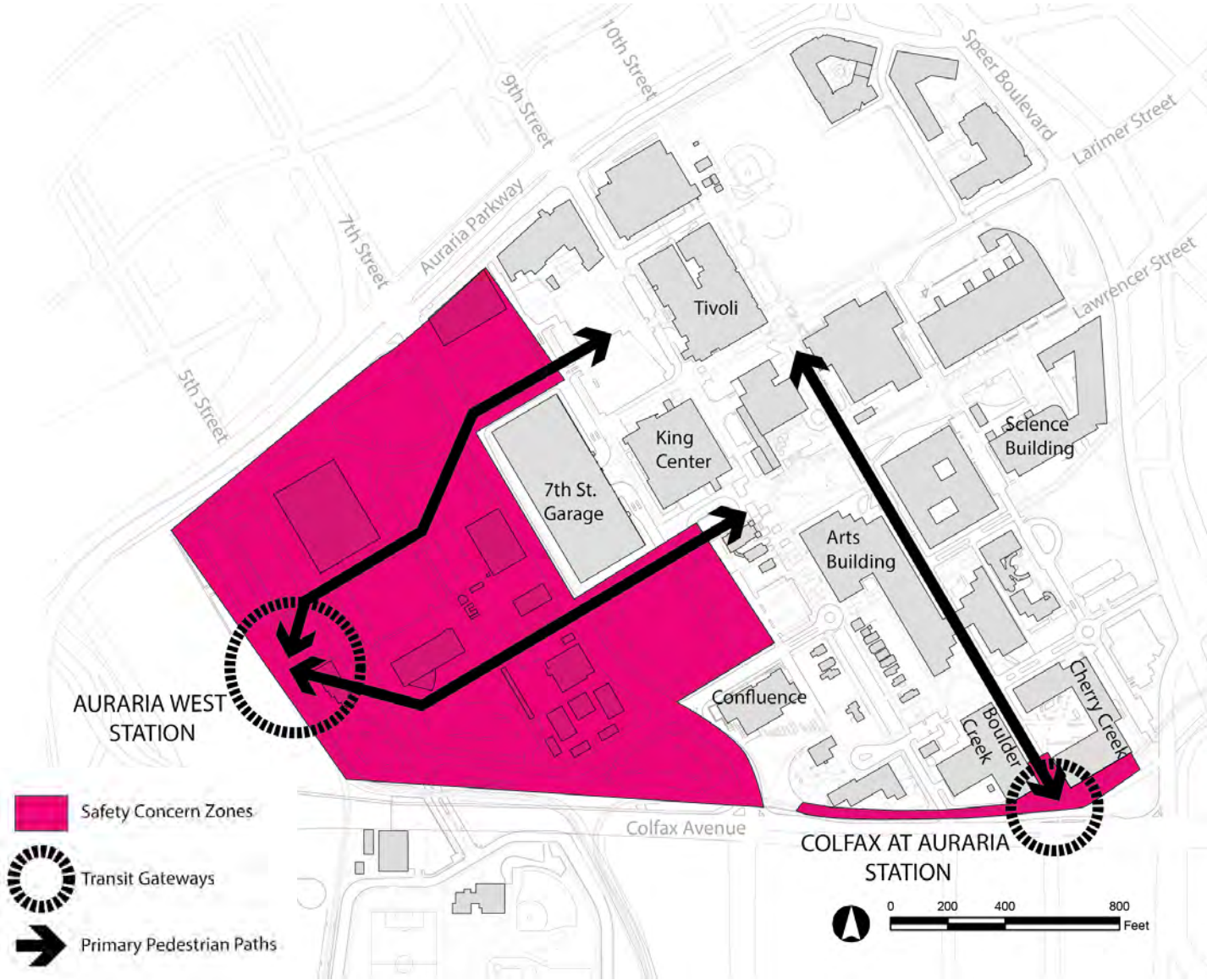


Figure 3.q - Safety Improvement Zones

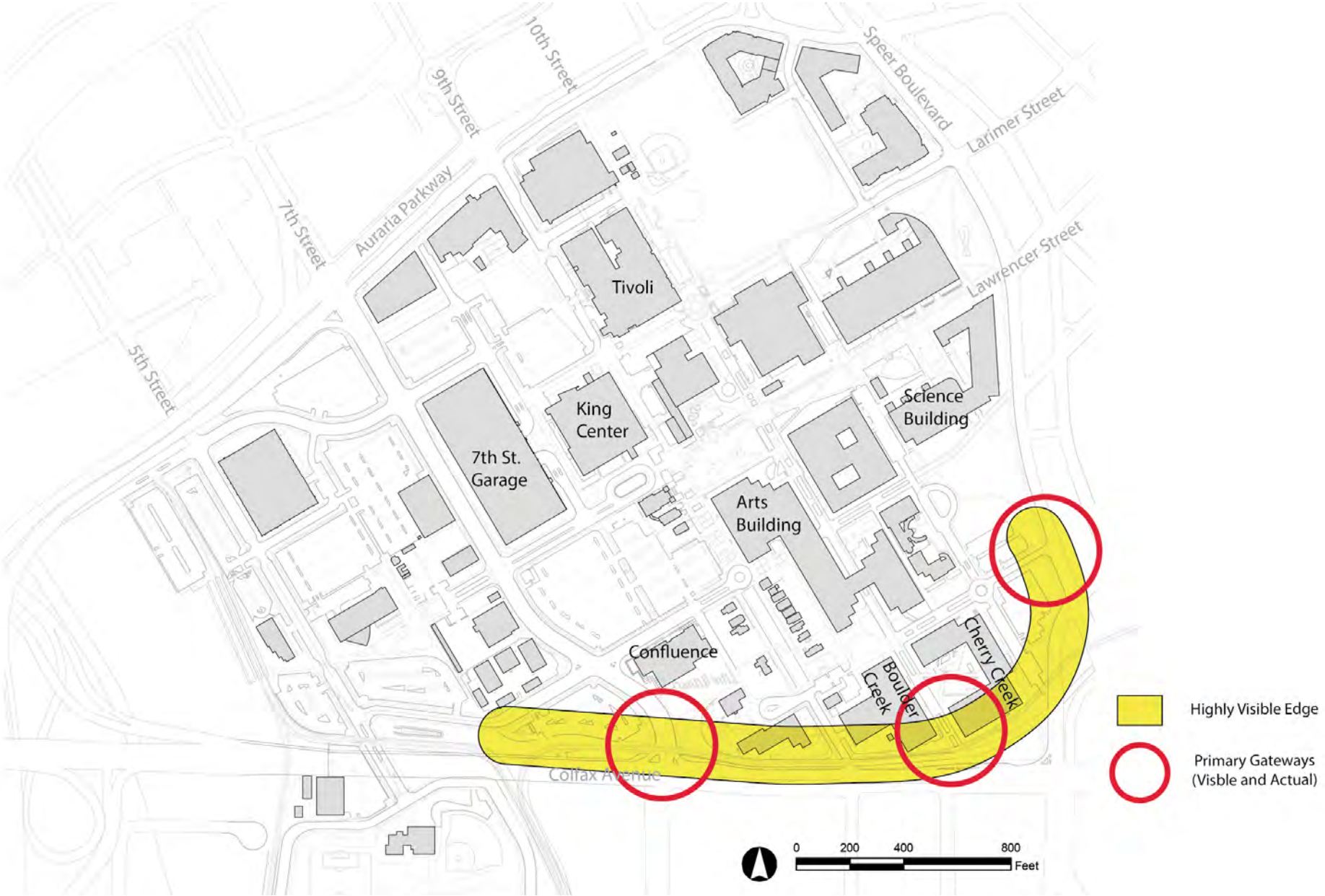


Figure 3.r - Identity Opportunities

Light Rail Station - Colfax

d. Campus Connections

The Auraria Campus was built with pedestrian pathways roughly following the street grid that pre-dated it. Over time, certain connections have been developed and adapted to be primary connections through the site while others have remained secondary. The strongest connections across the campus run generally north-south along 10th Street and 9th Street and form the most comprehensive connection between the three institutions on the campus. In addition, 7th Street serves as the primary vehicular connection across the site and helps link Colfax and south Denver neighborhoods through the campus to the Auraria Parkway and beyond. This connection, though not as pedestrian friendly, is a crucial link for CCD and the campus as a whole.

In comparison the east-west connections lack in their quality and safety. Lawrence Street is the primary – and in many ways, only – east-west connection through campus, linking downtown Denver with the Auraria West light rail station. Though this connection is necessary and well used, the design of this spine does not support its role as the primary connection for the CCD neighborhood.

One connection that should be prioritized and strengthened is the series of informal connections that link the Cherry Creek and Boulder Creek buildings along 10th Street with the Confluence Building to the west and the eventual parking structure proposed directly to the west (as taken from the 2012 Master Plan). This connection is crucial in that Colfax Avenue will likely never be a strong pedestrian connection east to west from one end of the CCD neighborhood to the other. This corridor begins to form a series of interlinked open spaces that can act as the heart of the CCD neighborhood. This corridor, along with 10th (and to a lesser extent 9th and Lawrence Streets) should be reinforced as a safe and enjoyable route through campus connecting the CCD neighborhood both internally as well as to the remainder of the campus. Prioritizing this route can include ensuring that new buildings focus active edges onto the corridor, the integration of special lighting and landscape features are used along its length consistently, and signage and security features (such as police call boxes, etc.) located at dependable intervals.

Strengthening this corridor will allow the CCD neighborhood to easily connect to the City and to the transportation options that make it convenient and exciting for the students and employees of the institution. By making these connections safer and more stimulating, the CCD neighborhood can really start to feel like a distinct and connected district that is strongly integrated with the core of the shared campus.

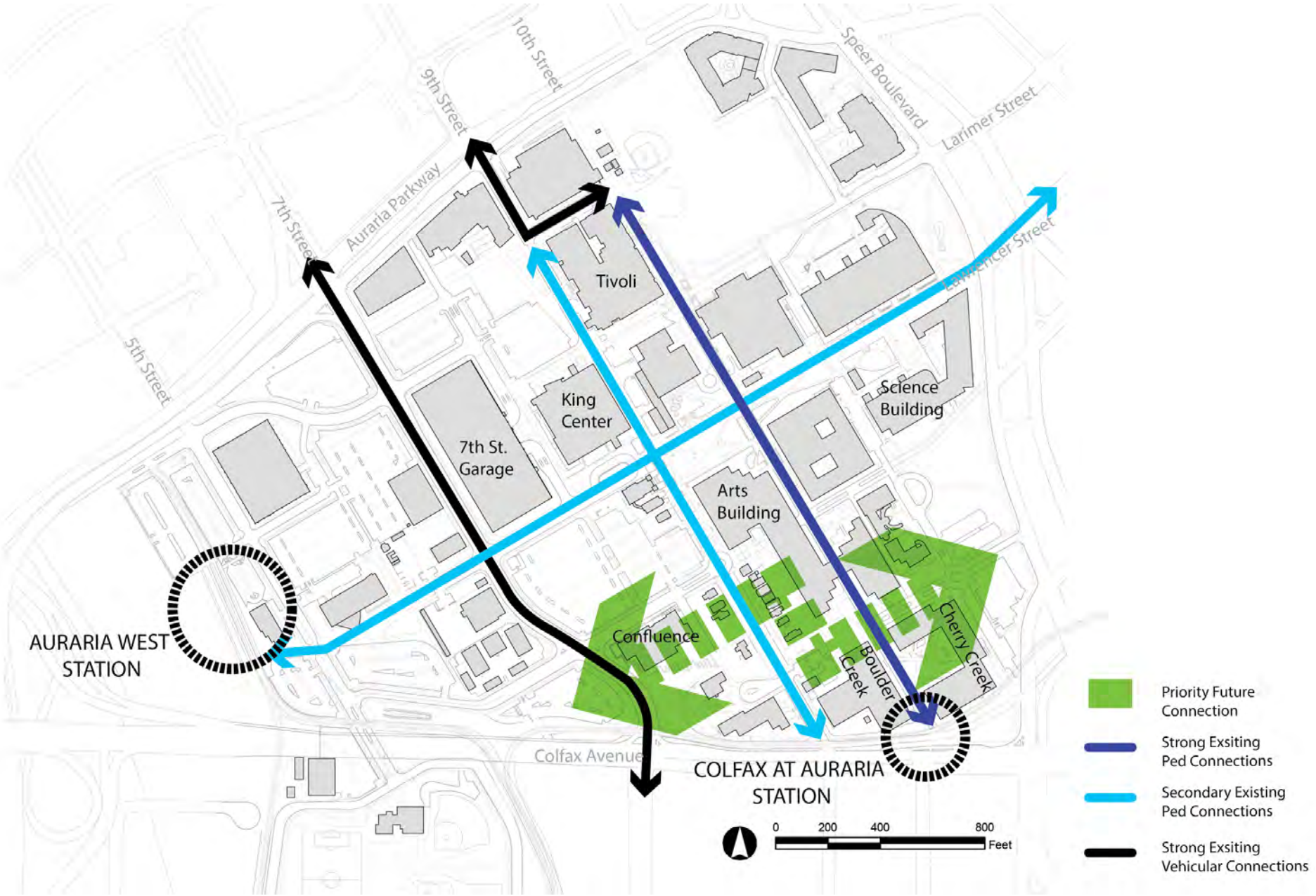


Figure 3.s - Campus Connections

e. Priority Planning Objectives

Through the three lenses off safety, identity, and connectivity, several strong planning objectives become evident within the CCD neighborhood. In many cases, there are priority actions that the institution can consider that will achieve positive change in all three of those lenses. The diagram on the following page provides the beginning of a framework that can help prioritize change and growth within the CCD neighborhood while supporting a strong sense of place that is safe, provides an identity to be proud of and helps connect the institution both internally as well as to the rest of campus, the transportation network and the city.

The first portion of this approach involves strengthening the burgeoning neighborhood core, building off the character and placemaking initiatives evident with the Confluence Building. This core is really a series of strong green spaces that together create a linear park connection between the Confluence building and the courtyard in the Cherry Creek building. This nascent green space has the potential to be a neighborhood green akin to those seen on more traditional college campuses. By strengthening this quad, CCD has the opportunity to instill a sense of pride in identifying with the institution as well as providing a safe shared space for students and employees alike. This quad will allow a safe connection amongst existing and future CCD buildings as well as provide an end-cap to connections across campus along 10th Street corridor, thereby connecting it to the remainder of the Auraria Campus and beyond.

To strengthen this neighborhood core, a priority action would be to ensure that all future buildings fronting the quad have transparent and active building frontages. By ensuring this type of design attention, the quad will feel safer with a higher level of passive surveillance and movement to and from the surrounding buildings. The Confluence building and, to a lesser degree, Cherry Creek have set a precedent for active frontages that can be equaled or bettered in future structures. Additionally, the quad should have landscape and lighting elements that make the quad feel safe while promoting a comfortable environment in which users feel inclined to linger, communicate, and collaborate.

Similarly, the prioritized pedestrian connections should have a similar degree of activity and energy to ensure a safe and exciting connection to and from the CCD neighborhood. The inter-neighborhood connection – beginning at the future parking structure at 7th Street and Colfax and ending at Cherry Creek building – in particular should see high attention paid to the quality and consistency of the landscape and lighting features, active building frontages, and safety elements. This connection links the entirety of the CCD neighborhood together as well as providing a safe and convenient route from any CCD neighborhood building to 10th Street (or 9th) in order to connect it to the important areas within the campus, such as the Tivoli, Library and transportation nodes.

This approach allows the future planning moves to achieve strong change in all three objectives (safety, identity, and connectivity). By strengthening these key pieces, CCD will be able to grow strategically while fulfilling a number of important objectives.

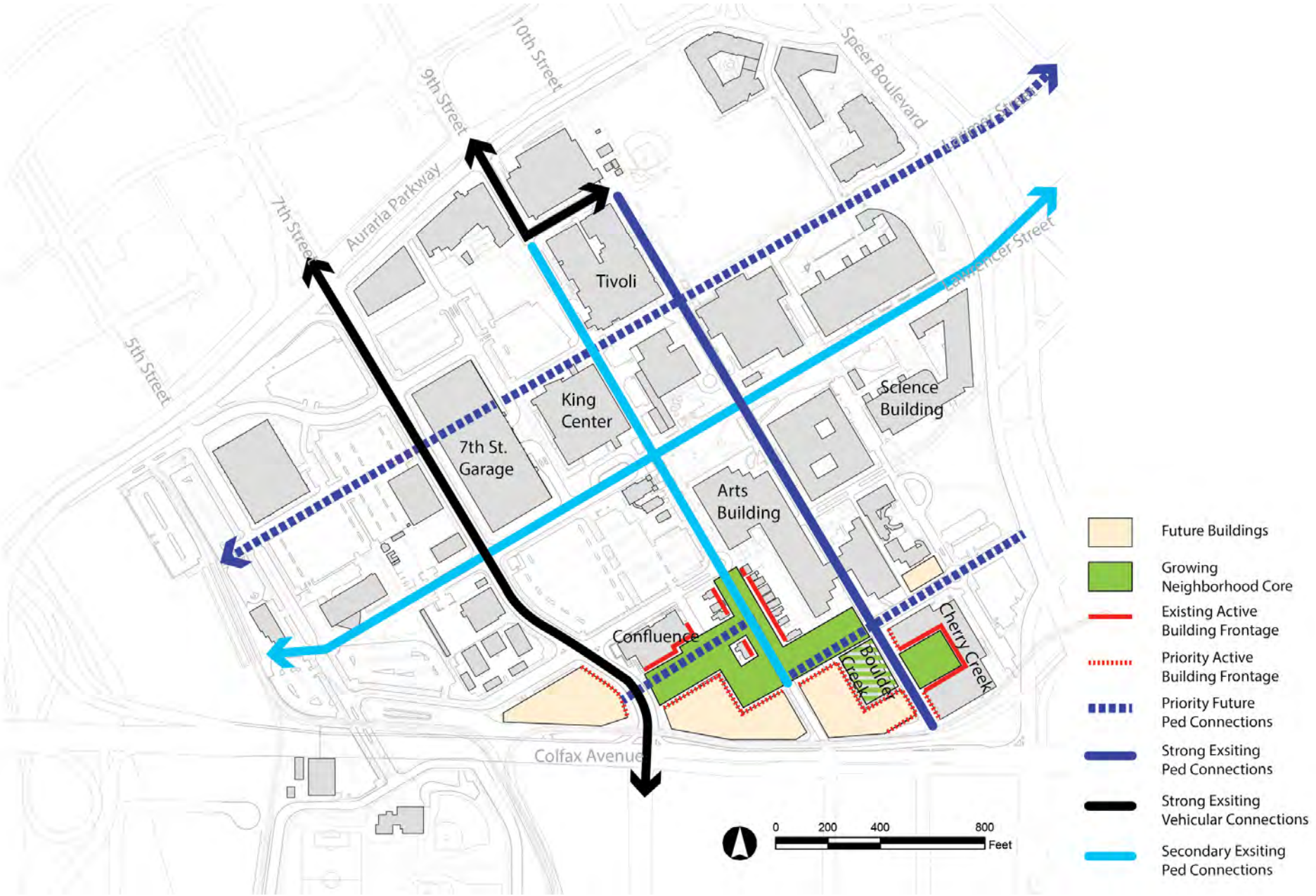
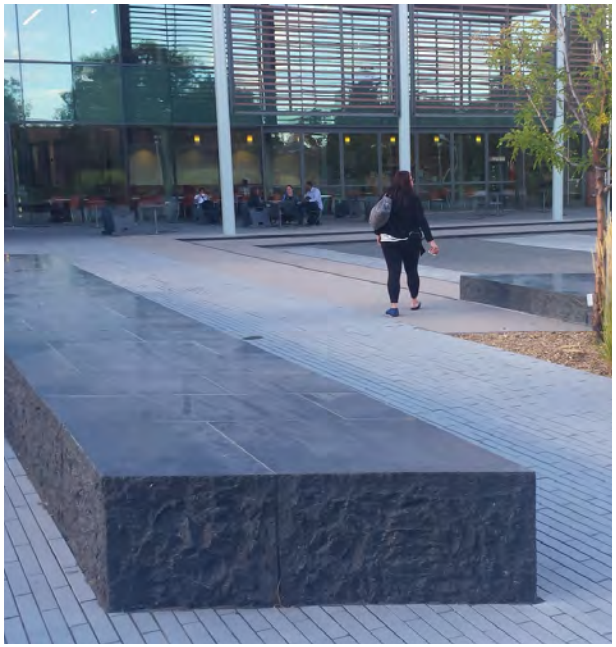


Figure 3.t - Priority Planning



Landscape Treatment - Confluence Building

f. Landscape and Lighting

CCD is beginning to establish an identity with its landscape treatments – in particular with the landscape character developed in the courtyard of the Cherry Creek building and behind the Confluence Building. While these landscape treatments are aesthetically pleasing in many regards, they do not achieve the goals of attracting students, faculty and staff to linger and relax in the available open spaces. The existing landscape treatments place high value on materials and beauty but tend not be used by many people. For example, the large, black granite blocks that are represented at the entry way of the Cherry Creek courtyard are strong visual elements, but do not attract a user to sit and relax. Likewise, this element is repeated to a large extent in the courtyard behind Confluence. These elements are rarely used for sitting and most people are observed spending time beneath the shade structures within these two green spaces. Another issue is the prevalence of large ornamental grasses. Though these grasses are very attractive features in the landscape, they tend to be overpopulated and lend the spaces a feeling of exclusivity and do not invite people to enter the space and linger. These grasses and other landscape elements should be used as accents to otherwise open, inviting, and flexible spaces.

For future landscape and public realm design treatments, the priority should be given to designs that are simple, flexible, and promote a maximum amount of collaboration and communication amongst all users. It is in these types of spaces that the energy of a dynamic institution of higher learning attains the type of synergy that promotes innovation and learning. It is possible to achieve truly remarkable public spaces with limited resources as long as the design is geared towards promoting a flexible set of spaces that can be optimized for large groups as well as individual use; active and energetic events as well as introspective and tranquil learning spaces.

Neighborhood Landscaping

Table 3.b - Building Ratings

BUILDING	RATING
King Center Building	93
Administration Building	93
Arts Building	90
Tech (Boulder Creek) Building	83
PE Events Center	75
South (now Cherry Creek) Bldg	70*
Plaza Building	57

*This Building has since been remodeled

2. FACILITIES ASSESSMENT

Facility assessment information was provided by AHEC based on an audit conducted campus wide in 2007/2008. The King Center and Arts Buildings were audited again in 2015 by an outside consultant and their ratings were updated at that time. A more detailed assessment was conducted by the consultant for the Boulder Creek Building as part of the development of the Building Program Plan under separate cover.

As of 2007/2008 the percentage of buildings on campus by building type that did not meet or exceed the target Facility Conditions Index rating of 85 were as follows:

- 80% of Classroom, Labs, Office and Events facilities (15 buildings)
- 100% of historic facilities (16 buildings)
- 45% of Service and AHEC facilities (9 buildings)
- 43% of Auxiliary facilities (7 buildings)
- 75% of all facilities, campus wide (47 buildings at the time of the audit)

The ratings for the buildings that are used significantly by CCD today and that have not been recently renovated are shown to the left. The King Center, Arts Building and Administration building meet/exceed the target goal of 85, while Boulder Creek is close to the target.

The renewal costs to bring these buildings into the target range were assessed as part of the above audit, and showed that the "majority of the renewal costs for the larger buildings on campus are for mechanical, building envelope and electrical systems". The majority of the historic houses on 9th Street require "broad building envelope repairs, and all required extensive foundation, grade and sub-surface drainage improvement" and all have "extremely limited handicapped accessibility".

Renewal costs will need to be factored in as remodels and reconfigurations are completed to implement the master plan.

3. SURVEY FINDINGS

A brief survey of the user groups on campus was conducted during the data collection phase of the project. A full summary is included in the Appendix. Key findings outlined below illustrate end user opinions of general conditions and adequacy of administrative and instructional spaces as well as operational adjacencies between functions and ease of access for students. Some of these findings differ somewhat from feedback received during face to face interviews where additional, specific space deficits were identified.

- Overall, departments did not feel that they have surplus space in any space type.
- Most departments felt that they have sufficient space otherwise.
- All respondents from Administrative functions felt that students could easily find their location. 47% of the Academic Departments/ Programs felt that students have trouble locating them. However, 100% of the Academic Departments responding felt that they are in an ideal location to reach the students they serve.
- The most frequently used teaching mode is lecture, and academic departments indicated they believe this the preferred delivery method by students.

4. CURRENT SPACE UTILIZATION AND OCCUPANCY

a. Current Occupancy

Community College of Denver (CCD) occupies 352,419 ASF of space in as many as 17 buildings on the Auraria campus in Denver, and three offsite facilities: Advanced Manufacturing Center, Lowry Main Building, and Lowry Dental Hygiene Center. The table on the following page shows the breakdown of ASF by space category for CCD.

In order to understand how well, CCD is using its existing instructional facilities, an occupancy and utilization analysis of 103 schedulable rooms was conducted. Scheduling data for these instructional facilities was provided by CCD's Office of the Registrar and includes 17 classrooms, 83 class labs, one open lab, one assembly, and one lobby space. This analysis uses scheduling data for a typical week in the fall semester, in this case the week of 15 November 2015.

Occupancy in this case refers to the number of students enrolled in one class meeting. The occupancy of a given classroom is measured against its capacity, or the total maximum number of students it is designed to hold. *Utilization is a measure of a classroom's total number of scheduled hours as compared to a maximum number of schedulable hours (15).* These two measures were calculated for instructional facilities in the buildings occupied by CCD and are illustrated in the charts on the following pages.

Confluence Building Resource Area

Table 3.c - Auraria Campus Occupancy

SPACE TYPE (AURARIA CAMPUS)	ASSIGNABLE SQUARE FOOTAGE (ASF)	COMBINED TOTALS
Instructional Facilities*	108,754	108,754
Office Facilities	82,263	82,263
Study Facilities	11,784	11,784
Special Use Facilities**	2,227	18,687
Health Care Facilities	446	
PE/Athletics/ Recreation Facilities	16,000	
General Use Facilities***	32,883	54,766
Student Activity Facilities	21,883	
Support Facilities	8,402	
Total	284,656	

* Includes Classroom Facilities and Laboratory Facilities

** Excludes PE/Athletic/Recreation Facilities

*** Excludes Student Activity Facilities

Table 3.e - AMC Campus Occupancy

SPACE TYPE (ADVANCED MANUFACTURING CENTER)	ASSIGNABLE SQUARE FOOTAGE (ASF)
Instructional Facilities*	31,000

* Includes Classroom Facilities and Laboratory Facilities

** Excludes PE/Athletic/Recreation Facilities

*** Excludes Student Activity Facilities

Table 3.d - Lowry Campus Occupancy

SPACE TYPE (LOWRY CAMPUS)	ASSIGNABLE SQUARE FOOTAGE (ASF)	COMBINED TOTALS
Instructional Facilities*	23,668	23,668
Office Facilities	10,108	10,108
Study Facilities	256	256
Special Use Facilities**	0	0
Health Care Facilities	0	
PE/Athletics/ Recreation Facilities	0	
General Use Facilities***	1,600	1,600
Student Activity Facilities	0	
Support Facilities	1,132	1,132
Total	36,764	36,764

* Includes Classroom Facilities and Laboratory Facilities

** Excludes PE/Athletic/Recreation Facilities

*** Excludes Student Activity Facilities

NOTE: If CCD relocated the Lowry Campus, it will give up approximately 52,000 square feet. This will be replaced with space currently occupied by the MSU Denver and UCD within the CCD neighborhood that they will vacate.

b. Utilization Findings - Instructional Space

CCD's schedulable rooms achieve a median utilization rate of 40.0% (scheduled 6 out of 15 total schedulable hours) and a 54.5% utilization rate (8.17 hours) about 75% of the time on weekdays Monday through Thursday. On Fridays however, schedulable rooms are not utilized at all (0 hours) at least 70% of the time.

Classrooms and class labs used by CCD have similar utilization rates: Classrooms have a median utilization rate of 44.3% (6.65 hours) and reach 54.9% utilization (8.18 hours) 75% of the time on weekdays Monday through Thursday, while class labs have a median utilization rate of 40.0% (6 hours) and achieve 55.0% utilization (8.25 hours) about 75% of the time. While each institution has its own goals for classroom utilization, *65% utilization is a typical benchmark for classroom scheduling. This standard is set for by the State of Colorado and is based on a 15 hour day for a two year commuter campus. CCD's schedulable rooms only achieve or exceed this benchmark 10% of the time on weekdays Monday through Thursday.*

Large classrooms (36-55 seats) perform better than rooms of other sizes, achieving a median utilization rate of 43.9% (6.59 hours) versus 20.8% (3.12 hours) for small rooms (5-20 seats) and 36.7% (5.5 hours) for medium-sized rooms (21-35 seats). Medium and large-sized rooms achieve a similar utilization rate of 55% (8.25 hours) about 75% of the time, while small and rooms only achieve 34.5% (5.18 hours) 75% of the time on weekdays Monday through Thursday.

Extra-large rooms only achieve 12.5% utilization 75% of the time. Extra large rooms in this analysis include the black box theatre in the King Center and a lobby space in the PE/Events Center.

While each institution has its own goals for classroom utilization, 65% utilization is a typical benchmark for classroom scheduling. CCD's schedulable rooms only achieve or exceed this benchmark 2% of the time on weekdays Monday through Thursday.

Nearly one third of CCD's classrooms are less than half full 50% of the time.

Health Sciences Classroom (Lowry)

c. Occupancy Findings - Instructional Space

When comparing the number of enrolled students in a room against that room's capacity, CCD's *schedulable rooms achieve a median occupancy rate of 55.7% on weekdays Monday through Thursday.* On Fridays, 74.8% of schedulable rooms are not used. Class labs have a higher median occupancy rate than classrooms (58.3% versus 42.4%), and are 73.6% full 75% of the time versus 54.0% full for classrooms. *Small classrooms (those with a capacity of between 1 and 20 seats) achieve the greatest occupancy rates* 80%% full 50% of the time, whereas medium and large rooms only achieve 62.9% and 47.5% occupancy rates 50% of the time. This means that nearly one third of CCD's classrooms are less than half full, 50% of the time.

When coupled together the occupancy and utilization analyses indicate that small and medium sized classrooms are in high demand and that there is a lesser need for large and extra-large sized classrooms. The figure below shows that 1,381 (Monday through Friday) class hours are scheduled with class meeting sizes of 20 or fewer seats, while only 7 classrooms are of this size. Furthermore, 1,089 class hours are scheduled with class meeting sizes greater than 20 seats, while there are 96 rooms with capacity greater than 21 seats. *This indicates that CCD needs more small sized classrooms (1 to 20 seats) and fewer large and extra-large classrooms.*

d. Rightsizing

Based on the occupancy and utilization analysis and the findings that indicate that CCD has a high demand from classrooms that seat 21-25 students, rightsizing of certain classrooms and class labs could help CCD make up some of the deficit of total instructional facilities. *Of CCD's 103 schedulable rooms 4 class labs were identified as spaces that could be right sized to accommodate additional instructional space* (see table below).

Table 3.f - Classroom Resizing

BUILDING	NUMBER OF CLASS LABS FOR RESIZING	TOTAL ASF OF RESIZABLE CLASS LABS
Arts Building	1	1,866
Boulder Creek	1	1,733
Science Building	2	3,278
TOTAL	4	6,877

Based on a benchmark of 40 ASF/student for class lab facilities, CCD could turn these four instructional spaces into 8 spaces between 840 and 940 ASF, thereby reducing its overall need for instructional facilities by 3,438 ASF to 17,400 ASF (refer to the following chart for instructional space needs projections).

The following pages illustrate CCD's occupancy overall on campus by total S.F. and by space type

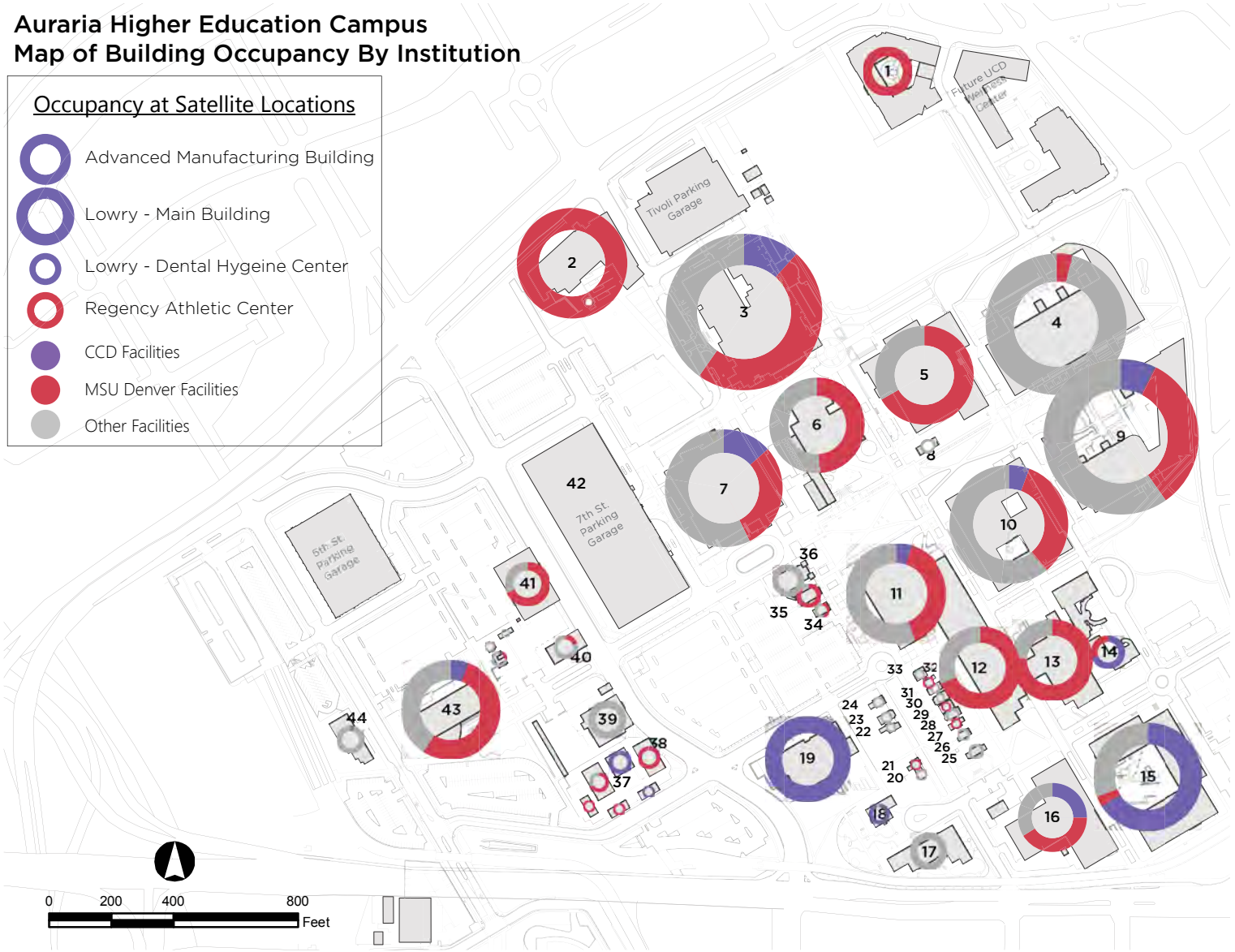
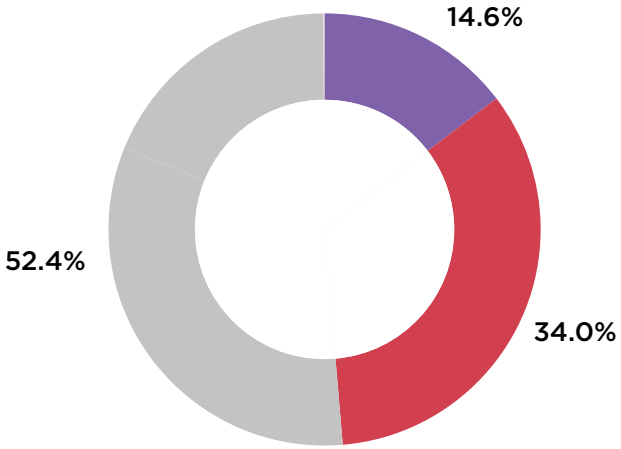


Figure 3.q - Auraria Higher Education Campus Map of Building Occupancy by Institution

List of Auraria Campus Facilities

1 Hospitality Learning Center
2 Student Success
3 Tivoli Student Union
4 North Classroom Building
5 PE Event Center
6 Plaza Building
7 King Center
8 Emmanuel Gallery
9 Science Building
10 Library & Media Center
11 Arts Building
12 West Classroom Building
13 Central Classroom Building
14 Clear Creek
15 Cherry Creek
16 Boulder Creek
17 Early Learning Center
18 Bear Creek
19 Confluence Building
20 Smedley House
21 Roop House
22 Centennial House
23 Dolan House
24 Davis House
25 Knight House
26 Witte House
27 Gardner House
28 Wheeler Griebling House
29 Schultz House
30 Young House
31 Rundle House
32 Mullen House
33 Mercantile
34 Golda Meir Museum
35 Rectory Office
36 Saint Cajetan Center
37 Modular Classrooms
38 Modular Classrooms
39 Facilities Services
40 Facilities Annex
41 7th Street Building
42 Parking Garage
43 Administration Building
44 5th Street Hub



Space Use Categories	ASF
CCD Facilities	368,584
MSU Denver Facilties	857,612
Other Facilities	1,293,291

Figure 3.r - List of Auraria Campus Facilities

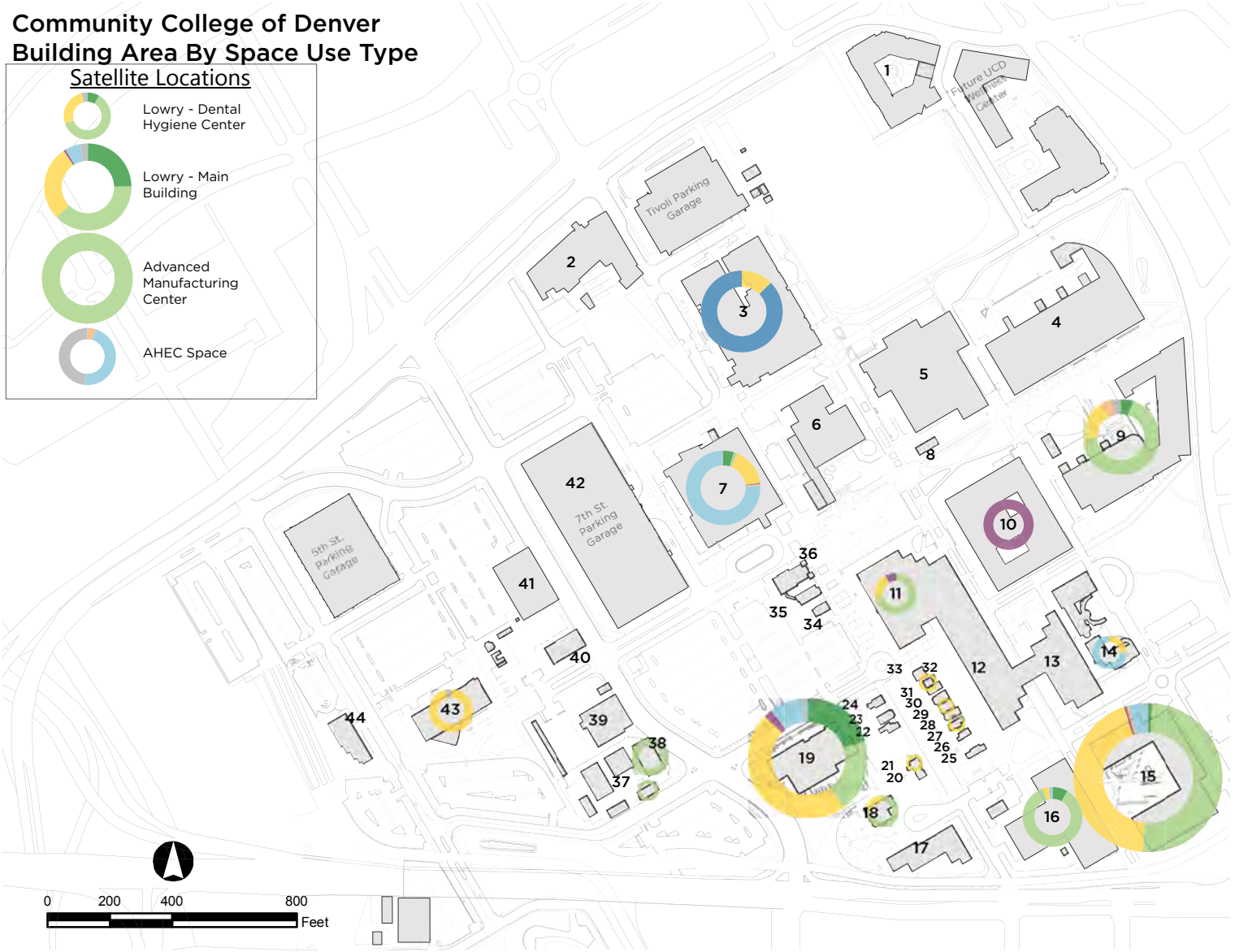
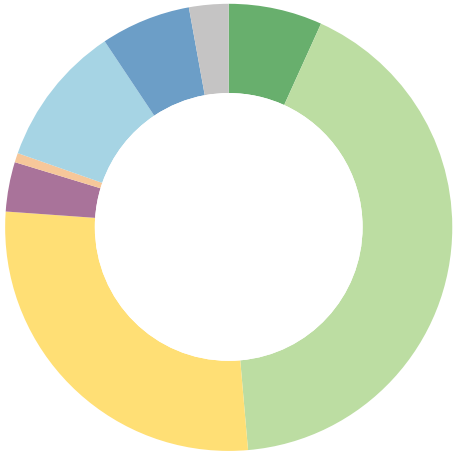


Figure 3.s - Building Area by Space Use Type

List of Auraria Campus Facilities

1 Hospitality Learning Center
2 Student Success
3 Tivoli Student Union
4 North Classroom Building
5 PE Event Center
6 Plaza Building
7 King Center
8 Emmanuel Gallery
9 Science Building
10 Library & Media Center
11 Arts Building
12 West Classroom Building
13 Central Classroom Building
14 Clear Creek
15 Cherry Creek
16 Boulder Creek
17 Early Learning Center
18 Bear Creek
19 Confluence Building
20 Smedley House
21 Roop House
22 Centennial House
23 Dolan House
24 Davis House
25 Knight House
26 Witte House
27 Gardner House
28 Wheeler Griebling House
29 Schultz House
30 Young House
31 Rundle House
32 Mullen House
33 Mercantile
34 Golda Meir Museum
35 Rectory Office
36 Saint Cajetan Center
37 Modular Classrooms
38 Modular Classrooms
39 Facilities Services
40 Facilities Annex
41 7th Street Building
42 Parking Garage
43 Administration Building
44 5th Street Hub



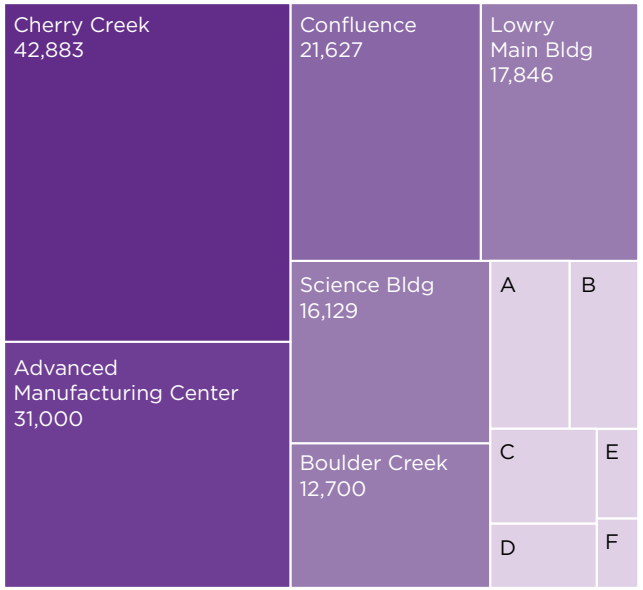
Space Use Categories	ASF
Classroom Facilities	22,708
Laboratory Facilities	140,421
Office Facilities	92,371
Study Facilities	12,040
Special Use Facilities	2,227
Health Care Facilities	-
PE/Athletics/Rec Facilities	-
General Use Facilities	34,438
Student Activity Facilities	21,883
Support Facilities	9,534

Figure 3.t - List of Auraria Campus Facilities

The following pages illustrate the distribution of existing instructional and office space by building.

Community College of Denver
Total Instructional Facilities Area By Building

Classroom Facilities	22,708
Laboratory Facilities	140,713
Total Instructional Facilities	163,421

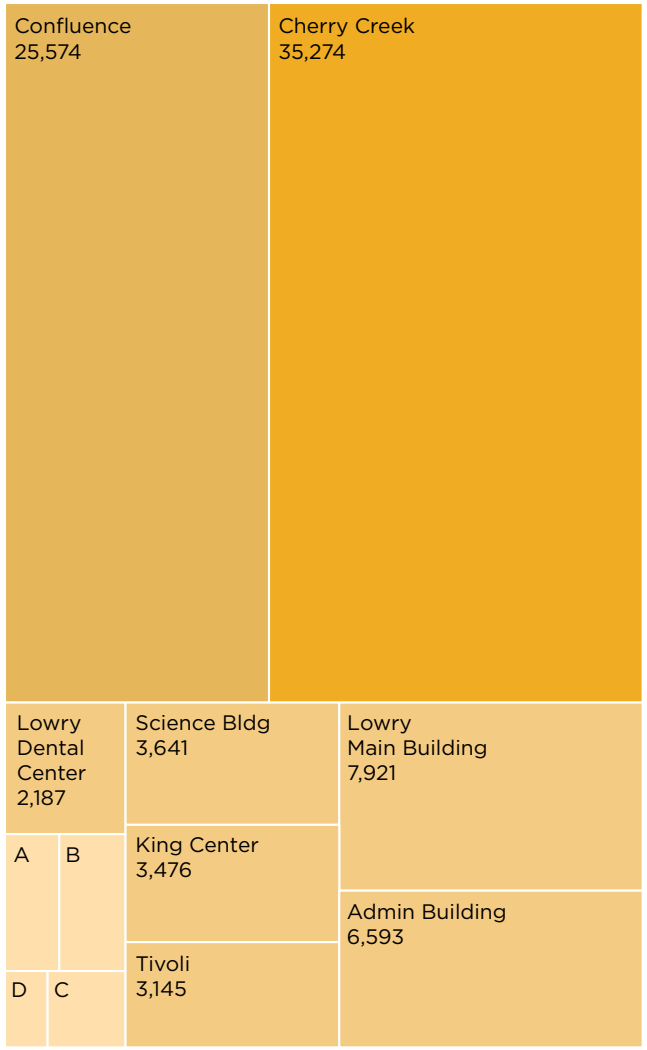


A	Lowry Dental Center	5,822
B	Modular 8	5,127
C	Arts Building	4,406
D	Bear Creek	3,012
E	Modular 10	1,638
F	King Center	1,281

Figure 3.u - Total Instructional Facilities Area by Building

Community College of Denver
Total Office Facilities Area By Building

Total Office Facilities 93,371



A	Clear Creek	1,037
B	Arts Building	1,253
C	Bear Creek	815
D	Boulder Creek	455

Figure 3.u - Total Office Facilities Area by Building

Distribution of Classrooms by Instructional Capacity and Class Meetings By Scheduled Hours

*King Center Black Box Theatre

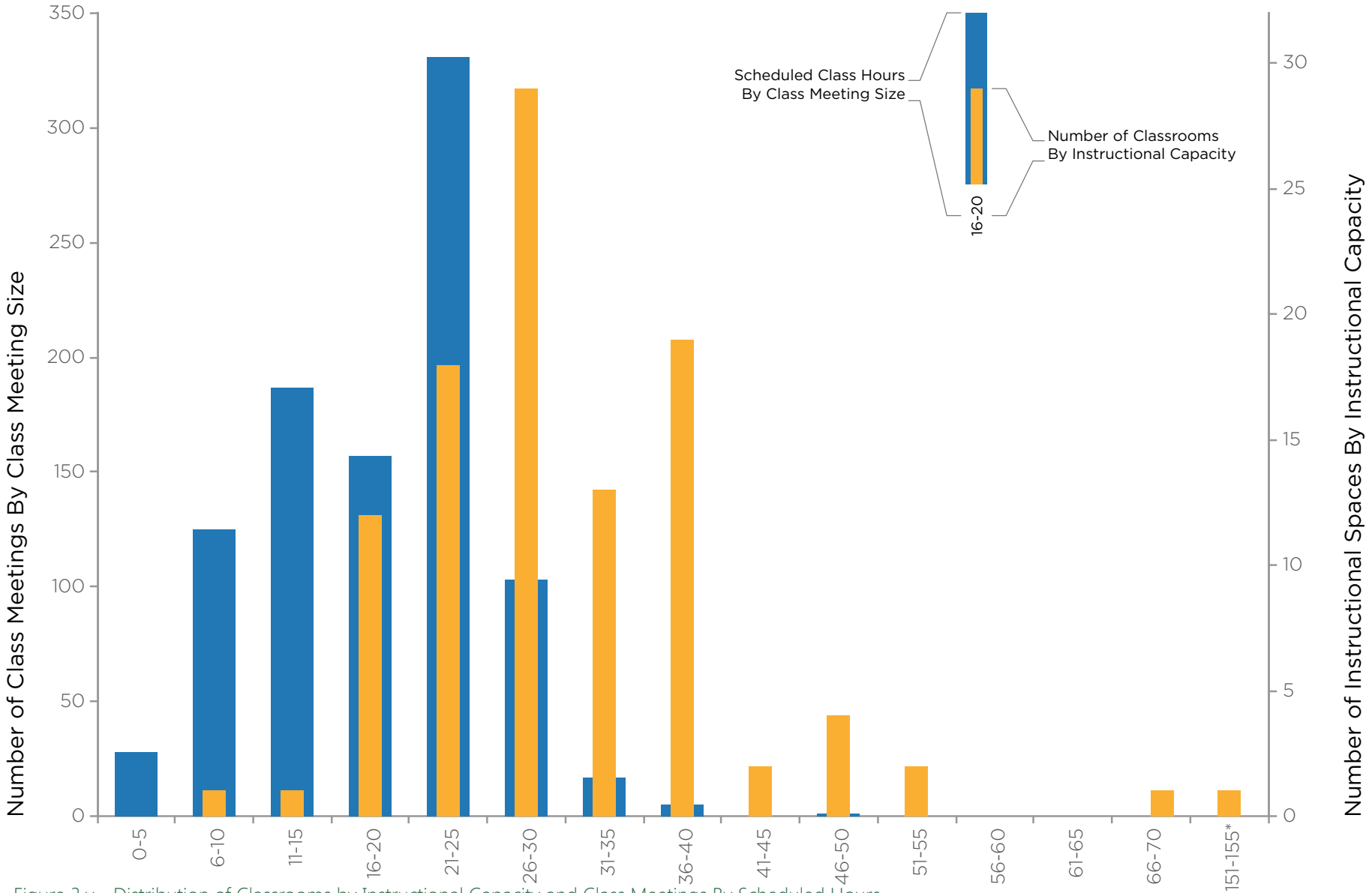


Figure 3.v - Distribution of Classrooms by Instructional Capacity and Class Meetings By Scheduled Hours

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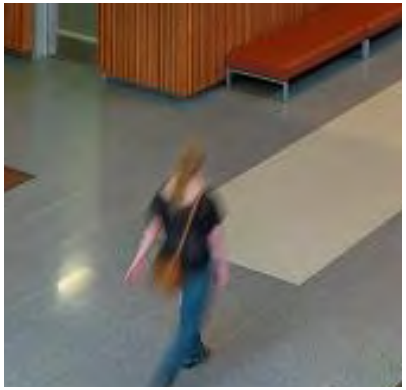
COMMUNITY COLLEGE OF DENVER



04
ANALYSIS

A) ENROLLMENT AND STAFFING PROJECTIONS

1. PROJECTED ENROLLMENT

The space needs analysis relies in part on the enrollment trends and projections. Since school facilities can take years to build, projections must look ten to twenty years in advance to assess needs. Current enrollment data was provided by CCD's executive leadership team in the form of a report filed with the State of Colorado. The data used for the CCD enrollment projections came from enrollment growth figures stated by the CCD executive staff and was calculated based on current headcount converted to student FTE. Total full time equivalent enrollment projections were for 2017-2021. Enrollment projections out to 2030 were based on a linear growth rate equal to the average growth rate between 2017 and 2021 (0.652%). Enrollment for academic centers was calculated first by determining the relative proportion of the enrollment for each center to the over all enrollment of CCD and then applying that proportion to future college-level enrollment projections.

Table 4.a - Student FTE Enrollment Projections

DIVISION	2015	2020	2025	2030
Center for Career & Technical Education	603	574	589	609
Center for Health Sciences	234	223	229	236
Center for Math & Science	1,698	1,617	1,660	1,715
Arts & Humanities + Performing Arts and Behavioral Sciences	2,411	2,297	2,357	2,435
Center for Academic Support & Achievement	183	174	179	185
TOTAL	5,129	4,885	5,014	5,180

The projections indicate a 1% growth in enrollment over 15 years

Numbers shown are FTE. Current headcount is approximately 14.822 students.

FTE Enrollment Projections by Center

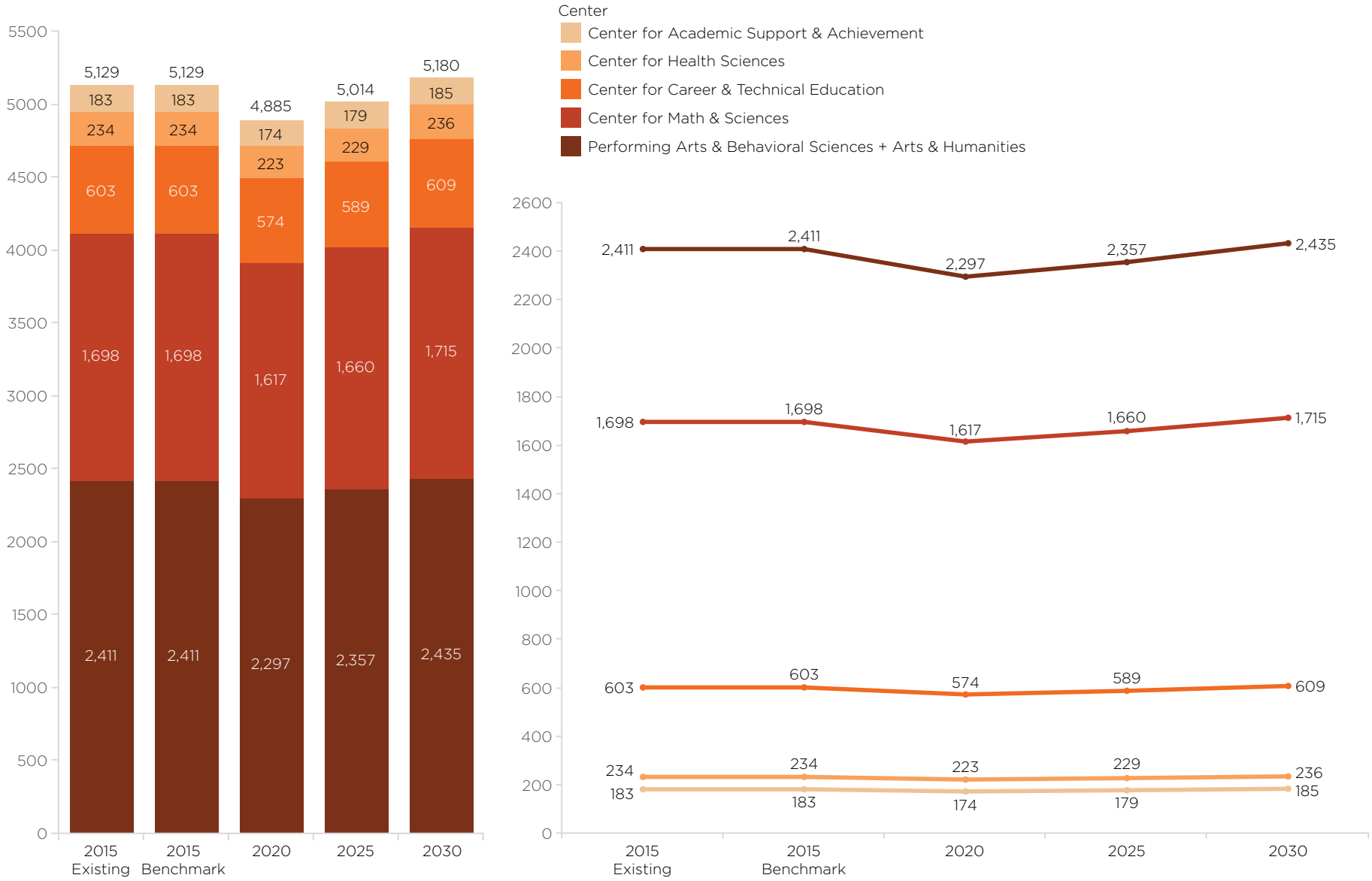


Figure 4.a - FTE Enrollment Projections by Center

2. FACULTY/STAFF PROJECTIONS

CCD's Human Resource department provided employee data detailing the number of employee in each department. Employee projections were calculated in two different ways, depending on whether the employees were associated with an academic center or an administrative division. For academic centers, a student to faculty ratio was calculated for using FTE enrollment in each academic center. This ratio was then applied to Center enrollment projections to determine the number of employees in future years. For administrative divisions, staff projections were calculated in three steps. First, a student to administrative staff ratio was calculated. Next, a proportion was calculated determining the relative size of a given administrative division relative to the total number of administrative staff. If, for example, an administrative division consisted of 20 employees and there were 200 total administrative employees, then that division was 10% of the total administrative staff. Finally, the student to staff ratio and the divisional proportion were both applied to future university enrollment figures to determine future staff projections. The following table details the FTE employee projections used for the Neighborhood Master Plan.

Table 4.b - FTE Staff and Faculty Projections (Numbers shown are "seat count", not headcount)

Division	2015	2020	2025	2030
Center for Career & Technical Education	45	43	44	45
Center for Health Sciences	33	31	32	33
Center for Math & Science	59	56	58	60
Arts & Humanities + Performing Arts and Behavioral Sciences	106	101	103	107
Presidents Office	13	12	15	15
Provost's Office	16	15	18	18
Student Life	15	14	17	17
Enrollment Services	49	44	55	56
Student Development and Retention	61	55	68	70
EASS	7	6	8	8
Center for Academic Support and Achievement	11	10	12	13
CFO / Administrative Services	63	57	70	73
TOTAL	478	444	500	515

These projections indicate a 8% growth in faculty/staff by 2030. Staff projections will continue to fluctuate based on actual enrollment

**Adjunct faculty are accounted for at a 3:1 staff to seat ratio.*

Campus Office Space

B) BENCHMARKING

1. BENCHMARKING

Several resources were used for reference material regarding space planning definitions and guidelines. These include:

- CEFPI – The Council Of Educational Facility Planners, Space Planning for Institutions of Higher Education, 2006
- IES – Institution of Education Sciences, Postsecondary Education Facilities Inventory and Classification Manual, 2006
- State of Colorado Department of Higher Education Space Utilization Planning Guidelines, 2007
- SCUP – Society for College and University Planning, 2007 Campus Facilities Inventory (CFI) Report

Other institutions were used to provide a comparison of actual space use and defined targeted goals with CCD's actual and projected space use. This data was collected from a variety of sources including other campus master plans where multiple institutions were benchmarked. To the extent possible (based on available data) peer institutions similar in size, region or institution type were used for this comparison. It is important to note that each institution across the country has a unique set of requirements and existing conditions that have evolved over time so benchmarking is not an exact science. Based on the comparisons available, a set of guidelines were developed for CCD. These guidelines are used to calculate future space needs but do not reflect a precise square footage that would be defined through micro programming and the design process.

Space guidelines are typically expressed as "assignable square feet (asf)". As defined earlier, this is space that is assigned to a particular user or use and does not include primary building circulation, shaft space, wall thicknesses, mechanical, restroom or service space. Each building has a grossing or efficiency factor that is unique to calculate the asf to gross square foot ratio. The asf is typically 55-70% of the total gross square footage on campus.

SOURCES:

1. RNL Cadet Area Master Plan for the US Air Force Academy, 2015 (Benchmarks provided by Smith Group)
2. CSU 2014 Physical Development Plan
3. CU Master Plan – 2010 (Paulien and Associates)
4. Utah System of Higher Education Space Standards Study - 2011 (Paulien and Associates)
5. University of Wyoming Macro Level Space Needs Findings -2008 (Paulien and Associates)
6. University of Nevada, Reno Campus Master Plan Update and Regional Center Plan – 2014 (Von Woert Bigotti Architects and team)
7. On-line research on Community College standards
8. Red Rocks Community College Master Plan – 2013 (prepared by Tim Griffin, Executive Director Planning, Research and Effectiveness)
9. Pueblo Community College Master Plan – 2012 (Stephen Hall Architects)
10. State Fair Community College – 2014 (Paulien and Associates)

2. SPACE GUIDELINES

Table 4.c is the culmination of comparing current space use to benchmarks by space type and institution to arrive at a set of guidelines to be applied to projected enrollments and calculate future space needs. The data corresponds to the space categories defined above. After analyzing benchmarking comparisons using multiple methodologies it was determined that the most appropriate way to compare to other institutions and to develop realistic guidelines is a hybrid model of using an asf/FTE metric for instructional and office space and a percent of total asf for institutional spaces. The following calculations and comparisons are included:

a. Current Space Occupied by Space Type

- Currently occupied space includes both space shown in the AHEC database as belonging to CCD and space used by CCD that falls under AHEC ownership. This primarily includes classrooms that are "priority scheduled" for CCD, the portion of the Library identified as CCD's portion by AHEC, and 15% of the common/general use space in the Tivoli that is not assigned to any of the three institutions. The PE Events Center and Clinic space is counted as MSU Denver space only.
- Current square footage figures do include the Advanced Manufacturing Center and the Lowry Campus buildings. Moving forward

with assessing alternatives to meet future space needs some or all of this space may be deducted from the overall existing inventory if those satellite locations are vacated.

- As a result of the above calculations, the total of 352,419 asf is greater than what shows up as a total in the AHEC database.
- Based on a student FTE count of 5,129, this equates to 69 asf/student. This figure is in line with national asf benchmarks for community colleges.
- The calculations that are used for comparison to benchmarks are shown in the data cells bordered in bold in the top section of the table.

b. ASF Per Student FTE or Faculty/Staff FTE For Instructional and Office Space

- For instructional space and office space the recommended guidelines for CCD are highlighted in yellow.
- For comparison, calculations are shown for other metrics and for the national benchmarks that were derived from review of the multiple sources cited in this document.
- Currently CCD has approximately 32 asf of Instructional Facilities per student FTE. The national benchmarks would suggest 40 asf and/or 40% of the total square footage would be appropriate. Modifying for the general use instructional space that is not counted and the current usage, the recommended guideline is 30 asf/student FTE. More specific class/lab recommendations are provided based on the instructional space utilization analysis(discussed separately) but preliminarily indicate that the Auraria Campus class/lab demand is in line with benchmarks.
- Currently CCD has approximately 193 asf of office space per faculty/staff FTE. This is using a 3:1 ratio pf adjunct to FTE and seat ratio. The national benchmarks would suggest 150 asf and/or 25-30% of the total square footage would be appropriate. Understanding that CCD currently has some surplus office space in some of their buildings, the recommended guideline is the 150 asf/staff and faculty FTE benchmark. An analysis of office space needs specific to each center was completed (included in the appendix) to assess this space type in more detail.

c. Percent of Total Institutional Square Footage

- Recommended guidelines for the various types of institutional space are also highlighted in yellow in the benchmarking table below.
- For comparison, calculations are shown for other metrics and for the national benchmarks that were derived from review of the multiple sources cited in this document.
- Currently 3% of CCD's space is allocated to "Study Space" (predominately Library), 5% to Special Use), 16% to General Use (including large assembly spaces, theaters and Student Union) and 3% to Support Facilities. The national benchmarks indicate that the study space is appropriate, the Special Use space has deficits and the General Use space has surplus. Support Facilities square footage is somewhat lower than benchmarks figures. The Special Use deficit is in large part because CCD does not have significant assigned Recreation or Clinic space, though CCD students have access to these facilities. The General Use space shows a surplus in large part because the tri-institutional campus provides more of these than might typically be found on a Community College campus.
- As a cross check these spaces were also measured using an asf/student FTE metric. These comparisons also show that the Special Use/PE-Rec-Athletics spaces General Use spaces are below benchmarks nationally.

3. SPACE TYPES

The Higher Education General Information Survey (HEGIS) code is a standard used nationally to define space types on college/university campuses. AHEC tracks space on the Auraria Campus in accordance with these codes, although not all sub-categories are tracked. The benchmarking process for this study assessed how best to use this data at the levels AHEC tracks to be comparable to the benchmarks available. Brief definitions of each of the major categories are provided below:

a. Category 100: Classrooms

Classroom facilities include seminar rooms, classrooms, lecture halls and support space for any of these. A relatively new category of space referred to as "class/lab" has developed that combines use categories. Because of the ambiguity around class, class lab and specific types of labs in the way AHEC tracks these spaces, this study will look at "Instructional Space" as a single category.

b. Category 200: Laboratories

This category can include teaching labs, research labs, class/labs, and associated support spaces. As stated above, for the purposes of this master plan all Instructional Space will be combined into a single category.

c. Category 300: Office Facilities

Offices, conference rooms, office support (such as conference, copy or file rooms) other administrative space is included in this category. This is used for both administrative and faculty staff space.

d. Category 400: Study Facilities

This category includes student study space, project rooms and is primarily library related space. The amount of space shown in this category by AHEC tracking suggests that only dedicated enclosed "quiet study rooms" fall under this designation outside of the library. This is not inclusive of the myriad of open, casual seating areas that serve as study space across campus.

e. Category 500: Special Use Spaces

Special use facilities can include unique subsets of space such as a media production room, athletic facilities, greenhouses etc. For the purposes of this analysis, this category has been combined with the PE/Rec/Athletics spaces for comparison to benchmarks. Athletic Facilities are included but also considered separately. A separate study of the PE Events Center is pending to examine this category of space in more detail.

f. Category 600: General Use Spaces

General use spaces are those things that serve the general student body including dining, lounges, retail, informal recreation space, and spaces seen in a student union. For the purposes of this analysis, this category has been combined with the Student Union spaces for comparison to benchmarks. The Tivoli, as a student union, is included but also considered separately.

g. Category 700: Support Facilities

Support Facilities include IT related spaces, shop/ maintenance space, central service space or what is sometimes termed "physical plant". Most of the spaces tracked in this category by AHEC are managed by AHEC .Those that are "owned" by the individual institutions are called out in the analysis.

h. Category 800: Health Care Facilities:

This is simply any clinic space providing patient care. The only space in this category at Auraria is the current campus health clinic.

i. Category 900: Residential Facilities:

Housing facilities for any student or faculty/ staff fall in this category. Currently no housing is considered a campus/AHEC or institutionally owned space at the Auraria Campus.

Table 4.c - Hybrid Benchmarking Model

REVISED 3/21/16

CCD	2015 Staff/Fac FTE	478	(seat count with adjuncts@3:1)
CCD	2015 Student FTE	5,129	(not incl. on-line enrollment)

		Instructional Facilities (100/200)	Office Facilities (300)	Study Facilities (incl.Library) (400)	SPECIAL USE (500) Special Use	SPECIAL USE (500) Health Care	SPECIAL USE (500) PE/Athl/Rec	GENERAL USE (600) General Use, Assembly	GENERAL USE (600) Student Activity Facilities	Support Facilities (700)	TOTAL
CURRENT											
CCD - Current	Current ASF	163,421	92,371	12,040	2,227	460	16,000	34,483	21,883	9,534	**352,419**
	ASF/Stud FTE	32	**141** (fac/staff)	2	0.4	0.09	3.1	7	4	2	69
	% of total SF	46%	26%	3%	5%			16%		3%	
NOTES				*2,549 of extg sf is non-library. Total Library = 166,242****		*50% of CCD studentsusers of clinic=10% of MSUD&CCD pop. 10% of Clinic = 460*	*CCD pop = 23% of total MSUD & CCD pop. 23% of PE Events Ctr = 16,000*				
BENCHMARKS											
CCD Guidelines	Req'd ASF	166,481	79,288	12,040	19,000			62,648		9,534	**348,991**
	ASF/Stud FTE	30 (32 actual)	150(166 actual)	2	4			12		2	68
	% of total SF	48%	23%	4% (3% actual)	8% (5% actual)			12% (18% actual)		3%	
2 Yr Inst.	ASF Benchmark	40	150	4	2	0.5	4.5	2	5	4	
	% Benchmark	40%	25%-30%	4%	7-8%			9-12%		5%	
NOTES		*Based on adding (2) class labs and (1) classrm**		*Assume use of entire library is significantly above benchmrk*	*Assumes current space is adequate*	*Assumes Clinic will need to expand*	*Assumes current space is adequate*	*Assumes new 150 seat assembly space*	*Assumes 15% increase needed for Tivoli functions*	*Assumes current space is adequate*	
SURPLUS/DEFICIT											
CCD	ASF Surplus Deficit	-3,060	13,083	0	-313			-6,282		0	3,428
NOTES		*Deficit can be negated by rightsizing*	*Changed benchmmark from 130 to 150 asf/FTE*	*Confluence & Cherry Creek provide adequate non-library spc*			*Double counting PE space for both MSUD & CCD-excludes Regency*				*Small net surplus - but redistribution of space is needed*

* (2) classlabs at 30 seats ea., 40 asf/seat; (1) classrm at 30 seats, 22 asf/seat

** Fine tuned based on more specific asf/FTE for Academic vs. Academic functions by Center??

***Total library # excludes classrooms and circulation

C) SPACE NEEDS

1. METHODOLOGY

The development of space needs is a multi-layered analysis that includes considering current space distribution and utilization, and future needs based on projected enrollment, staffing and academic/ institutional growth or change. The bulk of the data used to assess existing space conditions was provided by CCD through existing AHEC or Facility Department records and/or specific information relayed to the consultant team by faculty/staff representatives. Because a number of the facilities and particular instructional spaces are shared, some assumptions were made as to how spaces are assigned or "owned" and these assumptions are called out. No on-site inventory was conducted to verify room usage, space type or square footage.

Space need projections were based on two primary sets of data: First, enrollment projections provided by CCD and extrapolated by the consultant team to reflect growth beyond 2020; and second, benchmark data from a variety of sources that provides a means to compare CCD to other institutions and/or national higher education guidelines. In addition, compensation was given to the fact that a tri-institutional campus has a unique distribution of space as a result of sharing common amenities, support space, physical plant etc. This creates some challenges when comparing on an "apples to apples" basis. On the one hand this makes a more efficient campus. Relative to CCD, however, it actually provides some spaces, or more space in certain categories, than would typically be available on a community college campus (e.g. a full recreation center or large library). Overall, guidelines developed are on the conservative side of the available benchmark data to reflect the efficiencies, and recognize the funding challenges of building new space in the higher education economic environment in the state.

The end result is a macro level quantification of space needs at an institution wide level. These space needs are defined at broad space category levels and do not negate the need for future detailed planning and programming of individual buildings and spaces as the master plan phases are implemented. No on-site inventory was conducted to verify room usage, space type or square footage.

2. DATA PROVIDED

The following data was provided by CCD:

- Room inventory by building and ownership status from AHEC
- Color coded block plans indicating current occupancy by owner from AHEC
- Class scheduling data from the Registrar's office and AHEC for a typical week in the fall semester of 2014
- Historical student enrollment figures from the institutional research office
- Projected student enrollment figures from the CFO's office for CCD
- Current staffing numbers from Human Resource records
- Anecdotal surpluses and deficits as communicated by departmental representatives during programming interviews
- Observations of existing conditions during building walk-throughs by the consultant team

(It should be noted that the occupancy/ownership data and drawings provided do not accurately reflect current conditions in all cases. Where possible, RNL modified the data to reflect actual occupancy based on available information)

3. PROJECTED SPACE NEEDS AND GAP ANALYSIS

a. Previous Study Projections

When the 2007 Master Plan was completed, enrollment projections assumed a total student population of 31,373 and a total campus population (faculty and staff included) of 35,101 for all 3 institutions by 2026. These numbers were adjusted in 2012. The methodology applied in the 2012 Strategic Implementation Plan to arrive at the projected space need was based on an overall GSF per student figure, defined by benchmarks collected and the current asf/student at that time. This figure, 85 GSF/FTE (or approximately 50-60 asf/FTE), was then multiplied by the range of projected student population to arrive at the total campus square footage requirement. In this update the projections showed up to 6,800 additional students by 2021, for a campus total of 50,400 students.

The 2012 Plan extrapolated GSF requirements for the campus through 2020 based on population growth in Colorado, the portion of that population that would attend Colorado Public Higher Education Institutions, and the percentage of that population that the campus has captured historically. Several models were developed suggesting from 405,000 to 632,000 GSF of additional space would be needed for all three institutions. Using a 60% factor, this translates to approximately 243,000 - 379,000 assignable square feet.

b. Revised Projections

Space needs projections rely on three primary factors: Enrollment projections, employee projections, and space use benchmarks. Enrollment projections are described above. Space use Benchmarks are outlined in Part III. CCD's Human Resource department provided employee data detailing the number of employee in each department. Employee projections were calculated in two different ways, depending on whether the employees were associated with an academic center or an administrative division. For academic centers, a student to faculty ratio was calculated for using FTE enrollment in each academic center. This ratio was then applied to center enrollment projections to determine the number of employees in future years. For administrative divisions, staff projections were calculated in three steps. First, a student to administrative staff ratio was calculated (1:0.037). Next, a proportion was calculated determining the size of a given administrative division relative to the total number of administrative staff. If, for example, an administrative division consisted of 20 employees and there were 200 total administrative employees, then that division was 10% of the total administrative staff. Finally, the student to staff ratio and the divisional proportion were both applied to future university enrollment figures to determine future staff projections. The following table details the FTE employee projections used for the Neighborhood Master Plan.

Community College of Denver Instructional and Office Facility Space Needs Projections

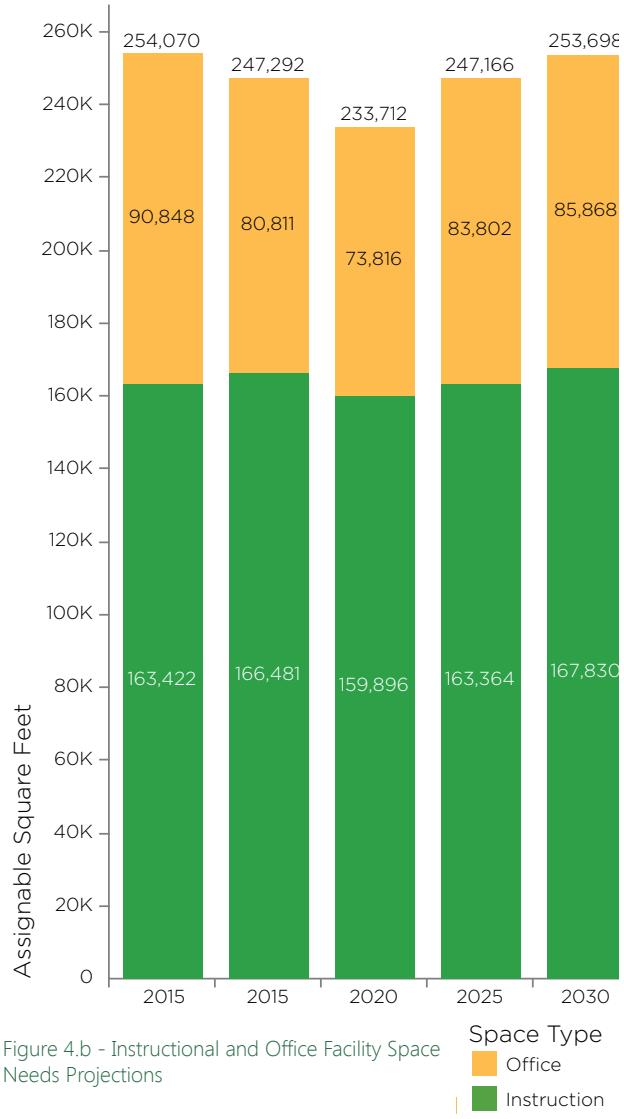


Figure 4.b - Instructional and Office Facility Space Needs Projections

Table 4.d - Total Institutional Space Need Organized By Space Type

	CURRENT ASF	CURRENT REQUIRED ASF	2020 PROJECTED NEED	2025 PROJECTED NEED	2030 PROJECTED NEED
FTE Enrollment	5,129	5,129	4,885	5,014	5,180
Instructional Facilities	163,422	166,481	159,896	163,364	167,830
Office Facilities	92,371	79,288	73,816	83,802	85,868
Study Facilities	12,040	12,040	11,467	11,770	12,160
Special Use Facilities*	18,687	19,000	18,096	18,574	19,189
General Use Facilities**	56,365	62,648	59,668	61,243	63,271
Support Facilities	9,534	9,534	9,080	9,320	9,629
TOTAL	352,419	348,991	332,023	348,074	357,946

These projections indicate that there is currently a slight surplus in space but that by 2030 a 1.6% increase in space will be required.

*Includes health care and PE/Athletics/Recreation Facilities

**Includes Student Activity Facilities

4. GAP ANALYSIS

The space needs analysis shows that CCD has a gap in multiple space types including instructional facilities, but has a surplus of space in other categories such as office facilities. The following table shows the quantification on the gap analysis using existing facility area and industry benchmarks by 2030.

Table 4.e - Gap Between Existing Facilities and Current Need

	EXISTING ASF	CURRENT REQUIRED ASF	SURPLUS / (DEFICIT)
FTE Enrollment	5,129	5,129	
Instructional Facilities	163,422	166,481	(3,059)
Office Facilities	92,371	79,288	13,083
Study Facilities	12,040	12,040	0
Special Use Facilities*	18,687	19,000	(313)
General Use Facilities**	56,365	62,648	(6,283)
Support Facilities	9,534	9,534	0
TOTAL	352,419	348,991	3,428

Due to excess office space, the analysis shows an overall small surplus in total current space.

*Includes health care and PE/Athletics/Recreation Facilities

**Includes Student Activity Facilities

The capacity gap increases slightly as growth projections near 6,200 FTE students and 650 FTE employees in 2030. The following table quantifies the gap between CCD's existing facilities and those needed based on growth projections and industry benchmarks.

Table 4.f - Gap Between Existing Facilities and Projected Need

	EXISTING ASF	2030 PROJECTED NEED	SURPLUS / (DEFICIT)
FTE Enrollment	5,129	5,180	
Instructional Facilities	163,422	167,830	(4,408)
Office Facilities	92,371	85,868	6,503
Study Facilities	12,040	12,160	(120)
Special Use Facilities*	18,687	19,189	(502)
General Use Facilities**	56,365	61,243	(6,906)
Support Facilities	9,534	9,320	(95)
TOTAL	352,419	357,946	(5,527)

The projected deficit by 2030 indicates a deficit of 1.5%

The projected 2030 ASF per student equates to 69 ASF per student which is within the recommended range for a community college.

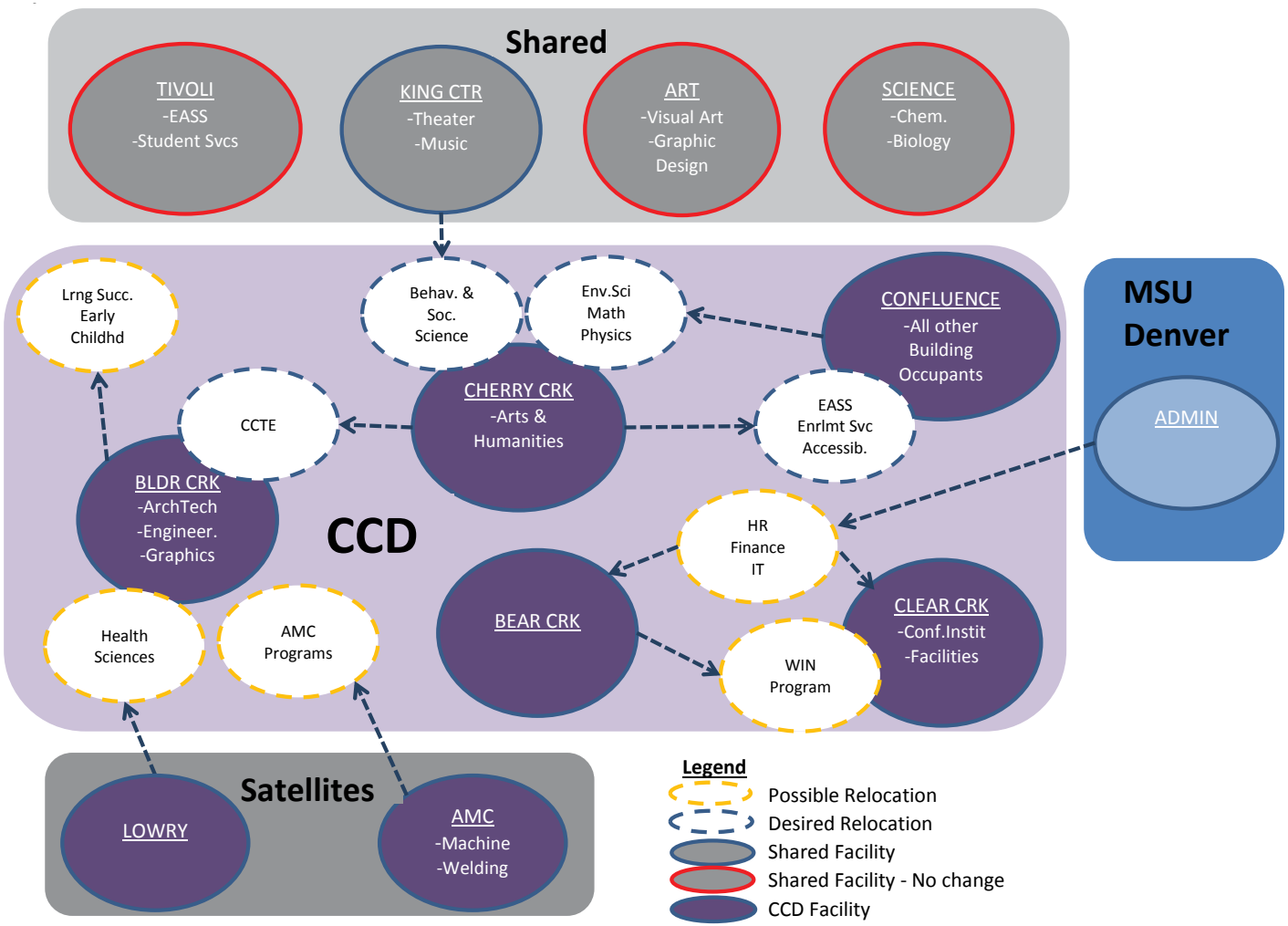
**See Appendix for gap analysis data by Center.*

D) ADJACENCIES AND POTENTIAL RELOCATION

1. ADJACENCIES AND POTENTIAL RELOCATION

The following diagram illustrates key adjacencies that were initially communicated to the planning team by stakeholders during data collection and programming interviews. These preliminary suggestions were intended to improve operations through co-location of functions that are related and currently separated between buildings; or are being driven by another institution's desire to occupy space currently occupied by CCD.

These concepts were then explored and refined during alternatives development.



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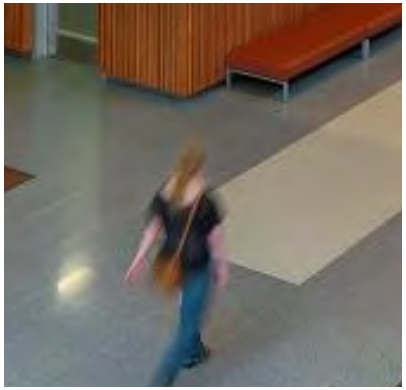
COMMUNITY COLLEGE OF DENVER



05

RECOMMENDATIONS

A) SHORT, MID, LONGTERM PRIORITIES

The master planning process is an iterative one that considers multiple options and variables, testing their validity, benefits and detriments, until a feasible and favored set of recommendations is established. This becomes more complex when the plan is being driven not only by CCD's own internal goals, objectives and space needs, but also by the larger Auraria Campus Master Plan and by shared space use issues involving the other institutions, particularly MSU Denver. The following recommendations strive to achieve a balance between the internal goals and larger campus context to address CCD's and Auraria's needs.

Recommendations were developed for three timeframes: short, mid and long-term. Short-term is defined as roughly the first four years (through 2020). Mid-term is defined as the second five years (through 2025) and long-term beyond that timeframe up to approximately 2035. These timeframes roughly correspond to Phases I through III that were outlined in the 2012 Strategic Implementation Plan for the entire campus. However, timeframes are dependent upon funding streams so a more realistic way of looking at this is as a sequence of desired outcomes that will be driven by addressing current deficiencies and by future enrollment. When enrollment reaches a given projected level, these action items will be triggered. Enrollment growth for CCD between today and 2020 is expected to change very little overall as discussed in the Analysis Section (04). So the most immediate priorities are to address current space needs and adjacency requirements the College has.

1. Short Term

(2016-2020 OR Enrollment Projection of 4,885 Student FTE)

Several critical priorities rose to the top of the list for CCD during the planning process that helped to shape this Neighborhood Master Plan and also represent the short term action items:

- Complete the necessary and agreed upon swap of space between CCD and MSU Denver involving removing CCD's administrative functions from the Administration Building and MSU Denver's Nursing Program from the Boulder Creek Building.
- Find a home for the Administrative functions within the CCD Neighborhood.
- Backfill with the vacated space in the Boulder Creek Building one of the programs currently located remotely from the main campus (either the Health Sciences Center or Machining and Welding Program AMC).
- Find an appropriate use for the Clear Creek Building.

Multiple alternatives were developed to explore how to best address these priorities. The following outlines the alternatives that were considered and highlights the recommended direction.

Priority: Relocate Finance/CFO, Human Resources, and IT (currently located in the Administration Building)

Recommendation

Move IT to Clear Creek and both HR and Finance/CFO functions into Boulder Creek

This option makes use of space that will be vacated in Boulder Creek as well as space that would be created by decentralizing the computer lab. Clear Creek, once vacated by MSU Denver, can house the IT department. Dispersing computer lab spaces to all of the primary buildings (Confluence, Cherry Creek, and Boulder Creek) is favored by both students and staff. Space can be created for this by reconfiguring office space in Confluence and Cherry Creek that is currently underutilized. HR and Finance/CFO functions can move in once CU Denver's lab and studio functions relocate. A temporary home for HR and Finance/CFO may be created, if necessary. Options for temporary housing for HR and Finance will need to be explored further. Ultimately, HR and Finance/CFO will reside in CU Denver's temporary space in Boulder Creek.

Other options considered

Place Finance/CFO in Clear Creek, HR in Cherry Creek and IT in Boulder Creek.

This option is not ideal as it disperses these functions into three locations based on where smaller pockets of space are available or can be created through reconfiguration. Clear Creek is not a preferred location for HR or Finance functions in terms of location or available square footage. The two functions ideally need to be together and Clear Creek does not have adequate space. Boulder Creek, in its current configuration can best accommodate additional administrative space by decentralizing the computer lab.

Move WIN to Clear Creek, place IT in Bear Creek, HR in Cherry Creek and Finance/CFO in Boulder Creek.

This is a slight improvement to the first option in that, while still split into three locations, the adjacencies are better. Clear Creek is a viable option long term for WIN as a stand-alone function that needs good public access. IT in Bear Creek has some benefits because of its central location to the all facilities in the Neighborhood. HR in Cherry Creek places it in proximity to the President and Provost's offices which may have benefits. Finance/CFO in Boulder Creek is more a default solution than an advantageous one, as that is the only remaining place with available space until such time that Boulder Creek is expanded.

Confluence Building

Priority: Backfill the Boulder Creek Building

Recommendation

Relocate Health Sciences from the Lowry Campus into the Boulder Creek Building.

The advantages of this option include:

- The Health Sciences building at Lowry is significantly underutilized, costing CCD money for space not used effectively.
- Enrollment in this program is suffering from being in a remote location without good access to public transportation where it is also in competition with programs offered by other institutions that have more up to date facilities.
- The Dental and Vet Clinics would potentially increase their clientele and revenue sources by being in a more urban and central location
- Retrofitting Boulder Creek for this program is less costly.

Recommendation

Expand Boulder Creek to include additional functions in the building

It is recommended that an addition be completed concurrently with the remodel. The advantages of completing this option in the short term are:

- Finance/CFO, HR, who prefer to be co-located, can both fit in Boulder Creek, along with Health Sciences.
- The Nutrition Program's Teaching Kitchen can be brought onto campus from their 10th and Osage location and can be expanded to include a working cafe in the building. Currently they are borrowing this kitchen and would benefit from owning such a space.
- A new front door, CCD amenity at the Neighborhood gateway and branding opportunity can be created through the design and construction of this addition as an infill of the courtyard facing Colfax Avenue.

*Note - Depending upon the timing of CU Denver's lab relocations, the HR and Finance/CFO relocation may not occur until the mid-term timeframe.

Other options considered

Move the Machining and Welding programs currently located in a leased, satellite location into the Boulder Creek Building.

This option was considered and rejected based on numerous factors including the following (further details have been provided in the Appendix):

- A substantial investment was made recently in the leased facility specifically for this program and the lease term is for 10 years at which point lease extensions or ownership may be considered.
- There are benefits to co-locating industry based training facilities with the academic program off site, which would not be possible on the main campus.
- Retrofitting Boulder Creek to accommodate this program and relocating the equipment are more costly than other explored options.
- Truck access to the Boulder Creek Building and noise control are substantially more difficult than at the current location or other potential sites on campus.

2. Mid Term

(2020-2025 OR Enrollment Projection of 5,014 Student FTE)

As noted previously, the relocation of HR/Finance functions may occur in the mid-term as shown in the phasing plan. The primary action items for the mid-term are related to capturing space elsewhere in existing buildings to provide requirements identified through benchmarking as being deficient today and/or realigning some of the support services to be in more desired locations.

Alternatives considered to address these areas of growth and change in the mid-term include the following. These can be accomplished as opportunities and funding are available.

- Create additional student study space as surplus space is available. This could include reconfiguring inefficiently used office space in the Cherry Creek or Confluence Buildings.
- Relocate several classrooms from the Modular Buildings to what is now occupied by MSU Denver's Anthropology Labs in the Cherry Creek Building (assumes MSU Denver can relocate these).
- Move the small food bank and book lending functions that are currently in the Tivoli to a central location in the CCD Neighborhood.
- Relocate CCTE and Visual Arts functions from Boulder Creek to be co-located with other functions in their departments (if space is available to do so).

3. Long Term

(2025-2030+ OR Enrollment Projections of 5,180 Student FTE)

Beyond the ten year time-frame there are potential long-term new construction projects that could be considered based on enrollment levels, and the status of other facilities at that point in time.

- Construct a new building for the AMC programs. Site options for this facility will need to be considered within the context of the Auraria Master Plan overall. This building could include structured parking if it is determined at that time that additional parking is required within the neighborhood per the 2012 Strategic Implementation Plan for the Auraria Campus. If this option is pursued, other academic space needs can be assessed to see if additional instructional and/or faculty space is needed for other programs within CCD that would be compatible with the AMC functions.
- Construct a new Administration building if academic space demands in the Boulder Creek or Cherry Creek Buildings are increasing and can be accommodated by vacating existing administrative space.

4. Goals and Objectives Met

The implementation of these recommendations will address the priorities set and the most critical goals and objectives including:

- Current space issues and consolidation of administrative functions in the CCD neighborhood are addressed.
- Inefficient office space is re-purposed for computer labs thereby optimizing use of existing space.
- Boulder Creek is re-purposed to support bringing a critical academic program onto campus which will positively impact enrollment.
- The revitalization of Boulder Creek will enhance the neighborhood gateway, place-making, branding and campus safety.

Tivoli

B) PHASING

1. Short Term

The timing of implementing the most immediate, short-term priorities is dependent upon a) dollars available for an initial minimal remodel of several spaces, b) major funding for a complete remodel and addition for Boulder Creek, c) MSU Denver's ability to vacate space in Clear Creek and Boulder Creek currently occupied by Veteran's Upward Bound, Aerospace Engineering Science (AES) programs and Nursing, and d) CU Denver's ability to relocate their engineering labs and visual arts studios in the short-term.

In order for CCD to vacate administrative space in the Administration Building as part of a space swap with MSU Denver, it is recommended that HR and Finance/CFO move to temporary offices in one of the modular buildings. MSU Denver currently occupies this office space and would need to relocate those functions to the Administration Building. In addition, it will be necessary to downsize and decentralize the main computer lab that is currently in Boulder Creek. This change allows new academic programs to move into the building and is also an improvement that has been requested by both CCD students and faculty in order to make the computer labs more accessible. In order to accomplish this it will be necessary to reconfigure and minimally remodel space in both the Confluence and Cherry Creek Buildings to make room for smaller satellite computer labs. There is space that can be captured in these two buildings by reconfiguring currently underutilized/ surplus space in office areas. Ideally all of this can occur in 2017 (fiscal year 2018).

Construction of MSU Denver's new AES Building is underway and slated for completion by fall of 2017. This will allow MSU Denver to vacate its AES space in Boulder Creek. MSU Denver's Nursing program will be able to vacate the building once several moves occur with MSU Denver's buildings that should be complete in 2018. Because timing is unknown for the relocation of CU Denver's labs and studios, these spaces will be consolidated into a single suite within the Boulder Creek building, at CCD's expense. Ultimately, this space will become office space for CCD's HR and Finance/CFO functions.

Once the Boulder Creek building has been cleared of all MSU Denver functions, the remodel can be completed to accommodate the relocation of the Health Sciences program from the Lowry campus into the building. This move is dependent upon the construction of a building addition. Therefore, it is recommended that the addition be constructed concurrently with the major remodel of the building to be more cost effective and shorten the timeframe for disruption of the building occupants who will need to remain in the building for the duration of the project. The addition will provide instructional and office space for Health Sciences. Space vacated by MSU Denver will become new space for the Nutrition Teaching Kitchen and Cafe that is currently located off-campus, and will provide additional student study space.

2. Mid Term

With the exception of the final move for the HR/ Finance, most of the remainder of the master plan goals and objectives are less time sensitive and address bringing a few disparate functions into the neighborhood such as the Food Bank, and classroom space that is currently housed in the Modular Buildings. There is less flexibility as to when these items need to be addressed.

The AMC programs, currently located off-site and in a leased facility do have a time constraint. The ten year lease will expire by 2025. Several years prior to that deadline, decisions will need to be reached as to whether the program can renew its lease, consider facility purchase options or will require new construction in the CCD Neighborhood at one of the potential sites identified in the site planning sections of this document.

3. Phasing Sequence

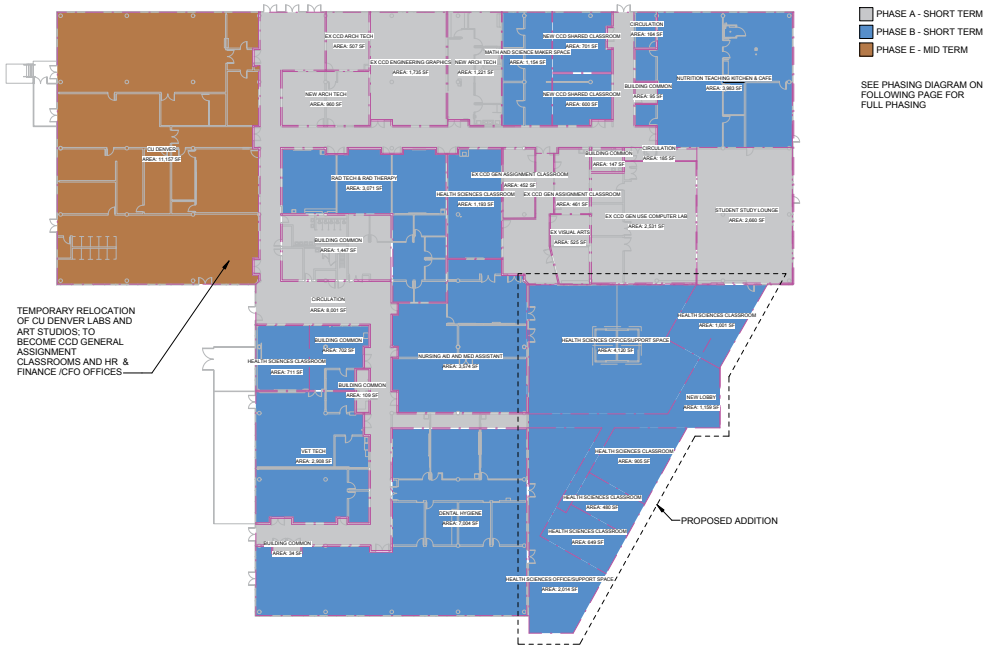
The sequence of events that need to occur in order to implement the short and long term goals is mapped out in the following preliminary phasing chart. The time-frames shown for each move and/ or remodel are the basis for the escalation factors used to determine probably cost and described in Section C.

CCD

Phasing

Revised 6/13/16

			SHORT TERM				MID-TERM			LONG-TERM		
User Group	Current Location	Future Location	Fisc. Yr 2017	Fiscal Yr 2018 (A)	Fiscal Yr 2019 (B)	Fiscal Yr 2020 (C)	Fiscal Yr 2021 (D)	Fiscal Yr 2022 (E)	Fiscal Yr 2023 (F)	2024 (G)	2025 (H)	2026+ (I)
MSUDen Vets Upward Bound	Clear Creek	Admin.										
IT	Admin.	Clear Creek										
Computer Lab -Satellite	Boulder Creek	Confluence										
Computer Lab - Satellite	Boulder Creek	Cherry Creek										
Human Resources	Admin.	Temp location TBD										
Finance/CFO	Admin.	Temp location TBD										
MSUDen AES	Boulder Crk	AES Building										
CU Den Engineer/Vis Arts	Curr.BldrCrk Suites	New Bldr Crk Suite										
MSUDen Nursing	Boulder Crk	Plaza										
Health Sciences	Lowry Campus	Boulder Creek										
CCD Boulder Creek Expansion	NA	Boulder Creek										
Nutrition/Teaching Kitch/Café	10th & Osage	Boulder Creek										
Visual Arts	Boulder Crk	Art Building					TBD					
CU Denv	Boulder Crk	Art/Engin.Bldg					TBD					
HR & Finance/CFO	MSUDen Modulars	Boulder Creek						TBD				
Food Bank/Book Lending	Tivoli	Confluence										
MSUDen Anthropology Labs	Cherry Creek	Central/West										
Modular Classrooms	Modulars	Cherry Creek										
AMC	Leased Space	New Bldg										
		Calender Year July-June	*2016-2017*	*2017-2018*	*2018-2019*	*2019-2020*	*2020-2021*	*2021-2022*	*2022-2023*	*2023-Beyond*		



C) ESTIMATES OF PROBABLE COST

All costs developed for the Master Plan are related to the short and mid-term renovation and new construction associated with the Boulder Creek Building Building. Details of these estimates are provided in the Program Plan Document. A summary of the costs by timeframe is show on the next page. Definitions and cost details are provided in the Appendix.

Total Project cost for short-term projects associated with the renovation and new addition to the Boulder Creek Building is approximately $21,934,240. The creation of satellite computer labs is approximately $521,131 of remodel construction costs. 6% of the total project cost is expected to be contributed by CCD.

Mid-term costs are associated with final renovation of CU Denver's lab space to accommodate CCD's HR and Finance Departments with an estimated remodel construction cost of $1,533,162.

CC-C: CAPITAL CONSTRUCTION REQUEST FOR FY 2017-18

Agency :	**Community College of Denver**	State Controller Project No. (if applicable):	
Project Title:	Short Term Master Plan Projects	Agency Signature Approval:	Date
Project Year(s):	FY 2018 - 18	OSA Signature Approval:	Date
Agency Priority Number:		OSPB Signature Approval:	Date:
Name and E-mail of Preparer:			

	Revision? Yes No If yes, last submission date:	Total Project Costs	Total Prior Year Appropriation(s)	Current Year Request FY 17-18	Year 2 Request	Year 3 Request	Year 4 Request	Year 5 Request
A.	***Land /Building Acquisition***							
(1)	Land /Building Acquisition	$ -	$ -	**$ -**	$ -	$ -	$ -	$ -
B.	***Professional Services***							
(1)	Master Plan/FPP	$ -	$ -	**$ -**	$ -	$ -	$ -	$ -
(2)	Site Surveys, Investigations, Reports	$ -	$ -		$ -	$ -	$ -	$ -
(3)	Architectural/Engineering/ Basic Services	$ 1,791,313	$ -	**$ 1,791,313**	$ -	$ -	$ -	$ -
(4)	Code Review/Inspection	$ 179,131	$ -	**$ 179,131**	$ -	$ -	$ -	$ -
(5)	Construction Management	$ 612,180	$ -	**$ 612,180**	$ -	$ -	$ -	$ -
(6)	Advertisements	$ -	$ -	**$ -**	$ -	$ -	$ -	$ -
(7a)	Inflation for Professional Services	$ 213,156	$ -	**$ 213,156**	$ -	$ -	$ -	$ -
(7b)	Inflation Percentage Applied		0.00%	**5.00%**	0.00%	0.00%	0.00%	0.00%
(8)	Other	$ -	$ -	**$ -**	$ -	$ -	$ -	$ -
(9)	*Total Professional Services*	$ 2,795,781	$ -	**$ 2,795,781**	$ -	$ -	$ -	$ -
C.	***Construction or Improvement***							
(1)	Infrastructure	$ -	$ -	**$ -**	$ -	$ -	$ -	$ -
	(a) Service/Utilities	$ -	$ -	**$ -**	$ -	$ -	$ -	$ -
	(b) Site Improvements	$ 313,775	$ -	**$ 313,775**	$ -	$ -	$ -	$ -
(2)	Structure/Systems/ Components							
	(a) New (GSF): 10,327	$ 3,407,910	$ -	**$ 3,407,910**	$ -	$ -	$ -	$ -
	New $282 /GSF							
	(b) Renovate GSF: 65,593	$ 9,672,781	$ -	**$ 9,672,781**	$ -	$ -	$ -	$ -
	Renovate $133 /GSF							
(3)	Other (Contractor Indirects)	$ 2,072,108	$ -	**$ 2,072,108**	$ -	$ -	$ -	
(4)	High Performance Certification Program	$ 100,037	$ -	**$ 100,037**	$ -	$ -	$ -	$ -
(5a)	Inflation for Construction	$ 1,213,716	$ -	**$ 1,213,716**	$ -	$ -	$ -	$ -
(5b)	Inflation Percentage Applied		0.00%	**5.00%**	0.00%	0.00%	0.00%	0.00%
(6)	*Total Construction Costs*	$ 16,780,326	$ -	**$ 16,780,326**	$ -	$ -	$ -	$ -
D.	***Equipment and Furnishings***							
(1)	Equipment	$ 22,000	$ -	**$ 22,000**	$ -	$ -	$ -	$ -
(2)	Furnishings	$ 2,525,985	$ -	**$ 2,525,985**	$ -	$ -	$ -	$ -
(3)	Communications	$ -	$ -	**$ -**	$ -	$ -	$ -	$ -
(4a)	Inflation on Equipment and Furnishings	$ 171,282	$ -	**$ 171,282**	$ -	$ -	$ -	$ -
(4b)	Inflation Percentage Applied		0.00%	**5.00%**	0.00%	0.00%	0.00%	0.00%
(5)	*Total Equipment and Furnishings Cost*	$ 2,719,267	$ -	**$ 2,719,267**	$ -	$ -	$ -	$ -
E.	***Miscellaneous***							
(1)	Art in Public Places=1% of State Total Construction Costs (see SB 10-94)	$ -	$ -	**$ 157,735**	$ -	$ -	$ -	$ -
(2)	Annual Payment for Certificates of Participation	$ -	$ -	**$ -**	$ -	$ -	$ -	$ -
(3)	Relocation Costs	$ -	$ -	**$ -**	$ -	$ -	$ -	$ -
(4)	Other Costs [specify]	$ -	$ -	**$ -**	$ -	$ -	$ -	$ -
(5)	Other Costs [specify]	$ -	$ -	**$ -**	$ -	$ -	$ -	$ -
(6)	Other Costs [specify]	$ -	$ -	**$ -**	$ -	$ -	$ -	$ -
(7)	Other Costs [specify]	$ -	$ -	**$ -**	$ -	$ -	$ -	$ -
(8)	*Total Misc. Costs*	$ 157,735	$ -	**$ 157,735**	$ -	$ -	$ -	$ -
F.	**Total Project Costs**	$ 22,453,110	$ -	**$ 22,453,110**	$ -	$ -	$ -	$ -
G.	***Project Contingency***							
(1)	5% for New	$ 170,396	$ -	**$ 170,396**	$ -	$ -	$ -	$ -
(2)	10% for Renovation	$ 967,278	$ -	**$ 967,278**	$ -	$ -	$ -	$ -
(3)	*Total Contingency*	$ 1,137,674	$ -	**$ 1,137,674**	$ -	$ -	$ -	$ -
H.	**Total Budget Request [F+G(3)]**	**$ 23,590,783**	**$ -**	**$ 23,590,783**	**$ -**	**$ -**	**$ -**	**$ -**
I.	***Source of Funds***							
1	CCF	$ 22,175,336	$ -	**$ 22,175,336**	$ -	$ -	$ -	$ -
2	CF	$ 1,415,447	$ -	**$ 1,415,447**	$ -	$ -	$ -	$ -
3	RF	$ -	$ -	**$ -**	$ -	$ -	$ -	$ -
4	FF	$ -	$ -	**$ -**	$ -	$ -	$ -	$ -

D) URBAN PLANNING

1. SPECIFIC PROJECT PLANNING

a. Boulder Creek Building

The Boulder Creek building has been targeted as a relatively near term building for potential renovations and a redistribution of programming for CCD. With this discussion, the idea of expanding the building along its Colfax Avenue edge with a small addition has been considered in order to add additional capacity to the building as well as to enhance the pedestrian realm and provide identity improvements, such as signage and improved architecture, along this very important edge. Certain other structural and architectural improvements have been proposed in order to enhance the visibility of the entrances of the building, especially along 10th Street, and create an overall stronger presence for the building and its uses. A program plan, done simultaneously with the report, goes into greater detail about the uses and programming of the building. This section aims at describing the urban design goals of the building and its renovations and important considerations as the work develops over time.

Building Form and Material

The Boulder Creek building, along with most of its neighbor buildings on the campus, is a relatively simple structure with minimal ornamentation and variation on its exterior. Similarly, aside from a minimalistic transition from a consistent row of windows to small doorway areas, the building façade is very consistent around its entire perimeter. As a result, it is difficult to discern the entry ways to the building and even more difficult to decipher which entryway is its primary front door. The proposed changes include architectural treatments that help draw attention to the front door. These can include new vertical elements with a different but complementary materiality to help differentiate the front door along 10th Street. This vertical element can be glass and metal or other materials to give it a highlighted feel and can rise above the existing building roof line. This entry tower can have integrated signage to describe the use of the building as well display the identity of CCD. A clearer, more pronounced entryway along 10th can help activate that corridor and make a positive contribution to the life of the campus's most important pedestrian spine.

Currently a Pinch Point and Innactive Facade Along Light Rail and Colfax

The proposed new addition along Colfax Avenue has the opportunity to totally redefine the Boulder Creek building from an aesthetic and functional point of view. Being that this addition will replace the existing frontage (or lack of a frontage) along Colfax, the addition should be designed to improve on the limitations of the existing building. One limitation of the existing building is its relative lack of transparency and visibility in and out of the building. The new addition should aim to increase the transparency by providing increased glazing to allow users a view out of the building as well as provide much needed "eyes on the street" to help provide an added layer of safety along Colfax and at the adjacent light rail station. This addition can also be more generous in height. The addition can be a taller and more comfortable single story structure with greater floor-to-ceiling heights, but it can also be two or more stories allowing for a greater increase in programmable space internal to the building and a greater presence along Colfax. A multiple story building will have to be studied to figure out its connections to the existing structure. In the long term, a building along this edge can be three to five stories according to the 2012 Master Plan.

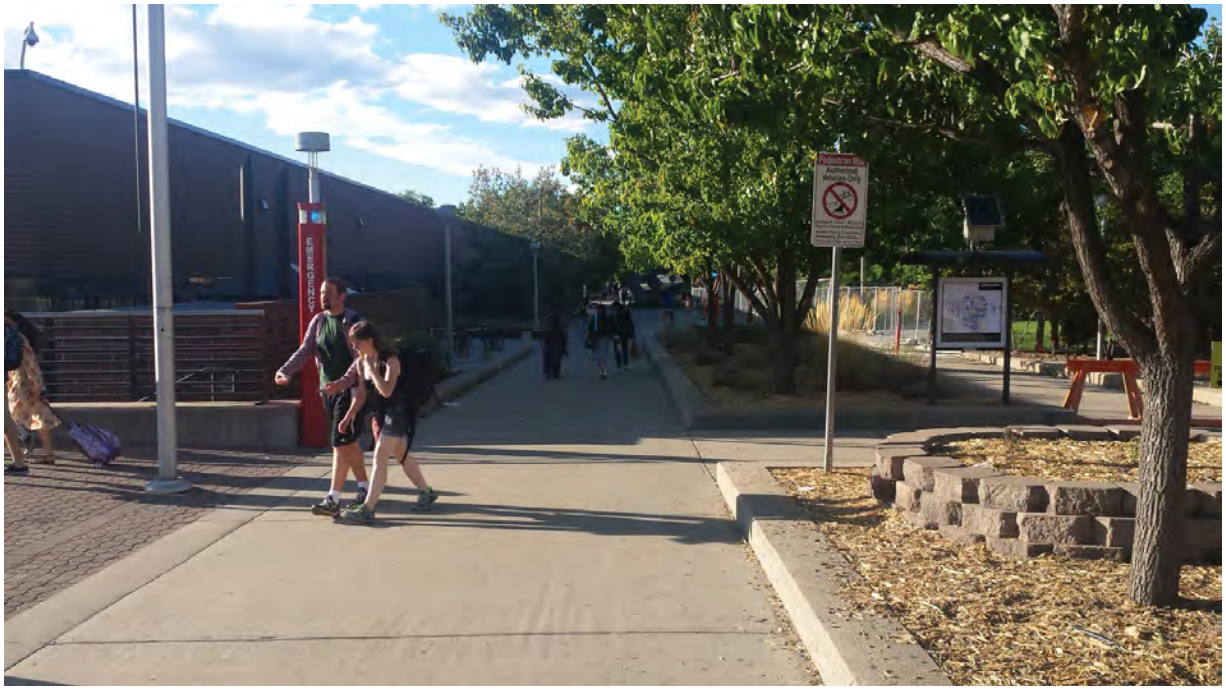
Potential Future for the Boulder Creek Building Along Colfax Avenue

Gateway and Identity

As a result of its presence along Colfax and its position as the point of entry for nearly all students, faculty and staff arriving by light rail at the Colfax at Auraria Station, the Boulder Creek building has an opportunity improve its role as the gateway into campus. Currently, the building does not possess the qualities associated with a gateway structure. Gateways are defined by providing an interesting, safe, and identifiable arrival to a place. Ideally, a gateway experience will help strengthen the identity of that place with signage, recognizable building forms and materials, and other elements special to that place. In order to achieve this, the Boulder Creek building should maximize the structural changes described above in order to create a more interesting and pleasant arrival sequence to the campus. In particular, the definition of its entry way along the 10th Street edge will allow the building to act as a contributor to the overall placemaking and activation of 10th Street, a corridor that has recently been invested in as a more sustainable and comfortable connection.

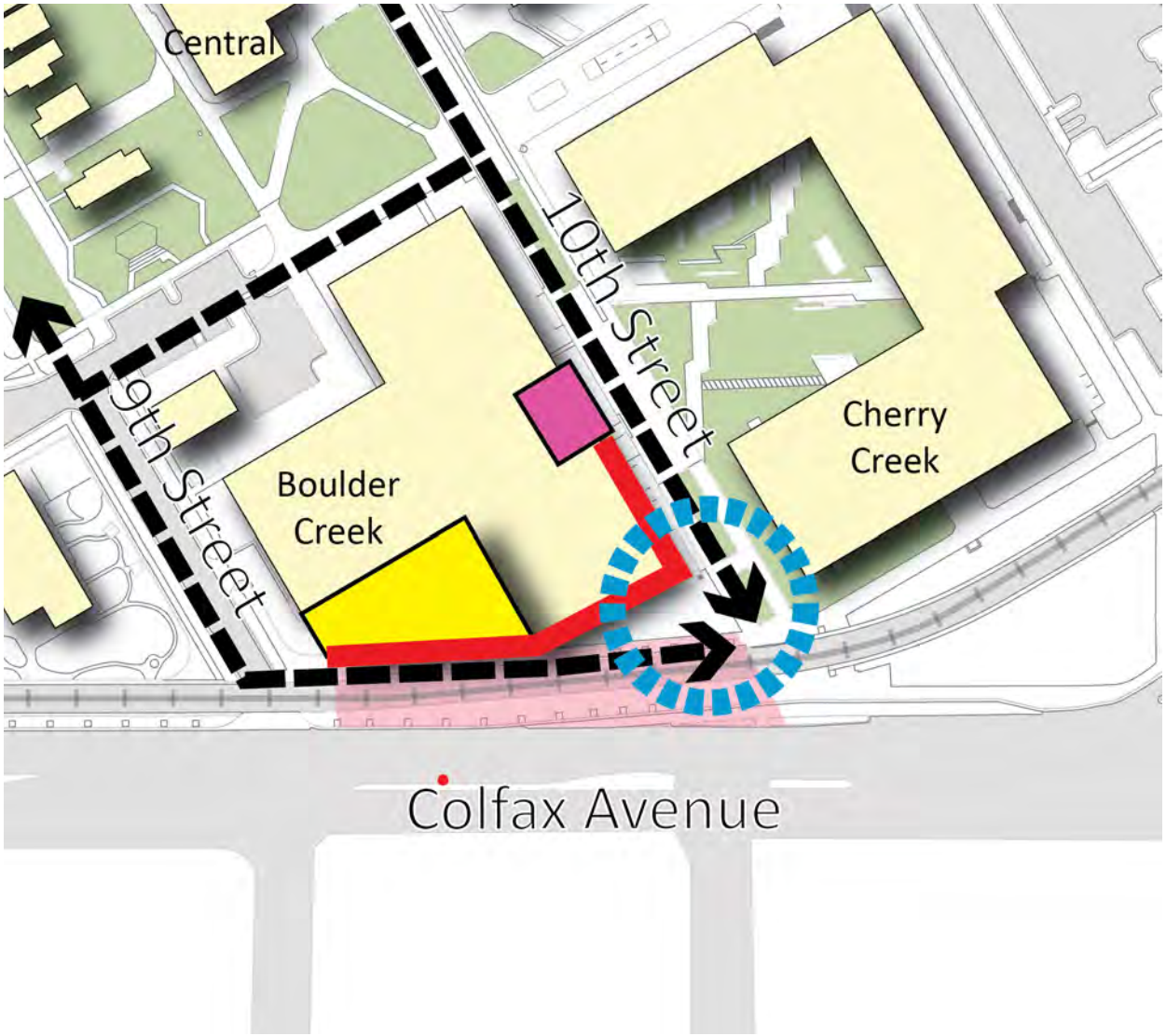
The southeastern corner of the Boulder Creek as it faces the light rail station should also be studied to find opportunities for gateway placemaking. In the short term, improved signage and identification at this primary corner can be applied to the existing structure. As a slightly longer term solution, the corner could see a renovation that would allow it to become more transparent and open up to the plaza adjacent to it. This renovation could look similar to the entryway tower proposed for the 10th Street doorway. The windows on this corner could expand along a larger portion of the façade – both vertically and horizontally – to make the building more inviting from this edge and provide greater visibility. The plaza surrounding this corner may also be reconfigured to improve Boulder Creek's presence and image. This reconfiguration of the plaza may see the wall surrounding this key corner removed and the sunken portion of the plaza peeled back to create a gradual transition from the higher transit plaza to the lower building area. The exact design of this plaza should be considered for a future design study.

In the long-term, the edge along Colfax and the primary corner should be totally reconsidered. The proposed addition is a great start and will provide several years of usability and improvement over the existing condition. In the future, however, this edge and, potentially, the entire building should be reconsidered in order to provide a great experience along this edge. A taller building (up to five stories) was identified at this site in the 2012 Master Plan. A building of this stature can totally redefine the entry experience and the identity along Colfax – both from a pedestrian experience and from the large number of cars driving by the campus. This edge can essentially act as a billboard with strong signage and identification advertising the Community College of Denver identity. This can include great signage, world-class architecture, and strong ground floor activation to create a great gateway structure for any user.



Existing Conditions Along 10th Street

Potential Future for the Boulder Creek Building Along 10th Street



Important Relationships and Design Considerations

2. FUTURE URBAN DESIGN AND PLANNING

a. Centers of Gravity

With the completion of the Confluence Building in 2013, a seed was planted for the direction and quality of growth and change in CCD's neighborhood. The Confluence was the first building in the CCD neighborhood to proudly and completely identify with the institution and provided some much needed gathering spaces, both internal to the building and outside. The confluence, with its outdoor plaza spaces and its connection to the rest of the CCD neighborhood and the campus, becomes a logical place to start building a new neighborhood center as new buildings get built or existing buildings get renovated over time. This neighborhood center can include new academic, office, and collaborative space (among other uses) clustered around open space and become a new center of gravity for the life of all users at CCD. This new neighborhood center will not detract from the recent work done at Cherry Creek building and other places, but will instead compliment it by expanding the services and amenities of CCD into the farther reaches of the neighborhood.

Building Sites and Uses

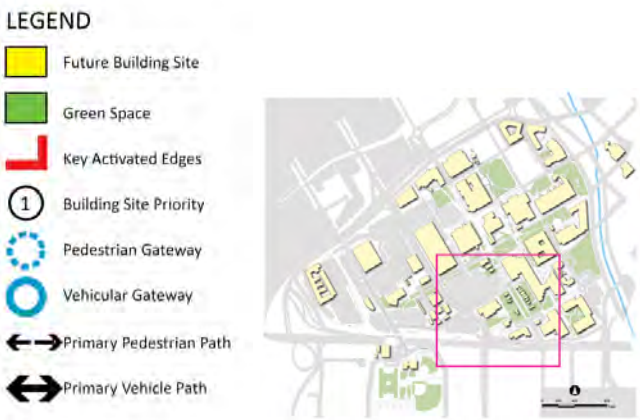
In its current state, the CCD neighborhood is largely built out with the majority of the buildings being of the original stock of structures built when the campus was formed in the 1970s. Some of the existing buildings are viable and functional for the uses that are in them (or are planned to be in them) while others have outlived their usefulness and represent opportunities to redevelop with new structures as funding and need appears over time. Only one site within the current boundary of the CCD neighborhood is currently undeveloped, though this site – as explained below – has certain challenges that make building on it more difficult than other sites.

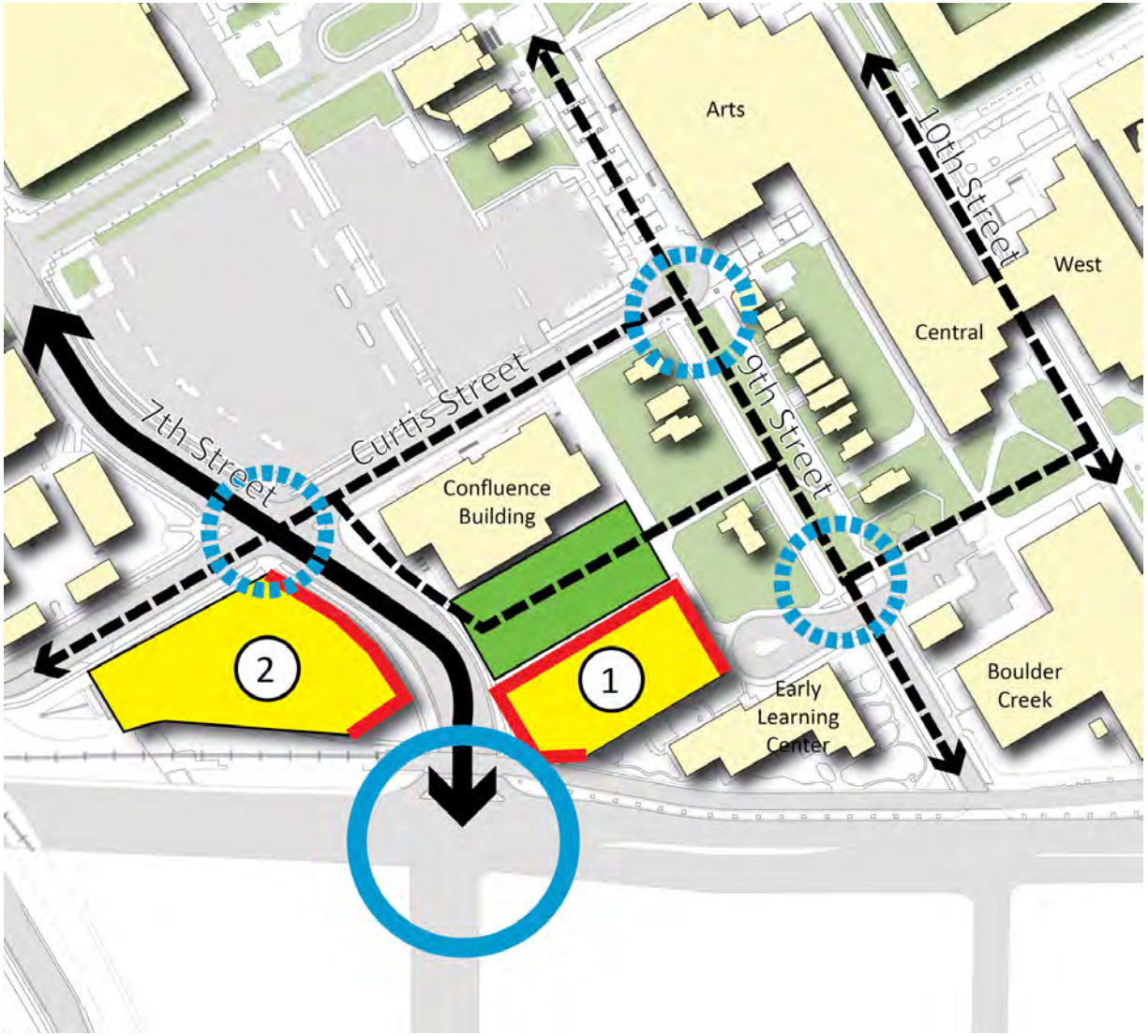
Despite the existence of a building currently occupying the site, the Bear Creek site (Site 1) represents the best and most beneficial future growth site within the CCD neighborhood. This site has several clear advantages over other sites within the neighborhood. The existing Bear Creek building is very small (approximately 5,000 sf) and the uses within it can be relocated causing minimal ripple effects relative to other buildings. Similarly, the demolition and infrastructural costs will be minimal as compared to other sites, including the undeveloped site to the west across 7th Street. This site can also connect to and enhance the green and plaza open space associated with the Confluence Building and start forming the core of a quad space within the CCD neighborhood. According to the 2012 Master Plan, this site can accommodate an approximately 30,000 sf footprint. That plan also indicates that this site would be appropriate for a 3-5 story building allowing for a structure that can be up to 150,000 sf. Additionally, this building site can be considered independent from or connected to the Auraria Early Learning Center site and can accommodate a much larger structure or set of structures depending on need. Using the ELC site is contingent upon the move of that function, as proposed in the 2012 study, to a site west of St. Cajetan's.

The second buildable site is the site currently occupied by the Juniper parking lot (Site 2). This site is the only future building site with no development currently on it. This site has certain benefits, however those benefits are counterbalanced by some significant challenges. Site 2 has a presence along Colfax Avenue, which provides a high degree of visibility and identity branding opportunities, though the site is largely adjacent to the Colfax viaduct which means this visibility will be reduced as cars quickly rise over the site and look down on it from above. Similarly, the site has some advantages in providing a strong endcap to the quad that is taking shape between the Confluence Building and a future building on Site 1, however, this too is mitigated as a result of the size and traffic of 7th Street. This street creates a large and difficult separation from the rest of the CCD campus and lessens the site's ability to create an activating presence to the quad space. The site also sits on a hill making construction more challenging – especially for structured parking – though this challenge is certainly manageable. Probably the most challenging aspect of the site is that it has a fairly major utility corridor that cuts across the site along the primary alignment of the southwest sidewalk of Walnut Street prior to it curving around the site. Construction on Site

2 would almost certainly require the relocation of these utilities, adding substantial cost to the project. A building on this site would have a footprint of 52,000 sf, according to the 2012 Master Plan, and can rise to 4 stories for a building of approximately 208,000 sf. This site is slated in the 2012 Master Plan as structured parking with small amounts of program along the ground floor. Structured parking will become more and more critical as surface parking lots are redeveloped. Other uses should be considered for this site in a way that would not reduce the needed amount of parking planned for it.

A proposed solution to the challenges presented on Site 2 is to try to trade it for a more buildable site on elsewhere in the shared neighborhood. CCD will have to partner with AHEC in order to form and agreement that would allow for a trading of sites that is mutually beneficial and





Important Relationships and Design Considerations

agreeable to all parties. The exact location of the building site will have to be decided based on the parameters of the program needs of the building. For example, it has been proposed that the Advanced Manufacturing Center may move in the future to the selected site (including Site 2). If this were the case, a site that could accommodate truck deliveries without affecting the sense of place would be appropriate for this use. In any case, integrated, structured parking should be included in any proposed site as Site 2 was the assigned location for structured parking (a badly needed amenity) within the CCD neighborhood.

Gateways and Connections

A primary vehicular gateway for the CCD neighborhood exists on 7th Street as it connects with Colfax Avenue. Though large numbers of people travel through this gateway daily, there is no major sense of arrival crossing through this area. A new building on Site 1 would have a large opportunity to create a strong gateway feeling for this area. A new building should have a major presence along 7th Street with CCD signage and identity prominently displayed along this edge. The ground floor and, to a slightly lesser degree, upper floors should have a high degree of openness and transparency in order to make the building look inviting as people pass by it. This building will be the first experience many will have as they visit the campus. Passing this building, people travelling along 7th will have a great view up the burgeoning quad towards the 9th Street Historic Park. This view will help establish CCD as a green and inviting campus. If a building is constructed on Site 2, these principles should be replicated on the 7th Street side of the building and provide a 'bookend' experience passing through the new buildings on either side of the street. The site on the southern-most edge of the Holly lot possess a great opportunity for visible identity-making and signage, though a building on Site 1 would have more impact and this may be unnecessarily redundant.

The primary pedestrian gateway experiences exist along 9th street on either end of the historic park. Coming from the light rail or a class in Cherry

The Confluence Building Currently Provides and Interesting Gateway Along 7th

Creek, you would enter this new neighborhood center from 9th Street approaching from the extension of St. Francis Way. This experience can be improved over time by the removal of the small surface parking lot adjacent to Boulder Creek and an extension of the historic park's green space. The view of a new building on Site 1 would provide a strong visual endcap to this experience. These changes may happen as Boulder Creek gets redeveloped in the future. Coming from the other direction on 9th Street, a pedestrian is already treated to a pleasant view of the historic park. This experience can be improved with a strong, active ground floor experience on a future building in Holly lot if the site directly adjacent to 9th Street is selected. A building here can have major placemaking advantages and act as a great introduction to the CCD neighborhood.

A final pedestrian gateway experience occurs on Curtis Street as it approaches 7th Street from the Auraria West light rail station. The Confluence building does a great job holding the corner and providing an interesting entry into CCD's neighborhood. A building on Site 1 will help to draw attention to the quad and may work to pull some pedestrians through the growing quad area in addition to the primary path along Curtis Street.

The 9th Street Historic Park Acts as a Gateway to the CCD Neighborhood and the Confluence Building

Urban Design

In order to activate and create vibrancy within the open spaces and travel corridors that are forming and strengthening with increased development, it is important that the energy and use of buildings that form these spaces be directed correctly. Primarily, any future buildings should work to activate the shared common outdoor spaces such as the burgeoning quad adjacent to the Confluence building. A new building on Site 1 has the opportunity to add significant activation to the quad space. A building on this site should have a very active and transparent ground floor facing the Confluence building. This edge should have primary circulation and entryways in order to ensure that high levels of pedestrian traffic through the quad. Capturing pedestrian movement from the Confluence building and other points throughout the neighborhood and campus through the quad will help give it a feeling of activity, excitement, and safety throughout the day. Active and collaborative uses should be prioritized for this edge that would promote energy on site. Retail and restaurant uses or active gathering space can be considered here to increase vibrancy.

The future building on Site 1 also has the opportunity and responsibility to create a stronger presence on 7th Street. This side of the building should be designed in a way that it creates a strong gateway for vehicular travel with architectural treatments on this edge should have a high degree of transparency, design attention, and signage in order to enhance the identification with CCD as users travel to and through the CCD neighborhood. Despite this presence with high speed vehicular travel, the building would also have to enhance the pedestrian experience along 7th. As a result, the design of this building will have to balance larger-scale iconic design moves with smaller-scale pedestrian experiences. Like the additions at the Confluence building, the streetscape along this side of the building can be enhanced and improved to add a more comfortable experience for those walking along this edge. Groundfloor treatment should be active and attractive but this is not as crucial as internal to the quad. Additionally, the edge adjacent to the 9th Street historic park should work to attract people towards the quad and orient them to it. This edge should not be treated as the buildings back side.

An Active Edge on Confluence can Activate the Outdoor Areas

Any future building on Site 2 will have to be designed in a way that helps lessen the feeling of high speed travel and street scale and make a closer feeling connection with the uses across 7th Street. Though this building will likely be majority or largely structured parking, the edge along 7th Street should be active and could potential house a restaurant or retail space or an active office space. The ground floor must be transparent and attractive in order to promote a greater streetlife presence. In addition, the 7th Street facing side of this building should be of strong architectural design as it will be an endcap to the growing quad across the street. This edge should not be a standard parking deck design but should use screening and changes in materiality in order to provide an aesthetically pleasing focal point across the open space. Regardless of future use of this site, attention to design on this edge will be critical.

Inviting and Transparent Facades Promote Activity and Safety

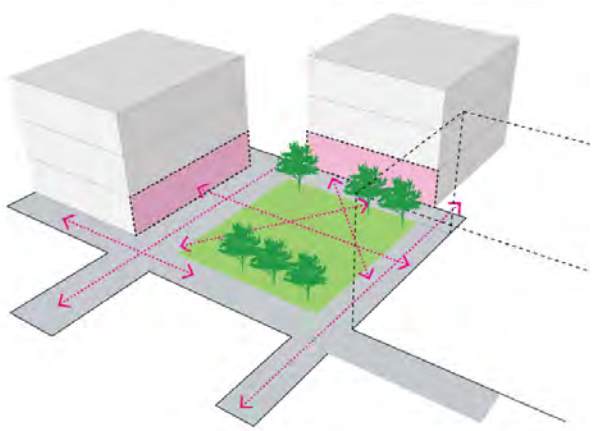
Great Buildings (Like the Tivoli) can Anchor a Great Quad. Buildings Need to Define a Space.

Open Space

With the development of the Confluence building, a new open space was created. With new development on the site of the Bear Creek building, this open space quad has the ability to transform into a heart of the CCD neighborhood.

Currently, the existing open space focuses directly towards the Confluence building with a bit of a back side facing Bear Creek as a result of the latter building turning its back completely to the quad. When new development comes

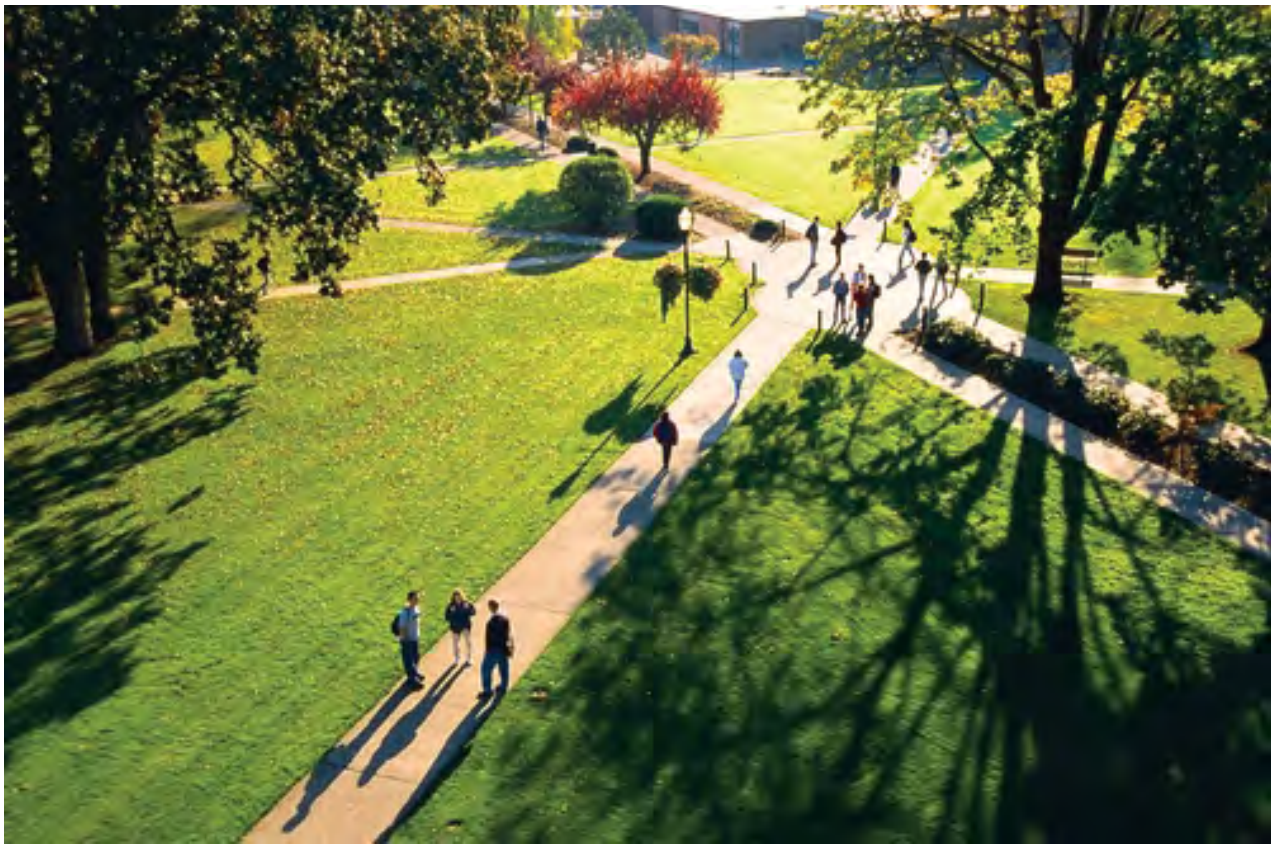
Open Space that is Flexible and Comfortable



Building Define Space and Activated Ground Floors Create Vibrancy. People Colliding Between Places Spark Collaboration and Innovation

on line in the future, the edge along the quad should be designed to activate the open space and as a result, the open space should adapt to accommodate this. The large granite walls that define the current plaza should be studied for ways to selectively remove sections in order to increase connections across the quad to the future new building. Similarly, the grass and tree berms within the site should be reduced or eliminated in order to provide more flexibility and open space that does not detract from movement across the quad. Being that the plaza is currently largely hardscape, the new additions to the plaza may be more lawn and softscape oriented. This is consistent with what we heard form stakeholders and the steering committee: CCD should be the green neighborhood. Green space should be designed in a way that is both flexible for events but comfortable and accommodating for small group or individual use.

Another theme heard at the stakeholder and steering committee was that the 9th Street historic park open space is a frequently used amenity for CCD students, faculty, and staff. Though the site is not part of CCD's neighborhood and will likely not be in the future, the open space system should be studied to find appropriate ways to link the improvements to CCD-specific open space into a more cohesive whole with the shared amenity. Currently the existing plaza space adjacent to the Tivoli does not interface strongly with the 9th Street park. This connection should be considered when approaching the design of any new building on Site 1 or elsewhere in the vicinity.



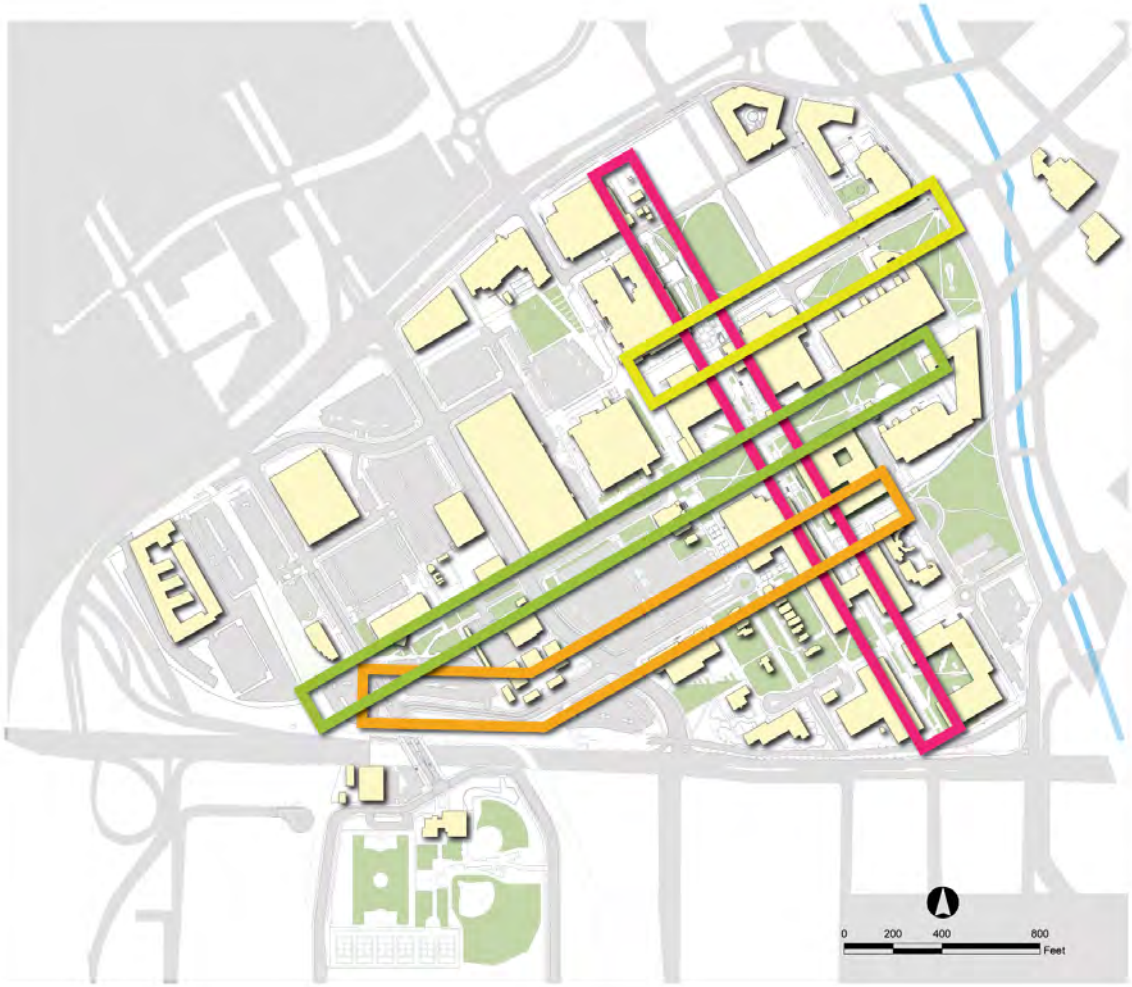
Green Space Provides Connectivity and Leads to Interaction

3. OVERALL CONNECTIVITY

Connectivity and Safety Framework Plan

Throughout the stakeholder meeting and outreach process, one theme that became apparent was a perception or feeling of compromised safety throughout the campus, especially in the more remote areas such as near the Auraria West train station and closer to Colfax Avenue. This feeling is most prevalent at night. One concept that can help alleviate this perception is the undertaking of a Connectivity and Safety Framework Plan process. The idea behind this type of plan is to create a series of specific travel paths that are designed and programmed in order to provide sense of safety and interest at all times of day. This undertaking would have to be a partnership between CCD, AHEC, and the other institutions on campus.

The framework plan would identify the most used paths of travel and study them for opportunities to provide additional amenities such as street furniture, pedestrian scaled lighting, plant and tree spacing and selection, and use prioritization in order to focus increased vibrancy and safety to these corridors and open spaces. The plan can also identify opportunities to enhance the CCD identity as it crosses through the neighborhood by identifying places for branding components such as signage and wayfinding. This framework plan would help strengthen key corridors while not diminishing the importance of other connections across the campus or neighborhood. This planning task can be undertaken with the aid of a consultant team that specializes in placemaking and urban design.



Priority Travel Corridors for Safety, Identity, and Connectivity Improvements

Wayfinding and Signage

The Auraria Campus has recently undertaken a campus wide signage and wayfinding program and implemented it with a series of signs and wayfinding devices at all scales, accommodating all users and mobility types. Though this process has been very successful and provided enhanced clarity for finding your way around campus, the program does not address the identity and wayfinding needs specific to the individual institutions. For example, CCD lacks a comprehensive package for helping students locate and travel to specific institution uses and academic spaces. It also lacks a series of banners, signs, and logo opportunities to help identify the neighborhood as a whole and individual uses within as well as provide an immediate sense of identity to users and visitors of the neighborhood.

A signage planning effort can be undertaken by CCD in order to provide this clarity and identity currently underserved in the neighborhood. This process will likely require a consultant team that specializes in signage and wayfinding. The process should be undertaken with help from AHEC in order to make the CCD signage and wayfinding package work in conjunction with the existing AHEC package and enhance it as opposed to overlapping and interfering with it.

Small Banners Provide Easy Identity Creation

Gateway Signage at Major Pedestrian Gateway Points

Combining Signage, Identity, and Wayfinding is Very Effective

Connectivity to Downtown Denver

Another recurrent theme throughout the planning process was identifying and strengthening connections to Downtown Denver across Speer Boulevard. Though several street connections currently exist, they are seen as challenging. AHEC is currently reviewing crossings for Larimer Street, Lawrence Street, and Arapahoe Street (in that order) to provide safer more convenient crossings for bike and pedestrian users. These connections improvements will help link people across Speer and make for a more comfortable and safe experience. Currently, the most successful and safe connection across Speer is at Larimer Street. This connection has been improved in recent years with streetscape improvements including planting and improved sidewalks. Likewise, Arapahoe Street has become a stronger bicycle connection to campus with bicycle infrastructure improvements having been implemented in recent years. The Arapahoe Street connection will interface with the Denver Performing Arts Complex's plans for a bike depot on their side of Speer.

As AHEC studies connections across Speer, CCD should examine how best to interface with these connections. As a pedestrian, it is likely that 10th Street will provide the primary connection to these crossings. On a bicycle, however, the dismount rules make 10th Street challenging coming from the farther areas of the neighborhood, such as Cherry Creek. 11th Street can be studied as a more comfortable bike connection towards Arapahoe and Curtis Streets.

An important connection from the campus to downtown may come through the partnership with the Denver Performing Arts Complex. The DPAC is currently going through a major visioning and planning process for their campus. This planning effort will likely address Speer and a connection across it as the vision includes major new programmatic and open space uses along this edge. A strong connection can be formed between the two campuses along Champa Street, Arapahoe Street, or a point in between. CCD, AHEC, and the other institutions should work with DPAC in order to decide the correct crossing configuration that would benefit all users. The connections can be a major benefit for CCD and other campus users.

AHEC is Currently Working on Three Primary Connections

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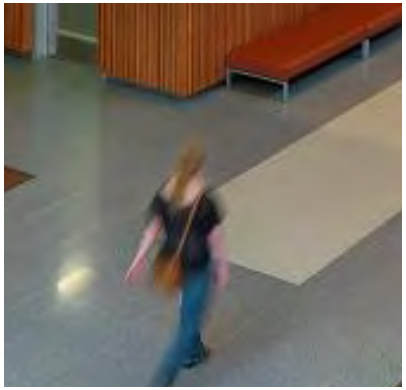
COMMUNITY COLLEGE OF DENVER



A

APPENDIX

APPENDIX

A) VISION AND EMPATHY MAPS

CAMPUS MAPPING

During the Campus Mapping exercise, participants were asked to look at maps of the Auraria campus and using colored icons, identify the existing and ideal locations of various campus facilities ranging from administrative buildings to green space.

The participants were divided into two groups for this exercise. Each group mapped out it's own unique view of the campus in terms of existing focal points and future nodes of activities and space types. The groups identification of existing spaces were not identical to each other, nor were they necessarily completely accurate as the focus was primarily on future vision. So, for example, the Cherry Creek Building may not have been identified as an Academic Hub, when it clearly is currently, and will continue to be. These concepts will be revisited in more depth during the alternatives development phase of the project.

1	Hospitality Learning Center	28,598
2	Student Success	153,136
3	Tivoli Student Union	292,003
4	North Classroom Building	243,534
5	PE Event Center	220,639
6	Plaza Building	110,097
7	King Center	335,660
8	Emmanuel Gallery	2,627
9	Science Building	307,142
10	Library & Media Center	178,328
11	Arts Building	139,373
12	West Classroom Building	80,783
13	Central Classroom Building	79,250
14	Clear Creek	14,287
15	Cherry Creek	141,399
16	Boulder Creek	57,073
17	Early Learning Center	16,887
18	Bear Creek Building	4,799
19	Smedley House	1,544
20	Roop House	1,351
21	Centennial House	1,055
22	Dolan House	1,529
23	Davis House	1,447
24	Knight House	2,695
25	Witte House	1,882
26	Gardner House	1,304
27	Wheeler Griebling House	2,071
28	Schultz House	1,018
29	Young House	1,019
30	Rundle House	1,403
31	Mullen House	1,550
32	Mercantile	3,281
33	Golda Meir Museum	2,498
34	Rectory	10,498
35	Saint Cajetan Center	12,326
36	Modular Office Building	5,813
37	Modular Classrooms	16,464
38	Facilities Services	17,986
39	Facilities Annex	6,823
40	7th Street Classroom	23,295
41	Parking Garage	12,241
42	Administration Building	128,197
43	Confluence Building	88,051
44	5th Street Hub	9,306

Group 1

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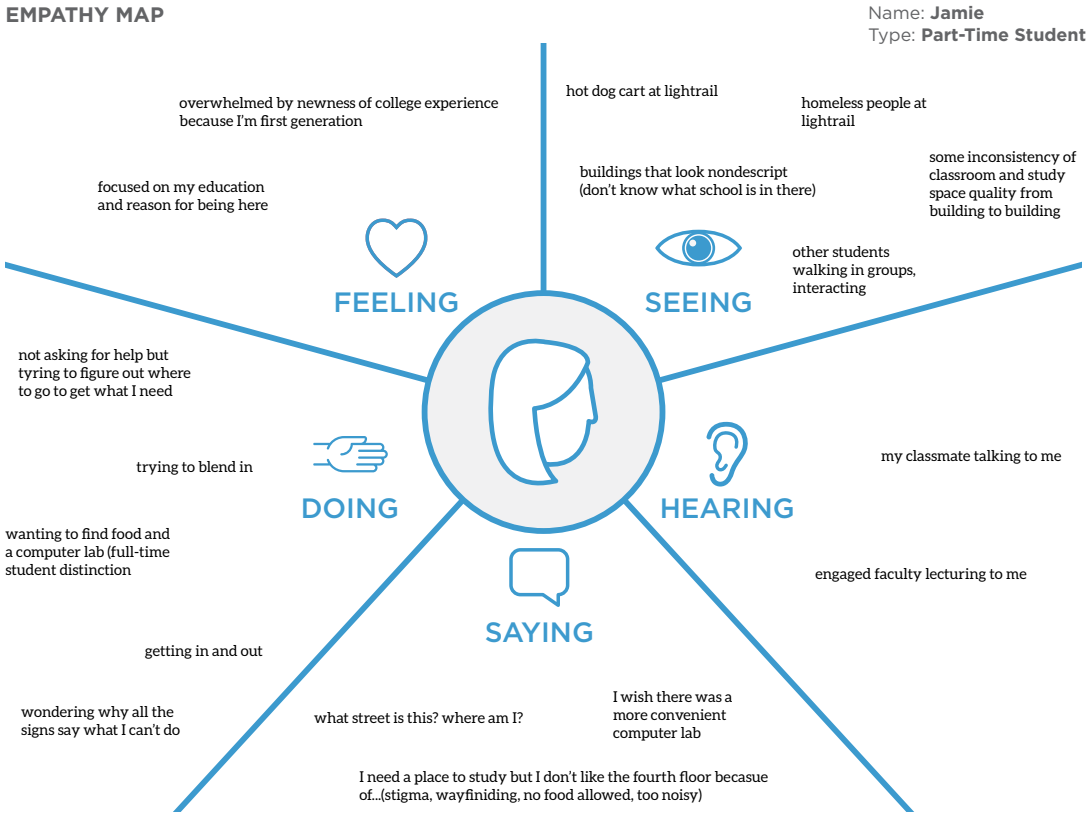
44	5th Street Hub	9,306

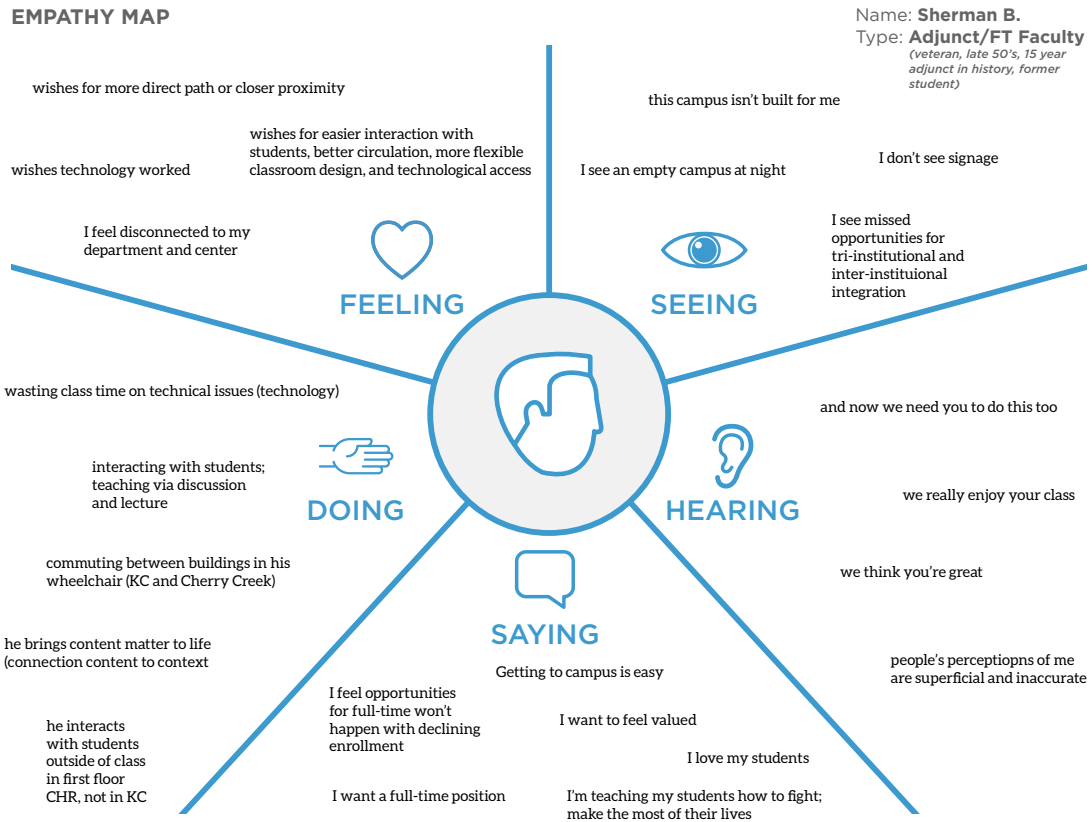
Group 2

EMPATHY MAP

The goal of empathy mapping is to get participants to think about the world from another campus user's point of view.

Participants were split into two groups to travel through a typical day for either a part-time student or a faculty member. Groups were asked to describe what these users are *Seeing*, *Hearing*, *Saying*, *Feeling*, and *Doing* when they are on campus. The results of this exercise are shown in the two empathy maps that follow that correspond to the persona the groups were given.




EMPATHY MAP
Name: Sherman B.
Type: Adjunct/FT Faculty
(veteran, late 50's, 15 year adjunct in history, former student)
wishes for more direct path or closer proximity
wishes for easier interaction with students, better circulation, more flexible classroom design, and technological access
wishes technology worked
I feel disconnected to my department and center
FEELING
this campus isn't built for me
I see an empty campus at night
I don't see signage
I see missed opportunities for tri-institutional and inter-instituional integration
SEEING
wasting class time on technical issues (technology)
interacting with students; teaching via discussion and lecture
DOING
commuting between buildings in his wheelchair (KC and Cherry Creek)
he brings content matter to life (connection content to context
he interacts with students outside of class in first floor CHR, not in KC
and now we need you to do this too
we really enjoy your class
HEARING
we think you're great
people's perceptiopns of me are superficial and inaccurate
SAYING
Getting to campus is easy
I feel opportunities for full-time won't happen with declining enrollment
I want to feel valued
I love my students
I want a full-time position
I'm teaching my students how to fight; make the most of their lives

B) SURVEY RESULTS AND FOCUS GROUP SUMMARIES

student focus group discussions

Student focus groups provided insight into facility use form the point of view of a student, as well as campus challenges and opportunities.

Student Focus Group #1: 7 participants

Participant 1: 32-year-old female, a student for one year, on campus five days/week, typically 8:00 AM – 8:00 PM

Participant 2: 31-year-old female, a student for three years, on campus five days/week, 8:00 AM – 5:00 PM

Participant 3: 27-year-old female, a student for one year, on campus five days/week, 8:00 AM – 6:00 PM

Participant 4: 23-year-old male, a first semester student, on campus five days/week, 8:00 AM – 7:00 PM

Participant 5: 48-year-old female, a student for two years, on campus four days/week, 9:00 AM – 2:30 PM

Participant 6: Male (age not given), a first semester student, on campus four days/week, 8:00 AM – 8:00 PM

Participant 7: 31-year-old male, a student for four years, on campus two days/week, 11:00 AM – 8:00 PM

**Three of the above hold jobs in addition to being a student. Several participants have plans to transfer to another school upon completing course work at CCD (including MSU Denver and UCD)*

Student Focus Group #2, 5 participants

Participant 8: 68 years old male, a student for three years, on campus five days/week, 7:30 AM – 7:00 PM

Participant 9: 68 years old female, a student for three years, on campus primarily Mon/Wed

Participant 10: 24 years old male, a third semester student, on campus seven days/week, 7:00 AM – 8:00 PM

Participant 11: 23 years old male, a student for three years, on campus five days/week, 6:00 AM – 9:00 PM

Participant 12: 48 years old male, a student for three years, on campus briefly a couple days per week

TRANSPORTATION & COMMUTING

- Five of the twelve regularly take the bus. Four of the twelve take light rail most frequently, while the others use it more sporadically. One drives most often and two others drive on occasion. One bikes regularly and two ride a bike occasionally.
- Issues mentioned with driving included parking shortages particularly at the beginning of the semesters and expensive parking fees. Remote lots are more affordable but unsafe early and late in the day.
- A suggestion was made that on campus bike paths would be appreciated.
- Safety concerns were mentioned regarding the light rail stations, and remote parking areas.

WHERE/HOW TIME IS SPENT WHEN NOT IN CLASS

The favored locations were generally within the CCD Neighborhood including the Confluence Building (lounge and tutoring center), Cherry Creek Building (lounge and courtyard), Boulder Creek Computer Lab and Clear Creek Building. Two participants predominately use the Tivoli because they hold jobs there and one goes there because it's a good central location to meet friends from across the campus. The library was favored by several participants as well.

<u>Preferred attributes of spaces:</u>

- Better wifi is needed across campus.
- Covered/shaded outdoor seating space.
- Single person and multi-person study/team project rooms that are reservable. These can currently be found in the Confluence Building and the Library.

FOOD OPTIONS

The participants generally bring their own food, use vending machines or get snacks at the cafes because options are either too far away, too expensive or are not healthy enough. Those that use the Tivoli will get food there. The Library Café (called the "Confluence Café"), the café in the Confluence Building and the Starbucks in the Cherry Creek Building were favored.

Star, Journal of Excellence editors (photo courtesy of CCD)

SENSE OF COMMUNITY

Two key thoughts emerged:

1. *The social/student life aspects of CCD are not emphasized by faculty/ staff, and may not be as important to much of the non-traditional student body.*
    - There is a recognition that many students are essentially "transient", passing through CCD as a stepping stone to a four year institution, or as a means to an end to get a job, so the students here less concerned with being part of the social experience.
    - However, they felt that if more social activities were provided and supported, more students would take advantage of them.
2. *CCD students want to feel more integrated with the other institutions on the Auraria campus rather than be segregated. They identify more as Auraria students than as CCD students.*
    - The benefits of being more integrated include having better access to resources such as CU Denver Library materials in the combined library, potential to participate in classes not offered by CCD (e.g. PE classes offered by MSU Denver), and meeting more people.
    - The CCD students expressed the feeling that they are not as welcome in facilities, classes or events on campus as students from MSU Denver or CU Denver. This was also discussed in terms of the fact that CCD students contribute fees that benefit the entire campus but they may not receive the benefits as fairly.
    - The participants would like to see any expansion of facilities that are used by CCD move towards the center of campus, to be more integrated with the rest of campus rather than separating them further.

OTHER AREAS THAT NEED IMPROVEMENT

- More composting and recycling stations.
- An improved gym facility.
- Designated space for student organizations/clubs to hold meetings and events. These could be shared between multiple organizations.
- Options to participate in intramural sports on campus.
- Inclusion in campus wide events in a more visible way (e.g. food trucks and Fall Fest activities or other events where the activity occurs within the CCD Neighborhood as well as in other parts of campus).
- Designated non-smoking areas are needed (and are planned for implementation in 2016) and will need to be enforced.
- Better lighting across campus.
- Increased campus police personnel and patrolling of campus, not just focused on the lightrail station areas.
- More courtyard/outdoor spaces.
- Better and more visible signage across campus that makes it easy to know which buildings are where as you traverse across between and within the neighborhoods.

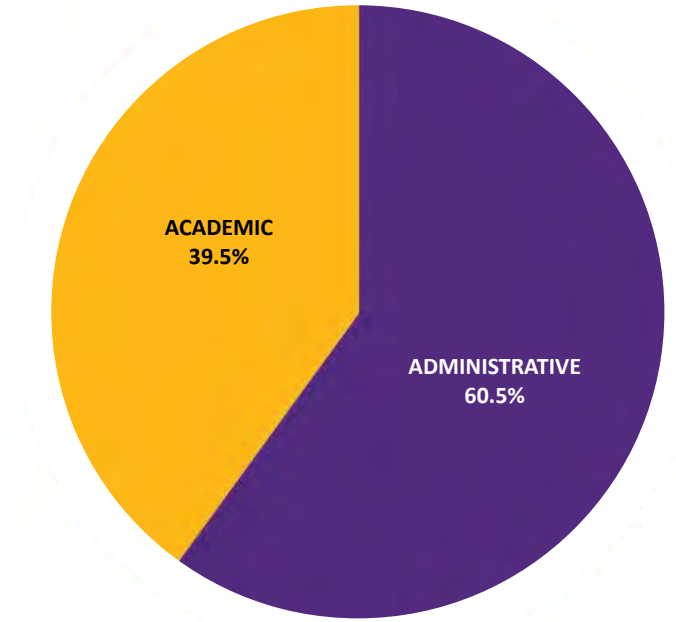
space use survey

A brief survey of each of the user groups on campus was conducted using a Survey Monkey on-line tool. This provided insight into overall opinions regarding adequacy and conditions of spaces, classroom preferences, student support spaces and other issues. A summary is provided in the following pages.

KEY FINDINGS

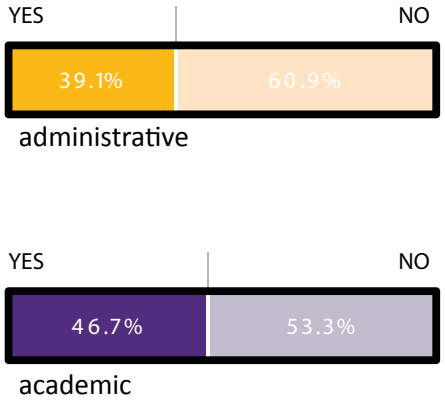
- Almost no responding departments/programs indicated that they have a surplus of any space type.
- Almost all responding departments/programs have adequate file and general storage.
- All responding departments/programs have adequate copy/print areas.
- All responding administrative departments/programs believe that students have no trouble finding their physical location. 46.7% of academic departments/programs believe that students have trouble locating them.
- All responding academic departments/programs feel that they are in an ideal location to reach the students they serve.
- “Lectures” are the most commonly used teaching methodology among responding departments/programs.
- Responding academic departments/programs believe students least prefer seminar-based learning.

SURVEY RESPONSES

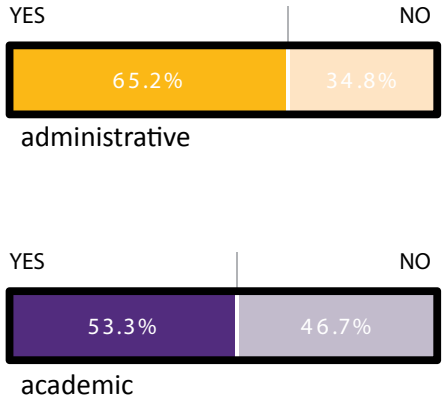


RESPONDENT	# of COMPLETED RESPONSES
Administrative	23
Academic	15

Q: DO STUDENTS HAVE TROUBLE FINDING THE PHYSICAL LOCATION OF YOUR DEPARTMENT/PROGRAM?

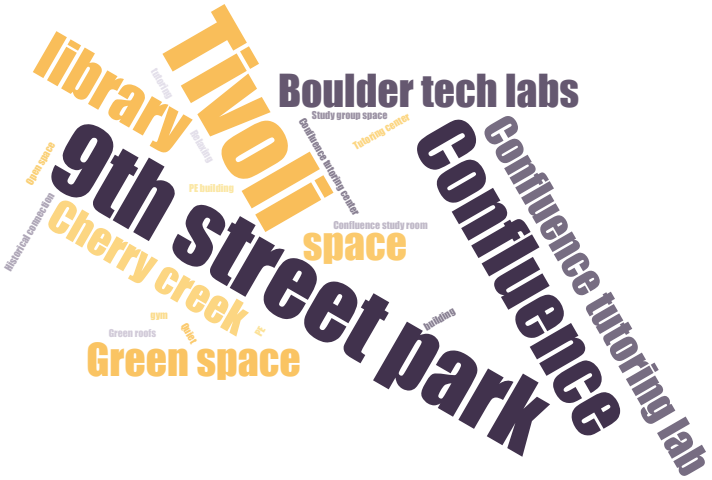


Q: IS THE CURRENT LOCATION OF YOUR DEPARTMENT/PROGRAM IN AN IDEAL SPACE TO REACH THE STUDENTS IT SERVES?



C) GRAFFITI WALL RESULTS

What is your favorite place on the Auraria Campus? Why?



What are the two most important thing you think should be improved on campus? Why?

What do you find to be the most confusing thing about the campus?

Wordle Summary of Graffiti Wall Feedback

Ideally, where should administrative/student services functions be? Should they be dispersed or in one central location?

What is your favorite place in the CCD Neighborhood? Why?

What, if anything, would make you want to spend more time on campus?

D) USER GROUP INTERVIEW FINDINGS

Train at Colfax at Auraria Station

end user interviews and facility tours

This section captures key findings and discussion items that came out of face to face interviews with leadership from each of the academic and administrative areas of CCD. Highlights of the information gathered during those meetings have been outlined including organizational elements, current locations, existing conditions and emerging issues. This material, in conjunction with the quantified space needs that will be developed for each group, will be supplemented by the detailed data being analyzed including departmental occupancies, space utilization, enrollment trends, and headcount projections. The resulting provide the program plan framework with which to develop alternative master plan solutions that meet the individual group, and overall institutional, facility requirements.

GENERAL ISSUES

CAMPUS SAFETY AND SECURITY

- Students, faculty and staff have all expressed concerns regarding their personal safety and general campus site and building security. This issue is particularly prominent for the CCD Neighborhood, in large part due to its proximity to Colfax Avenue and the Light Rail Station located at the default "gateway" into CCD's side of the overall campus.
- Some feedback was received that this is a contributing factor to students leaving campus in the afternoon, and being less inclined to register for evening classes. One suggestion offered to counter this is to schedule all evening courses in a single building which would create a critical mass of people in one location and create a greater deterrent to prevent non-students from entering or loitering in multiple, scarcely populated buildings.

CLASSROOM CONDITIONS

- Detailed analyses of classroom utilization will be provided separately. The following are general comments regarding classroom use, configuration, size and equipment.
  - ✓ The pre-assigned classroom system is preferred over having the majority of classrooms be general assignment. Some faculty expressed a desire to go to a 100% assigned system whereby each institution would have its own inventory of classrooms including some flex space and manage the scheduling of those independently of AHEC.
  - ✓ There has been a reduction in recent history of evening course offerings. This is in part in response to a shrinking

demand/preference for night classes. This means that classrooms shortages can occur during peak daytime hours but be very underutilized at other times of day.

- ✓ CCD still prefers small class sizes, up to 24 students in most cases. However, the class sizes may need to increase for the same number of students to accommodate more flexible furniture and teaching methodologies.

SHARED FACILITIES

- There are "space swaps" that must occur in order to proceed with creating CCD only buildings within the neighborhood. Preliminarily, these include, but are not limited to:
  - ✓ CU Denver and MSU Denver space in the Boulder Creek Building will need to relocate.
  - ✓ MSU Denver science lab space in the Cherry Creek Building will need to relocate.
  - ✓ MSU Denver space on the 2nd floor of the Clear Creek Building will need to be vacated.
  - ✓ CCD functions currently in the Administration Building will need to relocate to the CCD neighborhood.

CAMPUS AMENITIES AND COMMUNITY

- Improved campus and building signage came up frequently as something that would help wayfinding, student orientation, student success, and a sense of place.
- Additional computer labs and printing access throughout CCD is a desired improvement.
- A greater sense of identity and branding for CCD overall was identified by the students as something that would have a positive impact on their sense of belonging to a community (see Student Focus Group Section).
- In addition, students expressed a desire to feel more integrated with the other two institutions on campus, so that there is a sense of being a part of the Auraria Campus as a whole (see Student Focus Group Section).
- The Tivoli's purpose as a Tri-Institutional student center remains important and vital to the overall campus to maintain a sense of community for Auraria in general, and to better integrate students from the three institutions. However, students and faculty alike feel that the building is confusing and a sense of which spaces belong to each institution needs to be more clearly defined. Some feedback suggested that students feel there should be a space or spaces within their neighborhood that provide some sense of social community and identity specific to their school in addition to what is provided through the Tivoli.

View from Campus Toward Downtown

ADVANCED MANUFACTURING CENTER (AMC)

MACHINING AND WELDING

Programs

- Machining/Manufacturing
- Welding
- Thinking about adding Additive Manufacturing
- Creating a corporate training center with funding from and in partnership with Burlington Northern Santa Fe (BNSF); other potential corporate partnerships have been identified as well

Current Location

- Advanced Manufacturing Center, approximately 4 miles north of the CCD central location on the Auraria Campus

Existing Conditions Summary

- Recently relocated to a newly-renovated facility that offers three times as much space as the previous facility
- Machining courses are offered in the mornings and afternoons; welding mornings, afternoons, and evenings
- The nature of the equipment used at the AMC creates a number of environmental concerns, noise concerns, and loading concerns that are easily addressed at the current remote location
- Faculty use desks in open manufacturing areas rather than offices, though this is not preferred
- The facility has no break area or nearby food services
- There is currently no area for metal processing
- Classes are taught in a single open conference space that has noise issues

Emerging Issues

- Non-credit certificate program enrollment is increasing and is expected to continue to increase significantly in the next few years; enrollment in machining is expected to double in the next year; enrollment in welding is expected to increase by 50% in the next year
- BNSF prefers the off-campus location for liability reasons; the CCD staff and students prefer the autonomy of the off-campus location; non-credit certificate seekers prefer the off-campus location b/c they do not need on-campus services
- The partnership with BNSF offers the use of equipment that would otherwise not be available to CCD students

AMC

CENTER FOR PERFORMING ARTS, BEHAVIORAL & SOCIAL SCIENCES (PABS)

PERFORMING ARTS

Programs

- Music
- Theater

Current Locations

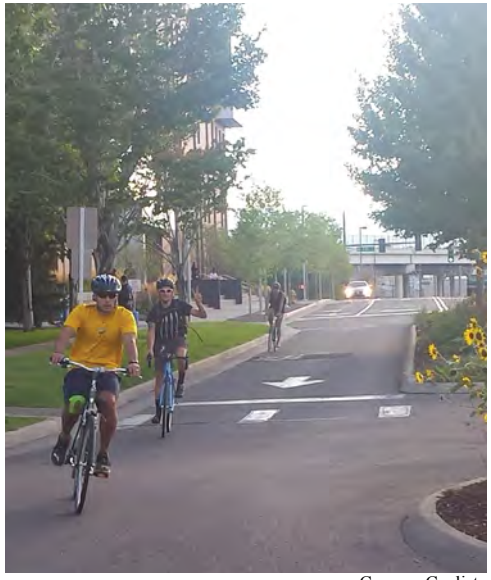
- Classes and Black Box Theater in King Center.
- Faculty Offices in King Center.
- Use of Choir Room and Piano Room (under MSU Denver) in Arts Building.
- Use of shared practice rooms (under CU Denver) in Arts Building.

Existing Conditions Summary

- Scheduling of theater space is difficult for those spaces that are shared tri-institutionally. The Courtyard Theater is particularly in high demand.
- The current faculty offices are not soundproof, and need upgrades to provide this as they are used as instructional space. The new King Center Plan does provide some sound proofed practice rooms.
- The Music program only has one dedicated classroom.
- Theater and Dance do not have any dedicated space.

Emerging Issues

- The pending plan for the King Center meets their needs.



Campus Cyclists

- A second theater similar to the Rawls/Courtyard Theater is needed.
- Dedicated instructional spaces are needed.

BEHAVIORAL AND SOCIAL SCIENCES

Programs

- Human Services
- Political Science
- Paralegal
- History
- Psychology
- Sociology
- Anthropology

Current Locations

- Faculty Offices in King Center.
- Classrooms primarily in the Modular Buildings, occasionally in Cherry Creek Building.

Existing Conditions Summary

- The pairing of Behavioral and Social Sciences with Arts is one that evolved over time organizationally, but functionally the King Center is not the right location.
- Center/Arts Buildings are not the right location.
- Currently 24 Adjunct Faculty share a single, undersized space.

Emerging Issues

- The Behavioral and Social Science Programs should ideally be within the CCD Neighborhood buildings long term.
- Initially the 4th and 5th floors of the King Center will not be part of the building renovation, so in the short term these spaces can remain as.

MATH AND SCIENCE

MATH AND SCIENCE

Programs

- Biology
- Chemistry
- Environmental Science
- Astronomy, Geology, Physics
- Math

Current Locations

- Faculty Offices are in the Confluence and Science Buildings.
- Classrooms are in Confluence, Science, Cherry Creek and Boulder Creek Buildings.
- Use of Denver Housing Authority's Osage Kitchen as a teaching kitchen for the Nutrition program.

Existing Conditions

- The office space in the Science Building is more than adequate, with several currently vacant offices.
- If any further growth is needed, the office suite in the Science Building is "land locked".
- Lab and lecture spaces are deficient and there are scheduling issues with those that are available.
- Physics, Astronomy and Geology are located in the Cherry Creek Building where there is sufficient space but separation from other Science and Engineering programs is not optimal. Physics staff have offices in the Confluence Building which adds to the de-centralization. Originally Physics was to be included in the Science Building.
- The Math program's faculty and classrooms are in the Confluence Building where there is an over-abundance of adjunct faculty work space.
- Boulder Creek space is a newly created "Maker Space" and storage. The Maker Space is not yet well equipped and will have limited users initially.

Emerging Issues

- The Dean would prefer that all faculty in this Department be co-located.
- Math and Science class/lab space would ideally be co-located.
- There are new instructional program areas coming on-line including Fermentation Science and a growing Nutrition program. These programs require a commercial teaching kitchen, ideally on campus.
- Some consideration should be given to creating a more robust Maker Space that is a tri-institutional facility.
- A "wish list" item is to add a Planetarium to the campus.

ARTS AND HUMANITIES

ARTS AND HUMANITIES

Programs

- English (Development and Standard)
- World Languages
- Communications
- Journalism
- Multi-Media /Graphic Design
- Humanities
- Philosophy
- Literature
- English as a Second Language (ESL)
- Visual Arts
- Confucius Institute

Current Locations

- Visual Arts and Graphic Design Faculty are in the Arts Building.
- All other Faculty are in the Cherry Creek Building.
- Classrooms are in the Modulars, Cherry Creek, Boulder Creek and Arts Buildings.
- The Confucius Institute is in the Clear Creek Building.

Existing Conditions

- Faculty space in the Cherry Creek Building is adequate, and there is excess space where suites are particularly generous in common and circulation space.
- Classroom space is deficient and requires scheduling of AHEC general assignment classrooms. This problem will be alleviated with the implementation of the Arts Building improvements.
- Additional computer based classrooms are needed to support ESL and English classes.
- The Confucius Institute is in an appropriate location with good public access. It is deficient in storage and classroom space.

Emerging Issues

- The pending plan for the Arts Building will rightsize the space allocated to CCD overall in the building. The plan would add office space, and a dedicated Art History lecture classroom. It would also provide a home for the 3D Studio and Gallery currently in the Boulder Creek Building.
- Video teleconferencing capabilities to support collaboration with China partners is desired.

CENTER FOR CAREER AND TECHNICAL EDUCATION (CCTE)

CCTE

Programs

- Machining/Manufacturing
- Welding
- Engineering, Graphics, Mechanics
- Architectural Technology
- Business (Marketing, Management, Economics)
- Accounting
- Info Technology/ Computer Sciences
- Criminal Justice
- Early Childhood/Elementary Education

Campus Open Space with View Toward Downtown

Current Locations

- The Manufacturing/Welding programs are in newly leased space at the Advanced Manufacturing Center (AMC) Facility (see previous detailed description).
- Engineering, Graphics, Mechanics and Architectural Tech are located in the Boulder Creek Building.
- The Early Childhood Education classroom is in the Boulder Creek Building. These classes are only offered nights and weekends.
- The remainder of the programs, both Faculty and Classroom spaces, are located in the Cherry Creek Building.

Existing Conditions

- The Architectural Technology program has no model shop, and would like to add this capability.

Emerging Issues

- Consideration should be given to moving functions currently in the Boulder Creek Building to the Cherry Creek Building, depending upon the space needs of other groups slated to move into the Boulder Creek Building.
- The Machining/Welding program, or components of it, are under consideration for occupancy of the Boulder Creek Building which would increase the visibility of that program, and allow the program to grow and tie in more effectively with other course offerings on campus.
- Growth areas include the Computer Science program, and Architectural Technology program.

ENROLLMENT ADMINISTRATION AND STUDENT SUCCESS (EASS)

EASS

Programs

- Student Affairs/Advising
- Student Development (includes the Resource Center, EOC, TRIO programs)
- Institutional Research
- Financial Aid
- Registrar
- Enrollment
- Admissions
- Orientation
- Testing Center
- Institutional Research/Retention
- Student Life (including Transfer and Career Services)
- Alternative Media Services and Accessibility Office
- Building Reception Desks - Cherry Creek and Confluence Buildings
- Food Pantry
- Student Study Lounges

Current Locations

- Student Life, Student Government and Student Activities offices are in the Tivoli Building.
- Institutional Research and Retention, Financial Aid Call Center, Resource Center, Alternative Media Services, Transfer and Career Services and TRIO programs are located in the Cherry Creek Building.
- All other functions are in the Confluence Building.
- The Food Pantry, shared with other institutions, is located in the Tivoli.
- Study Lounge space can be found in a variety of locations, including on the 4th floor of the Confluence building where there is both an open, casual study lounge and an enclose, quiet study space; casual lounge space on the first floor of the Confluence Building; and casual study/lounge space on the first floor of the Cherry Creek Building as well as a designated study room in that building that was recently created.

Existing Conditions

- The Financial Aid Office is split with most functions in the Confluence Building and the Processing/Call Center functions in the Cherry Creek Building.
- Advising is also split between the two buildings and ideally would be consolidated in the Confluence Building.
- The Accessibility Office is also split and should be consolidated, ideally in the Confluence Building. Their space in that building has some underutilized area that could be reconfigured to make more optimal use of the suite.
- The spaces in the Cherry Creek Building are generally adequate. There are some spaces that have surplus square footage such as the TRIO area and Transfer/Career Services space. This is, in part, due to inefficient configurations. In other areas growth space is unavailable such as in the Institutional Research suite.
- The functions in the Confluence Building generally have sufficient space, however, the lobby areas can become very congested during

peak times of year when waiting lines are long and can conflict with one another. In most other areas, overall standards used for offices, meeting spaces, break spaces etc. are generous. It was noted that this building has neither a tornado shelter area nor a safe space for active shooter events.

- The computer lab located on the 4th floor of the Confluence Building is underutilized. The reasons for this are not entirely understood but theories include that it is not visible enough, and that because it is included in the Tutoring Suite, there may be a stigma associated with going to the space.
- Functions in the Tivoli are in an appropriate location, though split between two floors. The preference would be to have them co-located. The student activities suite is deficient in meeting space and room for student club activities. The tri-institutional Student Senate space is not frequently used by CCD because student representatives feel attendance is improved if these meetings are held in the CCD neighborhood.
- The amount and variety of study space offered in the CCD neighborhood has been vastly improved through the recent renovations in the Cherry Creek Building and the addition of the Confluence Building to the institution.

<u>Emerging Issues</u>

- The primary priority is creating a better alignment and consolidation of "like" functions so that students can find virtually all academically oriented student services in one primary location. Ideally the EOC, TRIO and Resource Center would be in the Confluence Building, along with all of advising. However, EOC and Career/Transfer Center do have an affinity to one another. If no other groups move, the KEYS program would ideally relocate from Confluence to Cherry Creek.
- Some student support space could potentially be outside of the Tivoli including club space and student organization meeting space that could support a variety of activities including student government meetings. But most of the student life functions should remain in the Tivoli for the benefit of integration with the other two institutions.
- The idea has been raised of moving the Accessibility Office to the Bear Creek Building, if it were available.

Campus Cummuters

ACADEMIC SUPPORT CENTER (ASC)

ASC

Programs

- Tutoring support for Math, Writing, Student Success and ESL
- Preparation Lab (including placement testing)
- Foundational Skills and GED Institutes.

Current Locations

- This center is located in its entirety in the Confluence Building on the 4th Floor.

Existing Conditions

- The center generally has adequate space. Slightly more secure storage space is needed for the GED testing function.
- There is a smaller quiet study room that is underutilized.
- The open lounge and enclosed, larger quiet study lounge on the 4th floor are well used and a favored amenity for CCD students in general.
- Ideally a satellite writing center would be created in the Cherry Creek Building that would be equipped with classroom computers. This request is being driven by the fact that all writing classes are held in that building and those students tend not to make the trip to the center at the Confluence Building. Math students who are already in that building tend to be the heaviest users of the writing center there.
- The Math and Writing tutoring centers are the busiest and often hit capacity at peak times of day.

Emerging Issues

- One desired area of growth is to add a supplemental instruction program where tutors sit in on specific classes and then facilitate study groups around that class. This however, can be accommodated within the existing tutoring center facility.

Students Await the Train

CENTER OF HEALTH SCIENCES

Programs

- Nurses Aid Program
- Medical Assistant Program
- Home Health Aid Testing (for PASCO)
- Radiation Therapy Program
- Mammography Program
- CT Scanning Program
- Veterinary Tech Program
- Emergency Medical Tech Program
- Dental Hygiene

Current Locations

- Lowry Campus – two buildings: one dedicated to the Dental Program and Clinic, the other for all other programs
- One newly created class/lab in the Cherry Creek Building for the Nurses Aid Program.

Existing Conditions

- This campus location does not include any of the amenities or student services that the main campus offers including student life, student support, advising, etc., nor food or public transportation options.
- The Dental Clinic could downsize if brought onto the main campus by redesigning exam space from individual rooms to a group exam layout and by sharing class/lab space with other programs.
- There is a significant amount of surplus space in the main Lowry Building. Much of the space was originally built to support the Nursing Program, which was eliminated. The classroom space could be reduced significantly. Some lab space could also be eliminated or downsized if relocated.
- There are special requirements for some of the labs including:
  - Radiology and Dental Hygiene need a lead lined room for X-ray equipment use.
  - The Vet Tech program requires a dark room and a dissection room. The latter is a full wet lab, with regular use of formaldehyde and other toxic substances.
  - Dental Hygiene and Vet Tech need a vacuum system an compressed air. Both of these programs also need secure storage for pharmaceuticals.
  - All labs require sinks, except for the VERT projection room/ computer lab.
- The new class/lab in the Cherry Creek Building houses three simulation beds and can only accommodate one class at a time. It is fully booked.

Emerging Issues

- The creation of the simulation class/lab in the Cherry Creek building has resulted in a doubling of enrollment in the Nurses Aid program which supports the theory that Health Sciences could grow if relocated.
- This Center would like to offer continuing education courses that are not degree programs, which would be a way to expand nighttime use of spaces and fee generating.
- There is growing competition on the Lowry Campus and in the surrounding areas from other privately run institutions as well Aurora Community College.

- If the Dental Clinic were downtown, CU Denver is interested in using four dental exam chairs for their program which could be revenue generating for CCD.
- Ideally if Health Sciences moved from Lowry, the entire program would be under one roof. This may rule out the use of Boulder Creek as a possible location. The Vet Tech program conducts spay/neuter clinics that bring live animals into the building which may need special consideration. However, this too could be a revenue generator and reach a larger clientele base if located downtown.

Cherry Creek Building

ADMINISTRATION

PRESIDENT'S OFFICE & PROVOST

Current Locations

- The President and Provost share a suite in the Cherry Creek Building

Existing Conditions

- This space is adequate and has some room for growth. The location is appropriately central with good access to most CCD buildings, staff and faculty.

Emerging Issues

- The future of the Lowry and the Advanced Manufacturing Center (AMC) is critical to understanding how CCD's main campus may need to expand.
- A primary goal is to transform the student experience so that CCD is an institution of choice and so students "persist and complete" their degrees and move on to jobs or a four year institution.
- Fulltime and adjunct faculty also need to feel supported and embraced.
- Some targeted areas of expansion include the WIN program, the AMC program and industry partnership there, Police and Firefighter training and Health Sciences (see individual Department/Program sections for more information)

HUMAN RESOURCES

Programs

- Stand-alone Department

Current Locations

- Administration Building, third floor

Existing Conditions

- The existing CCD office space in the Administration Building is generally adequate, but inconveniently located.
- The primary deficiency for HR currently is lack of a conference/ training space that can accommodate up to 20 people and that is equipped with virtual meeting technology. Slightly more file storage space is needed.

Emerging Issues

- The need to locate administrative functions within the CCD Neighborhood is a key driver for changes in this Department.
- One location that has been discussed is a 9th Street House, being centrally located, but with some level of privacy for visitors, and inability to meet ADA codes.

BUDGET/PLANNING/FACILITIES/IT

Programs

- Facilities Management
- Budget/Planning
- Information Technology

Current Locations

- Facilities Management is located in the Clear Creek Building, ground floor.
- All other functions are in the Administration Building.
- IT has a computer lab and server room in the Boulder Creek Building. There is also a server room in the Confluence Building.
- One Facilities staff is located at the AMC facility.

Existing Conditions

- The relatively central location for the new Facilities Department is

working well, but there is no growth space and some deficiencies which include:
  - ✓ A crew room for custodial staff
  - ✓ Adequate custodial storage and staff workspace in each of the CCD Buildings
  - ✓ A central storage facility for parts, materials, furniture inventory etc.
- The Budget/Planning Department has some surplus open office space
- The IT Department is lacking sufficient space to stage incoming and outgoing equipment, test and assemble equipment.

Emerging Issues
- Improving existing custodial facilities in the Cherry Creek, Confluence and Boulder Creek Buildings is a priority.
- A central storage facility has not been explored but should be considered.
- Budget, Planning, Accounting and Payroll should ideally be together, but do not necessarily need to be in the Cherry Creek Building.
- The IT Department does not necessarily need to be located with all of the other administrative functions. An ideal location would be next to the main CCD student computer lab, currently located in the Boulder Creek Building. Two new spaces, a staging/storage room and a building/testing room are needed.
- IT would like to see some, at least, small computer lab in each CCD building and printing stations distributed throughout for student use.
- Consistent AV/IT standards in every classroom is recommended to reduce technical problems due to lack of familiarity with the equipment, and to reduce scheduling issues that result from high demand and low demand classrooms based on faculty preference around technology.
- Higher security for buildings and spaces that are computer intensive is needed to reduce theft problems.

CONTROLLER

Programs
- This is a stand-alone Department including Payroll and Accounting.

Current Locations
- The Cashier's Office/Business Office is located in the Confluence Building.
- All other functions are in the Administration Building.

Existing Conditions
- There is adequate space currently. Several vacant workstations are being used by workstudy student employees.
- The reception area is not considered secure enough for the existing office suite.

Emerging Issues
- This office would like to be closer to the Cashier's Office, but also close to HR due to their affinity to Payroll. Affinities to Financial Aid are also important.

FOUNDATION (COLLEGE ADVANCEMENT) OFFICE/MARKETING/ COMMUNICATIONS

Programs
- Creative Services
- Marketing
- Foundation Office

Current Locations
- The Foundation has offices within the President's Suite in the

Cherry Creek Building.
- Marketing/Creative Services have offices on another floor of the same building.

Existing Conditions
- There is sufficient space in the President's Suite
- The Marketing area is tight and does not have sufficient storage, layout, and collation workspace. There is no space for staff growth. There is an entry foyer to their suite that is underutilized space but due to location/configuration, difficult to use for any specific purpose.

Emerging Issues
- The Marketing suite requires a workroom, and a separate storage room where materials and the larger banner printer could be stored. In addition, staff growth is anticipated that might include a grant writer, web manager and additional support staff.

WORKFORCE INITIATIVE NOW (WIN)

Programs
- This is a stand-alone Department, reporting directly to the President's Office.

Current Locations
- This function is the sole occupant of the Bear Creek Building.

Existing Conditions
- Because this is a program involving significant community outreach, the Bear Creek location works well with relatively good public access.
- There is adequate classroom space with the two existing classrooms. This space was recently upgraded with sponsorship from RTD.
- Part of one classroom space may be converted to additional staff space, and/or some of the excess entry/lobby area may be used for additional work space.
- Current office space and meeting space is adequate, although the conference room was originally a storage space and is less than ideal.

Emerging Issues
- If this program were to relocate, it has affinities to the CTE and Career Services programs.
- Two pending new programs would work closely with the Engineering Graphics/Architecture Technology programs.

COLLEGE PATHWAYS

Programs
- This is a stand-alone Department, reporting directly to the Provost.

Current Locations
- This function is in the Cherry Creek Building, second floor.

Existing Conditions
- The current space is adequate.
- The current location works well as they work closely with academic departments as well as administration and the TRIO programs.

Emerging Issues
- The current relationship to other functions within CCD needs to be maintained whether that's in the Cherry Creek Building or Confluence Building.

TEACHING LEARNING CENTER (TLC) – Not Interviewed

Programs
- This function supports faculty and staff with training in teaching methodologies and technologies.

Current Locations
- This function is in the Cherry Creek Building, second floor.

Existing Conditions
- The space is considered adequate but does require access to classroom space. Existing adjacencies are good.

E) SPACE NEEDS BY CENTER

Community College of Denver
Space Needs Analysis

3 February 2016
14:30 PST

CCD		Current asf	Curr asf/staff-faculty	Current Req'd asf	Projected asf 2020	2025	2030	% Change Current -2030
Student Development & Retention	Staff Seat Count Projection			61	55	68	70	14.8%
	Office	10,673	175	9,150	8,250	10,200	10,500	-1.6%
	Instruct.	15,695	-	15,695	15,695	15,695	15,695	0.0%
	Total	26,368		24,845	23,945	25,895	26,195	-0.7%
Enrollment Administration & Student Success	Staff Seat Count Projection			7	6	8	8	14.3%
	Office	1,084	155	1,050	900	1,200	1,200	10.7%
	Instruct.	1,471	-	1,471	1,471	1,471	1,471	0.0%
	Total	2,555		2,521	2,371	2,671	2,671	4.5%
CFO / Administrative Services	Staff Seat Count Projection			63	57	70	73	15.9%
	Office	7,238	115	9,450	8,550	10,500	10,950	51.3%
	Instruct.	-	-	-	-	-	-	0.0%
	Total	7,238		9,450	8,550	10,500	10,950	51.3%
CCD Unassigned Facilities	Office	5,185	-	5,185	5,185	5,185	5,185	0.0%
	Instruct.	-	-	-	-	-	-	0.0%
	Total	5,185		5,185	5,185	5,185	5,185	0.0%
CCD Classrooms Shared By Multiple Centers	Office	-	-	-	-	-	-	0.0%
	Instruct.	2,351	-	2,351	2,351	2,351	2,351	0.0%
	Total	2,351		2,351	2,351	2,351	2,351	0.0%

Community College of Denver
Space Needs Analysis

3 February 2016
14:30 PST

CCD	Current asf		Curr asf/staff-faculty	Current Req'd asf	Projected asf 2020	2025	2030	% Change Current -2030
Center for Academic Support & Achievement	Staff Seat Count Projection			11	10	12	13	18.2%
	Office	1,309	119	1,380	1,230	1,530	1,590	21.5%
	Enrollment Projection			183	174	179	185	1.1%
	Instruct.	-	-	-	-	-	-	0.0%
	Total	1,309		1,563	1,404	1,709	1,775	35.6%
President's Office	Staff Seat Count Projection			13	12	15	15	15.4%
	Office	4,956	381	4,940	4,560	5,700	5,700	15.0%
	Instruct.	-	-	-	-	-	-	0.0%
	Total	4,956		4,940	4,560	5,700	5,700	15.0%
Provost's Office	Staff Seat Count Projection			16	15	18	18	12.5%
	Office	5,316	332	5,280	4,950	5,940	5,940	11.7%
	Instruct.	4,800	-	4,800	4,800	4,800	4,800	0.0%
	Total	10,116		10,080	9,750	10,740	10,740	6.2%
Student Services	Staff Seat Count Projection			15	14	17	17	13.3%
	Office	4,537	302	4,500	4,200	5,100	5,100	12.4%
	Instruct.	2,998	-	2,998	2,998	2,998	2,998	0.0%
	Total	7,535		7,498	7,198	8,098	8,098	7.5%
Student Enrollment Services / Learning & Academic Achievement	Staff Seat Count Projection			49	44	55	56	14.3%
	Office	8,269	169	7,350	6,600	8,250	8,400	1.6%
	Instruct.	1,036	-	1,036	1,036	1,036	1,036	0.0%
	Total	9,305		8,386	7,636	9,286	9,436	1.4%

Community College of Denver
Space Needs Analysis

3 February 2016
14:30 PST

CCD	Current asf		Curr asf/staff-faculty	Current Req'd asf	Projected asf 2020	2025	2030	% Change Current -2030
Center for Career & Technical Education	Staff Seat Count Projection			45	43	44	45	0.0%
	Office	5,651	126	5,400	5,190	5,250	5,400	-4.4%
	Enrollment Projection			603	574	589	609	1.0%
	Instruct.	50,503	84	53,643	51,080	52,422	54,178	7.3%
	Total	56,154		59,043	56,270	57,672	59,578	6.1%
Center for Math & Sciences	Staff Seat Count Projection			59	56	58	60	1.7%
	Office	12,335	209	6,510	6,150	6,360	6,660	-46.0%
	Enrollment Projection			1,698	1,617	1,660	1,715	1.0%
	Instruct.	35,422	21	37,625	35,827	36,768	38,000	7.3%
	Total	47,757		44,135	41,977	43,128	44,660	-6.5%
Performing Arts & Behavioral Sciences + Arts & Humanities	Staff Seat Count Projection			106	101	103	107	0.9%
	Office	15,711	148	11,310	10,740	11,040	11,460	-27.1%
	Enrollment Projection			2,411	2,297	2,357	2,435	1.0%
	Instruct.	25,478	11	27,062	25,769	26,446	27,332	7.3%
	Total	41,189		38,372	36,509	37,486	38,792	-5.8%
Center for Health Sciences	Staff Seat Count Projection			33	31	32	33	0.0%
	Office	10,107	306	7,783	7,311	7,547	7,783	-23.0%
	Enrollment Projection			234	223	229	236	0.9%
	Instruct.	23,668	101	19,800	18,869	19,377	19,969	-15.6%
	Total	33,775		27,583	26,180	26,924	27,752	-17.8%

Community College of Denver
Space Needs Analysis

3 February 2016
14:30 PST

CCD	Current asf	Current Req'd asf	Projected asf 2020	2025	2030
FTE Enrollment		5,129	4,885	5,014	5,180
Staff Seat Count		478	444	500	515
Office & Support	92,371	79,288	73,816	83,802	85,868
Instructional Space	163,422	166,481	159,896	163,364	167,830
Study Space	12,040	12,040	11,467.23	11,770	12,160
Special Use Space	18,687	19,000	18,096	18,574	19,189
General Use Space	56,365	62,648	59,668	61,243	63,271
Support Facilities	9,534	9,534	9,080.44	9,320	9,628.80
TOTAL	**352,419**	**348,991**	**332,023**	**348,074**	**357,946**

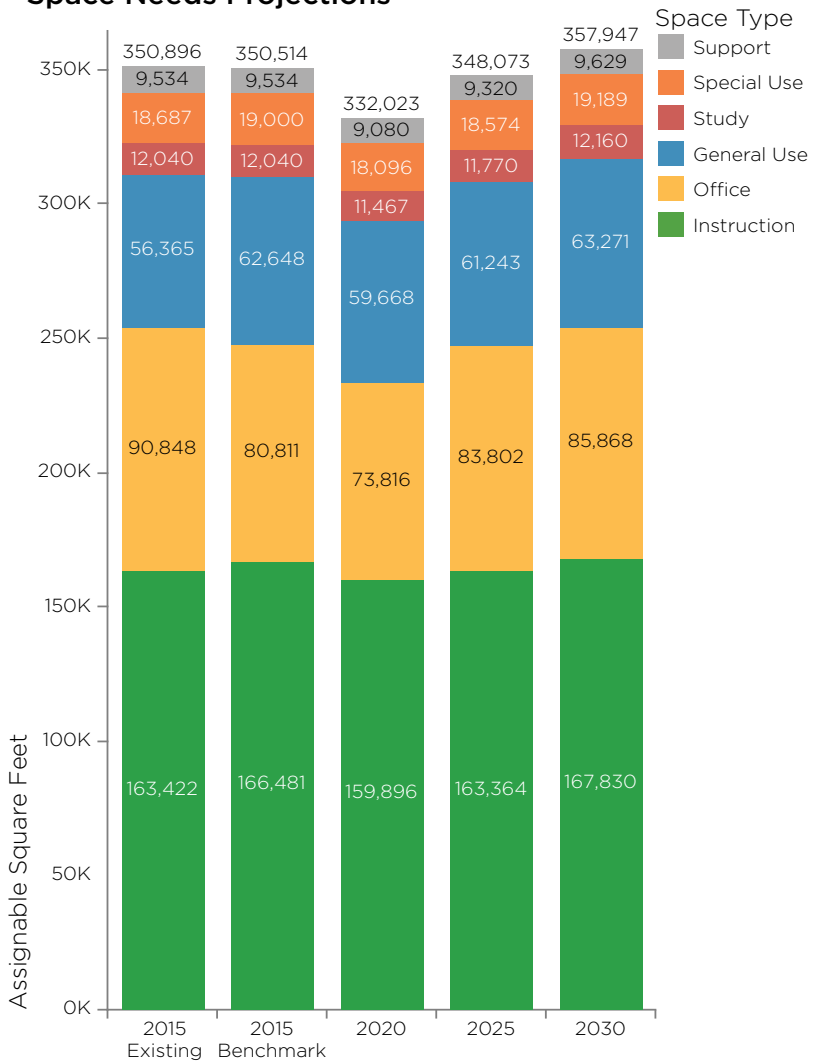
CCD	Current asf	Current Req'd asf	2020	2025	2030
FTE Enrollment		5,129	4,885	5,014	5,180
Staff Seat Count		478	444	500	515
Office & Support	92,371	13,083	18,555	8,569	6,503
Instructional Space	163,422	-3,059	3,526	58	-4,408
Study Space	12,040	0	573	270	-120
Special Use Space	18,687	-313	591	113	-502
General Use Space	56,365	-6,283	-3,303	-4,878	-6,906
Support Facilities	9,534	0	454	214	-95
TOTAL	**352,419**	**3,428**	**20,396**	**4,345**	**-5,527**

F) OFFICE SPACE NEEDS CALCULATIONS

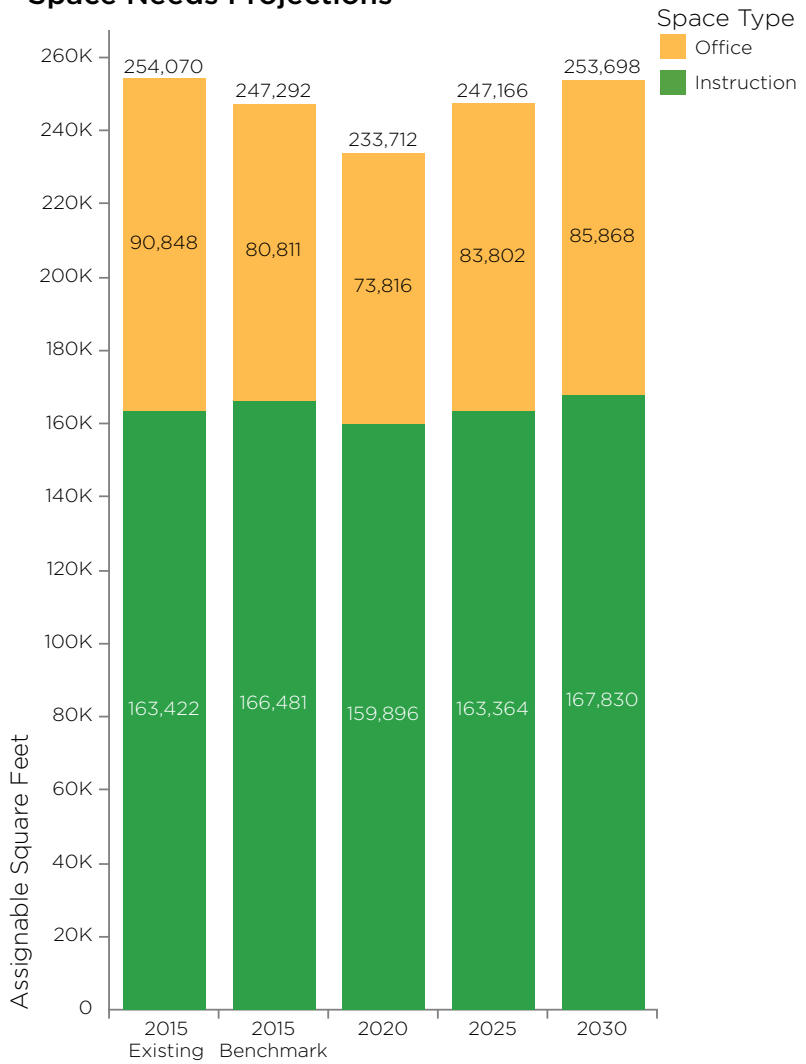
Table 5.a CCD Office Space (Seat Count) Calculations

Center	2015 STAFF ADJUNCT	TOTAL ADJUNCT	3:1 RATIO ADJUNCT SEATS	TOTAL SEAT COUNT	CURRENT OFFICE ASF	CURRENT ASF PER SEAT	ASF USING BENCHMARK	STD FOR FTE FACULTY	FTE FACULTY ASF	STD FOR ADJUNCT	ADJUNCT ASF	STD FOR ADMIN	ADMIN ASF	TOTAL ASF
CCTE	30	45	15	45	5,651	126	6,750	150	4,500	60	900			5,400
Health Sciences	22	33	11	33	10,108	306	4,950	Based on Detailed Program						7,783
Math & Science	33	77	26	59	12,335	210	8,800	150	4,950	60	1,540			6,490
Arts & Humanities	37	94	31	68	12,031	176	10,250	150	5,550	60	1,880			7,430
Ctr for Academic Supp	8	9	3	11	1,309	119	1,650	150	1,200	60	180			1,380
Perf.Arts/Behav. Science	18	60	20	38	3,680	97	5,700	150	2,700	60	1,200			3,900
Office of the President	13			13	4,956	381	1,950					380	4,940	4,940
Office of the Provost	16			16	5,316	332	2,400					330	5,280	5,280
VP EASS	7			7	1,084	155	1,050					150	1,050	1,050
Office of Student Life	15			15	4,537	302	2,250					300	4,500	4,500
Enrollment Services	49			49	8,269	169	7,350					150	7,350	7,350
Student Development	61			61	10,673	175	9,150					150	9,150	9,150
Admin. Services	63			63	7,238	115	9,450					150	9,450	9,450
Unassigned					5,185									5,185
	372	318	106	478	92,372		71,700							79,288
Surplus/Deficit							20,672							13,084
							Surplus							Surplus

Community College of Denver
Institutional Facility
Space Needs Projections



Community College of Denver
Instructional and Office Facility
Space Needs Projections



G) AHEC SPACE INVENTORY

Building Name	Allocation	Division Name	Department Name	Classroom Facilities	Laboratory Facilities	Office Facilities				Classroom	Laboratory	Office
Cherry Creek	CCD	Arts and Humanities	Arts and Humanities	-	-	3,482			MSUD	86,034	213,354	308,666
Cherry Creek	CCD	Arts and Humanities	Confucious Institute	-	-	237					299,387	
Clear Creek	CCD	Arts and Humanities	Confucious Institute	-	-	854						
Cherry Creek	CCD	Arts and Humanities	English/Journalism	-	-	849			CCD	22,708	140,713	92,371
Cherry Creek	CCD	Arts and Humanities	Foreign Languages	-	-	245					163,421	
Cherry Creek	CCD	Arts and Humanities	History/Humanities	-	-	232						
Cherry Creek	CCD	Arts and Humanities	Language, Arts, Behavioral Sciences	-	-	4,852						
Cherry Creek	CCD	Arts and Humanities	Philosophy	-	-	116						
Arts Building	CCD	Arts and Humanities	Visual Arts	-	-	1,164						
Cherry Creek	CCD	Center for Academic Support & Achievement	Denver Transfer Initiative	-	-	1,309						
Cherry Creek	CCD	Center for Career & Technical Education	Accounting, Business Administration, Economics	-	3,819	768						
Cherry Creek	CCD	Center for Career & Technical Education	Business Technology	-	-	115						
Boulder Creek	CCD	Center for Career & Technical Education	Career & Technical Education Administration	-	1,088	-						
Cherry Creek	CCD	Center for Career & Technical Education	Career & Technical Education Administration	-	6,483	4,104						
Cherry Creek	CCD	Center for Career & Technical Education	Computer Information Technology	-	2,252	344						
Cherry Creek	CCD	Center for Career & Technical Education	Criminal Justice	-	-	116						
Bear Creek	CCD	Center for Career & Technical Education	Early Childhood Education	-	3,012	-						
Boulder Creek	CCD	Center for Career & Technical Education	Energy Technology, Engineering Graphics, Trades &	501	1,733	-						
Boulder Creek	CCD	Center for Career & Technical Education	Industrial Design	615	-	-						
Advanced Manufacturing Center	CCD	Center for Career & Technical Education	Machining & Welding	-	31,000	-						
Cherry Creek	CCD	Center for Educational Advancement	Center for Educational Advancement Administration	-	3,083	-						
Modular Classroom 8	CCD	Center for Educational Advancement	Center for Educational Advancement Administration	-	3,896	-						
Boulder Creek	CCD	Center for Educational Advancement	Developmental Programs	-	641	-						
Boulder Creek	CCD	Center for Educational Advancement	Learning Success Services	-	5,059	455						
Dental Hygiene Center @ Lowry	CCD	Center for Health Sciences	Dental Hygine	-	-	2,187						
Dental Hygiene Center @ Lowry	CCD	Center for Health Sciences	Health Programs	699	5,123	-						
Main Building	CCD	Center for Health Sciences	Health Programs	-	93	7,921						
Main Building	CCD	Center for Health Sciences	Medical Assisstant / Nurse Aid	745	5,189	-						
Main Building	CCD	Center for Health Sciences	Radiation Therapy & Radiologic Technology	2,373	1,076	-						
Main Building	CCD	Center for Health Sciences	Shared Classroom	3,248	-	-						
Main Building	CCD	Center for Health Sciences	Shared Laboratory	-	1,646	-						
Main Building	CCD	Center for Health Sciences	Veternary Technology	689	2,787	-						
Confluence	CCD	Center for Math & Science	Math & Science Administration	10,995	502	8,694						
Confluence	CCD	CFO/Administrative Services	Cashiers	-	-	667						
Administration Building	CCD	CFO/Administrative Services	CFO/Administrative Services	-	-	3,193						
Administration Building	CCD	CFO/Administrative Services	Information Technology	-	-	2,146						
Cherry Creek	CCD	Circulation	Breakroom	-	-	507						
Clear Creek	CCD	Circulation	Restroom	-	-	164						
Confluence	CCD	Enrollment Administration & Student Success	Academic Recruitment & Retention	-	1,471	1,000						
Confluence	CCD	Enrollment Administration & Student Success	College Opportunity & Student Outreach	-	-	1,300						
Confluence	CCD	Enrollment Administration & Student Success	Enrollment Administration & Student Success Administration	-	-	676						
Confluence	CCD	Enrollment Administration & Student Success	Enrollment Services	-	-	704						
Confluence	CCD	Enrollment Administration & Student Success	Financial Aid	-	-	1,876						
Cherry Creek	CCD	Enrollment Services	Finanical Aid Processing	-	-	1,384						
Cherry Creek	CCD	Enrollment Services	Recruitment & Student Outreach	-	-	1,329						

Building Name	Alloca-tion	Division Name	Department Name	Class-room Facilities	Laborato-ry Facil-ities	Office Facilities				Class-room	Labora-tory	Office
Clear Creek	CCD	Circulation	Restroom	-	-	164						
Confluence	CCD	Enrollment Administration & Student Success	Academic Recruitment & Retention	-	1,471	1,000						
Confluence	CCD	Enrollment Administration & Student Success	College Opportunity & Student Outreach	-	-	1,300						
Confluence	CCD	Enrollment Administration & Student Success	Enrollment Administration & Student Success Administration	-	-	676						
Confluence	CCD	Enrollment Administration & Student Success	Enrollment Services	-	-	704						
Confluence	CCD	Enrollment Administration & Student Success	Financial Aid	-	-	1,876						
Cherry Creek	CCD	Enrollment Services	Finanical Aid Processing	-	-	1,384						
Cherry Creek	CCD	Enrollment Services	Recruitment & Student Outreach	-	-	1,329						
Clear Creek	CCD	Facilities	Operations & Maintenance	-	-	19						
Administration Building	CCD	Human Resources	Human Resources	-	-	1,254						
Science Building	CCD	Math & Science	Biology	-	11,522	2,373						
Science Building	CCD	Math & Science	Chemistry	-	3,015	1,241						
Cherry Creek	CCD	Math & Science	Math & Science Administration	-	7,567	-						
Science Building	CCD	Math & Science	Math & Science Administration	-	471	27						
Cherry Creek	CCD	Math & Science	Physics	-	1,349	-						
Cherry Creek	CCD	Office of Student Life	Career Center/Transfer Center	-	-	1,392						
Cherry Creek	CCD	Office of the Provost	Provost	-	-	358						
King Center	CCD	Performing Arts & Behavioral Sciences	Behavioral Sciences	-	-	838						
Cherry Creek	CCD	Performing Arts & Behavioral Sciences	English/Journalism	-	1,549	-						
Cherry Creek	CCD	Performing Arts & Behavioral Sciences	Foreign Languages	-	409	-						
Arts Building	CCD	Performing Arts & Behavioral Sciences	Graphic Design	-	1,568	-						
Cherry Creek	CCD	Performing Arts & Behavioral Sciences	History/Humanities	735	-	-						
King Center	CCD	Performing Arts & Behavioral Sciences	Human Services	-	-	429						
Cherry Creek	CCD	Performing Arts & Behavioral Sciences	Language, Arts, Behavioral Sciences	-	12,035	-						
King Center	CCD	Performing Arts & Behavioral Sciences	Language, Arts, Behavioral Sciences	988	-	1,290						
Modular Classroom 10	CCD	Performing Arts & Behavioral Sciences	Language, Arts, Behavioral Sciences	-	1,638	-						
Arts Building	CCD	Performing Arts & Behavioral Sciences	Music	-	-	89						
King Center	CCD	Performing Arts & Behavioral Sciences	Music	-	293	373						
King Center	CCD	Performing Arts & Behavioral Sciences	Paralegal	-	-	118						
Confluence	CCD	Performing Arts & Behavioral Sciences	Performing Arts & Behavioral Sciences Adminis-tration	-	843	-						
King Center	CCD	Performing Arts & Behavioral Sciences	Theatre/Speech/Communications	-	-	428						
Arts Building	CCD	Performing Arts & Behavioral Sciences	Visual Arts	-	2,838	-						
Boulder Creek	CCD	Performing Arts & Behavioral Sciences	Visual Arts	-	1,195	-						
Cherry Creek	CCD	Performing Arts & Behavioral Sciences	Visual Arts	-	1,386	-						
Cherry Creek	CCD	Performing Arts and Behavior Science	Political Science	-	-	115						
Cherry Creek	CCD	Pre-collegiate Programs	College Pathways	-	-	816						
Cherry Creek	CCD	Pre-collegiate Programs	Educational Planning & Advising Center/Precol-legiate	-	-	334						
Cherry Creek	CCD	President's Office	Creative Services	-	-	974						
Confluence	CCD	President's Office	Facilities Planning and Management	-	-	3,809						
Cherry Creek	CCD	President's Office	President's Office Administration	-	-	3,167						
Confluence	CCD	Provost	Academic Support Center	-	4,800	1,338						
Confluence	CCD	Provost	Foundational Skills Institute	-	-	947						
Science Building	CCD	Shared Classroom	Shared Classroom	1,120	-	-						
Modular Classroom 8	CCD	Shared Space Among CCD Divisions/Departments	CCD Shared Space	-	1,231	-						
Confluence	CCD	Student Development & Retention	Academic Advising	-	-	1,193						
Cherry Creek	CCD	Student Development & Retention	Accessibility Center	-	-	223						

Building Name	Allocation	Division Name	Department Name	Classroom Facilities	Laboratory Facilities	Office Facilities				Classroom	Laboratory	Office
Confluence	CCD	Student Development & Retention	Accessibility Center	-	207	1,191						
Cherry Creek	CCD	Student Development & Retention	Educational Opportunity Center	-	-	5,887						
Confluence	CCD	Student Development & Retention	Student Development and Retention	-	-	973						
Confluence	CCD	Student Development & Retention	Testing Center	-	2,809	1,206						
Cherry Creek	CCD	Student Enrollment Services/Learning & Academic Achievement	Educational Opportunity Center	-	1,036	-						
Cherry Creek	CCD	Student Lounge	Student Lounge	-	-	413						
Tivoli Student Union	CCD	Student Services	Dean of Student Administration	-	-	528						
Boulder Creek	CCD	Student Services	Educational Planning & Advising Center/Precollegiate	-	1,868	-						
Cherry Creek	CCD	Student Services	Educational Planning & Advising Center/Precollegiate	-	1,130	-						
Tivoli Student Union	CCD	Student Services	Student Conduct	-	-	577						
Tivoli Student Union	CCD	Student Services	Student Life	-	-	2,040						
Cherry Creek	CCD	Teaching and Learning Center	Teaching & Learning Center	-	-	1,523						
Cherry Creek	CCD	VP EASS	Institutional Research & Planning	-	-	1,084						
Bear Creek	CCD	WIN	Workforce Initiative Now	-	-	815						
Central Classroom	MSUD	Letters Arts & Sciences	African American Studies	-	-	1,908						
Rectory Building	MSUD	Letters Arts & Sciences	African American Studies	-	-	440						
Cherry Creek	MSUD	Letters Arts & Sciences	Anthropology	-	3,158	-						
Arts Building	MSUD	Letters Arts & Sciences	Art	-	22,196	3,114						
Central Classroom	MSUD	Letters Arts & Sciences	Art	-	3,088	1,051						
Rectory Building	MSUD	Letters Arts & Sciences	Art	-	-	828						
Science Building	MSUD	Letters Arts & Sciences	Biology	-	28,533	5,408						
Science Building	MSUD	Letters Arts & Sciences	Chemistry	1,902	14,695	4,254						
Rectory Building	MSUD	Letters Arts & Sciences	Chicano Studies	-	-	1,844						
Rectory Building	MSUD	Letters Arts & Sciences	College Assistance Migrant Program	-	515	579						
Central Classroom	MSUD	Letters Arts & Sciences	Communication Arts & Sciences	-	3,426	4,075						
Central Classroom	MSUD	Letters Arts & Sciences	Dean's Office	-	-	2,613						
Modular Classroom 7	MSUD	Letters Arts & Sciences	Dean's Office	-	2,992	-						
5th Street Hub	MSUD	Letters Arts & Sciences	Earth & Atmospheric Sciences	-	413	-						
Science Building	MSUD	Letters Arts & Sciences	Earth & Atmospheric Sciences	-	11,726	3,892						
King Center	MSUD	Letters Arts & Sciences	English	3,113	929	6,673						
Central Classroom	MSUD	Letters Arts & Sciences	History	-	-	5,983						
1059 9th Street	MSUD	Letters Arts & Sciences	Institute for Women's Studies	-	-	1,205						
Central Classroom	MSUD	Letters Arts & Sciences	Math & Computer Sciences	-	881	-						
King Center	MSUD	Letters Arts & Sciences	Math & Computer Sciences	1,603	-	-						
Science Building	MSUD	Letters Arts & Sciences	Math & Computer Sciences	-	6,171	8,708						
Plaza Building	MSUD	Letters Arts & Sciences	Modern Languages	449	-	4,088						
Arts Building	MSUD	Letters Arts & Sciences	Music	-	4,074	5,570						
King Center	MSUD	Letters Arts & Sciences	Music	784	1,244	14						
Central Classroom	MSUD	Letters Arts & Sciences	Philosophy	312	-	4,908						
West Classroom	MSUD	Letters Arts & Sciences	Philosophy	418	-	-						
North Classroom	MSUD	Letters Arts & Sciences	Physics	689	3,049	1,136						
Golda Meir Museum	MSUD	Letters Arts & Sciences	Political Science	-	-	1,061						
King Center	MSUD	Letters Arts & Sciences	Political Science	-	-	2,323						
Plaza Building	MSUD	Letters Arts & Sciences	Psychology	1,959	4,782	7,271						
Central Classroom	MSUD	Letters Arts & Sciences	Science & Anthropology	-	491	3,230						
Cherry Creek	MSUD	Letters Arts & Sciences	Science & Anthropology	1,155	-	-						

Building Name	Alloca-tion	Division Name	Department Name	Class-room Facilities	Laborato-ry Facil-ities	Office Facilities				Class-room	Labora-tory	Office
Science Building	MSUD	Letters Arts & Sciences	Science & Anthropology	-	-	99						
7th Street Classroom	MSUD	Letters Arts & Sciences	Shared Classroom	437	-	-						
Arts Building	MSUD	Letters Arts & Sciences	Shared Classroom	1,432	-	-						
Central Classroom	MSUD	Letters Arts & Sciences	Shared Classroom	4,057	-	-						
King Center	MSUD	Letters Arts & Sciences	Shared Classroom	3,196	-	-						
North Classroom	MSUD	Letters Arts & Sciences	Shared Classroom	4,009	-	-						
Plaza Building	MSUD	Letters Arts & Sciences	Shared Classroom	8,014	-	-						
Science Building	MSUD	Letters Arts & Sciences	Shared Classroom	3,251	-	-						
West Classroom	MSUD	Letters Arts & Sciences	Shared Classroom	4,382	-	-						
Central Classroom	MSUD	Letters Arts & Sciences	Social Work	453	-	4,156						
Arts Building	MSUD	Letters Arts & Sciences	Theatre	-	920	1,431						
King Center	MSUD	Letters Arts & Sciences	Theatre	-	1,078	260						
West Classroom	MSUD	Letters Arts & Sciences	Theatre	31	150	740						
Modular Classroom 5	MSUD	Metro State Circulation Space	Classroom	-	816	-						
Modular Classroom 6	MSUD	Metro State Circulation Space	Classroom	-	1,626	-						
Central Classroom	MSUD	Metro State Circulation Space	Kitchen/Lounge Space	-	-	106						
Student Success Building	MSUD	Metro State Circulation Space	Kitchen/Lounge Space	-	-	1,001						
Student Success Building	MSUD	Metro State Circulation Space	Lactation Space	-	-	106						
Student Success Building	MSUD	Metro State Circulation Space	Mail Services	-	-	151						
Student Success Building	MSUD	Metro State Circulation Space	Media Storage	-	-	91						
Modular Office Building	MSUD	Metro State Circulation Space	Restroom	-	-	290						
Student Success Building	MSUD	Metro State Circulation Space	Restroom	-	-	465						
Modular Office Building	MSUD	Metro State University of Denver	Vacant Space Occupied By CCD	-	-	1,742						
Student Success Building	MSUD	President's Office	Diversity	-	-	334						
Student Success Building	MSUD	President's Office	Equal Opportunity	-	-	633						
Student Success Building	MSUD	President's Office	Faculty Senate	-	-	543						
Administration Building	MSUD	President's Office	Intercollegiate Athletics	-	-	4,370						
PE/Events Center	MSUD	President's Office	Intercollegiate Athletics	-	-	176						
Tivoli Student Union	MSUD	President's Office	Intercollegiate Athletics	-	-	976						
Student Success Building	MSUD	President's Office	Marketing & Communications	-	-	3,829						
Central Classroom	MSUD	President's Office	President's Office Administration	-	-	357						
Modular Office Building	MSUD	President's Office	President's Office Administration	-	-	255						
Student Success Building	MSUD	President's Office	President's Office Administration	-	-	7,574						
Administration Building	MSUD	School of Business	Accounting	-	707	2,587						
7th Street Classroom	MSUD	School of Business	Accounting, Business Administration, Economics	1,191	-	-						
Administration Building	MSUD	School of Business	Accounting, Business Administration, Economics	4,960	-	-						
Facilities Annex	MSUD	School of Business	Accounting, Business Administration, Economics	1,402	-	-						
King Center	MSUD	School of Business	Accounting, Business Administration, Economics	5,376	-	-						
Modular Classroom 5	MSUD	School of Business	Accounting, Business Administration, Economics	-	810	-						
Administration Building	MSUD	School of Business	Computer Information Systems	-	1,485	2,590						
Administration Building	MSUD	School of Business	Dean's Office	-	-	2,028						
Administration Building	MSUD	School of Business	Economics	-	-	1,454						
Administration Building	MSUD	School of Business	Finance	-	-	1,144						
Administration Building	MSUD	School of Business	Management	-	-	2,172						
Administration Building	MSUD	School of Business	Marketing	-	-	2,187						
Administration Building	MSUD	School of Business	School of Business Administration	-	1,752	6,945						
West Classroom	MSUD	School of Education	Teacher Education	684	5,001	9,850						
7th Street Classroom	MSUD	School of Professional Studies	Aviation and Aerospace Science	18	9,288	2,920						
Modular Office Building	MSUD	School of Professional Studies	Criminal Justice & Criminology	-	-	282						

Building Name	Allocation	Division Name	Department Name	Classroom Facilities	Laboratory Facilities	Office Facilities				Classroom	Laboratory	Office
West Classroom	MSUD	School of Professional Studies	Criminal Justice & Criminology	379	1,725	3,550						
West Classroom	MSUD	School of Professional Studies	Dean's Office	-	-	2,531						
Plaza Building	MSUD	School of Professional Studies	Electrical Engineering Technology	-	970	-						
Boulder Creek	MSUD	School of Professional Studies	Engineering Technology	-	5,766	230						
Plaza Building	MSUD	School of Professional Studies	Engineering Technology	-	6,670	3,740						
West Classroom	MSUD	School of Professional Studies	Health Professions	-	2,007	5,797						
Spring Hill Suites & Hospitality Learning Center	MSUD	School of Professional Studies	Hospitality, Tourism & Events	-	13,027	3,802						
PE/Events Center	MSUD	School of Professional Studies	Human Performance & Sport	-	3,596	2,457						
West Classroom	MSUD	School of Professional Studies	Human Services	562	533	2,718						
Boulder Creek	MSUD	School of Professional Studies	Industrial Design	-	10,030	1,836						
Boulder Creek	MSUD	School of Professional Studies	Nursing	-	3,066	-						
West Classroom	MSUD	School of Professional Studies	Nursing	-	-	2,855						
1045 9th Street	MSUD	School of Professional Studies	One World One Water	-	-	897						
Modular Office Building	MSUD	School of Professional Studies	One World One Water	-	-	186						
Modular Office Building	MSUD	School of Professional Studies	Reserve Officers' Training Corps	-	-	423						
PE/Events Center	MSUD	School of Professional Studies	Shared Classroom	1,004	-	-						
Plaza Building	MSUD	School of Professional Studies	Shared Classroom	595	-	-						
West Classroom	MSUD	School of Professional Studies	Shared Classroom	1,115	-	-						
Central Classroom	MSUD	School of Professional Studies	Telecommunication & Media Production	-	2,509	3,631						
7th Street Classroom	MSUD	Shared Classroom	Shared Classroom	1,095	-	-						
Boulder Creek	MSUD	Shared Classroom	Shared Classroom	1,332	-	-						
Central Classroom	MSUD	Shared Classroom	Shared Classroom	4,852	-	-						
King Center	MSUD	Shared Classroom	Shared Classroom	1,648	-	-						
PE/Events Center	MSUD	Shared Classroom	Shared Classroom	1,027	-	-						
Plaza Building	MSUD	Shared Classroom	Shared Classroom	552	-	-						
Science Building	MSUD	Shared Classroom	Shared Classroom	904	-	-						
West Classroom	MSUD	Shared Classroom	Shared Classroom	4,429	-	-						
Student Success Building	MSUD	Vice President of Academics & Student Affairs	Academic Advising	-	-	3,070						
Science Building	MSUD	Vice President of Academics & Student Affairs	Academic Computing	-	2,289	135						
Plaza Building	MSUD	Vice President of Academics & Student Affairs	Access Center & Testing Services	-	672	2,372						
Tivoli Student Union	MSUD	Vice President of Academics & Student Affairs	Access Center & Testing Services	-	1,126	1,671						
Student Success Building	MSUD	Vice President of Academics & Student Affairs	Admissions & Outreach	-	-	7,245						
Administration Building	MSUD	Vice President of Academics & Student Affairs	Applied Learning Center	640	-	2,610						
Tivoli Student Union	MSUD	Vice President of Academics & Student Affairs	Applied Learning Center	-	-	1,106						
PE/Events Center	MSUD	Vice President of Academics & Student Affairs	Campus Recreation	-	-	1,206						
Tivoli Student Union	MSUD	Vice President of Academics & Student Affairs	Career Services	-	-	2,308						
Central Classroom	MSUD	Vice President of Academics & Student Affairs	Center for Faculty Development	-	989	1,255						
Administration Building	MSUD	Vice President of Academics & Student Affairs	Center for Individualized Learning	280	-	1,318						
Clear Creek	MSUD	Vice President of Academics & Student Affairs	Center for Individualized Learning	-	-	1,484						
Student Success Building	MSUD	Vice President of Academics & Student Affairs	Center for Innovation	-	-	1,082						
Tivoli Student Union	MSUD	Vice President of Academics & Student Affairs	Center for Urban Education	-	-	1,717						
Tivoli Student Union	MSUD	Vice President of Academics & Student Affairs	Counseling Center	-	-	3,055						
Central Classroom	MSUD	Vice President of Academics & Student Affairs	Educational Technology Center	-	1,132	1,678						
Student Success Building	MSUD	Vice President of Academics & Student Affairs	Enrollment Services	-	-	384						
Modular Office Building	MSUD	Vice President of Academics & Student Affairs	Equity Assistance Center	-	-	986						
Student Success Building	MSUD	Vice President of Academics & Student Affairs	Financial Aid	-	-	6,511						
Student Success Building	MSUD	Vice President of Academics & Student Affairs	First Year Student Success	9,420	-	2,837						
Tivoli Student Union	MSUD	Vice President of Academics & Student Affairs	Gay, Lesbian, Bisexual & Transgender Students	-	-	739						

Building Name	Alloca-tion	Division Name	Department Name	Class-room Facilities	Laborato-ry Facil-ities	Office Facilities				Class-room	Labora-tory	Office
1024 9th Street	MSUD	Vice President of Academics & Student Affairs	High School Upward Bound	-	-	1,029						
Central Classroom	MSUD	Vice President of Academics & Student Affairs	High School Upward Bound	-	547	-						
1033 9th Street	MSUD	Vice President of Academics & Student Affairs	Honors Program	-	182	841						
Tivoli Student Union	MSUD	Vice President of Academics & Student Affairs	New Student Orientation	-	-	2,109						
Administration Building	MSUD	Vice President of Academics & Student Affairs	Office of International Studies	280	-	1,013						
Central Classroom	MSUD	Vice President of Academics & Student Affairs	Office of International Studies	-	-	743						
Student Success Building	MSUD	Vice President of Academics & Student Affairs	Registrar	-	-	3,714						
Student Success Building	MSUD	Vice President of Academics & Student Affairs	Student Academic Success Center	-	6,002	5,569						
Tivoli Student Union	MSUD	Vice President of Academics & Student Affairs	Student Activities	-	-	2,645						
Tivoli Student Union	MSUD	Vice President of Academics & Student Affairs	Student Government	-	-	1,726						
Clear Creek	MSUD	Vice President of Academics & Student Affairs	Student Health Center	-	-	519						
Plaza Building	MSUD	Vice President of Academics & Student Affairs	Student Health Center	-	-	2,277						
Tivoli Student Union	MSUD	Vice President of Academics & Student Affairs	Student Life	-	-	2,016						
Tivoli Student Union	MSUD	Vice President of Academics & Student Affairs	Student Media	-	-	3,328						
Student Success Building	MSUD	Vice President of Academics & Student Affairs	Student Support Services	-	-	1,255						
Clear Creek	MSUD	Vice President of Academics & Student Affairs	Veteran's Upward Bound	-	-	1,101						
Student Success Building	MSUD	Vice President of Academics & Student Affairs	Vice President of Academics & Student Affairs	-	-	5,795						
Student Success Building	MSUD	Vice President of Admin, Finance & Facilities	Accounting Services	-	-	3,774						
Student Success Building	MSUD	Vice President of Admin, Finance & Facilities	Budget Office	-	-	1,897						
Student Success Building	MSUD	Vice President of Admin, Finance & Facilities	Bursar/Perkins Student Accounts	-	-	2,890						
Student Success Building	MSUD	Vice President of Admin, Finance & Facilities	Cashier	-	-	1,329						
Science Building	MSUD	Vice President of Admin, Finance & Facilities	Facilities Planning and Management	-	-	89						
Student Success Building	MSUD	Vice President of Admin, Finance & Facilities	Facilities Planning and Management	-	-	657						
Student Success Building	MSUD	Vice President of Admin, Finance & Facilities	Human Resources	-	-	3,519						
Student Success Building	MSUD	Vice President of Admin, Finance & Facilities	Office of Institutional Research	-	-	1,939						
Student Success Building	MSUD	Vice President of Admin, Finance & Facilities	Vice President of Admin, Finance & Facilities	-	-	2,505						
Student Success Building	MSUD	Vice President of Advancement & External Relations	Alumni Relations	-	-	3,122						
Student Success Building	MSUD	Vice President of Advancement & External Relations	Institutional Advancement	-	-	620						
Student Success Building	MSUD	Vice President of Advancement & External Relations	Metro State Foundation	-	-	441						
Student Success Building	MSUD	Vice President of Advancement & External Relations	Office of Development	-	-	440						
Student Success Building	MSUD	Vice President of Advancement & External Relations	Office of Sponsored Research and Programs	-	-	330						
Student Success Building	MSUD	Vice President of Advancement & External Relations	Vice President of Advancement & External Relations	-	-	8,018						
7th Street Classroom	MSUD	Vice President of Information Technology	IT Academics Labs	-	782	-						
Administration Building	MSUD	Vice President of Information Technology	IT Academics Labs	-	2,831	148						
King Center	MSUD	Vice President of Information Technology	IT Academics Labs	-	709	-						
Plaza Building	MSUD	Vice President of Information Technology	IT Academics Labs	-	3,735	190						
Tivoli Student Union	MSUD	Vice President of Information Technology	IT Academics Labs	-	2,650	390						
West Classroom	MSUD	Vice President of Information Technology	IT Academics Labs	-	3,814	1,334						
Administration Building	MSUD	Vice President of Information Technology	IT Admin Services	-	-	2,069						
Administration Building	MSUD	Vice President of Information Technology	IT Application Services	-	-	954						
Administration Building	MSUD	Vice President of Information Technology	IT Desk Support	-	-	606						
Administration Building	MSUD	Vice President of Information Technology	IT Infrastructure Services	-	-	1,434						
Central Classroom	MSUD	Vice President of Information Technology	IT Infrastructure Services	-	-	221						
Administration Building	MSUD	Vice President of Information Technology	IT Security	-	-	386						
Administration Building	MSUD	Vice President of Information Technology	IT User Services	-	-	1,709						
West Classroom	MSUD	Vice President of Information Technology	IT User Services	-	-	499						
Administration Building	MSUD	Vice President of Information Technology	VPIT/CIO	-	-	5,651						
Student Success Building	MSUD	Vice President of Information Technology	VPIT/CIO	-	-	386						
Science Building	MSUD	0	Classroom	642	-	-						

The following definitions were used to determine the renvoation levels required to meet the program outlined by RNL. Cost per square foot assumptions were utilized for Finishes, Electrical, and Mechanical depending on the renovation level.

MINOR RENOVATION
Up to 20% remodel
Reconfigured partitions
Same use
Patch/repair flooring/base/paint
Selective replacement of ACT
Repair casework as needed

Minor Renovation Cost Per Square Foot Assumptions		
Finishes	$	12.50
Electrical	$	6.00
Mechanical	$	10.00

MODERATE RENOVATION
20- 50% remodel
Reconfigured partitions
Similar or new use
New flooring/base/paint
50% new ACT and grid
50% new light fixtures
50% new casework

Moderate Renovation Cost Per Square Foot Assumptions		
Finishes	$	31.00
Electrical	$	12.00
Mechanical	$	15.00

MAJOR RENOVATION
50-90% remodel
New partitions/doors/borrowed lights
New use
New flooring/base/paint
New ACT and grid
New light fixtures
New casework

Extensive Renovation Cost Per Square Foot Assumptions		
Finishes	$	50.00
Electrical	$	15.00
Mechanical	$	25.00

CC-C: CAPITAL CONSTRUCTION REQUEST FOR FY 2017-18

Agency :	**Community College of Denver**	State Controller Project No. (if applicable):	
Project Title:	Short Term Master Plan Projects	Agency Signature Approval:	Date
Project Year(s):	FY 2018 - 18	OSA Signature Approval:	Date
Agency Priority Number:		OSPB Signature Approval:	Date:
Name and E-mail of Preparer:			

	Revision? Yes No If yes, last submission date:	**Total Project Costs**	**Total Prior Year Appropriation(s)**	**Current Year Request FY 17-18**	**Year 2 Request**	**Year 3 Request**	**Year 4 Request**	**Year 5 Request**
A.	***Land /Building Acquisition***							
(1)	Land /Building Acquisition	$ -	$ -	**$ -**	$ -	$ -	$ -	$ -
B.	***Professional Services***							
(1)	Master Plan/FPP	$ -	$ -	**$ -**	$ -	$ -	$ -	$ -
(2)	Site Surveys, Investigations, Reports	$ -	$ -		$ -	$ -	$ -	$ -
(3)	Architectural/Engineering/ Basic Services	$ 1,791,313	$ -	**$ 1,791,313**	$ -	$ -	$ -	$ -
(4)	Code Review/Inspection	$ 179,131	$ -	**$ 179,131**	$ -	$ -	$ -	$ -
(5)	Construction Management	$ 612,180	$ -	**$ 612,180**	$ -	$ -	$ -	$ -
(6)	Advertisements	$ -	$ -	**$ -**	$ -	$ -	$ -	$ -
(7a)	Inflation for Professional Services	$ 213,156	$ -	**$ 213,156**	$ -	$ -	$ -	$ -
(7b)	Inflation Percentage Applied		0.00%	**5.00%**	0.00%	0.00%	0.00%	0.00%
(8)	Other	$ -	$ -	**$ -**	$ -	$ -	$ -	$ -
(9)	*Total Professional Services*	$ 2,795,781	$ -	**$ 2,795,781**	$ -	$ -	$ -	$ -
C.	***Construction or Improvement***							
(1)	Infrastructure	$ -	$ -	**$ -**	$ -	$ -	$ -	$ -
	(a) Service/Utilities	$ -	$ -	**$ -**	$ -	$ -	$ -	$ -
	(b) Site Improvements	$ 313,775	$ -	**$ 313,775**	$ -	$ -	$ -	$ -
(2)	Structure/Systems/ Components							
	(a) New (GSF): 10,327	$ 3,407,910	$ -	**$ 3,407,910**	$ -	$ -	$ -	$ -
	New $282 /GSF							
	(b) Renovate GSF: 65,593	$ 9,672,781	$ -	**$ 9,672,781**	$ -	$ -	$ -	$ -
	Renovate $133 /GSF							
(3)	Other (Contractor Indirects)	$ 2,072,108	$ -	**$ 2,072,108**	$ -	$ -	$ -	
(4)	High Performance Certification Program	$ 100,037	$ -	**$ 100,037**	$ -	$ -	$ -	$ -
(5a)	Inflation for Construction	$ 1,213,716	$ -	**$ 1,213,716**	$ -	$ -	$ -	$ -
(5b)	Inflation Percentage Applied		0.00%	**5.00%**	0.00%	0.00%	0.00%	0.00%
(6)	*Total Construction Costs*	$ 16,780,326	$ -	**$ 16,780,326**	$ -	$ -	$ -	$ -
D.	***Equipment and Furnishings***							
(1)	Equipment	$ 22,000	$ -	**$ 22,000**	$ -	$ -	$ -	$ -
(2)	Furnishings	$ 2,525,985	$ -	**$ 2,525,985**	$ -	$ -	$ -	$ -
(3)	Communications	$ -	$ -	**$ -**	$ -	$ -	$ -	$ -
(4a)	Inflation on Equipment and Furnishings	$ 171,282	$ -	**$ 171,282**	$ -	$ -	$ -	$ -
(4b)	Inflation Percentage Applied		0.00%	**5.00%**	0.00%	0.00%	0.00%	0.00%
(5)	*Total Equipment and Furnishings Cost*	$ 2,719,267	$ -	**$ 2,719,267**	$ -	$ -	$ -	$ -
E.	***Miscellaneous***							
(1)	Art in Public Places=1% of State Total Construction Costs (see SB 10-94)	$ -	$ -	**$ 157,735**	$ -	$ -	$ -	$ -
(2)	Annual Payment for Certificates of Participation	$ -	$ -	**$ -**	$ -	$ -	$ -	$ -
(3)	Relocation Costs	$ -	$ -	**$ -**	$ -	$ -	$ -	$ -
(4)	Other Costs [specify]	$ -	$ -	**$ -**	$ -	$ -	$ -	$ -
(5)	Other Costs [specify]	$ -	$ -	**$ -**	$ -	$ -	$ -	$ -
(6)	Other Costs [specify]	$ -	$ -	**$ -**	$ -	$ -	$ -	$ -
(7)	Other Costs [specify]	$ -	$ -	**$ -**	$ -	$ -	$ -	$ -
(8)	*Total Misc. Costs*	$ 157,735	$ -	**$ 157,735**	$ -	$ -	$ -	$ -
F.	**Total Project Costs**	$ 22,453,110	$ -	**$ 22,453,110**	$ -	$ -	$ -	$ -
G.	***Project Contingency***							
(1)	5% for New	$ 170,396	$ -	**$ 170,396**	$ -	$ -	$ -	$ -
(2)	10% for Renovation	$ 967,278	$ -	**$ 967,278**	$ -	$ -	$ -	$ -
(3)	*Total Contingency*	$ 1,137,674	$ -	**$ 1,137,674**	$ -	$ -	$ -	$ -
H.	**Total Budget Request [F+G(3)]**	**$ 23,590,783**	**$ -**	**$ 23,590,783**	**$ -**	**$ -**	**$ -**	**$ -**
I.	***Source of Funds***							
1	CCF	$ 22,175,336	$ -	**$ 22,175,336**	$ -	$ -	$ -	$ -
2	CF	$ 1,415,447	$ -	**$ 1,415,447**	$ -	$ -	$ -	$ -
3	RF	$ -	$ -	**$ -**	$ -	$ -	$ -	$ -
4	FF	$ -	$ -	**$ -**	$ -	$ -	$ -	$ -

Community College of Denver — **6/16/2016**
Renovation: Boulder Creek Building

Boulder Creek Renovation - Cost Estimate Summary

		Renovation Scope (SF)		55,283
Item No.	**Description**	**$/SF**		**Total**
A10	Foundations	Excluded		
A20	Basement	Excluded		
B10	Superstructure	Excluded		
B20	Exterior Closure[1]	$ 13.19	$	729,000
B30	Roofing[2]	$ 14.25	$	787,783
C10	Interior Construction	Included in finishes		
C20	Staircases	Excluded		
C30	Interior Finishes[3]	$ 42.15	$	2,330,017
D10	Conveying Systems	Excluded		
D20	Plumbing[4]	$ 8.75	$	483,750
D30	HVAC[5]	$ 53.69	$	2,968,140
D50	Electrical[6]	$ 21.00	$	1,160,943
E10	Equipment[7]	$ 0.36	$	20,000
E20	Furnishings[8]	$ 35.00	$	1,934,905
F10	Special Construction & Equipment	Excluded		
F10	Selective Building Demolition	Included in finishes		
G10	Site Preperation	Excluded		
G20	Site Improvements[9]	$ 0.64	$	35,250
H10	General Conditions / Requirements (15%)[10]	$ 23.10	$	1,277,232
	Subtotal Direct Construction Costs	$ 212.13	$	11,727,020
	Estimators Contingency (10%)		$	1,172,702
	Total Direct Construction Costs	$ 233.34	$	12,899,722
	Escalation Cost Through Construction Start Date of January 2018 (FY 2018)	$ 17.72 (5%)	$	979,474
	Estimated Construction Cost of Boulder Creek Renovation:	$ 251.06	$	13,879,195
	Architectural and Engineering Design Fee (10% of Escalated Construction Cost)	$ 25.11	$	1,387,920
	Construction Management Cost (3.5% of Escalated Construction Cost)	$ 8.79	$	485,772
	Materials Testing and Special Inspections (1% of Escalated Construction Cost)	$ 2.51	$	138,792
	LEED Building System Commissioning Fee	$ 0.65	$	35,934
	LEED Credit Management / Oversight	$ 1.00		55,283
	Art in Public Places (1% of State Total Costs)[11]	$ 1.98	$	109,713
	Total Cost (Art, Construction, Design, Management, Escalation, FFE)	**$ 291.10**	**$**	**16,092,608**

Comments:

(1) Exterior closure consists of tuckpointing allowance of $35,000; full replacement of all windows to insulated high-performance glazing allowance of $650,000 including storefront window system at one location; storefront replacement and masonry infill allowance of $44,000.
(2) Roofing and flashing to be replaced with single ply membrane and covered with aggregate at estimated cost of $4.25 per square foot.
(3) Finish renovation levels per Minor, Moderate, and Extensive renovation levels as outlined by RNL program and cost to renovate space into Nutrition Teaching Kitchen and Cafe. Additional costs include painting of mechanical penthouse (500sf) at a cost of $5 per square foot.
(4) Assumes full restroom replacement and expansion of 1,935 square feet.
(5) HVAC cost represents a complete demolition and replacement of the building's existing mechancial system. HVAC systems upgrade should be sized to accommodate new construction addition at time of Boulder Creek renovation.
(6) Electrical renovation levels per Minor, Moderate, and Extensive renovation levels as outlined by RNL program.
(7) Equipment consists of $20,000 allowance for signage. Security upgrades are not included.
(8) Furnishings includes $20 allowance for FF&E psf and $15 allowance psf for AV/IT upgrades.
(9) Site Imporvements consists of allowance for paved areas ($25,250) and equipment enclosure ($10,000).
(10) General Conditions / Requirements does not include Furnishings cost. This cost to be assumed by owner and outside of General Contractor scope.
(11) Assumes State funding for 94% of total project cost of including architectural and engineering design fee, construction management fee, materials testing, LEED costs, furnishings, and construction cost.
(12) See cover sheet for full list of exclusions and basis for estimate.

Community College of Denver — **6/16/2016**
New Construction: Boulder Creek Building

Boulder Creek New Construction - Cost Estimate Summary

		New Construction Scope (SF)		10,327
Item No.	**Description**	**$/SF**		**Total**
A10	Foundations	Excluded		
A20	Basement	Excluded		
B10	Superstructure	$ 250.00	$	2,581,750
B20	Exterior Closure[1]	Included in Superstructure		
B30	Roofing[2]	Included in Superstructure		
C10	Interior Construction[3]	$ 50.00	$	516,350
C20	Staircases	Excluded		
C30	Interior Finishes[4]	Included in Interior Construction		
D10	Conveying Systems	Excluded		
D20	Plumbing	Included in Superstructure		
D30	HVAC[5]	Included in Superstructure		
D50	Electrical	Included in Superstructure		
E10	Equipment	Included in Superstructure		
E20	Furnishings[6]	$ 35.00	$	361,445
F10	Special Construction & Equipment	Excluded		
F10	Selective Building Demolition	Included in finishes		
G10	Site Preperation	Excluded		
G20	Site Improvements[7]	$ 24.21	$	250,000
H10	General Conditions / Requirements (15%)[8]	$ 53.88	$	556,432
	Subtotal Direct Construction Costs	$ 413	$	4,265,977
	Estimators Contingency (10%)	$ 41.31	$	426,598
	Total Direct Construction Costs	$ 454	$	4,692,574
	Escalation Cost Through Construction Start Date of January 2018 (FY 2018)	$ 34.50 (5%)	$	356,306
	Estimated Construction Cost of Boulder Creek NC:	$ 488.90	$	5,048,881
	Architectural and Engineering Design Fee (10% of Escalated Construction Cost)	$ 48.89	$	504,888
	Construction Management Cost (3.5% of Escalated Construction Cost)	$ 17.11	$	176,711
	Materials Testing and Special Inspections (1% of Escalated Construction Cost)	$ 4.89	$	50,489
	LEED Building System Commissioning Fee	$ 0.65	$	6,713
	LEED Credit Management / Oversight	$ 1.00		10,327
	Art in Public Places (1% of State Total Costs)[9]	$ 4.22	$	43,624
	Total Cost (Art, Construction, Design, Management, Escalation, FFE)	**$ 565.67**	**$**	**5,841,632**

Comments:

(1) Exterior closure consists of core and shell construction costs @ $250psf for 10,327 gross square feet.
(2) Roofing cost is included in core and shell construction cost @ $250psf for 10,327 gross square feet.
(3) Interior Construction includes 3,110 square feet of classroom, 6,043 of office, and 1,174 square feet of circulation per RNL space diagram dated 5/16/2016.
(4) Interior Finish cost included in Interior Construction cost.
(5) HVAC upgrades as part of Boulder Creek Renovation should be sized appropriately to accommodate new addition.
(6) Furnishings include $20 psf FFE allowance and $15 psf IT/AV allowance.
(7) Site Improvement allowance of $250,000 assumes $155,000 plaza cost plus additional amenities and site improvements.
(8) General Conditions / Requirements does not include Furnishings cost. This cost to be assumed by owner and outside of General Contractor scope.
(9) Assumes State funding for 94% of total project cost of including architectural and engineering design fee, construction management fee, materials testing, LEED costs, furnishings, and construction cost.
(10) See cover sheet for full list of exclusions and basis for estimate.

Additional Renovation Costs per Institution and Building [1]

Institution	Building	Total GSF	Est. NSF by Level of Renovation: Minimal	Moderate	Extensive	Renovation Cost (April 2016)	Hard Cost PSF (April 2016)	Estimators Contingency 10%	Indirects 15%	Total Cost (April 2016)	Construction Start Date	Escalation Allowance[2] 5% per annum	Total Cost with Escalation	Escalated Cost PSF
Community College of Denver	Short Term Projects													
	Clear Creek Building	7,410	5,500	1,910	-	$ 222,655	$ 30.05	$ 22,266	$ 36,738	$ 281,659	Jan-18	$ 28,870	$ 310,529	$ 41.91
	Cherry Creek Building	2,340	2,340	-	-	$ 66,690	$ 28.50	$ 6,669	$ 11,004	$ 84,363	Jan-18	$ 11,004	$ 93,010	$ 39.75
	Confluence Building	1,560	1,560	-	-	$ 44,460	$ 28.50	$ 4,446	$ 7,336	$ 56,242	Jan-18	$ 5,765	$ 62,007	$ 39.75
	Subtotal:	11,310				$ 333,805				$ 422,263			$ 465,545	$ 41.16
	Subtotal A&E Costs (10%)									$ 42,226			$ 46,555	
	Subtotal Materials Testing (1%)									$ 4,223			$ 4,655	
	Subtotal State Art Requirement (1%)[5]									$ 4,687			$ 4,376	
	Total Short Term Projects:	**11,310**								**$ 473,399**			**$ 521,131**	**$ 46.08**

Institution	Building	Total GSF	Est. NSF by Level of Renovation: Minimal	Moderate	Extensive	Renovation Cost (April 2016)	Hard Cost PSF (April 2016)	Estimators Contingency 10%	Indirects 15%	Total Cost (April 2016)	Construction Start Date	Escalation Allowance[2] 5% per annum	Total Cost with Escalation	Escalated Cost PSF
Community College of Denver	Mid Term Projects													
	Boulder Creek Building[4]	11,157	-	1,002	6,043	$ 985,767	$ 62,124	$ 98,577	$ 162,652	$ 1,246,995	Jan-21	$ 306,166	$ 1,553,162	$ 139.21
	Grand Total All CCD Projects:	**22,467**				**$ 1,319,572**				**$ 1,720,395**			**2,074,293**	**$ 92.33**

(1) Renovation levels per Minor, Moderate, and Extensive defination provided by RNL.
(2) Escalation allowance is based on 5% escalation rate compounded annually through construction start date per RNL program dated 5/16/2016.
(3) Furniture, Fixtures, and Equipment not included in costs. Construction Management costs not included.
(4) Boulder Creek renvoation from UCD to CCD anticipated to occur January 2021. This is a mid-term project; not reflected on Capital Construction Request form.
(5) Assumes State funding for 94% of total project cost of including architectural and engineering design fee, construction management fee,
(6) See cover sheet for full list of exclusions and basis of estimate.