



PERALTA COMMUNITY COLLEGE DISTRICT

Berkeley City College

**2017 Facilities & Technology
Master Plan
Update**

BOARD APPROVED
March 13, 2018

STEINBERG

ACKNOWLEDGMENTS

The District and the Board of Trustees would like to thank all the participants. These include all the participants from the surveys, campus workshops, interviews, and campus shared governance committees. A special thank you to the Facilities Planning Committee and College President who provided the necessary leadership and outreach in gaining consensus and approvals of the plan.

MASTER PLAN TEAM



Facilities Master Plan Architect



Technology Master Planner



Infrastructure Master Planner



Mechanical, Electrical, Plumbing



Preliminary Costing



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A NOTE FROM THE PRESIDENT

After years of work, Berkeley City College moved into its new 160,000 square foot LEED™ certified green building in late 2006. The light-filled facility with its auditorium, student gathering spaces, smart classrooms, computer labs, and library has given the college scope for events and programs never before possible. Distance Education and innovative programs such as Biotechnology, Multimedia Arts, Learning Communities, and a host of transfer programs have put Berkeley City College on the map. The Teaching and Learning Center, Learning Resources Center, Veterans Resource Center, and other student support and career/transfer services have contributed to the college's growth.

In addition, the new facility has attracted such growth in the student body that the 2118 Milvia building, with over 25,000 square feet of building space, was acquired in 2015 to increase number of lecture classrooms, expand programs space, and increase number of faculty offices. Despite this added square footage, the college will still be deficient in Lecture, Lab, Office, Library, and AV/TV space. As the college continues to grow, our commitment to excellence stays firm. With the help of an outstanding faculty, staff, administration, and students, we are looking forward to an exciting future.

This document bridges the Educational Master Plan to the Facility Master Plan. It is meant to be a living document. Planning for continuous improvement is a Berkeley City College priority. It forms the basis for our commitment to superlative academic programs and services. The college community deserves credit for engaging in planning and embracing its future. I want to thank our college community for developing BCC's unit plans, program review, self study, and design and build plans, all of which informed the facilities and technology master plan.

Very Truly Yours,



Rowena M. Tomaneng, Ed.D. President



Executive Summary

OVERVIEW

Berkeley City College (BCC) is one of four colleges in the Peralta Community College District, located in Downtown Berkeley, California. It has a main campus building located at 2050 Center Street, a portion of a leased facility at 2000 Center Street, and a recently acquired facility at 2118 Milvia Street.

As an update to the 2009 Facilities Master Plan, the purpose of this Facilities Technology Master Plan Update (FTMP) is to analyze existing facilities and technology, and outline development goals that align with the current and future needs of Berkeley City College, as identified in the College's 2016 Educational Master Plan.

To fully understand Berkeley City College's needs and issues, a large and diverse set of stakeholders - students, faculty, staff and facilities personnel - participated in the Facilities & Technology Master Plan process through Online surveys, workshop discussions, meetings, campus forums, and presentations. The results of this extensive, investigative, and collaborative planning process are documented here, as follows:

Chapter One documents the FTMP purpose, process, vision, mission, and BCC's Educational Master Plan Goals. **Chapter Two** documents the existing conditions analysis, stakeholder feedback, and summarizes the facilities needs. **Chapter Three** documents the opportunities and constraints, Master Plan projects, and Priority projects.

The 2017 District-Wide Facilities and Technology Master Plan (*available under separate cover*) documents the Technology needs and projects (Technology Master Plan), the preliminary cost estimates (Cost Information), and the proposed Implementation Plan.

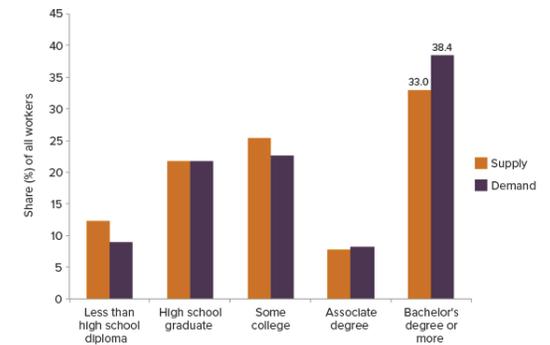
KEY DRIVERS FOR THE FTMP

The key drivers for the FTMP Update are:

- The needs arising out of the 2016 Educational Master Plan (EMP);
- In particular the need to increase student success, retention, transfer and completion, and reduce the education gap;
- Also from the EMP, the needs arising out of 21st Century changing teaching and learning pedagogies;
- And the need to increase recruitment, and retention, of faculty since 50% of PCCD faculty and staff are within retirement age;
- The needs arising out of the existing condition of technology; and
- Lack of Lecture, Laboratories, Office and Library space capacity for *current* demand.

KEY FINDINGS FROM 2016 EMPS

The 2016 Educational Master Plan's main goal is to achieve equity, and to eliminate the education gap in **student access (participation), learning, completion, and success**. This is also the top strategic goal for the District, as identified in the 2015 PCCD Strategic Plan, and reflects the concern that by 2030, California will be short by 1.1 million college graduates if current trends persist (according to the Public Policy Institute of California (PPIC) Higher Education Center).



Source: Johnson, Cueller Mejia, and Bohn, *Will California Run Out of College Graduates?* (PPIC 2015)

The 2016 EMPS identify a 1.0% per year college area population growth rate, and a decline in students less than 25 years old, which means that for the **next five years the College is growth neutral**.

However, growth in the 24 - 34 age group offer opportunities for the PCCD colleges to enhance and re-design **existing career technical education (CTE) programs and complementary CTE programming** to cater to this population segment's needs for professional growth and career changes.

Other program enhancements/re-designs are needed to address the PCCD 2016 EMP Labor Market Gap Analysis Report, which identifies gaps between district's educational programs and high-wage/high-skill jobs available in the region.

There is also **a need to develop non-credit to credit pathways for 16% of the adult population** that is in need of career development and college preparation.

KEY FINDINGS FROM EXISTING CONDITIONS

The existing conditions analysis identified that **BCC continues to be under-built in all the five State Space categories, and is significantly under-built in class labs.** In addition:

- Even with the renovation of 2118 Milvia Street, a recently acquired property, the College will need additional space to meet its current lecture, class lab, office, library and AV/TV needs;
- Even though the main campus building is a little over ten years old, the technology infrastructure is in need of updating due to rapid changes in technology;
- There are a number of programmatic issues with the existing main building with respect to inappropriate clustering of programs, inability to expand Tutoring/Success Center, inadequate space for student support groups, and student gathering spaces, to name a few; and
- Lack of student gathering space is having a noise impact on adjacent instructional and student support spaces.

FACILITIES TECHNOLOGY MASTER PLAN DEVELOPMENT

Based on the 2016 Education Master Plan, Institutional Goals, and Facilities Assessments, campus stakeholders identified the following as their key priorities for the 2017 Facilities and Technology Master Plan:

- Build-out of the 3rd floor of Milvia Street (current project only builds out lower floors)
- Reconfigure existing Main Building, where feasible, to address as many of the identified issues as possible
- Network Upgrade & Computer Refresh
- Additional Facility and/or Land

These priorities helped guide the development of the master plan, as did all data gathered and analyzed.

MASTER PLAN PRIORITY PROJECTS

FACILITIES	
B1A	Milvia Street 3rd Floor Build Out
B1B	Existing Main Building Reconfigurations
B4	Additional Facility and/or Land

TECHNOLOGY	
B2	Complete Wi-Fi Deployment
B3	Complete Network Upgrade Project

SUSTAINABILITY AND RESILIENCY

Both Peralta CCD and Berkeley City College are deeply committed to sustainability and total cost of ownership. To that effect, Peralta CCD has created a **2017 Sustainability and Resiliency Master Plan (SRMP)** that will guide the execution of all future facilities and infrastructure projects, to achieve District Sustainability and Resiliency Goals. All FTMP projects, from infrastructure replacement, site improvements, demolitions, renovations and new construction will need to be developed utilizing the guidelines and recommendations within the SRMP.

FTMP PROJECT COSTS AND IMPLEMENTATION

Please see District-Wide FTMP for complete details.

1.0 Introduction

PURPOSE

The purpose of the Berkeley City College 2017 Facilities and Technology Master Plan Update (FTMP) is to update the previous Campus Facilities Master Plan (FMP) for:

- Alignment with the 2016 Educational Master Plan
- Alignment with the District Strategic Goals
- Changes experienced by the College since the last facilities master plan was developed
- Identify and integrate Infrastructure needs
- Identify and integrate Technology needs
- Prioritize projects for a first phase of implementation

THIS 2017 FTMP AND PREVIOUS FMPS

The 2017 Facilities and Technology Master Plan Update works in conjunction with the Berkeley City College 2009 Facilities Master Plan in that aspects not covered in this update are still applicable.

The 2017 FTMP Update does supersede the previous FMP in the following aspects:

- Master plan projects defined here supersede previous master plan projects
- The building assessments from 2009 and the State provided FUSION 2016 assessments were re-analyzed, so the assessments ranking provided here supersedes previous rankings
- Space Capacity analysis is based on 2016 data, and therefore supersedes previous space capacity data

PROCESS

The 2017 FTMP process was a shared governance process led by Steinberg from March 2017 through December 2017. The process included Online surveys to reach a diversity of stakeholders, meetings with Facilities Planning Committees and Technology Committees, and campus forums open to students, staff, faculty and administration.

MISSION

Berkeley City College's mission is to promote student success, to provide our diverse community with educational opportunities, and to transform lives. The College achieves its mission through instruction, student support and learning resources which enable its enrolled students to earn associate degrees and certificates, and to attain college competency, careers, transfer, and skills for lifelong success.

EQUITY AGENDA

For Berkeley City College, the equity focus is about creating an institution where student participation, completion, and success cannot be predicted by student demographics. Instead, BCC envisions achieving its mission equally and equitably across all of its student populations.

The overarching focus for Berkeley City College, 2016-2020, is to achieve equity and to eliminate the education gap in student access (participation), learning, completion, and success with exemplary programs.

VISION

Berkeley City College will be a leader in equitable academic excellence, collaboration, innovation and transformation, as a premier, diverse, student-centered learning community.

2016 EDUCATIONAL MASTER PLAN GOALS

- **Goal One: Strengthen Resilience.** Strengthen BCC students' abilities to become self-directed, focused and engaged in the pursuit of transformative, life-long learning experiences that result in personal and academic success.
- **Goal Two: Raise College Competence.** Raise student skills and competencies, and expand their learning experiences, so that they can successfully complete their college program.
- **Goal Three: Enhance Career-Technical Education Certificates and Degrees.** Enhance BCC's 1- and 2-year career and technical education programs so that they provide current and transferable skills and competencies to earn a living wage in our area, and to maintain competency for advancement in one's career.
- **Goal Four: Increase Transfer and Transfer Degrees.** Ensure that all of BCC's programs of study and transfer pathways for degrees prepare students, in a timely manner, for multiple transfer options.
- **Goal Five: Ensure Institutional Sustainability.** Increase BCC's impact in education through innovation, internal and external collaboration and partnerships, and sufficient resources, both short-term and long term.

2.0 Data Analysis & Needs

PROCESS

There are three types of information required to make informed decisions on master planning and future facilities improvements: reliable data, first hand feedback from the users of the facilities, and industry established trends in the delivery of education. To that effect, this first phase involved three concurrent efforts which informed one another: space capacity analysis, campus condition analysis, and a multi-faceted approach for gathering stakeholder feedback. The process and outcomes of these three efforts are documented in the following pages.

Figure 2.1: Existing Campus Site Plan



CAPACITY LOAD ANALYSIS

What Does the State Monitor?

Although there are a variety of spaces on a college campus, the State has established sizing¹ criteria and capacity² calculations for only six categories of spaces. These criteria are described in the Title 5 California Code of Regulations³ (often abbreviated to just Title 5).

The Title 5 six categories are:

- **Classrooms** (the State gives these spaces Room Use codes in the 100s)
- **Class Laboratories** (Room Use codes in the 200s)
- **Office** (Room Use codes in the 300s)
- **Library** (Room Use codes in the 400s)
- **Audiovisual/Television**, known as AV/TV (Room Use code 530 and 535 only)
- **Child Development Centers**

Five of the categories have criteria that is tied to student enrollment and quantity of faculty and staff, and is monitored annually by the State. The sixth category, Child Development Centers requires program approval by the State, and the approval stipulates the criteria for the size and capacity of the Child Development Center.

1 Sizing refers to the total amount of ASF that the College can have of that type of space category. ASF stands for Assignable Square Feet, and it is the square footage of a space (or room) for assignment to occupants for a specific functional purpose. It includes the circulation space within the room but not the walls, in other words the clear inside dimensions of the room/space.

2 Capacity refers to the how many students the room can accommodate for Classrooms, Class Laboratories, Library and AV/TV, and how many Faculty/Staff/Administrators and Counselors for Offices. The State uses different mechanisms to calculate these, some of which are discussed later in this Chapter.

3 The California Community College's Board of Governors is responsible for approving Title 5 regulations, and the California Community Colleges Chancellor's Office (CCCCO) is responsible for implementation and compliance.

CAPACITY LOAD ANALYSIS

How Does the College Fare?

Based on the State Title 5 Criteria, the State's projected student enrollments for Berkeley City College, and the College's faculty and staff forecasting, Berkeley City College is under-built by a total of 30,045 ASF¹ in 2023. **Note this analysis does not include the spaces in the Milvia Street Building since this project is still in design.** Given the length of time facilities projects take, a District always needs to be looking at the required campus capacities five - six years from now.

Per the projected enrollment and forecasting, the 2023 space needs shows:

- Under-built in Lecture Classrooms (abbr. Classrooms)
- Significantly under-built in Class Laboratories (abbr. Class Lab)
- Under-built in Offices
- Under-built in Library spaces
- Under-built in Audiovisual/TV (abbr. AV/TV)

Note, the State is concerned with District totals, not the individual campus totals, which leaves some discretion for the District to offset overages and/or allocate missing capacity according to the campus location where it is most needed.

Figure 2.2: Capacity Load Analysis

BERKELEY	Lecture ASF	Lab ASF	Office ASF	Library ASF	AV/TV ASF
EXISTING ASF	21,146	25,046	20,351	6,282	2,293
Fall 2017 NEEDED ASF	21,622	38,357	21,840	9,412	3,511
ASF Difference	-476	-13,311	-1,489	-3,130	-1,218
Percentage Difference	98%	65%	93%	67%	65%
Fall 2023 NEEDED ASF	23,894	42,549	25,060	10,076	3,584
2023 ASF Difference	-2,748	-17,503	-4,709	-3,794	-1,291
2023 Percentage Difference	88%	59%	81%	62%	64%

CAPACITY LOAD ANALYSIS

Considerations Regarding the State Data

It is important to understand that the State has not revised its Title 5 criteria regarding sizing and capacity for these five categories in over 40 years. In that time frame very significant changes have happened:

LECTURE CLASSROOMS

Lecture Classroom¹ sizing criteria provides a range of 11.5 to 25 ASF per student, however the State capacity computation is based on an average of 15 ASF/student. As such, the range results in fewer classrooms if a campus chooses to use anything above 15 ASF/student, which impacts the number of concurrent classes that can be held.

Realities the State Computation does not address:

- Current California Building Code requires a minimum of 20 ASF per student per classroom, anything below this is not complying with the Code.
- Standard tablet arm lecture spaces and tiered lecture spaces (that result in 15 ASF or less per student) are no longer the norm. Most programs require group work; many require flexibility to have students sit individually and grouped; others require some computers, or other equipment, within the room. The ability to accommodate these needs requires all classrooms to be in the 20 - 25 ASF per student range.
- ADA regulations apply, requiring larger aisles between rows of seating, in addition to seating areas large enough to accommodate wheelchairs.
- Regarding capacity, the State computations do not align with community college student enrollment patterns – they expect to see rooms occupied from 8 am till 10 pm Monday through Friday, yet majority of Community College students are part-time coming either in the mornings or evenings, and not in the afternoon.

Per State calculations Berkeley City College is under in classrooms. The Milvia Street project will probably address some of the shortfall, and as a newer facility the existing classrooms are more adequately sized and configured, nonetheless, **the expectation is that there will still be some need for additional classroom space that will need to be addressed in an additional facility.**

¹ Classroom is a space used for classes that do not require special purpose equipment for student use.

CLASS LABORATORIES

Class Laboratories¹ sizing criteria is based on the program, so as an example Mathematics (computer) labs get 35 ASF per student, Physics gets 60 ASF and Automotive Technology gets 200 ASF. Furthermore, the areas for the support spaces such as Physics prep and stock rooms, and Automotive tool rooms and painting booths, are calculated within the 60 ASF for Physics, and the 200 ASF for Automotive.

Changes in the last 40 years since criteria was developed:

- Most disciplines have more, and often larger, equipment both within the lab, and the support spaces.
- ADA regulations apply to class laboratories as well.
- Some programs need to conduct the lecture portion of their course within the lab itself, or in a dedicated room adjacent to the lab, due to equipment and materials required for the instructor's demonstration. This means that the class lab needs to not only accommodate one student per equipment item, but also an area within the room where all students can sit together around a whiteboard/projection screen and listen to the instructor's lecture. The State's sizing does not account such space.
- Many disciplines now have computer based instruction in addition to the traditional methods of teaching that program. Examples include Art, Photography, Music.
- Other disciplines were previously taught in lecture classrooms only, but now use computers periodically as well. Examples include Journalism, Mathematics, Foreign Languages etc.
- Regarding capacity, the State computations do not align with community college student enrollment patterns see last bullet under classrooms.

Per State calculations Berkeley City College is significantly under in class labs and the Milvia Street project is currently not adding class labs to the college's space inventory. As such, **the expectation is that an additional facility will be needed to address the large class laboratories shortfall.**

¹ Class Laboratory is a space designed for and/or furnished with special purpose equipment (including computers for student use) to serve the needs of a particular discipline for group instruction in regularly scheduled classes.

OFFICE

Office category sizing criteria was based on a time when there were no computers, a significant amount of occupants were in cubicles, which in turn were not sized with disabled access requirements in mind (now a code requirement).

Changes in the last 40 years since criteria was developed:

- We have computers and more equipment to house (printers, copiers etc.) in offices.
- Most faculty and staff require private offices to maintain student confidentiality, due to State privacy regulations.
- Both cubicles and offices have to be larger to accommodate wheelchairs, per California Building Code ADA (American Disabilities Act) regulations.
- Faculty hiring has changed, with a movement away from predominantly full-time faculty to less full-time and more adjunct part-time faculty. While it is feasible for part-time faculty to share offices while they work on campus, the issue is when their office hours for students overlap. Aside from the noise issues with having two different sets of faculty and students talking in the same office, the more significant issue is that with the existing State criteria there is not enough space to accommodate the two different sets of faculty and students in the same space.
- There are far more counselors needed today (related to both student success and support programs and mental health specialists).

Berkeley City College is under-built in office space and although the Milvia Street project will add some offices, **the expectation is that an additional facility will be needed to address the office shortfall.**

CAPACITY LOAD ANALYSIS

Considerations Regarding the State Data

LIBRARY

Library category sizing criteria is based on traditional book libraries with no computers (one of the library sub categories was called “Carrels” and the State only revised the terminology to “Electronic Carrels”), and before tutoring and cohort groups came into existence.

Changes in the last 40 years since criteria was developed:

- Libraries are heavily computer based.
- There has been a dramatic increase in the need for tutoring services driven by State mandates focused on student success¹, basic skills and student equity.
- There has been a decline in student preparedness for College resulting in increased demand for basic skills and associated tutoring.
- There has also been an increased need to have decentralized study areas dedicated to particular cohort groups, located adjacent to the support services provided to that group (e.g. STEM Center, Veterans Center etc.). Studies have shown that doing so significantly increases the chances for student success.
- Changes in teaching pedagogy has also resulted in a sharp rise in group project assignments requiring more group study rooms for students to meet and complete these assignments while on campus (having no residential halls as an alternative place to meet).

Berkeley City College is significantly under-built in library space and **the expectation is that an additional facility will be needed to address the library shortfall.**

AV/TV - AUDIOVISUAL TELEVISION

AV/TV category sizing criteria is based on both Radio/TV teaching programs, and AV rooms that housed overhead projectors and TVs and VCRs on rolling carts.

Changes in the last 40 years since criteria was developed:

- Radio/TV programs are in decline and typically require smaller footprints due to digitalization and smaller equipment.
- Overhead projectors, TVs and VCRs have been replaced with ceiling mounted projectors within teaching spaces.

Berkeley City College is under in this category, and **the expectation is that it will not need to build any significant amount of space in this category.**

¹ Student Success is defined by how many students complete their college courses, persist to the next academic term, and achieve their educational objectives. The goal of the Student Success and Support Program & Student Equity Plan is to ensure that all students are able to achieve this through the assistance of student support programs offered by the College.

SPACE ANALYSIS

Teaching Pedagogies affecting Classrooms

There have been many changes in teaching pedagogies over the last several decades. Some of it is driven by technology (which continues to evolve at an ever-changing rapid pace) but, it is also driven by research into the ways students learn best. That research shows that students learn when they not only read, hear and see, but when they also experience and teach. The combination of these is often called "active learning" which is defined as "those instructional activities involving students in doing and thinking about what they are doing."¹ The FTMP update Online survey respondents echo this research, with 68% of respondents saying they learn and teach best with a combination of lecture, small group and hands on activities.

The 2016 Educational Master Plan indicated the need for facilities to accommodate both current and future teaching pedagogies. Although future teaching pedagogies and future technology can be hard to predict, one method of preparing for the future is to build flexible spaces. Luckily, active learning spaces that are needed now are all about flexibility: the ability to reconfigure the room for multiple different activities. To do this they require more space per student (20 - 26 ASF per student), more writable surfaces (that can double up as projectable surfaces), and furniture that can be versatile.

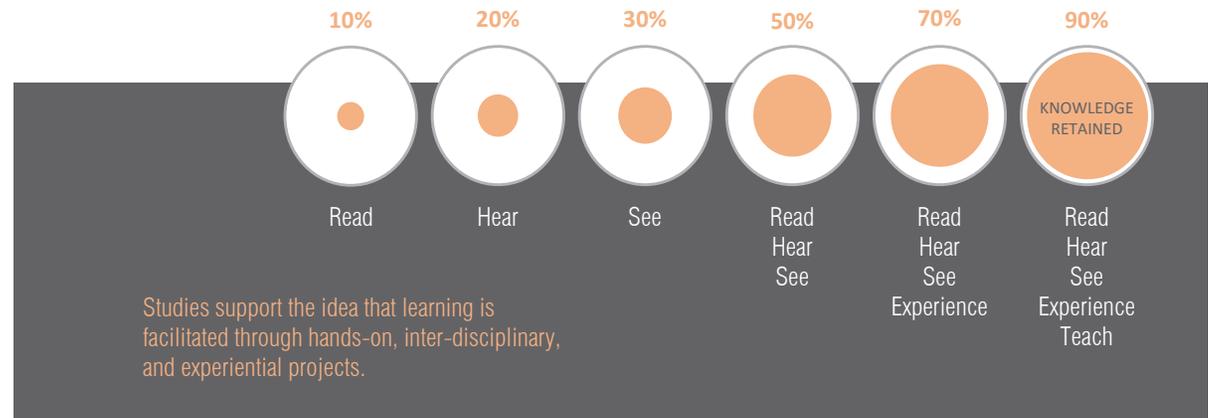
Existing classrooms are fairly well equipped, and need to maintain that standard, i.e. they should address:

- Technology
- Sizing – area/per student, disabled access and appropriate code clearances at lab equipment
- Sizing – # of student chairs
- New lab equipment & more writing Surfaces
- Furniture - comfortable and flexible
- Flexibility/Adaptability to accommodate Hands On, Lecture and Group work.

On the next pages we outline some examples of how modern teaching pedagogies have impacted campus spaces.

¹ Active Learning definition by Bowell, C., & Eison, J. (1991) Active learning: Creating excitement in the classroom AEFHE-ERIC higher education report No. 1.

SETTING THE STAGE FOR INNOVATION Today's Learners



Hands On Lecture Small Group

68%

of respondents think that these three methods are the most effective way of teaching and learning

SPACE ANALYSIS

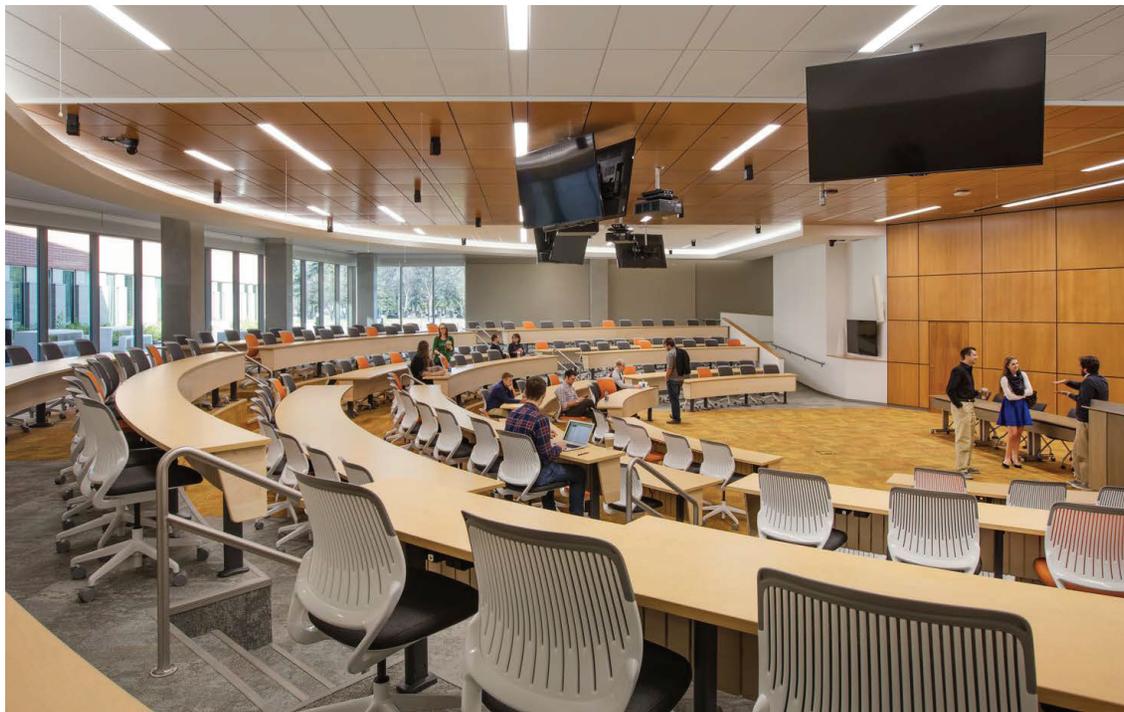
Tiered Lecture Classrooms

Semi-circle layout facilitates class discussion, but to accommodate group work, the lecture classroom needs tables (versus tablet chairs and there needs to be two tables per tier (students in front row of tier turn around and collaborate with students in row behind them).

Layout requires 20 to 25 square feet per student.

Modern audiovisual systems means that these rooms can have daylighting, which research indicates improves student

Typical for Today's Teaching Pedagogies (below)



SPACE ANALYSIS

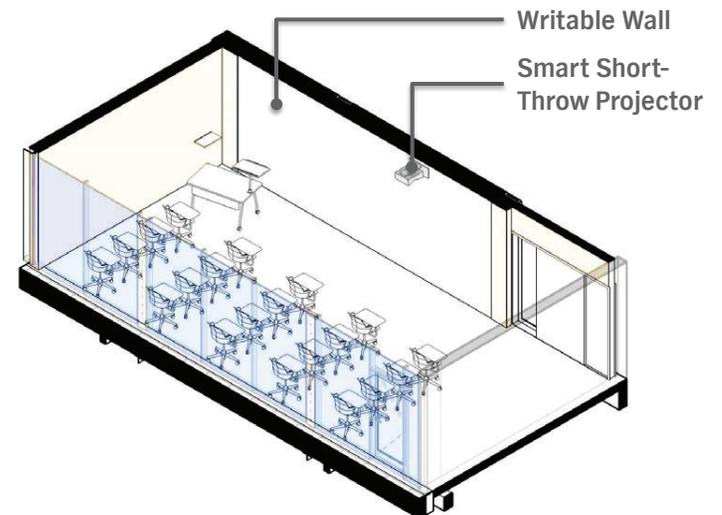
Tablet Arm Classrooms

Again reflecting the need for interactive classrooms, tablet arm chair classrooms have changed in that the tablet arm chairs are now mobile, permitting collaboration as well as lectures. Modern tablet arm chairs are also sized bigger in both the chair (reflecting the change in people's sizes) and tablet (to accommodate digital devices in addition to notebook).

Rooms typically have writable walls all around for both projection and collaboration in different classroom formations.

Layout requires 20 to 24 square feet per student.
Typically used for small class sizes (20 - 25 students)

Typical for Today's Teaching Pedagogies (below)



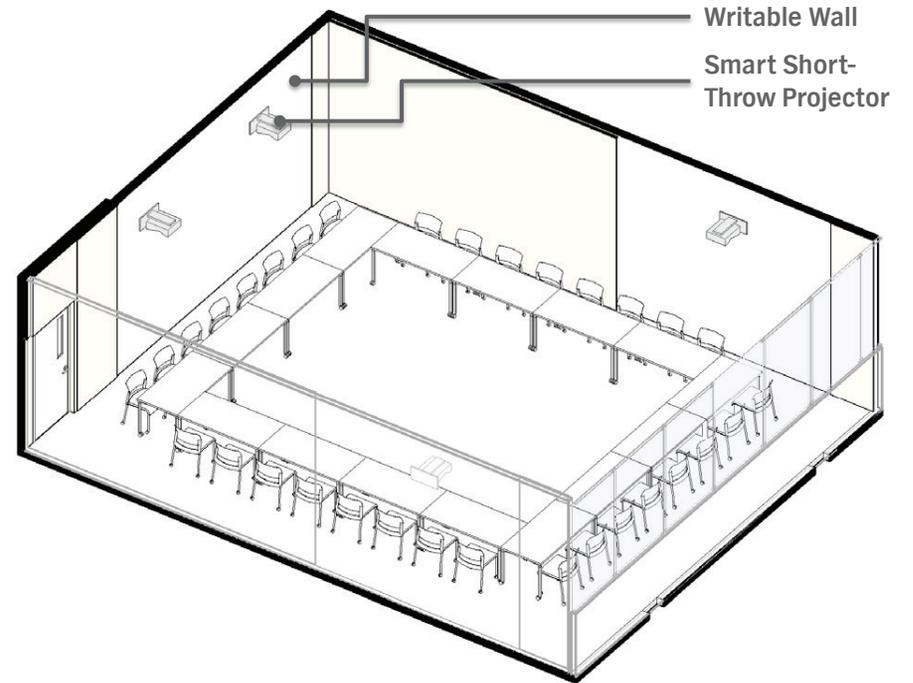
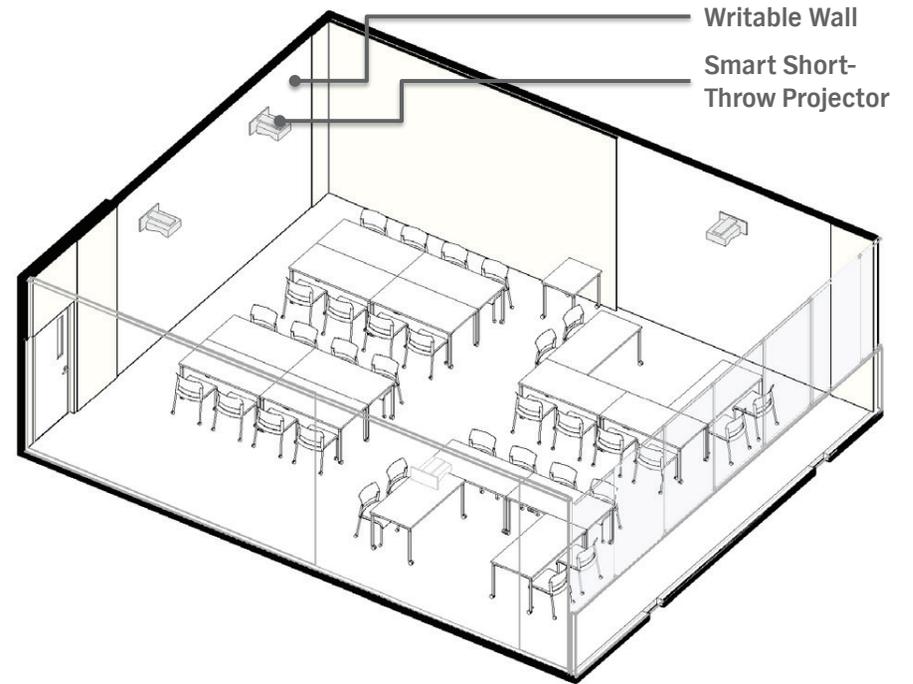
SPACE ANALYSIS

Table Chair Classrooms

Quickly move between class discussion & group work. Mobile tables and chairs accommodate different teaching style set ups with relative ease. Interactive projectors & writable walls for group work.

Layout requires 26 square feet per student.
Typically used for small to medium class sizes.

Typical for Today's Teaching Pedagogies
(below)



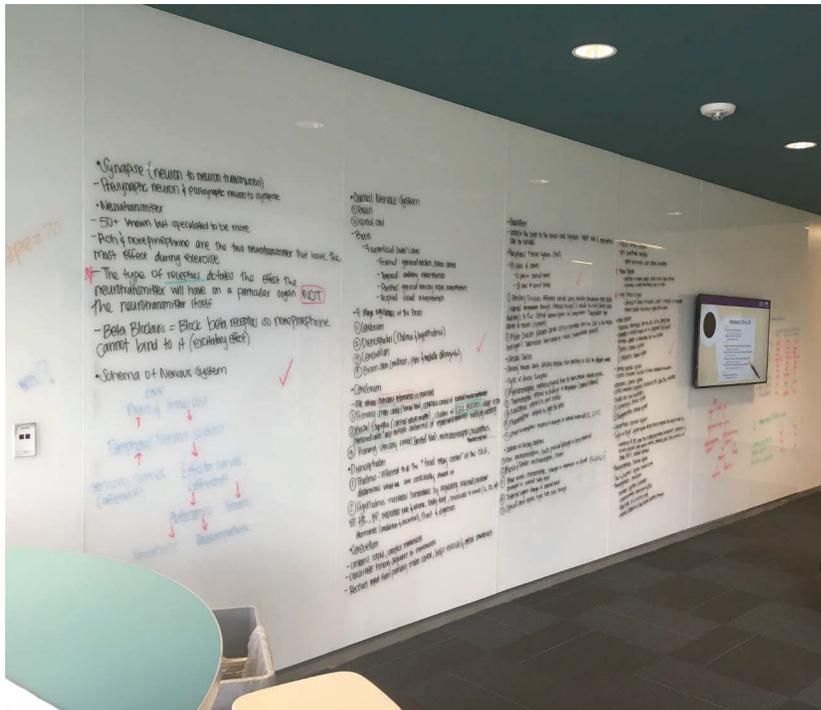
SPACE ANALYSIS

Collaboration Spaces near Classrooms & Offices

Longstanding research has shown that the majority of student learning happens outside of the classroom setting, with a fair amount arising from peer to peer learning. Fairly recent research has shown that locating collaboration spaces in close proximity to classrooms and faculty offices enhances this type of learning by providing immediate opportunities to continue classroom discussions and faculty assistance.

These spaces feature expansive writable walls and comfortable seating.

Typical for Today's Teaching Pedagogies (below)



CAMPUS CONDITION ANALYSIS

Overview

To understand the condition of the buildings the master planning team:

- Reviewed State provided data (via FUSION) on Facilities Conditions. This includes written assessments from 2016 and a Facilities Condition Index from 2017
- Reviewed the District provided 2009 Building Assessments (no new site or building observations were made by this team)

CAMPUS CONDITION ANALYSIS

State Facility Condition Index

The State Facilities Condition Index (FCI) is a measure of the condition of a building relative to the replacement cost of the building. FCI does not measure the suitability or functionality of spaces.

$$FCI \% = \frac{\text{current repair cost}}{\text{replacement cost}}$$

Not surprisingly, given that it is a newer building, Berkeley City College's FCI is 0 (zero) - in other words repairs noted come nowhere close to replacement cost.

CAMPUS CONDITION ANALYSIS

Building Assessments

The Fusion 2016 Assessments noted that the Cooling Tower at Berkeley City College needs to be replaced. In general the Mechanical, Electrical and Plumbing systems are holding up well and require routine maintenance to ensure their lifespan, Figure 2.3 provides an assessment summary.

Figure 2.3: Building Assessments Analysis

BERKELEY BUILDING ASSESSMENT SUMMARY				
System	Condition	Rank	Recommendation	Priority
Electrical Distribution System	F	7	E	RM
Emergency Distribution System	F	8	E	RM
Lighting Systems	F	7	E	RM
Fire Alarm System	F	7	E	RM
HVAC Equipment	F	7	E	RM
HVAC Ducts and Air Distribution	F	6	E	M
HVAC Piping	F	7	E	RM
Plumbing Fixtures	F	9	E	RM
Plumbing Piping	F	8	E	RM
Telecommunications Distribution	F	9	E	D
Telecommunications Rooms	F	9	E	D

Condition: F = Functional; NF = Non-Functional; LS = Life/Safety; AT = Antiquated; NA = Not Applicable
Rank: 1 = Bad; through 10 = New
Recommendation: E = Existing to Remain; RR = Repair Required; DR = Demolish and Replace with New; IN = Install New
Priority: M = Mandatory; RM = Routine Maintenance; D = Deferred Maintenance

CAMPUS CONDITION ANALYSIS

Technology Assessments & Needs

Please refer to the District-Wide FTMP for detail on technology assessments, needs, telecommunications standards, and audiovisual systems design guidelines as they apply to Berkeley City College, and to the District as a whole. Inclusive of all the needs are the Audiovisual components for various spaces and most importantly classroom technologies for a variety of classroom types.

Figure 2.4: Proposed Audiovisual Capabilities per Room Type

	Single Display	Multiple Display	Projector and Screen	Laptop / BYOD Presentation	Local Dedicated Computer Presentation	Video Capture / Recording	Distance Education	Overflow to Adjacency or Huddle Space	Voice Amplification / Audience Participation	Assisted Listening	Control Touch Panel / Keypad	Room Scheduler / Roster	Local AV Furniture / Lectern / Teaching Station	Annotation Board	Wireless Microphones	Beamforming Microphone	Broadcasting Connectivity
Room Type																	
Small Classrooms	x			x		x	x			x	x	x	x	x			
Medium Classrooms		x	x	x		x	x			x	x	x	x	x			
Large Classrooms		x	x	x		x	x	x	x	x	x	x	x	x	x		
Breakout/Huddle/Overflow	x			x		x				x	x						
Auditoriums/Lecture Halls			x	x		x	x		x	x	x	x	x	x	x		
All-Hands Spaces		x		x		x	x		x	x	x		x	x	x		
Conference / Meeting	x			x	x	x				x	x	x	x			x	
Athletic Facility		x	x	x	x	x	x	x	x	x	x			x	x	x	x

Summary of Capabilities per Room Type

CAMPUS STAKEHOLDER DATA

Process

The starting point for gathering stakeholder feedback on facilities, infrastructure and technology needs was to conduct an Online survey based on facilities needs identified in the previous 2009 facilities master plan. The objective was to validate whether those needs and priorities were still valid, and to explore what other needs may have arisen since then.

Berkeley City College launched their survey April, and the complete results are presented in the Appendix, with a snapshot of some of the results to the right.

In addition to the Online surveys, additional stakeholder feedback regarding campus needs was provided through the Facilities Planning Committee (FPC), a campus forum, and FPC led stakeholder outreach across shared governance committees.

The major findings of the stakeholder feedback are:

- Lots of space needs, most of which can not be addressed within the existing building, nor the Milvia Street project that will be coming Online soon
- Will need an additional facility/land
- Need to address programmatic/architectural issues in existing Main Building
- Technology connectivity issues need to be addressed
- Address security concerns given location

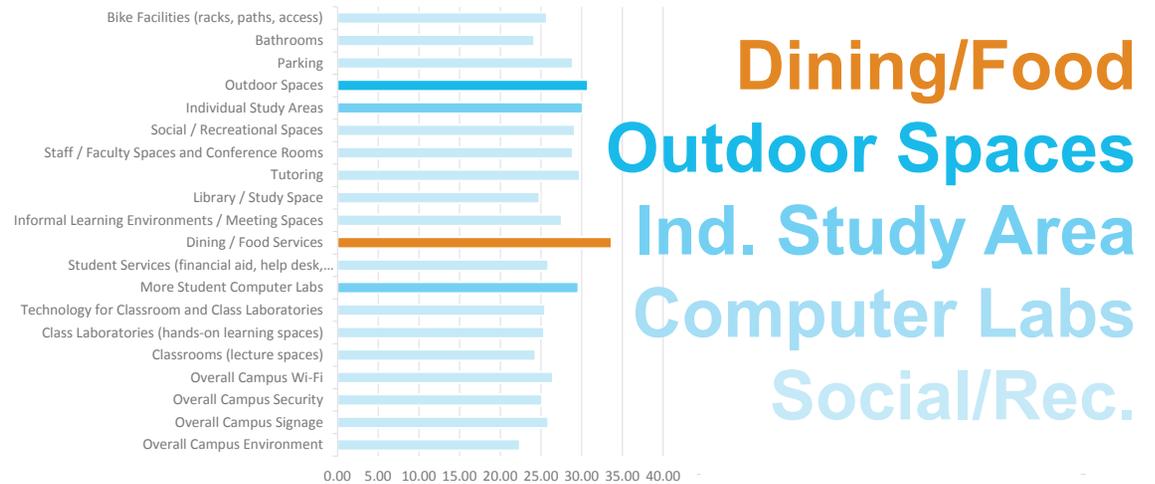
Berkeley City College
156 Responses

156
total responses

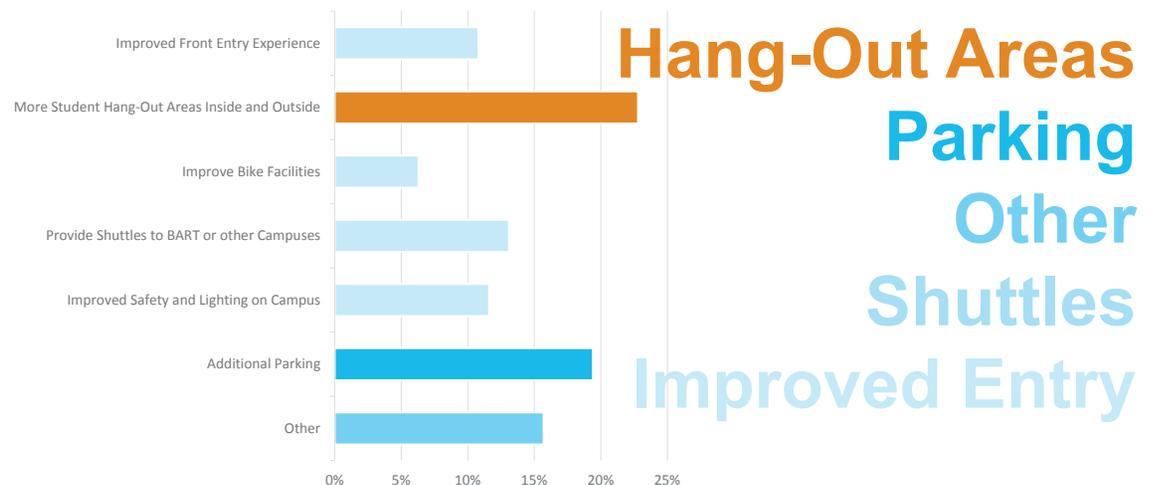
46 Students
36 Faculty
22 Staff
4 Administrators
0 Community
48 unanswered

Figure 2.5: Sample Online Survey Answers

Which facilities need the most improvement:



Top priorities for facilities improvements from previous FMP:



CAMPUS STAKEHOLDER DATA

Facilities Needs Summary

In order to meet the goals of the 2016 Educational Master Plan Berkeley City College needs:

- Additional classroom spaces to support existing needs and 1% growth per year - fully equipped flexible use classrooms that will fit minimum 45-50 students. Both individual seats and table layouts.
- Additional lab spaces – computer, language/communication labs with recording mechanisms
- Film screening and music labs – (potential to partner with the Jazz School and the Film Archive to access their facilities)
- Additional open study spaces – both small group and individual
- Dedicated general classroom space for workshops/orientations for student support programs
- Increase space for library, tutoring, transfer center to accommodate enrollment trends
- Transfer Center requires one-on-one office spaces for meeting with 4-year university representatives and job recruiters
- Small group meeting/study rooms
- Additional Faculty Office Pods
- Individual Faculty/Staff Office spaces – dedicated and mix-use

EXISTING BUILDING NEEDS:

In addition to the above the existing building needs to address (where feasible):

- Increased Technology infrastructure
- Appropriate clustering of programs
- Offices that allow privacy and confidentiality
- Veteran's Center expansion and location reconsideration
- Tutoring / Student Success Area expansion
- Latino Student Success Center
- Places for collaboration
- Student gathering spaces that do not create noise issues for adjacent instructional spaces
- Facilities and spaces for conveniences (food, etc.) that would keep the Students on campus.

- Appropriate furniture for lecture/small group/hands on classrooms (such as tables/chairs or mobile tablet chairs versus fixed)
- Quiet Space
- International Student Center additional Office Space
- Additional Power Outlets in Atrium hangout areas
- Students have expressed a desire for a space to rest and lounge, napping; airport hotel pods
- Prayer rooms are also a request.
- Make entry more welcoming
- The Front doors are consistently broken down; what protects our front door from being destroyed in a riot? Should we have a metal roll-down door on our front door?
- People don't about the other exits aside from front door: wayfinding is not that easy, even though this is a single building.
- Multipurpose space would be nice: student tables in front area during events etc., which limits emergency exiting.
- Additional Power Outlets in Atrium hangout area Intercom/PA System for active shooter etc. Existing system using phones with a code is not easy, hard to remember the code when one is stressed out.

CAMPUS STAKEHOLDER DATA

Facilities Projects

The stakeholder process identified the following projects, organized in the order of priority:

- Build-out of the 3rd floor of Milvia Street (current project only builds out lower floors)
- Reconfigure existing main building, where feasible, to address as many of the identified issues as possible
- Network Upgrade & Computer Refresh
- Additional facility and/or Land

3.0 The Facilities Master Plan

GOALS

The facilities master plan goals are the same five goals as the 2016 Educational Master Plan goals (repeated here for convenience):

- **Goal One: Strengthen Resilience.** Strengthen BCC students' abilities to become self-directed, focused and engaged in the pursuit of transformative, life-long learning experiences that result in personal and academic success.
- **Goal Two: Raise College Competence.** Raise student skills and competencies, and expand their learning experiences, so that they can successfully complete their college program.
- **Goal Three: Enhance Career-Technical Education Certificates and Degrees.** Enhance BCC's 1- and 2-year career and technical education programs so that they provide current and transferable skills and competencies to earn a living wage in our area, and to maintain competency for advancement in one's career.
- **Goal Four: Increase Transfer and Transfer Degrees.** Ensure that all of BCC's programs of study and transfer pathways for degrees prepare students, in a timely manner, for multiple transfer options.
- **Goal Five: Ensure Institutional Sustainability.** Increase BCC's impact in education through innovation, internal and external collaboration and partnerships, and sufficient resources, both short-term and long term.

VISION

The vision is to have an additional facility that is as great as the existing facility, but with exterior grounds and/or access to nature. Although some constituents would like the facility to be next door to the existing facility, others believe that locations in other Berkeley City College service areas might be convenient to those students.

PROCESS / THE MASTER PLAN

Based on the data collection and analysis, it was determined that besides providing some thoughts on how the existing facilities needs could be addressed, there were not any "options" that needed to be developed. This is due to the following:

- **The Milvia Street Project** already has a conceptual floor plan for the third floor, the current project did not have enough funding to do all three floors.
- **Additional Facility and/or Land** is about real estate opportunities in locations selected by the College.

With respect to the **reconfiguration of (portions) of the existing Main Building** the specifics of that reconfiguration will vary depending on the following two scenarios:

Scenario One is the reconfiguration needed after the Milvia Street third floor is built out, but there is no funding and/or additional facility identified.

Scenario Two is the reconfiguration needed after the Milvia Street third floor is built out, and the additional facility is identified / coming Online etc.

These results, and ideas on how to address the existing facilities needs, were discussed and vetted through a shared governance process which included campus town halls, College Roundtable, Facilities Planning Committee, and Executive Cabinet meetings. This Master Plan captures those vetted needs and ideas.

MASTER PLAN PROJECTS

FACILITIES*	
B1A	Milvia Street 3rd Floor Build Out
B1B	Existing Main Building Reconfigurations
B4	Additional Facility and/or Land
TECHNOLOGY	
B2	Complete Wi-Fi Deployment
B3	Complete Network Upgrade Project

* Bolded Projects are depicted on the Master Plan in Fig. 3.1

Figure 3.1: The Master Plan



PRIORITY PROJECTS

B1A: MILVIA STREET 3RD FLOOR BUILD OUT

is the completion of the Milvia Street Facility, consisting of the build out of the third floor. Figure 3.2 (courtesy of Noll and Tam Architects) shows the conceptual floor plan layout proposed at this time. Depending on the timeline for the B1 project, this floor plan and the elements it shows might change due to changes in needs between now and then.

B1B: EXISTING MAIN BUILDING RECONFIGURATIONS

As mentioned on the previous page the scope of partial reconfigurations to existing spaces within the main building will depend on whether Scenario One or Two is occurring. On the opposite page we illustrate some possible areas that will be reconfigured: the library tutoring areas and office spaces. We also illustrate an idea of adding about 400 ASF on the Level B (Basement), Level 1, Level 2 and Level 3, that could be used to address a few immediate needs.

B2: TECHNOLOGY WI-FI DEPLOYMENT PROJECT

Please refer to Chapter 2.0 for detail on technology projects.

B3: TECHNOLOGY NETWORK UPGRADE PROJECT

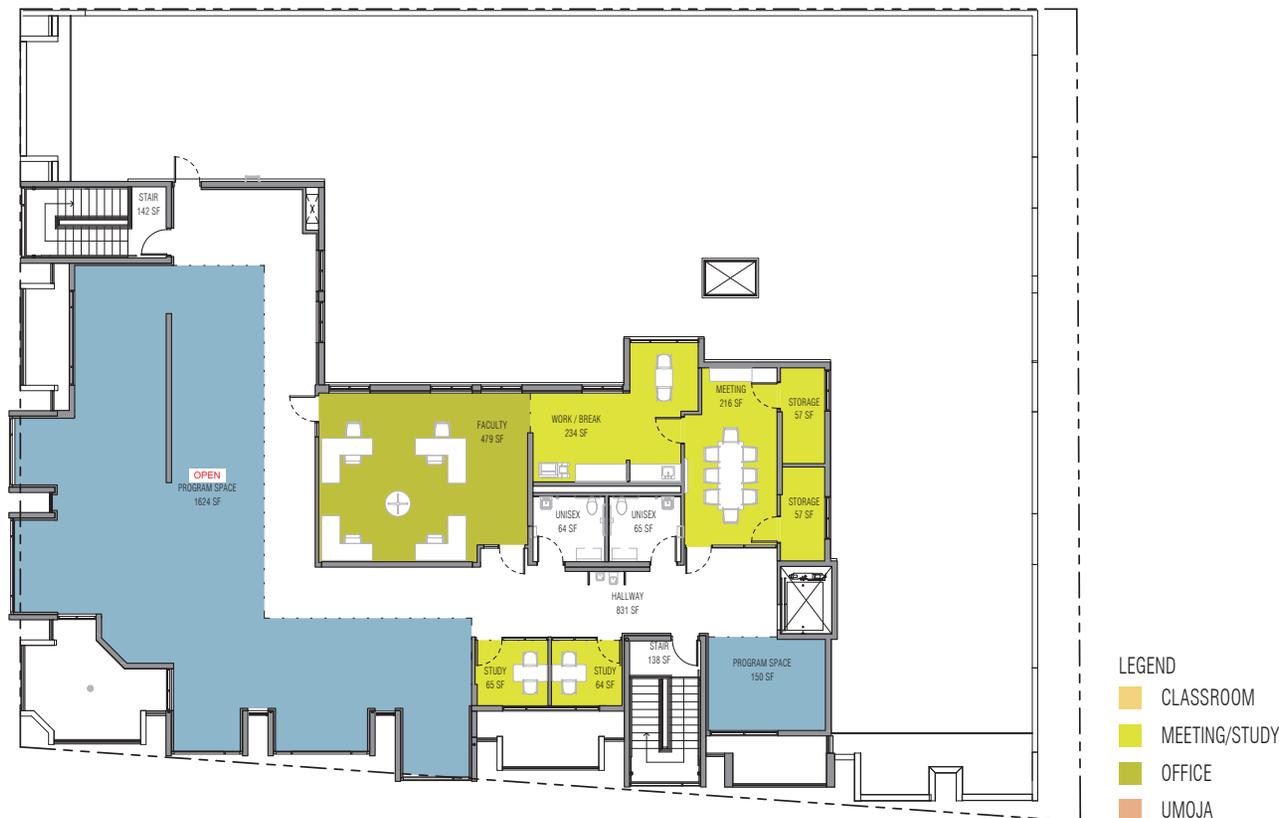
Please refer to Chapter 2.0 for detail on technology projects.

B4: ADDITIONAL FACILITY AND/OR LAND

In less than 8 years, the college has outgrown its current facilities. Even with the purchase of a second building on Milvia Street, the College does not have adequate space to accommodate its deficit space needs, particularly in class lab space. As such this project aims to identify an additional facility and/or land to build a new facility or renovate an existing one. It is highly desired that this additional facility include outdoor spaces for social, quiet and contemplative activities, inclusive of nature elements.

The location of this facility is deemed flexible, it can be in close proximity to the existing facilities, or it can be located in other parts of Berkeley City College's service area.

Figure 3.2: Project B1a: Milvia Street 3rd Floor Build Out

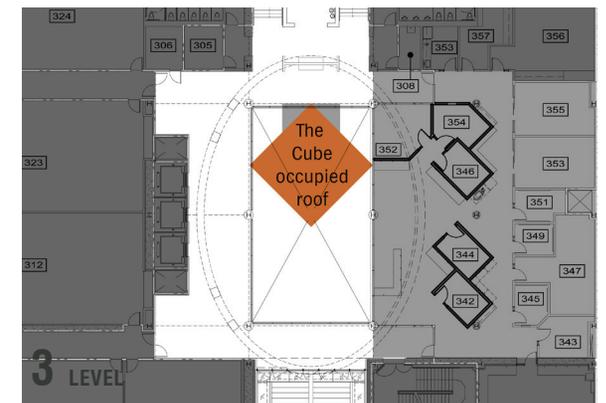
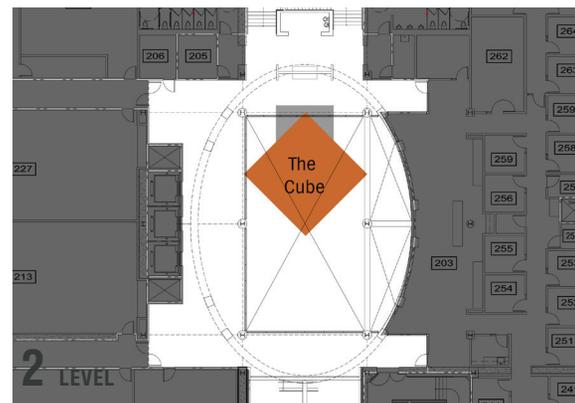
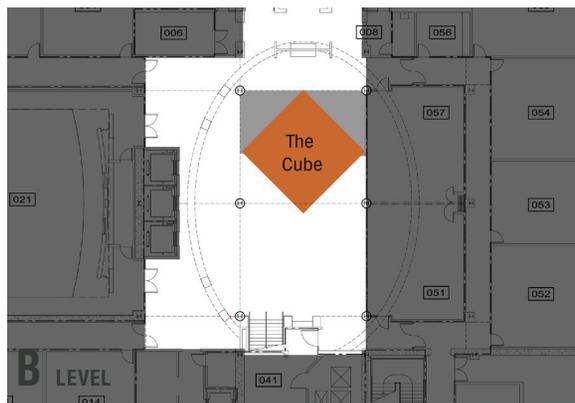
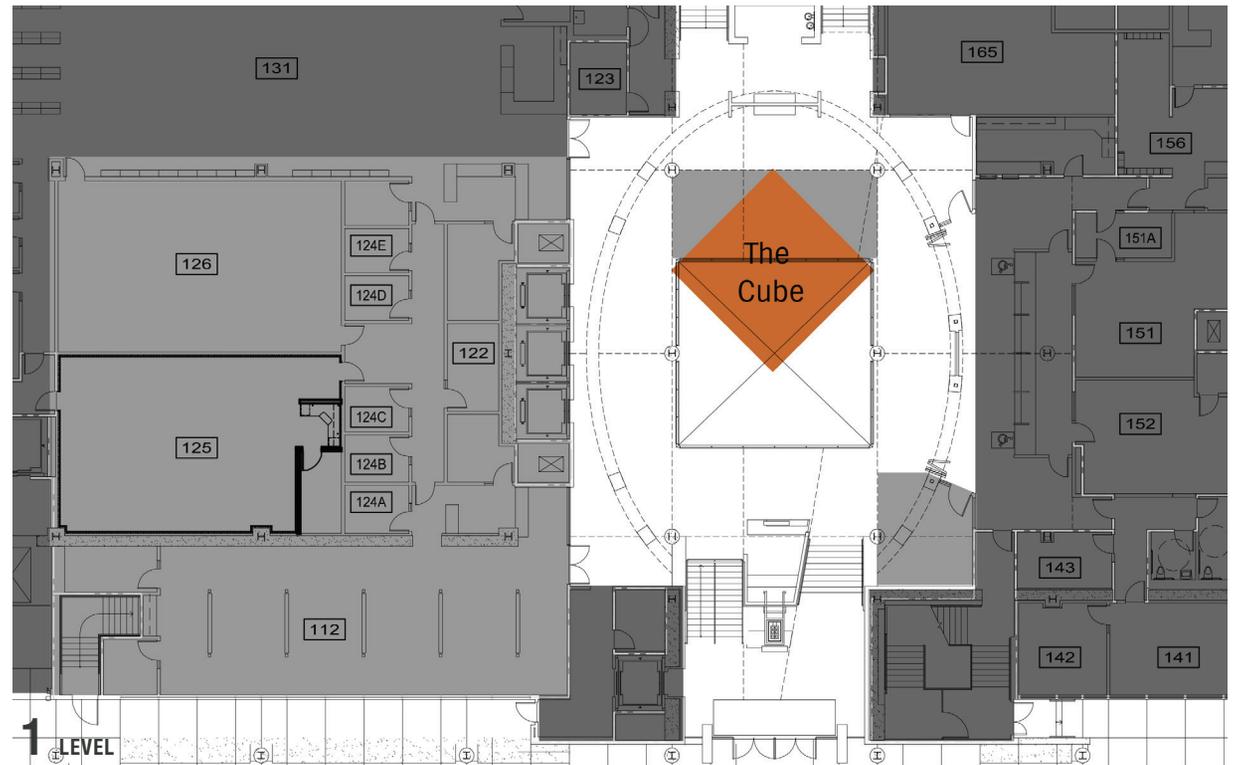


PROPOSED IDEAS

B1B: THE "CUBE" IDEA

The College lacks appropriate student congregation spaces. Students currently gather/hang out in the Atrium Basement. The noise from this area travels up through the Atrium and impacts the instructional spaces immediately adjacent to the Atrium. The "Cube" (see Orange Boxes on floors B through 3 in Figure 3.3) aims to alleviate this issue by building a 3-story element within the 6-story Atrium. The approximate 400 ASF per floor element would be enclosed on Levels B, 1 and 2 with predominantly glassy walls that will help maintain daylighting and a connection to the Atrium. The roof of the Cube would also be usable space, but it would only be enclosed with railings, unlike the lower floors. See Figure 3.4 (next page) for a conceptual view of the Cube. The amount of additional space is relatively insignificant in comparison to the space needs of the College, but this element could help resolve issues that remain in the existing building regardless of whether additional facilities are built or not.

Figure 3.3: Project B1b: Existing Main Building Partial Reconfigurations - The Cube Idea Plans

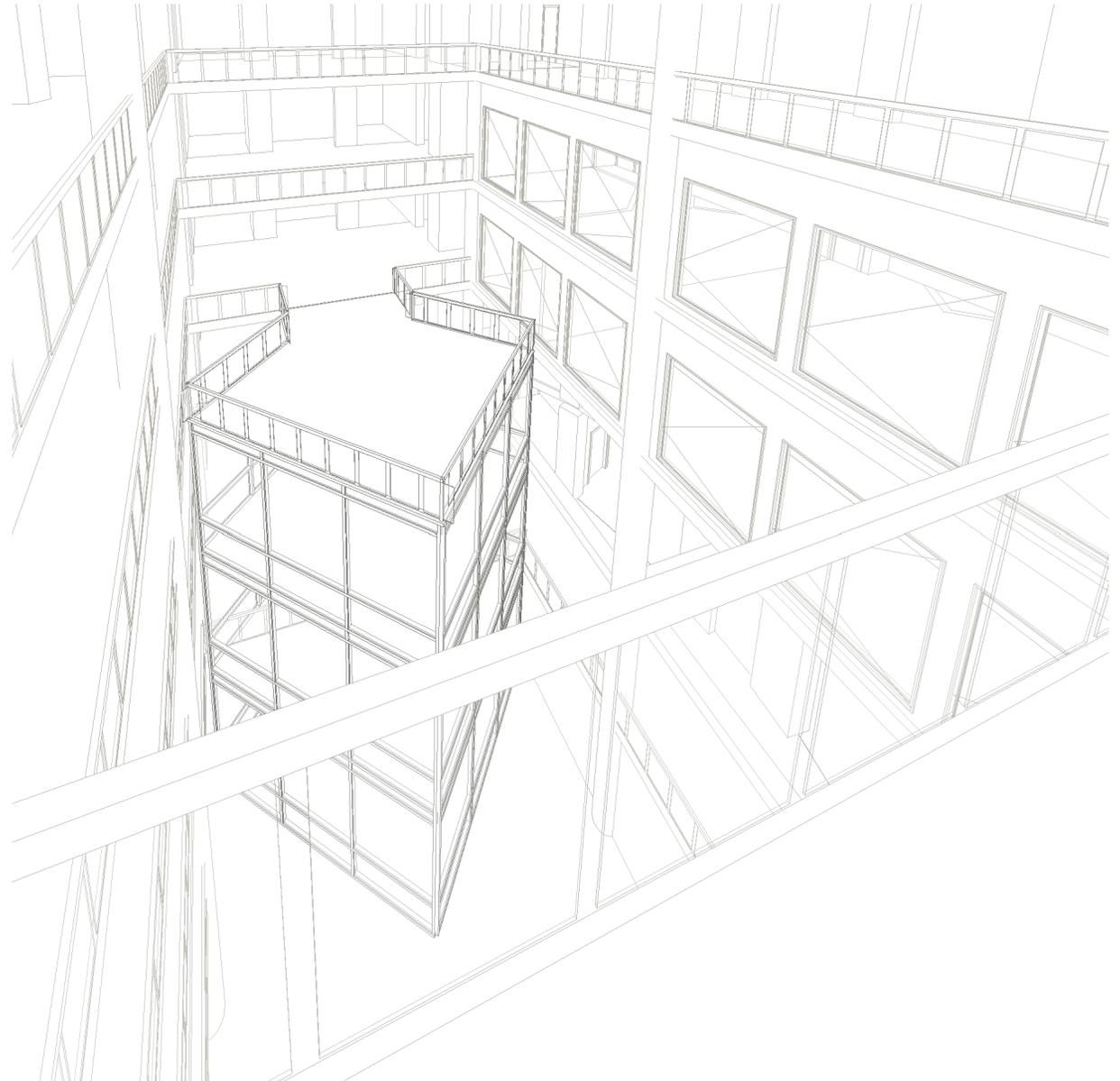


PROPOSED IDEAS

The “Cube” spaces on the four levels could be used for:

- B-Level: enclosed social student gathering space, where the adjacent Light Grey area could also be enclosed, or partially enclosed (perhaps for student club tables etc). The creation of this “noisier” room may allow the rest of the Basement Atrium floor to be zoned for quieter study.
- 1-Level: group study rooms, that might free up space in the Library Tutoring Center that is in dire need of additional space. The Light Grey areas immediately outside of the cube could be zoned for additional study carrels.
- 2-Level: the Cube could be subdivided into (2) Meeting Rooms that could replace or augment the meeting rooms on the 4th floor. Replacement could possibly permit reconfiguration of the office area to address lack of offices and lack of confidential spaces to meet.
- 3-Level: the roof of the Cube could extend the amount of quiet/study spaces for students. In lieu of the study carrels it could be set up with more lounge type furniture, inclusive of “airport hotel pods” if desired.

Figure 3.4: Project B1b: The Cube Idea Conceptual View from Existing 5th Floor Balcony



PROPOSED IDEAS

B1B: OTHER IDEAS

The front entry of the main building needs to feel more welcoming. One thought is to place the Security Desk and the Information Desk at the Light Grey location marked "Security & Info?" in Figure 3.5 to the right. The existing Security Desk area could be redesigned to have LED displays (highlighting the Berkeley City College student accomplishments, the distinctive programs, special events information etc. - in other words, information that keeps changing) and the Information Desk area could be a mini-gallery, or mini-lounge for those waiting to be picked up, etc. Both of these areas are marked by the Light Orange oval on figure 3.5.

Figure 3.5: Project B1b: Existing Main Building Partial Reconfigurations - The Front Entry

