PERALTA COMMUNITY COLLEGE DISTRICT

FACILITIES, TECHNOLOGY MASTER PLAN UPDATE | JANUARY 23, 2018

BOARD UPDATE: Draft Facilities Technology Master Plan
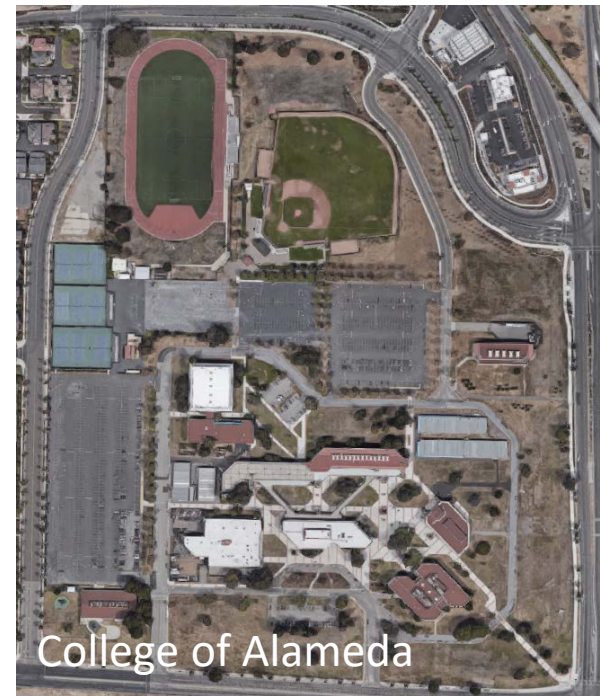

District Offices

Berkeley City College

Merritt College

Laney College

College of Alameda

Agenda

- Draft 2017 FTMP Update Document Overview
- Key Drivers of the District Needs
- Phase One: Campus Priorities
  - ❖ Technology
  - ❖ Berkeley City College
  - ❖ College of Alameda
  - ❖ Laney College
  - ❖ Merritt College
  - ❖ District Sites: District Office & 860 Atlantic Avenue

Draft Facilities Technology Master Plan
Document Overview

Draft FTMP

Table of Contents

Draft FTMP

DOCUMENT ORGANIZATION

The *summary* results of the extensive, investigative, and collaborative master planning process are documented here. For more detail on Berkeley City College, College of Alameda, Laney College, and Merritt College, please refer to the individual campus' 2017 Facilities and Technology Master Plan. This document is organized as follows:

Chapter One summarizes the FTMP purpose, process, and key drivers for the entire District's Facilities, Technology and Infrastructure needs. It also provides a summary list of Priority Projects across the District.

Chapter Two documents the technology needs for the District, and provides guidelines for AudioVisual Systems, standards for Telecommunication Infrastructure, and Network, and Wi-Fi standards.

Chapter Three documents the Berkeley City College Master Plan, and the projects that comprise it.

Chapter Four documents the College of Alameda Master Plan, and the projects that comprise it, including Priority projects.

Chapter Five documents the District Administrative Complex, Workforce Development/Continuing Education, and the Genomics Institute Master Plans.

Chapter Six documents the Laney College Master Plan, and the projects that comprise it, including Priority projects.

Chapter Seven documents the Merritt College Master Plan, and the projects that comprise it, including Priority projects.

Chapter Eight documents the Rough Order of Magnitude (ROM) Costs for the Priority projects, and Project Implementation.

Draft Facilities Technology Master Plan
Key Drivers

Draft FTMP

## DRIVERS BEHIND DISTRICT NEEDS

KEY DRIVERS FOR THE FTMP

The key drivers for the FTMP Update are:

- The needs arising out of each of the College's 2016 Educational Master Plans (EMPs);
- In particular the need to increase student success, retention, transfer and completion;
- And as indicated in the EMPs, 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 facilities, and infrastructure at College of Alameda (including Aviation Maintenance Training Facility), District site, Laney College, and Merritt College;
- The needs arising out of the existing condition of technology at all District sites;
- Lack of Library space capacity at all four colleges: Berkeley City College, College of Alameda, Laney College, and Merritt College; and
- Lack of Lecture, Laboratories, and Office space capacity at Berkeley City College.

KEY FINDINGS FROM 2016 EMPS

The 2016 Educational Master Plans' main focus/goal is to increase student success, retention, transfer, and completion in alignment with State Student Success Act (SB 1456). 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).
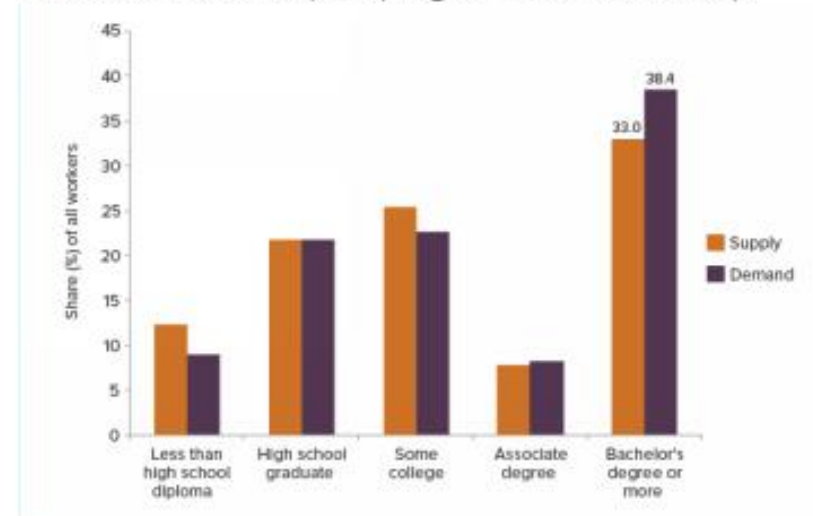
Source: Johnson, Cueller Mejia, and Bohn, Will California Run Out of College Graduates? (PPIC 2015)

The 2016 EMPs identify a 1.0% - 1.1% 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.

Draft Facilities Technology Master Plan
Technology

Draft Technology Master Plan

OVERVIEW

Master Plan

The Technology portion of the Facilities Master Plan covers the following:

- Network – wired and wireless (Wi-Fi)
- WAN and CENIC
- Telephony / VoIP
- Telecommunications Infrastructure (telecom rooms/IDFs, pathways, cabling)
- Classroom Technologies
- Security Systems

Within each of the categories above, there are subsystems that collectively comprise an overall system. The following pages delve into greater detail per subcategory.

The detail includes information regarding the current condition, an identification of what improvements are needed, and a general statement as to what the Master Plan includes and what (in general) the rough budget numbers at the end of this section cover.

Note, unlike the Facilities Master Plan, the Technology Master Plan only covers a period of five years. As such, the plan takes into account annual renewals and product life spans based on this time frame.

Guidelines & Standards

The following Technology Guidelines and Standards are located after the Technology Master Plan:

- Audiovisual Systems Design Guidelines
- Telecommunications Infrastructure Standards
- Network and Wi-Fi Standards

These Guidelines and Standards are applicable to all campuses, supersede any previous Standards, and will remain in effect until they are revised or updated by the District.

PRIORITY PROJECTS
District-Wide Technology Needs

ITEM
Network and Wi-Fi Refreshes
Berkeley City College
College of Alameda
Laney College
Merritt College
District Office
Firewalls
Network Monitoring
Maintenance Contracts
Cisco Maintenance Contract - per year
NetworkConnect - per year
Cloud Data Storage - per year
Cloud Application Deployment - per year
Power and UPS Upgrades
Security Access Control Replacement
Video Surveillance Cameras
Video Surveillance Maint. Contract - per 3 year
Emergency Call Stations
Blackboard Connect
Subscription Fees
System/Infrastructure Upgrades
Premises Radio System
Duress Buttons and Intrusion Detection
Professional Development/Training
IR Sensors

Draft Facilities Technology Master Plan
Berkeley City College Priority Projects

Berkeley

PRIORITY PROJECTS
Berkeley City College

	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

** Additional Facility and/or Land will depend on timing of
available opportunities

Figure 3.1: The Master Plan

Berkeley

Figure 3.1: Project B1a: Milvia Street 3rd Floor Build Out

LEGEND
- CLASSROOM
- MEETING/STUDY
- OFFICE
- UMOJA

Figure 3.2: Project B1b: Existing Main Building Parital Reconfigurations - the Cube Idea
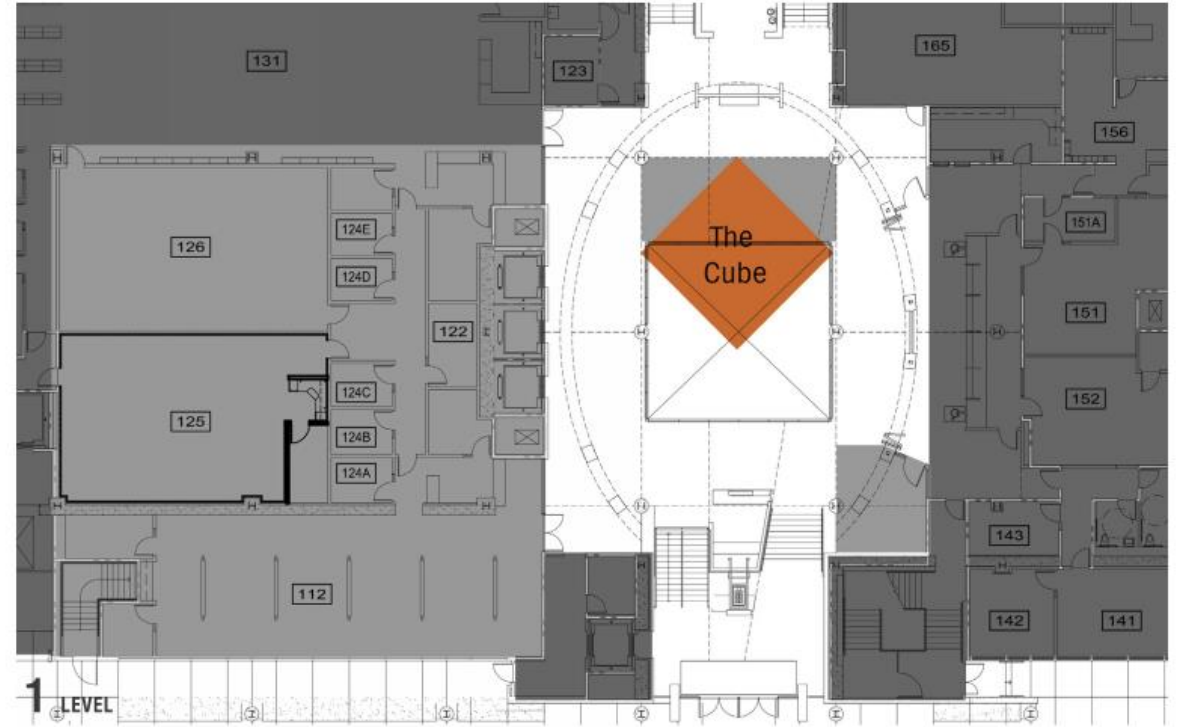
Figure 3.3: Project B1b: Existing Main Building Parital Reconfigurations - the front entry
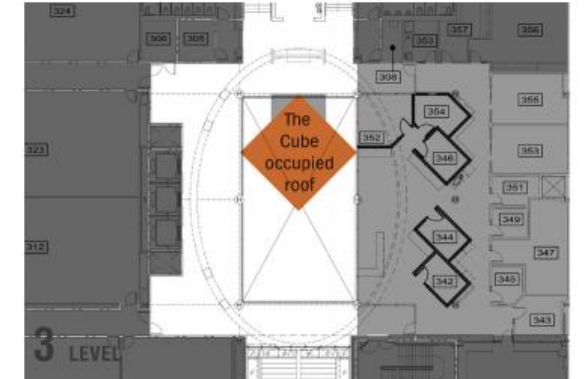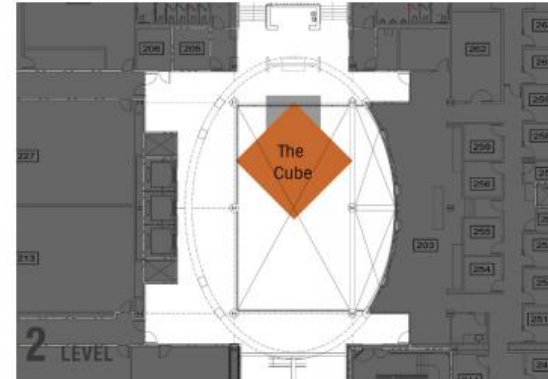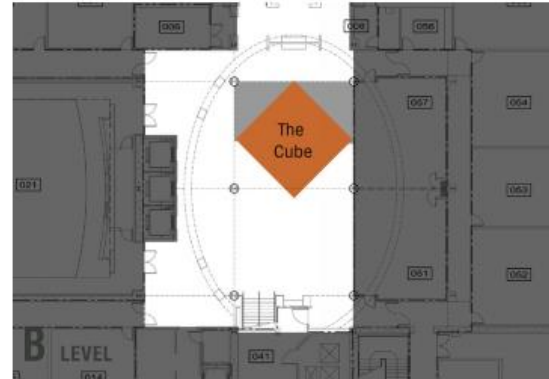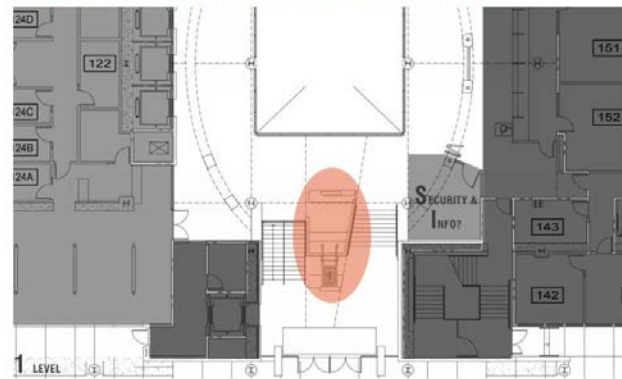
Draft Facilities Technology Master Plan
College of Alameda Priority Projects

Alameda

PRIORITY PROJECTS
College of Alameda

	INFRASTRUCTURE
A1	Replace All Campus Major Electrical Equipment
A2	Upgrade / Replace Central Heating Hot Water Plant
A3	Civil Infrastructure Replacements

	FACILITIES
A4	C/D Replacement: Science & Administration
A5	Aviation Complex (Replacement)**
A6	Automotive/Diesel Complex (Replacement)
A7	Performing Arts
A9	Modernize Student Center Building F

	TECHNOLOGY
A14	Main Campus Complete Wi-Fi Deployment
A15	Main Campus Complete Network Upgrade Project
A16	Aviation Site Complete Wi-Fi Deployment
A17	Aviation Site Complete Network Upgrade Project

PRIORITY PROJECTS
Figure 4.5: 2017 Facilities Master Plan for Priority Projects Only (Inset: Aviation Campus)

Draft Facilities Technology Master Plan
Laney College Priority Projects

Laney

	INFRASTRUCTURE
L1	Replace All Campus Major Electrical Equipment
L2	Replace / New Central Plant & Infrastructure
L3	Replace Domestic Hot Water System
L4	Replace Compressed Air System
L5	Replace Domestic Water & Compressed Air Piping

	FACILITIES
L6	New Student and Welcome Center
L7	New STEAM Center
L8	New Library Learning Resource Center
L9	New Design & Manufacturing Center & Outdoor Work Area Canopy
L10	New / Replace Central Plant**
L11	Modernize Performing Arts (Theater & Partial G)
L13	New Community Building & Campus Green

	TECHNOLOGY
L19	Complete Wi-Fi Deployment
L20	Complete Network Upgrade Project

** Exact location and details to be determined by a Central Plant Study, in alignment with the SRMP.

PRIORITY PROJECTS
Figure 6.5: 2017 Facilities Master Plan for Priority Projects Only

Draft Facilities Technology Master Plan
Merritt College Priority Projects

Merritt

PRIORITY PROJECTS
Merritt College

	INFRASTRUCTURE
M1	Replace All Campus Major Electrical Equipment
M2	Civil Infrastructure Replacements

	FACILITIES
M3	Replacement Building A
M4	Renovate Building D
M5	Renovate Building E and F
M9A	Combined Child Care Center & Child Development Center
M10	Horticulture Complex Replacement
M11	Kinesiology Physical Fitness Addition
M12	Site Improvement Projects
M15	Renovate Partial Building R

	TECHNOLOGY
M13	Main Campus Complete Wi-Fi Deployment
M14	Main Campus Complete Network Upgrade Project

PRIORITY PROJECTS
Figure 7.5: 2017 Facilities Master Plan for Priority Projects Only

Draft Facilities Technology Master Plan
District Sites Priority Projects

District Sites

MASTER PLAN PROJECTS
District Sites

	INFRASTRUCTURE
D3	Replace HVAC until New Complex
	Civil Infrastructure Replacements until New Complex

	FACILITIES
D1	New Consolidated Administrative Complex (DAC)
	Child Care Center Renovation/Replacement
D2	New Workforce Development and Continuing Education Center (WDCE)
D18	Renovate 860 Atlantic Avenue, Alameda for Peralta Genomics Institute (PGI)

	TECHNOLOGY
	See Technology List

PRIORITY PROJECTS
District Site

D1: THE DISTRICT ADMINISTRATIVE COMPLEX (DAC)
is a new consolidated facility that will replace the existing District Administrative Complex, Admissions and Records Building, Physical Plant Building, and Warehouse/Storage Buildings. Location is to be determined: within PCCD service area, and close to public transportation. Preliminary Assumptions:

*   Size: 60,000 GSF / 40,000 ASF
*   Height: 3 stories
*   Programs: District Administration, Finance, Information Technology, Facilities & Planning, Purchasing, and Warehousing
*   Site Improvements: exterior welcoming plaza, and garden spaces
*   Other: built flexibly to allow departments to change sizes as needed

Other Considerations:
*   Child Center Renovation or Replacement: the existing District operated Child Care Center at Laney College is need of renovation or replacement. Depending on location of the new District Administrative Complex, there may be a desire to collocate the Child Care Center with the DAC.

PRIORITY PROJECTS
District Site

D2: WORKFORCE DEVELOPMENT AND CONTINUING EDUCATION CENTER (WDCE)
is a new facility that will expand the much needed services of the Workforce Development and Continuing Education Center. As identified in the Educational Master Plans for all colleges, there is a rising demand for Corporate Training, Professional Development and non-credit Continuing Education in the 24 - 34 age group in particular. In order to avoid duplication and inefficient use of resources, the District proposes that this should be located in one new facility, near public transportation. If feasible, it should be located adjacent to the new DAC, for this will offer operational efficiencies, and opportunities to share spaces.

*   Size: 25,000 GSF / 17,,000 ASF
*   Height: 2 stories
*   Programs: Workforce Development and Continuing Education
*   Site Improvements: exterior welcoming plaza, and garden spaces

PRIORITY PROJECTS
860 Atlantic Avenue, Alameda

D18: PERALTA GENOMICS INSTITUTE
860 Atlantic Avenue, Alameda, will be renovated to expand the existing research-based Genomics program into the Peralta Genomics Institute (PGI). Genomics is one of the fastest growing industries requiring high technical training, and the PGI will attract local students for profitable careers in this rapidly growing field. In addition, the institute is poised to be largely self-sustaining, by conducting DNA prep and sequencing for others, as well as creating novel course work delivered for profit through a series of webinars. Preliminary Assumptions:

*   Size: 26,000 GSF / 19,600 ASF
*   Height: 1 story
*   Programs: Genomics
*   Renovations: roofing; air conditioning, electrical (increase capacity) and backup generator required because negative freezers house valuable samples; increase technology bandwidth drastically (huge amounts of data transmitted); existing Genomics area very minor adjustments, rest of the building will require reconfiguration and replacement of outdated equipment; add some lab systems (deionized water, nitrogen etc); and signage.

Other Considerations:
*   Secondary Effects: project requires CoA Science programs and the Merritt Medical Genomics program to move out.