

PERALTA COMMUNITY COLLEGE DISTRICT

FACILITIES, TECHNOLOGY MASTER PLAN UPDATE | BOARD APPROVED MARCH 13, 2018

DISTRICT WIDE 2017 Facilities Technology Master Plan



District Offices



Berkeley City College

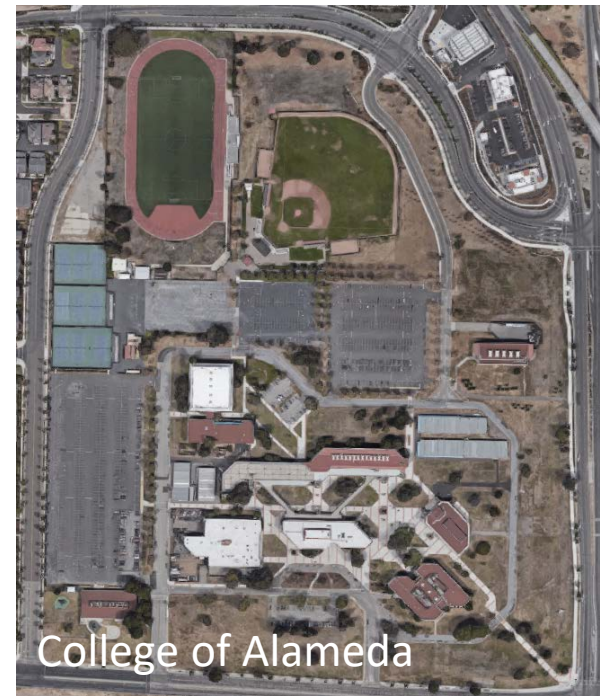


STEINBERG

Merritt College



Laney College



College of Alameda

District-Wide Needs

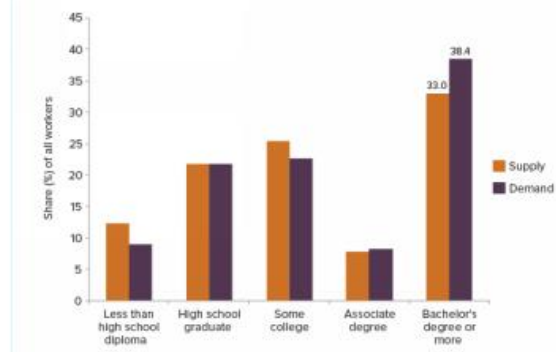
KEY DRIVERS FOR THE FTMP

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, Cuellar Mejia, and Bohn, *Will California Run Out of College Graduates?* (PPIC 2015)

District-Wide Needs

KEY FINDINGS FROM EXISTING CONDITIONS

At College of Alameda, Laney College, and Merritt College, the existing conditions analysis process identified that the existing facilities, technology and infrastructure are unable to support the 2016 Educational Master Plan goals due to:

- There is no need to increase capacity in the classrooms, and class labs space categories, BUT classrooms and class labs are outdated and cannot support the 21st century instruction and learning necessary for student success, retention, transfer and completion;
- There is a need to increase library, and some office space capacity;
- Aging facilities with failing systems requiring repair or replacement, like electrical and air-conditioning (see next page for a snapshot for each college's conditions);
- Significant number of instructional and student spaces are located in buildings past their useful life (especially when failing systems and viewed in conjunction with structural upgrades required);
- Student services are impaired by dispersed locations and inadequate space to accommodate functions; and
- Underground infrastructure in poor condition.

At Berkeley City College, the existing conditions analysis process identified that:

- There is a lack of space capacity, especially in class labs, but also in classrooms, office, and library;
- Student services are impaired by dispersed locations and inadequate space to accommodate functions;
- Technology upgrades, and corrections, are required within existing facilities;
- Lack of student gathering space is having a noise impact on adjacent instructional and student support spaces.

At the District Site, the existing conditions analysis process identified that:

- Aging facilities with failing systems requiring repair or replacement, like electrical and air-conditioning;
- Departments dispersed between several buildings create operational inefficiencies; and
- Underground infrastructure in poor condition.

WHY CONDITION OF FACILITIES MATTER

Thousands of studies over the last three decades indicate that the condition of facilities impacts student learning, teaching, and teacher retention. A 2002 UCLA Study states that "researchers have repeatedly found a difference of between 5-17 percentile points difference between achievement of students in poor buildings and those students in standard buildings."

Building aspects that most affect student and teacher performance are:

- Acoustics and Noise
- Air Quality
- Lighting
- Proper Temperature
- Control of Temperature
- Classroom Size
- Classroom Configuration
- Twenty-First Century Learning

The following overview of the existing conditions at College of Alameda, Laney College, Merritt College, and the District Site, illustrates how all the aspects above are deficient across these campuses. Since poor facilities negatively impact teacher effectiveness and performance, which in turn negatively impacts student performance, one of the keys to improving student success as required by the college EMPs, and the California State Student Success Act (SB 1456), is to improve facilities for the aspects listed above.

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:

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

Figures 1.0, 1.2, 1.5 and 1.8 show the State FCI for each respective campus. The FCI colors represent:

- Blue = Good (Repair Costs less than 10% of Replacement)
- Green = Fair (Repair Costs between 10 - 50% of Replacement)
- Yellow = Poor (Repair Costs between 50 - 90% of Replacement)
- Red = Very Poor (Repair Costs over 90% of Replacement)

OVERALL BUILDINGS ANALYSIS OVERVIEW

Our team analyzed previous assessments provided by the District: facilities assessments from 2009, and State (FUSION) facilities assessment from 2016. Taking into consideration any District provided information on items addressed since 2009, the team factored in the additional age and wear in updating the assessments. The results are depicted in Figures 1.1, 1.4, 1.7 and 1.10. The scale: 1 (red) to 10 (blue), with "1" being bad condition, end of useful life, needing to be replaced; to "10" being in good condition, like new.

STRUCTURAL ANALYSIS OVERVIEW

Our approach to this structural assessment began with the review of the existing as-built structural plans, the review of the structural assessment report from 2008 by WLC architects and KPW structural engineers, and site visits to the Alameda campus. Once the existing conditions were assessed, collaboration with the District's team enabled us to provide structural recommendations for future planning. Structural analysis will be required for each future project to identify specific deficiencies and retrofit requirements.

The diagrams in Figure 1.3, 1.6, and 1.9 indicate which buildings were investigated and the estimated effort required to upgrade the structure with **voluntary retrofits** (see discussion within individual Campus FTMPs for mandatory versus voluntary upgrades explanation).

District-Wide Classroom Needs

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% - 71% of respondents saying they learn and teach best with a combination of lecture, small group and hands on activities.

The 2016 Educational Master Plans indicate the need for each College's 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. Very few existing classrooms at COA, Laney, and Merritt meet these requirements. BCC is better equipped being a newer facility, but even at BCC some rooms require *some* reconfiguration. Across the District, the majority of existing classrooms, and class labs, are in need of reconfiguration and modernization for:

- 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.

Some examples of how modern teaching pedagogies have impacted campus spaces follow.

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

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 learning.

Existing Example (to right)



Typical for Today's Teaching Pedagogies (below)



Technology Master Plan

ROUGH ORDER OF MAGNITUDE COSTS

The table below lists the rough-order-of-magnitude (ROM) costs for the projects and initiatives described previously.

The titles are the same to improve relating a cost with a description.

ITEM	BUDGET
Network and Wi-Fi Refreshes	\$10,100,000
Berkeley City College	\$1.4 - \$2M
College of Alameda	\$1.2 - \$1.8M
Laney College	\$1.3 - \$2.4M
Merritt College	\$2.5M
District Office	\$1.4M
Firewalls	\$300,000
Network Monitoring	\$300,000
Maintenance Contracts	\$2,350,000
Cisco Maintenance Contract	\$435k / yr
NetworkConnect	\$35k / yr
Cloud Data Storage \$500K/year	\$1,000,000
Cloud Application Deployment - \$500K/year	\$1,000,000
Power Upgrades	\$1,100,000
Power Study	\$100k
Power and UPS Upgrades	\$1M
Security Access Control Replacement	\$5,060,000
Cost Per Door	\$2,300

ITEM	BUDGET
Video Surveillance Cameras	\$500,000
Video Surveillance Maint. Contract	\$1,200,000
Cost Per 3-Year Renewal	\$600k
Emergency Call Stations	\$4,000,000
Blackboard Connect	\$890,000
Subscription Fees	\$190k
System/Infrastructure Upgrades	\$700k
Premises Radio System	\$1,000,000
Duress Buttons and Intrusion Detection	\$2,500,000
Professional Development/Training	\$2,000,000
IR Sensors	\$800,000
Per Classroom	\$2k

The total ROM Costs for IT/Network, Telecom, and Security systems during the 5-year duration of this Master Plan is \$34,100,000.

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



Element	Area	Construction Total	Escalation	Soft Costs	Construction Cost / SF	Project Total	Adjustments	Revised Project Total	Notes
Project B1 - BCC Milvia 3rd Floor Build-Out / Reconfig. Of E. Bldg.	27,053	\$11,405,362	\$3,451,728	\$5,199,982	\$741.40	\$20,057,072	-\$4,011,414	\$16,045,657	
Project B4 - BCC Additional Facility and/or Land Allowance							\$50,000,000	\$50,000,000	
Total Estimated Construction Cost	27,053	\$11,405,362	\$3,451,728	\$5,199,982	\$741.40	\$20,057,072	\$45,988,586	\$66,045,657	

College of Alameda

Per the Chancellor's FUSION
Facilities Condition Index
(FCI) ratings,

91%

of buildings at COA require
renovation or replacement.

Figure 1.2: COA State Facility Condition Index

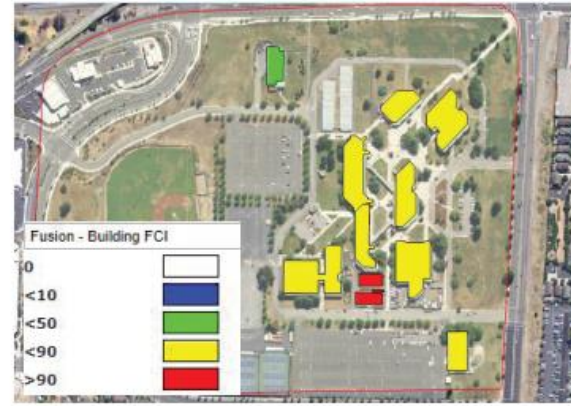


Figure 1.3: COA Structural Voluntary Upgrade Analysis
(Inset: Aviation Campus)

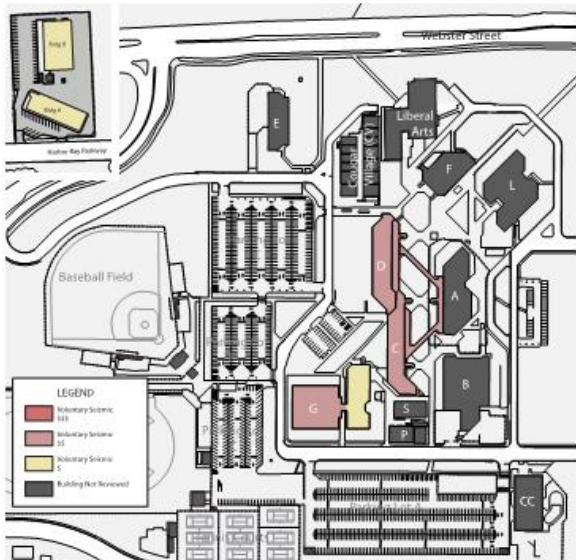


Figure 1.4: COA Building Assessments Analysis

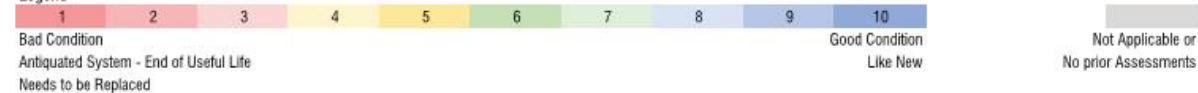
	Electrical Distribution System	Emergency Distribution System	Lighting Systems	Fire Alarm System	HVAC Equipment	HVAC Ducts & Air Distribution	HVAC Piping	Plumbing Fixtures	Plumbing Piping	Architectural ¹	Roofing ²
860 Atlantic Avenue ³	8	8	8		3	3	3				
Aviation Facility	3		3	5	1	1	1	1	1	4	1
A Building	8	8	8		3	3	3			8	4
B Building	3	4	4	5	1	1	3	3	6	4	3
C Building	3	3	4	5	2	2	1	4	7	4	1
Child Care Center					4	4	4	3	5	6	1
Cougar Village	7		7	6							
D Building	3	3	4	5	1	1	2	4	4	4	1
E Building					1	1	2	4	6	4	3
F Building	3	3	4	5	2	1	3	7	6	6	1
G Building	3	3	4	5	1	1	1	5	5	5	4
L Building	3	3	3	5	3	3	1	6	7	5	2

¹ Architectural ranking does not include teaching/learning set up of rooms. See separate discussion regarding teaching/learning observations

² Roofing information per District Vendor Information

³ No 2009 Assessments, only 2016 FUSION Assessments to go on

Legend



Alameda

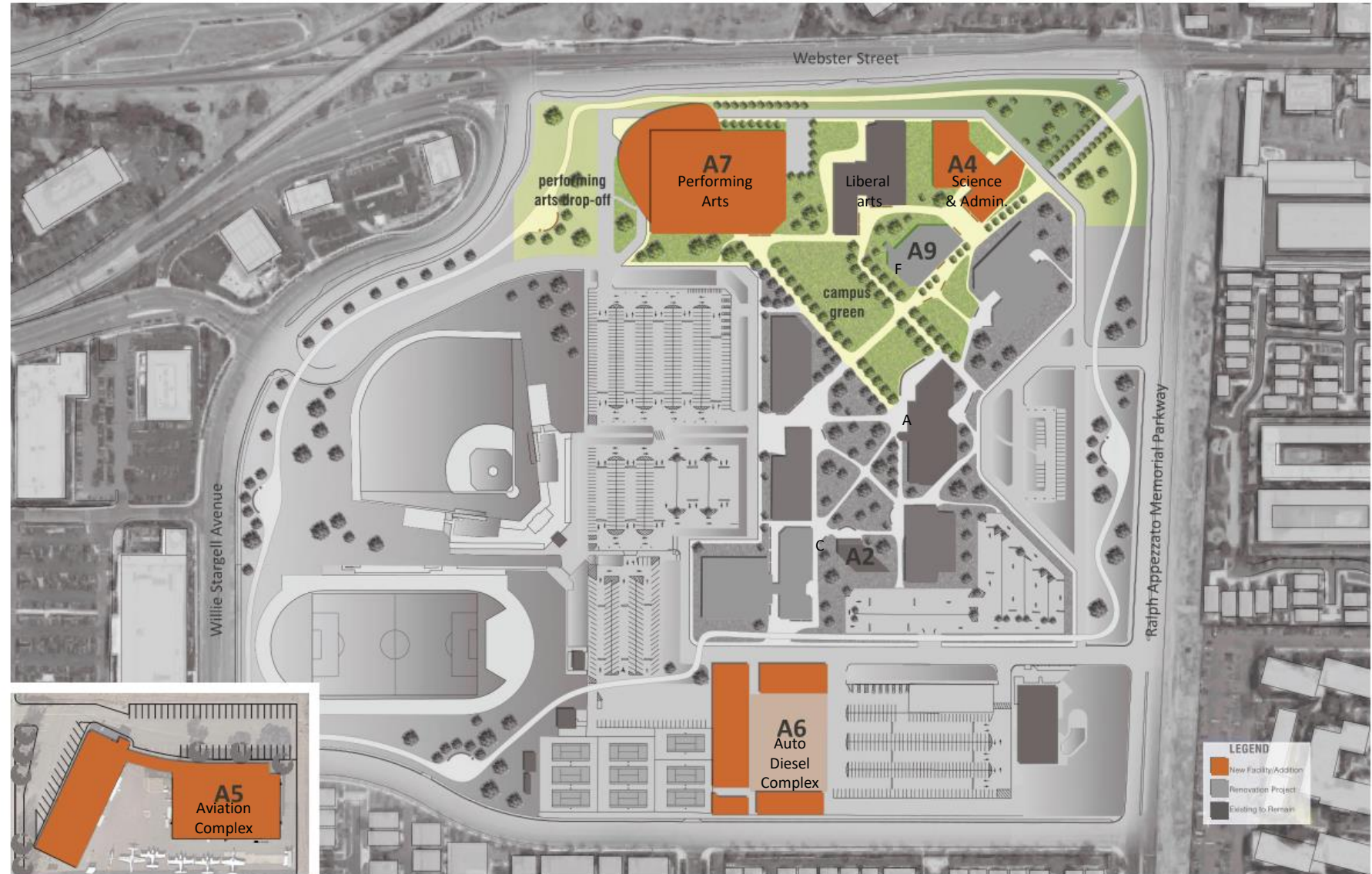
PRIORITY PROJECTS

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)



Alameda

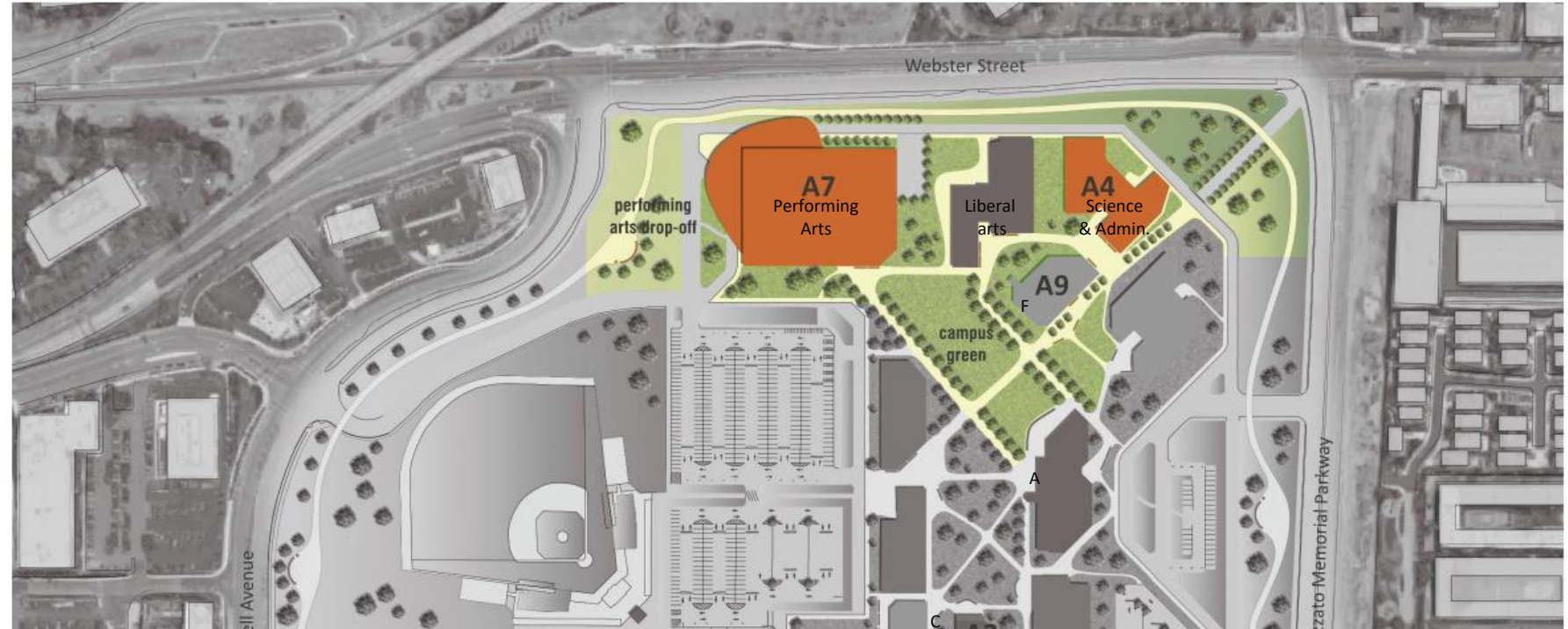
PRIORITY PROJECTS

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)



Element	Area	Construction Total	Escalation	Soft Costs	Construction Cost / SF	Project Total	Adjustments	Revised Project Total	Notes
Project A4 - COA Science & Administration Center	42,000	\$33,181,264	\$10,042,006	\$15,128,145	\$1,389.32	\$58,351,415	-\$11,670,283	\$46,681,132	
Project A5 - COA Replace Aviation Complex	28,479	\$14,872,931	\$4,501,156	\$6,780,930	\$918.40	\$26,155,017	-\$7,840,000	\$18,315,017	deduct for Potential State Funds
Project A6 - COA Automotive Center (Replacement)	35,000	\$30,789,655	\$9,318,207	\$14,037,752	\$1,547.02	\$54,145,613	-\$14,230,000	\$39,915,613	deduct for Potential State Funds
Project A7 - COA Performing Arts	50,000	\$42,506,370	\$12,864,164	\$19,379,687	\$1,495.00	\$74,750,220	-\$14,950,044	\$59,800,176	
Project A9 - COA Modernize Building F (Student Center)	22,762	\$8,561,053	\$2,590,924	\$3,903,192	\$661.42	\$15,055,170	-\$3,011,034	\$12,044,136	
Total Estimated Construction Cost	178,241	\$129,911,272	\$39,316,457	\$59,229,705	\$1,281.73	\$228,457,435	-\$51,701,361	\$176,756,074	

Laney College

Per the Chancellor's FUSION
Facilities Condition Index
(FCI) ratings,

87%

of buildings at Laney require
renovation or replacement.

Figure 1.5: LANEY State Facility Condition Index

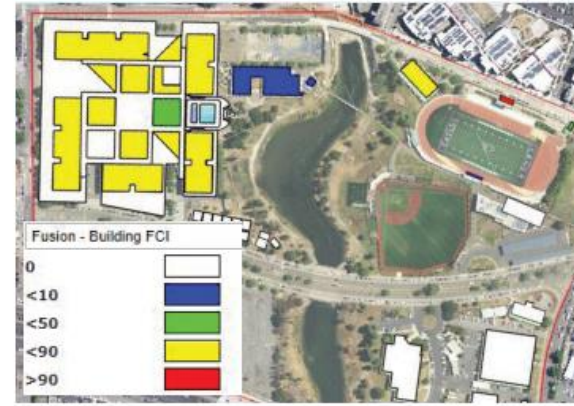


Figure 1.7: LANEY Building Assessments Analysis

	Electrical Distribution System	Emergency Distribution System	Lighting Systems	Fire Alarm System	HVAC Equipment	HVAC Ducts & Air Distribution	HVAC Piping	Plumbing Fixtures	Plumbing Piping	Architectural ¹	Roofing ²
A Building	3	3	3	5	1	1	1	4	4	6	1
Administration	3	5	3	5	1	1	2	4	4	9	8
Art Center	7	7	5	8	8	8	8	9	9	9	
Athletic Field House											
B Building	3	3	3	5	1	2	1	4	4	5	1
C Building	3		3	5	1	1	1	4	4	5	9
Child Care Center	3		3	5	5	5	5	3	6	5	1
D Building	2	3	4	5	1	1	3	5	4	5	4
E Building	3	3	4	5	2	1	3	3	5	6	1
F Building	2	2	4	5	2	1	3	6	5	6	1
Forum	3	3	3	5	1	1	1	4	4	6	1
G Building	3	3	3	5	1	1	2	4	4	7	9
Gymnasium	3	3	4	5	1	1	1	4	4	6	2
Library	3	3	3	5	1	2	2	4	4	5	3
Locker Room	3		3	5	1	1	1	4	1	5	
Student Center ³	3	3	3		2		2	4	4	6	1
Theater	3	3	2	5	3	3	3	4	4	5	1

¹ Architectural ranking does not include teaching/learning set up of rooms: See separate discussion regarding teaching/learning observations

² Roofing information per District Vendor Information

³ No 2009 Assessments, only 2016 FUSION Assessments to go on

Legend

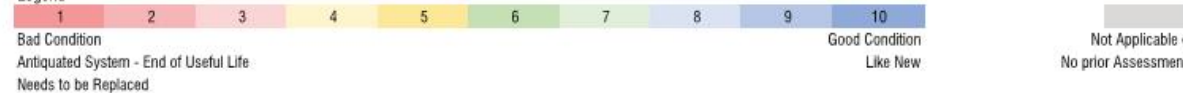


Figure 1.6: LANEY Structural Voluntary Upgrade Analysis



Laney

PRIORITY PROJECTS

Laney College

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



LEGEND	
■	New Facility/Addition
■	Renovation Project
■	Existing to Remain

Laney

PRIORITY PROJECTS

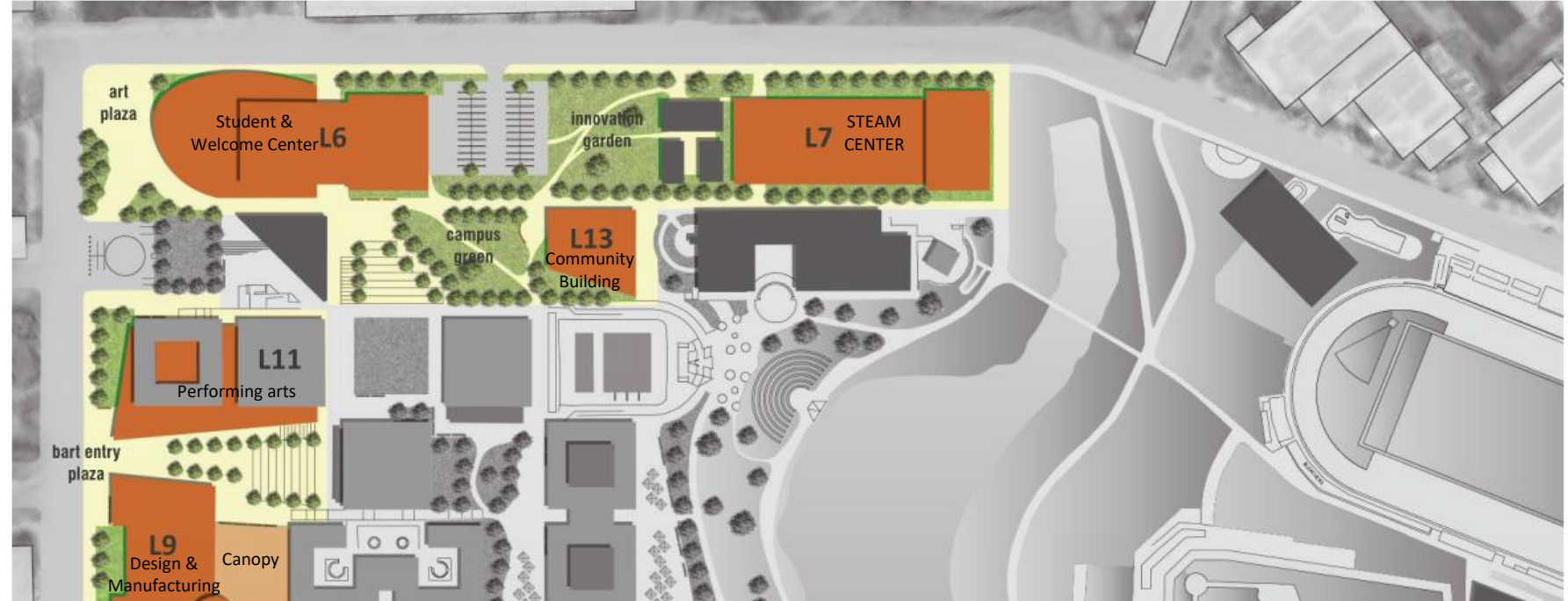
Laney College

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

PRIORITY PROJECTS

Figure 6.5: 2017 Facilities Master Plan for Priority Projects Only



Element	Area	Construction Total	Escalation	Soft Costs	Construction Cost / SF	Project Total	Adjustments	Revised Project Total	Notes
Project L6 - Laney Student and Welcome Center	70,000	\$52,216,217	\$15,802,760	\$23,806,642	\$1,311.79	\$91,825,620	-\$18,365,124	\$73,460,496	
Project L7 - Laney STEAM Center	120,000	\$86,357,693	\$26,135,365	\$39,372,570	\$1,265.55	\$151,865,628	-\$30,373,126	\$121,492,502	
Project L-CP - Laney (2) New Central Plants	10,000	\$24,463,546	\$7,403,668	\$11,153,525	\$4,302.07	\$43,020,739	-\$8,604,148	\$34,416,591	
Project L8 - Laney Library LRC	71,752	\$43,794,940	\$13,254,138	\$19,967,177	\$1,073.37	\$77,016,255	-\$20,245,005	\$56,771,250	deduct for Potential State Funds
Project L9 - Laney New Design & Manufacturing Center (DMC I)	60,000	\$39,693,383	\$12,012,839	\$18,097,178	\$1,163.39	\$69,803,400	-\$13,960,680	\$55,842,720	
Project L11 - Laney Modernize Theater & Partial G	53,886	\$48,440,839	\$14,660,176	\$22,085,355	\$1,580.86	\$85,186,371	-\$6,953,000	\$78,233,371	deduct for Potential State Funds
Project L13 - Laney New Campus Green & Community Building	20,000	\$15,956,554	\$4,829,105	\$7,274,981	\$1,403.03	\$28,060,640	-\$5,612,128	\$22,448,512	
Total Estimated Construction Cost	405,638	\$310,923,172	\$94,098,051	\$141,757,428	\$1,347.95	\$546,778,651	-\$104,113,210	\$442,665,441	

Merritt College

Per the Chancellor's FUSION
Facilities Condition Index
(FCI) ratings,

82%

of buildings at Merritt require
renovation or replacement.

Figure 1.8: MERRITT State Facility Condition

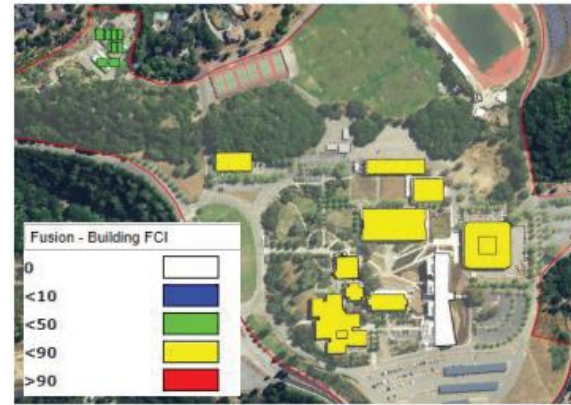


Figure 1.9: MERRITT Structural Voluntary Upgrade Analysis

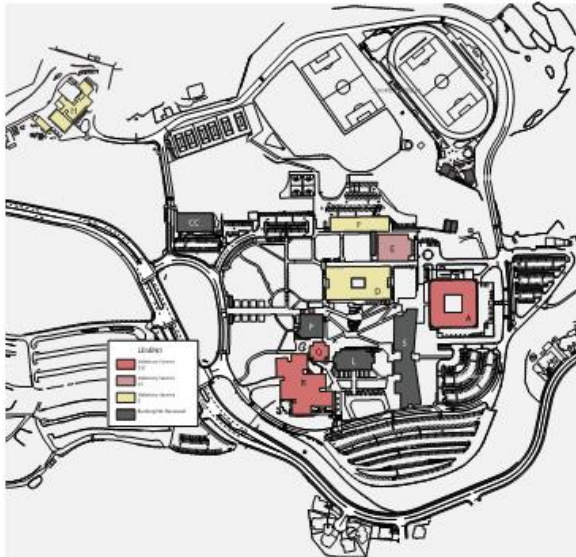


Figure 1.4: MERRITT Building Assessments Analysis

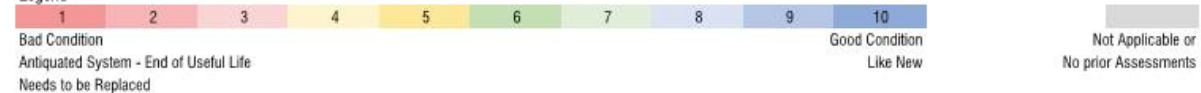
	Electrical Distribution System	Emergency Distribution System	Lighting Systems	Fire Alarm System	HVAC Equipment	HVAC Ducts & Air Distribution	HVAC Piping	Plumbing Fixtures	Plumbing Piping	Architectural ¹	Roofing ²
860 Atlantic Avenue ³	8	8	8		3	3	3				
Building A	3	3	4	4	3	1	2	3	6	4	1
Child Care Center	3		3	5	5	5	5	4	7	6	1
Building D ³	3	3	4	5	3	3	3	1	1		
Building E	2	3	2	5	1	2	1	4	6	4	5
Building F	1	3	4	5	2	1	3	7	6	4	1
Horticulture	3		4	5	1	3	2	5	5	4	1
Building L	3	3	4	4	1	3	2	5	7	7	8
Building P	3	3	4	4	5	5	5	5	5	8	2
Building Q	3	3	4	4	2	1	1	5	5	6	7
Building R	3	3	4	4	3	3	3	7	7	7	2
Building S											

¹ Architectural ranking does not include teaching/learning set up of rooms: See separate discussion regarding teaching/learning observations

² Roofing information per District Vendor Information

³ No 2009 Assessments, only 2016 FUSION Assessments to go on

Legend



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



Merritt

PRIORITY PROJECTS

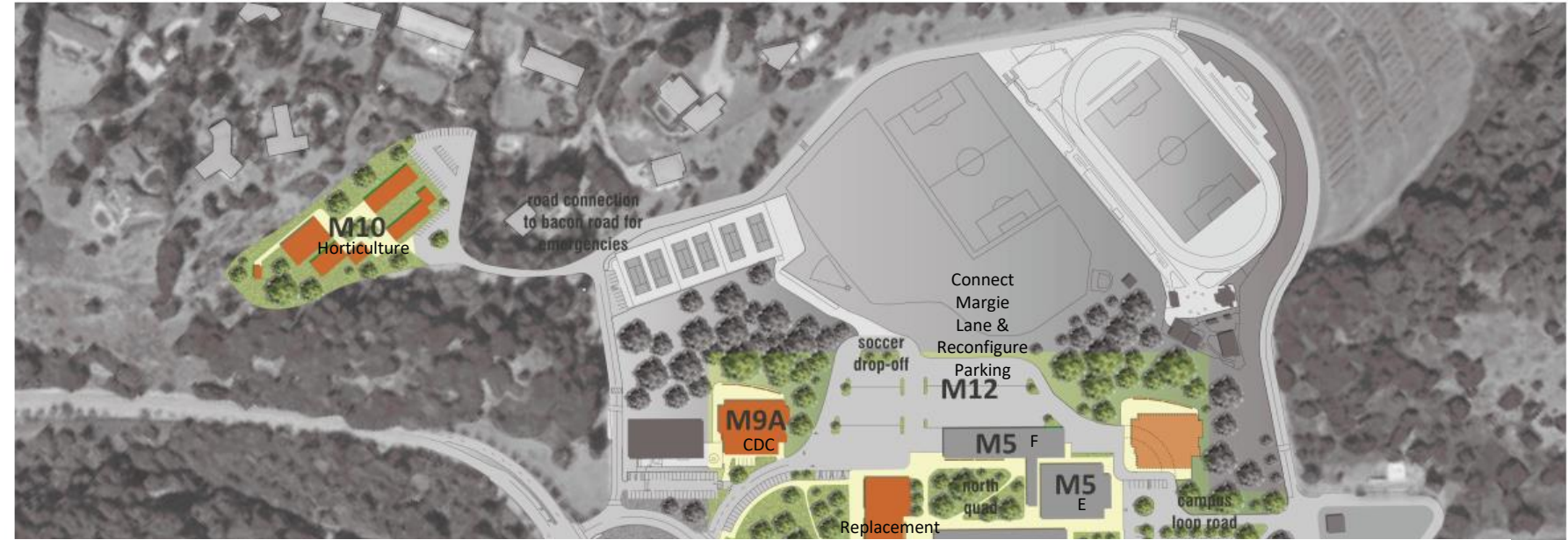
Merritt College

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

PRIORITY PROJECTS

Figure 7.5: 2017 Facilities Master Plan for Priority Projects Only



Element	Area	Construction Total	Escalation	Soft Costs	Construction Cost / SF	Project Total	Adjustments	Revised Project Total	Notes
Project M3 - Merritt Demolish Building A / New Building	30,000	\$23,513,192	\$7,116,052	\$10,720,235	\$1,378.32	\$41,349,479	-\$8,269,896	\$33,079,583	
Project M4 - Merritt Renovate Bldg. D	75,493	\$32,092,031	\$9,712,359	\$14,631,537	\$747.57	\$56,435,927	-\$11,287,185	\$45,148,742	
Project M5 - Merritt Renovate F and E	54,202	\$18,924,268	\$5,727,256	\$8,628,033	\$613.99	\$33,279,558	-\$6,655,912	\$26,623,646	
Project M9 - Merritt Child Development Center	12,532	\$8,043,966	\$2,434,433	\$3,667,440	\$1,128.78	\$14,145,838	-\$5,119,000	\$9,026,838	deduct for Potential State Funds
Project M10 - Merritt Horticulture Replacement	19,032	\$15,649,300	\$4,736,117	\$7,134,896	\$1,446.00	\$27,520,314	-\$8,003,000	\$19,517,314	deduct for Potential State Funds
Project M11 - Merritt Kinesiology Physical Fitness Addition	20,000	\$12,700,127	\$3,843,577	\$5,790,296	\$1,116.70	\$22,334,000	-\$5,501,000	\$16,833,000	deduct for Potential State Funds
Project M12 - Merritt Site Improvement Project	-	\$5,304,920	\$1,605,485	\$2,418,642	N/A	\$9,329,047	-\$1,865,809	\$7,463,238	
Project M13 - Merritt Renovate Building R	53,889	\$21,679,714	\$6,561,167	\$9,884,308	\$707.48	\$38,125,189	-\$7,625,038	\$30,500,151	
Total Estimated Construction Cost	265,148	\$137,907,517	\$41,736,447	\$62,875,388	\$914.66	\$242,519,352	-\$54,326,840	\$188,192,512	

District

Per the Chancellor's FUSION
Facilities Condition Index
(FCI) ratings,

35%

of buildings at District require
renovation or replacement.

Figure 1.0: DISTRICT State Facility Condition Index



Figure 1.1: DISTRICT Building Assessments Analysis

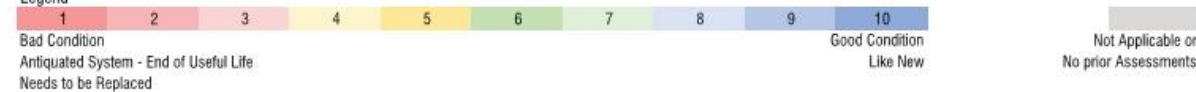
	Electrical Distribution System	Emergency Distribution System	Lighting Systems	Fire Alarm System	HVAC Equipment	HVAC Ducts & Air Distribution	HVAC Piping	Plumbing Fixtures	Plumbing Piping	Architectural ¹	Roofing ²
District Admin. Center	4	4	6	5	2	2	1	5	5	5	3
Physical Plant Warehouse	6		6	5	2	2	1	5	5	4	2
Admissions and Records	4		6	5	2	2	1	5	5	5	2
Grounds Butler Bldg	4		4		1					4	
Grounds Shed	2		2		1	1					

¹ Architectural ranking does not include teaching/learning set up of rooms: See separate discussion regarding teaching/learning observations

² Roofing information per District Vendor Information

³ No 2009 Assessments, only 2016 FUSION Assessments to go on

Legend



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.

Element	Area	Construction Total	Escalation	Soft Costs	Construction Cost / SF	Project Total	Adjustments	Revised Project Total	Notes
Project D1 - District New Consolidated Admin. Complex	60,000	\$37,688,343	\$11,406,032	\$17,183,031	\$1,104.62	\$66,277,406	-\$19,883,222	\$46,394,184	
Project D2 - District Workforce & Development / CE Center	25,000	\$16,315,976	\$4,937,881	\$7,438,850	\$1,147.71	\$28,692,707	-\$8,607,812	\$20,084,895	
Project D18 - District Genomics Institute at 860 Atlantic Avenue Allowance	20,000				\$600.00		\$12,000,000	\$12,000,000	
Total Estimated Construction Cost	85,000	\$54,004,319	\$16,343,913	\$24,621,881	\$1,117.30	\$94,970,113	-\$16,491,034	\$78,479,079	



Overall Summary

Element	Area	Construction Total	Escalation	Soft Costs	Construction Cost / SF	Project Total	Adjustments	Revised Project Total
Berkeley	27,053	11,405,362	3,451,728	5,199,982		20,057,072	45,988,586	66,045,657
Alameda	178,241	129,911,272	39,316,457	59,229,705		228,457,435	(51,701,361)	176,756,074
District Offices	85,000	54,004,319	16,343,913	24,621,881		94,970,113	(16,491,034)	78,479,079
Laney	405,638	310,923,172	94,098,051	141,757,428		546,778,651	(104,113,210)	442,665,441
Merritt	265,148	137,907,517	41,736,447	62,875,388		242,519,352	(54,326,840)	188,192,512
Total Estimated Construction Cost	961,080	\$644,151,643	\$194,946,597	\$293,684,384		\$1,132,782,623	-\$180,643,859	\$952,138,764