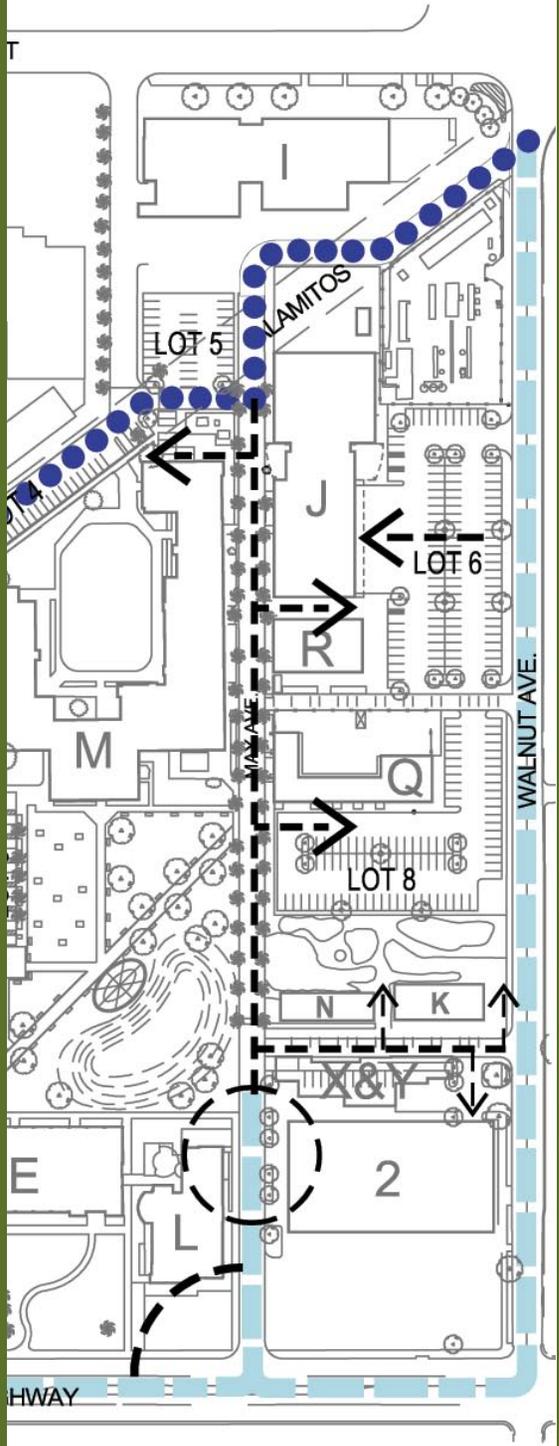


LONG BEACH CITY COLLEGE 2020 UNIFIED MASTER PLAN

LONG BEACH COMMUNITY COLLEGE DISTRICT
LONG BEACH CITY COLLEGE
Liberal Arts Campus &
Pacific Coast Campus

Cambridge West Partnership
August 20, 2007





LONG BEACH CITY COLLEGE 2020 UNIFIED MASTER PLAN

LONG BEACH COMMUNITY COLLEGE DISTRICT
4901 E. CARSON STREET
LONG BEACH, CALIFORNIA 90808

FACILITIES PLANNING COMMITTEE

Jeff Wheeler, Co-Chairman
Gene Farrell, Co-Chairman
Mark Bowen, Board Liaison
Cindy Baker, Management Team
Alta Costa, AFT
Adrian Erb, Faculty, LAC
Mike Avila, Faculty, PCC
Mark Thissell, Facilities
Greg Floyd, Facilities
Student, Associated Students Organization

AUXILIARY MEMBERS

Javier Rivera, Industrial Representative
Donna Prindle, Large Facilities

BOARD OF TRUSTEES

Douglas Otto, President
Jeff Kellogg, Vice President
Mark Bowen, Trustee
Dr. Thomas Clark, Trustee
Robert Uranga, Trustee

Eloy Oakley, President

MASTER PLANNING TEAM

Educational Resource & Facilities Planning

Cambridge West Partnership
Corona, California
Wolfeboro, New Hampshire

Architect

Marlene Imirzian & Associates
Escondido, California
Phoenix, Arizona

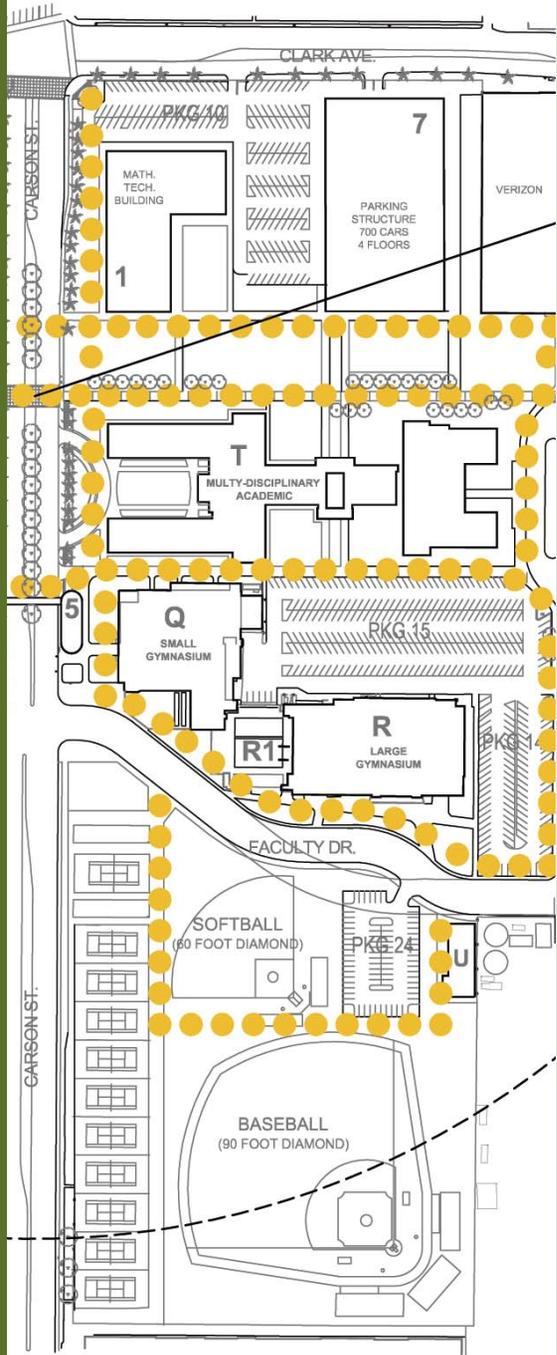


Table of Contents

OVERVIEW	4
THE CURRENT BUILDING/FACILITIES PROGRAM	5
BEYOND THE MEASURE E BOND PROGRAM	8
THE 2020 UNIFIED MASTER PLAN	11
Phases of the Sequence Schedule	
Project Sequencing Criteria	
Sequence Schedule	
Summary	
FINANCIAL REQUIREMENTS FOR THE 2020 PLAN	17
OPTIONS AND RECOMMENDATIONS	21
Options	
Recommendations	
CONCEPT PLANS FOR THE 2020 BUILDING FACILITIES PROGRAM ..	29
LAC	
Aerial Photograph	
Facility Site Plan	
Open Space	
Pedestrian Circulation	
Vehicular Circulation and Gateway Plan	
Parking Plan – Option A	
Parking Plan – Option B	
PCC	
Aerial Photograph	
Facility Site Plan	
Open Space	
Pedestrian Circulation	
Vehicular Circulation and Gateway Plan	
Parking Plan	

Overview

The *2020 Long Beach Community College Unified Master Plan* (“Plan” or “2020 Unified Master Plan”) was envisioned to address the following objectives:

- a) Meld the various plans and planning efforts that have taken place at the Liberal Arts Campus (“LAC”) and the Pacific Coast Campus (“PCC”) to date. This includes conceptual plans that predated the Long Beach Community College District’s (“District”) Measure E Bond Program through the recent work conducted by the architectural firm of Marlene Imirzian & Associates and the *Long Beach Resource and Facilities Plan* completed in 2006. *The 2020 Unified Master Plan* updates all previous planning documents to the current condition that exists as of July 2007.
- b) Create a long-term vision for meeting academic growth and addressing aging facilities and infrastructure. It was assumed that this long-term vision would need to extend beyond the resources of Measure E and target the needs of the two campuses well into the future.
- c) Produce, as an outcome, a single, guiding document that would drive all future facility planning efforts of the District.
- d) Identify project priorities, scopes, timelines for construction, costs, and a financing strategy for implementing the long-term vision.
- e) Define the projects and financial needs for a future bond program.
- f) Convert the data and information into a comprehensive site plan that not only addressed facilities but also the supporting elements and amenities that define a campus (e.g. parking, vehicular/pedestrian circulation, site access, etc.).

The planning effort was based on meeting the growth needs of the academic program of instruction. It also had its roots in addressing aging buildings and infrastructure at LAC and PCC, much of which is 60 to 70 years old.

The Current Building/Facilities Program

The current building/facilities program is based on the Measure E Bond. This bond was passed by District voters in March of 2002. It provided the District with starting revenues of \$176,000,000. The available amount for a capital facilities program has since grown to \$181,000,000. The District has also been successful in attracting state funding for its current capital facilities program. Over the past six years, state support for capital projects has resulted in additional revenues of \$61,790,100. This has extended the financing capacity of the District's capital facilities program to \$242,789,993. Combined, these two revenue sources have defined the parameters for the current capital construction program of District.

The Measure E Bond Program supports three capital construction projects at LAC. New construction of a Maintenance/Warehouse facility has already been completed (2005/2006 academic year). Currently in progress is the South Quad Building, which is scheduled for completion in 2007/2008. The third project, renovation and expansion of the existing Library/LRC facility, will also be completed in 2008/2009. The total budget allocation for these three projects is currently \$76,009,993. Of this amount, \$14,602,000 will be derived from state funding and \$61,047,993 from the Measure E Bond.

Six projects are scheduled for completion at PCC under the current Measure E Bond Program. Two of these projects, new construction of the Child Development Center and the Technology II Building, have already been completed. The remaining new construction projects include the Technology I Building and the Library/LRC facility. Renovation projects scheduled for completion include the Multidisciplinary Building and the existing Library facility (Building G). The existing Library Building will undergo a two-phased renovation program resulting in a new Student Services Center. Phase I of this project will be part of the current capital facilities program supported by the Measure E Bond Program. Projects accommodated under the Measure E Bond Program at PCC will total \$93,877,000. Approximately 50% of this amount (\$46,688,100) will come from state funds. Measure E funds required for PCC projects are anticipated to be \$47,188,900.

Under the Measure E Program, the combined building projects (new construction and retrofit/renovation) at LAC and PCC are currently budgeted at \$169,886,993. The remaining \$72,903,000 of the Measure E budget has been devoted to project support costs for construction/renovation. Project support costs include the central plant facilities, infrastructure replacement and upgrades, provisions for interim facilities (swing space), facility maintenance, and project management/oversight.

It should be noted that the scope of projects to be completed under the Measure E Bond Program has been revised and rebalanced on several occasions to meet budgetary constraints. In addition to the nine projects

identified as the current capital facilities program supported by Measure E, the original project scope also included six additional projects. These projects are noted below.

LAC

- a) Liberal Arts Building: New construction/replacement of the existing M and N Building
- b) Child Development Center: New construction
- c) Administration Building: Renovation for conversion to Student Services
- d) Family/Consumer Studies Building: Renovation for conversion to the Bookstore facility

PCC

- a) Existing Library Facility: Conversion to a Student Services Center (Phase I and Phase II)
- b) Economic Development and Culinary Arts Facility: New construction at the East Campus (Los Coyotes)

These projects were put on hold as a result of higher than anticipated costs. The cost of construction was one of the primary catalysts for this action. Also contributing to the downsizing in scope was the cost for infrastructure replacement and upgrades. Infrastructure improvements, including the addition of central plant facilities at the two campuses and the replacement and upgrade of antiquated mechanical and utility systems represents \$25,000,000 in the current budget.

The table that follows provides a perspective of relative values for the distribution of total projects costs, state revenues attracted, and Measure E monies required vis-à-vis the two campuses and the cost for project support.

TABLE 1
MEASURE E DISTRIBUTION OF COSTS/RESOURCES BY BUDGET ELEMENT

BUDGET ELEMENT	% OF TOTAL PROJECT ALLOCATION	% OF STATE REVENUES ATTRACTED	% OF MEASURE E RESOURCES REQUIRED
LAC	31%	24%	34%
PCC	39%	76%	26%
Project Support Costs	30%	1%	40%

Source: LBCC Bond Fund Report Analysis; Bond Budget Summaries (Marlene Imirzian and Associates Architects); Input from LBCC Administrative Staff; analysis by Cambridge West Partnership

As modified to reflect these reductions in scope, a snapshot of the current budget for the Measure E Program (as of July 2007) indicates total project costs of \$242,749,993. The breakdown of revenues supporting this cost is \$61,790,100 in state funding and \$180,999,893 in Measure E funding. The current balance is projected at \$107.

The current status of the Measure E Bond-based facilities program is captured in a more comprehensive manner as follows.

**TABLE 2
CURRENT STATUS OF MEASURE E CAPITAL FACILITIES PROGRAM**

CAMPUS/PROJECT	SCOPE OF WORK	FUNCTION	TOTAL PROJECT ALLOCATION	STATE \$	MEASURE E \$
Liberal Arts Campus Projects					
Maint/Warehouse Bldg	New Construction	Support to Operations	\$10,250,002	\$0	\$10,250,002
South Quad Bldg	New Construction	Support to Academic Programs	\$48,348,991	\$0	\$48,348,991
LRC (Library Bldg)	New Construction	Support to Study/Learning Resource	\$17,411,000	\$14,602,000	\$2,809,000
sub total			\$76,009,993	\$14,602,000	\$61,407,993
Pacific Coast Campus Projects					
Child Development Ctr	New Construction	Support to Child Devel Program	\$7,792,000	\$4,016,000	\$3,776,000
Tech II	New Construction	Support to Voc Tech Program	\$11,100,000	\$8,883,100	\$2,216,900
Tech I	New Construction	Support to Voc Tech Program	\$13,800,000	\$10,800,000	\$3,000,000
LRC (Library/Learning Res)	Remodel/Expand	Support to Learning Resources	\$14,391,000	\$6,088,000	\$8,303,000
MultiDisciplinary Bldg (A-E)	Reconstruction	Support to Academic Program	\$45,320,000	\$16,901,000	\$28,419,000
G Building	Temp Renovation	Support to Student Services	\$1,474,000	\$0	\$1,474,000
sub total			\$93,877,000	\$46,688,100	\$47,188,900
Combined Project Support Costs - Both Campuses					
Infrastructure/Central Plant	Construct/Replace	Support to New Constr/Renovation	\$25,000,000	\$0	\$25,000,000
Upgrades/Repairs/Maint	Replace/Upgrade	Support to New Constr/Renovation	\$11,500,000	\$0	\$11,500,000
Interim Facilities	Lease/Purchase	Support to New Constr/Renovation	\$2,210,000	\$0	\$2,210,000
Scheduled Maintenance	Retro/Renovation	Support to Campuses	\$1,000,000	\$500,000	\$500,000
Contingency	NA	Unanticipated Expenses	\$9,000,000	\$0	\$9,000,000
Project Management	NA	Support to New Constr/Renovation	\$24,193,000	\$0	\$24,193,000
sub total			\$72,903,000	\$500,000	\$72,403,000
TOTAL EXPENDITURES			\$242,789,993	\$61,790,100	\$180,999,893
BOND PROGRAM ALLOCATION					\$181,000,000
BALANCE					\$107

Source: LBCC Bond Fund Report Analysis; Bond Budget Summaries (Marlene Imirzian and Associates Architects); Input from LBCC Administrative Staff; analysis by Cambridge West Partnership

Beyond The Measure E Bond Program

The Measure E Bond Program has provided a jump start to the capital facilities program of the District. However, it was never intended to address all of the building/facilities needs for the two campuses. Both LAC and PCC have roots that date back to the 1930's and 1940's. The age of the facilities coupled with the need to meet both current and future growth of the academic program of instruction requires a perspective that goes beyond Measure E.

The District addressed this need in 2006 when it requisitioned the *Long Beach Community College Resource And Facilities Plan*. The purpose of this plan was to transition from a perspective of what could be done with \$242,789,993 to what was actually needed on each of the campuses to meet the space needs of the future.

The *Resource and Facilities Plan* identified the growth rates vis-à-vis the academic programs of instruction at LAC and PCC. Enrollment and the production of weekly student contact hours (WSCH) were used as the basis for quantifying growth as well as for determining the space needs of the future. The year 2020 was selected as the "target year". Based on the growth rates, the vectors for enrollment and WSCH were determined to intersect with the physical capacity of the two campuses at or about year 2020. Physical capacity was defined as achieving student enrollment of 27,500 and 238,000 WSCH at LAC and 8,700 student enrollment and 130,000 WSCH at PCC. At this point in time, both campuses will have effectively reached their physical limits for available land area, for parking, and the ability to effectively serve students. When these enrollment and WSCH benchmarks are achieved, the District will either need to move portions of the academic program off-campus or acquire additional land.

While the 2020 target year is somewhat relative, the enrollment and WSCH benchmarks are not. Enrollment and WSCH projections may be reached prior to the year 2020 or after that point in time. However, when 238,000 WSCH are reached at LAC and 130,000 WSCH at PCC, the campuses will effectively be operating at maximum capacity.

Looking to the year of 2020, LAC's priorities will lie with addressing the key areas for academic growth. These include the Life Sciences (Biology), Mathematics, Language Arts, Performing Arts and Child Development. From the Student Services side of the equation, a comprehensive student center for educational support is a high priority. LAC will also need to address its Physical Education facilities. With the exception of cosmetic

treatment, these facilities have remained unchanged since the 1940's and 1950's. Additionally, the physical capacity of the outdoor laboratories is presently understated for the enrollment served, the expansion of the athletics program, and the impacts of the Title IX program. LAC will also need to focus on the renovation of its buildings north of Carson Street. While the structural integrity of the selected buildings to be retained are in good condition, the teaching/learning environments and the technology support offered are outdated for today's methods of instructional delivery. Additionally, these buildings have utility and mechanical systems that have been extended well beyond their intended life span. The provision of parking that is close and usable to the primary academic areas will also be a high priority at LAC.

The needs at PCC will be similar in nature, although PCC has already benefited substantially from the current capital construction program. Four new building projects and one major renovation project (the Multi-disciplinary Building) will be completed via the current Measure E Program. For the 2020 target year, replacement of the Construction Trades Building will be needed in addition to a new building (the Humanities Building) that can support the expansion of the academic program of instruction and diversity of the curriculum. Replacement of the building that presently supports Auto Body/Diesel Mechanics will also be a point of focus as the building/facilities program moves out to the year 2020. Support services priorities at PCC will include a one-stop Student Services Center and a new Maintenance and Operations Building. The provision of additional parking will be a requirement if PCC is to meet the enrollment and WSCH growth that has been projected.

To meet enrollments of 27,500 and 8,700 at LAC and PCC, a 2020 building/facilities program will need to include the following new construction and renovation projects.

**TABLE 3
BUILDING/FACILITIES PROJECTS
BEYOND THE MEASURE E PROGRAM**

CAMPUS	PROJECT	FUNCTION/SUPPORT	ASF	SCOPE
LAC	Science Bldg (Bldg D)	Bottom Floor Reuse to Biology	6,100	Retro/Renovation
	Language Arts Bldg (Bldg P)	Language Arts	9,656	Retro/Renovation
	Math Tech Bldg	Math, Culinary Arts, Health, Instr Supp	51,873	New Construction
	Liberal Arts Bldg (M/N Bldg)	Lang Arts, Speech Comm, CIS, Cons Ed	49,799	New Construction
	Nursing/Tech (Bldg C)	Nursing/Health Tech	15,861	Retro/Renovation
	Tech Studies Bldg (B Bldg)	Technical Educational Programs	28,651	Retro/Renovation
	Art Building (Bldg K)	Fine Arts	24,365	Retro/Renovation
	Outdoor Phys Ed Labs	Physical Education	NA	Relocation/Reconstr
	Performing Arts Bldg.	Drama, Dance, Music	34,000	New Construction
	Child Develop Center	Support to Child Development	11,002	New Construction
	Stadium Bldg (Bldg S)	Health/Safety & Fitness/Wellness	48,000	Retro/Reno/Expand
	Economic Development Ctr	Economic Development	10,500	New Construction
	Primary Gymnasium (Bldg R)	Support to Physical Education	51,916	Retro/Renovation
	College Center (Bldg E)	Campuswide Student Support	37,049	Retro/Reno/Expand
	Family/Cons Ed Bldg (Bldg F)	Reuse to Bookstore	10,892	Retro/Renovation
	Admin Bldg/SS (Bldg A)	Reuse to Student Services	24,287	Retro/Renovation
	Tutorial Center	Campus-wide Support	6,800	New Construction
	Auditorium Bldg. (Bldg J)	Performing Arts	20,554	Retro/Renovation
Secondary Gymnasium (Bldg Q)	Support to Physical Education	24,546	Retro/Renovation	
Foundations Bldg. (Bldg I)	Foundation Activities	3,378	Retro/Renovation	
Swim Pool Facility	Infrastructure Support	NA	Retro/Upgrades	
Parking Structure	Support to Campuswide Parking	NA	New Construction	
PCC	Construction Trades (Bldg M)	Occupational Education Program	30,000	New Construction
	Humanities Bldg.	General Academic Programs	24,500	New Construction
	Auto Body/Diesel Bldg (Q&R)	Support to Occupational Education	22,000	New Construction
	Student Serv Center (G)	Reuse for Student Services	18,887	Retro/Renovation
	Fine Arts/Sen Ctr (Bldg F)	Support to Arts/Community	7,988	Retro/Renovation
	Fitness Center (Bldg C)	Phys Ed/Fitness/Wellness	12,500	Reno/Expansion
	Maintenance and Op Bldg.	Maintenance and Operations	4,850	New Construction
	PCC Parking Structure	Campuswide Support	NA	New Construction
BOTH CAMPUSES	Infrastructure	Support to Building Program	NA	Replacement/Upgrade
	Circulation/Access	Support to Building Program	NA	New Construction
	Demolition	Support to Building Program	NA	Demolition
	Interim Use Space	Support to Building Program	NA	Renovation/Lease
	Equipment/Furnishings	Support to Building Program	NA	New Equipment
	Project Management	Support to Building Program	NA	Management/Oversight
	Debt Services	Support to Building Program	NA	Finance

Source: Cambridge West Partnership analysis and projections

The 2020 Unified Master Plan

The current Measure E Bond Program and the space and building needs identified to the year 2020 are captured together in a prioritized program of work that identifies timelines for construction, project scope, and costs. This sequence schedule provides the form and structure for the *2020 Unified Master Plan*. It also provides a perspective of the total building/facilities program for the District.

Phases of the Sequence Schedule

The sequence schedule is divided into four phases. These phases are generally characterized and described as follows.

Phase I

Phase I is characterized by projects that are, for the most part, currently included in the Measure E Bond Program. These projects are scheduled for construction/renovation starts over the time period 2005-2008. Three of the projects have already been completed (Maintenance/Warehouse Building at LAC and the Child Development Center and Technology II Building at PCC), three are in various stages of construction (South Quad and Library/LRC at LAC and the Library/LRC at PCC), and three are in the conceptual or planning stages (the Family/Consumer Education Building and Administration Building at LAC and the Technology I Building at PCC). All but the Family/Consumer Education Building and the Administration Building will be Measure E funded projects. The projected cost for implementing Phase I is estimated to be \$139,425,657.

PHASE I

Phase II

Phase II is characterized by projects that are time-sensitive. These are “critical path” projects either because they are important to resolving space shortfalls in the academic program of instruction or because they are “linchpins” projects, i.e. critical to the actualization of other projects or to securing state funding. Key Phase II projects for LAC are the conversion of the Science Building (lower floor), replacement of the current M & N Building, construction of a new Math/Technology Building, renovation and upgrade of the outdoor laboratories for Physical Education, and construction of accessible/usable on-campus parking.

PHASE II

At PCC, the key “critical path” projects will include conversion of the existing Library facility (Building G) and renovation of the Multidisciplinary Building (Building A-E).

Phase II projects will take place between the construction time frame of 2008 and 2011. The total allocation needed for this phase will be \$151,709,554.

PHASE III

Phase III

Phase III will be dominated by projects at LAC. Most of these will target aging buildings on the campus. Of the eleven total projects included in this phase, eight will be at LAC. New construction projects for this phase will include a Performing Arts Building, an Economic Development Center, and a Child Development Center. The remainder of the Phase III projects at LAC will focus on retrofit and renovation of buildings that are deemed to have a useful future life. Key renovation projects will include the College Center (Student Center), the Language Arts Building, the Nursing Technology Building, the Stadium Facility, and the primary Gymnasium.

PCC will have three key projects in the Phase III program. These will include replacement of the Construction Trades Building, new construction of a Humanities Building and construction of a parking garage.

The Phase III program will cover the construction period of 2012 to 2015. The projected cost for this phase is \$137,513,215.

PHASE IV

Phase IV

The Phase IV program is characterized as addressing projects that complete or finish the campus concept at LAC or PCC. There will be eleven projects associated with this phase – seven at LAC and four at PCC. Key projects at LAC will include construction of a Tutorial Center as well as renovation of the secondary Gymnasium, the Tech Studies Building, the Art Building, and the Auditorium Building. At PCC, the focus will be on the new construction of facilities for Auto Body/Diesel Mechanics as well as for Maintenance and Operations. Retrofit/renovation projects will include the Fitness Center and Fine Arts/Senior Center facility.

Phase IV will cover the construction period of 2015 to 2019. It will carry a cost of \$56,494,165.

Project support costs – i.e. infrastructure, circulation and access, demolition, swing space, equipment and furnishings, project management and debt service - will be a significant part of the overall expense. These costs are projected to approach \$162,000,000 over the fifteen year period that comprises the *2020 Unified Master Plan*.

Project Sequencing Criteria

The sequencing schedule for the *2020 Unified Master Plan* was developed based on the following criteria.

a) Health/Safety Projects

Projects that may affect the health or safety of students receive the highest priority in the sequencing schedule. At the present time, no projects have been identified as having health/safety issues.

b) Growth Projects Associated With The Academic Program Of Instruction

Students attend college for the academic program of instruction – all other services are a result of this relational condition. Projects supporting the academic program of instruction, therefore, receive a high priority.

c) “Linchpin Projects”

Projects that are the catalyst for other projects to occur are given priority status. “Linchpin projects” can be in the form of new construction, renovation, infrastructure replacement/upgrades or for accessing state funding.

d) Projects That Attract State Funding

The state allows each campus to submit one project per year for state funding consideration/support. Projects are appropriately placed in the sequencing schedule to meet the timelines that relate to the state funding criteria.

e) Projects That Modernize For Greater Functionality/Efficiency

The sequence schedule takes into account the need for renovation as well as new construction. Rehabilitation projects that require less financial resources but offer a similar benefit in a shorter period of time may be positioned higher in sequence schedule.

f) The Impact On The Capacity-To-Load Ratios

Each project positively or negatively impacts the cap/load ratios of the District. Projects that place cap/load burdens on the District and jeopardize state funding should be prioritized downrange in the sequence schedule.

g) Projects That Are In Synchronicity With District Financing Strategies

Projects need to be sequenced in a manner that is compatible with the District’s takedown of bond monies and/or the allocation of available funds.

h) Growth Projects That Address Support Services

Projects associated with successfully assisting students in their academic pursuits and/or serving students in a support capacity are given priority consideration after those projects that address academic growth.

i) Impacts To The Campus

Projects need to be thoughtfully planned and distributed in the sequence schedule to minimize the impact on any one area of the campus (at a given time) and on the educational process as a whole.

Project Sequence Schedule

The sequence schedule that follows provides the baseline perspective for the *2020 Unified Master Plan*. It incorporates both the current Measure E Program and the building/facilities space needs to the year 2020. The schedule also identifies the key elements for the total program of work.

**TABLE 4
SEQUENCE SCHEDULE FOR 2020 UNIFIED MASTER PLAN**

	CAMPUS	PROJECT	CONSTRUCT START	FUNCTION/SUPPORT	ASF	SCOPE	TOTAL COST
PHASE I	LAC	Maint/Warehouse Bldg	2004/2005	Maintenance Operations/Warehousing	27,365	New Construction	\$10,250,002
	PCC	Child Development Ctr	2004/2005	Child Development Program	11,618	New Construction	\$7,792,000
	PCC	Technology Bldg II	2005/2006	Vocational/Technical Programs	11,300	New Construction	\$13,800,000
	LAC	South Quad Bldg	2006/2007	Business/Social Sci, Child Devel, Admin	80,129	New Construction	\$48,348,991
	LAC	LRC (Library Bldg)	2006/2007	Library/LRCFunctions	64,933	Renovation/Expand	\$17,411,000
	PCC	Technology Bldg I	2007/2008	Vocatiional/Technical Programs	22,118	New Construction	\$11,100,000
	PCC	LRC/Library	2007/2008	Learning Resources	14,903	New Construction	\$14,391,000
	LAC	Family/Cons Ed Bldg (Bldg F)	2007-2008	Reuse to Bookstore	10,892	Retro/Renovation	\$4,945,819
	LAC	Admin Bldg/SS (Bldg A)	2008 /2009	Reuse to Student Services	24,287	Retro/Renovation	\$11,386,845
						SubTotal Phase I	\$139,425,657
PHASE II	PCC	G Building (Phase I)	2008/2009	Student Services	17,865	Temp Renovation	\$1,474,000
	LAC	Science Bldg (Bldg D)	2009/2010	Bottom Floor Reuse to Biology	6,100	Retro/Renovation	\$3,731,759
	LAC	Parking Structure	2009/2010	Support to Campuswide Parking	NA	New Construction	\$12,285,000
	LAC	Math Tech Bldg	2009/2010	Math, Culinary Arts, Health, Instr Supp	51,873	New Construction	\$30,958,455
	LAC	Outdoor Phys Ed Labs	2010/2011	Physical Education	NA	Relocation/Reconstr	\$6,768,450
	LAC	Liberal Arts Bldg (M/N Bldg)	2010/2011	Lang Arts, Speech Comm,CIS, Cons Ed	49,799	New Construction	\$41,150,000
	PCC	Student Serv Center (G)	2010/2011	Reuse for Student Services	18,887	Retro/Renovation	\$10,021,890
	PCC	MultiDisc Bldg (Bldg A-E)	2010/2011	Primary Academic Support	71,485	Reconstruction	\$45,320,000
						SubTotal Phase II	\$151,709,554
SUPPORT	LA/PC	Infrastructure/Central Plant	2004-2014	Support to New Construction/Renovation	NA	Construct/Replace	\$25,000,000
	LA/PC	Upgrades/Repairs/Maint	2004-2014	Support to New Construction/Renovation	NA	Replace/Upgrade	\$11,500,000
	LA/PC	Interim Facilities	2004-2014	Support to New Construction/Renovation	NA	Lease/Purchase	\$2,210,000
	LA/PC	Scheduled Maintenance	2004-2014	Support to Existing Bldgs/Infrastructure	NA	Retro/Renovation	\$1,000,000
	LA/PC	Contingency	2004-2014	Reserve for Unanticipated Expenses	NA	NA	\$9,000,000
	LA/PC	Project Management	2004-2014	Support to New Construction/Renovation	NA	NA	\$24,193,000
						SubTotal Support Ph I & II	\$72,903,000

	CAMPUS	PROJECT	CONSTRUCT START	FUNCTION/SUPPORT	ASF	SCOPE	TOTAL COST
PHASE III	LAC	College Center (Bldg E)	2012/2013	Campuswide Student Support	37,049	Retro/Reno/Expand	\$10,920,156
	LAC	Language Arts Bldg (Bldg P)	2012/2013	Language Arts	9,656	Retro/Renovation	\$4,519,864
	LAC	Child Develop Center	2013/2014	Support to Child Development	11,002	New Construction	\$8,597,865
	PCC	Construction Trades (Bldg M)	2013/2014	Occupational Education Program	30,000	New Construction	\$14,841,090
	LAC	Nursing/Tech (Bldg C)	2013/2014	Nursing/Health Tech	15,861	Retro/Renovation	\$4,526,016
	PCC	PCC Parking Structure	2013/2014	Campuswide Support	NA	New Construction	\$6,615,000
	LAC	Stadium Bldg (Bldg S)	2013/2014	Health/Safety & Fitness/Wellness	48,000	Retro/Reno/Expand	\$19,966,316
	LAC	Economic Development Ctr	2014/2015	Economic Development	10,500	New Construction	\$6,613,483
	LAC	Primary Gymnasium (Bldg R)	2014/2015	Support to Physical Education	51,916	Retro/Renovation	\$19,774,447
	LAC	Performing Arts Bldg.	2014/2015	Drama, Dance, Music	34,000	New Construction	\$26,445,838
	PCC	Humanities Bldg.	2014/2015	General Academic Programs	24,500	New Construction	\$14,693,140
						SubTotal Phase III	\$137,513,215
PHASE IV	LAC	Tech Studies Bldg (B Bldg)	2015/2016	Technical Educational Programs	28,651	Retro/Renovation	\$8,781,788
	LAC	Secondary Gymnasium (Bldg Q)	2015/2016	Support to Physical Education	24,546	Retro/Renovation	\$9,933,128
	LAC	Tutorial Center	2015/2016	Campus-wide Support	6,800	New Construction	\$5,408,550
	PCC	Fitness Center (Bldg C)	2015/2016	Phys Ed/Fitness/Wellness	12,500	Reno/Expansion	\$4,672,408
	PCC	Fine Arts/Sen Ctr (Bldg F)	2016/2017	Support to Arts/Community	7,988	Retro/Renovation	\$1,849,190
	LAC	Art Building (Bldg K)	2016/2017	Fine Arts	24,365	Retro/Renovation	\$5,100,635
	PCC	Maintenance and Op Bldg.	2016/2017	Maintenance and Operations	4,850	New Construction	\$1,164,000
	LAC	Swim Pool Facility	2016/2017	Infrastructure Support	NA	Retro/Upgrades	\$850,000
	LAC	Auditorium Bldg. (Bldg J)	2017/2018	Performing Arts	20,554	Retro/Renovation	\$4,663,599
	PCC	Auto Body/Diesel Bldg (Q&R)	2017/2018	Support to Occupational Education	22,000	New Construction	\$13,359,280
	LAC	Foundations Bldg. (Bldg I)	2018/2019	Foundation Activities	3,378	Retro/Renovation	\$711,588
						SubTotal Phase IV	\$56,494,165
SUPPORT	LA/PC	Infrastructure-Primary	2014-2020	Support to New Construction/Renovation	NA	Replace/Upgrade	\$12,893,154
	LA/PC	Infrastructure Secondary	2014-2020	Support to New Construction/Renovation	NA	New/Replace	\$10,296,188
	LA/PC	Surface Parking Improvement	2014-2020	Support to New Construction/Renovation	NA	New Construction	\$996,300
	LA/PC	Circulation/Access	2014-2020	Support to New Construction/Renovation	NA	New Construction	\$4,812,014
	LA/PC	Building Demolition	2014-2020	Support to New Construction/Renovation	NA	Removal	\$5,268,623
	LA/PC	Provisions for Swing Space	2014-2020	Support to New Construction/Renovation	NA	Interim Space	\$3,774,000
	LA/PC	Infrastructure Contingencies	2014-2020	Support to New Construction/Renovation	NA	Replace/Upgrade	\$4,100,140
	LA/PC	Equip/Furnishings NOC	2014-2020	Support to New Construction/Renovation	NA	Replace/Upgrade	\$4,185,691
	LA/PC	Project Management	2014-2020	Support to New Construction/Renovation	NA	NA	\$25,493,041
	LA/PC	Inflation and Debt Service	2014-2020	Support to New Construction/Renovation	NA	NA	\$17,100,000
						SubTotal Support Ph III & IV	\$88,919,152
						GRAND TOTAL	\$646,964,742

Source: Cambridge West Partnership projections. Costs are related in current-day market values

Summary

The *2020 Unified Master Plan* includes a total of thirty-nine projects at LAC and PCC. Of these, nine projects will be completed in the current Measure E Bond Program. The remainder will fall under the category of “work yet to be done”.

In all, there will be eighteen new construction projects – nine of these will be at LAC and nine at PCC. Five existing buildings will be retrofitted/renovated and assigned for reuse. In addition, there will be eighteen retrofit/renovation projects at the two campuses. Of these, four will be both renovated and expanded.

When viewed in its entirety (i.e. projects funded via Measure E and projects that are currently unfunded), the *2020 Unified Master Plan* has a bottom line cost of \$646,964,742 in today’s dollars.

Financial Requirements For The 2020 Plan

With the \$242,789,993 provided in the current Measure E Program, the District is about one-third of the way to meeting the \$646,964,742 expense of a 2020 building/facilities program. A finance strategy will be required to complete the remaining two-thirds of the program. Short of an unforeseen windfall, the District will need to consider putting a second bond measure before the voters.

An aggressive campaign will also be needed to attract additional state funding. Accessing state monies in today's marketplace has become extremely competitive. The days of receiving 100% state financing for projects are in the past. All projects vying for state funding today, as well as in the future, will likely require matching funds of some sort. The District is limited to submitting only one project per campus for state funding consideration annually.

Viewed from this current point in time, what remains for projects to the year 2020, and the financial burden that will be required of the District, is captured in the overview that follows.

- ❑ A total of twelve new construction projects – seven at LAC and five at PCC – will be needed to complete the remainder of the 2020 building/facilities program. These twelve new construction projects will have a total value of \$182,131,700. From this group of new construction projects, \$56,312,304 is projected to be derived from state funding. This will leave a balance of \$125,819,396 to be financed by the District.
- ❑ There will be a total of thirteen retrofit/renovation projects to be completed by the 2020 target year. The lion's share of these (eleven of the thirteen) will be at LAC. The total cost for retrofit/renovation projects at both campuses is estimated at \$83,071,269. State funding that will most likely be secured for this project category is \$4,363,913. The District's financial commitment for retrofit/renovation projects is estimated to be \$78,707,356.
- ❑ There are five projects targeted for renovation and reuse in the 2020 building/facilities program. Four of these will be at LAC and one will be at PCC. The total cost for this project category is estimated to be \$50,052,629. Projected state funding is estimated at \$3,476,890 leaving a balance of \$46,575,739 to be financed via the District.
- ❑ Support costs for infrastructure, access and circulation, interim space provisions, project management, debt service, and equipment and furnishings are estimated at \$88,919,152. No state funding matches are projected for this category. The District, therefore, would need to underwrite the entire amount of this expense.

Based on the program of work outlined and the amount of work that will be completed as part of the Measure E Program, the cost to achieve the remaining two-thirds of the 2020 building/facilities program is projected at \$404,174,749. Revenues from the state are expected to provide \$64,153,107. The overall, net cost to the District is anticipated to be \$340,021,642. A breakdown of the costs by campus/function is provided below.

TABLE 5
SOURCE SUMMARY OF FINANCIAL REQUIREMENTS

SOURCE	TOTAL COST	STATE \$s	DISTRICT \$s
LAC	\$248,039,600	\$42,553,432	\$205,486,168
PCC	\$67,215,998	\$21,599,675	\$45,616,323
Support	\$88,919,152	\$0	\$88,919,152
TOTAL	\$404,174,749	\$64,153,107	\$340,021,642

Source: Cambridge West Partnership projections. Costs are related in current-day market values

Project and site specific costs for achieving the 2020 building/facilities program are presented in the table that follows. The revenue required is projected as being derived from both local (District) and state sources. Projects selected for state funding were those that had the best possibilities for support as well as the greatest return on investment.

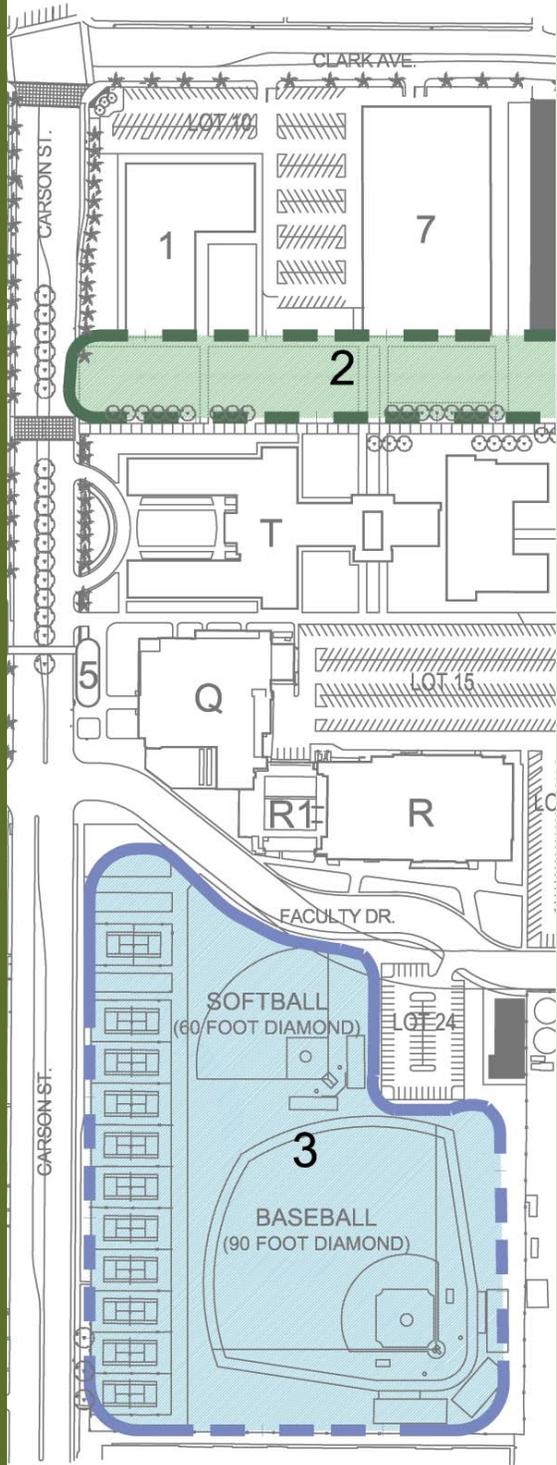
TABLE 6
SITE SPECIFIC PROJECTS AND COSTS FOR REMAINDER OF 2020 PROGRAM

	NEW CONSTRUCTION	TOTAL COST	STATE \$s	NEW BOND \$s
LAC	Liberal Arts Bldg	\$41,150,000	\$19,372,075	\$21,777,925
LAC	Parking Structure	\$12,285,000	\$0	\$12,285,000
LAC	Math Technology Bldg	\$30,958,455	\$0	\$30,958,455
LAC	Performing Arts Bldg.	\$26,445,838	\$11,986,169	\$14,459,669
LAC	Child Development Center	\$8,597,865	\$4,382,000	\$4,215,865
LAC	Economic Develop Ctr	\$6,613,483	\$0	\$6,613,483
LAC	Tutorial Center	\$5,408,550	\$2,449,275	\$2,959,275
	sub total	\$131,459,190	\$38,189,519	\$93,269,671
PCC	Humanities Bldg	\$14,693,140	\$6,655,670	\$8,037,470
PCC	Construction Trades	\$14,841,090	\$5,407,875	\$9,433,215
PCC	Parking Structure	\$6,615,000	\$0	\$6,615,000
PCC	Auto Body/Diesel Technology	\$13,359,280	\$6,059,240	\$7,300,040
PCC	Maintenance and Op Bldg.	\$1,164,000	\$0	\$1,164,000
	sub total	\$50,672,510	\$18,122,785	\$32,549,725
	TOTAL	\$182,131,700	\$56,312,304	\$125,819,396

TABLE 6 (continued)
SITE SPECIFIC PROJECTS AND COSTS FOR REMAINDER OF 2020 PROGRAM

RETROFIT/RENOVATION		TOTAL COST	STATE \$s	NEW BOND \$s
LAC	Language Arts Bldg (Bldg P)	\$4,519,864	\$2,054,078	\$2,465,786
LAC	Nursing/Tech (Bldg C)	\$4,526,016	\$0	\$4,526,016
LAC	Outdoor Phys Ed Labs	\$6,768,450	\$0	\$6,768,450
LAC	College Center (Bldg E)	\$10,920,156	\$0	\$10,920,156
LAC	Gymnasium (Bldg R)	\$19,774,447	\$0	\$19,774,447
LAC	Tech Studies Bldg (B Bldg)	\$8,781,788	\$0	\$8,781,788
LAC	Secondary Gym (Bldg Q)	\$9,933,128	\$0	\$9,933,128
LAC	Auditorium Bldg. (Bldg J)	\$4,663,599	\$0	\$4,663,599
LAC	Art Building (Bldg K)	\$5,100,635	\$2,309,835	\$2,790,800
LAC	Swim Pool Facility	\$850,000	\$0	\$850,000
LAC	Foundations Bldg. (Bldg I)	\$711,588	\$0	\$711,588
sub total		\$76,549,671	\$4,363,913	\$72,185,758
PCC	Fitness Center (Bldg C)	\$4,672,408	\$0	\$4,672,408
PCC	Fine Arts/Sen Ctr (Bldg F)	\$1,849,190	\$0	\$1,849,190
sub total		\$6,521,598	\$0	\$6,521,598
TOTAL		\$83,071,268	\$4,363,913	\$78,707,355
RENOVATION FOR REUSE		TOTAL COST	STATE \$s	NEW BOND \$s
LAC	Family/Cons Ed Bldg (Bldg F)	\$4,945,819	\$0	\$4,945,819
LAC	Admin Bldg/SS (Bldg A)	\$11,386,845	\$0	\$11,386,845
LAC	Science Bldg (Bldg D)	\$3,731,759	\$0	\$3,731,759
LAC	Stadium Bldg (Bldg S)	\$19,966,316	\$0	\$19,966,316
sub total		\$40,030,739	\$0	\$40,030,739
PCC	Existing Library (Bldg G)	\$10,021,890	\$3,476,890	\$6,545,000
sub total		\$10,021,890	\$3,476,890	\$6,545,000
TOTAL		\$50,052,629	\$3,476,890	\$46,575,739
SUPPORT		TOTAL COST	STATE \$s	NEW BOND \$s
LAC & PCC				
sub total		\$88,919,152	\$0	\$88,919,152
TOTAL		\$88,919,152	\$0	\$88,919,152
TOTAL 2020 PROGRAM		\$404,174,749	\$64,153,107	\$340,021,642

Source: Cambridge West Partnership projections. Costs are related in current-day market values



Options And Recommendations

Options

While the recommended course of action is to pursue full implementation of the proposed 2020 Plan, optional programs, with compressed target years, were also considered to provide points of comparison and alternate possibilities. The following analysis weighs the preferred 2020 option with options that have end points at 2016 and 2012. It was assumed that all options would need to be supported by a future bond program.

Option A: Pursue A \$340,000,000 Bond Program With A 2020 Target Year

The total cost for this option would be \$404,174,749. With state revenues of \$64,153,107 projected as supplemental income to the capital construction program, a bond measure of \$340,000,000 would be required.

Of the total program amount, \$315,255,598 would be devoted to new construction and retrofit/renovation projects at LAC and PCC. A total of \$88,919,152 would be allocated to program support, including infrastructure upgrades and replacements, vehicular and pedestrian access/circulation, the provision of interim space, equipment and furnishings and project management.

This option would facilitate construction/renovation of twenty-two projects on the LAC campus – seven of which would be new construction and fifteen of which would be retrofit/renovation. For the PCC campus, it would include eight projects – five of which would be new construction and three of which would be retrofit/renovation. Option A would cover the time period of 2007/2008 and 2018/2019.

This would be the most complete of the options presented. It would effectively address all the projects and support services needed through the year 2020 and for buildout of the two campuses. This option would effectively position the two campuses of the District for the next 40 years.

As outlined in the table that follows, the project and support costs would include the following.

**TABLE 7
OPTION A: 2020 TARGET YEAR**

PROJECTS	CAMPUS	PROJECT	CONSTR START	ASF	SCOPE	STATE \$	BOND \$s REQUIRED	TOTAL COST
	LAC	Family/Cons Ed Bldg (Bldg F)	2007/2008	10,892	Retro/Renovation	\$0	\$4,945,819	\$4,945,819
	LAC	Admin Bldg/SS (Bldg A)	2008 /2009	24,287	Retro/Renovation	\$0	\$11,386,845	\$11,386,845
	LAC	Science Bldg (Bldg D)	2009/2010	6,100	Retro/Renovation	\$0	\$3,731,759	\$3,731,759
	LAC	Parking Structure	2009/2010	NA	New Construction	\$0	\$12,285,000	\$12,285,000
	LAC	Math Tech Bldg	2009/2010	51,873	New Construction	\$0	\$30,958,455	\$30,958,455
	LAC	Outdoor Phys Ed Labs	2010/2011	NA	Relocation/Reconstr	\$0	\$6,768,450	\$6,768,450
	LAC	Liberal Arts Bldg (M/N Bldg)	2010/2011	49,799	New Construction	\$19,372,075	\$21,777,925	\$41,150,000
	PCC	Student Serv Ctr (Phase II)	2010/2011	18,887	Retro/Renovation	\$3,476,890	\$6,545,000	\$10,021,890
	LAC	College Center (Bldg E)	2012/2013	37,049	Retro/Reno/Expand	\$0	\$10,920,156	\$10,920,156
	LAC	Language Arts Bldg (Bldg P)	2012/2013	9,656	Retro/Renovation	\$2,054,078	\$2,465,786	\$4,519,864
	LAC	Child Develop Center	2013/2014	11,002	New Construction	\$4,382,000	\$4,215,865	\$8,597,865
	PCC	Construction Trades (Bldg M)	2013/2014	30,000	New Construction	\$5,407,875	\$9,433,215	\$14,841,090
	LAC	Nursing/Tech (Bldg C)	2013/2014	15,861	Retro/Renovation	\$0	\$4,526,016	\$4,526,016
	PCC	PCC Parking Structure	2013/2014	NA	New Construction	\$0	\$6,615,000	\$6,615,000
	LAC	Stadium Bldg (Bldg S)	2013/2014	48,000	Retro/Reno/Expand	\$0	\$19,966,316	\$19,966,316
	LAC	Economic Development Ctr	2014/2015	10,500	New Construction	\$0	\$6,613,483	\$6,613,483
	LAC	Primary Gymnasium (Bldg R)	2014/2015	51,916	Retro/Renovation	\$0	\$19,774,447	\$19,774,447
	LAC	Performing Arts Bldg.	2014/2015	34,000	New Construction	\$11,986,169	\$14,459,669	\$26,445,838
	PCC	Humanities Bldg.	2014/2015	24,500	New Construction	\$6,655,670	\$8,037,470	\$14,693,140
LAC	Tech Studies Bldg (B Bldg)	2015/2016	28,651	Retro/Renovation	\$0	\$8,781,788	\$8,781,788	
LAC	Secondary Gymnasium (Bldg Q)	2015/2016	24,546	Retro/Renovation	\$0	\$9,933,128	\$9,933,128	
LAC	Tutorial Center	2015/2016	6,800	New Construction	\$2,449,275	\$2,959,275	\$5,408,550	
PCC	Fitness Center (Bldg C)	2015/2016	12,500	Reno/Expansion	\$0	\$4,672,408	\$4,672,408	
PCC	Fine Arts/Sen Ctr (Bldg F)	2016/2017	7,988	Retro/Renovation	\$0	\$1,849,190	\$1,849,190	
LAC	Art Building (Bldg K)	2016/2017	24,365	Retro/Renovation	\$2,309,835	\$2,790,800	\$5,100,635	
PCC	Maintenance and Op Bldg.	2016/2017	4,850	New Construction	\$0	\$1,164,000	\$1,164,000	
LAC	Swim Pool Facility	2016/2017	NA	Retro/Upgrades	\$0	\$850,000	\$850,000	
LAC	Auditorium Bldg. (Bldg J)	2017/2018	20,554	Retro/Renovation	\$0	\$4,663,599	\$4,663,599	
PCC	Auto Body/Diesel Bldg (Q&R)	2017/2018	22,000	New Construction	\$6,059,240	\$7,300,040	\$13,359,280	
LAC	Foundations Bldg. (Bldg I)	2018/2019	3,378	Retro/Renovation	\$0	\$711,588	\$711,588	
Sub Total Projects Option A						\$64,153,107	\$251,102,491	\$315,255,598

TABLE 7 (continued)
OPTION A: 2020 TARGET YEAR

	CAMPUS	PROJECT	CONSTR START	ASF	SCOPE	STATE \$	BOND \$s REQUIRED	TOTAL COST
SUPPORT	LA/PC	Infrastructure-Primary	2007/2020	NA	Replace/Upgrade	\$0	\$12,893,154	\$12,893,154
	LA/PC	Infrastructure Secondary	2007/2020	NA	New/Replace	\$0	\$10,296,188	\$10,296,188
	LA/PC	Surface Parking Improvement	2007/2020	NA	New Construction	\$0	\$996,300	\$996,300
	LA/PC	Circulation/Access	2007/2020	NA	New Construction	\$0	\$4,812,014	\$4,812,014
	LA/PC	Building Demolition	2007/2020	NA	Removal	\$0	\$5,268,623	\$5,268,623
	LA/PC	Provisions for Swing Space	2007/2020	NA	Interim Space	\$0	\$3,774,000	\$3,774,000
	LA/PC	Infrastructure Contingencies	2007/2020	NA	Replace/Upgrade	\$0	\$4,100,140	\$4,100,140
	LA/PC	Equip/Furnishings NOC	2007/2020	NA	Replace/Upgrade	\$0	\$4,185,691	\$4,185,691
	LA/PC	Project Management	2007/2020	NA	NA	\$0	\$25,493,041	\$25,493,041
	LA/PC	Inflation and Debt Service	2007/2020	NA	NA	\$0	\$17,100,000	\$17,100,000
SubTotal Support Option A						\$0	\$88,919,152	\$88,919,152
TOTAL COST OPTION A						\$64,153,107	\$340,021,642	\$404,174,749

Source: Cambridge West Partnership projections. Costs are related in current-day market values

Option B: Pursue A \$278,000,000 Bond Program With 2016 Target Year

Option B would support new construction and renovation in the total amount of \$330,939,926. This option would require a future bond program of approximately \$278,000,000. It assumes state funding support in the amount of \$53,334,757.

Of the total program amount, \$258,761,432 would be devoted to new construction and retrofit/renovation projects. A sum of \$72,178,494 would be devoted to support costs, including infrastructure upgrades/replacement, vehicular and pedestrian access/circulation issues, the provision of interim space, equipment and furnishings and project management functions.

The option would include nineteen new construction and renovation projects overall at the two campuses (versus the thirty projects outlined in Option A). Overall, fifteen of the nineteen projects would be at LAC. These would include six new construction projects and nine retrofit/renovation projects. PCC would have four projects included in this option, three of which would be new construction and one of which would be retrofit/renovation. Option B would cover the time period of 2007/2008 to 2014/2015.

This option would address the most critical of the academic and support services space needs on the two campuses. However, it would omit several key projects. For LAC, this would include a new Tutorial Center as well as renovation of the Tech Studies Building, Art Building, the Auditorium, and the secondary gymnasium. PCC would have to forego its new facility for Auto Body/Diesel Mechanics and Maintenance and Operations as well as retrofit/renovation of the Fitness Center and Fine Arts/Senior Center.

The project and support cost for this option are enumerated in the table that follows.

**TABLE 8
OPTION B: 2015 TARGET YEAR**

	CAMPUS	PROJECT		ASF	SCOPE	STATE \$	BOND \$s REQUIRED	TOTAL COST
PROJECTS	LAC	Family/Cons Ed Bldg (Bldg F)	2007/2008	10,892	Retro/Renovation	\$0	\$4,945,819	\$4,945,819
	LAC	Admin Bldg/SS (Bldg A)	2008 /2009	24,287	Retro/Renovation	\$0	\$11,386,845	\$11,386,845
	LAC	Science Bldg (Bldg D)	2009/2010	6,100	Retro/Renovation	\$0	\$3,731,759	\$3,731,759
	LAC	Parking Structure	2009/2010	NA	New Construction	\$0	\$12,285,000	\$12,285,000
	LAC	Math Tech Bldg	2009/2010	51,873	New Construction	\$0	\$30,958,455	\$30,958,455
	LAC	Outdoor Phys Ed Labs	2010/2011	NA	Relocation/Reconstr	\$0	\$6,768,450	\$6,768,450
	LAC	Liberal Arts Bldg (M/N Bldg)	2010/2011	49,799	New Construction	\$19,372,075	\$21,777,925	\$41,150,000
	PCC	Student Serv Ctr (Phase II)	2010/2011	18,887	Retro/Renovation	\$3,476,890	\$6,545,000	\$10,021,890
	LAC	College Center (Bldg E)	2012/2013	37,049	Retro/Reno/Expand	\$0	\$10,920,156	\$10,920,156
	LAC	Language Arts Bldg (Bldg P)	2012/2013	9,656	Retro/Renovation	\$2,054,078	\$2,465,786	\$4,519,864
	LAC	Child Develop Center	2013/2014	11,002	New Construction	\$4,382,000	\$4,215,865	\$8,597,865
	PCC	Construction Trades (Bldg M)	2013/2014	30,000	New Construction	\$5,407,875	\$9,433,215	\$14,841,090
	LAC	Nursing/Tech (Bldg C)	2013/2014	15,861	Retro/Renovation	\$0	\$4,526,016	\$4,526,016
	PCC	PCC Parking Structure	2013/2014	NA	New Construction	\$0	\$6,615,000	\$6,615,000
	LAC	Stadium Bldg (Bldg S)	2013/2014	48,000	Retro/Reno/Expand	\$0	\$19,966,316	\$19,966,316
	LAC	Economic Development Ctr	2014/2015	10,500	New Construction	\$0	\$6,613,483	\$6,613,483
	LAC	Primary Gymnasium (Bldg R)	2014/2015	51,916	Retro/Renovation	\$0	\$19,774,447	\$19,774,447
	LAC	Performing Arts Bldg.	2014/2015	34,000	New Construction	\$11,986,169	\$14,459,669	\$26,445,838
PCC	Humanities Bldg.	2014/2015	24,500	New Construction	\$6,655,670	\$8,037,470	\$14,693,140	
Sub Total Projects Option B						\$53,334,757	\$205,426,675	\$258,761,432
SUPPORT	LA/PC	Infrastructure-Primary	2007/2016	NA	Replace/Upgrade	\$0	\$10,314,523	\$10,314,523
	LA/PC	Infrastructure Secondary	2007/2016	NA	New/Replace	\$0	\$8,236,950	\$8,236,950
	LA/PC	Surface Parking Improvement	2007/2016	NA	New Construction	\$0	\$0	\$0
	LA/PC	Circulation/Access	2007/2016	NA	New Construction	\$0	\$4,571,413	\$4,571,413
	LA/PC	Building Demolition	2007/2016	NA	Removal	\$0	\$4,214,898	\$4,214,898
	LA/PC	Provisions for Swing Space	2007/2016	NA	Interim Space	\$0	\$3,396,600	\$3,396,600
	LA/PC	Infrastructure Contingencies	2007/2016	NA	Replace/Upgrade	\$0	\$3,485,119	\$3,485,119
	LA/PC	Equip/Furnishings NOC	2007/2016	NA	Replace/Upgrade	\$0	\$3,139,268	\$3,139,268
	LA/PC	Project Management	2007/2016	NA	NA	\$0	\$21,994,722	\$21,994,722
	LA/PC	Inflation and Debt Service	2007/2016	NA	NA	\$0	\$12,825,000	\$12,825,000
SubTotal Support Option B						\$0	\$72,178,494	\$72,178,494
TOTAL COST OPTION B						\$53,334,757	\$277,605,169	\$330,939,926

Source: Cambridge West Partnership projections. Costs are related in current-day market values

Option C: Pursue A \$134,000,000 Bond Program With 2012 Target Year

This option would generate \$156,804,481 in total project costs and assume state funding support of \$22,848,965. Bond revenues required for Option C would amount to \$133,955,516.

Of the total program amount, \$121,248,217 would be devoted to new construction and retrofit/renovation projects at both campuses. Another \$35,556,624 would be needed for program support costs, including infrastructure upgrades and replacements, vehicular and pedestrian access/circulation, the provision of interim space, equipment and furnishings and project management.

The scope of Option C would be limited to eight projects on the two campuses. Seven of the eight projects would be at LAC. Of these, three of the projects would be for new construction and four would be for retrofit/renovation. The lone project at PCC under Option C would be a retrofit/renovation project – conversion of the existing Library facility (Building G) to reuse as a Student Services Center. Option C would cover the time period of 2007/2008 to 2010/2011 relative to construction start dates.

Option C addresses those projects that should be completed immediately to meet the demands for space that currently exists. On the academic side of the equation, this would include expansion space for Science and Mathematics at LAC. For both LAC and PCC, it includes the unmet space needs for Student Services. Additionally, this option addresses the District's financial obligation to provide matching funds for two state funded projects – the Liberal Arts Building at LAC (replacement of the M & N Building) and the conversion of PCC's existing Library facility (Building G) to the Student Services Center. Failure to meet the funding commitments for these two approved projects would result in a loss of \$22,848,965 to the District.

The project and support cost for this option are related in the table that follows.

**TABLE 9
OPTION C: 2012 TARGET YEAR**

	CAMPUS	PROJECT	CONSTR START	ASF	SCOPE	STATE \$	BOND \$s REQUIRED	TOTAL COST
PROJECTS	LAC	Family/Cons Ed Bldg (Bldg F)	2007/2008	10,892	Retro/Renovation	\$0	\$4,945,819	\$4,945,819
	LAC	Admin Bldg/SS (Bldg A)	2008 /2009	24,287	Retro/Renovation	\$0	\$11,386,845	\$11,386,845
	LAC	Science Bldg (Bldg D)	2009/2010	6,100	Retro/Renovation	\$0	\$3,731,759	\$3,731,759
	LAC	Parking Structure	2009/2010	NA	New Construction	\$0	\$12,285,000	\$12,285,000
	LAC	Math Tech Bldg	2009/2010	51,873	New Construction	\$0	\$30,958,455	\$30,958,455
	LAC	Outdoor Phys Ed Labs	2010/2011	NA	Relocation/Reconstr	\$0	\$6,768,450	\$6,768,450
	LAC	Liberal Arts Bldg (M/N Bldg)	2010/2011	49,799	New Construction	\$19,372,075	\$21,777,925	\$41,150,000
	PCC	Student Serv Ctr (Phase II)	2010/2011	18,887	Retro/Renovation	\$3,476,890	\$6,545,000	\$10,021,890
	SubTotal Projects Option C						\$22,848,965	\$98,399,252
SUPPORT	LA/PC	Infrastructure-Primary	2008/2012	NA	Replace/Upgrade	\$0	\$5,157,262	\$5,157,262
	LA/PC	Infrastructure Secondary	2008/2012	NA	New/Replace	\$0	\$5,662,903	\$5,662,903
	LA/PC	Surface Parking Improvement	2008/2012	NA	New Construction	\$0	\$0	\$0
	LA/PC	Circulation/Access	2008/2012	NA	New Construction	\$0	\$3,849,611	\$3,849,611
	LA/PC	Building Demolition	2008/2012	NA	Removal	\$0	\$790,293	\$790,293
	LA/PC	Provisions for Swing Space	2008/2012	NA	Interim Space	\$0	\$1,132,200	\$1,132,200
	LA/PC	Infrastructure Contingencies	2008/2012	NA	Replace/Upgrade	\$0	\$1,435,049	\$1,435,049
	LA/PC	Equip/Furnishings NOC	2008/2012	NA	Replace/Upgrade	\$0	\$2,092,846	\$2,092,846
	LA/PC	Project Management	2008/2012	NA	NA	\$0	\$10,306,098	\$10,306,098
	LA/PC	Inflation and Debt Service	2008/2012	NA	NA	\$0	\$5,130,000	\$5,130,000
SubTotal Support Option C						\$0	\$35,556,264	\$35,556,264
TOTAL COST OPTION C						\$22,848,965	\$133,955,516	\$156,804,481

Source: Cambridge West Partnership projections. Costs are related in current-day market values

Recommendations

Financing the Plan assumes that needed District revenues would be in the form of general obligation bonds passed via the local election process. The level to which the District will ask the voters to support and underwrite long-term debt will be a matter to be determined. In making this decision, the Board of Trustees will need to weigh whether the current needs for space and future academic growth should be met incrementally or as a single, long-term plan that targets buildout of the two campuses. The decision carries enormous responsibility and at the same time great opportunity. The long-term perspective (target year 2020) offers a chance to redevelop and redefine the campus for the next 40 years – it is a once in a lifetime opportunity, not unlike when the two campuses had their beginnings in the 1930's and 1940's. An incremental approach is also a viable possibility, if it is done as part of the larger picture and not in piecemeal fashion.

In either case, it would be strongly recommended that the District adopt the long-range vision and plan with the thought that financing can and will be available – if not in one definitive source or point in time, perhaps in several. Without the long-range vision and plan, decision-making becomes haphazard. It opens the door for limited financial resources to be directed to outcomes that may not be needed or desired.

Of the financing options considered, Option A receives the highest recommendation. It provides the District with the financial resources to fully support the 2020 Plan. It also gives the District the greatest flexibility to meld need, vision and opportunity into a dynamic building/facilities program that will redefine the two campuses of the District well into the future.

Concept Plans For The 2020 Building/Facilities Program

FACILITY SITE PLANNING OVERVIEW

The conceptual plans that support the *2020 Unified Master Plan* emanate from a series of planning efforts that date back to 2003, when an overall District facility site master plan was first completed by the firm of Robbins Jorgensen Christopher (RJC) as part of the pre Measure E Bond program. This master plan created a framework for future campus facility development and placement. In late 2003, the firm of Marlene Imirzian and Associates Architects (MIAA) was retained to provide ongoing bond facility master planning assistance for Measure E projects. The RJC plan was used as the basis for all Measure E project locations.

The conceptual plans that follow have their roots in these two master planning efforts. The current *2020 Unified Master Plan* updates, modifies, and unites the previous planning efforts and extends the vision to a comprehensive building/facilities program that identifies specific new construction and renovation projects that will carry the College to the year 2020 and beyond.

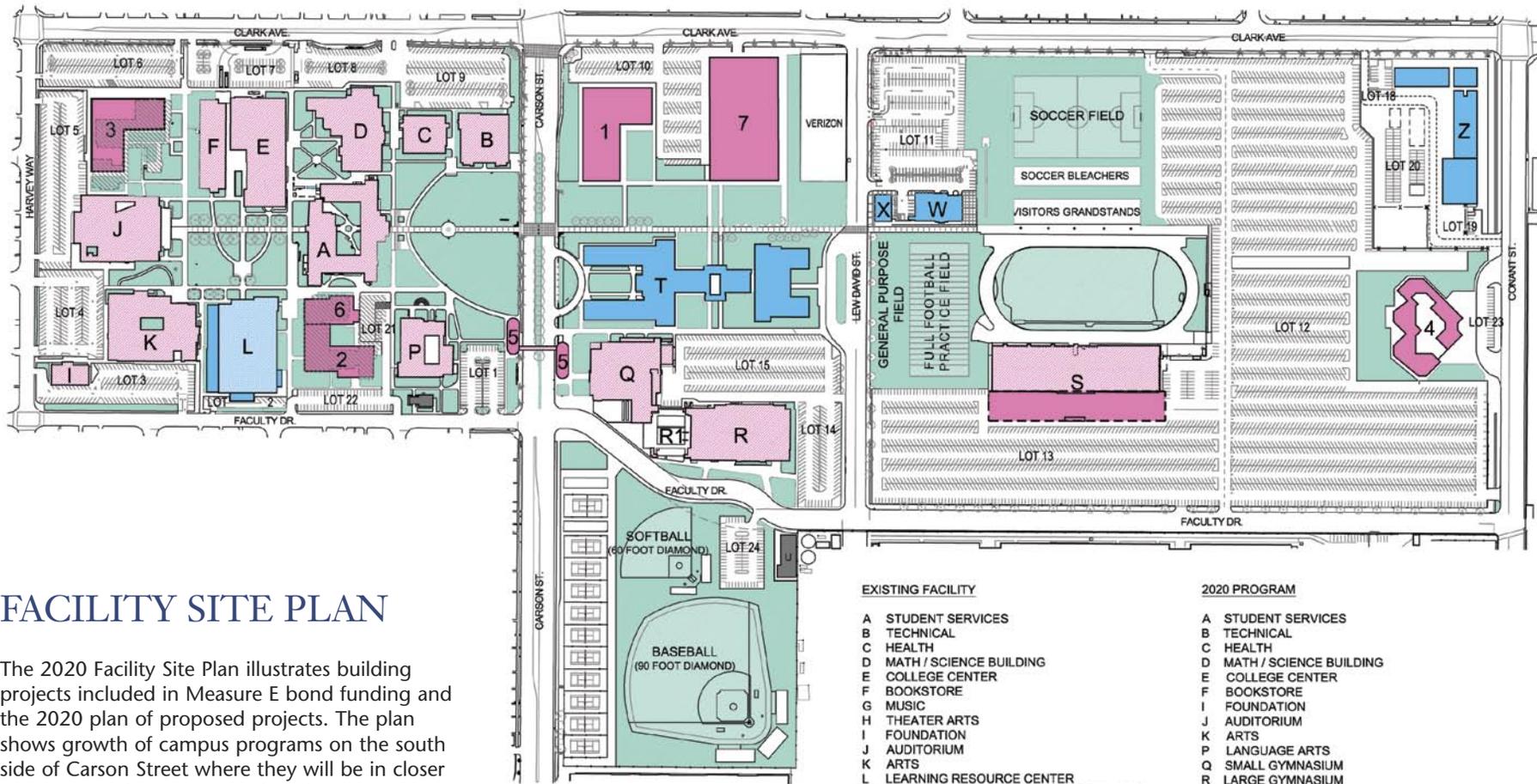


AERIAL PHOTOGRAPH

The Aerial photo shows the LAC campus prior to the start of bond construction. The buildings range in age, with initial buildings completed in 1935-1940, major campus expansion with five buildings in 1952, and most of the remainder constructed in the 1960s and 1970s. The oldest buildings on the campus are Building A (1940), M (1935), N (1935) and P (1935) located on

the north side of Carson Street. These buildings feature classic California mission style architectural design. Highlighted by the tower entry at the front of Building A, they provide the campus with its primary identity. Buildings A and P, on the campus, accent the large open green space that defines the front of the campus. The buildings are formed around courtyards that include generous covered porch walkways that support pedestrian circulation. Building A includes a large courtyard with a strong landscape accent.

Constructed in 1952, Buildings F, G, K, Q and R continued the mission revival architectural theme on the campus. Building H, completed in 1980, was one of the last buildings constructed on the campus. Building S, south of Carson Street, was acquired by the District in 1989. It supports the football stadium.



FACILITY SITE PLAN

The 2020 Facility Site Plan illustrates building projects included in Measure E bond funding and the 2020 plan of proposed projects. The plan shows growth of campus programs on the south side of Carson Street where they will be in closer proximity to the campus parking lots. Measure E new construction project Z Warehouse is complete. Buildings L, T, W, and X are under construction. The 2020 new construction shown indicates proposed future building zones. Final development of particular building form will be developed in the future.

A large multi-story building owned by Verizon occupies a portion of the site at Lew Davis Drive. 2020 project 2 is planned to replace the 1935 M & N buildings with a two story structure. 2020 project 3 is planned to replace existing buildings G & H.

LEGEND

- EXISTING FACILITY WITH NO ACTION
- EXISTING FACILITY RENOVATION E BOND
- NEW FACILITY E BOND
- RENOVATION 2020 PROGRAM
- NEW CONSTRUCTION 2020 PROGRAM

EXISTING FACILITY

- A STUDENT SERVICES
- B TECHNICAL
- C HEALTH
- D MATH / SCIENCE BUILDING
- E COLLEGE CENTER
- F BOOKSTORE
- G MUSIC
- H THEATER ARTS
- I FOUNDATION
- J AUDITORIUM
- K ARTS
- L LEARNING RESOURCE CENTER
- M BUSINESS, COMPUTER, SOCIAL SCIENCES
- N ADMINISTRATIVE SERVICES BUILDING
- P LANGUAGE ARTS
- Q SMALL GYMNASIUM
- R LARGE GYMNASIUM
- S VETERANS' STADIUM
- U GROUND SHOP

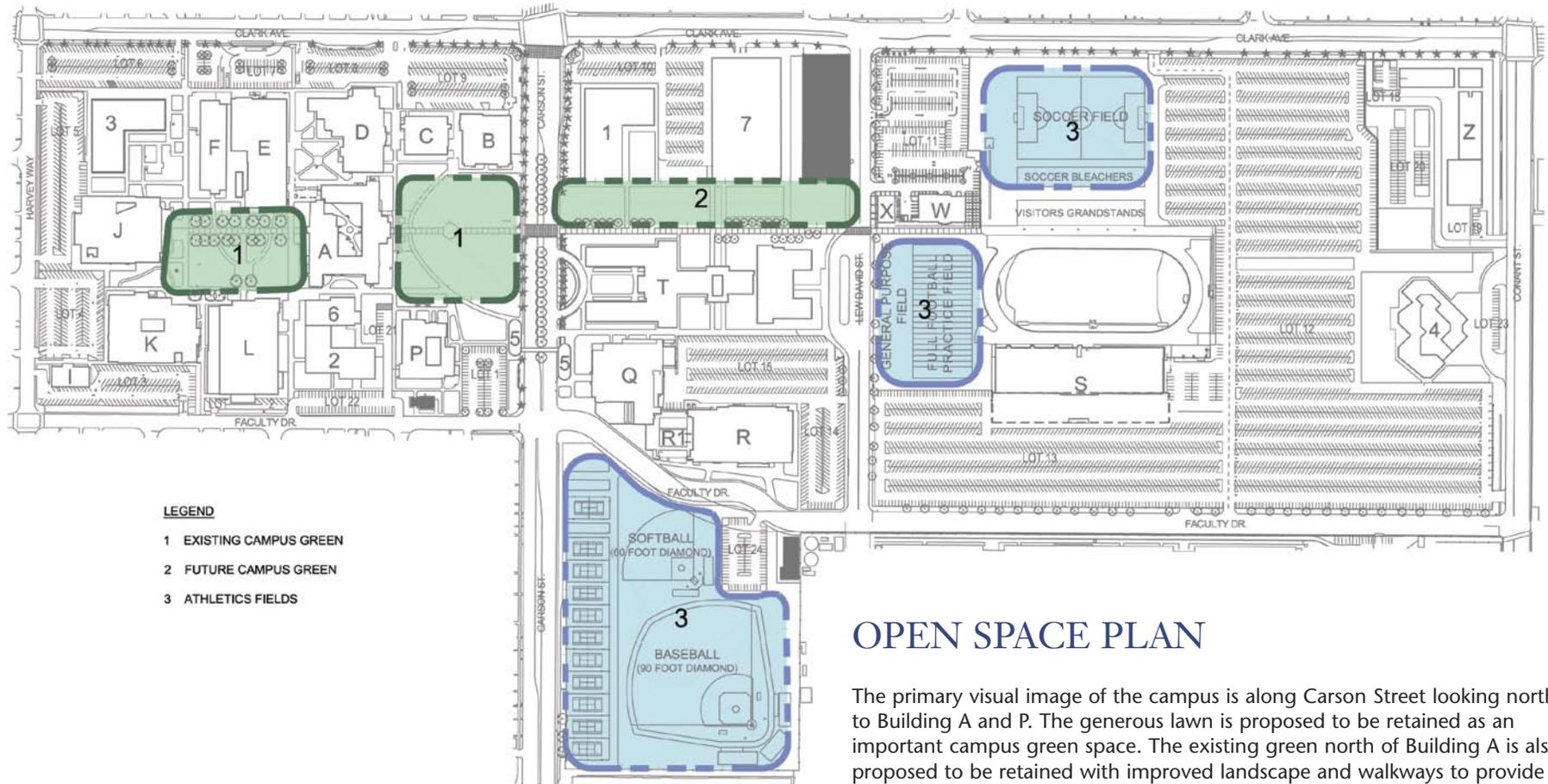
E BOND PROGRAM

- L LEARNING RESOURCE CENTER
- T MULTI-DISCIPLINARY ACADEMIC
- W, X INFRASTRUCTURE - CENTRAL PLANT, RESTROOMS, CONCESSION, CAMPUS POLICE
- Z WAREHOUSE

2020 PROGRAM

- A STUDENT SERVICES
- B TECHNICAL
- C HEALTH
- D MATH / SCIENCE BUILDING
- E COLLEGE CENTER
- F BOOKSTORE
- I FOUNDATION
- J AUDITORIUM
- K ARTS
- P LANGUAGE ARTS
- Q SMALL GYMNASIUM
- R LARGE GYMNASIUM
- R1 INFRASTRUCTURE - SWIM, POOL FACILITY RENOV.
- S STADIUM & FITNESS CENTER
- 1 MATH. TECH. BUILDING
- 2 M&N REPLACEMENT
- 3 PERFORMING ARTS G & H REPLACEMENT
- 4 CHILD DEVELOPMENT CENTER
- 5 PEDESTRIAN BRIDGE RENOVATION
- 6 TUTORIAL CENTER
- 7 PARKING STRUCTURE





- LEGEND**
- 1 EXISTING CAMPUS GREEN
 - 2 FUTURE CAMPUS GREEN
 - 3 ATHLETICS FIELDS

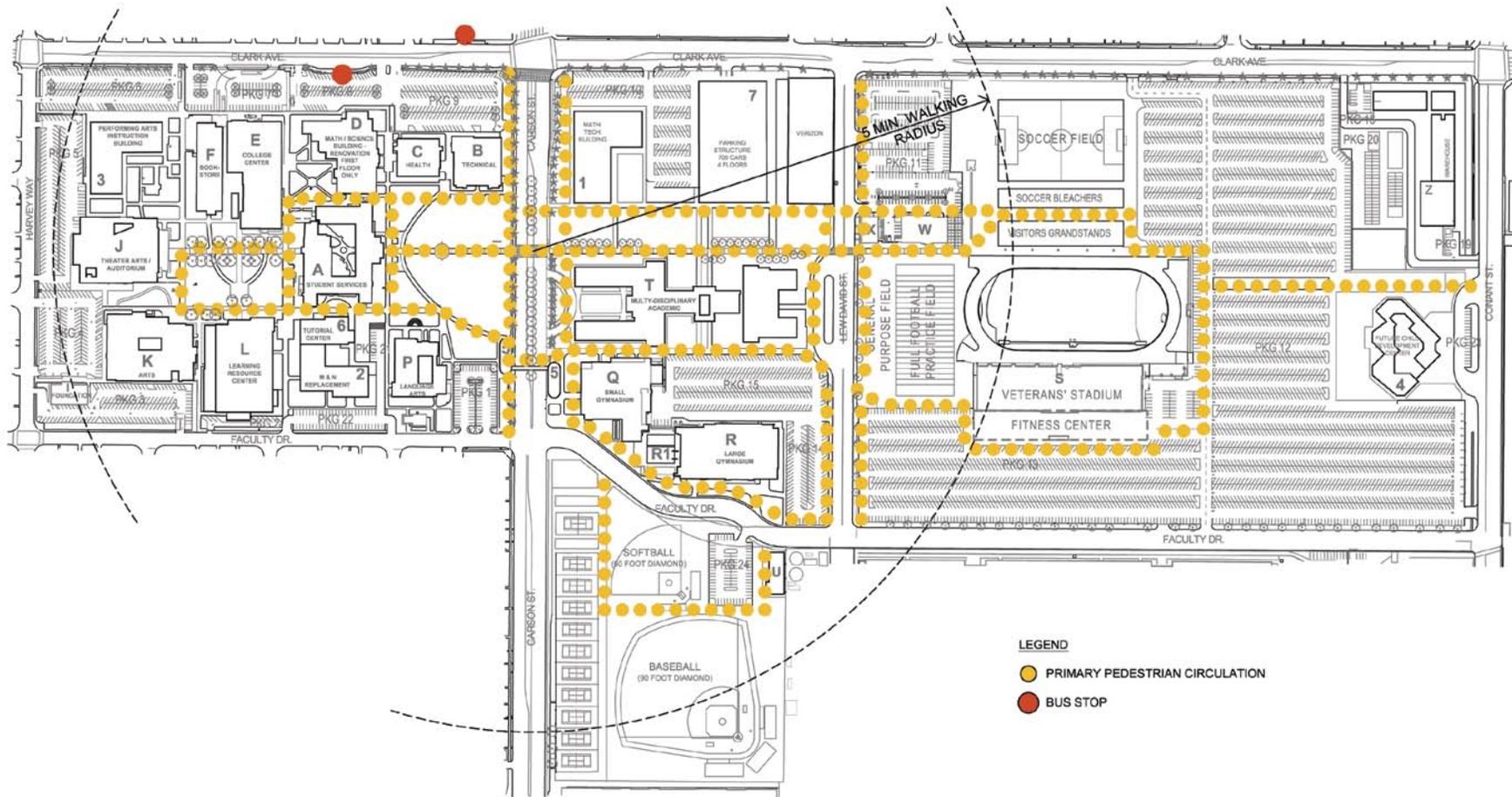


OPEN SPACE PLAN

The primary visual image of the campus is along Carson Street looking north to Building A and P. The generous lawn is proposed to be retained as an important campus green space. The existing green north of Building A is also proposed to be retained with improved landscape and walkways to provide open space for students to gather between classes. It will also serve/support the Student Services Center (Building A), the proposed Bookstore (Building F), and the College Center (Building E).

A linear planted mall is proposed to connect the new south campus instructional buildings to the primary existing campus green on Carson Street. This greenway will provide an important visual and pedestrian corridor that connects the campus over Carson Street. It is intended to be designed with trees that shade walkways on each side of the green.

Athletic programs for the District are primarily located on the LAC campus. The plan shows proposed location of athletic fields that will be required for year 2020. They include the Football Stadium, football practice field, Baseball field, Softball Field, Tennis Center Court and practice courts, Soccer Field, and a general purpose field.

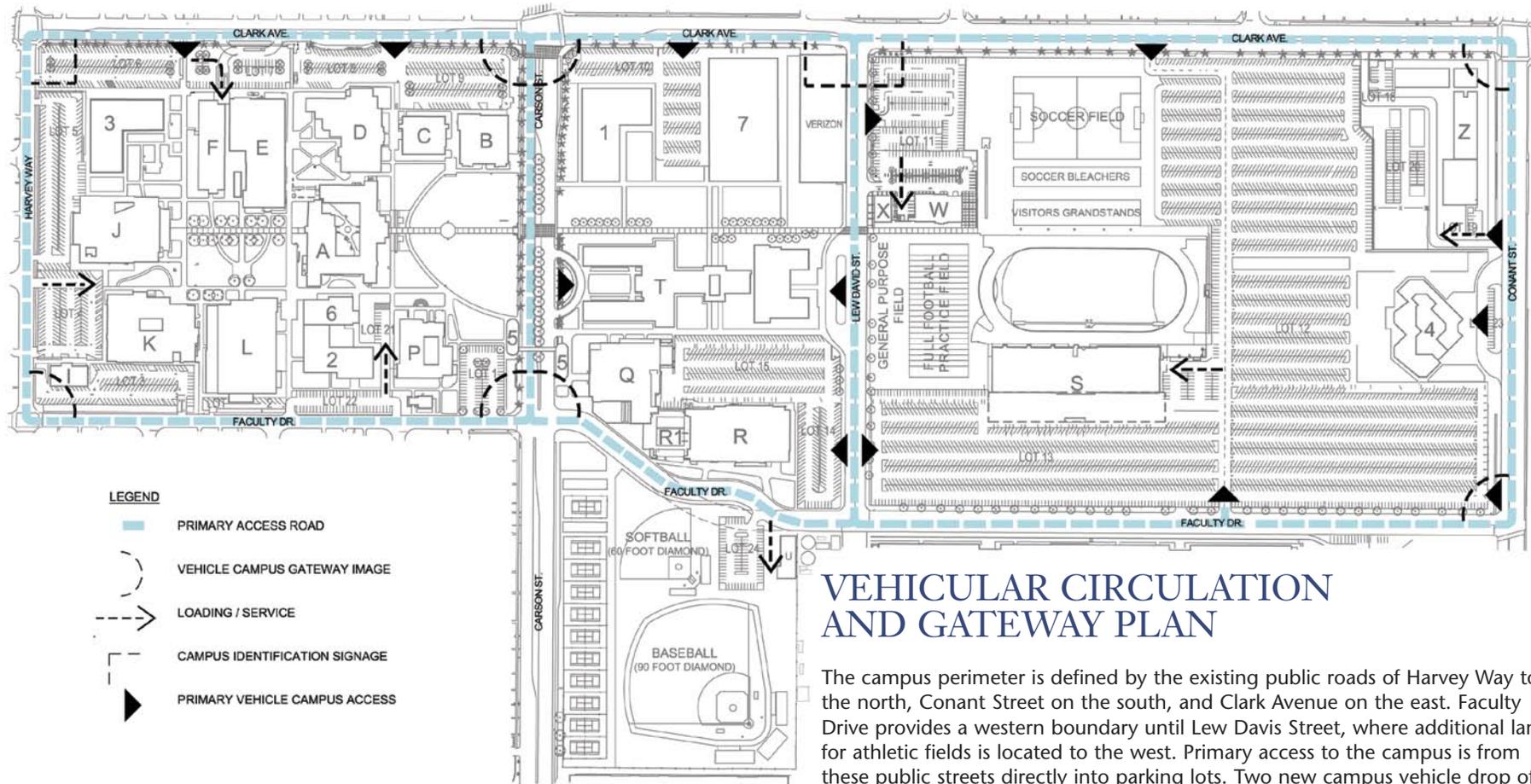


- LEGEND**
- PRIMARY PEDESTRIAN CIRCULATION
 - BUS STOP

PEDESTRIAN CIRCULATION PLAN

Primary pedestrian circulation is identified to illustrate paths that would be developed with major pedestrian walks and shade trees. They are planned to provide a pleasant pedestrian environment that connects the entire campus. The pathways flank and connect the three primary open spaces. They also provide important shaded connections to athletic fields and parking areas.



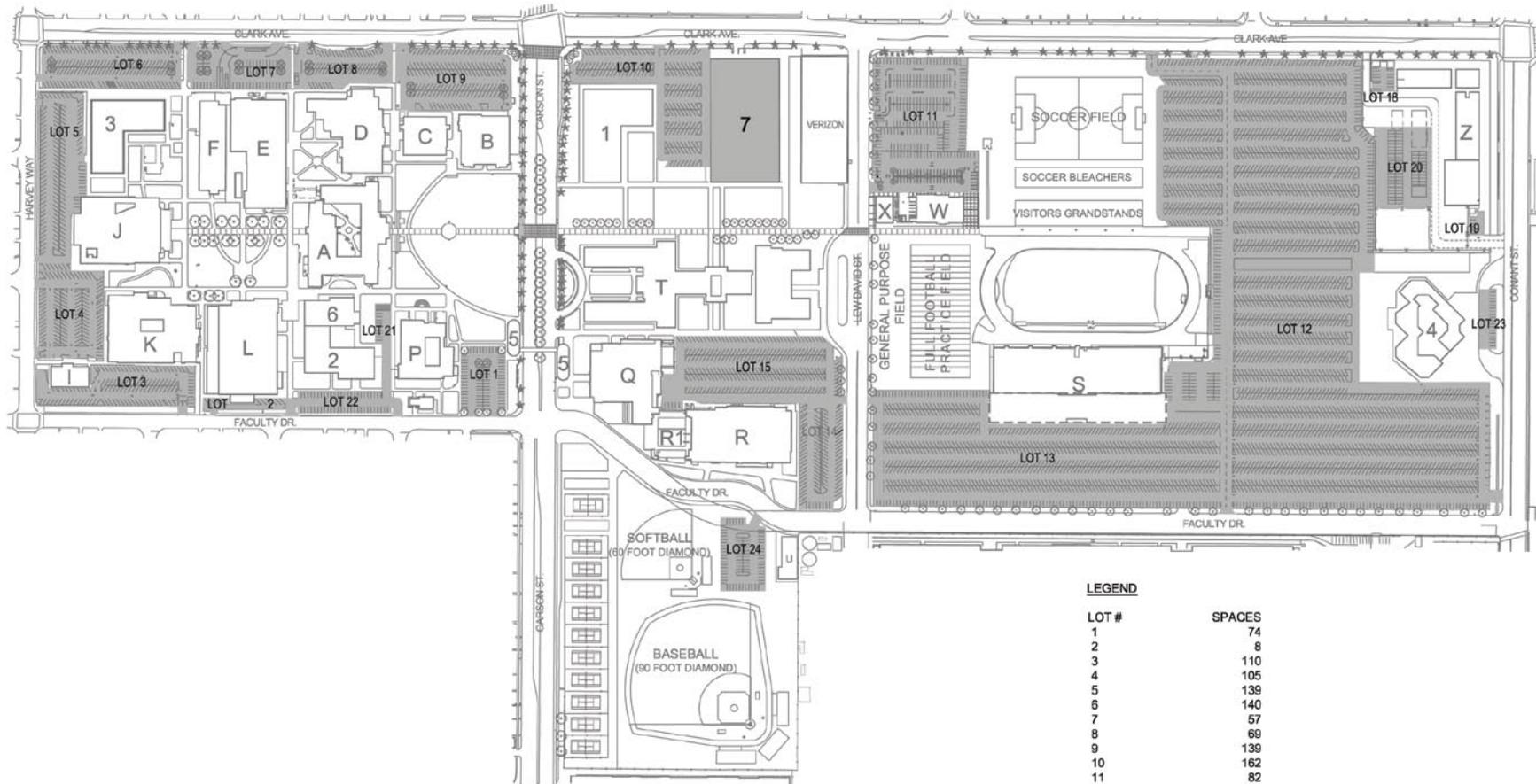


VEHICULAR CIRCULATION AND GATEWAY PLAN

The campus perimeter is defined by the existing public roads of Harvey Way to the north, Conant Street on the south, and Clark Avenue on the east. Faculty Drive provides a western boundary until Lew Davis Street, where additional land for athletic fields is located to the west. Primary access to the campus is from these public streets directly into parking lots. Two new campus vehicle drop off zones will be completed with Building T, providing much needed public access to each side of the campus.

Vehicle gateway signage/landscape is proposed to identify the campus location, which is currently not well marked or signed. These are proposed for the corners along Carson Street at the corners of Faculty Drive and Clark Avenue, and along Conant Street at the corners of Faculty Drive and Clark Avenue. To more clearly define the campus perimeter, campus identification signage is also recommended at the intersections of Lew Davis Street and Clark Avenue and at the corners of Harvey Way at Faculty Drive and Clark Avenue.

There are no dedicated service lanes on the campus. Service access locations are shown. A new loading dock and service lane is proposed to be located on the east side of Buildings E & F for access to the Bookstore and College Center Kitchen/Cafeteria.



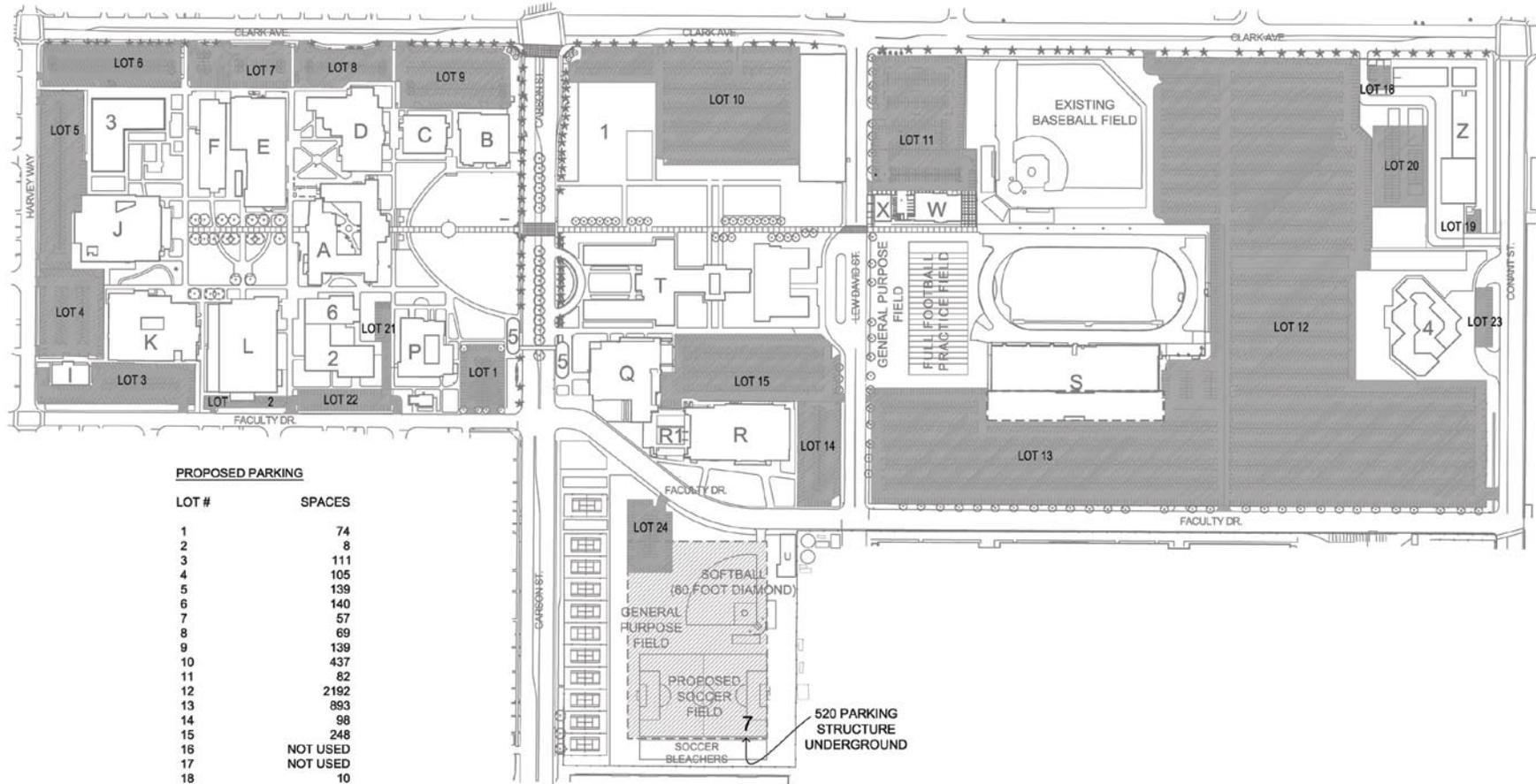
LEGEND

LOT #	SPACES
1	74
2	8
3	110
4	105
5	139
6	140
7	57
8	69
9	139
10	162
11	82
12	2192
13	893
14	98
15	248
16	NOT USED
17	NOT USED
18	10
19	5
20	64
21	10
23	53
22	19
24	74
PARK. STR. - BLDG.7	700
TOTAL:	5451

PARKING PLAN OPTION A

Parking is planned to meet the proposed campus student capacity of 27,557 students. Based on this student enrollment, approximately 5,500 parking spaces will be needed. A parking structure will be required to meet this demand. Parking Plan Option A proposes a multi story structure located adjacent to Clark Avenue.





PROPOSED PARKING

LOT #	SPACES
1	74
2	8
3	111
4	105
5	139
6	140
7	57
8	69
9	139
10	437
11	82
12	2192
13	893
14	98
15	248
16	NOT USED
17	NOT USED
18	10
19	5
20	64
21	10
22	53
23	19
24	74
PARK. STR. 7	520
TOTAL:	5547



PARKING PLAN OPTION B

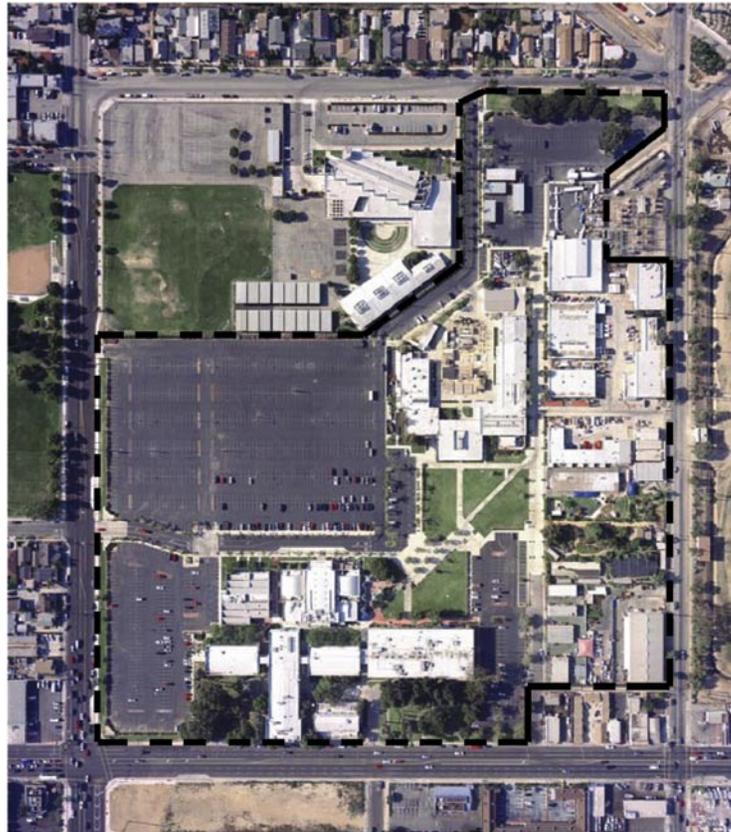
The parking structure in Option B is a one story underground structure upon which the athletic fields would be constructed south of Faculty Drive. As constructed, it would have the capacity to park between 500 to 900 vehicles.



AERIAL PHOTOGRAPH

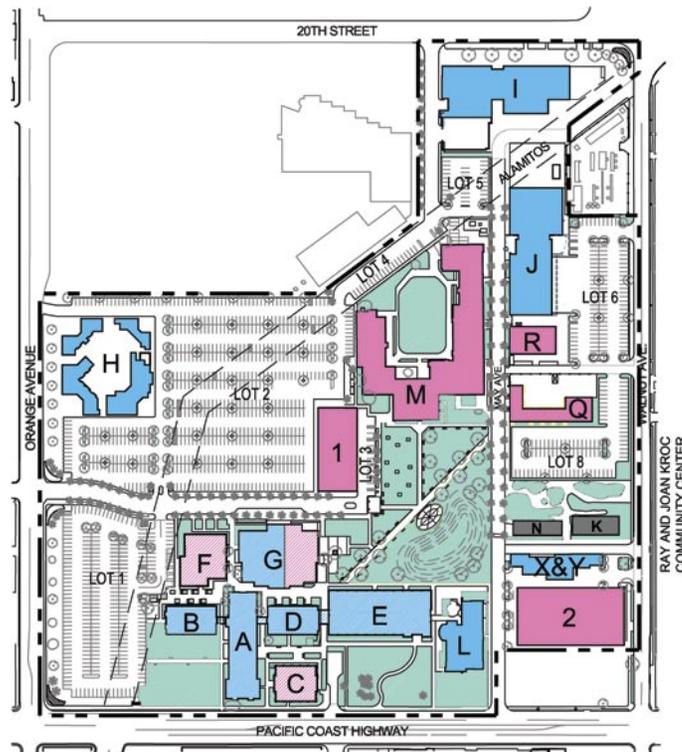
The aerial photograph shows the PCC campus prior to start of bond construction. The buildings range in age, with initial buildings completed in 1935-1937 and major campus expansion completed in 1950-1957. The oldest buildings on the campus are Buildings A,B,C, and D all constructed in 1935 and buildings F (1936) and G (1937). These buildings are in the historical Art Deco style and establish the recognized campus identity, particularly along the Pacific Coast Highway, where the two story buildings front generous lawns. Building E was added in 1950. The group of buildings on the north end of the site supports the trades programs. For the future, these buildings will remain in this area of the campus.

A primary school occupies the site directly to the north of the campus. Commercial properties are located at the northwest corner of Pacific Coast Highway and Walnut Avenue.



FACILITY SITE PLAN

The 2020 Facility Site Plan illustrates building projects included in the Measure E Bond Program and in the proposed 2020 plan. The plan shows growth of campus programs primarily through replacement and renovation in the areas where programs are currently located. Buildings I, J, and L are presently under construction as part of the Measure E Program. Proposed building zones for new construction in the 2020 building/facilities program are noted for Buildings 1, 2, M, R and Q. Replacement buildings are shown in the current configuration only to illustrate site size. A more finite building footprint will be developed as the project scope becomes more fully defined.



EXISTING FACILITY

- A,B,D&E MULTI-DISCIPLINARY
- C FITNESS CENTER
- F FINE ARTS / SENIOR CENTER
- G STUDENT SERVICES
- H CHILD DEVELOPMENT CENTER
- L LEARNING RESOURCE CENTER
- N HORTICULTURE
- K GREENHOUSE

E BOND PROGRAM

- A,B,D&E MULTI-DISCIPLINARY
- G STUDENT SERVICES
- H CHILD DEVELOPMENT CENTER
- I TECHNOLOGY PHASE 1
- J TECHNOLOGY PHASE 2
- L LEARNING RESOURCE CENTER
- X INFRASTRUCTURE - RESTROOMS
- Y INFRASTRUCTURE - CENTRAL PLANT / SATELLITE MAINTENANCE

2020 PROGRAM

- C FITNESS CENTER
- F FINE ARTS / SENIOR CENTER
- G STUDENT SERVICES
- M CONSTRUCTION TRADES
- Q AUTO BODY
- R DIESEL MECHANICS
- 1 HUMANITIES BUILDING
- 2 PARKING STRUCTURE

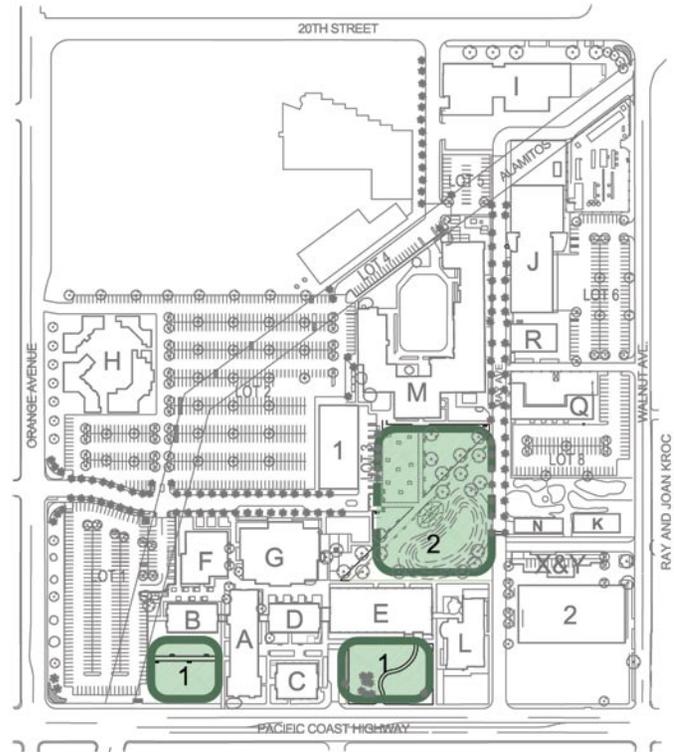
LEGEND

- EXISTING FACILITY WITH NO ACTION
- EXISTING FACILITY RENOVATION E BOND
- NEW FACILITY E BOND
- RENOVATION 2020 PROGRAM
- NEW CONSTRUCTION 2020 PROGRAM



OPEN SPACE PLAN

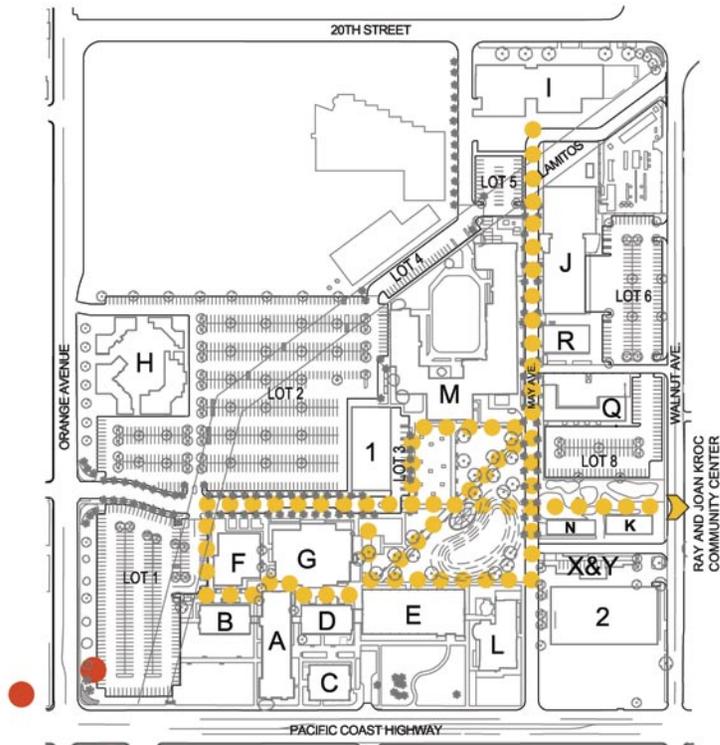
The existing green, parklike areas along the Pacific Coast Highway are proposed to be retained but improved with modified landscaping that will accent the handsome Art Deco facades and provide new view corridors from the street. The campus currently lacks any major open space that can be used by students. The 2020 building/facilities program proposes a new campus green at the center of PCC to connect the older buildings on the south with proposed new construction on the north.



LEGEND

- 1 EXISTING CAMPUS GREEN
- 2 FUTURE CAMPUS GREEN





LEGEND

- PRIMARY PEDESTRIAN CIRCULATION
- BUS STOP

PEDESTRIAN CIRCULATION PLAN

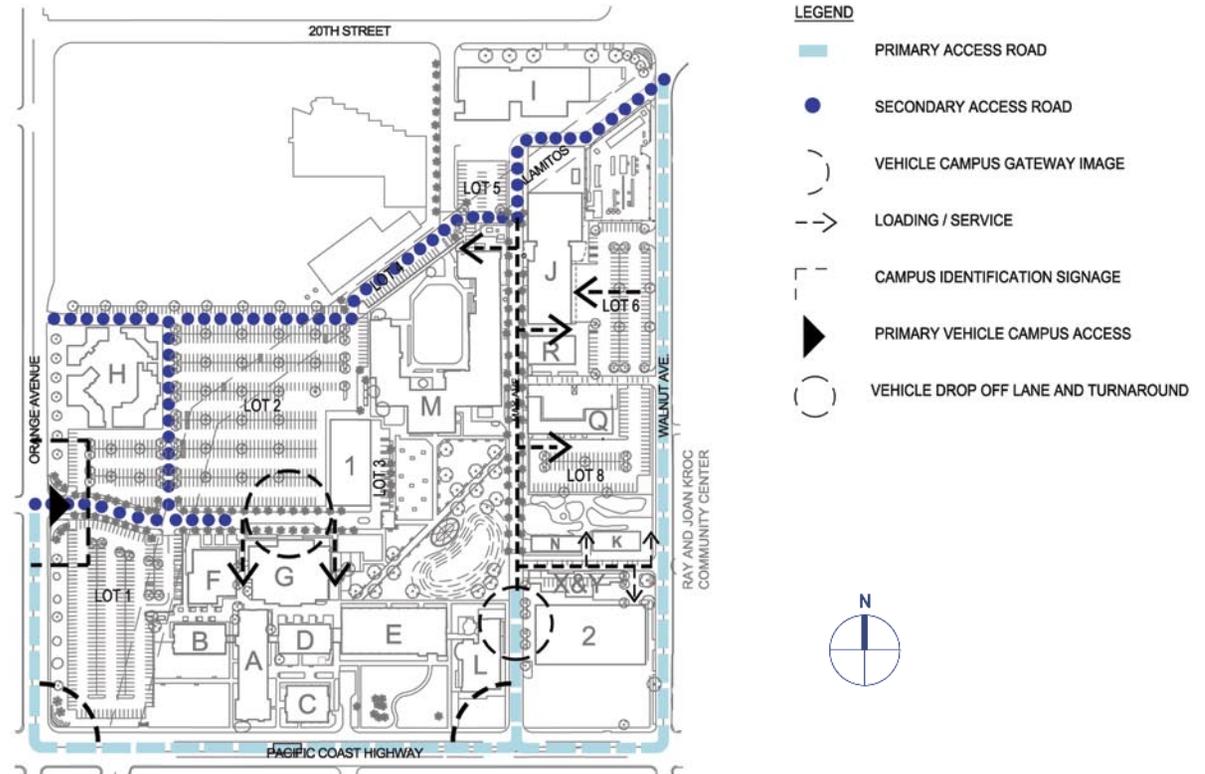
Primary pedestrian circulation is identified to illustrate paths that would be developed with major pedestrian walks and shade trees. They are planned to provide a pleasant pedestrian environment that connects the entire campus. The pathways flank and connect the three primary open spaces. They also provide important shaded connections to parking areas. A path is proposed to connect to the future Ray and Joan Kroc Community Center that will be located across Walnut Avenue. It is anticipated that this facility will offer PCC opportunities for collaboration and perhaps joint use of community education and activity spaces.

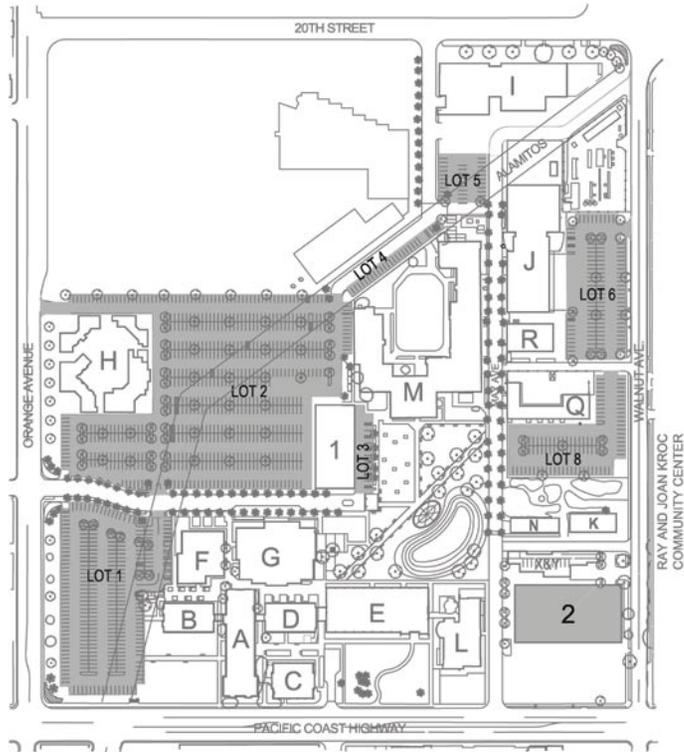
VEHICULAR CIRCULATION AND GATEWAY PLAN

The campus perimeter is defined by the existing public roads of Pacific Coast Highway to the south, Orange Avenue on the west and Walnut Avenue on the east. Primary access to the campus is from Orange Avenue. Two new campus vehicle drop off zones are proposed - in front of Building G and between the Library and Parking Structure.

Vehicle gateway signage/landscape is proposed to identify the campus location, which is currently not well marked or signed. These are proposed for the corners along Pacific Coast Highway at the corners of Orange Avenue and Ray Avenue. Campus identification signage is recommended at the main campus access from Orange Avenue.

Ray Avenue is proposed to include a dedicated service lane for electrical and small campus motorized maintenance vehicles. Service access locations are shown. A new service lane is proposed to be located on the north side of Buildings G for access to the Kitchen/Cafeteria.





LEGEND

LOT #	SPACES
1	277
2	645
3	12
4	26
5	31
6	106
7	NOT USED
8	92
PARK. STR.	511
TOTAL:	1,700

PARKING PLAN

Parking is planned to allow for the proposed campus student capacity of 8,738. This will require approximately 1,700 parking spaces. A parking structure will be required to meet this demand. It is proposed to be a multi story structure located adjacent to Walnut Avenue.

