

# Facilities Master Planning

Steps in the Process

Academic Senate

September 2, 2015

# Facilities Master Planning - Four Parts

1. Comprehensive Facilities Condition Assessment
2. Current Space Utilization & Demographic Trends
3. Facilities Master Plan (Architecture & Landscape)
4. District Standards

# Comprehensive Facilities Condition Assessment

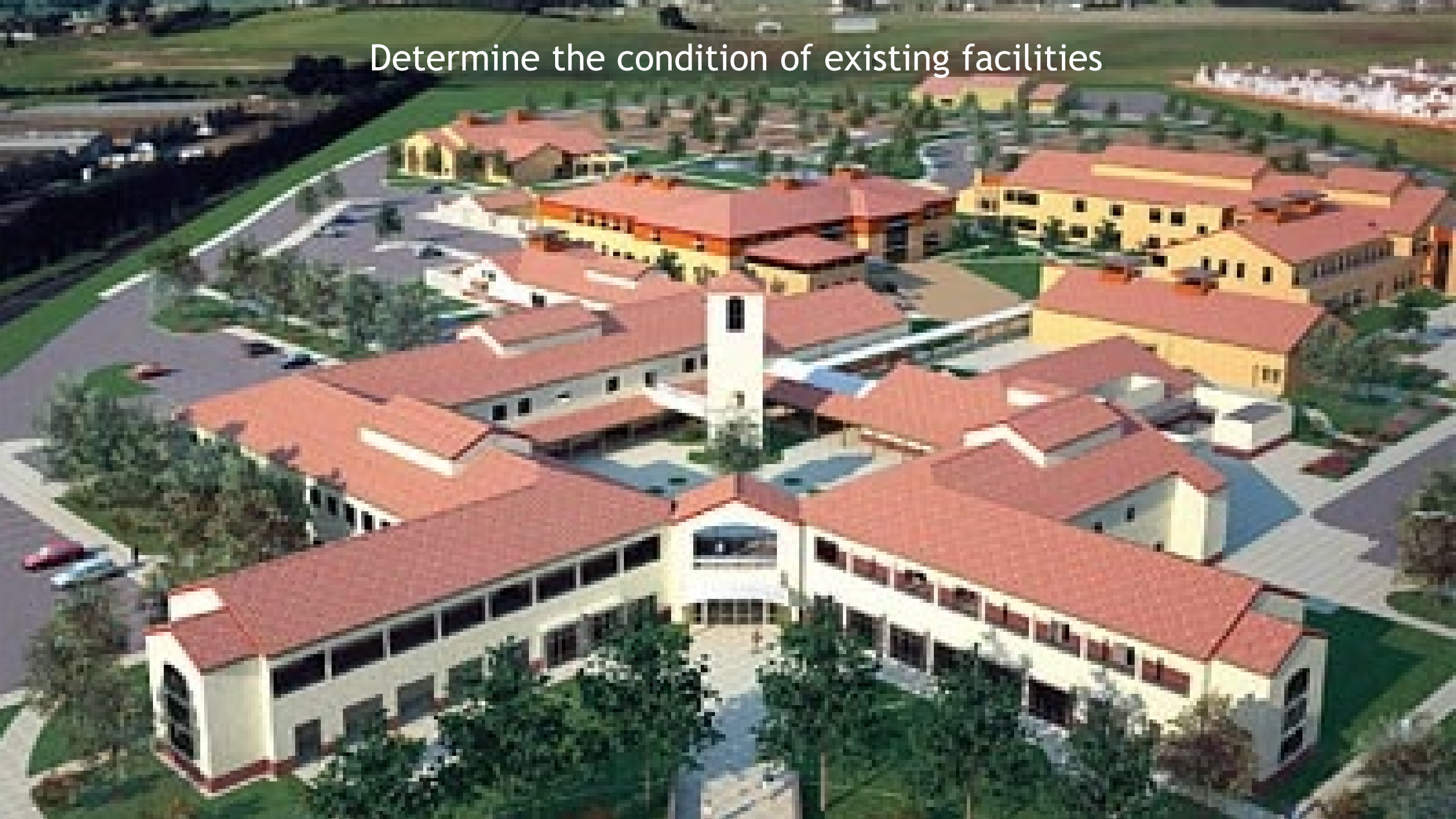
## 1. Comprehensive Facilities Condition Assessment

- ▶ All Campuses and Centers
- ▶ Comprehensive deferred maintenance liability
- ▶ Identify infrastructure repair or improvements required to meet future needs
- ▶ Map information to Statewide database (FCI) and internal database (Onuma?)
- ▶ Consider total cost of ownership
- ▶ Repair or replace?

### Desired outcome

- ▶ Determine which buildings are beyond their useful life
- ▶ Identify areas that require infrastructure repair or replacement

Determine the condition of existing facilities





# Current Space Utilization and Demographic Trends

## 2. Current Space Utilization and Demographic Trends

- ▶ Consider existing space; determine whether size and amenities fit program growth
- ▶ Identify growth areas and validate existing programs (size and location)
- ▶ Existing programs can form the baseline for improvement
- ▶ Demographic trends in District service area
- ▶ How do these inputs encourage FTES growth or fit the State funding (IPP/FPP) requirements?

## Desired Outcome

- ▶ Identify service areas and/or programs that require facilities upgrades



Consider existing space; determine whether size and amenities fit program growth



Consider Demographic Trends in the District service area



# Space Capacity

To understand a District's space needs, one needs to look at the existing space capacity, future space capacity (for projects already planned and funded), current enrollment as well as future expected enrollment. Title 5 of the California Administrative Code prescribes standards for the utilization and planning of five categories of spaces on public community college campuses: lecture, laboratory, office, library and AV/TV (Audiovisual / Television). The calculations are based on WSCH (weekly student contact hours) for Lecture and Laboratory, FTEFS (full-time equivalent faculty and staff) for Office, and Day-Graded Enrollment for Library and AV/TV spaces.

The Space Capacity calculations for Fairfield, Vacaville and Vallejo were based on the 2011 Space Inventory data in FUSION. The existing Space Needs were calculated by utilizing the FUSION Space Inventory Data and the WSCH, FTEFS and Day Graded Enrollment Data for the Fall Semester of 2011, provided by the District.

The existing Space Capacity analysis revealed that for the actual Fall 2011 enrollment numbers, the District **as a whole** has excess capacity for Lecture (177%) and Office (146%), is almost on target with Laboratory (107%), and is under capacity for Library (59%) and AV/TV(18%).

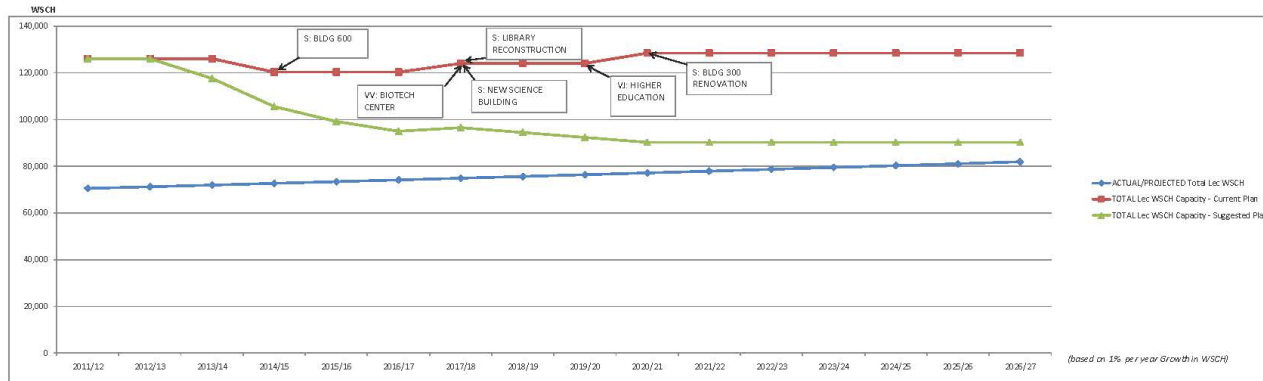
MAIN CAMPUS	Lecture ASF	Lab ASF	Office ASF	Library ASF	AV/TV ASF	P.E. ASF	Assembly ASF	Inactive ASF	All Other ASF	Total Campus ASF
Main Campus EXISTING ASF	46,329	79,865	52,049	21,944	3,608	43,929	21,029	7,560	72,302	348,615
Main Campus Fall 2011 JUSTIFIED	26,343	70,475	31,130	35,527	19,140	NA	NA	NA	NA	
ASF Difference	19,986	9,390	20,919	-13,583	-15,532	NA	NA	NA	NA	
Percentage Difference	176%	113%	167%	62%	19%					

VACAVILLE	Lecture ASF	Lab ASF	Office ASF	Library ASF	AV/TV ASF	P.E. ASF	Assembly ASF	Inactive ASF	All Other ASF	Total Campus ASF
Main Campus EXISTING ASF	6,118	5,509	2,151	1,680			1,439		7,382	24,279
Main Campus Fall 2011 JUSTIFIED	3,301	6,694	3,141	2,876	391	NA	NA	NA	NA	
ASF Difference	2,817	-1,185	-990	-1,196	-391	NA	NA	NA	NA	
Percentage Difference	185%	82%	68%	58%	0%					

VALLEJO	Lecture ASF	Lab ASF	Office ASF	Library ASF	AV/TV ASF	P.E. ASF	Assembly ASF	Inactive ASF	All Other ASF	Total Campus ASF
Main Campus EXISTING ASF	7,176	7,102	2,211	1,906			1,874		8,158	28,427
Main Campus Fall 2011 JUSTIFIED	3,723	7,107	4,430	5,172		NA	NA	NA	NA	
ASF Difference	3,453	-5	-2,219	-3,266		NA	NA	NA	NA	
Percentage Difference	193%	100%	50%	37%						

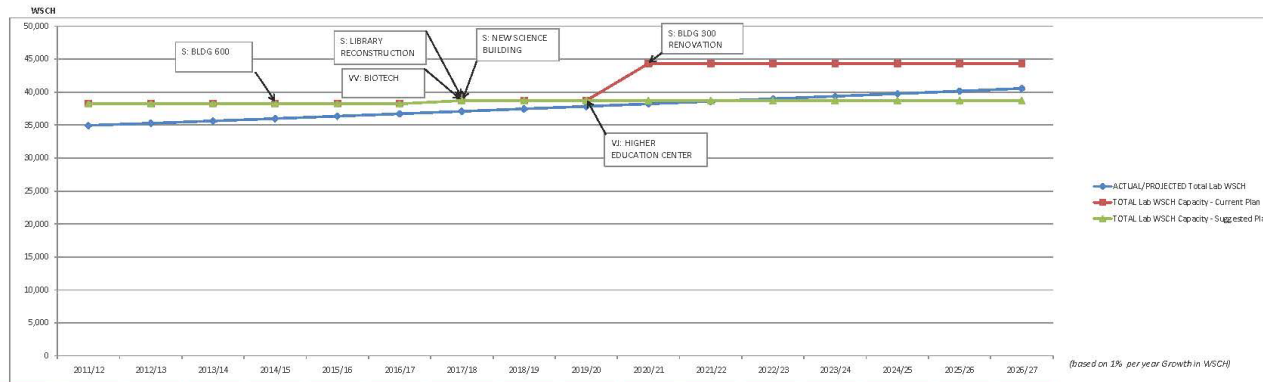
# Future Space Needs

SOLANO CCD  
SOLANO, VAC, VALLEJO  
LECTURE ANALYSIS



Project by Year of Occupancy	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
Net Effect of Project on Lecture WSCH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Re-assignment of Existing Lec. ASF to Other	0	0	-4,000	-3,000	-3,000	-2,000	-1,000	-1,000	-1,000	-1,000	0	0	0	0	0	0
Net Effect on Lecture WSCH	0	0	-4,457	-6,342	-6,342	-4,228	-2,114	-2,114	-2,114	-6,954	0	0	0	0	0	0

SOLANO CCD  
SOLANO, VAC, VALLEJO  
LAB ANALYSIS



Project by Year of Occupancy	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
Net Effect of Project on Lab WSCH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Re-assignment of Existing Lab ASF to Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Net Effect on Lab WSCH	0	0	0	0	0	0	0	0	0	-5,806	0	0	0	0	0	0

The future Space Capacity were calculated based on the existing Space Inventory, plus the changes resulting from Measure G and future projects, as detailed in the District's 2014-18 Five Year Construction Plan. The future Space Needs calculations were based on a 1% per year growth rate in WSCH, FTEFS and Day Graded Enrollment, with the assumption that the percentage of lecture WSCH and laboratory WSCH would remain the same as Fall 2011. *Note this Space Analysis was undertaken in March-April 2012, before the 2013 Educational Master Plan was complete. The 2013 Educational Master Plan ultimately called for a 2% per year growth rate.*

The graphic charts on this page and the following show the effects on Space Capacity (on a yearly basis) for each category at the District level. The Lecture and Lab Space Needs have been combined into one chart, whereas Library, Office and AV/TV each have their own chart (where shown).

These charts allow the college to understand its projected Space Needs against its available portfolio, as well as when equilibrium in each category will be achieved if they maintain their current course of action. Additionally, the District is provided with opportunity to quicken this equilibrium through expedited space category shifts, reduction of space, and off-lining of facilities.

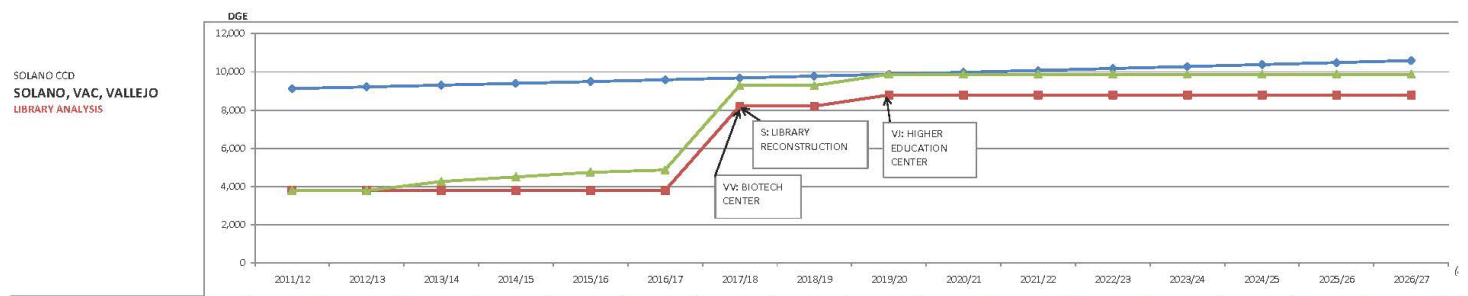
The baseline starting point is the Fall 2011 WSCH, FTEFS and Day-Graded Enrollment. The blue line in the charts shows the Space Needs per year and is based on a 1% growth in WSCH, FTEFS and Day-Graded Enrollment projected through 2026/2027. The red line represents the effects on Space Capacity due to the future projects identified in the District's 2014-18 Five Year Construction Plan, with project detail outlined in the tables below the charts. The green line represents the effects on Space Capacity due to the combination of these future projects and the targeted re-allocations of existing space. Detail on the re-allocations of space is outlined in the tables below the charts.

# Space Justification

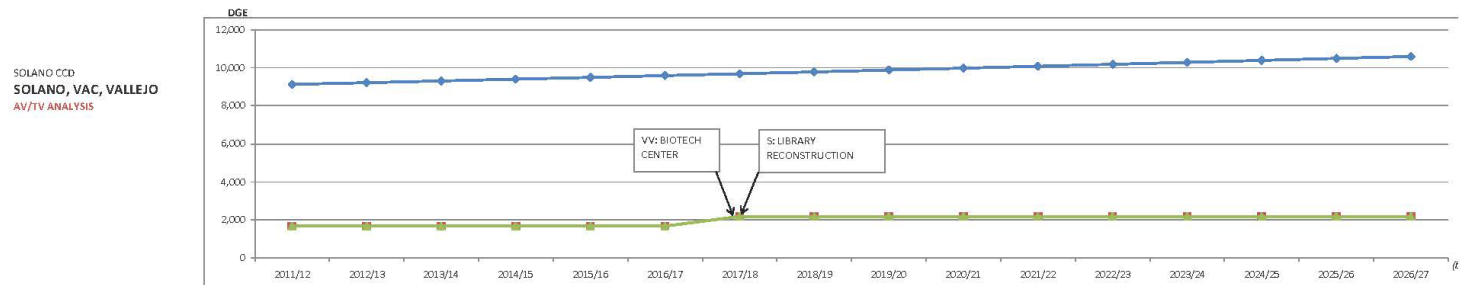
The analysis shows that if SCCD proceeds with their future projects as currently identified in the District's 2014-18 Five Year Construction Plan they will have excess capacity in the Lecture and Office category; they could be in alignment in the Laboratory category if they opted to re-purpose Building 300 at the Fairfield Campus for something other than Laboratory; and would be under capacity in the Library and AV/TV categories. Based on the above analysis the District's top priority projects (Library Reconstruction at Fairfield, New Science Building at Fairfield and New Bio-tech Building at Vacaville) are justifiable as long as their Lecture and Office components are re-visited. The Vallejo Education Building and Fairfield Building 300 Renovation projects however, would need further evaluation.

There are several factors that this analysis does not address:

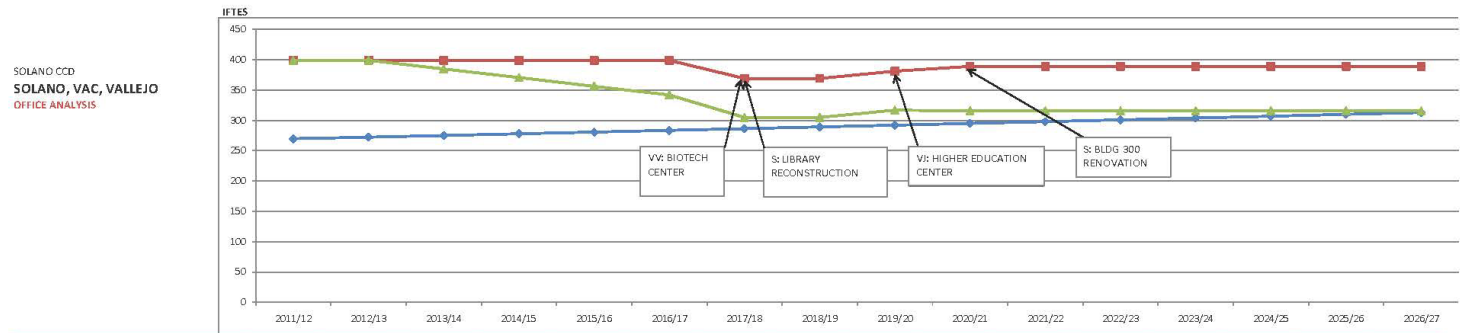
- The Fall 2011 enrollment was "suppressed" from what was originally projected due to State funding issues that limited the number of students the District could serve. In November 2012, the State passed Proposition 30 which helped restore State Funding for Community Colleges that would help CCDs increase their enrollments to the perceived demand, but this might take some time to manifest itself.
- Due to the same State funding issues (and the analysis being done before Proposition 30 passed) it was hard for the District to predict a projected growth rate in such an unknown funding climate. The 1% for this analysis was used conservatively, and ultimately the Educational Master Plan called for a 2% growth rate.
- This analysis does not address the need to replace outdated facilities (buildings and classrooms that are inadequate for teaching the curriculum as it is taught today and the future); the fact that although SCCD may be over in the Lecture category, most of these classrooms are sized inappropriately which contributes to their inefficiency; and lastly the fact that the Office category as it is computed at the State level is completely inadequate for the realities that Community College Districts face today with respect to Student Support Services needed to help underprepared students achieve success.



Project by Year of Occupancy	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
Net Effect of Project on Library ASF							15,983	2,000								
Net Library Capacity Add							4,420	590								
Re-assignment of Existing To Library	0	0	2,000	1,000	1,000	500	0	0	0	0	0	0	0	0	0	0
Net Library Capacity Add	0	0	481	241	241	120	0	0	0	0	0	0	0	0	0	0



Project by Year of Occupancy	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
Net Effect of Project on AV/TV ASF							385	0								
Net AV/TV Capacity Add							385	0								
Re-assignment of Existing To AV/TV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Net AV/TV Capacity Add	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Project by Year of Occupancy	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
Net Effect of Project on Office ASF							-3,949	1,200								
Net Office Capacity Add							-30	12								
Re-assignment of Existing To Office	0	0	-2,000	-2,000	-2,000	-2,000	-1,000	0	0	0	0	0	0	0	0	0
Net Office Capacity Add	0	0	-14	-14	-14	-14	-7	0	0	-9	0	0	0	0	0	0

# Facilities Master Plans (Architecture and Landscape)

## 3. Facilities Master Plans

- ▶ Long-term comprehensive vision (30 - 40 years)
- ▶ Landscape Master Planning
- ▶ Consider land acquisition and development (if relevant)
- ▶ Consider ADA issues and mitigation
- ▶ Identify building site opportunities
- ▶ Identify important landscape “nodes” and gathering spaces
- ▶ Minimize “swing space” costs
- ▶ Spending and Implementation Plan - mapping the vision to a 5, 10 & 15 year set of increments and align with budgets
- ▶ Project Prioritization

## Desired Outcome

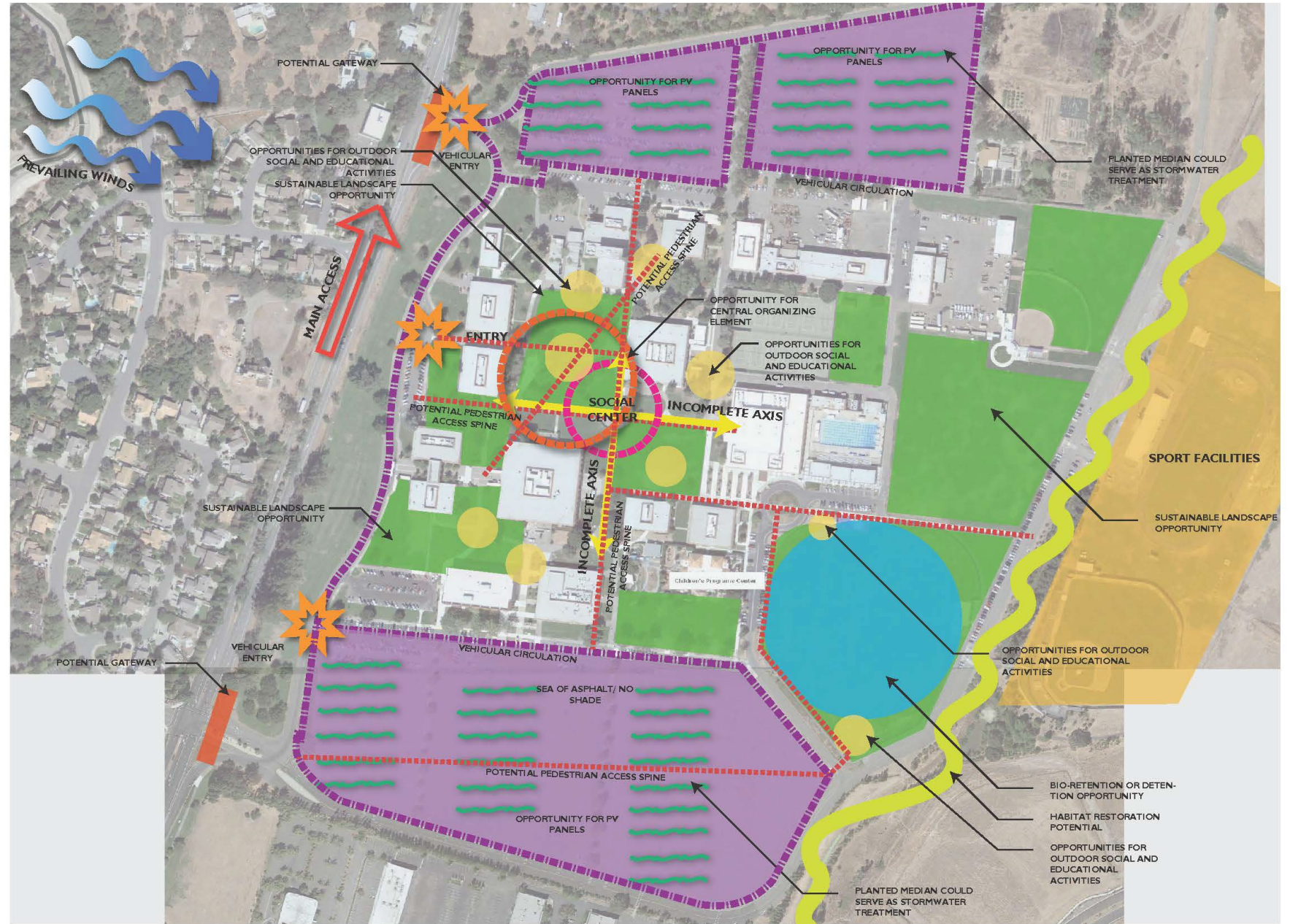
- ▶ Comprehensive vision mapped to a priority list of projects

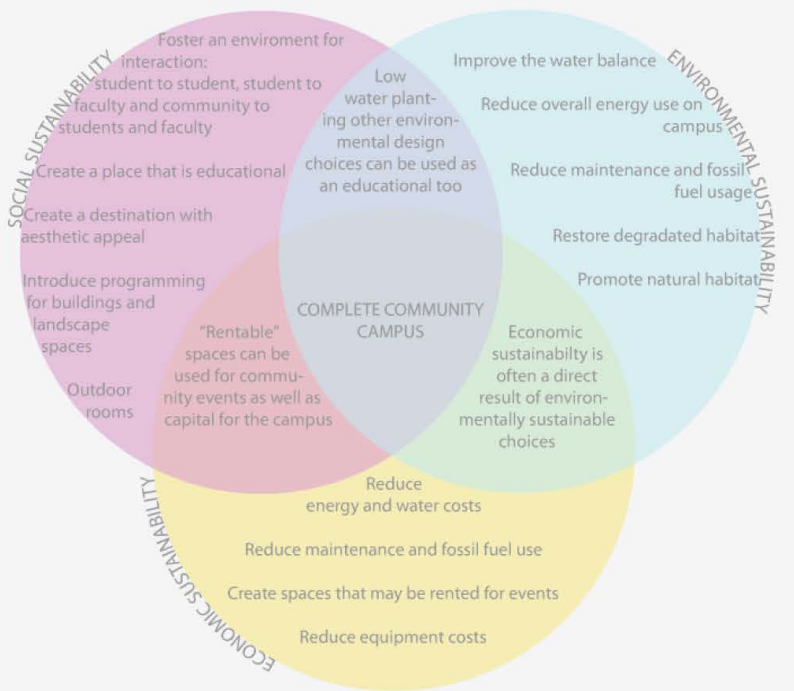
# Campus Analysis

Most of Solano's Fairfield Campus was built in 1971, with buildings 800, Horticulture, 1200, 1300 and 1800 added between 1974-1978 and the Childcare Building 200 added in 1995. The passage of Measure G in 2002 allowed the District to complete a number of facilities and renovations identified within its 2002 FMP. These included the partial renovations of most of the 30-year-old buildings, some infrastructure upgrades, a new Student Services Building (400) and a new Faculty Office Building (900). It also allowed the District to build permanent Centers (previously in leased facilities) on newly acquired properties in Vallejo (2007) and Vacaville (2010).

## Fairfield Existing Campus Analysis

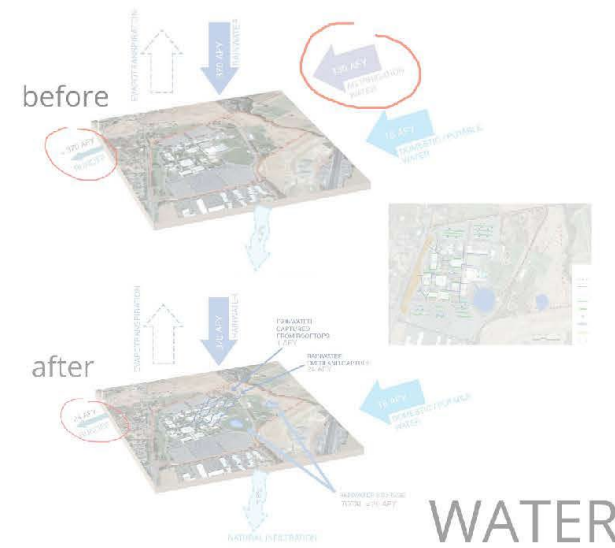
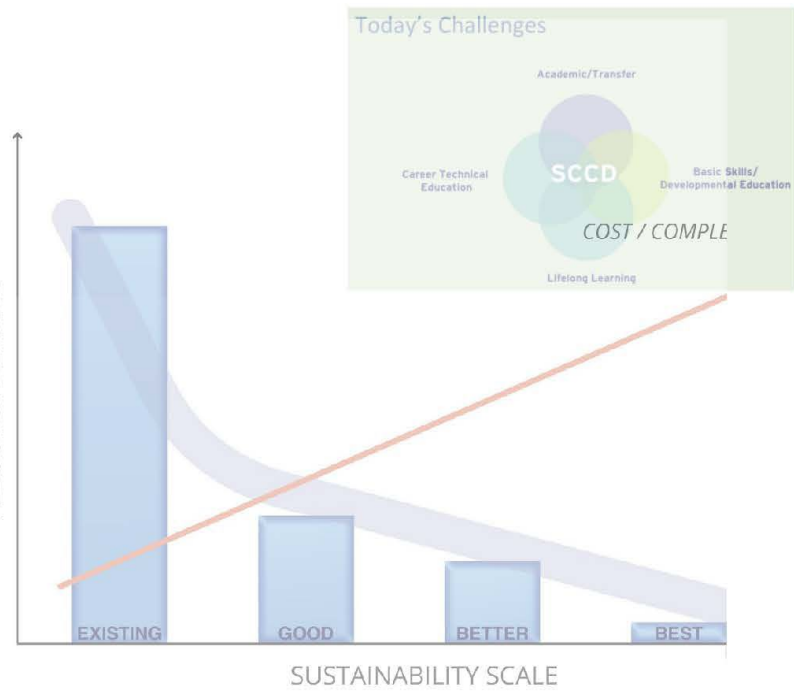
- Campus lacks visibility/identification from Suisun Valley Road and has no sense of arrival.
- A heritage tree near the entrance of the campus unknowingly announces an underwhelming and unofficial entrance that is dominated by through traffic.
- Traffic circulation at entries is confusing.
- Campus is surrounded by a sea of asphalt parking lots.
- Existing architecture is monotonous, outdated, and lacks presence.
- No hierarchy nor diversity in buildings or outdoor spaces.
- Existing campus layout is segmented and has few social gathering spaces for students and faculty.
- While the campus has a number of mature trees it still lacks sufficient shade.
- Existing campus landscape is water intensive and high maintenance.





## The Complete Campus Planning Goals

- Supportive Educational Environment
- Environments for Interaction/Connection
- Inviting Front Door
- Destination with Aesthetic Appeal
- Infrastructure for the Future
- Reduce Energy and Water Costs
- Reduce Maintenance
- Rental Facilities
- Restore Habitat
- Promote Natural Systems



## Conceptual Campus Planning

Synthesizing the District Vision, Goals and the results from the analysis and assessments the team articulated Campus Planning Principles that were validated by numerous Stakeholder Groups on campus, including ASSC, Academic Senate, FABPAC, Shared Governance, the Board of Trustees and Flex Day attendees. In August 2012, conceptual Campus Plan Options for each campus were also reviewed by each of these Stakeholder groups.

## Project Priorities

Concurrent with the conceptual campus planning, the team worked with District Leadership and the Educational Master Planners to refine the project priorities. These project priorities were constantly reviewed and refined as new information became available, and the Educational Master Plan was finalized.

## Draft Facilities Master Plan (Campus Plans)

During September through early October, the feedback received by the Stakeholder Groups on the campus options lead to the refinement and development of a preferred option for each campus. These options became the Draft Facilities Master Plan for each campus. These and the project priorities were reviewed and validated by the Academic Senate, FABPAC, Shared Governance and the Board of Trustees.

## Comprehensive Facilities Master Plan

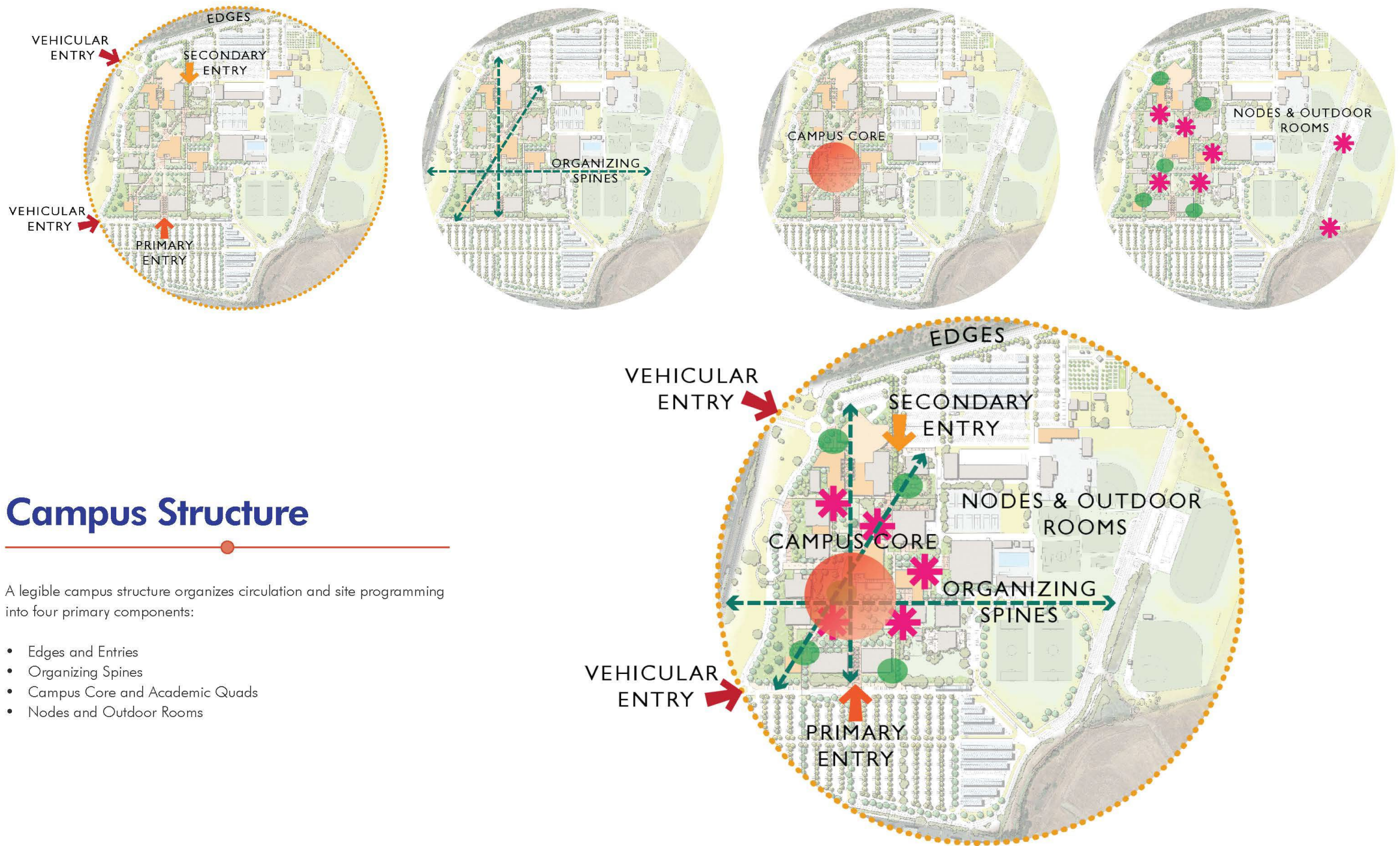
After the passage of the Measure Q Bond in November 2012, the District embarked on a more comprehensive Facilities Master Plan that comprised:

- Accessibility Transition Plan
- Design and Sustainability Guidelines
- District Standards (multiple disciplines)
- Fittings, Furniture and Equipment Master Plan
- Infrastructure Existing Capacity/Condition Assessments
- Infrastructure Master Plan
- Initial Asset Management
- Signage and Way-finding Master Plan
- Security and Technology Standards
- Traffic and Parking Analysis
- Work Ticketing

# Campus Structure

A legible campus structure organizes circulation and site programming into four primary components:

- Edges and Entries
- Organizing Spines
- Campus Core and Academic Quads
- Nodes and Outdoor Rooms



## CAMPUS GATEWAYS

Gateways are an important element of campus and help create a sense of place and identity for students, faculty, staff, and visitors.

*Vehicular Entries/ Gateways should:*

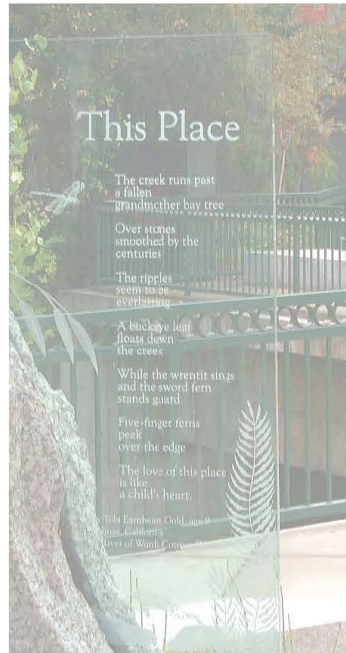
- Provide orienting views into the campus
- Reinforce campus identity
- Reflect sustainable and educational values
- Demonstrate a prestigious first impression
- Have a welcoming and auto-scale design
- Have special paving, planting signage and lighting

*Pedestrian Entries/ Gateways should:*

- Be welcoming and create a sense of arrival
- Provide direction and hierarchy of circulation corridors
- Have special paving, planting signage and lighting
- Have appropriately scaled elements; vertical elements should not exceed adjacent building heights
- Reflect sustainable and educational values



“Every doorway,  
every intersection  
has a story.”  
- Katharine Dunn







## EDGES

Edges can both define the campus boundaries and provide a friendly interface with the surrounding communities. The perimeter edge should be visually distinct while providing amenities such as pathways, trees, and benches which can be enjoyed by the community.

*Edges should:*

- Distinctly identify the perimeter of campus
- Create a quality first impression
- Create a boundary without creating a barrier
- Use landscape to create "soft" transition
- Create physical connections to neighbors and community





Image source: LandscapeArchitectMagazine



## PATHWAYS

Pathways are the links between buildings, gateways, and spaces. There are a hierarchy of paths used depending on function and accessibility.

### *Guidelines for Primary Spine:*

- Should be a minimum width of 20'
- Should be main spines or formal promenades
- Should have special paving
- Should be lined with allee of trees
- Should initiate at parking lots with gateways and landscaping and lead to the campus core
- Should be ADA compliant and barrier free
- Intersections among primary paths should be emphasized with seating, special planting, and wayfinding elements
- Should incorporate Pathway Lighting which is laid out to respond to alignment of walkways and spaced regularly and consistently to provide uniform light levels

### *Guidelines for Secondary Paths:*

- Should be a minimum width of 10-15'
- Should be used as interior circulation paths
- Should lead to primary spine
- Should incorporate Pathway Lighting or Pedestrian Lighting which is laid out to respond to alignment of walkways and spaced regularly and consistently to provide uniform light levels

### *Guidelines for Tertiary Paths:*

- Should be a minimum width of 6'
- Should be used to connect internal campus areas and buildings
- Should incorporate Pedestrian Lighting which is laid out to respond to alignment of walkways and spaced regularly and consistently to provide uniform light levels

### *General Guidelines for all Paths:*

- Paths less than 5% slope are encouraged wherever possible
- Should have a minimum 2% cross slope
- Informal paths shall meander and be coupled with informal plantings
- Materials should respond to building architecture
- Material palette should match existing materials
- When possible allow for visual termini of pathways
- Should have trash and recycling at key point
- Should be drivable for maintenance and service purposes



## ACADEMIC QUADRANGLES / "QUADS"

The academic quadrangles are strong central activity hubs for mid-size communities of people to gather. They promote interaction among students, faculty, staff, and community, and is the philosophical 'heart' of campus.

*Academic quadrangles should:*

- Have spaces for passive and active recreation
- Have educational elements and themes relevant to adjacent buildings
- Have a recognizable, central organizing element
- Have sufficient space for graduation ceremonies and other events
- Be a point of reference for orientation
- Be a destination for many paths
- Be designed to invite and engage
- Be along primary spines that lead to the campus core
- Can serve as the primary open space on campus.



The campus core will serve as the visual, social and civic center of the campus.



## PLAZAS

Plazas are primarily paved spaces at entrances to buildings and campus crossroads. Plaza spaces can promote the uses of adjacent buildings and spaces and weave together the diverse elements of the campus.

*Plazas can:*

- Accommodate higher levels of traffic and activity
- Serve as event spaces
- Be used as outdoor living rooms
- Have enriched features such as special paving, water elements and art installations
- Have seating arrangements that promote social interaction as well as quiet studying and people watching



## COURTYARDS

Courtyards are small and intimate outdoor spaces partially enclosed by buildings that can vary in design and in use, depending on their location.

*Courtyards can:*

- Emphasize outdoor/indoor relationships
- Be enhanced with special paving, color planting, overhead structures and accents related to adjacent buildings
- Have an outdoor performance space
- Have a central visual focal elements
- Be located between buildings
- Be a mix of hardscape and softscape
- Be intimate and comfortable



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“To the mind  
that is still, the  
whole universe  
surrenders.”

-Lao Tzu



imagesource: news.zhulong.com

# Design Standards

## 4. Design Standards

- ▶ Building Materials and Equipment - style guide, quality, color
- ▶ Landscape - plantings, site furniture, lighting, pathway and other materials
- ▶ Sustainability - energy, water, transportation, maintenance & operations considerations
- ▶ Signage - wayfinding (to campus & on campus), building signage (exterior & interior)
- ▶ FFE - Fixtures, Fitting and Equipment (flexible classrooms, peer to peer learning)
- ▶ IT - Information Technology improvements (infrastructure, classroom tech)
- ▶ Parking and Site infrastructure
- ▶ ADA Transition Plan

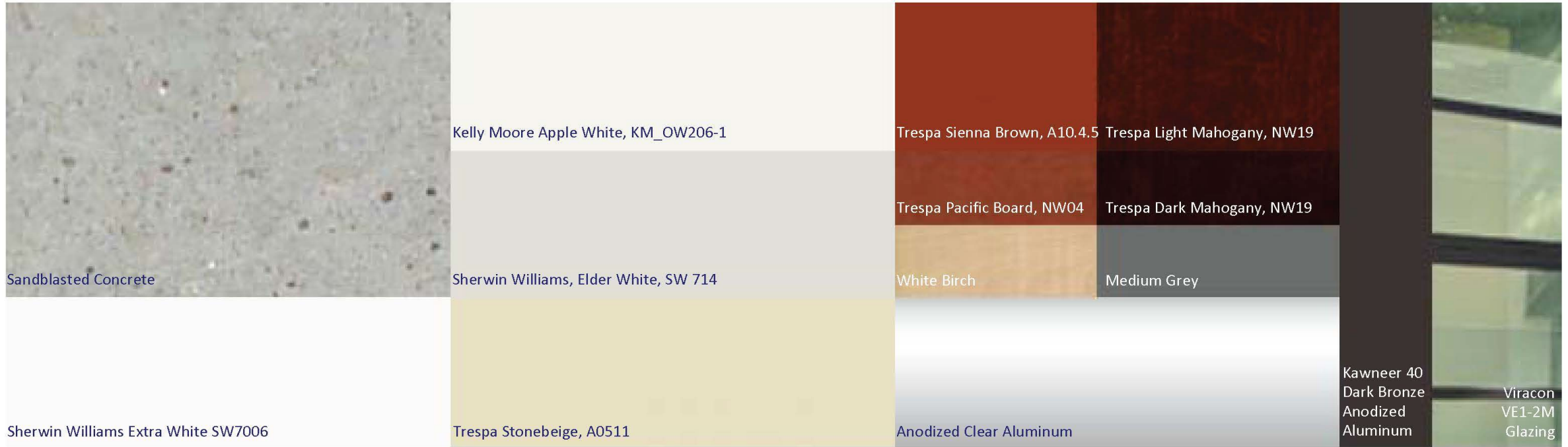
## Desired Outcome

- ▶ Approved document that can be shared with design community



Style Guide: Transparency, Proportion, Material

## Exterior Color Palette:





Canopy / Shade Trees Continued...



*Ulmus parvifolia*  
Chinese Elm  
Height: 50'  
Spread: 60'  
Deciduous



Parking Lot / Shade Trees Continued...



*Quercus Virginiana*  
Southern Live Oak  
Height: 40'-60'  
Spread: 40'-60'  
Evergreen



Orchard Tree



*Malus spp.*  
Crabapple  
Height: 25'  
Spread: 25'  
Deciduous



Parking Lot / Shade Trees



*Pistacia chinensis*  
Chinese Pistache  
Height: 30'-60'  
Spread: 30'-60'  
Deciduous



Accent & Entry Trees



*Chitalpa tashkenensis*  
Chitalpa  
Height: 25'  
Spread: 20'-30'  
Deciduous



Screen Trees



*Calocedrus decurrens*  
Incentive Cedar  
Height: 20' (40' with age)  
Spread: 10' (70' with age)  
Evergreen



*Platanus acerifolia 'Columbia'*  
London Plane Tree  
Height: 50'  
Spread: 30'  
Deciduous

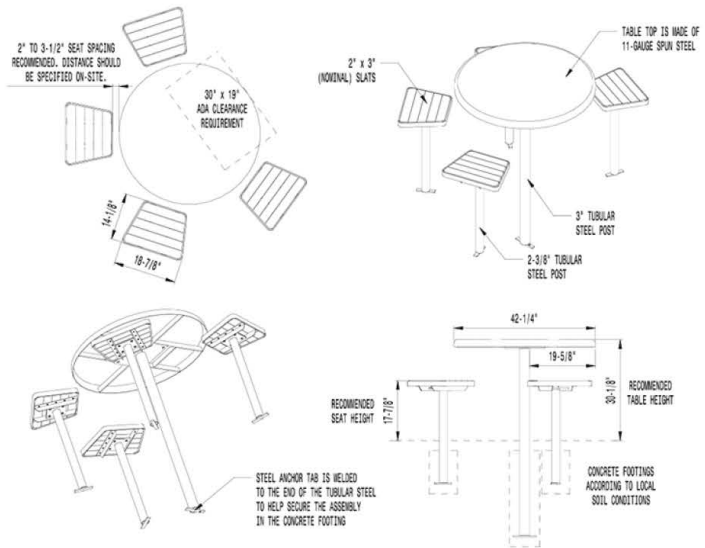


*Lagerstroemia indica*  
Crape Myrtle  
Height: 25'  
Spread: 25'  
Deciduous





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 STEEL TABLE, BACKLESS SEATS WITH WOOD SLATS  
 SHOWN: STANDARD IN-GROUND MOUNT  
 STANDARD ADA CONFIGURATION

TABLE TOP  
 AVAILABLE WITH OPTIONAL UMBRELLA HOLE  
 MOUNTING  
 STANDARD IN-GROUND (AS SHOWN) AND SURFACE MOUNT

## DESIGN STANDARD

### Purpose:

The purpose of this document is to standardize the trash, waste, and recycling receptacles used throughout all the campuses.

### Design Standard:

- Trash and recycling should be placed together
- Place at main entrances to buildings, plazas, and pedestrian walkways
- Place with other site furniture for functional and organized gathering areas

### Approved Manufacturers:

- Landscape Forms: Scarborough Litter Receptacle with 30-gallon side opening, Vertical strap, with Lock
  - Finish: Pangard II® polyester
  - Color: powder coat Stormcloud
- Landscape Forms: Scarborough Receptacle with 30-gallon side opening, Vertical strap, dual use
  - Finish: Pangard II® polyester
  - Color: powder coat Stormcloud

### Substitutes Allowed:

Approved manufacturer or approved equal.

### Associated Design Standards and Construction Specifications

Install per manufacturer's specifications

# Sustainability Guidelines

These guidelines were developed through conversations with Solano Stakeholders (through the Sustainability Committee) and with the collaboration of maintenance and operations staff at the District.

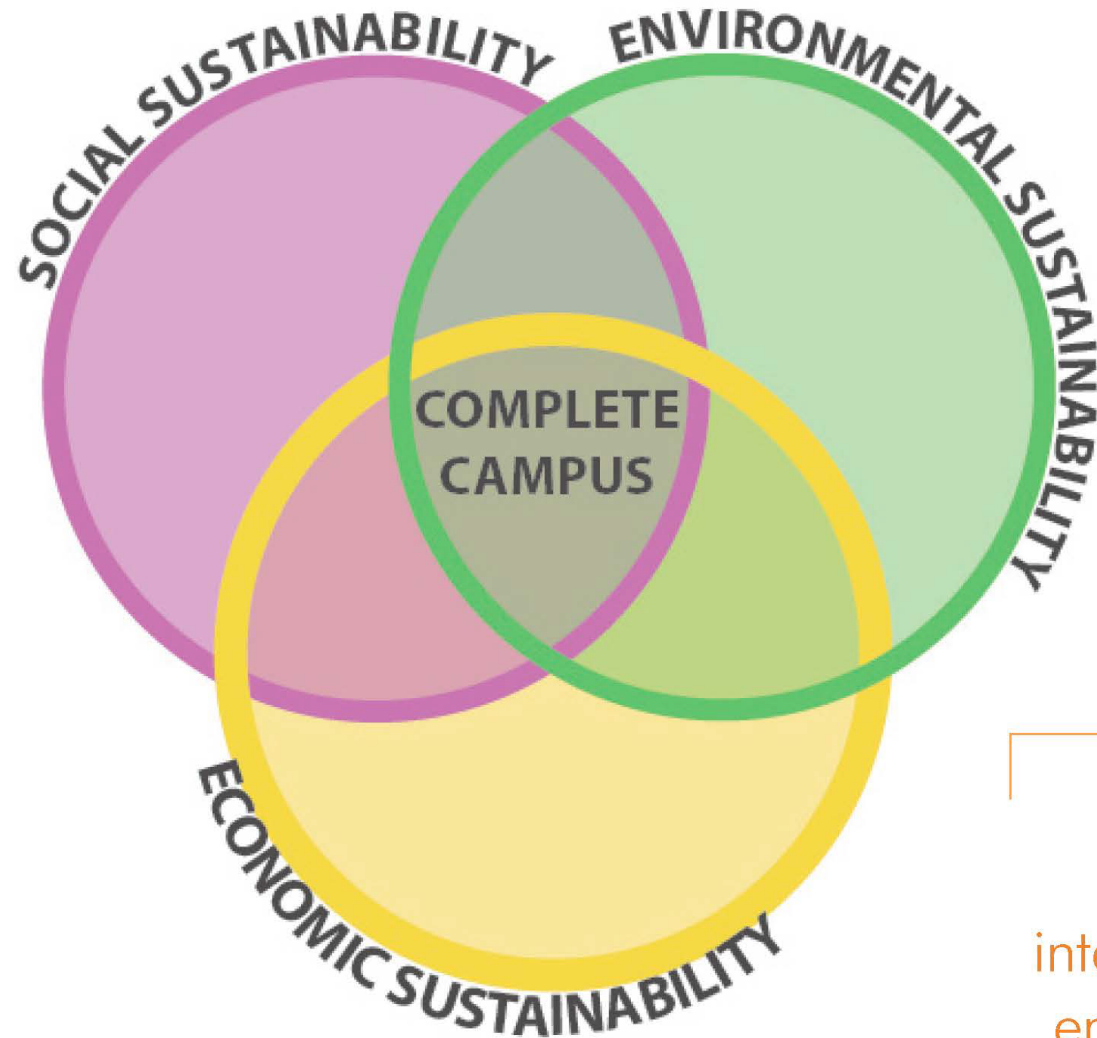
## SUSTAINABILITY VISION

“Solano Community College will be a leader in sustainable practices that balance the best interests of the environment, our community and fiscal responsibility. In particular, it will reduce its ecological footprint through energy, water and waste reduction, curriculum development and community engagement.”

## SUSTAINABILITY GOALS

The District will aspire to meet the following goals and target dates:

- Reduce energy consumption from the 2001-2002 baseline by 15% by the end of 2014-2015.
- Reduce the energy cost from the 2001-2002 baseline by 20% by the end of 2014-2015.
- Procure 40% of electricity from renewable sources by 2014.
- The District will endeavor to meet and exceed the following LEED standards: all major new capital projects to be designed to LEED Silver criteria and all major renovation projects to be designed to LEED Certified criteria.
- Reduce water use per student by 20% from 2011 levels by 2020.
- Eliminate the use of potable water for irrigation by 2020.
- Divert 75% of solid waste from landfills by 2015 and aim for zero waste by 2020.
- District will commit to working with local transportation agencies to improve service and routes to the benefit of our students with the aim of reducing Vehicle Miles Traveled (VMT).
- Integrate sustainability into the curriculum through multi-disciplinary approaches, to increase the number of courses offering a sustainable component.
- Reduce annual GHG emissions to 1990 levels by 2020 and achieve climate neutrality by 2050.



balance  
the best  
interests of the  
environment,  
our community  
and fiscal  
responsibility

## LOCATION AND TRANSPORTATION

The Facilities Master Plan is based on sustainable planning principles that should be reinforced with each Capital Improvement Project. The following apply to the Location and Transportation credits:

### LEED for Neighborhood Development Location

- At Fairfield, most existing buildings have been repurposed rather than demolished and new buildings are proposed in areas with existing infrastructure.
- Buildings are proposed to be in close proximity to one another to encourage walkability and reduce vehicle distance traveled.
- New buildings should to be a **minimum of 2-stories**.

### Sensitive Land Protection

- On the Fairfield Campus the land east of the campus loop road is being maintained as its natural riparian habitat, and the area fronting Suisun Valley Road is being maintained as open land.

### Access to Quality Transit

- District is committed to working with local transportation agencies to improve service and routes for the benefit of its students and at this time it is expected that the existing bus stops on each campus will accommodate these improvements.
- Existing Public Transit access has been maintained on all campus sites and the Fairfield Campus bus stop is proposed to be relocated south of Building 400 with better waiting facilities.
- At the Fairfield Campus a pathway to the proposed Regional Bus Station (off-site) has been reinforced.
- At the Vacvaille Campus a pathway should be provided once the Regional Bus Station location has been identified.

### Bicycle Facilities

- District is interested in trying out a **Bicycle Share program** and specific projects should look at opportunities to incorporate bicycle storage and shower rooms.



ImageSource: [campuslifeservices.ucsf.edu](http://campuslifeservices.ucsf.edu)

### Reduced Parking Footprint

- The Facilities Master Plan proposes to reduce Parking at the Fairfield campus (current supply exceeds current and projected demand), and Vallejo is proposed to have a one-story parking deck on the additional property to reduce future parking footprint in favor of more green space.

### Green Vehicles

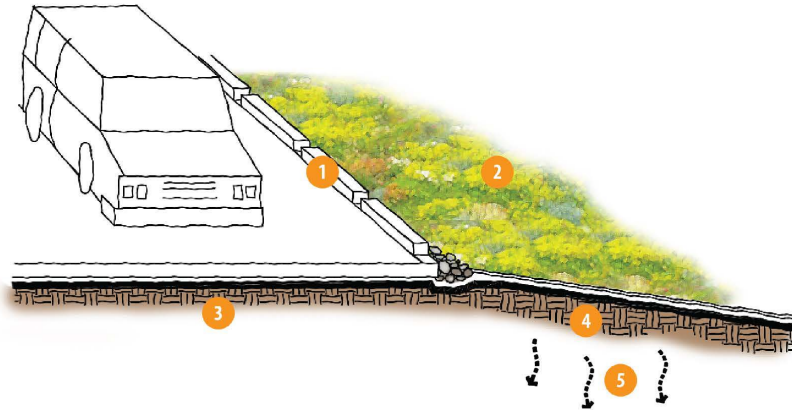
- Fairfield already has some **Electric Vehicle Charging Stations** and the District is interested in promoting Green Vehicle usage on all Campus sites thus future projects affecting parking lots should include the addition of charging stations per LEED criteria.



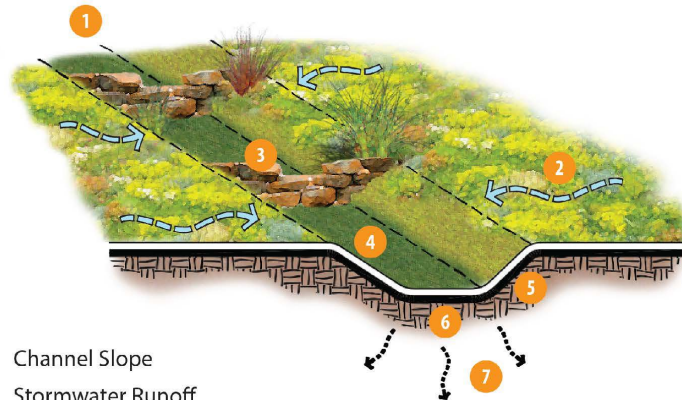
**BIKE SHARE: 4 EASY STEPS**



- 1 Optional curb cuts evenly disperse run-off inflow
- 2 Thick vegetation and 10% maximum slope
- 3 60-foot maximum road width
- 4 15-foot minimum buffer strip width (in direction of flow)
- 5 Infiltration where feasible



Vegetated Buffer



- 1 Channel Slope
- 2 Stormwater Runoff
- 3 Check Dam (Slope greater than 5%)
- 4 6-inch grass height recommended
- 5 3:1 maximum slope bank
- 6 Channel bottom
- 7 Infiltration

Vegetated Swale



## SUSTAINABLE SITES

The Facilities Master Plan is based on sustainable planning principles that should be reinforced with each Capital Improvement Project. The following apply to the Sustainable Sites credits:

### Site Development - protect or restore habitat

For the Fairfield Campus the buildings proposed are replacing demolished buildings and existing parking, which results in green space added to the campus. This is not the case with the other two campuses, where greenfields are being replaced with buildings and parking, so these credits will apply only to Fairfield.

Furthermore, on the Fairfield Campus the land east of the campus loop road is being maintained as its natural riparian habitat. In addition, by allowing habitats to flourish the natural ecology of the land will thrive. To better the soils and habitat one should:

- Mulch regularly and Sheet mulch where appropriate.
- Avoid synthetic and quick release fertilizers.
- Limit use of chemical pesticide.
- Plant California Natives when suitable for microclimate.

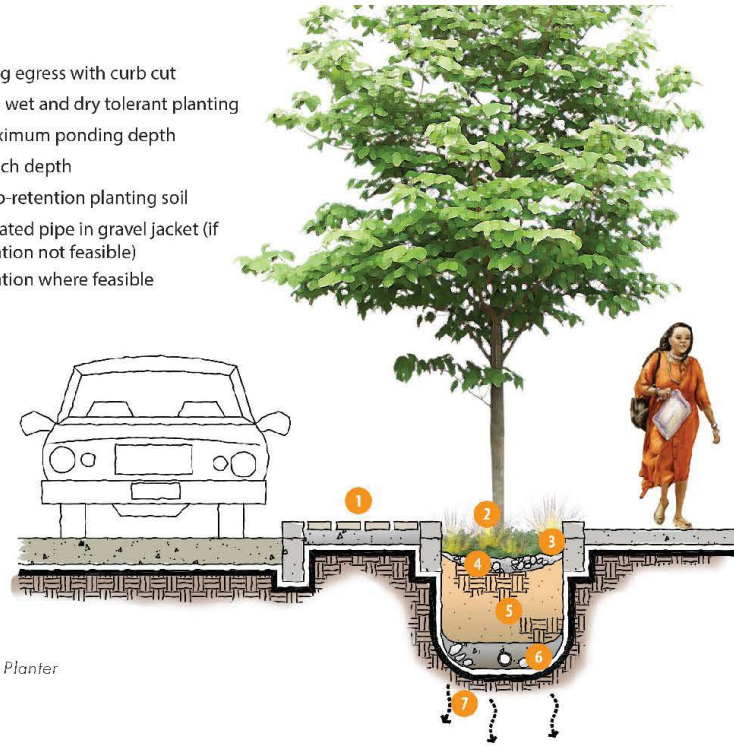
### Rainwater (Stormwater) Management

Rainwater management consists of systems that retain rainfall on sites instead of allowing it to leave via gutters and storm drains. Retaining stormwater allows for reduced irrigation water demand, an increase in groundwater recharge and an opportunity for removal of sediments and pollutants. Refer to the [Stormwater Management Plan](#) that follows for complete details. The following are some systems that help retain rainfall on sites:

- **Vegetated Buffers** are sloped planting strips designed to capture and treat sheet flow from adjacent paved areas. Vegetated Buffers are attractive landscape features that can improve water quality, attenuate peak flows and facilitate groundwater recharge.
- **Vegetated Swales** are shallow planted channels that convey storm water runoff. The advantages of vegetated swales is that they remove particulates from the storm water flow, thereby improving the water quality. They also reduce the rate of runoff and helps facilitate groundwater recharge.

- **Flow-Through Planters** allow water to percolate through vegetation and soils to help remove pollutants and sediment. Apart from providing an aesthetic amenity, the benefits of flow-through planters include creation of habitat, reduction in runoff volumes, improvement of water quality, facilitation of groundwater recharge and facilitation of evapotranspiration.

- 1 Parking egress with curb cut
- 2 Dense wet and dry tolerant planting
- 3 6" maximum ponding depth
- 4 3" mulch depth
- 5 18" bio-retention planting soil
- 6 Perforated pipe in gravel jacket (if infiltration not feasible)
- 7 Infiltration where feasible

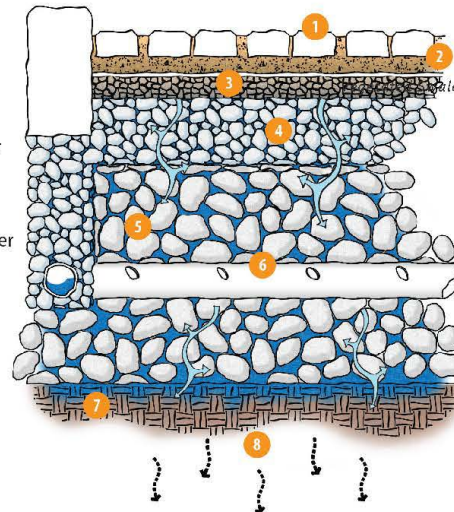


Flow-through Planter



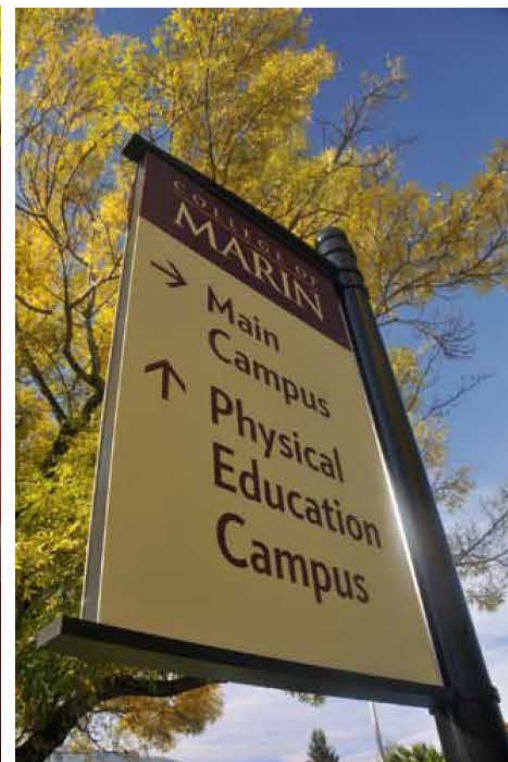
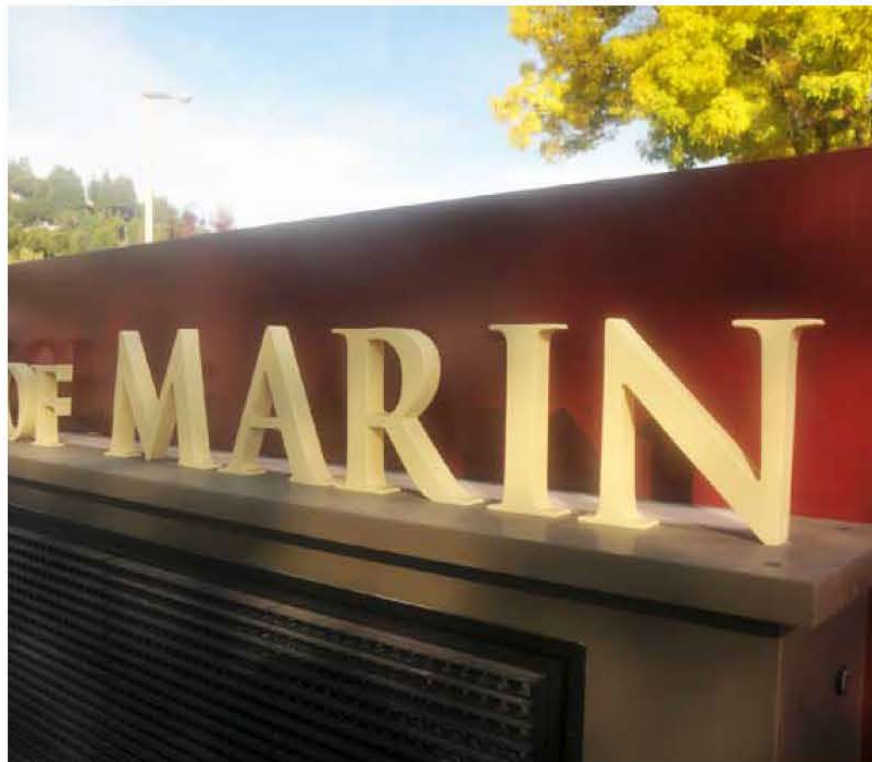
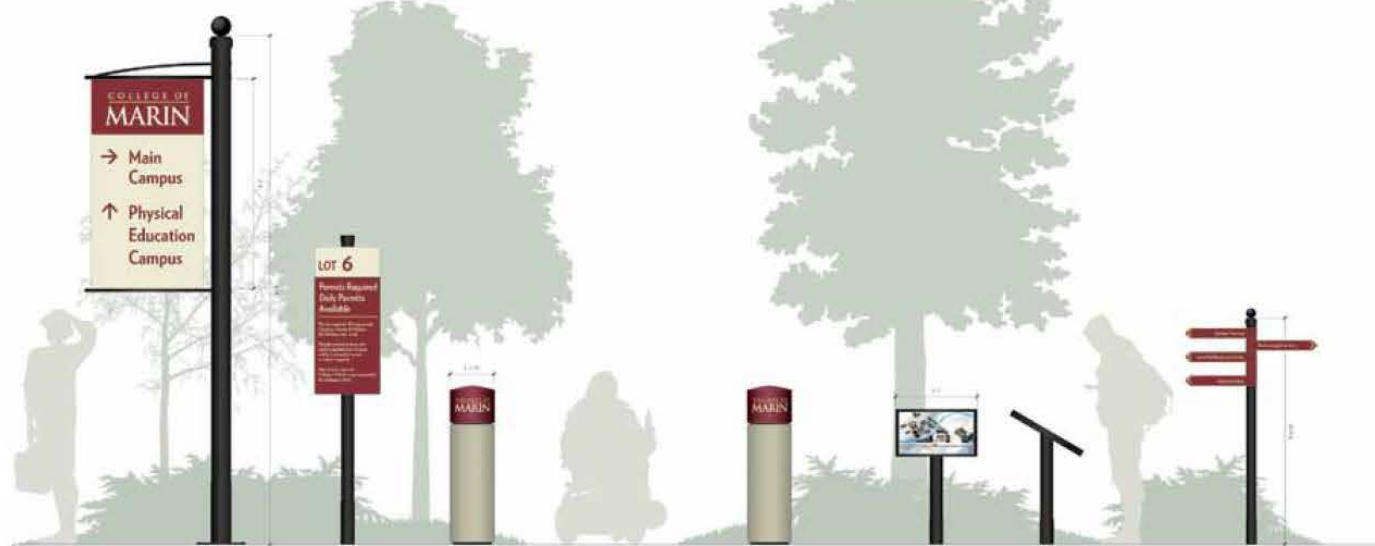
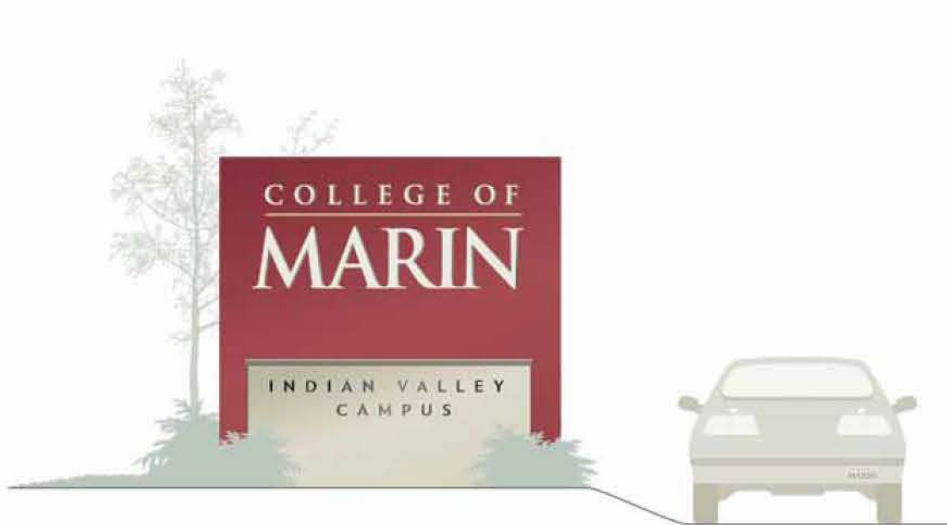
- **Permeable Pavements** are porous, load-bearing surfaces that can temporarily store rainwater before infiltration to the stormwater system or groundwater table. Permeable pavement can reduce runoff, improve water quality, facilitate groundwater recharge, reduce surface ponding and reduce heat island effect.

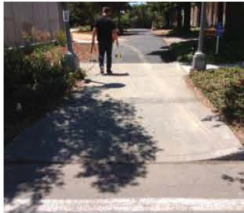
- 1 Pavers
- 2 Fine gravel bedding layer
- 3 Transition layer
- 4 Medium gravel
- 5 Coarse gravel storage layer
- 6 Underdrain if necessary
- 7 Subgrade
- 8 Infiltration





Pervious Pavers







Item No.	Name, Rm. #	Existing Architectural Barrier and Proposed Solution	Codes / Mitigation Info	Qty	Unit	Cost	Total
<b>Curb Ramp</b>							
239		<ul style="list-style-type: none"> <li><i>As-Built Description:</i> Detectable warning not provided where pedestrian crosses vehicular area.</li> <li><i>Proposed Solution:</i> Provide detectable warning surface (i.e. in-line truncated domes) at regular curb ramp.</li> </ul>	PCODE EH07A ADAAG 4.7.7 CSAS 1127B.5.7 ADA 2010 705.1	1	JOB	\$250	\$250
		Priority 1 Severity 3 Funding: Measure Q Funds Phasing: Phasing 1 - 1D Year: 2016 O/R: Dir. - Fac. Planning & Management					


<b>Detectable Warning</b>							
236		<ul style="list-style-type: none"> <li><i>As-Built Description:</i> 36" wide band of truncated domes not provided at walkway or crossing adjoining a vehicular way, if surfaces are not separated by a curb, railing, or other element.</li> <li><i>Proposed Solution:</i> Provide 36" wide, contrasting color, band of truncated domes between pedestrian and vehicular area.</li> </ul>	PCODE EG09 ADAAG 4.29.5 CSAS 1133B.8.5	18	LF	\$27	\$486
		Priority 1 Severity 3 Funding: Measure Q Funds Phasing: Phasing 1 - 1D Year: 2016 O/R: Dir. - Fac. Planning & Management					


<b>Walk</b>							
238		<ul style="list-style-type: none"> <li><i>As-Built Description:</i> Walk: Slope greater than 1:20 (5.0%), and walk does not comply with requirements for ramps.</li> <li><i>As-Built:</i> 6.7% along joint</li> <li><i>Proposed Solution:</i> Modify walk/sidewalk slope to 1:20 or less.</li> </ul>	PCODE EF01REF ADAAG 4.3.7 CSAS 1133B.7.3 ADA 2010 403.3	REF			
		Priority 1 Severity 4 Funding: Measure Q Funds Phasing: Phasing 1 - 1D Year: 2016 O/R: Dir. - Fac. Planning & Management					

**12 4 Accessible Spaces at SW of Lot E**

Item No.	Name, Rm. #	Existing Architectural Barrier and Proposed Solution	Codes / Mitigation Info	Qty	Unit	Cost	Total
<b>Detectable Warning</b>							
244		<ul style="list-style-type: none"> <li><i>As-Built Description:</i> 36" wide band of truncated domes not provided at walkway or crossing adjoining a vehicular way, if surfaces are not separated by a curb, railing, or other element.</li> <li><i>Proposed Solution:</i> Provide 36" wide, contrasting color, band of truncated domes between pedestrian and vehicular area.</li> </ul>	PCODE EG09 ADAAG 4.29.5 CSAS 1133B.8.5	10	LF	\$27	\$270
		Priority 1 Severity 3 Funding: Measure Q Funds Phasing: Phasing 3 - 3A Year: 2021 O/R: Dir. - Fac. Planning & Management					

<b>Parking</b>							
240		<ul style="list-style-type: none"> <li><i>As-Built Description:</i> No van parking provided (one in every 6 or fraction of 6 accessible spaces, but not less than one).</li> <li><i>As-Built:</i> 5' access aisle</li> <li><i>Proposed Solution:</i> Remove or relocate accessible spaces. Remove van-accessible parking signs.</li> </ul>	PCODE EA07 ADAAG 4.1.2(5)(b) CSAS 1129B.3.2 ADA 2010 208.2; 502.1	1	JOB	\$350	\$350
		Priority 1 Severity 2 Funding: Measure Q Funds Phasing: Phasing 3 - 3A Year: 2021 O/R: Dir. - Fac. Planning & Management					

241		<ul style="list-style-type: none"> <li><i>As-Built Description:</i> The words "NO PARKING" not painted on the ground within loading and unloading access aisle (12" min high white letters), located so that it is visible to traffic enforcement officials (required in CA only).</li> <li><i>Proposed Solution:</i> Provide the words "NO PARKING" in each access aisle, painted in 12" high letters, when altering area.</li> </ul>	PCODE EA04D CSAS 1129B.3.1	3	JOB	\$100	\$300
		Priority 5 Severity 4 Funding: Measure Q Funds Phasing: Phasing 3 - 3A Year: 2021 O/R: Dir. - Fac. Planning & Management					

242		<ul style="list-style-type: none"> <li><i>As-Built Description:</i> Parking sign is not located between 60" and 80" above the finish floor or ground surface measured to the bottom of the sign.</li> <li><i>As-Built:</i> 37" AFG</li> <li><i>Proposed Solution:</i> Remount existing sign at accessible height.</li> </ul>	PCODE EA04H ADAAG 4.6.4 CSAS 1129B.4 ADA 2010 502.7	4	JOB	\$45	\$180
		Priority 1 Severity 2 Funding: General Funds Year: 2015 O/R: Dir. - Maintenance					



# Process and Timing:

## Facilities Planning Process

- ▶ RFP to the facilities planning community (Architects & Educational Planners)
- ▶ Alignment with external and internal community
- ▶ Principles of Design

## Approvals Process

- ▶ Facilities Education & Master Plan is vetted and approved
- ▶ Standards are vetted and approved
- ▶ Spending and Implementation Plan is vetted and approved

## Project Development Process

- ▶ Faculty “Champions” identified for each project
- ▶ Architect and Engineers are hired
- ▶ Project Delivery Methodology approved

# First Steps:

## Request for Qualifications and Proposals (RFQ/P) for Facilities Planning - DRAFT

- ▶ Week of August 31: RFQ/P distribution;
- ▶ Friday, September 25: Statement of Qualifications and Proposal (SOQ/P) received (the SOQ/P will include a response and approach to the four areas outlined earlier in this presentation);
- ▶ Week of September 28: SOQ/P review and scoring by selection committee;
- ▶ Week of October 5: Interview facilities planning teams and make selection;
- ▶ October 13: Board approval

# Opportunities for Participation and Collaboration:

In order to accelerate the process, sub-committees may be formed to provide feedback to the 2030 committee:

- ▶ Information Technology - Input on instructional equipment and classroom technology
- ▶ Sustainability - Develop the guiding principles for the use of energy, water, transportation and other sustainability initiatives
- ▶ **ADA Transition Plan** - Identify and provide mitigation measures to correct access issues
- ▶ **FFE** (Fixture, Fittings and Equipment) Committee - Develop a program level plan to guide the College in the selection of Furniture, insuring that comfort and quality are met and that the furniture is functional for many years
- ▶ **Architectural Standards** - Develop guiding principles for design, materials and aesthetics, and encourage the development of a site plan that is based on organizing principles rather than on “likes and dislikes”
- ▶ **Signage and Graphics** - Develop the wayfinding and signage plan for all sites
- ▶ Maintenance and Operations Standards - Facilities





Questions?