



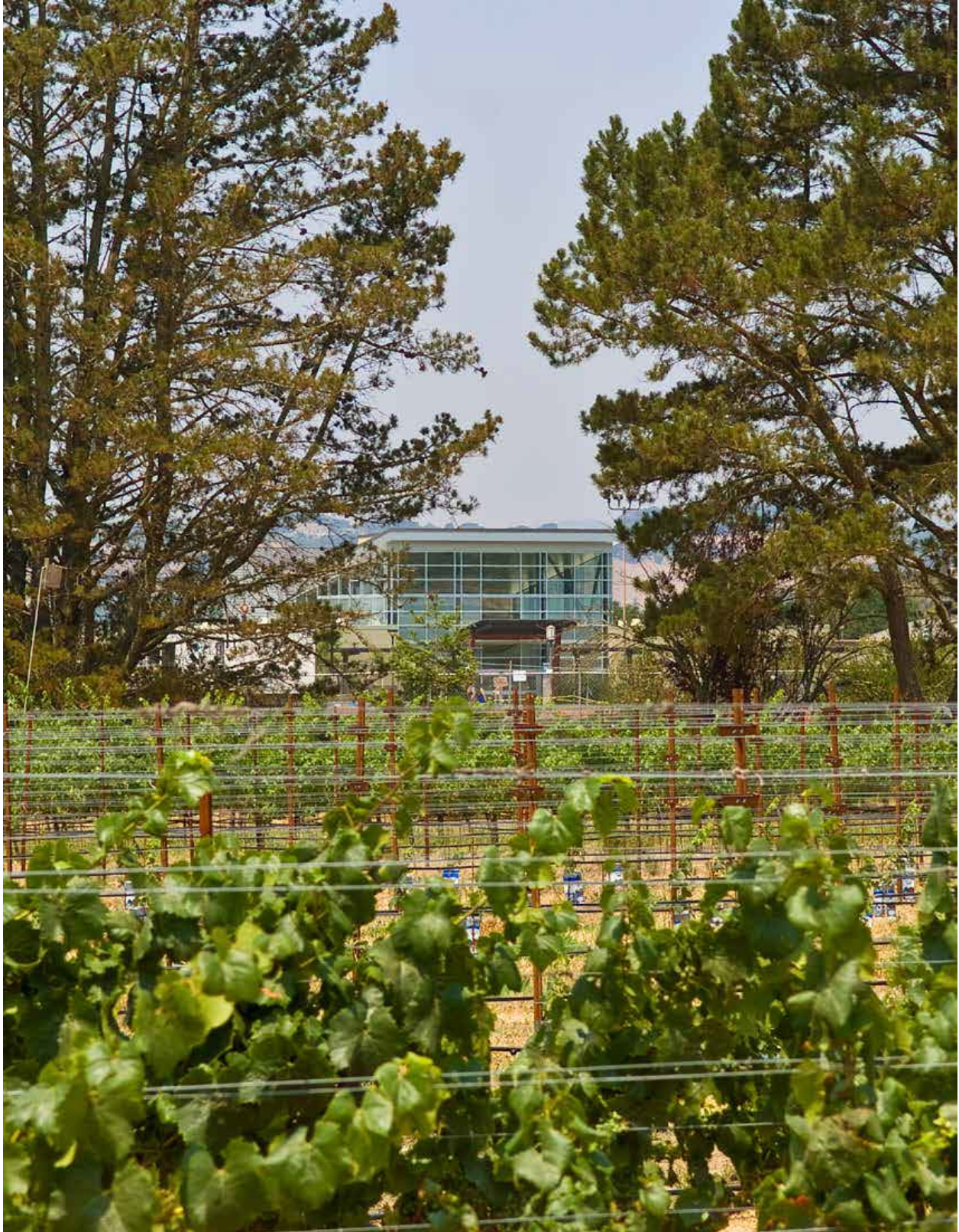
# Napa Valley College Facilities Master Plan

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*2016/17*

Approved 3/9/17





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## **Facilities Master Plan History**

In December of 2003 Napa Valley College completed its first comprehensive Facilities Master Plan since the initial construction of the central buildings in the 1960's. The master plan has been subsequently updated in two increments in 2004 and 2009 to reflect the changing campus conditions and needs. In 2014 an update draft was begun but not finalized.

## **Facilities Master Plan Objectives**

The 2017 Facilities Master Plan for Napa Valley Community College District has been developed to provide guidance for future development activities.

This plan is driven by and supports the District's Educational Master Plan.

It provides an overview of the strategies to address program needs, support enrollment projections, and position the District to maximize funding opportunities. As such, the Facilities Master Plan is not meant to be a static plan but rather a guide that can be updated as necessary.

The Facilities Master Plan will serve as the long-range planning tool for the buildings and infrastructure of the district. This plan builds on past Facilities Master Plans and the 2015 Educational Master Plan and reflects the changes in district demographics, campus growth needs, and evolving educational programs. Campus standards and other guidelines developed in Facilities Master Plan Volumes III and IV (2009) remain intact as appropriate and are available on the website. The basic form and plan of the campus buildings and site remain essentially the same. The goal of this plan is to enhance prior planning efforts to include new and emerging projects and incorporate revisions and new data in the Educational Master Plan.

## **Educational Master Plan**

The Educational Master Plan is the guiding document for all of the District's activities. A flow chart of the Napa Valley College Multi-Year Integrated Planning System is available on the District's web site at:

<http://www.napavalley.edu/AboutNVC/Planning/instplanning/Pages/AnnualPlanning.aspx>

The Educational Master Plan may be found at:

<http://www.napavalley.edu/President/emp/Pages/default.aspx>

The Facilities Master Plan is designed to support and implement the Educational Master Plan.



The Educational Master Plan highlights specific facilities-related items and provides direction

for others. Specifically included are:

- Creation of larger format classrooms
- Constructing additional lab space for the Physical Science programs
- Update and improve technology in classroom space

General direction is indicated for:

- Develop flexible classroom spaces to host a variety of instructional modalities
- Providing permanent space for instruction currently located in portable facilities
- Provide space that will allow for growth of programs and services that support student success and retention

A faculty survey, conducted during the spring semester 2016, found support for larger flexible classroom spaces with an equal number of responses for traditional student desks and moveable tables and chairs. Nearly all responses indicated a need for additional technology in the classrooms as well as the need for small group work that is not possible in many of our current classroom configurations. Half of the responses indicated a need for additional dedicated storage in the classrooms.

## **Guiding Principles**

When looking forward and planning capital improvements, it is critical to have a strong sense of direction, which is supplied by the Educational Master Plan, plus a foundation of principles that will provide guidance for any major projects. The following are the planning principles embraced by the District for any future improvements:

### **Support and Reinforce the District's Educational Master Plan and Strategic Initiatives**

Plan and manage spaces and places to promote the District's mission and values and assist in meeting the District's strategic initiatives.

<http://www.napavalley.edu/AboutNVC/Planning/Pages/default.aspx>

### **Teaching and Learning Spaces**

Design and construct spaces that enhance the teaching and learning process.

### **Treat Space as a Valuable Asset**

Manage the undeveloped land and developed space to maximize its effectiveness in supporting the mission, values, and strategic initiatives of the college.

### **Respond to Accessibility Needs**

Provide access to persons with disabilities, with a goal of universal accessibility.

**Facilities and Grounds Stewardship**

Preserve the quality and utility of the existing facilities for sustainable use in the future.

**Safety of All Users**

Provide safe access to and through the campuses and use the principles of Crime Prevention Through Environmental Design.

**Planning and Design Integrity**

Establish and implement use and fixture standards for buildings, classrooms, laboratories, support spaces, and grounds that support the instructional mission of the college, promote collaboration, minimize total cost of ownership, and provide an attractive environment for students, faculty, and staff.

**Sustainability**

Embrace suitable strategies in promoting sustainable sites, water and energy efficiency, renewable energy production, both indoor and atmospheric air quality, and waste and recycling management.

**Respect Natural and Architectural Heritage**

Design facilities and grounds to respect the natural ecology and to respect the scale, materials, and textures of the existing architecture.

**Pedestrian Dominance**

Maintain pedestrian-dominant spaces while recognizing and accommodating the need for bicycles and vehicles.

**Strong Sense of Place**

Create meaningful campus environments and memorable places for all members of the community.

**Diversity with Unity**

Create and maintain campus settings that bring together the diversity of peoples, heritages, and cultures.

**Promote Recruitment and Retention**

Emphasize the qualities of the learning and working environments that help attract and retain students, faculty and staff.

**Allow for Prudent Expansion of Campus Functions**

Provide for facilities expansion in ways that respect neighbors and effectively utilize land resources while conserving and protecting natural resources.

**Transportation and Vehicle Circulation**

Maintain a safe, functional, and aesthetically compatible system of transportation, vehicle circulation, and parking.

## **History/Development of Campuses**

### **Napa Main Campus**

Napa Valley College was established in 1942 in Napa and shared space with the Napa School District. The college moved to its current location in 1964 after construction of the primary buildings (Bldgs. 900, 1100, 1300, 1400, 1500, 1600, and 1800) on property originally owned by the State as part of the Napa State Hospital property. Five original State Hospital structures remain on the property and are in use today (3700, Ag Lab, and Facilities shops). Additional buildings were added in 1969 (3100), 1970 (1200), 1975 (600), 1980 (800, 1000, and 4000) and in 1993 (3000).

In addition to those buildings, several portable and modular buildings have been used to house various programs and classrooms over the intervening years.

The single most important factor in the evolution of the campus since original construction was the passage of Measure N in November 2002. This \$133.8 million general obligation bond, coupled with \$38 million in state funding allowed for the addition of over 130,000 square feet of new facilities to the campus including a new Library and Learning Resource Center (Bldg. 1700), Life Sciences Building (Bldg. 2000), Performing Arts Center (Bldg.100), Central Utilities Plant (Bldg. 4090) and North Gymnasium (Bldg. 400). Major infrastructure improvements, renewable energy projects, and modernization projects were also completed.

All of this construction increased the built environment of the Napa campus from 336,763 square feet in 2002 to 491,120 square feet today. This is more than a 43% increase in building area.

### **St. Helena Upper Valley Campus**

The Upper Valley Campus was constructed in its current location of approximately 6 acres in 1994 using state funding to replace deteriorated trailers that once held the instruction programs. The facility is composed of two primary instructional buildings of approximately 18,900 square feet and houses the Culinary Arts Program. As part of the Measure N implementation, the kitchen and library spaces were expanded in 2006.

### **American Canyon**

As part of the Measure N implementation, the District entered into a long-term agreement with Napa Valley Unified School District for three classrooms and office space in the Administration Building at the American Canyon High School. This provides opportunities for instruction in the south county.

## **Mt. Veeder and Dale Peters Clyde Preserve**

The college was given title to approximately 160 acres of property in 1980 from the Nature Conservancy. Located in the western hills of Napa County near Mount Veeder, the property known as Bumpy Camp, includes a small house and out buildings.

Dale Peters Clyde Preserve is a 40 acre parcel given to the college by the Napa Land Trust. There are no improvements on this property located in the same area as Bumpy Camp.

### **Land Use**

The main campus is on approximately 141 acres. Of this, approximately 95 acres are considered developed and are building sites, vineyard, athletic fields, pavement or maintained landscape.



Napa campus looking North (2012)



## **Buildings**

### **Conditions**

The California Community College Chancellor's Office performs a building condition assessment every three years. This assessment identifies the current replacement value and the cost to perform needed repairs. From these two values, a facility condition index (FCI) is calculated by dividing the repair cost by the replacement cost. The FCI is an industry standard calculation.

The FCI is a valuable indicator of the deferred maintenance needs of a building, campus, or District. Typically, once the FCI reaches a level of 0.30, the users of the facility begin to notice disrepair, and unintended maintenance items begin to affect other systems; i.e. a roof leak may cause damage to finishes or structure. Once the FCI reaches about 0.50, it becomes more cost effective to demolish and rebuild or to do a full-scale remodel of the structure.

The current District-wide replacement value is \$285,127,855, and the deferred maintenance costs are estimated at \$56,892,276, producing an FCI of 0.20. In this case, the broad District-wide value is skewed due to the new buildings constructed in recent years with local bond funds. The newer buildings have FCIs at or near zero, while the older buildings have FCIs much higher. For example, the Physical Sciences Building (Bldg. 1800) is one of the older buildings and has an FCI of 0.70. Additional FCI information is on page 24.

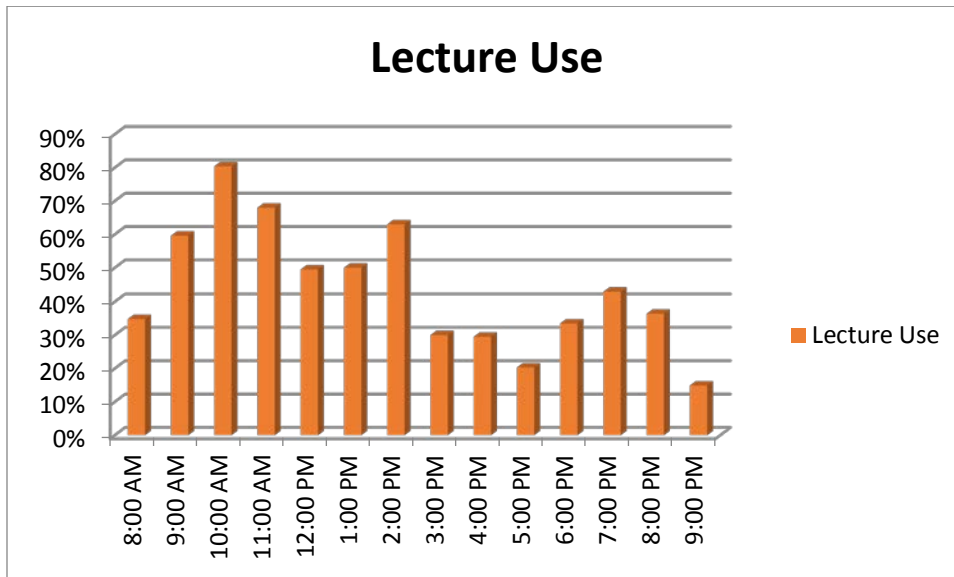
Of primary concern with respect to building condition is the ability of Facilities Services Department to maintain them. The District building square footage increased from 355,000 SF in 2002 to 510,000 SF today. During that same period, the maintenance staff has not increased. The square feet per maintenance FTE has gone from 74,700 to 102,000, a 26% increase. The buildings have become more complex, requiring a higher level of training and knowledge from the maintenance staff. As square footage increases and buildings become more technologically integrated, special attention should be given to ensure facilities can be maintained at an acceptable level.

### **Utilization**

One metric for measuring space utilization looks at classroom scheduling and serves as an indicator of the intensity of utilization. Because of variances in reporting, the data is not precise but can give broad indications of the space utilization.

Classroom use at Napa Valley College has been examined using two methods – the number of hours scheduled compared to the possible hours and, when the room is scheduled, how many students are using the room compared to room capacity. For the fall 2015 semester, the main campus classrooms were used approximately 45% of the available time, and when they are used, the average loading is 73% of the room capacity. These numbers indicate that there is significant availability of classrooms at various times of the day, however, when used, the rooms are used efficiently. Time of section offerings, classroom type, classroom size, and faculty

availability all play a role in classroom utilization. The chart below illustrates the percentage of general classrooms used by time of day, Monday through Thursday 8:00 am to 10:00 pm.



## Outdoor Athletic Facilities

The athletic fields are in various conditions. Restroom facilities were added in 2003 and new dugouts, batting cages, and storage facilities were built in 2009 for baseball and softball fields but overall the turf grass and irrigation systems are in need of major replacement, renovations and modifications. The athletic fields are located in the lowest area of the campus and are subject to flooding from the campus and state hospital watersheds. Some drainage systems have been added over time to increase the playability after a rain event for baseball and softball, but seasonal sports beginning in January are heavily affected during normal and above normal rain events.

The soccer field is subject to damage during winter play and is difficult to maintain collegiate level turf during the season due to practice and play on the same field.

The track is used for physical education courses, the Criminal Justice Training Program, and various community groups. Its surface consists of blending fines, gravel, and cinder mix and is subject to flooding in the winter. The turf area inside the track (formerly the football field) has been used for youth practices, games, and community events such as Relay for Life. The turf condition is poor as is the irrigation system. The current field is crowned in the middle and is not suited for collegiate level soccer.

The tennis courts, constructed in 2006, are in good overall condition but are due for resurfacing in 2017. LED retrofit lighting was added in 2013 funded by Prop 39.



Baseball field following rain storm (2015)

## **Landscape/Grounds**

The campus landscapes are very diverse in design as well as age and maturity. Significant portions of the design and planting material around the central buildings date to the original construction in the 1960's. New landscaping was added in various locations throughout the 2000's primarily adjacent to new construction and reconfigured parking or paths of travel. Much of the newer landscape was overplanted to increase the visual impact but has made routine maintenance challenging.

## **Utility Infrastructure**

### **Natural Gas**

Pacific Gas and Electric provides and maintains the primary natural gas supply to the campuses including the main meters. Smaller meters serve the south end of campus. Due to the centralized heating system, not all buildings have or need a natural gas supply. The pipes are a combination of black iron and poly material. The distribution on campus is medium pressure.

### **Domestic Water**

The potable water for the main campus is provided by the City of Napa through 4 meters at 3 locations. The primary main is an 8 inch pipe from the east side of campus from the City's 24 inch main. All piping after the meters is maintained by the college. The water main system loops around the original buildings and branches out to service additional areas outside the

central core. The water piping is primarily transite pipe installed between 1963 and 1980 ranging from 8 inch to 4 inch diameters.

Transite pipe is subject to cracking due to earth movement or external force such as tree roots. Although main piping appears to be intact, the age of the pipe is concerning. Exterior domestic water pipe installed since 1980 has been PVC pipe.

### **Recycled/Reclaimed Water**

With the expansion and development of the recycled water program by Napa Sanitation district, the college began shifting landscape irrigation from domestic to recycled water in 2006.

### **Sanitary Sewer**

The sanitary sewer piping on the main campus is comprised of a transite piping network flowing westward to the main pipeline maintained by the Napa Sanitation District. All piping on campus is maintained by the college. The transite pipe is of the same vintage as the domestic water pipe and is of similar size and is subject to the same risk factors. Tree root intrusion is a greater risk, however, due to pipe location, oxygen, and nutrients.

### **Storm Water**

Nearly all of the storm water piping on campus is transite pipe and flows westerly to the Napa River. All landscape, hardscape, and roof system network through the sediment pond and pass through the pond system at the adjacent golf course, through the flap gates at the Napa River. This piping is also subject to risk factors of ground movement and root intrusion. Tree roots have resulted in numerous obstructions, pipe rerouting, and temporary flooding while pipe replacement is needed. The current storm water system is unfiltered free flow to the sediment pond. Proposed regulatory changes would require extensive filtering, testing, and modifications to the campus system before water could be released. The main campus is also along the storm water path of travel for the areas of the Napa State Hospital and as such have additional mitigating concerns.

### **Electricity**

The primary switch gear for the campuses PG&E electric system was replaced 2005 in anticipation of the solar field installation and startup in 2006. The power system for the main campus is 12kV with a series of 20 transformers located throughout campus to reduce 12kV to 480 V at the building level. The transformers are tested annually as a preventative maintenance plan but are of various ages and conditions. Several smaller electrical services and meters are located on the southern end of the campus.

The 1.18 MW photovoltaic system came online in May 2006. The solar field provides approximately 1/3 of the electricity used by the main campus. Maintenance costs have increased as the inverters and panels have aged and the system passes the 10 year mark.



## Pedestrian Circulation

The Pedestrian Mall links buildings on both levels of the two-tier campus. While building accessibility has been greatly improved in recent years, there remain deficiencies that need to be addressed for ADA accessibility throughout the campus. The Pedestrian Mall forms the major north-south spine to the campus, around which the original campus buildings are organized. The mall, which originally extended from the Gymnasium (Building 600) to the Administration Building (Bldg. 1500), was extended to connect the Performing Arts Center (Bldg. 100) and the LLRC (Bldg. 1700) on either end of the existing mall. There are also east-west components of the mall that extends to the main parking lot at the east, and parking and athletic facilities to the west.

The primary mall section is comprised of concrete and asphalt walkways interspersed with trees in concrete planter boxes. The walkways are lined with pole lights dated back to original construction in 1964. Although retrofitted in 2013 with LED lamps as a Prop 39 project, the poles, lens, and fixtures are past their useful life.

The zelkova trees planted in 1965 in concrete raised planter boxes are at the end of their life expectancy. Root damage over the years has cracked the planters and created uneven walking surfaces in multiple locations.



Pedestrian mall looking south from Gymnasium (2015)

## **Vehicle Circulation**

The Napa campus is accessible by vehicle at either the Streblov Ave. intersection or at the Magnolia Dr. entrance off of highway 221. Significant improvements were made during implementation of Measure N. Diemer Dr. realignment included removal of the hook ramp, the addition of a traffic circle at the north near the Magnolia Dr. entrance, and directional signage.

The relocation of the bus stop from near the flag poles to Diemer Dr. removed city bus traffic from the parking lots while providing a more visible presence for public transportation. Challenges still exist as there are only two points of ingress and egress. Traffic congestion is backed up into the campus roadways and is easily impacted by commute traffic on highway 221 further delaying quick exit of the campus.

## **Recommendations:**

### **Additional Space Needs**

#### **Building 200**

There is a recognized need for large format classrooms as well as flexible instructional space that can serve the needs of various programs and disciplines. A new classroom building located on the north end of campus would eliminate the reliance on the modular classrooms and allow for increasing classroom size in modernization projects in the 1400 and 1600 buildings.

This building would also house the student activity center, student life offices, bookstore, and a food service component allowing for reconfiguration of the Student Services areas in the 900 and 1100 buildings. Building 200 is also a possible location for a student success center.

#### **Building 2200**

Building 2200 would be located in the modular building footprint adjacent to building 2000 and would contain new physical science lab spaces (chemistry, physics, engineering, geology, and astronomy), lecture space, and faculty offices.

## Building 900 and 1100 Infill and Reconfiguration

There is a recognized need for increased space for Student Affairs. Recent changes in funding sources, increased required service levels, and mandated counseling services, have all increased need for dedicated space. Relocation of bookstore to building 200 with student life activities allows for a reconfiguration of the building 900. Added square footage in the Quad area between 1100 and 900 would also allow additional student services space and consolidation of services.

## Ag Lab and Viticulture Lab

Additional lab space for the viticulture program is needed and the Ag Lab classroom building needs to be replaced. A lab similar to 3200 A would meet the lab need and serve a classroom space while the Ag Lab project was being completed in its current footprint.

## Classrooms-Buildings 800,1200,1400,1600 & 1800

Five buildings are slated for major classroom modernization. Some of the building spaces will require repurposing as new construction occurs. Minor modernization will refresh instructional technology and finishes while major modernization projects will be full renovations of classrooms, often involving reconfiguration of room size and function. Buildings 800 and 1200 will have major HVAC upgrades for energy efficiency as well as user comfort. Once the 2200 building is completed, building 1800 could be converted to traditional instruction space.

## Industrial Technology-Building 3100

The Industrial Technology Building houses Welding and Machine Tool programs that are actively supporting the vocational education needs of the agricultural and winery industries of the Napa Valley region. Bringing this facility up to modern teaching capabilities is key to supporting the mission of the college.

Built in 1968, this 10,000 SF vocational education building has serious deficiencies in access and infrastructure and has not been substantially updated since its original construction. The building currently has numerous accessibility problems in both restroom and instructional spaces. Restroom facilities are currently male only. The project will modernize the building; providing men's and women's restrooms, improved path of travel and major rehabilitation to building infrastructure including technology, lighting, power and HVAC systems and compliance with current codes and safety practices.

Recent stakeholder meetings have indicated that current labs are not large enough to accommodate existing shop classes.

## Building 3700 Phase II

Building 3700 was partially renovated as part of Measure N. A second phase is planned to complete the reconfiguration of spaces on the first floor, specifically photo labs and computer lab spaces.

## Physical Education Lower Level Modernization-Building 600

Renovations for Building 600 were broadly identified in previous master plan documents. The following specific needs were identified in 2014 meetings with stakeholders. The upper floor, Main Gymnasium, was renovated in 2004 and is complete except for some building-wide HVAC improvements.

### **Modernization Scope**

- Repurpose the four unused racquetball courts, possibly add second floor.
- Reduce size of locker and equipment rooms.
- Dance / Exercise rooms need permanent sound wall separation.
- General buildings need deferred HVAC improvements to upper level and general HVAC, plumbing, electrical, lighting, and finishes throughout building.

## Child Development Center Buildings A, B, C, & D

The Child Development Center classroom environments need modernization with minor reconfigurations. A large part of the Center is made up of the exterior playgrounds and landscape. Tree and plant maturity has impacted hardscapes and learning spaces as well as increased the maintenance burden. Exterior reconfiguration of landscapes and playgrounds is needed.

## North Campus Access & Circulation

The project includes a new vehicular and pedestrian connection from the existing Magnolia Drive traffic circle to Imola Avenue to the north. The master plan goal is to create a north public entrance to the campus. The connection point to Imola Avenue will occur at one of two potential intersections; the westernmost option at Gasser Drive or the easternmost option at South Napa Marketplace. The route may also be influenced by potential development on the college-owned parcel at the corner of Imola Avenue and Highway 221. Further study and discussions with the City of Napa will be required to determine the preferred route for the new connection. Additionally, as part of the City of Napa's Kennedy Park Master Plan a through road on the campus's West boundary is necessary for anticipated traffic flow increases in the park. The new circulation route is assumed to include a two-lane paved roadway, new sidewalk, bicycle pathway, and lighting.



## Pedestrian Mall & Pathways Upgrades

The scope of the project includes re-paving the major concrete and asphalt walkways, replacement of the existing concrete raised planters, new trees, drought tolerant planting, efficient irrigation and energy efficient lighting. The upgrades may be performed incrementally in conjunction with building modernization projects, or could be performed as a stand-alone project.

## Transit Mall Covered Walkway

This project will provide a new covered pedestrian walkway connecting the existing bus stop on Diemer Dr. to the main campus, providing accessible, safe passage through the parking lots; it will be roofed with photovoltaic panels to provide solar generated electricity for electricity for electric vehicle charging. Pedestrian pathway lighting will be upgraded to high efficiency fixtures.

## Athletic Field Upgrades

There are long acknowledged challenges with extended wet weather non-usability of fields and need for an all-weather track. Future work on the soccer, softball, running track and baseball fields would have to include new irrigation, drainage, and playing surfaces, either natural or synthetic.

Because of the challenges due to field location and existing conditions, the District has been involved with the City of Napa's master planning process for Kennedy Park. There are joint use opportunities in the park master plan that could provide solutions. Baseball, softball, and soccer programs could use facilities in the park once developed.

## Seismic & Structural Upgrades of Concrete Trellis Portals

There are three freestanding concrete structures (portals) located on the campus that serves as symbolic entrances to specific outdoor spaces. One portal is located in the Pedestrian Mall at the east entrance to the Glade, and the other two structures are located at the south and west entrances to the courtyard bounded by Buildings 900 and 1100. A structural/seismic evaluation study of the existing campus structures was completed by a structural engineer firm and with the current building code structural requirements, they pose potential risk in the occurrence of a major earthquake. Removal of two of the structures is likely during construction of the infill building at the Quad. The larger structure on the mall will need to be modified to meet current standards.



## Site and Utility Upgrades

A series of utility and site projects are required to support the overall campus infrastructure:

- Expand solar panel installation
- Potable Water System: Extension of 4" line along Roy Patrick Drive
- Sanitary Sewer System: Upsizing of sewer systems along Roy Patrick Drive and across fields
  - Replace of pipe in locations impacted by trees.
- Storm Water system: Significant pipe replacement along with catch basin modifications through parking lots and at egress points from campus.
- Hot and Chilled Water Systems (Hydronics): Connection of buildings to be modernized
- Site lighting upgrades; Parking Lots B, G, I and main Pedestrian Mall as well as exterior emergency communication upgrades.
- Parking Lot Upgrades & Potential Expanded Parking: Parking Lot G, south of the Green and west of the McCarthy Library. Parking Lot I, west of Bldg. 1200 needs new base and paving, additional planters with trees and drought tolerant landscaping, and new energy efficient lighting. Include solar expansion into parking lots.
- Upgrades to institutional network and data systems will provide support for Instructional Technology environments throughout the campus.

### **Outdoor Education Labs**

The Outdoor Education Labs project will provide outdoor educational spaces and will include an interpretive trail along the college's restored riparian corridor and pond, both elements of the historic Tulucay Creek. The project will provide outdoor lab space for Life Sciences, Environmental Science, Hydrology/ Engineering, and Geology. It is planned that this project will include access to the nearby Napa River, including the floodplain and seasonal wetlands, for expanded educational opportunities.

### **Environmental Education Center at Mt. Veeder**

A new Environmental Education Center located on College property in the Mt. Veeder area could provide lab, classroom and support space for various science and agriculture classes that would take advantage of the natural and agricultural settings the property offers. Lack of physical infrastructure has limited the College's ability to fully utilize the property.




- EXISTING BUILDINGS
- PROPOSED MODERNIZATION PROJECTS
- PROPOSED NEW BUILDINGS

  
**NAPA VALLEY COLLEGE**  
 FACILITIES MASTER PLAN  
 UPDATE 2018  
WITH THE  
 





-  PEDESTRIAN MALL UPGRADES & CAMPUS PATHWAYS
-  STRUCTURAL UPGRADE TO TRELLIS PORTALS
-  TRANSIT MALL COVERED WALKWAY
-  PEDESTRIAN & VEHICULAR CONNECTION TO IMOLA AVE
-  FIBER OPTIC AND UTILITY EXTENSION
-  NORTHBOUND BUS PULLOUT

**SITE & INFRASTRUCTURE PROJECTS**

- Athletic Field Upgrades
- Water, Sewer & Storm Drain Extensions
- Hydronic Connections To Central Plant
- Site Lighting Upgrades
- Parking Lot Upgrades
- Electric Car Charging Stations
- Energy & Mechanical Systems Maintenance & Upgrades

  
**NAPA VALLEY COLLEGE**  
 SITE & INFRASTRUCTURE  
 PROJECT 2016  
MARCH, 2016  
 

## Roof Matrix for Repairs and Replacement Scheduling

Building	Building Description	age	schedule Yr	cost factor	Size	estimate
600	GYMNASIUM, PHYSICAL EDUCATION	26	2017	18.00	12,800	\$230,400.00
600	GYMNASIUM, PHYSICAL EDUCATION	26	2017	18.00	16,375	\$294,750.00
1200	TELECOMMUNICATIONS, THEATRE, MUSIC	18	2018	18.00	15300	\$275,400.00
3000	CHILD AND FAMILY CENTER	29	2018	18.00	3600	\$64,800.00
3000	CHILD AND FAMILY CENTER	29	2018	18.00	4000	\$72,000.00
3000	CHILD AND FAMILY CENTER	29	2018	18.00	3800	\$68,400.00
3200	VITICULTURE/ WINERY TECHNOLOGY	26	2018	6.50	560	\$3,640.00
1800	SCIENCES, MESA	33	2019	18.50	18000	\$333,000.00
600	POOL HOUSE	33	2019	18.00	1900	\$34,200.00
3100	MACHINE TOOL & WELDING TECHNOLOGY	30	2020	18.00	13000	\$234,000.00
UVC	MAIN CAMPUS BUILDING	22	2020	24.00	17663	\$423,912.00
UVC	Culinary Building	22	2020	24.00	4914	\$117,936.00
4000	MAINTENANCE BUILDING	38	2020	8.00	6580	\$52,640.00
3950	MAC LAB	12	2021	2.00	1200	\$2,400.00
3300	SBDC	18	2021	18.00	2850	\$51,300.00
600	GYMNASIUM, PHYSICAL EDUCATION, MECHANICAL	41	2021	18.00	5537	\$99,666.00
3000	CHILD AND FAMILY CENTER	29	2022	8.00	1900	\$15,200.00
4100	Facilities Services	18	2022	8.50	3450	\$29,325.00
3900	Drafting	23	2022	8.00	3850	\$30,800.00
3200	Trefethen Viticulture Center	26	2024	8.00	1171	\$9,368.00
2000	Life Sciences	9	2024	18.00	9000	\$162,000.00
3200	VITICULTURE/ WINERY TECHNOLOGY	48	2025	18.00	1784	\$32,112.00
4000	OLD WAREHOUSE	43	2025	18.00	1800	\$32,400.00
1100	STUDENT SERVICES	9	2025	9.00	5832	\$52,488.00
1300	ADMISSIONS/ REGISTRATION, COUNSELING	6	2025	9.50	17534	\$166,573.00
3700	ART, PHOTOGRAPHY TECHNOLOGY	19	2025	7.00	6500	\$45,500.00
900	STUDENT CENTER	10	2025	8.00	23000	\$184,000.00
2000	Life Sciences	9	2025	21.00	8999	\$188,979.00
1500	Administration	6	2026	9.00	24367	\$219,303.00
4000	WAREHOUSE, MAINTENANCE OFFICE	18	2026	8.00	11600	\$92,800.00
400	North Gym	7	2026	18.00	2500	\$45,000.00
400	North Gym	6	2026	18.00	7600	\$136,800.00
3200	Wine Storage	8	2027	3.00	2425	\$7,275.00
4000	FURNITURE WAREHOUSE	10	2027	8.00	3500	\$28,000.00
4000	PAINT WAREHOUSE	10	2027	8.00	1500	\$12,000.00
4000	CARPENTER SHOP	19	2027	5.00	1517	\$7,585.00
1600	GENERAL CLASSROOMS	6	2027	18.00	11000	\$198,000.00
100	Performing Arts Center	6	2028	19.00	40100	\$761,900.00

4090	Chiller Plant	9	2028	9.00	700	\$6,300.00
1700	LLRC	6	2028	18.00	34875	\$627,750.00
3200	Teaching Winery	15	2028	8.00	5000	\$40,000.00
2	BALL FIELD RESTROOM	13	2029	18.00	640	\$11,520.00
800	HEOC/INSTRUCTION	2	2029	18.00	20500	\$369,000.00
1000	FACULTY OFFICES, ADMINISTRATION OF JUSTICE	2	2029	18.00	15350	\$276,300.00
4090	Chiller Plant	9	2030	8.00	2900	\$23,200.00
3500	CERAMICS	8	2030	8.00	4800	\$38,400.00
2250	Police/Health Center	10	2030	18.00	2700	\$48,600.00
100	Performing Arts Center	>1	2031	18.00	2300	\$41,400.00
1400	BUSINESS/ COMPUTER STUDIES	6	2031	18.00	9950	\$179,100.00

\$6,477,422.00

## Scheduled Maintenance Non-Roofing

Plan Year	Project	Age	Estimate
2017	Replace rainwater leaders and storm lines 1100 and 1400	55	\$100,000
2018	Replace HVAC in Bldg. 800 (1000A)-1st and 2nd Floor	36	\$125,000
2018	Replace HVAC in Bldg. 800 (1000A)-3rd Floor	36	\$75,000
2018	Replace carpet- Bldg. 600 (1100) gym offices- Lower Floor	22	\$33,000
2018	Replace HVAC in Bldg. 1000 (1000B)	36	\$200,000
2019	Replace shower partitions and plumbing Bldg. 600 (1100)- Lower Floor	28	\$486,000
2019	Replace HVAC in Bldg. 1200 (900)- Lower floor	40	\$296,000
2019	Replace HVAC in Bldg. 1200 (900)- Upper floor	40	\$296,000
2019	Insulation Abatement in bldg. 1200 (900)	45	\$393,000
2020	Renovate and Replace pedestrian walkway and lighting through Campus Center for trip and fall and ADA path of Travel	52	\$1,000,000
2020	Upgrade 3 exterior pergolas to meet seismic standards	50	\$500,000
2020	Replace elevator (upgrade to ADA) in bldg. 800	36	\$480,000
2020	Replace HVAC in Bldg. 1800 (700)- Lower floor	52	\$423,000
2020	Replace HVAC in Bldg. 1800 (700)- Upper floor	52	\$423,000
2020	Replace pneumatic reheats Bldg. 1300	52	\$150,000
2020	Extend reclaimed water to interior campus irrigation	NA	\$225,000
2021	Re-plaster swimming pool	12	\$130,000
2021	Replace pool lighting	22	\$50,000
2021	Replace HVAC in Bldg. 3200	18	\$65,000

\$5,450,000

## Facilities Condition Index Primary Buildings

Bldg. Name	Bldg. #	SQFT	YR BLT	Cost per SF	Repair Est	Replace Est	FCI
ADMIN OF JUSTICE	1000	14,676	1980	\$469.63	\$1,888,385	\$6,892,583	27.40%
ADMINISTRATION	1500	29,593	1966	\$541.99	\$500,000	\$16,038,222	3.12%
BUSINESS	1400	6,681	1965	\$550.30	\$2,195,341	\$3,676,621	59.71%
CAMPUS CENTER	900	16,508	1965	\$576.28	\$5,164,787	\$9,513,065	54.29%
CDC - ADMINISTRATION A	3000	2,922	1992	\$506.22	\$92,837	\$1,479,175	6.28%
CDC- INFANT/TODDLER B	3020	3,520	1992	\$506.22	\$78,919	\$1,781,894	4.43%
CDC- INFANT/TODDLER D	3040	1,650	1999	\$371.94	\$4,659	\$613,668	0.76%
CDC- PRESCHOOL C	3030	3,149	1992	\$506.22	\$70,601	\$1,594,087	4.43%
CERAMICS STUDIO	3500	3,786	2009	\$458.93	\$0	\$1,737,509	0.00%
CHILLER PLANT	4090	9,012	2007	\$3,189.95	\$0	\$28,747,649	0.00%
DIGITAL DESIGN GRAPHICS	3900	2,662	1968	\$347.87	\$400,000	\$926,003	43.20%
ECON WORKFORCE DEVELOP	3300	2,610	1998	\$347.87	\$25,092	\$907,915	2.76%
FACILITIES SERVICES	4100	3,195	1968	\$347.87	\$400,000	\$1,111,413	74.79%
FINANCIAL AID	1100	4,000	1965	\$545.19	\$1,244,609	\$2,180,800	57.07%
GENERAL CLASSROOMS	1600	6,681	1965	\$503.01	\$2,036,866	\$3,360,677	60.61%
GYMNASIUM COMPLEX	600	64,613	1976	\$629.25	\$10,000,000	\$40,657,730	50.02%
HEALTH OCCUPATIONS	800	43,964	1980	\$469.63	\$8,404,280	\$20,647,693	40.70%
INDUSTRIAL TECHNOLOGY	3100	10,000	1968	\$503.01	\$3,025,445	\$5,030,200	60.15%
LIFE SCIENCES	2000	13,805	2008	\$458.93	\$0	\$6,335,529	0.00%
LITTLE THEATER	1200	19,505	1971	\$526.97	\$5,566,668	\$10,278,160	54.16%
MAINTENANCE- WAREHOUS	4000	9,178	1977	\$276.46	\$1,004,288	\$2,537,166	39.58%
MCCARTHY LIBRARY	1700	61,637	2010	\$543.52	\$0	\$33,500,326	0.00%
NORTH GYM	400	19,409	2009	\$616.05	\$0	\$11,957,303	0.00%
PERFORMING ARTS CENTER	100	39,688	2010	\$543.78	\$0	\$21,581,541	0.00%
PHYSICAL SCIENCES	1800	27,886	1965	\$517.97	\$10,305,396	\$14,443,554	71.35%
STUDENT SERVICES	1300	15,159	1965	\$452.60	\$1,000,000	\$6,860,963	14.48%
VISUAL ARTS	3700	10,620	1946	\$503.01	\$1,850,650	\$5,342,072	34.64%



VWT- AGRICULTURE LAB	3220	1,452	1946	\$506.22	\$447,041	\$735,031	60.82%
VWT- VITICULTURE LAB 1	3200	2,193	1999	\$503.01	\$8,912	\$1,103,123	0.81%
VWT- WINE STORAGE	3230	2,194	2007	\$506.22	\$0	\$1,110,647	0.00%
VWT- WINERY BLDG	3210	3,220	2002	\$506.22	\$0	\$1,630,028	0.00%
UPPER VALLEY CAMPUS	A&B	18,916	1994	\$540.91	\$372,745	\$9,923,362	3.76%

\$56,892,276 \$285,127,855