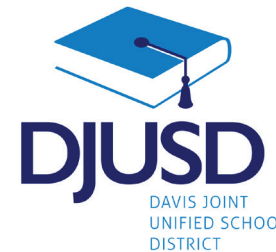




# DAVIS JOINT UNIFIED SCHOOL DISTRICT FACILITIES MASTER PLAN



## EDUCATIONAL PROGRAM VISION / GENERAL GUIDELINES **3.1** SECTION

classroom setting







## CULTURE

Ranked as a “Biker’s Paradise” by WalkScore.com, bicycles are ubiquitous in Davis’s community fabric, highly popular with school-age and college students alike. In fact, the United States Bicycling Hall of Fame relocated to Davis in 2010. Originally located in Somerville, NJ, Davis was selected as the Hall of Fame and Museum’s new home, thanks to Davis’ commitment to cycling and recognition as a “Platinum” Bicycle Friendly Community by the League of American Bicyclists. (source: [www.usbhof.org](http://www.usbhof.org))

Admission to the Bicycling Hall of Fame is free, that is, if you’re a member of the Davis Bike Club. The DBC originated in the early 1970s and earned its status as a non-profit organization in 1979. More than a cycling club, the DBC gives back to its community with monetary donations upwards of \$10,000 annually. (source: [davisbikeclub.org](http://davisbikeclub.org))

As a member of the Davis community, you may find yourself biking through such tree-lined streets such as those in the Village Homes neighborhood. “Village Homes is a seventy-acre subdivision located in the west part of Davis. It was designed to encourage both the development of a sense of community and the conservation of energy and natural resources.” (source: [villagehomesdavis.org](http://villagehomesdavis.org)) Embodying the spirit of the Davis, Village Homes was designed with community garden areas, optimized home orientation for passive solar design, traffic-calming measures that create friendly, tree-shaded lanes, edible landscaping, natural drainage, and an abundance of pedestrian / bike paths, common areas, and open space. These design elements are evident throughout all of Davis, as each school within the District is shared with the City’s Parks Department and connected through the extensive bike path network. According to an article published online by The Optimistic Futurist, Village Home’s suburban design cuts crime by 90%, energy by 70% and water by 33% ([www.theoptimisticfuturist.org](http://www.theoptimisticfuturist.org)).



Bike Parking at Willett Elementary School



Gardens in Village Homes

Obviously a very active and engaged community, Davis is powered by its roots in the local agriculture economy. While most communities host a single Farmer’s Market in a week, with breaks during the rainy winter months, the Farmer’s Market in Davis occurs twice weekly, and once all year-round. The Market is so popular, a large open-air structure was built to accommodate the Market year-round. Activating Central Park, the Davis Farmer’s Market has earned national acclaim, including being recognized as one of the best farmer’s markets in the country (source: [davisenterprise.com](http://davisenterprise.com)). If you miss the Farmer’s Market, sustainable, high-quality, and locally grown and produced foods can also be found at the Davis Food Co-op. Now a full-service grocery store, the Co-op “showcases natural, organic, and local foods, but strives to offer a full spectrum of groceries to serve (their) entire community” (source: [davisfood.coop](http://davisfood.coop)).



Davis Farmer’s Market

### What does this all mean for the Facilities Master Plan?

Davis is a highly active community, both physically and politically, which cares deeply for the wellbeing of its residents and the land they walk on. Design of the elements depicted in this document does not stop here. All future projects should be designed by a committee of school and community members, and retain high levels of sustainability and wellness values evident in the broader Davis community.

## SECTION 3.1



## EDUCATIONAL PROGRAM VISION GENERAL GUIDELINES





## SUSTAINABLE STRATEGIES

In an effort to provide healthy environments and act as a good steward of the environment, the District is interested in exploring numerous sustainable strategies to increase energy efficiency and lower energy usage, conserve natural resources, reduce environmental impacts, and reduce operating costs. In implementing these sustainable strategies, the District will create teachable moments for their students.

### Overall Strategies

- Consider pursuing CHPS Verified and/or LEED certification for new construction and/or at a minimum meet LEED best practices for modernization projects.

### Safe & Healthy Environments

- Specify materials, products and systems that are sustainable, durable and easy to maintain.
- Eliminate materials that may be harmful to the environment and/or occupants.
- Implement safety and security measures including improvements to pedestrian and vehicular circulation, replacing door hardware, addition of security systems (passive and active strategies), and reorganizing campuses to ensure the main point of campus entry is easily located and secure.
- Educate staff and administration on sustainable environments and practices, and create teachable topics for students of every grade level.
- Incorporate shade into open space design through the use of trees (preservation of existing and/or planting new), shade sails, extended building awnings, etc.



Renewable Energy via Photovoltaic Arrays



Native Plant Species

### Energy Efficiency / Reduce Operating & Maintenance Costs

- Life-cycle planning and decision making.
- Climate and environmental responsive design.
- Consider 'solar-ready' construction and install solar panels where possible.
- Utilize passive design strategies such as building orientation to maximize daylighting and natural ventilation.
- Incorporate window glazing to minimize heat gain.
- Balance natural daylighting with energy efficient LED fixtures and lighting controls.
- Regulate climate controls.
- Include drought tolerant and native gardens in landscape areas.
- Incentivize energy and cost saving for schools.
- Make use of grants and rebates.



Natural Shading at Patwin Elementary School

### Conserve Natural Resources & Reduce Environmental Impacts

- Maintain and preserve existing trees.
- Encourage use of recycled materials and the active recycling of materials on each site.
- Incorporate recycling systems into the design of spaces, for easy use.
- Reuse materials discarded from other sites, if possible.
- Consider pervious pavers and other alternatives to traditional hardscape.
- Install artificial turf and all-weather tracks.
- Specify low-flow fixtures for water and cost savings.
- Utilize green cleaning products and materials that are easy to clean / maintain.
- Include technology in the renewable materials, invest in systems that have a low carbon footprint.
- Specify native plants at landscape areas to reduce water usage.
- Implement water reclamation strategies.

### Curriculum Opportunities

- Utilize educational facility design as an opportunity to educate students in citizenship and responsibility towards the environment by getting students involved in facility management.
- Emphasis on natural lighting - for cost savings and connection of students with environment.
- Establish recycling and composting programs with student participation.
- Cultivate and continue organic school gardens with edible and native plants; incorporate water efficient irrigation strategies.
- Create learning dashboards for solar and energy monitoring, biology and water sustainability.
- Pursue opportunities for students to monitor and study building energy use; this could include the use of anemometers, occupancy sensors and daylighting controls, and/or photovoltaic arrays.

## SECTION 3.1



# ARRIVAL



*Pleasanton Elementary School*

Pedestrian and vehicular points of entry to the campus provide visitors the first look at a school site. These spaces are the face of the school to the surrounding community and provide the initial impression of the overall campus character.

### DESIGN

Consider using key landscape and/or building features to aid in wayfinding and orientation of visitors, staff, and students.

### BY BICYCLE

Ample parking for bicycles shall be provided at the front of school, at a bike path, or both. Bike parking should be secured with perimeter fencing that is locked during school hours. This area should also accommodate other modes of transportation such as scooters and skateboards.



*Hawthorne Elementary School*

### ON FOOT

Pedestrian arrival shall be enhanced at key locations of entry to the site. These include student drop-off locations, entry to student gathering areas, multipurpose facilities, and shared field space. Community use of these facilities after hours will require wayfinding signage and exterior lighting.

### BY CAR

Entry points create a sense of arrival through open views to the campus at key locations. The vehicular arrival should be from a main roadway connecting the campus to the immediate community. The entry shall include clear signage that leads students, staff, and visitors to the appropriate parking or drop-off areas.



*Ernest McBride Senior High School*

### SIGNAGE

In addition to signage used for pedestrian and vehicular approach, appropriate signage should be provided to direct towards major program elements in the school. In particular, visitors and new students will require clear wayfinding to the Administration building.

## SECTION 3.1



# SAFETY

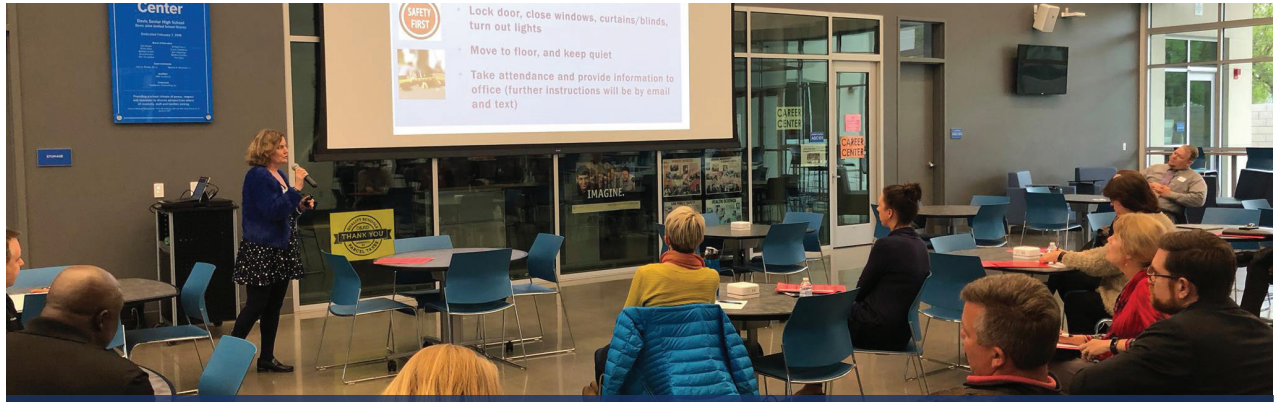


Woodcrest Elementary School

## BACKGROUND

In response to shared community and staff concerns related to school and student safety, the Board of Education, on March 1 authorized the Superintendent to create a Safety Task Force. On March 15, Superintendent John Bowes announced the creation of a DJUSD Safety Task Force, to solicit community input and expertise regarding improving the safety of DJUSD campuses in the wake of continued gun violence on school campuses throughout the nation.

The Safety Task Force was open to anyone in the community and was widely advertised. Community members, parents, teachers, school staff, city officials and district staff attended the first three meetings of the Task Force, which took place on consecutive Wednesdays between April 4th and April 18th, culminating with input from parents on priorities developed by the Task Force at the 2018 DJUSD Parent Engagement Night held on April 25. A report separate from this FMP contains feedback from the individuals who participated in this process.



Safety Task Force Meeting (courtesy of DJUSD)

## MEETING STRUCTURE

The meeting structure at each of the three consecutive meetings in April was very similar, but focused on a unique theme. The meeting themes included: 1) Safety and Facilities, 2) DJUSD Safety Procedures and Policies, and 3) Safety Personnel. Each meeting began with Director of Student Support Services, Laura Juanitas, providing an overview of current district conditions related to the meeting theme. Participants asked questions of district staff and each other. Participants then broke into smaller subtopic workgroups, for example during the meeting focused on facilities, subtopics included: 1) access control, 2) fencing/perimeter control, wayfinding, 3) parking/drop-off, and 4) surveillance, intrusion detection. Workgroups highlighted challenges the district faces in their area of study and potential solutions to those challenges. Each workgroup then engaged with members of the other subtopic workgroups to cross-pollinate discussions and add more depth to each subtopic conversation. The outcome of this process was the development of a wide breadth of challenges and solutions that had been discussed by all members of the Task Force. The separate report contains recommendations related to safety procedures and priorities.

Recommendations relevant to this Facilities Master Plan are included herein:

## ITEMS TO BE INCLUDED FOR CONSIDERATION IN THE FACILITIES MASTER PLAN

- Implement key card access to all classrooms and campus buildings with the capacity to automatically lock or unlock all doors remotely.
- Install video surveillance of campuses.
- Reduce points of access onto campus.
- Implement key card access to all classrooms and campus buildings with the capacity to automatically lock all doors remotely.
- Install strategic perimeter fencing at campuses where there is a need to restrict access to or cross traffic through campus.

## SECTION 3.1



## EDUCATIONAL PROGRAM VISION GENERAL GUIDELINES



## SERVICE / SUPPORT AREAS



Provide service areas that accommodate the appropriate amount of storage spaces, parking for District vehicles and maintenance equipment, support delivery, waste/recycling enclosures and composting areas as needed for the campus.

### SHELTER

Service areas require covered space that can accommodate storage of maintenance equipment. These areas are to be sheltered and screened from the campus core as they often require large vehicle circulation for waste pick-up and delivery of food and supplies.



### ACCESS

Wide access ramps shall lead from the parking area to the delivery door of the Food Service building.

### RECYCLING

Recycling collection stations should be incorporated at the ends of classroom/building wings to facilitate student recycling efforts and allow for easy pick up by maintenance staff at the end of the day. Bins should be well placed and should have covers so that odors will not permeate into other areas.



### COMPOST

If there is available space at the site, provide an area for on-site composting of excess plant material wherever possible and if supported by staff and/or incorporated into the educational program. Compost bins can co-locate with trash and recycling, or can locate alongside the school garden.

## SECTION 3.1



# DISTRICT-WIDE STRATEGIES



Furniture

- Furniture should not hinder the program activities. Furniture should be agile, flexible, and sized appropriately per age group.
- Provide a variety of furniture options including soft seating for individual study.



Finishes

- Walls should be made available for presentations and display, with writable and tackable surfaces.
- Ceilings should be a majority of acoustically absorptive material. In areas that are dedicated to small group or individual focus, lower ceilings can provide a sense of scale.
- Classrooms / meeting spaces should be acoustically separated with high-performing acoustics. They should meet minimum acoustic rating with background noise less than 35 dB and reverberation time of 0.6 seconds.



Equipment

- Mobile technology use should be supported through a multitude of electrical outlets and a combination of data port locations, with wireless internet access available and able to expand capacity in the future.
- Thermal comfort should be supported through high-efficiency mechanical ventilation systems, the operable windows, and improved air circulation and comfort through the use of ceiling fans.
- Classrooms should be naturally day-lit, supplemented with high-efficiency lamped light fixtures that supply a balance of indirect and direct light, reducing shadows and glare, and providing an even level of illumination.
- Lighting should be occupant-controlled around areas of projection, through shading devices and separate switches for dimming.



e3 Civic High School

## PURPOSE

Many commonalities exist between the various program spaces. This page aims to reduce redundancy, as the guidelines here apply to all spaces, unless noted otherwise.



Samueli Academy

## DESIGN OBJECTIVES & CHARACTERISTICS

Spaces should be open, inviting, and engaging via appropriate color and lighting strategies.

All areas are student project areas, with display of student work within rooms, hallways, Libraries, and other shared spaces.

Environmental considerations should include high indoor air quality, efficient HVAC systems (potentially individually controlled), opportunities for natural ventilation and balanced daylighting with efficient lighting systems.

## SECTION 3.1

