

Concord High School (includes Summit High School)

Items	Description	
Project Name	Concord High School	
Property Type	Academic	
Full Address	4200 Concord Boulevard Concord, CA 94521	
Year Built	1966	
Gross Building Area (GSF)	177,625	
Current Replacement Value (CRV)	\$133,218,750	
CRV/GSF (\$/Sq Ft)	\$750	
Number of Classrooms	X	
Number of Portables	0	
Student population (2018/2019)	1,450	
Site Acreage	42.12	
Building Name	Gross Square Footage	Built/Renovated
MU Building	15,100	1966
800 Wing	11,500	1966
Auto Shop	4,100	1966
P1 Class	1,000	2010s
P2 Class	1,000	2010s
Gym 1	26,975	1966
Gym 2	9,600	2010s
900 Wing	3,800	2010s
Admin Building	5,150	1966
701 Building	2,000	2010s
702-706 Building	4,900	2010s
707-710 Building	4,100	2010s
700 Restroom Building	2,900	2010s
715 Building	1,000	2010s
717-718 Building	2,900	2010s
719 Building	1,000	2010s
720 Building	1,000	2010s

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721 Building	1,000	2010s
716 Building	1,400	2010s
712-714 Building	2,900	2010s
711 Building	1,300	2010s
Library Building	3,500	1966
400 Wing	6,300	1966
300 Wing	16,900	1966
200 Wing	14,700	1966
500 Wing	16,900	1966
600 Wing	14,700	1966
Total	177,625	

All 177,625 square feet of the property are occupied by Concord High School. The spaces are a combination of offices, classrooms, gymnasiums, kitchen, multipurpose building with supporting restrooms, and mechanical and other utility spaces.

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OVERVIEW

Property Executive Summary

Concord High School is a fully-occupied high school campus. All buildings are single-story. The subject property was originally constructed in 1966. Additional buildings were added in the 2010s.

Site Executive Summary

Landscaping consists of trees, shrubs, and lawn areas. Landscaped areas are irrigated by an in-ground sprinkler system. Chain link fencing is located at the perimeter of the site and sports fields. Parking is provided in five asphalt paved lots. There is no service vehicle access. The pedestrian pavement throughout the property is constructed of cast-in-place concrete and asphalt. Cast-in-place concrete steps with metal handrails are located at grade changes. General site lighting is provided by pole-mounted sodium vapor and LED fixtures. Building perimeter lighting is provided by wall-mounted CFL and LED fixtures.

Architectural Structural Executive Summary

The foundation system was not able to be directly observed. However, based on similar structures, it is assumed to be a reinforced concrete slab-on-grade with integral footings. The first floor is concrete slab-on-grade and raised wood foundation. The buildings are masonry and conventional wood-framed structures with wood-framed floors and slab-on-grade with wood-framed roof decks. The flat roofs are finished with modified bitumen and PVC. Sloped roofs are finished with standing seam metal. The exterior walls are painted stucco, brick, and wood siding. Windows are double- and single-glazed, metal-framed units in punched openings. The building interiors generally include painted gypsum board walls and vinyl wall covering. The floor finishes consist of carpet, vinyl composition tile (VCT), and ceramic tile with exposed concrete in the shop areas. The interior ceilings are finished with acoustic ceiling tile and painted gypsum board.

Mechanical/Electrical/Plumbing Executive Summary

Domestic hot water is provided to restrooms, break rooms, and commercial kitchen by electric and gas-fired water heaters located in nearby mechanical rooms or closets. Heating and cooling is provided by rooftop package units, gas-fired furnaces with remote condensing units, wall-mounted heat pumps, VRF systems, and a central system with boiler and fan coil units. Supplemental heating is provided to the shop areas by suspended, gas-fired unit heaters. Cooling is provided to additional areas by ductless split systems. Fire protection systems include a fire alarm system, fire sprinkler system in newer buildings, smoke detectors, alarms with strobes, pull stations, extinguishers, standpipes, and appropriate egress signage. General interior lighting is provided by T-8 fluorescent fixtures with compact fluorescent (CFL) and LED fixtures in accent locations. Electrical service is provided by a single 2500-amp panel served from a pad-mounted transformer.

SCHOOL SITE ENGAGEMENT

Principal Priorities:

1. Science Classrooms
2. Restrooms
3. Locker Rooms

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ASSESSMENT OF SITE

Historical Summary

Concord High School is a fully occupied high school campus. The subject property was originally constructed in 1966. Additional buildings were added in the 2010s.

Site

Asphalt parking lots appear to be in fair condition. Sports courts and sidewalks are well maintained. Landscaping is in fair condition. Lifecycle replacements are budgeted and anticipated. *Originally constructed in 1966, Maintenance indicates deteriorating site utility infrastructure in need of replacement.*

Architectural

The finishes have been reasonably well maintained over the years. Some of the building roofs show wear and will require replacement. Exterior finishes consist of bare CMU, wood siding, and stucco, and will need only minor maintenance over the years. The interior finishes have been periodically replaced as-needed over the years. Lifecycle interior and exterior finish replacements are budgeted and anticipated.

Mechanical, Electrical, Plumbing & Fire (MEPF)

The HVAC systems were replaced around 2010 and are in fair condition overall. No major problems were reported. Plumbing components were well maintained. The electrical systems were in good working order. Only Gym 2 and buildings 716, 717, and 718 are equipped with fire sprinklers. The remainder of the campus should be retrofitted with sprinkler systems.

Recommended Additional Studies

Staining due to a reported roof leak was noted at the peak of the roof in the library. A professional consultant must be retained to perform a mold survey, provide recommendations and, if necessary, estimate the scope and cost of any required repairs. The cost of this study is included in the cost tables. Due to the ambiguity of the required repair scope at the time of this assessment, the cost for any possible subsequent repairs is not included.

Additional investigation is currently taking place to address specific AB-300 requirements and potential independent structural system review for Gym, MU and locker room.

Facility Condition Index

In this report we have calculated the Facility Condition Index (FCI) which is used in Facilities Management to provide a benchmark to compare the relative condition of a group of facilities. The FCI is primarily used to support asset management initiatives of federal, state, and local government facilities organizations.

The FCI is the ratio of accumulated Total Cost (TC) (Deferred Maintenance, Capital Renewal and Plant Adaptation) to the Current Replacement Value (CRV) for a constructed asset calculated by dividing the TC by the CRV. The range is from zero for a newly constructed asset, to one for a constructed asset with a TC value equal to its CRV. Acceptable ranges vary by "Asset Type", but as a general guideline the FCI scoring system is as follows:

Condition	Definition	Percentage Value
GOOD	In a new or well-maintained condition, with no visual evidence of wear, soiling or other deficiencies.	0% to 5%
FAIR	Subject to wear and soiling but is still in a serviceable and functioning condition.	5% to 10%
POOR	Subjected to hard or long-term wear. Nearing the end of its useful or serviceable life.	Greater than 10%
V-POOR	Subjected to hard or long-term wear. Has reached the end of its useful or serviceable life. Renewal now necessary.	Greater than 60%

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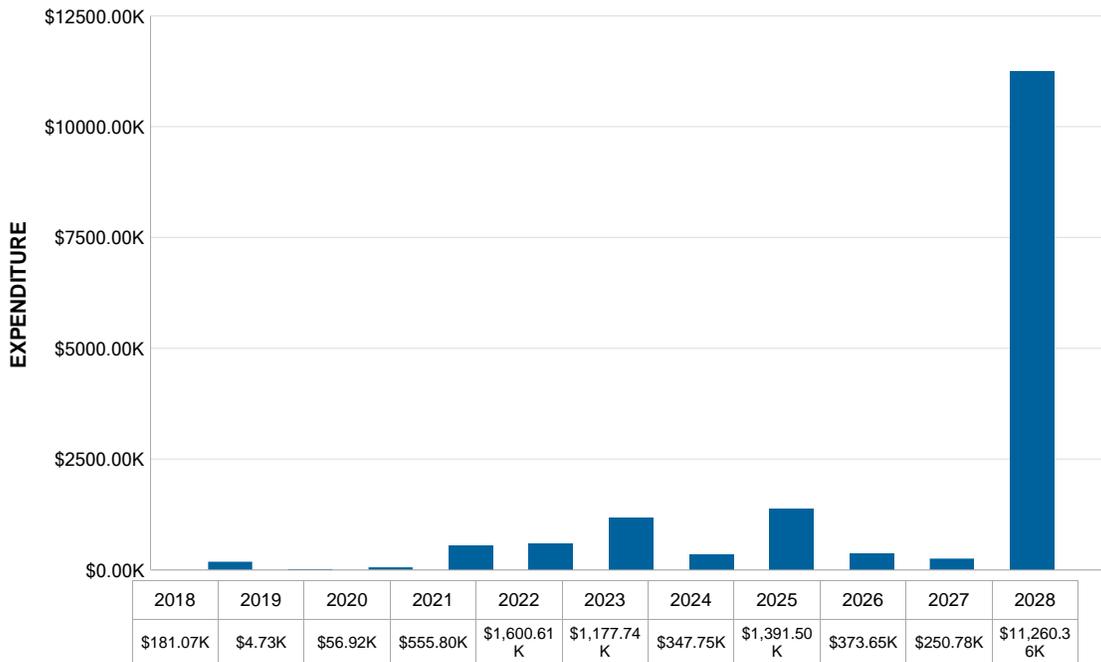
Summary of Findings

This report represents summary-level findings for the Property Condition Assessment. The deficiencies identified in this assessment can be combined with potential new construction requirements to develop an overall Long Term Capital Needs Plan that can be the basis for a facility wide capital improvement funding strategy. Key findings from the Assessment include:

Key Findings	Metric
Facility Condition Index (FCI)	0.14 %
Current Replacement Value (CRV)	\$133,218,750
Immediate Capital Needs (Current Year or Year 0)	\$181,068
Short Term Capital Needs (Year 1 to 5)	\$3,395,781
Long Term Capital Needs (Year 6 to 10)	\$13,624,049
TOTAL Capital Needs (Year 0 to Year 10)	\$17,200,898
Average Capital Needs Per Year	\$1,720,090

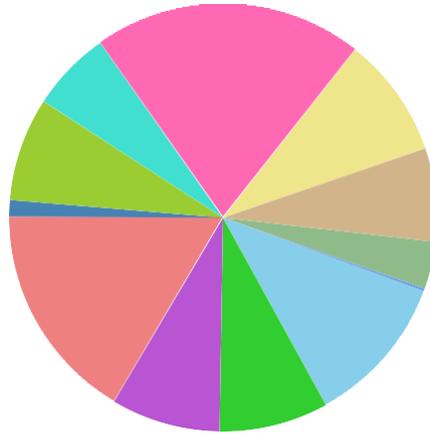
The building expenditure summary section provides an executive overview of the findings from the assessment. The chart below provides a summary of yearly anticipated expenditures over the study period for the Concord High School building. In addition, we have scheduled key findings highlighting key items of greater than \$5,000 and their anticipated failure year. Further details of these expenditures are included within each respective report section and within the expenditure forecast, in Appendix A of this report. The results illustrate a total anticipated expenditure over the study period of approximately \$17,200,898.

Expenditure Forecast Over Study Period



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Distribution of Future (Year 1-Year 10) Needs by Building System

Distribution of Capital Needs by Building System



- B20 Exterior Enclosure
- B30 Roofing
- C10 Interior Construction
- C30 Interior Finishes
- D10 Conveying
- D20 Plumbing
- D30 HVAC
- D50 Electrical
- E10 Equipment
- E20 Furnishings
- G20 Site Improvements
- G40 Site Electrical Utilities

Building System	Estimated Cost	Percentage of Total Cost
B20 Exterior Enclosure	\$1,947,691	11.44 %
B30 Roofing	\$1,405,121	8.26 %
C10 Interior Construction	\$1,406,084	8.26 %
C30 Interior Finishes	\$2,821,787	16.58 %
D20 Plumbing	\$210,176	1.23 %
D30 HVAC	\$1,333,649	7.84 %
D40 Fire Protection	\$1,038,311	6.10 %
D50 Electrical	\$3,460,592	20.33 %
E10 Equipment	\$1,554,843	9.14 %
E20 Furnishings	\$1,201,750	7.06 %
G20 Site Improvements	\$612,045	3.60 %
G40 Site Electrical Utilities	\$27,783	0.16 %
Total	\$17,019,830	100 %

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Building Type 1 Information



Building Type 1 Information		
Building Locations	Office, Library, Multipurpose, Gymnasium 1, Wings 200, 300,400,500,600, 800, Auto Shop	
Constructed/ Renovated	1966	
Total Area	135,825 SF	
Number of Stories	One	
<i>System</i>	<i>Description</i>	<i>Condition</i>
Structure	Conventional wood-framed structures on concrete slabs and wood-framed roofs	Fair
Facade	Stucco and exposed CMU with steel-framed windows	Fair
Roof	Primary: Flat construction with modified bituminous finish	Fair
Interiors	Walls: Painted gypsum board, vinyl Floors: Carpet, VCT, ceramic tile, quarry tile Ceilings: Painted gypsum board, ACT, unfinished/exposed	Fair
Elevators	Wheelchair lifts	Fair
Plumbing	Copper supply, cast iron waste and vent Gas-fired domestic boilers with storage tanks, gas-fired and electric water heaters	Fair
HVAC	Central system with boilers, tower feeding fan coil units Individual package, heat pump, and split system units Supplemental components: ductless split-systems, suspended gas unit heaters	Fair
Fire Suppression	Hydrants, fire extinguishers, kitchen hood system	Fair
Electrical	Source & Distribution: Main switchboard with copper wiring Interior Lighting: T-8, LED, CFL Emergency: none	Fair
Fire Alarm	Alarm panel, smoke detectors, alarms, strobes, pull stations, back-up emergency lights, and exit signs	Fair
Equipment/Special	None	Fair
Key Issues & Findings	Possible fungal growth noted in library	

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Building Type 2 Information



Building Type 2 Information		
Building Locations	900 Wing, Buildings 701, 702-706, 707-710, 700 Restroom, 715, 717*718, 712, 720, 721, 716, 712-714, 711, P1, P2, Gym 2	
Constructed/ Renovated	2010s	
Total Area	39,580 SF	
Number of Stories	One	
<i>System</i>	<i>Description</i>	<i>Condition</i>
Structure	Conventional wood-framed structures on concrete slabs and wood-framed roofs	Fair
Façade	Stucco or wood siding with aluminum-framed windows	Fair
Roof	Primary: Gable construction with metal finish Secondary: Flat construction with metal finish	Fair
Interiors	Walls: Painted gypsum board & vinyl Floors: Carpet, VCT, ceramic tile Ceilings: Painted gypsum board, ACT	Fair
Elevators	None	--
Plumbing	Copper supply, cast iron waste and vent Gas or electric water heaters	Fair
HVAC	Individual package, heat pump, and split system units Supplemental components: ductless splitsystems	Fair
Fire Suppression	Wet-pipe sprinkler system; hydrants, fire extinguishers	Fair
Electrical	Source & Distribution: Main switchboard with copper wiring Interior Lighting: LED, CFL Emergency: None	Fair
Fire Alarm	Alarm panel, smoke detectors, alarms, strobes, pull stations, back-up emergency lights, and exit signs	Fair
Equipment/Special	None	--
Key Issues & Findings	None noted	

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Site Summary Information



Site Information		
Lot Size	42.12 acres (estimated)	
Parking Spaces	413 total spaces all in open lots; 18 of which are accessible 18 accessible (included in total above), 1 van-accessible	
<i>System</i>	<i>Description</i>	<i>Condition</i>
Pavement/Flatwork	Asphalt lots with areas of concrete and concrete sidewalks, curbs, ramps, and stairs	Fair
Site Development	Building-mounted and property entrance signage, chain link fencing Playgrounds and sports courts with bleachers, fencing, and site lights Heavily furnished park benches, picnic tables, trash receptacles	Fair
Landscaping & Topography	Moderate landscaping features Irrigation present No retaining walls Low to moderate site slopes throughout	Fair
Draining Systems and Erosion Control	Surface flow, inlets, underground piping	Fair
Utilities	Municipal water and sewer Local utility-provided electric and natural gas	Fair
Site Lighting	Pole-mounted: LED Building-mounted: LED, HPS, CFL, metal halide	Fair
Ancillary Structures	Solar carports, pre-fabricated storage sheds, gazebos, storage trailers	Fair
Key Issues & Findings	Damaged parking bumpers	