



County School Facilities
Consortium Annual Summit
9.28.23

Ida A. Clair AIA, LEED AP, CASp
State Architect

Staff in office:

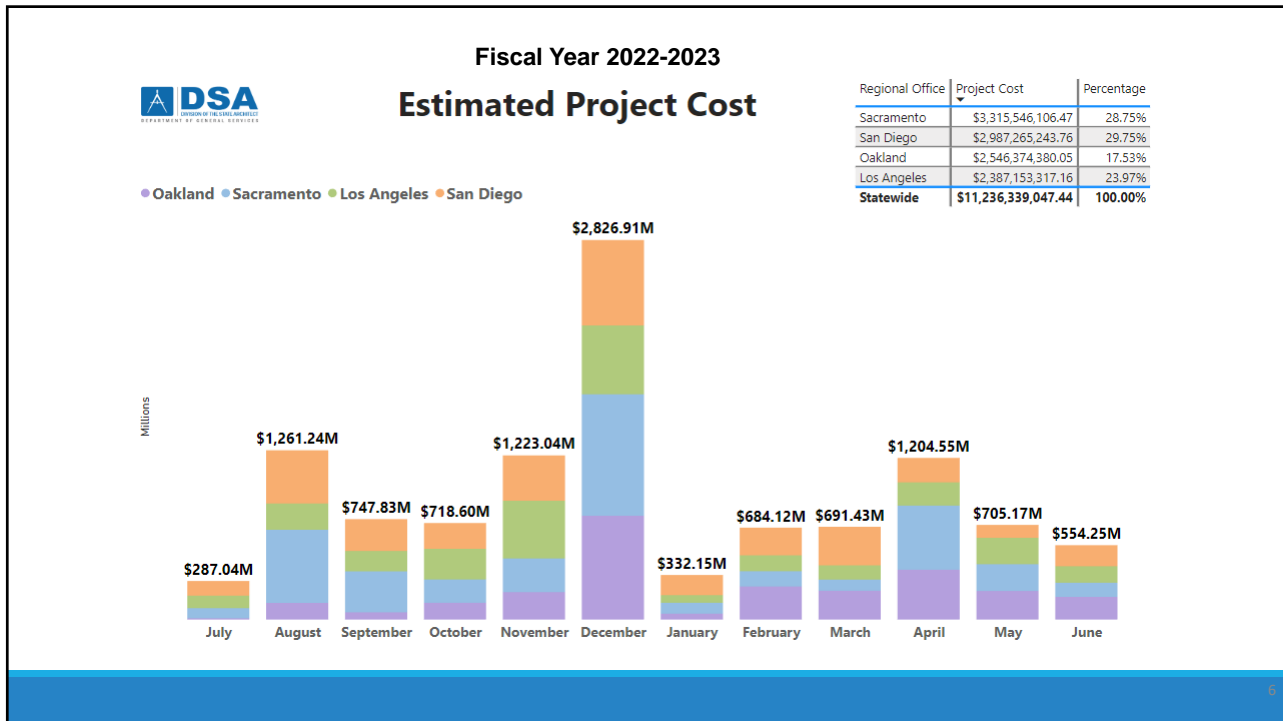
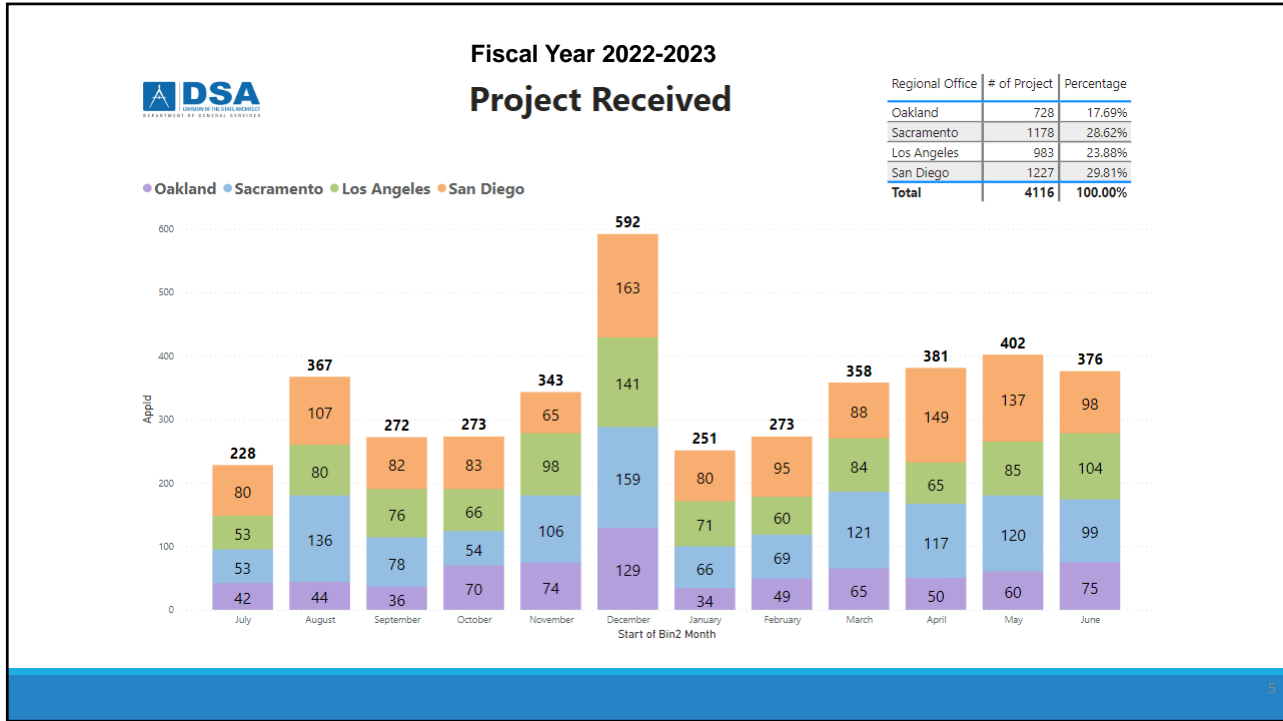
- ✓ Tuesday
- ✓ Wednesday
- ✓ Thursday

Staff telework:

- ✓ Monday
- ✓ Friday



Photo by [Tim Mossholder](#) on [Unsplash](#)





Meet with us early and anytime with an appointment....

- Use Form DSA-91, 92, 93, or 94
- To determine if submission to DSA is required
- To determine if project is exempt
- Discuss schedule
- Discuss code interpretations
- Discuss new code requirements



IR A-22: PROJECTS EXEMPT FROM DSA REVIEW



IR A-22

CONSTRUCTION PROJECTS AND ITEMS EXEMPT FROM DSA REVIEW

Disciplines: Structural, Fire and Life Safety, Accessibility. History: Revised 02/03/23 Original Issue 08/15/08

Division of the State Architect (DSA) documents referenced within this publication are available on the [DSA Forms](#) or [DSA Publications](#) webpages.

PURPOSE

This Interpretation of Regulations (IR) clarifies when plans and specifications for alteration, reconstruction or small new construction projects on existing public (K-12) school and community college sites are not required to be submitted to DSA for review and approval, and to clarify project inspection, testing and DSA construction oversight requirements for such projects. This IR is not applicable to state-owned or state-leased essential services facilities.

BACKGROUND

Certain alteration, reconstruction or small new construction projects on existing public (K-12) school and community college sites, regardless of previous construction date, may be exempt from DSA plan review and approval and construction observation as described in this IR. When authorizing construction of exempt projects, the school district assumes responsibility to assure compliance with all code provisions. In authorizing and completing the design and construction of exempt projects, the school board assumes the responsibility for employing appropriately licensed architects or registered engineers to prepare the construction documents. The school district also assumes the responsibility for employing inspectors and laboratories to provide for the required testing and inspection of materials and work of construction.

For this IR, "design professional in responsible charge" or "design professional" shall mean the architect, structural engineer, or professional engineer (e.g., mechanical engineer for mechanical-only projects; electrical engineer for electrical-only projects) who is responsible for the completion of the project design work. Architects and engineers providing project design and/or construction oversight must be licensed to practice in California as required by the rules governing the licensing of architects and engineers and in accordance with IR A-19, Design Professional's Signature and Seal (Stamp) on Construction Documents. See California Business and Professions Code Sections 6735 and 5535 through 5538.

DSA concurrence that a project is exempt is not required; however, written concurrence may be requested in accordance with DSA Procedure (P9) 14-02, Exempt Concurrence. Refer to Section 2.1.2 below for exempt items which are submitted as part of a larger project.

- Exempt concurrence by DSA not required; but can be requested
- Structures not considered a "school building"
- Charter schools not funded under the Charter School Facilities Program
- Construction projects shall not be subdivided for the purpose of obtaining exemption from DSA review and approval
- Certain partial demolition work exempt (see IR A-32)
- Voluntary submittals will trigger full DSA plan review for code compliance and construction oversight, including inspections and materials testing.



EXEMPTIONS BASED ON PROJECT COST

IR A-22: Construction Projects Exempt from DSA Review

- Exemption threshold raised to \$119,230 for all disciplines
- Exemption Raised to \$268,268 when:
 - ✓ There is no structural work
 - ✓ Project contains no access compliance work
 - ✓ Project contains no work that triggers Path of Travel improvements
 - ✓ Project meets all fire & life safety standards
- Exempt projects must comply with all design, construction and inspection requirements of the CBC
- School District is responsible for compliance with all code requirements
- Exemption is only applicable to alterations to DSA certified structures

EXEMPTIONS BASED ON PROJECT SCOPE

Applies to “maintenance” work, defined as

- Ordinary upkeep and repair
- Replacement in kind
- Repainting
- Re-plastering
- Reroofing
 - Limited to one additional application
 - Need to examine for deterioration prior to reroofing

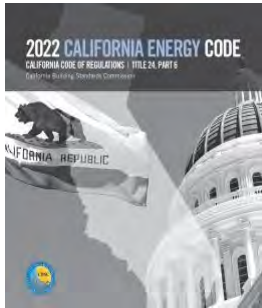
Maintenance does **not** include:

- Work on structural framing or reinforcement other than repainting
- Replacement of large mechanical, electrical, or plumbing systems



2022 CBC REQUIRES SOLAR PANELS AND BATTERY STORAGE

2022 California Energy Code
Title 24 Part 6
Section 410-10



- Solar Panels (PV) and companion Battery Storage is required for newly constructed buildings
- There are some exceptions (most straight forward is building size)
- California Energy Commission website has Nonresidential Compliance Manual (chapter 9) that is helpful
- DSA will check projects for general compliance. If solar/battery is required and not included in the initial submittal, the project will be considered incomplete for plan review

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TECHNICAL REQUIREMENTS FOR SOLAR (PV)



IR 16-8

SOLAR PHOTOVOLTAIC AND THERMAL SYSTEMS REVIEW AND APPROVAL REQUIREMENTS

Disciplines: All

History: Revised 03/06/21
Revised 07/23/20 Under 2019 CBC
Original Issue 08/15/08

Division of the State Architect (DSA) documents referenced within this publication are available on the [DSA Forms](#) or [DSA Publications](#) webpages.

PURPOSE

This Interpretation of Regulations (IR) describes the Division of the State Architect (DSA) requirements for review and approval of solar systems (see Definitions) used in construction projects under the jurisdiction of DSA.

SCOPE

This IR clarifies the requirements for structural support of solar systems, anchorage of solar systems, solar support frame systems, balance-of-system (BOS) equipment, and building-integrated photovoltaic (BIPV) roofing systems. It also addresses the basic requirements of the California Building Code (CBC) for Fire and Life Safety, Access Compliance, and certain electrical requirements. Projects involving the installation of solar systems and/or battery storage to existing buildings or structures or projects involving the installation of ground-mounted solar systems are not exempt from DSA review and construction oversight regardless of cost.

- PV systems must comply with 2022 CBC
- DSA developed and published IR 16-8 in 2008 to assist designers in understanding Structural, Fire and Access code requirements as well as DSA submittal process
- IR 16-8 was updated in 2021 and provides 2022 CBC compliance requirements

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TECHNICAL REQUIREMENTS FOR BATTERY STORAGE

DSA IR N-4

MODULAR BATTERY ENERGY STORAGE SYSTEMS: 2022 CBC AND CFC

Disciplines: Structural, Fire and Life Safety. History: Issued 02/15/23 Under 2022 CBC.

Division of the State Architect (DSA) documents referenced within this publication are available on the [DSA Forms](#) or [DSA Publications](#) webpages.

PURPOSE

This Interpretation of Regulations (IR) clarifies specific code requirements relating to battery energy storage systems (BESS) consisting of prefabricated modular structures not on or inside a building for structural safety and fire life safety reviews.

SCOPE

This IR clarifies Structural and Fire and Life Safety design requirements as well as what shall be included in the construction documents.

This IR provides clarification on the design or alternative shake table testing requirements of premanufactured modules and the internal components for seismic loading. The design of BESS modules connections shall comply with the applicable sections of the California Building Code (CBC), American Institute of Steel Construction Specification for Structural Steel Buildings (AISC 360), American Institute of Steel Construction Seismic Provisions for Structural Steel Buildings (AISC 341), and American Society of Civil Engineers Standard 7, Minimum Design Loads and Associated Criteria for Buildings and Other Structures (ASCE 7).

The following regulations address Fire and Life Safety requirements: California Fire Code (CFC), Section 1207, Electrical Energy Storage Systems, California Electrical Code (CEC), Article 706, Energy Storage Systems, and National Fire Protection Association: Standard on Stored Electrical Energy Emergency and Stand-by Power Systems (NFPA-111).

- Battery Energy Storage Systems (BESS) must comply with 2022 CBC
- DSA published IR N-4 early in 2023 to assist designers in understanding Structural and Fire Code requirements as well as DSA submittal requirements
- IR N-4 is for prefabricated BESS that are not on or inside a building
- Structural Codes - 2022 CBC and ASCE 7-16
- Fire Life Safety Code – 2022 California Fire Code (CFC 1207)

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CAMPUS PV SYSTEMS

DSA PR 23-04

PROCEDURE: ALTERNATE MEANS FOR PHOTOVOLTAIC (PV) PANEL REQUIREMENTS: CAMPUS PV SYSTEMS

Division of the State Architect (DSA) documents referenced within this publication are available on the [DSA Forms](#) or [DSA Publications](#) webpages.

DISCIPLINE(S)

Regional Intake and Headquarters Sustainability Unit

PURPOSE

This procedure is to define the process for the submittal and review of K-12 School and Community College projects for which DSA has authority, requesting alternate means to the California Energy Code (CEC) regulations requiring Photovoltaic (PV) systems for all newly constructed buildings and is to be used in lieu of Procedure (PR) 18-07, Request for Alternate Design, Materials and Methods of Construction for this purpose only. This procedure describes the process for and the specific information required when an alternative to the CEC Section 140.10 are requested, based upon the availability of existing DSA certified campus solar systems with surplus power capacity.

BACKGROUND

In 2022 the CEC requires that new PV systems are to be installed with all new buildings. Exemptions do not include the ability to transfer excess power generation from a campus sized PV array with surplus power capacity to a newly constructed building for the purpose to offset the PV requirements in the CEC. Energy Commission analysis indicated that schools were the leader in the effort to provide on-site power generation at a campus scale. School occupancies considered in the Energy Commission's test cases, indicate a marginal return on investment. When new PV panels are added to an existing campus sized PV systems in excess of 10% of the existing campus PV system, it may trigger the transfer of all existing campus PV on the meter to NEM 3.0 reducing the return on investment for the new PV and the existing PV under the previous Net Energy Metering (NEM) agreement. Until received DSA will, on a case-by-case basis, consider alternate means requests for campus PV systems pursuant to California Administrative Code (CAC) California Code of Regulations, Title 24 Part 1, Section 4-304.

PROCEDURE

This procedure is to be used solely for the purpose stated herein.

Alternate means requests utilizing this procedure may not be made related to battery storage requirements required by 140.10 – Prescriptive Requirements for Photovoltaic and Battery Storage Systems.

The performance method per Energy Code Section 140.1 – Performance Approach, Energy Budgets, shall not be accepted for the purposes of this request.

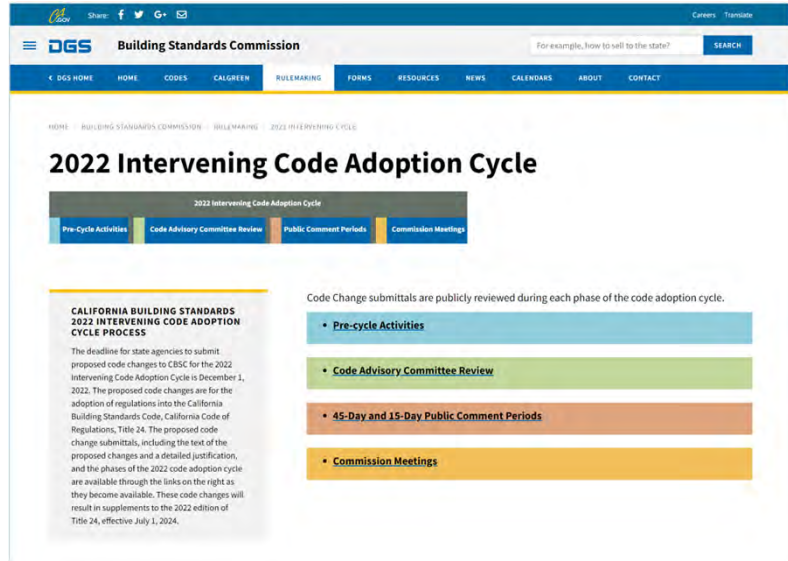
- Alternate Means Request for campus PV systems that have surplus power capacity
- When new PV panels are added to an existing campus sized PV systems in excess of 10% of the existing campus PV system, it may trigger the transfer of all existing campus PV on the meter to NEM 3.0
- Submit DSA 1-AMM-PV at project registration, with supporting documentation
 - Calculations on power for new building
 - Calculations on existing campus PV capacity
 - Prior 12 months of utility bills
 - Project drawings
 - Electrical drawings including campus PV system calculation table
 - Electrical site plan

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[Commission Mtgs \(ca.gov\)](https://www.ca.gov)

Find More Information on rulemaking under BSC's Rulemaking tab under Commission Meetings.



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2022 INTERVENING CODE CYCLE: Access - CBC, Part 2

- Adding technical requirements for wheelchair spaces at Safe Dispersal Areas.
- Clarifying scoping and technical requirements for accessibility at multi-user all-gender toilet rooms.
- Adding technical requirements for accessibility at urinals in compartments.
- Revising existing scoping requirements for public housing to match scoping at federal Fair Housing Act.
- Revising existing requirements for Adult Changing Facilities to match Health and Safety Code requirements.
- Removing duplicative text for site impracticality tests.
- Adding technical requirements for privacy latches at individual toilet room compartments.
- Clarifying existing references to Chapters 11A and 11B.
- Clarify existing terminology for indicating a slope.

Commission Adoption Meeting: Approved 6.29.23
Effective Date: July 1, 2024

[June 6-8, 2023 Commission Meeting \(ca.gov\)](https://www.ca.gov)



Photo by [AbsolutVision](#) on [Unsplash](#)

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2022 INTERVENING CODE CYCLE: STRUCTURAL SAFETY

2022 Pt. 1, Administrative Code (CAC)

- Update 4-310 and 4-314 to exclude buildings used as personal residence by teacher or employee of district from compliance with Field Act to align with Ed. Code sections 17283.5 and 81050.5, added by AB306 (Stats. 2021, Ch. 49, §1, Eff. Jan. 1, 2022)
- Editorial adjustments to address clarity and consistency but do not result in significant changes in practice or regulatory effect.

2022 Pt. 2, Building Code (CBC) & Pt. 10, Existing Building Code (CEBC)

- Edits to technical requirements to address clarity and consistency but do not result in significant changes in practice or regulatory effect.

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Commission Adoption Meeting: **Approved 6.29.23**
 Effective Date: August 1, 2023 – Administrative Code
 Effective Date: July 1, 2024 – CBC and CEBC

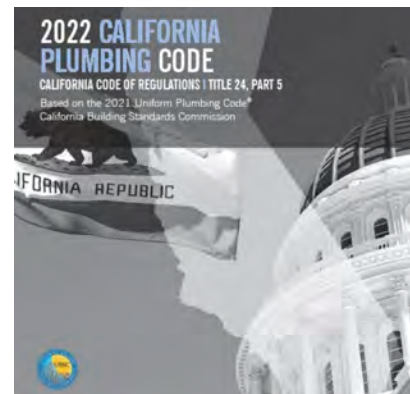
[June 6-8, 2023 Commission Meeting \(ca.gov\)](https://www.ca.gov)

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2022 INTERVENING CODE CYCLE - CPC

All-Gender Multi-user Restroom Facilities

- Not a requirement but an option
- Provides an exception to current requirements to provide separate facilities
- Allows for the replacement of a Urinal with a Toilet (Water Closet)
- Requires all fixtures to be in privacy compartments
- Urinals must be in privacy compartment or in a separate space



Commission Adoption Meeting: **Approved 8.1.23**
 Effective Date: July 1, 2024

[August 1-3, 2023 Commission Meeting \(ca.gov\)](https://www.ca.gov)



2022 INTERVENING CODE CYCLE: CALGREEN

EV Charging: Charging Power Alternative and Existing Facilities

New parking facilities:

Requires Level 1, Low Power Level 2 or Level 2, or any combination thereof, providing a minimum total power based on number of parking spaces in a facility.



Created by Luis Prado
from Noun Project

For existing facilities:

Required if installing new light fixtures in existing parking, adding to parking facilities, or installing solar PVs over parking. Requires chargers to be installed in EV capable spaces when a project is submitted to DSA.

CO2 Monitoring: Existing Facilities

Requires CO2 monitors in existing K-12 classrooms when a building is modernized.



Commission Adoption Meeting: **Approved 8.1.23**

Effective Date: July 1, 2024

[August 1-3, 2023 Commission Meeting \(ca.gov\)](#)

Approved Carbon Reduction Regulations Mandatory Measures

50,000 sf and greater for K-12 schools and community colleges,
100,000 sf and greater for nonresidential construction

BUILDING REUSE

Reuse existing building, maintain 45% of the existing structure and enclosure.

WBLCA

Performance Path- Conduct a cradle-to-grave whole building life cycle assessment demonstrating at 10% reduction in global warming potential (GWP).

PRESCRIPTIVE PATH

Comply with product GWP limits established in the BCCA. Based on 175% of IW-EDP GWP values (weighted average alternate available for concrete).



Commission Adoption Meeting: Approved 8.1.23

Effective Date: July 1, 2024

[August 1-3, 2023 Commission Meeting \(ca.gov\)](#)

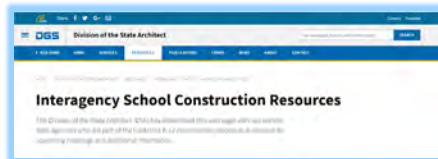


ASSISTANCE AFTER AN EMERGENCY

Photo by [Chris Gallagher on Unsplash](#)



Photo by [Marcus Kauffman on Unsplash](#)



Video available:

[Planning for and Addressing Natural Disasters](#)

With No Declared Emergency:

- Contact your local DSA Regional Office for assistance.

If Governor declares an emergency:

- Request SAP evaluation from local enforcement entity
- DSA will receive a Mission Task to dispatch a DSA SAP to provide rapid assessment
- Subsequent related events may require additional Mission Tasks or reissuance of a Mission Task.

Strategic Goal: TRI-AGENCY WORKSHOPS

Division of the State Architect
Office of Public School Construction
California Department of Education

February 3, 2022
Overview of Roles
Discussion on TK/K Facility Improvements
Q&A with Agency Leadership
Recording available on DSA Website

Photo by [Gautam Arora on Unsplash](#)





Strategic Goal : TRI-AGENCY WORKSHOPS

Division of the State Architect
Office of Public School Construction
California Department of Education

May 5, 2022

Planning for and Addressing Natural
Disasters: A School Facilities Perspective

- Presentation by California Office of Emergency Services
- Q&A with Agency Leadership
- Recording available on DSA Website

Photo by [Landon Parenteau](#) on [Unsplash](#)



Strategic Goal : TRI-AGENCY WORKSHOPS

Division of the State Architect
Office of Public School Construction
California Department of Education

September 9, 2022

Designing and Constructing Sustainable
Facilities and Outdoor Spaces

- Presentation by CAL Fire
- Q&A with Agency Leadership
- Recording available on DSA Website

STATE AGENCY WORKSHOP

DESIGNING AND
CONSTRUCTING
SUSTAINABLE FACILITIES
AND OUTDOOR SPACES

WITH A FOCUS ON PLANNING FOR
CONSTRUCTION AND POTENTIAL
FUNDING OPPORTUNITIES

The Office of Public School Construction (OPSC), the California Department of Education (CDE), the Division of the State Architect (DSA), and the California Department of Forestry and Fire Protection (CAL FIRE) are conducting a free workshop to provide information on school planning, design, and the availability of state funding to help Local Education Agencies build sustainable facilities and outdoor spaces. There will also be an opportunity for attendees to directly address concerns and receive assistance.

- Topics include the following:
- Green Building and Energy Codes and Standards
 - DSA's education and outreach program
 - Educational Specification Considerations
 - Funding opportunities for green buildings and school yards
 - Case Study – A School District Perspective

This workshop will include state agency presentations as well as a question & answer session.

Individuals who need auxiliary aids for effective participation are invited to make their requests and preferences known to Ms. Lisa Jones at (279) 946-8459 seven business days prior to the meeting.



WORKSHOP DATE & TIME:

Friday, September 9, 2022
10:00 a.m. – 12:00 p.m.

Click here to enter Zoom Webinar:

[Zoom Webinar](#)

If you would like to register for this free workshop, please click on the date above.

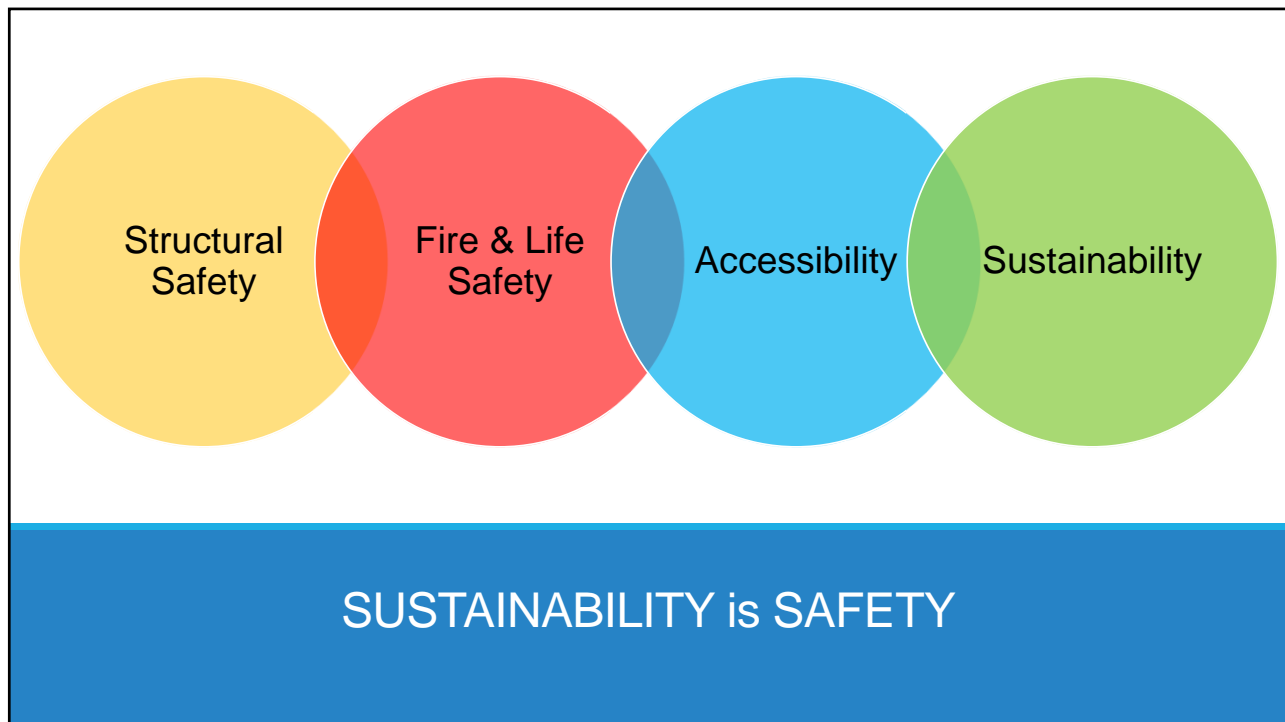
Agency Websites

Office of Public School Construction
<https://www.dgs.ca.gov/OPSC>

California Department of Education
<https://www.cde.ca.gov/ls/fo/>

Division of the State Architect
<https://www.dsa.ca.gov/DSA>

CAL FIRE
<https://www.fire.ca.gov/grants/>



SUSTAINABILITY PLAN REVIEW

Shade Trees

EV Charging Infrastructure

Photo by [Ryan Jacobson](#) on [Unsplash](#)

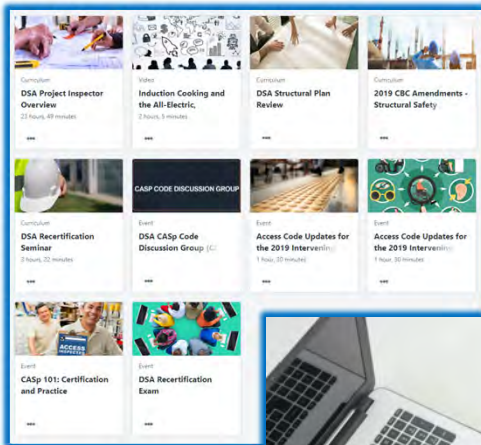
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DSA SUSTAINABILITY EDUCATION AND OUTREACH

- GETTING TO ZERO OVER TIME COHORT +
- NET ZERO EVENTS +
- CALIFORNIA SUSTAINABLE SCHOOLS SHOWCASE +
- NET ZERO ENERGY AND NET ZERO CARBON RESOURCES +
- CASE STUDIES IN SUSTAINABLE SCHOOL DESIGN: 7X7X7 DESIGN ENERGY WATER +
- WATER CONSERVATION +
- MECHANICAL ACCEPTANCE TEST TRAINING +

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DSA ACADEMY

Now offered:
California EVCS Accessibility
Free, On Demand
Provides CEU credit

All-Electric California Schools
Kitchen of the Future

Green Schoolyards



[DSA Academy](#)

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GETTING TO ZERO OVER TIME

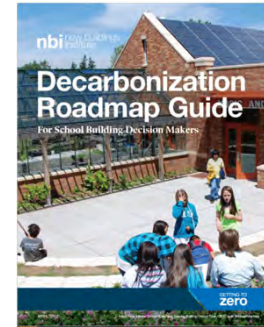
K-12 PUBLIC SCHOOL DISTRICT COHORT



a DSA collaboration with the

ROADMAP

- Long term, strategic approach to energy management
- Set measurable goals
- Focus on the benefits to the learning environment
- Leverage every opportunity to improve performance and reduce emissions



[Decarbonization Roadmap Guide for School Building Decision Makers - New Buildings Institute](#)



SUSTAINABLE SCHOOLS SHOWCASE

Green Ribbon Schools – Suisun Valley School



Photography by 3 Lopez Media Inc.



CALIFORNIA GRANT PROGRAMS

CalFire Green Schoolyards Program (\$200M)

Provides funding to mitigate the effects of extreme heat on public school campuses.

Strategic Growth Council Community Resilience Centers Program. (\$270M)

Provides shelter and resources during climate and other emergencies, including extreme heat events and poor air quality days.

California Energy Commission's California Schools Healthy Air, Plumbing, and Efficiency Program (CalSHAPE). Provides funding to upgrade HVAC systems and replace noncompliant plumbing fixtures and appliances that do not meet water efficiency standards. Funded by California Investor-Owned Utilities.

California Air Resources Board Clean Mobility in Schools (CMIS) and Sustainable Transportation Equity Project (STEP) (\$32.65M). Provides funding to clean transportation and supporting projects to increase transportation equity.

Integrated Climate Adaptation and Resiliency Program (ICARP) (\$21.9M) Regional Resiliency Grants

STAY INFORMED

The screenshot shows the website for the Division of the State Architect (DSA). The main navigation bar includes links for HOME, SERVICES, FORMS, RESOURCES, PUBLICATIONS, NEWS, ABOUT, and CONTACT. A search bar is located in the top right corner. The main content area features a large article titled "Sustainability for California Schools" with a sub-headline "Learn DSA's role in helping California schools create sustainable educational facilities and how it supports sustainability efforts through the adoption of guidelines and technical resources." To the right of this article is a large blue box with the text "SUBSCRIBE TO OUR LISTSERV!". Below the main article, there is a "NEWS" section with a sub-headline "MORE NEWS" and a list of recent news items, including "CBSC Code Advisory Committee Meeting - February 11 and 12, 2020". At the bottom of the page, there is a "CONTACT" section with the DSA's address, phone number, and email, as well as a "CONNECT WITH US" section with social media icons and a "SUBSCRIBE" button.