



California Department of Education

2012 CSFC Summit

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CALIFORNIA DEPARTMENT OF EDUCATION

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California's K-12 Educational Infrastructure Investment: *Leveraging the State's Role for Quality School Facilities in Sustainable Communities*

California Department of Education Webinar

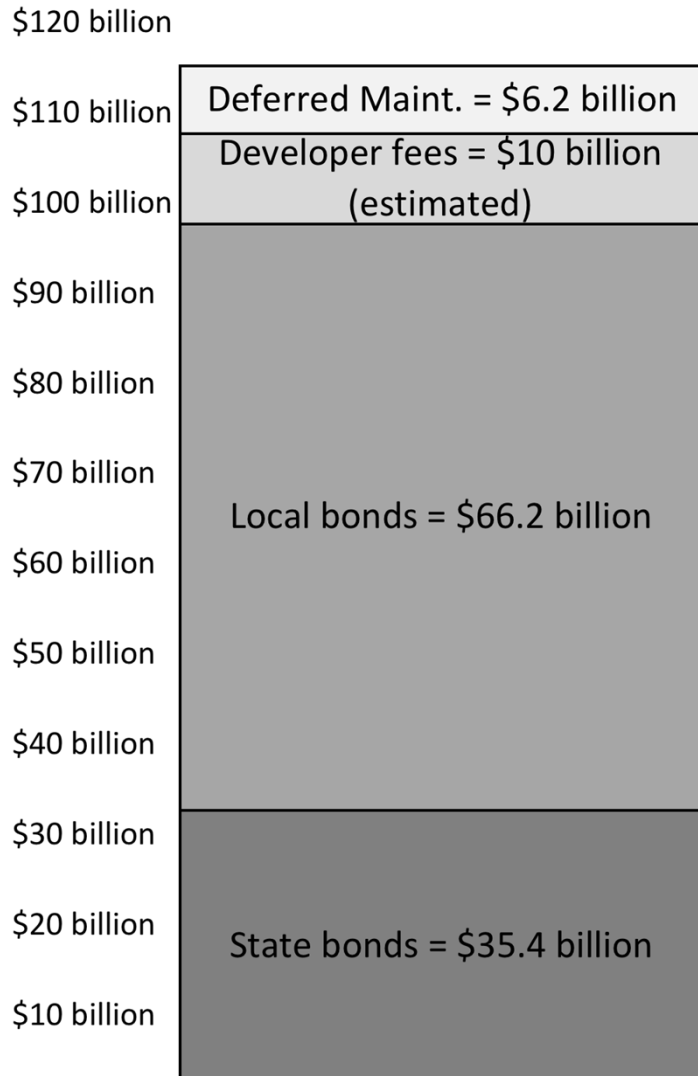
August 9, 2012

Jeff Vincent, PhD



**Funding SOURCES
for California K-12
Facilities, 1998 - 2011**

**Estimated Total =
\$118 billion**



Major Benefits from Past 10+ Years of Investment

- ~20% enrollment growth
- Overcrowding relieved
- Upgraded thousands
- 70/30 local/state share

State Funds, 1998-2011

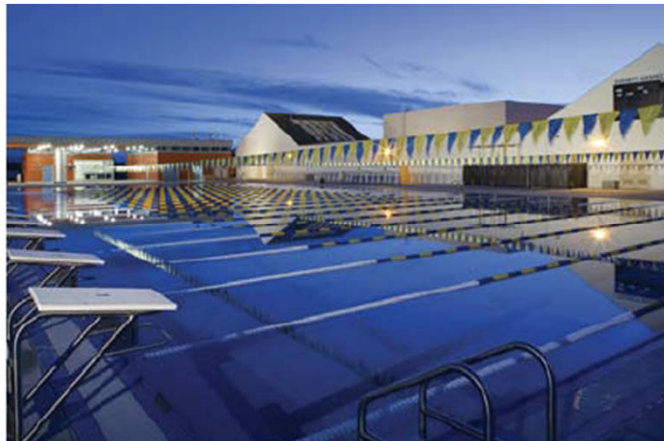
Prop 1A, Nov 1998 = **\$6.7 bil** (N,M,H,CSR)

Prop 47, Nov 2002 = **\$11.4 bil** (N,M,COS,Ch,JU)

Prop 55, Mar 2004 = **\$10 bil** (N,M,COS,Ch,JU)

Prop 1D, Nov 2006 = **\$7.33 bil** (N,M,CTE,HP,OCR,Ch,JU)

Deferred Maint. Program = **\$3.1 bil** (matched locally)



California's K-12 School Facility Facts, 2012

Number of students	6.1 million
Number of LEAs	1,042
Number of schools	9,903
Number of charter schools	912
Total gross square feet	471 million
Number of classrooms	303,399
Percent >25 years old	71%
Percent \geq 50 years old	30%
Percent \geq 70 years old	10%
Number of portable classrooms	75,000+
Total K-12 acreage	125,000

Comprehensive Look at Past and Future

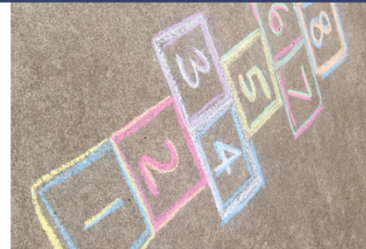
- Sound planning?
- Wise investment?
- Policies needed?

California's K-12 Educational Infrastructure Investments:

*Leveraging the State's Role for Quality School Facilities in
Sustainable Communities*

A Policy Research Report to the California Department of Education

2012



State by State Policy Review

- 1995-2004, CA LEAs ranked 36th in total capital expenditures per student per year (\$492)
- 2005-2008, CA LEAs ranked 6th in total capital expenditures (from all sources) per student per year (\$1,569)
- 2005-2008, CA ranked 23rd in state share (30%)

Today's Context

- New economic era
- New state policy framework on infrastructure & land use: *climate change & sustainable communities*
 - “communities that promote equity, strengthen the economy, protect the environment, and promote public health and safety” (Public Resources Code § 75125, originally SB 732)



State Planning Priorities for Infrastructure

- Promote infill development and equity
- Protect environmental and agricultural resources
- Encourage efficient development patterns

(Government Code § 65041.1, originally AB 857)



CA cannot afford to not be strategic: *A shift is needed*

- To existing facilities focus
- To investing in community sustainability
- To intentional innovation



Why School Facilities Matter

- Affect teaching and learning

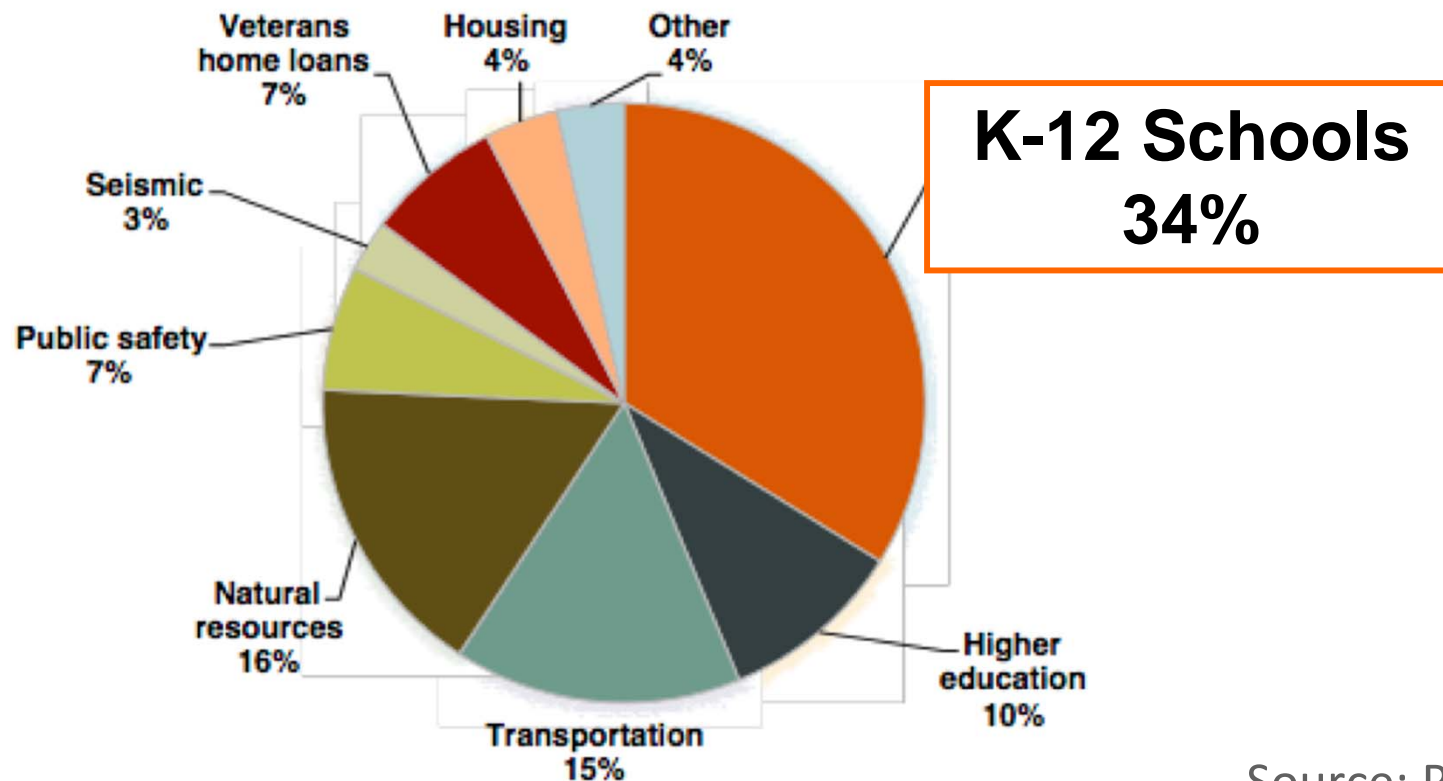
Uline, C. (editor). (2009). Special Issue, *Journal of Educational Administration* 47(3).
Higgins, et al. (2005). The Impact of School Environments. University of Newcastle.

- Affect land use, growth, travel patterns, VMT, housing choices

U.S EPA. (2003). Travel and Environmental Implications of School Siting
U.S. EPA. (2011). Voluntary School Siting Guidelines.
PACE and CC&S. (2009). Smart Schools, Smart Growth. UC Berkeley

Californian's Invest in K-12 Infrastructure

**State General Obligation Bonds
for Infrastructure, 1972–2006
\$178 billion (2007 \$)**



Source: PPIC 2008

Infrastructure Best Practices Framework

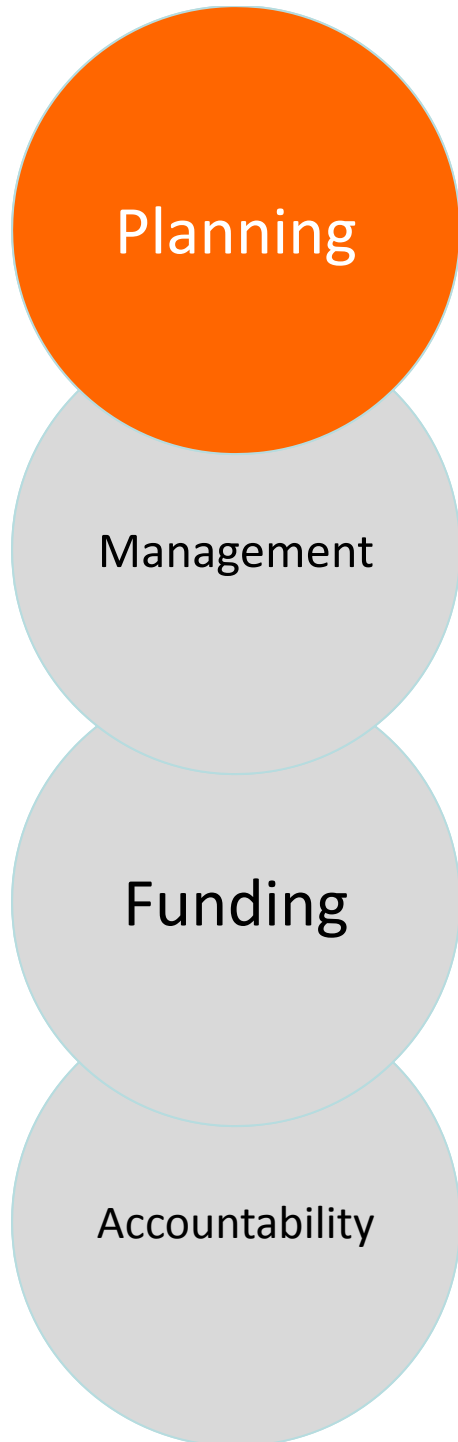
Sound
Planning

Effective
Management

Adequate
Equitable
Funding

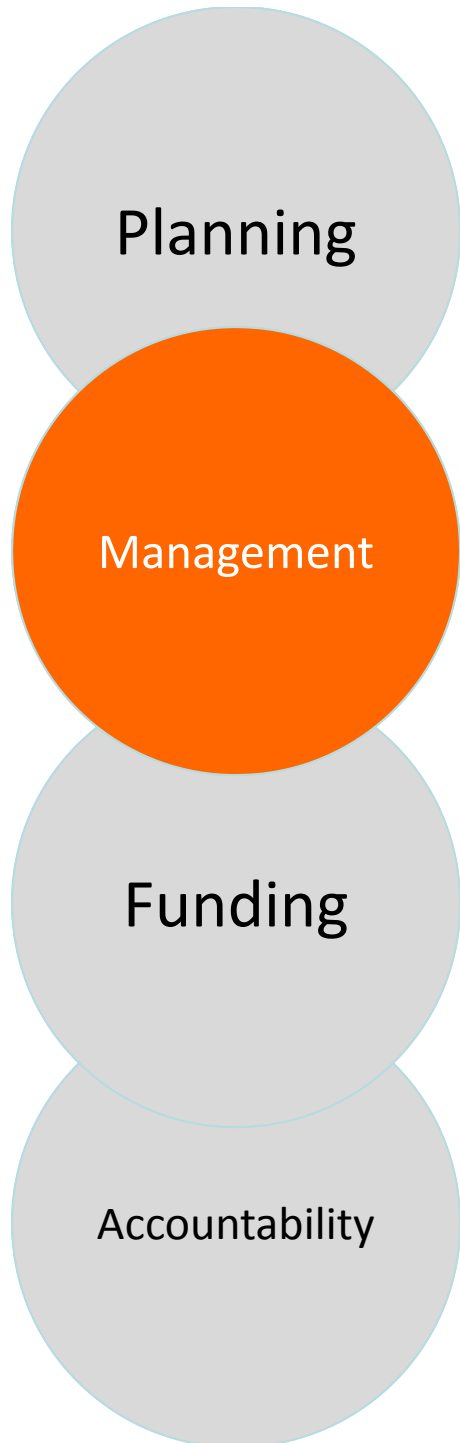
Appropriate
Accountability

U.S. General Accounting Office (1998)	21 st Century School Fund, Scientex Corporation, and the World Bank (1999)	Dowall and Reid (2008)
<i>Capital Decision-Making Framework</i>	<i>Six basic elements of a well- managed local K-12 capital improvement program</i>	<i>Eight interrelated activities of the framework for Performance Based Infrastructure in California</i>
1. Vision	1. Accurate information system	1. Visioning
2. Strategic Planning Principle 1: Integrate organizational goals into the capital decision-making process Principle 2: Evaluate and select capital assets using an investment approach Principle 3: Balance budgetary control and managerial flexibility when funding capital projects Principle 4: Use project management techniques to optimize project success Principle 5: Evaluate results and incorporate lessons learned into the decision-making process	2. Sound planning	2. Determining what infrastructure services are needed
3. Information and data systems	3. Process for needs based decision making	3. Choose the best method of project delivery
4. Communication	4. Sufficient and stable funding	4. Ensure value for money
	5. Skilled project management	5. Promote demand aggregation
	6. Effective oversight and monitoring	6. Provide technical and policy assistance
		7. Help negotiate
		8. Share knowledge



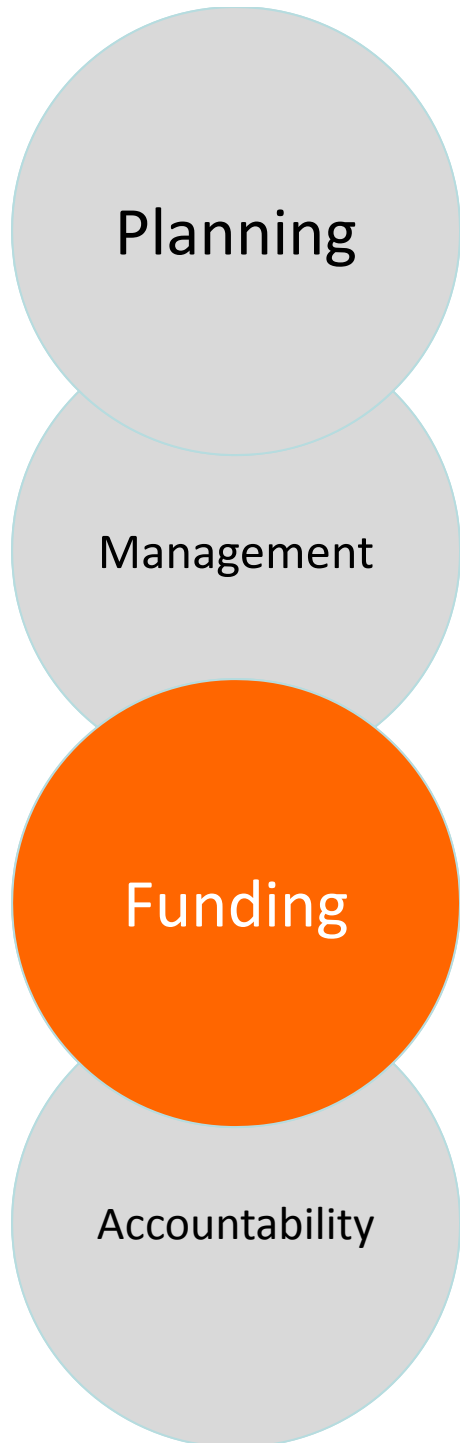
CHALLENGES

**Varying capacity &
mixed, unconnected
policies**



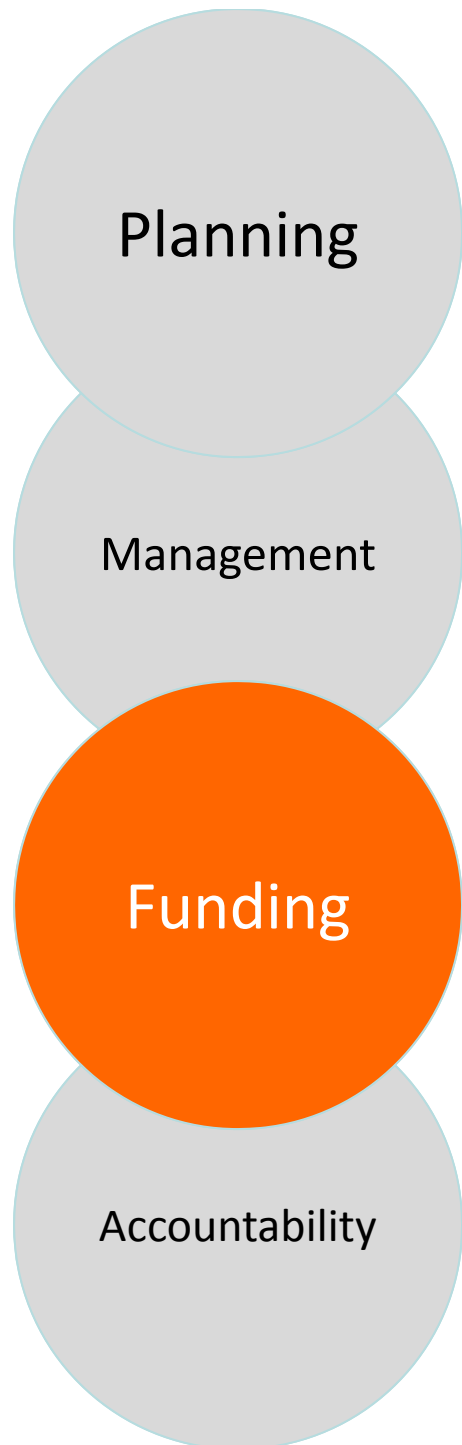
CHALLENGES

**Information and trust
lacking**



CHALLENGES

**Inadequate &
inequitable funding
patterns characterize
current need**



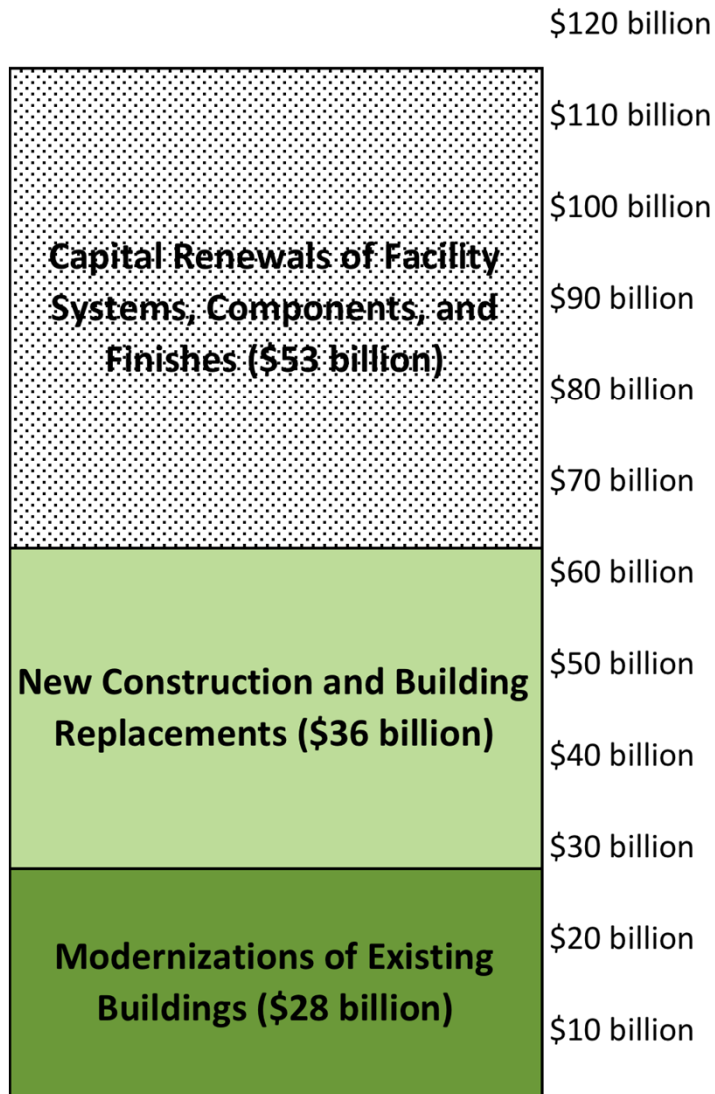
Modernization funds fell short

- Mod = \$11 billion (\$2.30 SF/yr)
- DM = \$3.1 billion (\$.66 SF/yr)
- *Total State Funds = \$3 SF/yr*
- Industry standard for capital renewals = \$7 - \$15 SF/yr

Estimating K-12 Capital Needs:

- New Construction
 - Enrollment growth/crowding
 - Building Replacement
- Modernization
 - For health, life-safety, and ADA
 - For educational program delivery
- Capital Renewals
 - Scheduled replacement or restoration (2-4%)

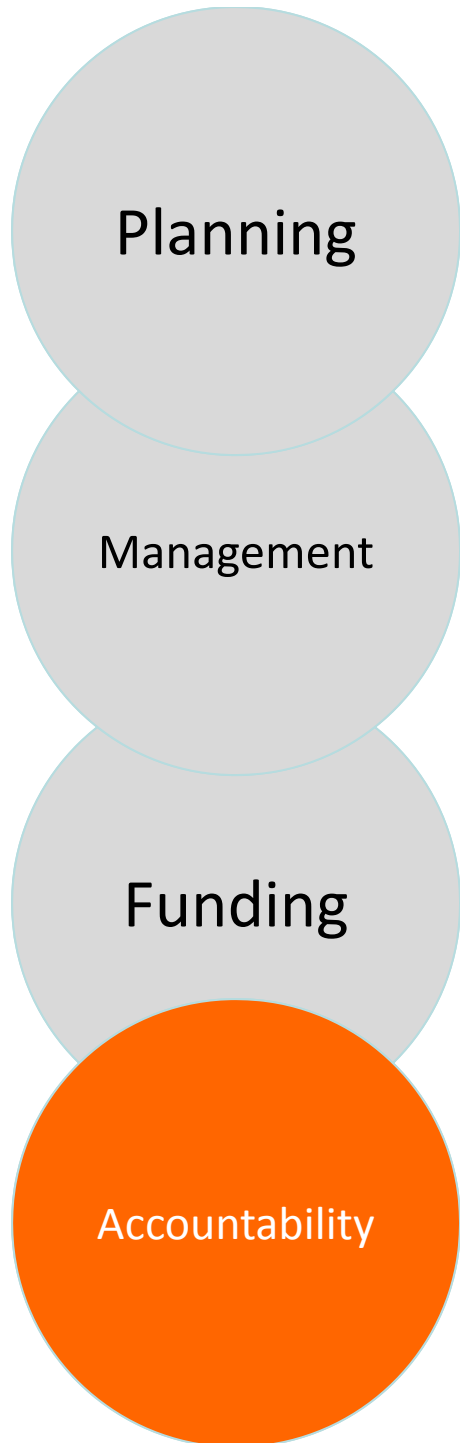
**Estimated Total
Funding NEEDS
for California K-12
Facilities, 2013-2023**



Estimating Needs:

\$117 billion to ensure
safe, modern, equitable,
and sustainable learning
environments for all
students

	Capital Outlay Category	Cost per Gross Square Foot (GSF)	GSF Affected Space	Total Cost Over Decade	Factors Affecting Estimates	Scope	
New Construction	Enrollment growth/crowding	\$375	31 million	\$12 billion	343,000 students at a minimum of 90 GSF per student	New construction to address enrollment growth and shifts.	\$36 billion
	Building replacements	\$375	47 million	\$18 billion	10% of existing square footage	New construction to replace an existing facility.	
	Site costs	n/a	n/a	\$6 billion	20% of Project Costs	Demolition, site clean-up; site acquisition.	
Modernization of Existing School Buildings	Modernization for health, life-safety and ADA	\$50	141 million	\$7 billion	30% of the total 471 million GSF	Facility design modifications to meet modern access, health and life-safety codes, including seismic.	\$28 billion
	Modernization for educational program delivery	\$150	141 million	\$21 billion	30% of the total 471 million GSF	Building and grounds design modifications, including capital furniture, fixtures and equipment that support educational program delivery.	
Capital Renewal of Facility Systems, Components, and Finishes	Capital renewals for efficient, reliable operations	\$113 (\$11.30 per GSF per year)	471 million	\$53 billion (\$5.3 billion annually)	Depreciated replacement value over 33 years	Facility system, component, and finish replacements and upgrades, including exterior systems, components, and treatments for school yards and athletics.	\$53 billion
TOTAL							\$117 billion



CHALLENGES

**Weak accountability
for high-value return**

Recommendations:

Leveraging the State Role

1. Establish **state** vision & master **plan**
2. Promote **local** intergovernmental **planning**
3. Assemble needed **information**
4. Review & update **Title 5** (CCR)
5. Set funding **priorities**
6. Establish state funding of **capital renewals**
7. Identify multiple **revenue** sources
8. Improve public **accountability**

Harnessing Efficiencies & Benefits



Three levers:

1. Policy reforms
2. Process innovations
3. Technology tools

1. Adopt vision & master plan

11 states and the District of Columbia reported that they had state level educational facility master plans.

Alabama, Alaska, Arkansas, Delaware, District of Columbia, Georgia, Hawaii, Illinois, Kentucky, Massachusetts, Ohio, Rhode Island

a. K-12 on Strategic Growth Council

2. Promote local inter-agency planning

- a. Include K-12 in SB 375, etc.
- b. Require standards-based LEA master plans
- c. Provide guidance for local joint planning
- d. Set minimum green building criteria
- e. Use CEQA strategically

23 states reported that they require LEAs to prepare educational facility master plans.	Alabama, Alaska, Arizona, Arkansas, California, Delaware, Florida, Georgia, Kentucky, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New Mexico, New York, North Carolina, Ohio, Oregon, Rhode Island, Washington, West Virginia, Wyoming
16 states and the District of Columbia have green school construction/renovation requirements in statute. (Source: USGBC)	Arizona, California, Colorado, Connecticut, District of Columbia, Florida, Hawaii, Illinois, Kentucky, Maryland, Massachusetts, New Jersey, Ohio, Pennsylvania, Rhode Island, South Carolina, Washington

3. Assemble info to be strategic and prioritize

a. Develop inventory & assessment tool

22 states reported that they maintained a publicly accessible database of the state's public school facilities inventory.

Alaska, Arizona, Arkansas, Colorado, Delaware, Florida, Hawaii, Illinois, Iowa, Maine, Maryland, Massachusetts, Minnesota, Montana, New Hampshire, New Jersey, New York, North Carolina, South Carolina, Washington, West Virginia, Wyoming

4. Review & update *Title 5, CCR*

- a. Statewide comparison of schools
- b. Supports sustainable communities

22 states and the District of Columbia reported that they have comprehensive facility standards on school size, siting, planning, design, construction, and sustainability.

Arizona, Arkansas, California, Connecticut, District of Columbia, Florida, Georgia, Hawaii, Kentucky, Maine, Maryland, Massachusetts, Minnesota, New Jersey, New Mexico, Ohio, Oklahoma, Rhode Island, South Carolina, Utah, Vermont, West Virginia, Wyoming

5. Set priorities to remedy inadequate facilities and support new construction

- a. Identify state-level need
- b. Establish criteria for ranking
- c. Bring all schools to minimum level
- d. Develop transparent funding formula

13 states and the District of Columbia have had lawsuits that established new state funding programs and/or shifted aspects of existing funding programs.	Arizona, Arkansas, California, Colorado, Connecticut, District of Columbia, Kentucky, Montana, New Jersey, New Mexico, New York, Ohio, West Virginia, Wyoming
23 states reported factoring local wealth into funding formulas.	Alaska, Arkansas, Colorado, Connecticut, Delaware, Florida, Hawaii, Idaho, Illinois, Kansas, Kentucky, Massachusetts, Montana, New Hampshire, New Jersey, New Mexico, New York, Ohio, Pennsylvania, Rhode Island, South Carolina, Texas, Utah
15 states reported factoring building condition (not just building age) into funding formulas.	Alaska, Arkansas, Colorado, Delaware, Florida, Georgia, Hawaii, Kentucky, Maine, Massachusetts, New Jersey, New York, Vermont, West Virginia, Wyoming

6. Establish capital renewals funding

a. Shift from reactive to proactive approach

New Mexico	Following New Mexico's school finance court case in 1998, the state established a Public School Facilities Authority, which has assessed each school in the state against the state adequacy standards (which include building condition, crowding, and other factors). The schools were ranked against the standards. State funding has gone to LEAs to improve the worst condition schools first. The adequacy standards are minimum facility requirements determined to meet the educational program needs. The adequacy standards serve as a trigger for state funding, which funds just up to meeting the minimum standards.
Ohio	In Ohio, state K-12 facility funds are prioritized by wealth of LEAs. Lowest-wealth LEAs receive funding first. The Ohio School Facilities Commission (OSFC) provides matching grants to LEAs based on legislative formula and ranking of LEAs on an equity list.

7. Identify multiple revenue sources

- a. Consider statewide special tax
- b. Public/private partnership legislation
- c. Periodic bond use

At least 9 states provide some amount of regular annual allocation to LEAs for capital expenses.	Arizona, Florida, Indiana, Kentucky, Minnesota, South Carolina, Tennessee, Utah, West Virginia
9 states and the District of Columbia have state revenues dedicated to repaying state K-12 construction bonds.	Alabama, District of Columbia, Idaho, Illinois, Iowa, Massachusetts, New Hampshire, New Mexico, North Carolina, Ohio

8. Improve accountability

- a. Produce annual report
- b. Inter-agency info system
- c. SFP Citizen's Oversight Committee
- d. Maintain Implementation Committee
- e. Streamline approval processes
- f. Support technology tools





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State by State Policy Review

STATE NAME	Number of Schools (1)	% State Funding for School Construction (2005-2008)	Facility Staff at State Education Agency	Additional Facility Agency Staffing	State Facility Plan	State Requires LEA Facilities Master Plan	State Technical Assistance to LEAs	Publicly Available State-Level K-12 Facilities Inventory	State PS12 Facility Standards	Green School Construction / Renovation Requirements (2)
Alabama	1,605	52%	4	1	Y	Y	Y	N	None	N
Alaska	501	85%	5	N/A	Y	Y	Y	Y	Limited	N
Arizona	2,135	32%	0	13	N	Y	Y	Y	Comprehensive	Y
Arkansas	1,121	19%	21	N/A	Y	Y	Y	Y	Comprehensive	N
California	9,983	30%	27	116	N	Y	Y	N	Comprehensive	Y
Colorado	1,757	1%	7.5	N/A	N	N	Y	Y	None	Y
Connecticut	1,117	18%	9	N/A	N	N	N	N	Comprehensive	Y
Delaware	235	64%	1.5	N/A	Y	Y	Y	Y	None	N
District of Columbia	244	100%	30	N/A	Y	N	N	N	Comprehensive	Y
Florida	3,935	21%	31	N/A	N	Y	Y	Y	Comprehensive	Y
Georgia	2,452	15%	12	N/A	Y	Y	Y	N	Comprehensive	N
Hawaii (3)	287	100%	363	N/A	Y	N	Y	Y	Comprehensive	Y
Idaho	727	11%	0.1	No info	N	N	N	N	None	N
Illinois	4,399	8%	10	No info	Y	N	Y	Y	Limited	Y
Indiana	1,970	0%	1	N/A	N	N	Y	N	None	N
Iowa	1,511	61%	1	N/A	N	N	Y	Y	None	N
Kansas	1,422	61%	2	N/A	N	N	Y	N	None	N
Kentucky	1,528	41%	8	3	Y	Y	Y	N	Comprehensive	Y
Louisiana	1,470	0%	0	N/A	N	N	N	N	None	N
Maine	670	84%	5	N/A	N	Y	Y	Y	Comprehensive	N
Maryland	1,453	32%	4	22	N	Y	Y	Y	Comprehensive	Y
Massachusetts	1,878	100%	0	45	Y	Y	Y	Y	Comprehensive	Y
Michigan	4,096	0%	5	N/A	N	N	N	N	None	N
Minnesota	2,679	21%	3	N/A	N	N	Y	Y	Comprehensive	N
Mississippi	1,068	0%	4	N/A	N	N	Y	N	Limited	N
Missouri	2,417	0%	0	N/A	N	N	N	N	None	N
Montana	831	12%	0.2	0	N	N	Y	Y	None	N
Nebraska	1,143	0%	2	N/A	N	N	N	N	None	N
Nevada	610	0%	0	N/A	N	N	N	N	None	N
New Hampshire	488	31%	1.5	N/A	N	Y	Y	Y	Limited	N
New Jersey	2,591	57%	20	330	N	Y	Y	Y	Comprehensive	Y
New Mexico	851	52%	0	51	N	Y	Y	N	Comprehensive	N
New York	4,631	52%	20	N/A	N	Y	Y	Y	Limited	N
North Carolina	2,516	15%	8.5	N/A	N	Y	Y	Y	None	N
North Dakota	528	0%	0.5	N/A	N	N	N	N	None	N
Ohio	3,924	50%	0	70	Y	Y	Y	N	Comprehensive	Y
Oklahoma	1,798	0%	2	N/A	N	D/K	Y	N	Comprehensive	N
Oregon	1,295	3%	0	N/A	N	N	N	N	None	N
Pennsylvania	3,246	4%	No info	No info	N	N	No info	N	Limited	Y
Rhode Island	328	34%	3	N/A	Y	Y	Y	N	Comprehensive	Y
South Carolina	1,195	2%	7	N/A	N	N	Y	Y	Comprehensive	Y
South Dakota	730	0%	0	N/A	N	N	N	N	None	N
Tennessee	1,718	57%	1	N/A	N	N	N	N	None	N
Texas	8,758	13%	4	N/A	N	N	Y	N	Limited	N
Utah	1,010	6%	1	N/A	N	N	Y	N	Comprehensive	N
Vermont	329	31%	1	N/A	N	N	Y	N	Comprehensive	N
Virginia	2,027	0%	3	N/A	N	N	N	N	None	N
Washington	2,311	20%	12	N/A	N	Y	Y	Y	None	Y
West Virginia	762	45%	4	9	N	Y	Y	Y	Comprehensive	N
Wisconsin	2,268	0%	0	N/A	N	N	N	N	None	N
Wyoming	368	100%	0	18	N	Y	Y	Y	Comprehensive	N

(1) NCES 2008-2009 school year; (2) US Green Building Council.

(3) Hawaii is a unitary district, so the state manages all school facilities. Staffing includes local and state staff.

Unless otherwise cited, all data is from survey of state education agencies by 21st Century School Fund in Summer and Fall of 2010.