LAUSD Construction Outcomes

Facilities and Procurement Committee Meeting

April 22, 2025

Agenda

- Introductions and Executive Summary
- Macroeconomic and Contractor Participation Analysis
- Peer Entity Review
- LAUSD Construction Outcomes Review
- Conclusion and Next Steps

Nationally-recognized Locally-focused

Our commitment to high-quality education drives us to partner with schools, districts, and agencies to deliver innovative solutions. With our expertise, we empower educational institutions to create environments where students and staff excel.

50M

Students impacted across over 500 school districts

1,000+

Team members, with California staff across local offices

30,000

Engagements completed – serving as a trusted partner

50

Years of positive change and social impact in education

LAUSD Construction Outcomes Analysis

Project Overview

Primary Objective: provide District decision-makers with critical data needed to understand the factors driving costs and delays in district construction projects

Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
✓ Project Planning ✓ LAUSD Staff Interviews ✓ LAUSD Project Selection ✓ Peer Entity Selection	✓ LAUSD document collection ✓ Market research ✓ Quality Control Review ✓ Peer interviews and data collection	✓ Develop evaluation metrics ✓ Detailed review and analysis ✓ Local market influences analysis ✓ Comparative analysis	✓ Consolidate Key Findings ✓ Integrate District Staff Feedback ✓ Develop Draft Report	✓ Presentation ❑ Finalize report

Executive Summary

Key Findings

MGT evaluated local labor market influences, key performance indicators, and best practices to identify key areas where LAUSD should evaluate changes to management of aspects of the school construction program.

Macroeconomic Analysis & Contractor Participation

- Construction costs have increased dramatically due to inflation, commodity pricing increases
- Employment gaps in construction, with limited contractor participation in trades that are most expensive
- Local events create higher demand on commodities and labor, increasing costs

Peer Entity Review

- Benchmarking against peer entities provides insights, with limitations in comparative analysis
- Gathered qualitative and quantitative data from peer entities to inform recommendations

LAUSD School Construction Review

- In-depth review of 10 projects sampled across various school and project types
- Original budget to actual cost variance ranging from $260k to $45M overage with two under by $100k and $3M
- Change orders ranged from 3 to 299 per project, with an average of 88 and one without any change orders

Executive Summary

Recommendations

MGT identified over 25 recommendations to improve aspects of the school construction program. These examples offer the four most important actions LAUSD should adopt to strengthen project delivery, risk management, and contractor engagement to manage costs.

Strategic Plan for Program Management	**Establish key performance indicators to measure, monitor, and assess school construction program: processes, people, and technology**
Strengthen Internal Controls	**Establish stringent thresholds (amount and number) for levels of review and accountability measures both internally and externally**
Encourage sub-contractor participation	**Conduct a sub-contractor participation management study and focused disparity study to evaluate barriers to entry that could be addressed to boost competition and potentially lower costs by increasing the availability of contractors**
Proactive Approach to Mitigate Abatement	**Incorporate abatement assessment into design phase to mitigate incidence and cost of change orders in the construction phase**

Macroeconomic and Contractor Participation Analysis

Macroeconomic Analysis

Variables Relating To Construction Outcomes

Understanding macroeconomic variables related to construction costs, with a focus on California and Los Angeles specific factors

Materials Market Conditions

- Analyzed trends in the cost of eight commodities as well as the average cost of inputs for producers
- Every category of commodity, and commodity prices on average, have risen considerably since January 2020 with margins of increase ranging from 26 percent for cold rolled steel to 52 percent for copper and copper products

Labor Market Conditions

- Analyzed employment trends for construction-related macroeconomic variables across the Los Angeles-Long Beach-Anaheim Metropolitan Statistical Areas (MSA)
- Employment gaps generally and in specialty trades of 16 and 18 percent, respectively, compared to historical trends

Other California-Specific Economic Considerations

- Cost of Living Index: *California is 4th highest nationally*
- California Construction Cost Index- *Increased 40% from Jan 2020 to Oct 2024*
- School Construction Bonds: *$18.1B approved in Nov 2024*
- Wildfires in January 2025
- Lack of Affordable Housing
- New Private Housing Demand
- 2026 FIFA World Cup
- 2028 Olympics

Macroeconomic Analysis

Recommendations for External Risk Mitigation

Responding to market pressures requires a shift from reactive to proactive approach

Labor Shortage Mitigation

1. Partner with trade schools and apprenticeship programs
2. Explore automation and innovation in contractor participation

Commodity Cost Preparedness

1. Monitor market prices routinely
2. Use adjusted escalation factors in cost planning

Contractor Participation Analysis

Assessment of Local Contractor Availability

Low availability of contractors in Los Angeles, particularly in high cost markets, increases cost of construction

Contractor Categories and Business Type

- Data sourced from the California Contractors State Licensing Board
- Peer counties include Orange, Riverside, San Bernardino, and Ventura
- Controlled for county population size to benchmark comparison (LA County: 9.6M vs. peer counties ranging from ~830K to ~3.1M residents)

Key Insights

- Incidence of contractors per 1,000 residents is 11% lower in Los Angeles County than average in other four counties
- Corporations and partnerships over-represented in Los Angeles County, with limited liability corporations infrequent

			County (Population)					Trend		
			Orange	Riverside	San Bernardino	Ventura	Mean	Los Angeles	Variance	Percent
	Contractor Classification	**Code**	**3,135,755**	**2,492,442**	**2,195,611**	**829,590**	**-**	**9,663,345**	**-**	**-**
	Asbestos Abatement Contractor	C-22	**0.012**	0.004	0.007	0.004	0.007	0.008	(0.001)	12%
	Plumbing Contractor	C-36	0.442	0.427	0.326	**0.574**	0.442	0.457	(0.014)	3%
	Boiler, Hot Water Heating and Steam Fitting Contractor	C-4	0.012	0.008	0.004	**0.014**	0.010	0.010	(0.000)	1%
★	**General Building**	B	2.829	2.125	1.856	**3.040**	2.463	2.312	0.150	-6%
★	**Electrical Contractor**	C-10	0.762	0.712	0.588	**0.840**	0.725	0.670	0.055	-8%
★	**Structural Steel**	C-51	0.034	0.040	**0.048**	0.028	0.037	0.034	0.003	-8%
	Building Moving/Demolition Contractor	C-21	**0.051**	0.047	0.049	0.049	0.049	0.043	0.007	-13%
★	**Warm-Air Heating, Ventilating and Air-Conditioning Contractor**	C-20	0.323	**0.412**	0.296	0.305	0.334	0.288	0.046	-14%
	Roofing Contractor	C-39	0.137	0.122	0.134	**0.165**	0.140	0.113	0.027	-19%
	Solar Contractor	C-46	0.025	**0.035**	0.020	0.023	0.026	0.020	0.006	-22%
	Masonry	C-29	0.072	0.087	0.054	**0.119**	0.083	0.043	0.040	-48%

★ ***Indicates building components that are significant costs in projects***

Contractor Participation Analysis

Challenges and Gaps

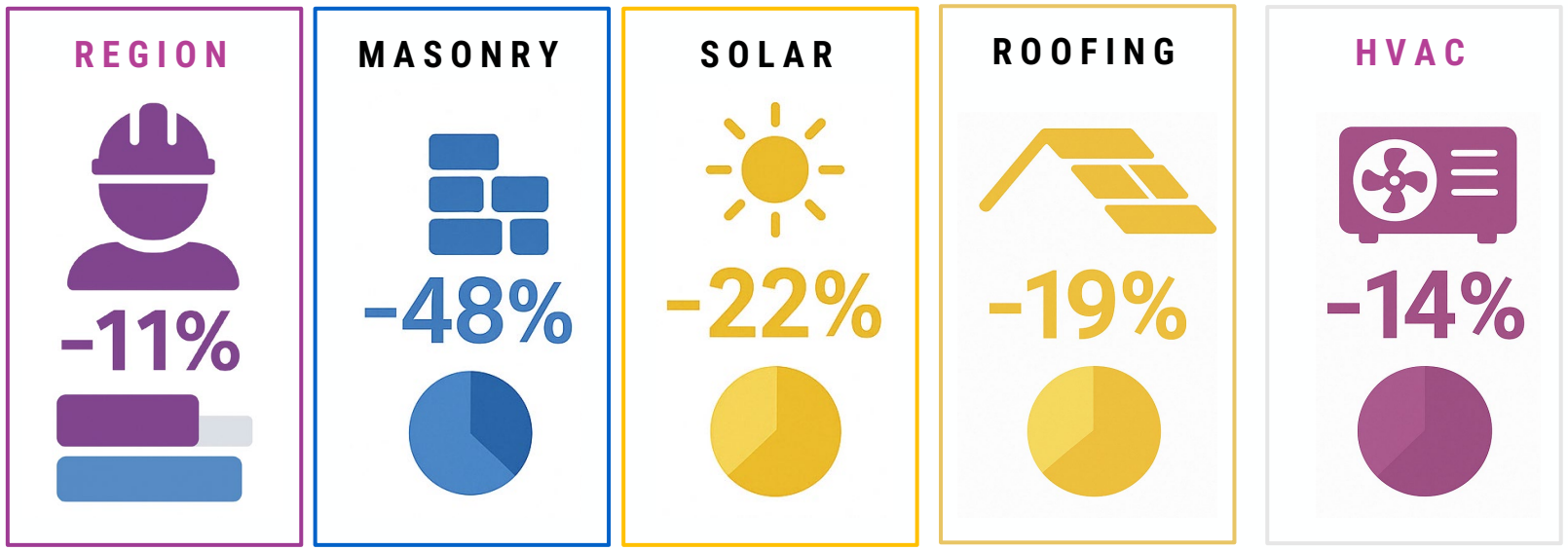
Understanding contractor availability gaps provides areas of focus based on LAUSD scheduled construction projects

Key Challenges

- LAUSD's contractor pool is dominated by large corporations and partnerships, reducing price competition
- Masonry contractors are nearly half as available compared to the regional average
- Solar contractor availability is also significantly underrepresented
- Warm-Air Heating, Ventilating and Air-Conditioning Contractor and Roofing are 19 and 14 percent underrepresented

Contractor Participation Gaps

per 1,000 residents



Contractor Participation Analysis

Recommendations for Improvement

With limited availability, LAUSD should focus on boosting competition through contractor engagement to potentially lower costs

Increase Subcontractor Participation

Target most underrepresented trades like Masonry, Solar, HVAC, or Roofing based on LAUSD project scheduling

Diversify Contractor Pool

Encourage small firms, joint ventures, and sole proprietors to participate in LAUSD projects

Peer Entity Review

Peer Entity Review
Selection Methodology

Peer selection was driven by desire to focus on urban school districts and California's local market factors

Peer entities were selected to reflect urban educational environments and local market conditions relevant to California, with a focus on comparability in scale, infrastructure needs, and community context.

Urban school districts in California

- Seven were considered across the state, 2 selected
- Factors influencing choice: school bonds, location

Colleges in California

- Two were considered across the state, 2 selected
- While not comparative on school type, similar market factors apply

Other Communities

- Two were considered outside of California, 1 selected
- Perspective into other geographies and national best practices

Peer Entity	State	Enrollment	County Population
Phoenix Union School District	Arizona	27,000	4,420,568
West Contra Costa Unified School District	California	32,197	1,165,927
Los Angeles Community College District	California	193,960	9,663,345
San Diego Unified School District	California	114,467	3,269,973
California State University	California	485,549	N/A
Peer District Average*	**---**	**235,087**	**5,636,632**
LAUSD	**California**	**557,352**	**9,663,345**

Peer Entity Review
Bond Measures
Understanding the Scale, Timing, and Strategic Focus of Capital Investments

Key Insights

- Districts are leveraging multi-billion-dollar bond measures to modernize aging infrastructure and adapt to evolving educational needs
- LAUSD's $9 billion Measure US, passed in 2024, represents one of the largest K–12 investments in California—expected to drive demand for specialized school construction labor and contribute to rising project costs
- Recent bonds emphasize safety, technology, and flexible learning environments, especially post-2018
- Ongoing investments reflect long-term, phased strategies rather than one-time facility overhauls
- Bonds are increasingly tied to sustainability, STEM, and workforce-readiness upgrades

District / Entity	Bond Measure	Year Approved	Amount	Purpose
SDUSD *(San Diego Unified)*	Proposition S	2008	$2.1B	Repairs, renovations, safety upgrades, facility replacement
	Proposition Z	2012	$2.8B	Continuation of S – safety, technology, energy efficiency
	Measure YY	2018	$3.5B	Modern learning environments – lead removal, STEM upgrades, security
WCCUSD *(West Contra Costa Unified School District)*	Measure E	2012	$360M	Modernize and construct school facilities
	Measure D	2016	$270M	Safety improvements, technology upgrades
	Measure R	2020	$575M	Construction, rehab, and facility replacement
LACCD *(L.A. Community College District)*	Proposition AA	2003	$980M	Renovation, replacement of aging facilities
	Measure J	2008	$3.5B	Continued facilities improvements
	Measure CC	2016	$3.3B	Security, tech upgrades, classroom/lab modernization
	Measure LA	2022	$5.3B	Infrastructure, tech, sustainability, athletics upgrades
Cal State University – Los Angeles *(California State University)*	Proposition 47	2002	$1.65B	Modernization as part of statewide K–12/higher ed effort
	Proposition 55	2004	$36M	Maintenance and building upgrades
	Proposition 1D	2006	$690M	Seismic retrofits, major renovations
	Systemwide Revenue Bonds	Ongoing	Project-based	Housing, infrastructure, energy improvements
PXU *(Phoenix Union)*	Previous Bonds	Various	N/A	General construction, tech, safety upgrades
	2023 Bond	2023	$475M	Renovation, inflation offset, flexible learning spaces
LAUSD (Los Angeles Unified School District)	Measure US	2024	$9B	Modernize school facilities to improve safety, seismic upgrades, ADA accessibility, plumbing, electrical, HVAC, green classrooms, and technology infrastructure. Approved as part of a larger $18.1B LA County school bond package. Expected to increase demand for specialized school construction labor and raise construction costs.
	Measure RR	2020	$7B	Measure RR funds critical school upgrades across LAUSD, including seismic retrofitting, lead and asbestos removal, and modernization of HVAC, plumbing, and electrical systems. The bond also supports technology infrastructure and classroom improvements to meet evolving safety and instructional needs.
	Measure Q	2008	$7B	Designed to relieve overcrowding and update aging facilities by funding new school construction, modernization projects, and improvements to campus safety, accessibility, and energy efficiency.

Peer Entity Review
Benchmarking Limitations

Benchmarking against peer entities provides insights, with limitations in comparative analysis

LAUSD is unique in its operations, scope, and local market conditions.

- **Entities operate differently**
  - Organizational structures
  - Internal and external expertise varies
- **Program management is influenced by process and scope**
  - Project management techniques and accountability structures
  - Variances in the number of school construction projects and how they are managed
- **School construction projects**
  - Variances in types of projects completed in the last two years
  - No two schools are the same: age, conditions, needs, community
- **Comparative analysis was completed where peer entity and LAUSD data could be credibly and reliably normalized**
  - Project timelines, costs, delivery methods
  - Legal terms and conditions, change orders
  - Data from peers is inconsistent due to numerous factors; therefore, peer selection was expanded

Peer Entity Review
Comparative Analysis
Project Cost by Square Foot

Average cost per square foot: LAUSD Projects

Project Data					Calculations	
Project	School Level	Project Type	Total Cost	SF	$ Per SF	$ per SF Avg. by Type
Carnegie MS - HVAC	MS	HVAC Replacement	$4,546,726	18,447	$246	$141
Sun Valley Magnet MS - HVAC	MS & HS	HVAC Replacement	$4,032,483	42,200	$96	
Garvanza Tech Magnet ES - Seismic Retrofit of Main Building	ES	Seismic Retrofit	$7,328,857	33,812	$217	$228
Glassell Park STEAM Magnet ES - Seismic Retrofit of Main Building	ES	Seismic Retrofit	$7,736,392	32,270	$240	
Cleveland Charter HS - Comprehensive Modernization	HS	Modernization	$167,080,188	246,309	$678	$498
Venice HS - Comprehensive Modernization	HS	Modernization	$156,907,036	402,362	$390	
Wonderland ES - Classroom Replacement	ES	Modernization	$11,367,361	24,141	$471	
Hollywood HS - Roofing	HS	Roofing	$2,979,797	57,838	$52	$56
Los Angeles Center for Enriched Studies Span - Roofing	HS	Roofing	$1,148,294	15,620	$74	

Average cost per square foot: Peer Projects

Project Data					Calculations	
District	Project	Project Type	Actual Costs	Sq Ft	$ Per Sq Ft	$ per Sq Ft Avg. by Type
LBUSD	Cubberley K-8 HVAC	HVAC Replacement	$17,972,735	47,870	$375	$241
LBUSD	Robinson K-8 HVAC	HVAC Replacement	$7,831,076	59,062	$133	
LBUSD	Jordan High School Major Renovation	Renovation	$35,715,684	29,000	$1,232	$826
LACCD	Los Angeles City College DaVinci Modernization	Modernization & ADA	$42,682,125	65,920	$647	

KEY INSIGHTS

- Benchmarking by square foot cost by project type gives LAUSD a starting point to evaluate projects moving forward and further refine this metric internally
- LAUSD's HVAC replacement costs ($141/SF) are in range with peer projects ($241/SF)
- LAUSD's modernization costs ($498/SF) appear significantly lower than the peer average ($826/SF), though difference may be attributed to differences in scope

Peer Entity Review
Comparative Analysis
LAUSD Hard Cost Percentage Analysis

LAUSD Project Data						Calculations
Project	School Level	Project Type	Hard Cost	Soft Cost	Total Cost	Hard Cost as % of Total Costs
Carnegie MS - HVAC	Middle	HVAC Replacement	$ 3,441,766	$ 1,104,960	$ 4,546,726	76%
Sun Valley Magnet MS - HVAC	Middle & High School	HVAC Replacement	$ 3,197,845	$ 834,638	$ 4,032,483	79%
Garvanza Technology & Leadership Magnet ES - Seismic Retrofit of Main Building	Elementary	Seismic Retrofit	$ 5,665,071	$ 1,663,786	$ 7,328,857	77%
Glassell Park STEAM Magnet ES - Seismic Retrofit of Main Building	Elementary	Seismic Retrofit	$ 6,419,278	$ 1,317,114	$ 7,736,392	83%
Ramona ES - ADA Improvements	Elementary	ADA Upgrades	$ 2,402,168	$ 923,666	$ 3,325,834	72%
Cleveland Charter HS - Comprehensive Modernization	High School	Modernization	$ 148,004,934	$ 19,075,254	$ 167,080,188	89%
Venice HS - Comprehensive Modernization	High School	Modernization	$ 133,247,276	$ 23,659,760	$ 156,907,036	85%
Wonderland ES - Classroom Replacement	Elementary	Modernization	$ 8,529,030	$ 2,838,331	$ 11,367,361	75%
Hollywood HS - Roofing	High School	Roofing	$ 2,916,623	$ 63,174	$ 2,979,797	98%
Los Angeles Center for Enriched Studies Span - Roofing	High School	Roofing	$ 1,079,701	$ 68,124	$ 1,147,825	94%
Total			**$ 314,903,692**	**$ 51,548,807**	**$ 366,452,499**	**86%**

KEY INSIGHTS

- LAUSD's hard cost to total cost percentage, on average, across the in-depth project sample is 86%, slightly higher than the 70-80% best practice range
- As expected, the roofing average is higher at 96%, where labor and materials are core to the project with a lower average of 77.5% for HVAC projects

Peer Entity Review
Comparative Analysis
Peer Entity Hard Cost Percentage Analysis

Peer Project Data						Calculations
Peer	**School**	**School Level**	**Project Type**	**Total Cost**	**Hard Cost Amount**	**Hard Cost %**
SDUSD	Barnard	Elementary	Modernization	$2,437,140.00	$1,925,341	79%
SDUSD	Roosevelt	Middle	HVAC Replacement	$2,949,238.00	$2,388,883	81%
SDUSD	Crawford	High School	Modernization	$62,111,642.00	$45,962,615	74%
WCCUSD	Cameron	Elementary	HVAC Replacement	$3,370,063.00	$2,392,745	71%
WCCUSD	Collins	Elementary	HVAC Replacement	$6,799,031.00	$4,895,302	72%
WCCUSD	Michelle Obama (Wilson)	Middle	Modernization	$39,361,480.00	$25,191,347	64%
WCCUSD	Richmond	High School	Modernization	$20,250,034.00	$13,770,023	68%
LBUSD	Jordan High School	High School	Renovation	$35,715,684.00	$23,215,195	65%
PUHSD	Central	High School	Modernization	$9,000,000.00	$6,480,000	72%
LACCD	Pierce College - 1500 Building	Community College	HVAC Replacement	$1,299,000.00	$935,280	72%
LACCD	Pierce College – SLE South of Mall	Community College	ADA Upgrades	$1,266,000.00	$873,540	69%
LACCD	LA City College – Da Vinci Hall	Community College	Modernization	$17,600,000.00	$13,059,200	74%
Total				**$202,159,312.00**	**$141,089,470.43**	**70%**

KEY INSIGHTS

- LAUSD's hard cost to total cost percentage, on average, across the in-depth project sample is 86%, higher than the 70% average for peer projects
- LAUSD's hard cost to total cost percentage of 77.5% for HVAC projects is slightly higher than the peer average of 74% - indicative of lower LAUSD indirect costs

Peer Entity Review
Comparative Analysis
Change Order Review

LAUSD Change Order Amount as Percent of Original Contract Value

LAUSD Project Name*	Original Contract Value	Change Orders Total Amount	Change Orders as % of Original Contract Value
Carnegie MS - HVAC	$ 4,414,069	$661,072	15%
Garvanza Technology & Leadership Magnet ES - Seismic Retrofit of Main Building	$5,224,506	$808,642	15%
Cleveland Comp Mod	$126,335,634	$2,657,635	2%
Venice HS - Comprehensive Modernization	$114,979,580	$16,242,267	14%
Ramona ES - ADA Improvements	$1,888,888	$202,991	11%
Wonderland ES - Classroom Replacement	$7,003,333	$604,369	9%
Glassell Park STEAM Magnet ES - Seismic Retrofit of Main Building	$7,221,209	$932,533	13%
Hollywood HS - Roofing	$1,553,680	$209,744	13%
Sun Valley Magnet MS - HVAC	$3,770,837	$641,112.00	17%
Totals	**$272,391,736**	**$22,960,369**	**8%**

WCCUSD Order Amount as Percent of Original Contract Value

Completed Project	Original Contract Value	Change Orders Total Amount	Change Orders as % of Original Contract Value
Pinole Valley HS - Fields and Bleachers	$15,185,000	$1,518,543	10%
Fairmont ES - Critical Needs	$59,000	$500	1%
Kennedy HS - Bleacher & Press Box	$5,042,000	$461,148	9%
Cameron School & Collins ES Critical Needs	$9,064,000	$456,475	5%
Riverside ES Playground Improvements	$849,000	$53,644	6%
Hercules MS/HS Science Building	$15,613,000	$693,466	4%
Total	**$45,812,000**	**$3,183,776**	**7%**

KEY INSIGHTS

- LAUSD's average change order percent of original contract value is one percentage point higher than West Contra Costa's
- Using 8-14% as a typical range, three LAUSD projects were above (15% or higher) with one below (2%), while WCCUSD had none over and 4 below (6% or lower)
- Due to the variability in project types and project management across districts, it is best for LAUSD to establish change order benchmarks internally

Peer Entity Review

Opportunities for LAUSD

MGT identified key areas and practices where LAUSD should evaluate changes to management of aspects of the school construction program. These examples offer opportunities for LAUSD to further assess current state to implement new or refine existing practices.

Best Practices		Opportunities for LAUSD
Competitive performance-based contractor terms (escalation clauses, incentives)	**Cost Controls**	Explore bonuses to increase adherence to project schedule and minimize unforeseen costs
Matching delivery methods to project complexity / scope	**Delivery Method**	Refine structured criteria to choose optimal delivery methods
Change order thresholds and owner scope review	**Change Orders**	Add review triggers (e.g., >10% budget or 15+ changes) to mitigate costs
Strategic plan with key performance indicators	**Program Management**	Create a formal performance oversight framework to address gaps in people, process, technology
Disparity study to expand vendor pool	**Vendor Access**	Identify participation barriers and attract more small/local contractors

LAUSD Strengths Compared to Peers

Opportunities to Build On Success

While the peer review and comparative analysis focused on areas where other districts may perform differently from LAUSD, MGT also identified LAUSD-specific strengths that may be expanded — presenting an opportunity to build on these internal wins.

	LAUSD Strengths	Building on Strengths
1	**Structured Project Prioritization Process** Staff described LAUSD's process for identifying and prioritizing construction projects as structured and data-informed.	**Enhance Long-Term Project Agility** Build on this strength by integrating formal scope and budget checkpoints into long-term projects to adapt to changing conditions.
2	**Improved Collaboration Post-Reorg** Following a recent reorganization, staff reported increased collaboration and alignment across departments involved in construction.	**Formalize Cross-Department Collaboration** Institutionalize this collaboration through consistent communication protocols and shared planning tools across teams.
3	**Community Engagement at Complex Sites** Roosevelt High School was highlighted as a standout example of collaborative planning that authentically reflected community input.	**Replicate Successful Engagement Models** Scale the current community engagement approach in a cost-effective manner to replicate success at other sites, especially those with historic or complex needs.

LAUSD Construction Outcomes Review

LAUSD Construction Outcomes Review

Process review and Staff Interviews

Information about LAUSD practices and processes were gathered through documentation reviews and staff interviews

Quantitative and qualitative data was gathered to understand the life cycle of projects from bid to completion.

- **Documentation review included but not limited to:**
  - Construction Management Policies and Procedures
  - Board of Education documents
  - Construction budget, cost, and control documents
  - Estimate at completion (EAC) reports
  - Budget modification forms
  - Change order logs and change orders
  - Notices of award
  - Notices to proceed
  - Notices of completion
  - Office of the Inspector General Audit Reports

- **Staff Interviews**
  - Conducted twenty interviews with key members across various LAUSD organizational units
  - Staff represented the following departments:
    - Business Services, Operations, Facilities, Construction and Maintenance, Community Relations, and Small Business departments
  - Rubric was created and leveraged to normalize feedback and analyze information gathered through interviews

LAUSD Construction Outcomes Review

Staff Interview Key Highlights

Information shared by multiple staff was organized into themes

Qualitative feedback reflects perspectives from varying levels of staff based on questions in MGT's interview rubric.

Communication gaps across departments limit transparency	Further improve **cross-departmental collaboration** and **communication**
Some design standards have not been updated in 20 years	**Inform staff of** educational specifications and materials updates
Limited checkpoints to reevaluate long-term projects	**Implement project checkpoints** for long-term builds with design complexities
Community engagement varies by project	Use **successful models** (e.g., Roosevelt High) to guide **community engagement practices**

LAUSD Construction Outcomes Review

Project Selection and Analysis

Ten projects were thoughtfully selected for in-depth review

Factors such as project budget, scope, percentage over budget, delays, and geographic region were considered during the project selection process.

- **Project Selection Process**
  - LAUSD's Informal Request for Proposal included 99 school construction projects completed since May 2022
  - MGT and LAUSD proposed potential projects for review
  - MGT reviewed crosswalk of proposed projects to identify those for in-depth analysis – focusing on factors like high costs, frequent change orders, and schedule extensions
  - Projects varied across type of school, type of project, and region

In-depth analysis focused on the following projects

Project	Type of School	Type of Project
Carnegie MS - HVAC	Middle	HVAC Replacement
Sun Valley Magnet MS – HVAC	Middle & High School	HVAC Replacement
Garvanza Technology & Leadership Magnet ES - Seismic Retrofit	Elementary	Seismic Retrofit
Glassell Park STEAM Magnet ES - Seismic Retrofit of Main Building	Elementary	Seismic Retrofit
Ramona ES - ADA Improvements	Elementary	ADA Upgrades
Cleveland Charter HS - Comprehensive Modernization	High School	Modernization
Venice HS - Comprehensive Modernization	High School	Modernization
Wonderland ES - Classroom Replacement	Elementary	Modernization
Hollywood HS - Roofing	High School	Roofing
Los Angeles Center for Enriched Studies Span - Roofing	High School	Roofing

KEY INSIGHTS

- Projects in the sample were significantly delayed and had high variance between actual costs and pre-bid original budget

LAUSD Construction Outcomes Review

Change Orders

Review of amount and reasons for change orders by type of change

Change Order Cost Per Code - Evaluated Projects				
Code	# Change Orders	Cost		% of Total Change Orders
Course of Construction Scope Addition	320	$	12,581,910	54.80%
Owner Initiated Scope Addition	162	$	6,716,538	29.25%
Abatement	57	$	2,304,332	10.04%
Design Scope Addition	122	$	1,158,188	5.04%
Bid Scope Gap	9	$	917,289	4.00%
Undefined	84	$	543,175	2.37%
Utilities	2	$	505,140	2.20%
Means and Methods	1	$	170,535	0.74%
COVID	2	$	87,217	0.38%
Administrative Change	16	$	44,863	0.20%
Seismic	1	$	42,655	0.19%
Value Engineering	1	$	1,775	0.01%
Delay	2	$	-	0.00%
Course of Construction Scope Deletion	1	$	(901)	0.01%
Design Scope Deletion	2	$	(2,415)	0.01%
Owner Initiated Scope Deletion	16	$	(2,109,935)	9.19%
Total	**799**	**$**	**22,960,367**	**100%**

Abatement Change Orders - Evaluated Projects			
# Change Orders	Project	Cost	
24	Venice HS - Comprehensive Modernization	$	1,282,515
14	Cleveland Comp Mod	$	821,324
5	Garvanza Technology & Leadership Magnet ES - Seismic Retrofit of Main Building	$	48,495
4	Valley Oaks Center for Enriched Studies - Clear Vision Studio	$	85,867
4	Carnegie MS - HVAC	$	95,242
3	Sun Valley Magnet MS - HVAC	$	37,641
2	Wonderland ES - Classroom Replacement	$	11,851
1	Ramona ES - ADA Improvements	$	7,263
Total		**$**	**2,390,199**

KEY INSIGHTS

- Three top volume for change orders are: course of construction scope addition, owner initiated scope addition, and design scope addition – areas to manage
- Significantly, abatement change orders were fifth in volume but account for 10% of total change orders – thus yielding recommendations

LAUSD Construction Projects Review

Challenges and Gaps

The following challenges were identified through MGT's in-depth review of LAUSD construction projects, highlighting key areas that contributed to delays, cost increases, and scope changes.

RISK OF DELAYS DUE TO ABATEMENT TESTING TIMING

- Abatement testing often occurs after construction starts, leading to change orders and delays.
- Lack of early identification (e.g., 9x9 tile) increases unforeseen conditions.

INSUFFICIENT PRE-CONSTRUCTION EFFORT

- Compressed schedules limit thorough facility condition assessments.
- "Unforeseen" conditions like tech incompatibility, roof/gas/fire line issues arose post-start

AGING PROJECT PLANS

- Projects are identified years before funding due to school bond timelines—market conditions and needs shift.

LIMITED SITE INVESTIGATION

- Late discovery of structural issues (e.g., elevator shaft at Glassell Park) required design changes mid-construction.

DESIGN OMISSIONS AND DOCUMENTATION GAPS

- Incomplete document reviews lead to scope changes and cost increases.

MISSED OPPORTUNITIES FOR VALUE ENGINEERING

- Limited time for assessments may overlook cost/time-saving alternatives.

LACK OF INSTITUTIONAL LEARNING

- Lessons from past projects not consistently documented or reviewed.

LAUSD Construction Projects Review

Recommendations for Improvement

Based on the analysis of LAUSD construction projects, the following recommendations are intended to address recurring challenges and improve project efficiency, reduce delays, and minimize unforeseen costs.

1 Proactive Abatement Testing

- Issue RFQs early for hazmat assessment, specifications, and abatement plans.
- Mandate detailed job walks to uncover risks before bidding.

2 Extend Pre-Construction Phase

- Build in more time for walkthroughs and facility condition assessments.
- Include CM/GC and A/E teams to catch "unforeseen" issues early.

3 Re-Evaluate Aged Projects

- Reassess scope and cost prior to bid.

4 Prioritize Site Investigations

- Conduct early structural reviews and explore alternative design options pre-DSA submission.

5 Strengthen Document Review Process

- Conduct detailed constructability reviews and assess As-Builts and historical documents before bidding.

6 Enable Value Engineering

- Allocate time for cost-saving assessments and explore alternate solutions during design.

7 Document and Review Lessons Learned

- Capture and share recurring issues and resolutions.
- Conduct team reviews of past projects to establish best practices.

Conclusion

Key Recommendations

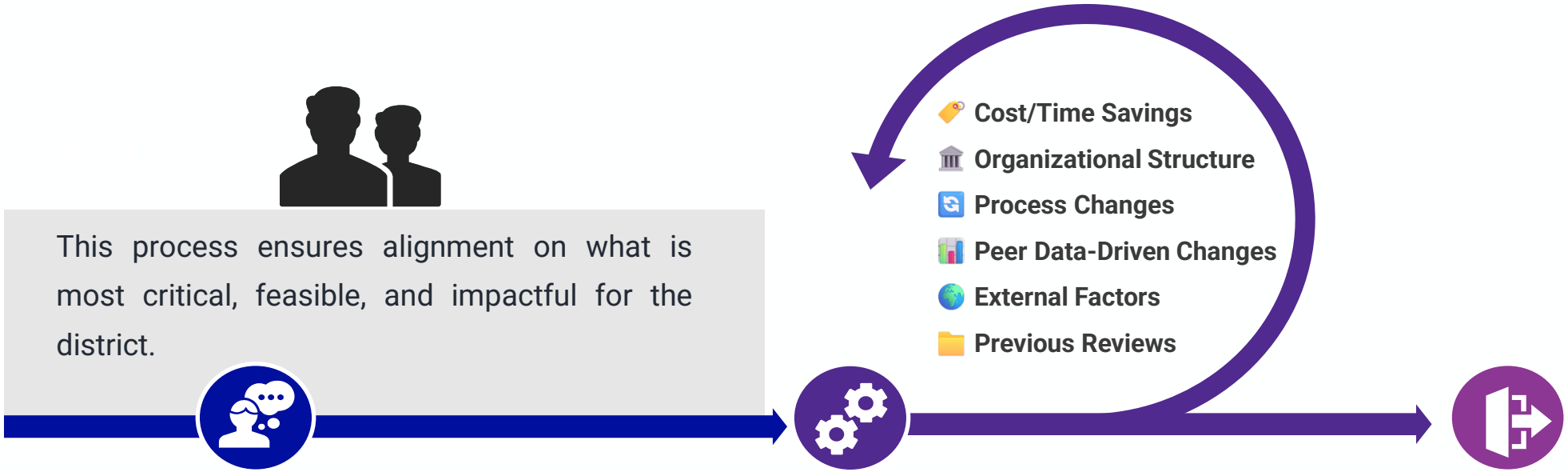
MGT identified over 25 recommendations to improve aspects of the school construction program. These examples offer the four most important actions LAUSD should adopt to strengthen project delivery, risk management, and contractor engagement to manage costs.

Strategic Plan for Program Management	**Establish key performance indicators to measure, monitor, and assess school construction program, processes, people, and technology**
Strengthen Internal Controls	**Establish stringent thresholds (amount and number) for levels of review and accountability measures both internally and externally**
Encourage sub-contractor participation	**Conduct a sub-contractor participation management study and focused a disparity study to evaluate barriers to entry that could be addressed to boost competition and potentially lower costs by increasing the availability of contractors**
Proactive Approach to Mitigate Abatement	**Incorporate abatement assessment into design phase to mitigate incidence and cost of change orders in the construction phase**

Conclusion

Recommendation Prioritization and Implementation

To support implementation, MGT will continue working collaboratively with district staff to prioritize the recommendations.



This process ensures alignment on what is most critical, feasible, and impactful for the district.

District Alignment

MGT will review and refine each recommendation with district staff to confirm urgency, feasibility, and strategic fit.

Categorization of Each Recommendation

Each item will be mapped to one or more categories to guide implementation.

Recommendation Matrix

A final matrix will visually represent the full set of prioritized recommendations across these categories for inclusion in final report.

Thank you

Peer Entity Comparative Analysis

Sub-Contractor Participation

Subcontractor Participation Initiatives

Exhibit 14

Subcontractor participation enhances project quality, efficiency, and cost-effectiveness in school construction by bringing specialized expertise and accelerating timelines. LAUSD actively supports small business participation through certification help, vendor engagement, and pre-apprenticeship programs. A comparison with peer districts reveals LAUSD's robust initiatives align with or exceed regional practices.

Entity	Subcontractor Participation Initiatives
Los Angeles Unified School District	LAUSD requires subcontractors, particularly those in mechanical, electrical, and plumbing (MEP) trades, to be prequalified before participating in construction projects. Additionally, LAUSD has a Small Business Enterprise (SBE) program that provides a 10% bid preference to certified SBEs.
San Diego Unified School District	San Diego Unified School District mandates that general contractors and MEP subcontractors submit a prequalification package for projects over $1 million. The district uses an "XBE" framework with targets of 5% DVBE, 8% MBE, 7% WBE, 40% SBE, and an overall 50% participation goal, with a minimum 3% DVBE requirement on every project.
West Contra Costa Unified School District	Under its Local Capacity Building Program (LCBP), WCCUSD prequalifies contractors for projects of $1 million or more in accordance with state guidelines. The district's approach ensures that local businesses secure at least 30% of the total project dollar volume, supported by local hiring targets (e.g., 24% of work hours by local residents and participation from apprentices).
Los Angeles Community College District	LACCD leverages its Community Economic Development (CED) Program to award contracts, mandating that at least 30% of Build Program contracts go to Local, Small, Emerging, and Disabled-Veteran Owned Businesses (LSEDV)—including MBE, WBE, SBE, and DVBE categories—reinforced by a Project Labor Agreement (PLA) supporting local hiring.
California State University	CSU requires subcontractors to comply with the Disabled Veteran Business Enterprise (DVBE) participation requirements, which include a 3% goal of total contract value. CSU allows informal bidding on contracts under $250,000 by obtaining quotes from at least two certified small businesses or two DVBEs. This prequalification process supports a minimum DVBE participation of 3% across all contracts and requires annual reporting to ensure diverse supplier engagement
Phoenix Union School District	Phoenix Union's Local and Small Business Outreach Program (LSBOP) requires contractors to maximize local participation. The district targets three priority areas—Central Phoenix, Greater Phoenix (Maricopa County), and Outlying Regions—to ensure local businesses receive at least 30% of the project dollar volume. Additionally, annual goals require 25% of work hours by local residents and 20% by apprentices, with all subcontracting pre-approved by the Procurement Officer.
Long Beach Unified School District	Long Beach Unified School District has a formal Local Hire and Local Business Participation policy to reinvest bond dollars back into the community, including targeting firms and workers within a 15-mile radius of the district. Additionally, the Long Beach Unified School District maintains a pre-qualification program for contractors that allows small and minority-owned firms to get on the district's preapproved bidders list for projects. The Long Beach Unified School District has also entered into a Community Workforce Development Agreement (a project labor agreement) with the Los Angeles/Orange Counties Building Trades Council. This agreement guarantees fair wages and working conditions on bond-funded projects and also includes provisions for hiring local apprentices and workers-in-training.

Peer Entity Comparative Analysis

Labor Availability and Cost

Wages in California MSAs

Exhibit 16

Average hourly wages in the LA and San Diego MSAs are nearly identical, despite LA having a much larger construction workforce. While wages in the San Francisco MSA are higher, this is influenced by the inclusion of Silicon Valley. MGT also reviewed California and national wage data to provide broader context.