

# LONG BEACH UNIFIED SCHOOL DISTRICT Facility Master Plan Update

# 2016



RENAISSANCE HIGH SCHOOL

PERFORMING ARTS CENTER



# ACKNOWLEDGEMENTS

## BOARD OF EDUCATION

**Felton Williams**  
President

**Jon Meyer**  
Vice President

**Diana Craighead**  
Member

**John McGinnis**  
Member

**Megan Kerr**  
Member

## PUBLIC INFORMATION

**Chris Eftychiou**  
Public Information Officer

## FACILITIES BRANCH

**Les Leahy**  
Business Services Administrator

**Stella Escario-Doiron**  
Interim Administrative Coordinator

**Edith Florence**  
Project Manager

**Jason Patrick Douglas**  
Assistant Planner

**Christy Wong**  
Facilities Intern

**Troy Glover**  
Consultant - Fanning Howey

**Carl Baxmeyer**  
Consultant - Fanning Howey

## EXECUTIVE STAFF

**Christopher J. Steinhauser**  
Superintendent of Schools

**Jill Baker**  
Deputy Superintendent of Schools

**Ruth Perez Ashley**  
Deputy Superintendent of Education Services

**Yumi Takahashi**  
Chief Business and Financial Officer

**Brian Moskovitz**  
Assistant Superintendent, Elementary Schools

**Jay Camerino**  
Assistant Superintendent, Middle & K-8 Schools

**Peter Davis**  
Assistant Superintendent, High Schools

**Pamela Seki**  
Assistant Superintendent, Curriculum, Instruction  
& Professional Development

**Tiffany Brown**  
Assistant Superintendent, School Support Services

**Christopher Lund**  
Assistant Superintendent, Research, Planning,  
Evaluation & School Improvement

**Kenneth Kato**  
Executive Officer, Personnel Commission  
& Classified Employment

## COMMUNITY ADVISORY COMMITTEE

### **Charlie Honeycutt**

City Manager, City of Signal Hill

### **Cliff Kusaba**

Retired Community Member

### **Christopher Koontz**

Manager, Planning Services  
City of Long Beach

### **Walter Larkins**

Businessman

### **J. Patrick McGuckian**

Director of Community Development  
City of Lakewood

### **Gerard Morrison**

Teacher, McBride High School

### **Miles Nevin**

Office of the President  
Long Beach City College

### **Valeeta Pharr**

President, CSEA – Chapter 2

### **Arturo Sanchez**

Deputy City Manager, City of Long Beach

### **Mary Stephens**

Office of the President  
California State University, Long Beach

### **Mark Taylor**

Chief of Staff, Mayor's Office  
City of Long Beach

### **Fuamatala Tuuao**

ASB President, Jordan High School

### **Rene Woodson**

Member, Parent Forum

### **Elena Wraight**

President, Long Beach Council PTA

## HIGH SCHOOL PRINCIPALS

### **Cheryl Cornejo and Elio Mendoza**

Cabrillo High School

### **Veronica Coleman and William Salas**

Jordan High School

### **Mario Jimenez and Shawn Abbate**

Lakewood High School

### **Alejandro Vega and Michael Navia**

Millikan High School

### **Victor Jarels and Diane Prince**

Polytechnic High School

### **Gonzalo Moraga and Sandra Blazer**

Wilson High School

### **Angelica Gonzalez**

Avalon School





# TABLE OF CONTENTS

EXECUTIVE SUMMARY .....	5
A. INTRODUCTION .....	6
1. FMP GUIDING PRINCIPLES .....	6
3. PROGRAM ACCOMPLISHMENTS .....	10
B. DISTRICT PROFILE .....	12
1. DEMOGRAPHICS.....	12
2. ENROLLMENT PROJECTIONS.....	13
3. SCHOOLS FACILITY INFORMATION.....	15
4. CAPACITY.....	17
C. NEEDS ASSESSMENTS.....	18
1. SCOPE OF WORK .....	18
2. ASSESSMENT FINDINGS .....	19
D. PROJECTS COST ESTIMATE.....	20
E. COMMUNITY ENGAGEMENT .....	21
1. COMMUNITY MEETINGS.....	21
F. FACILITY MASTER PLAN FUNDING .....	23
1. LOCAL FUNDING.....	23
2. STATE FUNDING .....	24
3. FEDERAL FUNDING.....	25
G. CHALLENGES AND SUMMARY .....	26
1. CHALLENGES .....	26
2. SUMMARY .....	30
H. APPENDICES.....	31



## EXECUTIVE SUMMARY

The Long Beach Unified School District Facility Master Plan (FMP) is a long-term blueprint for meeting the changing facility needs of the District and was developed with input from community members, educators, administrators and staff through dozens of meetings over a period of more than two years. The FMP was adopted in January 2008 by the Board of Education and updated in 2013.

Over 300 FMP projects have been completed over the past eight years. Major projects include construction of four schools, wireless data communications provided to every school site, and major renovations and reconstruction of two schools. Other accomplishments include:

- Seismic projects
- Building System/Safety Improvements
- Reuse/Conversion of schools
- Removing portables
- Technology upgrades
- Access Compliance at various sites
- DSA Certification Projects.



Supporting the District's educational endeavor through high quality facilities continues to be the leading goal of the FMP. Based upon Measure K accomplishments, current facilities assessments, community feedback, and recent challenges facing the District, this update recommends the following three Guiding Principles stand at the core of facilities improvements moving forward:

- 1. Creating learning environments to meet schools for the next generation**
- 2. Renovating and replacing aging infrastructure**
- 3. School safety and security**



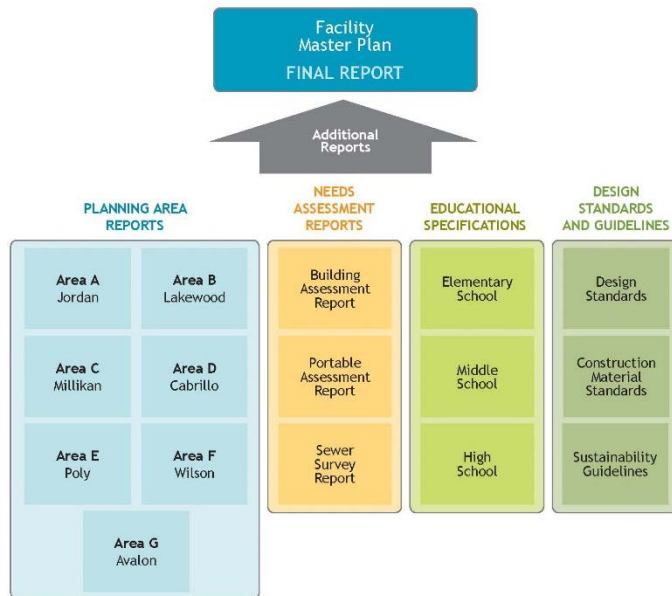
The Measure K \$1.2 billion General Obligation Bond funding is not sufficient to meet the District's facility needs. Additional funding is required to meet the current need estimated at \$3.5 billion. A community discussion regarding how to fund this plan is recommended at this time.



# A. INTRODUCTION

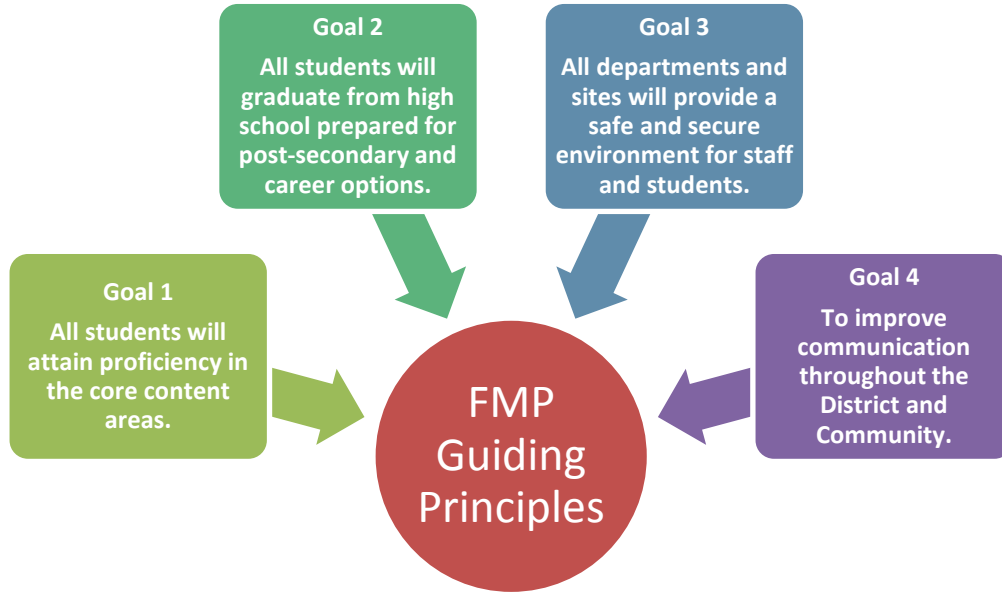
In 2008, Long Beach Unified School District (LBUSD or District) adopted a comprehensive Facility Master Plan (FMP). The intent of the FMP is to provide guidance on how LBUSD schools could be renovated and replaced over a 20-25 year period. Development of the FMP involved school planning professionals, engaged educators, parents, and community members. Information was vetted over an 18-month, multi-step process, which included data collection, forming of planning areas and various committees, community dialogues, and Board of Education approval. Measure K, a \$1.2 billion General Obligation Bond, was approved by LBUSD voters in November 2008. The FMP is a living document and updates are necessary to ensure its relevance. The 2013 Update confirmed that the implementation of the FMP has been successful with the passage of Measure K and its various Program accomplishments. The Update revisited the Guiding Principles, challenges, recommendations, and the FMP’s alignment with LBUSD’s Strategic Plan. This 2016 FMP Update continues to review the FMP with an emphasis on the ongoing Program challenges as identified in the 2013 Update, specifically LBUSD’s facility needs and funding shortfall. The following report provides up-to-date information on the items below, as well as a report on recent accomplishments.

- District Profile
- Facility Needs Assessments
- Facility Projects Cost Estimate
- Community Outreach
- Facility Master Plan Funding



## 1. FMP Guiding Principles

LBUSD has earned a reputation as one of America's finest school systems, winning several awards as a national and international model of excellence. LBUSD’s mission and vision is to support the personal and intellectual success of every student, every day, and to produce students who become responsible, productive citizens in a diverse and competitive world. The LBUSD strategic plan was integral to the development of the FMP Guiding Principles.



The six Guiding Principles that emerged during the development of the 2008 FMP were:

- **Creating learning environments to meet schools for the next generation**
- **Renovating and replacing aging infrastructure**
- **Declining enrollment and elimination of portables and bungalows**
- **Changing the size and type of high schools**
- **Joint use**
- **School Safety and Security**

The principles have been key factors for decisions made relating to the Program. The table below identifies the Guiding Principles and related FMP progress.

2008 Guiding Principles	Progress as of 2016 Update
<p><b>Creating learning environments to meet schools for the next generation</b></p> <p>The District is continually updating educational strategies and restructuring its educational focus to improve academic performance and meet the challenges of changing academic standards and student demography. The primary focus of future facility improvements should be to support such advancements in teaching and learning environments.</p> <p>District-wide educational facilities specifications by grade level have been developed to guide the design of new buildings and/or the redesign of current buildings. Extensive renovations will be needed to convert many of the current buildings into 21st Century learning environments. The cost effectiveness and efficiency of renovation of older structures and constructing new buildings will need to be determined. The final solution will be a combination of new and renovated schools.</p>	<ul style="list-style-type: none"> <li>• Construction of Jesse Elwin Nelson Academy</li> <li>• Construction of Ernest McBride, Sr. HS</li> <li>• Construction of Roosevelt ES</li> <li>• Construction of Newcomb K-8 Academy</li> <li>• Wireless data communications at all sites</li> <li>• Conversion of Hill MS to Sato Academy*</li> <li>• Conversion of Keller ES to Keller MS*</li> <li>• Construction of Browning HS*</li> <li>• Renovation of Jordan HS*</li> <li>• Renovation of Renaissance HS*</li> </ul> <p>(Note: *in construction)</p>
<p><b>Renovating and replacing aging infrastructure</b></p> <p>The 1930s and 1950s were two defining eras for LBUSD school facilities. Most of the District's schools were rebuilt as a result of the 1933 earthquake. Post war population growth in the 1950's and 1960's led to the construction of many new schools. During these eras, approximately 65 percent of LBUSD's current building square footage was constructed. This accounts for nearly two-thirds of the current square footage being 50 or more years old.</p>	<ul style="list-style-type: none"> <li>• Re-construction of Roosevelt ES</li> <li>• Re-construction of Newcomb Academy</li> <li>• Boiler replacement projects at 8 sites</li> <li>• Renovation/Seismic of Bancroft MS Gym</li> <li>• Renovation/Seismic of Hoover MS Gym</li> <li>• Truss repair of Hughes MS Auditorium/ Cafeteria</li> <li>• Truss repair of Twain ES Auditorium/ Cafeteria</li> <li>• Technology upgrades*</li> <li>• Fire, intercom, clock and speaker upgrades*</li> <li>• Deferred maintenance and maintenance repair/replacement projects*</li> <li>• Telecommunication*</li> <li>• Re-construction of Jordan HS*</li> <li>• Re-construction of Renaissance HS*</li> <li>• Re-construction of Sato Academy (Hill) Gym*</li> <li>• Renovation/Seismic of Poly HS Auditorium*</li> <li>• Renovation/Seismic of Wilson HS Auditorium*</li> </ul> <p>(Note: *in construction)</p>



<p><b>Declining enrollment and elimination of portables and bungalows</b></p> <p>Portables have been utilized to economically and expeditiously address overcrowding of school facilities or to create classroom space for programs such as class size reduction. Currently, there are more than 1,500 portable and bungalow classrooms in the District. Most of these temporary buildings are over 20 years old, some being over 30 and 50 years old.</p>	<ul style="list-style-type: none"> <li>● Phase 1 Department of Housing portable removal (17 sites)</li> <li>● Phase 2 and 3 portable and bungalow removal (32 sites)</li> <li>● Reuse/conversion of school sites to support facilities</li> <li>● Interim housing at Butler MS for Roosevelt ES</li> <li>● Interim housing at Keller ES for Newcomb Academy</li> <li>● Interim housing at Butler MS for Renaissance HS*</li> </ul> <p>(Note: *in construction)</p>
<p><b>Changing the size and type of high schools</b></p> <p>The District's six traditional comprehensive high schools have a current enrollment of 3,000 to 4,500 students each. The current trend is to create smaller thematic high schools and smaller learning communities at the larger high schools to promote a more personalized learning environment for students.</p>	<ul style="list-style-type: none"> <li>● Construction of Ernest McBride, Sr. HS</li> <li>● Conversion of Hill MS to Sato Academy*</li> <li>● Construction of Browning HS*</li> <li>● Re-construction of Renaissance HS*</li> </ul> <p>(Note: *in construction)</p>
<p><b>Joint use</b></p> <p>LBUSD has a history of collaborative arrangements with the cities surrounding it. These arrangements allow the District to provide vital services and opportunities for the citizens of Long Beach, Lakewood, Signal Hill, Catlina and consequently provide a benefit for the agencies with which the District partners.</p>	<ul style="list-style-type: none"> <li>● The LBUSD Board of Education revised Board Policy #1330 Use of School Facilities, which was approved on July 3, 2012.</li> <li>● Looking for additional opportunities for joint use across the District.</li> </ul>
<p><b>School Safety and Security</b></p> <p>Schools should maintain an inviting and de-institutionalized environment, while simultaneously providing for safety and security for staff and community.</p>	<ul style="list-style-type: none"> <li>● Technology upgrades</li> <li>● Fire alarm replacements (20 sites)</li> <li>● Intercom, clock and speaker upgrades*</li> <li>● Telecommunication*</li> <li>● Security cameras at High Schools*</li> </ul> <p>(Note: *in construction)</p>

## 2. PROGRAM ACCOMPLISHMENTS

Many accomplishments have occurred since the adoption of the LBUSD FMP and Measure K approval in 2008. The first seven years of the Program have focused on creating learning environments to meet Schools for the Next Generation, eliminating portables and bungalows that are beyond their useful life, changing the size and types of high schools and school safety and security. The following are projects completed or under construction.

- Standards Development
  - ✓ Design Standards & Specifications (ongoing)
  - ✓ Education Standards & Specifications (ongoing)
- New School Construction
  - ✓ Jesse Elwin Nelson Academy
  - ✓ Ernest S. McBride Sr. High School
  - ✓ Cabrillo High School Pool
  - ✓ Roosevelt Elementary School
  - ✓ Newcomb K-8 Academy
  - ✓ Browning High School (in construction)

**Roosevelt Elementary School  
Before and After**



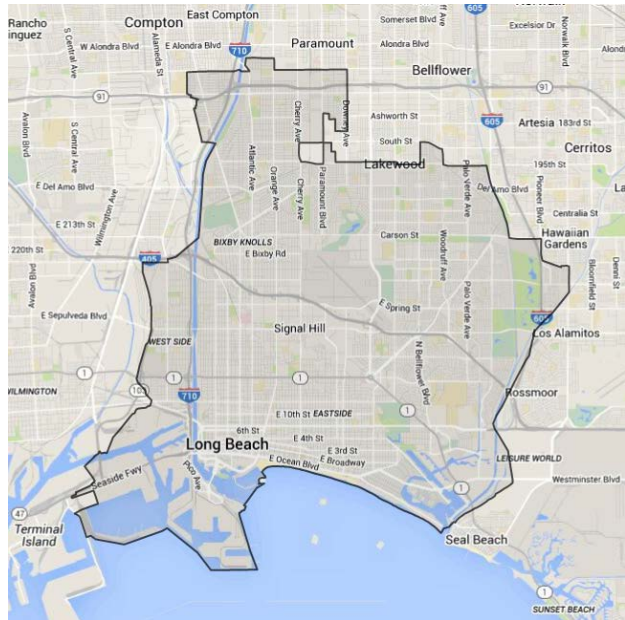
- Renovation Projects
  - ✓ Jordan High School (in construction)
  - ✓ Renaissance High School for the Arts (in construction)
  - ✓ Wilson High School Auditorium (in construction)
  - ✓ Polytechnic High School Auditorium (in construction)

- Seismic Mitigation Projects
  - ✓ Bancroft Middle School Gymnasium
  - ✓ Hoover Middle School Gymnasium
  - ✓ Hughes Middle School Auditorium/Cafeteria Truss Repair
  - ✓ Polytechnic High School Auditorium (in construction)
  - ✓ Sato Academy (Hill) Gymnasium (in construction)
  - ✓ Twain Elementary School Auditorium/Cafeteria Truss Repair
  - ✓ Wilson High School Auditorium (in construction)
  
- Interim Housing
  - ✓ Butler Middle School
  - ✓ Helen Keller Elementary School
  
- Reuse/Conversion Projects
  - ✓ Burroughs ES – Head Start Administration
  - ✓ Tucker ES – Student Support Services Administration
  - ✓ Monroe 6-8 – Personnel Commission, Child Development Center Administration
  - ✓ Hill MS – Sato Academy (Thematic High School)
  - ✓ Helen Keller Middle School
  
- Deportabilization Projects
  - ✓ Department of Housing (DOH) portables at 17 school sites
  - ✓ End of life portables at 32 school sites
  
- Building System/Safety Improvements
  - ✓ Boilers replacement at 8 sites
  - ✓ Fire alarm replacements at 20 school sites
  - ✓ Intercom and clock system upgrades on all campuses (ongoing)
  - ✓ Security cameras on all high school campuses (ongoing)
  
- Technology
  - ✓ Core switch and uninterruptible power supply replacement on all school campuses
  - ✓ Telecom on all campuses (ongoing)
  - ✓ Wireless data communications installation on all school campuses
  
- Access Compliance at Various Sites
  - ✓ Jordan High School
  - ✓ Polytechnic High School
  - ✓ Willard Elementary School
  - ✓ Wilson High School
  
- DSA Certification Projects
  - ✓ 342 of 392 old applications certified



# B. DISTRICT PROFILE

LBUSD was established in 1885 with fewer than a dozen students meeting in a borrowed tent. Currently, LBUSD educates approximately 77,000 students in 85 public schools in the cities of Long Beach, Lakewood, Signal Hill, and Avalon on Catalina Island. The District encompasses approximately 51.4 square miles extending from 70th Street near the Artesia Freeway (91) to the north; west of the Long Beach Freeway (710) to the west; the San Gabriel Freeway (605) to the east; and Ocean Boulevard to the south.



## 1. DEMOGRAPHICS

LBUSD continually monitors the status of the residential community within its jurisdiction. Many of the demographics trends identified in the 2008 FMP and the 2013 Update hold true today. LBUSD is continuing to experience a period of declining enrollment as a result of the community’s slow growth residential population, declining birth rates, and aging population.

### a. Community

The estimated 2015 population within LBUSD was 520,130. While the area served by LBUSD is projected to grow by 1.9 percent (%) in the next five years, the State is projected to grow by 4.8%. LBUSD’s population age trend is consistent with the State of California. The average age for the State and LBUSD area follows:

**Table 1  
Average Population Age for State and LBUSD**

Year	Average Age
2000	33
2010	35
2015	37
2020	38
2015	39

LBUSD serves a diverse population, and dozens of languages are spoken by local residents. The race and ethnicity of the population is projected to remain the same over the next five years. Table 2 shows the current race/ethnicity as a percentage of the population for the area.

**Table 2**  
**Current Race/Ethnicity of Residents**

Hispanic/Latino	40%
White	31%
Asian	13%
Black/African American	12%
Pacific Is/American Indian/Other	4%

## **b. Student Population**

The District’s student population race/ethnicity are presented in Table 3.

**Table 3**  
**Current Race/Ethnicity of Students**

Hispanic/Latino	55%
White	14%
Asian	11%
Black/African American	14%
Pacific Is/American Indian/Other	6%

Approximately 23% of LBUSD’s students are English Language Learners, and 68% are socioeconomically disadvantaged.

The complete summary of LBUSD’s demographic report is provided in the Appendices.

## **2. ENROLLMENT PROJECTIONS**

Student enrollment has decreased over the past twelve years since the 2003-04 school year when enrollment peaked with almost 97,000 students. Utilizing the same enrollment projection methodology used in 2008 and 2013, Table 4 presents the District K-12 enrollment projection by grade level. The decline in enrollment is projected to continue for another 10 years. The 2025 enrollment is approximately 7,000 students (-9%) less than the current enrollment.

Special Education Special Day Class (SDC) enrollment has increased throughout the District by 41% (892 students) between 2008 and 2015. It is important to examine the District’s SDC enrollment trend separately as the program requires classrooms to be loaded at a lower rate (between 10 and 18 students depending on severity). The average rate throughout the District is 4.0 SDC students for every 100 students enrolled from transitional kindergarten to 12<sup>th</sup> grade.

**Table 4**  
**Projected District Enrollment**

Year	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
K	5455	5279	5165	5165	5122	5068	5020	4967	4959	4915
1	5719	5653	5469	5352	5352	5301	5244	5195	5188	5140
2	5262	5523	5454	5267	5256	5256	5200	5155	5145	5097
3	5590	5281	5541	5467	5274	5264	5264	5208	5201	5152
4	5584	5497	5189	5438	5417	5232	5213	5213	5203	5157
5	5611	5472	5395	5085	5387	5366	5176	5162	5194	5150
6	5577	5518	5400	5327	5043	5334	5304	5119	5132	5137
7	5487	5528	5469	5350	5302	5020	5309	5283	5126	5111
8	5344	5428	5477	5411	5326	5277	4998	5284	5280	5102
9	5659	5558	5672	5695	5628	5556	5493	5219	5546	5507
10	5659	5539	5446	5554	5649	5585	5508	5453	5208	5501
11	5631	5517	5400	5309	5489	5583	5519	5440	5416	5147
12	5935	5719	5617	5530	5389	5572	5663	5600	5529	5497
<b>Subtotal</b>	<b>72513</b>	<b>71512</b>	<b>70694</b>	<b>69950</b>	<b>69634</b>	<b>69414</b>	<b>68911</b>	<b>68298</b>	<b>68127</b>	<b>67613</b>
TK	823	792	779	779	771	764	756	745	745	739
SDC	3025	2954	2915	2888	2865	2858	2835	2812	2823	2800
<b>Total</b>	<b>76361</b>	<b>75258</b>	<b>74388</b>	<b>73617</b>	<b>73270</b>	<b>73036</b>	<b>72502</b>	<b>71855</b>	<b>71695</b>	<b>71152</b>

The FMP divided LBUSD into seven planning areas, which are aligned with the six comprehensive high school attendance boundaries and Catalina Island. These planning areas have proven to be good levels of geographic study, both because of their alignment with high school boundaries and their consistency with respect to demographics. Enrollment is impacted both by the number of students who live within a given planning area and the number of students who attend schools outside of their planning area. LBUSD offers School Choice (open enrollment) and, as such, the number of students who live in one school's attendance area while attending another school has a potentially significant impact on projected enrollment. Other factors that impact LBUSD enrollment projections are new schools, school closures, and boundary adjustments. The enrollment projection based on current trends for K-12 without TK and SDC by planning area is presented below.

**Table 5**  
**Projected Planning Areas Enrollment**

Area	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Jordan	12779	12558	12364	12197	12147	12111	12001	11922	11840	11757
Lakewood	8865	8658	8569	8482	8409	8355	8291	8196	8134	8049
Millikan	10393	10282	10152	10088	10018	10016	9958	9854	9768	9675
Cabrillo	10072	9948	9889	9774	9738	9710	9657	9581	9818	9762
Polytechnic	17406	17216	17043	16941	16922	16913	16821	16709	16609	16506
Wilson	12408	12268	12089	11883	11813	11723	11599	11445	11375	11281
Avalon	590	582	588	585	587	586	584	591	583	583
<b>Total</b>	<b>72513</b>	<b>71512</b>	<b>70694</b>	<b>69950</b>	<b>69634</b>	<b>69414</b>	<b>68911</b>	<b>68298</b>	<b>68127</b>	<b>67613</b>

Table 6 shows the five and ten year projected decline percentage from the current enrollment by planning area. A previously stated, the overall decline in the next 10 years for the District is projected at 9%. The decline by planning area will vary from 1 to 11%.

**Table 6**  
**Projected 5 and 10 Year Planning Areas Decline Percentage**

Area	2020	2025
Jordan	6%	9%
Lakewood	6%	10%
Millikan	2%	5%
Cabrillo	6%	6%
Polytechnic	3%	6%
Wilson	7%	11%
Avalon	1%	1%

### 3. SCHOOLS FACILITY INFORMATION

The 1930s and 1950s were two defining eras for LBUSD school facilities. Most of the District’s schools were rebuilt as a result of the 1933 earthquake. Post war population growth in the 1950’s and 1960’s led to the construction of many new schools. During these eras, approximately 65 percent of LBUSD’s current building square footage was constructed. This accounts for nearly two-thirds of the current square footage being 50 or more years old. The average age of the District’s facilities is 65 years old, as shown in Table 7, with the year built of each facility in Table 8.

**Table 7**  
**Average Year Built and Age of Schools**  
**Districtwide and Planning Area**

AREA	AVERAGE YEAR FIRST BUILT	AVERAGE AGE
AREA A – JORDAN	1958	58
AREA B – LAKEWOOD	1950	66
AREA C – MILLIKAN	1951	65
AREA D – CABRILLO	1959	57
AREA E - POLYTECHNIC	1953	63
AREA F – WILSON	1939	77
AREA G – AVALON	1935	81
DISTRICTWIDE	1951	65

Note: Average does not include completed or ongoing FMP projects.

**Table 8  
Year of School Construction**

<b>AREA A – JORDAN</b>		<b>AREA B - LAKEWOOD</b>		<b>AREA C – MILLIKAN</b>		<b>AREA D - CABRILLO</b>	
School	First Built	School	First Built	School	First Built	School	First Built
Addams	1935	Bancroft	1944	Burcham	1949	Beach	1957
Barton	1948	Cleveland	1952	Carver	1950	Cabrillo	2000
CAMS	2003	Gompers	1952	Cubberley	1951	Chavez	2002
Dooley	2006	Henry	1951	Emerson	1952	Edison	1935
Grant	1934	Holmes	1952	Keller	1954	EPHS	1995
Hamilton	1952	Hoover	1955	Marshall	1952	Garfield	1935
Harte	1948	Lakewood	1957	McBride	2013	Hudson	1969
Jordan	1935	MacArthur	1942	Millikan	1956	Lafayette	1936
Jordan Ac	2001	Madison	1956	Newcomb	2015	Muir	1945
King	1934	Monroe	1953	Prisk	1953	Reid	1965
Lindbergh	1935	Riley	1952	Stanford	1953	Stephens	1945
Lindsey	1951	Twain	1935			Washington	1935
McKinley	1934					Webster	1951
Powell	2000						

<b>AREA E - POLYTECHNIC</b>		<b>AREA F - WILSON</b>		<b>AREA G - AVALON</b>	
School	First Built	School	First Built	School	First Built
Alvarado	1987	Bixby	1951	Avalon	1935
Birney	1950	Browning	2016		
Butler	1989	Bryant	1941		
Franklin	1924	Buffum	1949		
Hughes	1948	Burbank	1949		
International	1998	Fremont	1934		
Lincoln	1935	Gant	1949		
Longfellow	1935	Jefferson	1935		
Los Cerritos	1935	Kettering	1956		
Nelson	2012	Lee	1935		
PAAL	1996	Lowell	1922		
Polytechnic	1937	Mann	1935		
Renaissance	1935	Naples	1934		
Robinson	1990	Rogers	1935		
Roosevelt	2015	Sato (Hill)	1935		
Signal Hill	1936	Tincher	1954		
Smith	1934	Tucker	1954		
Stevenson	1934	Willard	1935		
Whittier	1935	Wilson	1924		



LBUSD school facilities' square footage is a combination of permanent and temporary facilities. Portables were installed on sites to house the rapid enrollment growth which peaked in 2003-04. As a result of the FMP's new construction and removal of portables, the 2016 total square footage is higher than the 2005's total square footage, with a reduction in temporary and an increase in permanent square footage. The table below presents the District square footage change.

**Table 9**  
**School Facilities Summary**

Type	2005	2016
Permanent SF	6,380,630	6,594,460
Temporary SF	1,248,961	1,057,524
<b>Total</b>	<b>7,629,591</b>	<b>7,651,984</b>

Source: American Appraisal, July 2005 and January 29, 2016

**4. CAPACITY**

LBUSD's declining student enrollment since 2003-04 has resulted in excess capacity at some of our campuses. The excess capacity has allowed the conversion of site use, interim housing for construction, and the removal of portables. Additionally, the District's excess capacity provides the opportunity to support improved educational programs for our students, which includes

- Kids' Club
- Head Start
- Child Development Centers (CDC)
- Special Education
- Personnel Commission

Various LBUSD programs housed in leased facilities have been moved to school sites.



## C. NEEDS ASSESSMENTS

In 2007, a facility needs assessment was conducted by architects and engineers for all schools in LBUSD. A sample group of schools was chosen in 2013 to verify the 2007 assessments. The overall conclusion of the sample group was that conditions are substantially similar to those encountered during assessments done in 2007. Over the last eight years, various facilities improvements by Measure K and/or the Maintenance Department have occurred at various school sites; therefore, a comprehensive field verification of the 2007 facility assessment and an inventory of key building components for each school site was conducted for this 2016 Update.

### 1. SCOPE OF WORK

The assessment for each school site was performed by six teams of LBUSD Program team members who conducted site visits to determine the scope of work required at each school. Referencing the 2008 FMP's recommended scope of work, the teams evaluated existing facilities utilizing the following categories:



**General Maintenance** is the ongoing maintenance and upkeep of a building, extending its useful life. Some of these funds are budgeted on an annual basis as part of the District's maintenance and operations budget.

**Minor Renovation** includes selective upgrades of systems or building components. This renovation could include replacement or repair to one or more building systems, such as boilers, heating/ventilation, roofing, flooring, ceiling, lighting, electrical upgrades, or painting. It may also include some minor reconfiguration of interior spaces. Deferred maintenance items may be considered minor repair.

**Moderate Renovation** includes creating appropriate learning environments and bringing a school building up to current codes. However, the amount of work to be completed would be less extensive than a major renovation. This could include new, replacement or upgrades to building components (Handicapped accessibility, heating/ventilation/air conditioning, roof, electrical, windows, flooring, ceiling, lighting, technology infrastructure) and some interior reconfiguration of space to support educational programs. This level of renovation will primarily focus on addressing code requirements.

**Major Renovation** includes creating appropriate learning environments and extensive renovation to bring the building up to current codes, and may include an addition. This could include new, replacement or upgrades to building components (Handicapped accessibility, heating/ventilation/air conditioning, roof, electrical, windows, flooring, ceiling, lighting, technology infrastructure) and interior reconfiguration of space to support educational programs. After having undergone a major renovation, an existing building would be comparable to a new building.

In addition, an inventory of key building components presented below was collected for each school site. The following were some of the items counted and assessed.

- Ceilings
- Doors
- Drinking Fountain
- Flooring
- Gutters
- Lighting Fixtures
- Roofs
- Utilities
- Walls
- Windows

## 2. ASSESSMENT FINDINGS

Due to the age of the District’s facilities, most sites, as shown in Table 10, are in need of moderate or major repair. Need Assessment results by planning area and school site are provided in the Appendices.

**Table 10**  
**Scope of Work Category Percentage Change**

Publication	General	Minor	Moderate	Major
2008 FMP	12%	9%	33%	46%
2016 FMPU	12%	5%	34%	44%

The need to install and replace air conditioning at the school sites moved projects from minor to moderate or major renovation.



## D. PROJECTS COST ESTIMATE

Based on the category for each project, the remaining FMP projects cost estimate total approximately \$3.5 billion. The 2008 FMP established estimated costs per square foot, which have been used for budgeting purposes. The cost per square foot varies based on the type of construction to be performed. Cost per square foot has changed slowly since 2008. However, costs are expected to rise significantly as the economy continues to improve. Table 11 shows the cost per square foot by construction type in 2008 vs. 2016.

**Table 11**  
**Construction Cost per Square Foot by Construction Type**  
**2008 vs. 2016 (Construction Only – No Soft Costs)**

School Level and Type	2008	2016
<b>Elementary Schools</b>		
New Construction	\$310 per SF	\$374 per SF
Major Renovation	\$186 per SF	\$224 per SF
Moderate Renovation	\$124 per SF	\$150 per SF
Minor Renovation	\$62 per SF	\$75 per SF
<b>Middle Schools</b>		
New Construction	\$320 per SF	\$386 per SF
Major Renovation	\$192 per SF	\$232 per SF
Moderate Renovation	\$128 per SF	\$154 per SF
Minor Renovation	\$64 per SF	\$77 per SF
<b>High Schools</b>		
New Construction	\$400 per SF	\$482 per SF
Major Renovation	\$240 per SF	\$289 per SF
Moderate Renovation	\$160 per SF	\$193 per SF
Minor Renovation	\$80 per SF	\$96 per SF

Note: Cost Estimate by school are provided in the Appendices



## E. COMMUNITY ENGAGEMENT

Community dialogues were conducted for the 2008 FMP to gain insight and understanding of public preferences relative to academic and facility topics. The Community Engagement component of this 2016 FMP Update involved a myriad of efforts which included community presentations in each of the Seven Planning Areas. The boundaries for the seven planning areas are based on the attendance area of the comprehensive high schools of Cabrillo, Jordan, Lakewood, Millikan, Polytechnic, and Wilson. Avalon K–12, located on Catalina Island, is not contiguous to the other planning areas and therefore is identified as the seventh planning area.

### 1. COMMUNITY MEETINGS

The focus of the communication efforts was to provide LBUSD staff and administrators, the broader community, and stakeholders with information regarding: the 2008 FMP, implementation of the Measure K Bond Program, and the 2013 and 2016 FMP Updates. The presentations included background information about the 2008 Facility Master Plan, Measure K accomplishments to-date, educational program changes, district-wide historical and projected enrollment, enrollment and capacity trends, demographics, facilities overview, and the seven planning areas specific information.

Community meeting attendees were asked to participate in an in-meeting survey regarding their knowledge and opinions regarding LBUSD facilities. Community meeting attendees acknowledged awareness of school improvements, primarily in the planning areas in which they reside. More than 60 percent of attendees at all community meetings were satisfied with the improvements results from Measure K. In addition, more than 90 percent of attendees indicated a willingness to support future funding to continue school improvement projects citing priorities should include air conditioning of schools, providing new technology and computer labs, and updating safety and security components of school sites.

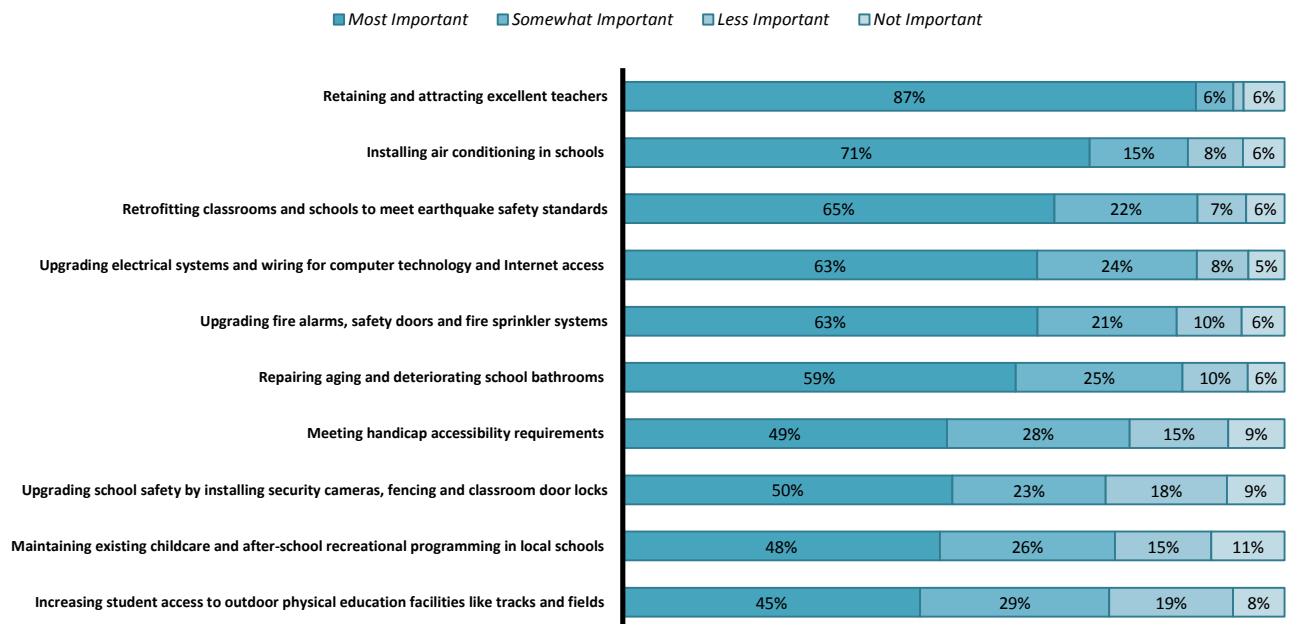
In addition to the community meetings, outreach was extended via social media, the District Website/School Bulletin, and the Measure K Newsletter. An online Community Feedback survey was made available to provide input on the following items:

- Retaining and attracting excellent teachers
- Meeting handicap accessibility requirements
- Repairing aging and deteriorating school bathrooms
- Retrofitting classrooms and schools to meet earthquake safety standards
- Upgrading electrical systems and wiring for computer technology and internet access
- Upgrading fire alarms, safety doors, and fire sprinkler systems
- Upgrading school safety by installing security cameras, fencing, and classroom door locks
- Maintaining existing childcare and after-school recreational programming in local schools

- Increasing student access to outdoor physical education facilities like tracks and fields
- Installing air conditioning in schools

The District posted the Community Feedback survey on the District website on February 18, 2016. As of May 27, 2016, thirteen hundred (1300) surveys have been completed. Participants were asked to rank the priorities listed above in a scale of 1 to 4 from “Most Important” to “Not Important”. The issues that received the greatest response as “Most Important” were retaining and attracting excellent teachers and installing air conditioning in schools, followed by retrofitting classrooms, upgrading electrical systems, and upgrading fire alarms, safety doors, and fire sprinkler systems. Overall, all priorities received the “Most Important” ranking in greater number than “Somewhat Important” and “Less Important.” The results align with the District’s Needs Assessment that 78% of the schools are in need of Moderate to Major Renovation.

### Community Feedback Survey Results

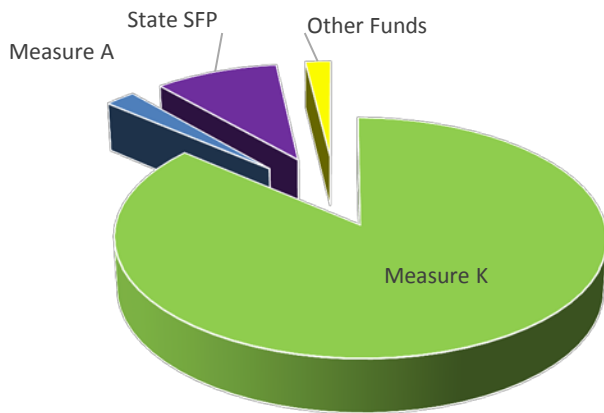


The outreach process also included meetings with the Community Advisory Committee (CAC), a select group of community leaders, who recommended that the District continue to inform the students, staff, community and stakeholders about the challenges the District faces when working to create learning environments for the next generation. The CAC encouraged the District to communicate the benefits of creating new school building facilities and how they enhance and benefit the students and local community. With limited funding from the Federal and State level, gathering support for the remaining FMP projects will be a very important component to obtaining local funding. As stated in this report, the remaining FMP projects are estimated at \$3.5 billion.



## F. FACILITY MASTER PLAN FUNDING

The Facilities Needs Assessments and Projects Cost Estimate performed for this update confirmed that the funding need for the remaining FMP projects total over \$3.5 billion. Current funding does not meet the facilities needs of the District. Long Beach Unified School District funds the FMP projects through local, State, and Federal funding sources. The local funds are primarily General Obligation Bonds and Developer Fees, State funds are through programs from the School Facilities Program (SFP), and Federal funds from the Schools and Libraries Program (E-Rate). Approximately \$500 million has been expended in FMP projects since 2008. The following chart and table illustrate the completed and existing FMP projects expenditure and funding sources.



**Table 12**  
**Completed and Existing**  
**FMP Projects Expenditure and**  
**Funding Sources**

Funding Source	Expended
Measure K	\$ 432,393,311
Measure A	\$ 11,738,002
State SFP	\$ 47,450,012
Other Funds	\$ 9,667,223
<b>Total</b>	<b>\$ 501,248,548</b>

In addition to the \$500 plus million in completed and existing FMP projects, approximately \$150 million more have been committed to on-going or planned projects.

### 1. LOCAL FUNDING

#### MEASURE A

Measure A was a \$295 million local school facilities bond approved by the community in March 1999. Measure A consisted of quick start projects in areas of the District that had experienced a rapid and large growth in student population. Projects included new schools such as Chavez Elementary School, Dooley Elementary School, Powell K-8 School, Jordan Freshman Academy and Nelson Academy. A District wide project was the installation of air conditioning at 17 school sites. Other projects included the expansion of Cabrillo High School, modernizations at Polytechnic High School and Wilson High School and installation of two-story portables at various sites. A few remaining projects funded from Measure A were identified in the FMP and completed after 2008. Measure A funds have been fully utilized.

## **MEASURE K**

The primary funding source for the FMP projects is Measure K. Measure K is a \$1.2 billion General Obligation Bond approved by LBUUSD voters in November 2008 to address the most critical needs identified in the FMP. The funds come from issuance of a series of bonds over 20-25 years. Measure K funds cannot fully fund the remaining \$3.5 billion FMP projects.

## **DEVELOPER FEES**

Pursuant to Education Code Section 17620 and Government Code Sections 65995(b), LBUUSD collects Statutory School Fees (Level 1 Developer Fees) for residential and commercial/industrial development. With the adoption of SB 50 and Proposition 1A in 1998 and meeting the requirements, the District exercised the option of adopting Alternative School Fees (Level 2 and 3 Developer Fee). The collection of developer fees helps mitigate the impact of potential students generated from new residential housing over future years, and the District is allowed, via this statutory structure, to have a local revenue source to utilize for capital improvement projects. The fees are then utilized for growth projects, such as placement of portables, supplemental funding for gymnasium projects, and the replacement of portables.

LBUUSD collected approximately \$10.5 million in Developer Fees from 2008 and 2015. Approximately 1.1 million square feet of residential new construction is projected in the District's communities generating an estimated \$5.2 million in fees collected over the next 5 years.

## **OTHER FUNDS**

General Fund, lease income, and joint use agreements are utilized for FMP projects when available. Monies projected from other local funding sources for facilities improvements are minimal.

## **2. STATE FUNDING**

The SFP is a source of funding for the District. SFP has two core programs: new construction and modernization. For both programs, the state provides a per student grant to participating school districts. For new construction, the state grant is intended to cover 50 percent of the project cost, whereas the modernization grant is intended to cover 60 percent of the project cost. School districts are required to cover the remainder of new construction and modernization project costs through local matches. The larger state share provided for modernization is intended as an incentive to modernize existing facilities rather than build new schools. The state also has created a number of smaller facilities programs to fund other state priorities, including Career Technical Education, Charter Schools, Seismic Mitigation, Overcrowding Relief Grant, and High Performance Incentive Grant (energy-efficient schools). The SFP allocates funding primarily on a first-come, first-served basis. School districts are required to submit specific projects for approval to receive state funding. These programs are subject to available fund and changes by the State Allocation Board.

LBUUSD has received over \$47 million from the State SFP program for FMP projects since 2008. Unfortunately, State monies are expended. The District can potentially receive \$140 million for new construction and \$236 million for renovation (modernization) from the SFP program through the proposed Kindergarten through Community College Public Education Facilities Bond Act of 2016 or another bond if approved by voters in an election.



### **3. FEDERAL FUNDING**

Mandated by Congress in 1996 and implemented by the FCC in 1997, the Schools and Libraries program (E-rate) provides telecommunications and data service discount, infrastructure, and equipment to eligible schools and libraries. The program is intended to ensure that schools and libraries have access to affordable telecommunications and information services. Funding depends on the level of poverty measured by the percentage of students eligible for the national school lunch program. E-rate funding is capped and distributed on a first come first served basis. LBUSD benefits from the E-rate telecommunications discount and applies annually for FMP project funding of data infrastructure and equipment. LBUSD received \$943,938 from E-rate for FMP projects. 2015 applications were recently approved for \$509,551.



# G. CHALLENGES AND SUMMARY

## 1. CHALLENGES

Challenges identified in the 2008 FMP and 2013 Update have been addressed, but some issues are ongoing. A new challenge identified for 2016 is the result of climate change and water drought.

Challenges	Progress as of 2016 Update
<p><b>Challenge No. 1: Balance Short-term and Long-term Needs</b></p> <p><u>2008</u> - In addition to the funds needed to renovate the LBUSD inventory, additional investment in deferred maintenance and small capital projects will continue, although it will decrease significantly in the coming years. Because of the timeframe required to complete the renovation program, many schools will not be renovated until several years into the future. Schools will require investment in health and safety improvements to extend the ongoing life of buildings systems.</p>	<ul style="list-style-type: none"> <li>• LBUSD’s maintenance staff conducts ongoing work on school sites, utilizing a combination of funding sources as available.</li> <li>• Ongoing technology upgrades at all sites.</li> </ul>
<p><b>Challenge No. 2: Location of Sites for New Schools</b></p> <p><u>2008</u> - There are very few sites available within LBUSD for new construction. Those that are available are very costly, limited in size, and require significant cost for remediation to make useful. Therefore, creative solutions and ongoing planning will be needed in the area of site selection.</p>	<ul style="list-style-type: none"> <li>• Nelson Academy construction.</li> <li>• Browning High School construction.</li> </ul>

<p><b>Challenge No. 3: Finding Interim Housing for Students</b></p> <p><u>2008</u> - There are various options for housing students during the construction process, including both on-site and off- site housing. In order to accomplish this, an interim housing plan will need to be established.</p>	<ul style="list-style-type: none"> <li>● On-site interim housing combined with reuse of existing inventory save cost and disruption of adding leased portable classrooms.</li> <li>● Keller Elementary School site for Newcomb students’ interim housing.</li> <li>● Butler Middle School site for Roosevelt students’ interim housing.</li> <li>● Butler Middle School site for Renaissance students’ interim housing.</li> </ul>
<p><b>Challenge No. 4: Funding the Facility Master Plan</b></p> <p><u>2008</u> - The cost to address school facilities in the LBUSD is too high to be addressed simultaneously. Projects will need to be phased over time. It is suggested that this Plan be completed in a 20-25 year time frame. The cost of construction will continue to increase. Therefore, the longer the time frame, the greater the cost will be to complete the projects. Identifying the resources, receiving approval for the funding, and completing the projects in a timely manner will indeed be challenging.</p> <p>2016 – Measure K funds cannot fully fund the remaining \$3.5 billion FMP projects.</p>	<ul style="list-style-type: none"> <li>● Passage of Measure K School Bond.</li> <li>● Participation in the State’s School Facility Program to identify matching funding.</li> <li>● Receipt of the State’s Career Technical Education (CTE) funding.</li> <li>● E-Rate funding for technology.</li> <li>● Use of other available funding.</li> </ul>
<p><b>Challenge No. 5: Capacity to Implement Projects</b></p> <p><u>2008</u> - The FMP will require an increased level of school construction within the LBUSD. The internal staffing and utilization of consultants’ capacity to plan, design, and manage projects will need to be addressed.</p>	<ul style="list-style-type: none"> <li>● A group of internal staff and external consultants with expertise in various disciplines have been hired to assist with implementation of the Measure K School Bond Program.</li> </ul>
<p><b>Challenge No. 6: Operational Staffing Impact</b></p> <p><u>2008</u> - Development of the LBUSD FMP is a positive step towards equalizing school building conditions district-wide. There is a staffing and operational component that must be evaluated and addressed as facilities are removed and/or added. Careful consideration and study will need to be devoted to evaluating and assessing the financial impact of school building improvements on staffing and operational costs.</p>	<ul style="list-style-type: none"> <li>● The operational impact is an ongoing effort that is monitored jointly by the District’s finance office and Maintenance Branch.</li> </ul>

<p><b>Challenge No. 7: School Boundary and Consolidation Planning Committee</b></p> <p><u>2008</u> - The LBUSD is experiencing declining enrollment attributed to a variety of factors. As a result, difficult financial decisions will need to be made that ensure quality and appropriate learning environments are provided for students and teachers. To facilitate a transparent and inclusive decision-making process, a school boundary and consolidation planning committee should be formed. The committee's roles and responsibilities could include developing criteria and standards for which school boundaries and consolidations are made, reviewing and confirming analyses from which school recommendations are formed, and assisting in the community involvement aspect of school consolidations.</p>	<ul style="list-style-type: none"> <li>• School closures have provided interim school housing and room for District programs that no longer require leased facilities.</li> </ul>
<p><b>Challenge No. 8: DSA closeout and review of projects</b></p> <p><u>2013</u> – In order to obtain approval for new projects, Division of State Architect (DSA) requires close out of previous projects. LBUSD continues to make progress towards closing out of projects in a timely manner and this continues to be a high priority.</p>	<ul style="list-style-type: none"> <li>• Staff has been added to focus on DSA Certification Projects.</li> <li>• 342 of 392 old applications have been certified.</li> </ul>

<p><b>Challenge No. 9: Removal of portable classrooms versus the need for flexibility</b></p> <p><u>2013</u> - Enrollment has been declining in LBUSD for nearly a decade. Declining enrollment has caused a number of difficult decisions to be made with regard to facility closures and consolidations. However, it has also allowed for the removal of almost 100 outdated portable classrooms, with a number of portable classrooms scheduled over the next 2-3 years. The ongoing challenge will be to anticipate the degree and duration of the enrollment decline, and other programmatic changes that may affect classroom space. We must continue to ensure that portable classrooms that are in good condition with substantial useful life remaining continue to be used and that we have classroom space at all campuses for all students.</p>	<ul style="list-style-type: none"> <li>• Portable inventory have been reduced by approximately 200,000 square feet.</li> <li>• Use of existing portables for LBUSD programs continue including Head Start and CDC.</li> <li>• As-needed maintenance continues on existing portables.</li> </ul>
<p><b>Challenge No. 11: Climate Change</b></p> <p><u>2016</u> - Climate change has caused temperatures to rise and a prolonged water drought. There is a community call to provide air conditioning for our sites and a State requirement to minimize our water use.</p>	<ul style="list-style-type: none"> <li>• New construction/renovation include air conditioning.</li> <li>• Sustainable design is incorporated into FMP projects.</li> <li>• Design standards include Collaborative for High Performance Schools (CHPS) a leading national movement to improve student performance and the entire educational experience by building the best possible schools.</li> </ul>

## 2. SUMMARY

Supporting the District's educational endeavor through high quality facilities continues to be the leading goal of the FMP. Based upon Measure K accomplishments, current facilities assessments, community feedback, and recent challenges facing the District, this update recommends the following three Guiding Principles stand at the core of facilities improvements moving forward:

- 1. Creating learning environments to meet schools for the next generation**
- 2. Renovating and replacing aging infrastructure**
- 3. School safety and security**

The evolution of curriculum and educational programs have resulted in the need to create new learning environments that promote next generation learning. New construction supported by Measure K (Nelson Middle School, McBride Senior High, Roosevelt Elementary and Newcomb K-8) is a showcase for design that supports innovation in teaching and learning. Work remains at other sites in the District. Updated Educational Specifications will ensure that the District reinforces design concepts that have been successful and that encourage learning.

The need to renovate and replace aging infrastructure at the school site is supported by the needs assessment that documents that 78% of the District school sites need a Moderate or Major Renovation. The scope of work for Moderate or Major Renovation projects include complying with current building regulations relating to accessibility, heating/ventilation/air conditioning, roof, electrical, windows, flooring, ceiling, lighting, technology infrastructure and interior reconfigurations to support the educational program. Renovation projects should also be prioritized to address climate change. Classrooms without air conditioning become a difficult place for teachers to provide instruction and for students to learn on severely hot days. Another issue related to climate change is the current water drought that the lack of annual rainfall produces. The District should provide alternatives to traditional landscaping and water use.

School safety items such as upgrading electrical and fire alarm systems were areas of high priority in the Community Survey as well as in Community Meetings. Though work has been completed through Measure K (Fire alarm systems at 20 sites, installation of intercom systems, and installation of security cameras at high schools), work still remains in these areas and will continue to be a focus moving forward.

The District's facilities funding need is \$3.5 billion. Though the District intends to access every available State, federal and local source of funding, this will not be adequate to fully address the District's facilities' needs. A community discussion regarding how to fund this plan is recommended at this time.



## APPENDICES

- 1. NEEDS ASSESSMENTS BY SITE**
- 2. LELAND SAYLOR COST ESTIMATE UPDATE**

Planning Area A - Jordan	Scope of Work
ADDAMS ES	Major Renovation/ Addition
BARTON ES	Major Renovation/ Addition
CAMS	General Maintenance
DOOLEY ES	General Maintenance
GRANT ES	Moderate Renovation/ Addition
HAMILTON MS	Major Renovation
HARTE ES	Moderate Renovation/ Addition
JORDAN HS	Major Renovation
JORDAN 9TH ACADEMY	General Maintenance
KING ES	Moderate Renovation/ Addition
LINDSEY MS	Major Renovation/ Addition
LINDBERGH MS	Major Renovation
MCKINLEY ES	Major Renovation/ Addition
POWELL ACADEMY K-8	General Maintenance/ Addition

Planning Area B - Lakewood	Scope of Work
BANCROFT MS	Major Renovation
CLEVELAND ES	Moderate Renovation
GOMPER ES	Major Renovation/ Addition
HENRY ES	Moderate Renovation
HOLMES ES	Major Renovation/ Addition
HOOVER MS	Moderate Renovation/ Addition
LAKEWOOD HS	Major Renovation
MACARTHUR ES	Major Renovation
MADISON ES	Moderate Renovation/ Addition
RILEY ES	Major Renovation/ Addition
TWAIN ES	Major Renovation/ Addition

Planning Area C - Millikan	Scope of Work
BURCHAM K-8	Moderate Renovation
CARVER ES	Moderate Renovation
CUBBERLEY K-8	Major Renovation/ Addition
EMERSON ES	General Maintenance
KELLER MS	Major Renovation
MARSHALL MS	Major Renovation
MC BRIDE HS	General Maintenance
MILLIKAN HS	Major Renovation
NEWCOMB K-8	General Maintenance
PRISK ES	Moderate Renovation
STANFORD MS	Major Renovation



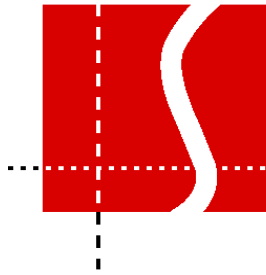
Planning Area D - Cabrillo	Scope of Work
CABRILLO HS	General Maintenance
CHAVEZ ES	General Maintenance
EDISON ES	Moderate Renovation
GARFIELD ES	Major Renovation/ Addition
HUDSON K-8	Major Renovation/ Addition
LAFAYETE ES	Moderate Renovation/ Addition
MUIR K-8	Major Renovation/ Addition
REID HS	General Maintenance
STEPHENS MS	Major Renovation/ Addition
WASHINGTON MS	Major Renovation
WEBSTER ES	Major Renovation/ Addition

Planning Area E - Polytechnic	Scope of Work
BIRNEY ES	Moderate Renovation/ Addition
BUTLER MS	Minor Renovation
ALVARADO ES	General Maintenance/ Addition
SMITH (Burnett) ES	Major Renovation/ Addition
FRANKLIN MS	Moderate Renovation
HUGHES MS	Moderate Renovation/ Addition
INTERNATIONAL ES	Minor Renovation
LEE ES	Moderate Renovation
LINCOLN ES	Major Renovation
LONGFELLOW ES	Major Renovation/ Addition
LOS CERRITOS ES	Moderate Renovation/ Addition
NELSON ACADEMY	General Maintenance
PAAL ES	Moderate Renovation
POLYTECHNIC HS	Major Renovation
RENAISSANCE HS	Moderate Renovation
ROBINSON K-8	General Maintenance. Addition
SIGNAL HILL ES	Major Renovation/ Addition
STEVENSON ES	Moderate Renovation/ Addition
WHITTIER ES	Moderate Renovation/ Addition

Planning Area F - Wilson	Scope of Work
BIXBY ES	Moderate Renovation
BROWNING HS	General Maintenance
BRYANT ES	Major Renovation
BUFFUM ES	Moderate Renovation
BURBANK ES	Major Renovation/ Addition
FREMONT ES	Moderate Renovation/ Addition

GANT ES	Major Renovation/ Addition
HILL MS	Major Renovation
JEFFERSON MS	Major Renovation
KETTERING ES	Moderate Renovation
LOWELL ES	Moderate Renovation/ Addition
MANN ES	Moderate Renovation
NAPLES ES	Moderate Renovation/ Addition
ROGERS MS	Major Renovation
TINCHER K-8	Moderate Renovation/ Addition
TUCKER ES	Major Renovation
WILLARD ES	Major Renovation/ Addition
WILSON HS	Major Renovation

Planning Area G - Avalon	Scope of Work
AVALON K-12	Moderate Renovation/ Addition



# Leland Saylor Associates

A Certified DVBE

## ESCALATION STUDY

### LBUSD MASTERPLAN PROJECT LIST

LONG BEACH, CA

LSA JOB NUMBER:

**14-005.14**

**October 21, 2015**

PREPARED FOR

**LONG BEACH UNIFIED SCHOOL DISTRICT**

BY LELAND SAYLOR ASSOCIATES

2046 Armacost Avenue | Los Angeles, CA 90025  
310-207-6900 | 310-207-6906 (f) | [www.lelandsaylor.com](http://www.lelandsaylor.com)

101 Montgomery Street, Suite 800 | San Francisco | California | 94104  
415-291-3200 | 415-291-3201 (f) | [www.lelandsaylor.com](http://www.lelandsaylor.com)



PROJECT: **LBUSD MASTERPLAN PROJECT LIST**  
LOCATION: **LONG BEACH, CA**  
CLIENT: **LONG BEACH UNIFIED SCHOOL DISTRICT**  
DESCRIPTION: **ESCALATION STUDY**

JOB NUMBER: **14-005.14**  
PREPARED BY: **AP**  
BID DATE: **N/A**  
ESTIMATE DATE: **10/21/2015**

---

---

## CONTENTS

---

---

<u>SECTION</u>	<u>DESCRIPTION</u>	<u>PAGE</u>
I	MASTERPLAN NARRATIVE	3
II	MASTERPLAN PROJECT LIST	7



PROJECT: **LBUSD MASTERPLAN PROJECT LIST**  
LOCATION: **LONG BEACH, CA**  
CLIENT: **LONG BEACH UNIFIED SCHOOL DISTRICT**  
DESCRIPTION: **ESCALATION STUDY**

JOB NUMBER: **14-005.14**  
PREPARED BY: **AP**  
CHECKED BY: **IS**  
ESTIMATE DATE: **10/21/2015**

---

---

## SECTION I

---

---

# MASTERPLAN NARRATIVE

Date: 10/21/2015

**Escalation for Long Beach Unified school District (LBUSD) – Master Plan Projects.**

LBUSD have requested Leland Saylor Associates (LSA) to review the Master Plan list of Projects and escalate the listed 2007 construction budgets to 2016 costs. The 2007 LBUSD Project List with values is for construction work only excluding soft costs and owner's costs.

No design drawings, specifications, narratives, gross square foot or any other descriptive documents have been made available to LSA.

Based on the information available LSA have advised LBUSD that the adopted methodology for this escalation task is to apply recognized published construction cost indices from 2007 to 2016. LBUSD have accepted this methodology

Three cost indices were examined:

News-Record (ENR)

RS Means (RSM)

Leland Saylor Associates (LSA)

1.0 - Basis of Escalation Analysis

We compared three sources of actual escalation as measured and reported annually by the ENR, the RSM and LSA.

Escalation Multiplier									
	Reported		Reported		Reported		Reported		Reported
	Actual Esc.		Actual Esc.		Actual Esc.		Actual Esc.		Actual Esc.
Year		ENR		RSM		LSA			Average
Base (2007)		\$81,701,154		\$81,701,154		\$81,701,154			\$81,701,154
2008	2.9%	\$84,070,487	6.5%	\$87,011,729	3.3%	\$84,397,292	4.2%		\$85,159,836
2009	3.6%	\$87,054,990	-0.2%	\$86,837,706	0.9%	\$85,156,868	1.4%		\$86,366,267
2010	1.6%	\$88,473,986	1.9%	\$88,487,622	1.5%	\$86,434,221	1.7%		\$87,814,342
2011	2.8%	\$90,915,868	4.3%	\$92,292,590	3.2%	\$89,200,116	3.4%		\$90,817,592
2012	1.7%	\$92,461,438	2.0%	\$94,138,441	3.6%	\$92,411,320	2.4%		\$93,027,487
2013	1.6%	\$93,959,313	3.4%	\$97,339,149	1.4%	\$93,705,078	2.1%		\$95,018,275
2014	4.6%	\$98,262,650	2.0%	\$99,285,931	3.6%	\$97,078,461	3.4%		\$98,242,562
2015	1.9%	\$100,100,161	1%	\$100,278,791	1%	\$98,049,246	1.3%		\$99,509,891
2016*	0.9%	\$101,036,098	1%	\$100,780,185	1%	\$98,539,492	0.6%		\$100,151,730
Compounded Average		124%		123%		121%			123%
*Indicates assumed only. Not backed by statistical data									

Even though the three escalation reports for each year vary, when compounding or multiplying the individual project values by each year's escalation through 2015, the compounded average reflects the mathematical impact of those variations. While the ENR and RSM are very close at 23.6% and 23.3%, they are based on national cost averages adjusted by a city then have apply adjustments for the city specific escalators.

The LSA compounded escalation of 20.6% is based on evaluations specific to California based cost increases. LSA has used 9 selected trade labor rate changes, 23 selected material cost changes and 21 sub-contractor (work-in-place) changes per each year from 2008 through June 2016. Based on this highly accurate approach specific to California, we feel the LSA compounded average represents the most accurate escalation percentages per year. Another observational note is that the ENR total escalation for 2008 & 2009 is 6.5%, the RSM total escalation for 2008 & 2009 is 6.3% and the LSA total escalation for 2008 & 2009 is 4.2% or a difference of 2.1% which is also the difference in the total compounded escalation and adds less to those earlier years to be compounded by the later years.

## 2.0 - LBUUSD Project Type Scope Calculations

The LSA analysis of escalation annual results in an average Material/Labor Index of 46%/54%. Using the compounded average for the 2008-2016 escalation of 20.6%, then:

- Material portion is  $(20.6 \times 46\% = 9.48\%)$
- Labor portion is  $(20.6 \times 54\% = 11.12\%)$

**General Maintenance:** Based on typical school maintenance programs and utilizing more “already budgeted” labor (maintenance crews in place and already budgeted) we would discount the labor % of 11.12% by 50% ( $11.12 \times .5 = 5.56\%$ )

Based on some materials utilized in a typical maintenance program as “Attic Stock” or pre-negotiated direct buys, we would discount the material % of 9.48% by 30% ( $9.48 \times .3 = 2.8\%$  or  $9.48 - 2.8 = 6.68\%$ )

Based on these adjustments we feel the more accurate escalation rate to apply to the General Maintenance project types would be  $5.56\% + 6.68\% = \mathbf{12.24\%}$

**Minor Renovations:** Selective upgrades of some systems, flooring, ceilings, lighting, electrical upgrades, and painting would limit escalations to the finish trades and the electrical trades. Based on the 2015 RS Means cost index for Long Beach, the Finishes Material/Labor are at 47%/53% and Electrical Material/Labor are at 46%/54% which is the same as the annual escalation % = **20.6%**

**Moderate Renovations :** Impacts mostly code compliances, but could impact several trades and should be calculated at the total compounded average of **20.6%**

**Major Renovations:** Extensive, reconfiguration and replacement of spaces to meet code and upgrades too current and future educational programs should also be calculated at the total compounded average of **20.6%**

The following LBUSD Master Project List – Update from 2007 to 2016 includes escalation compounded from 2008 through 2015. The escalation rate multiplier is based on the above analyses and is shown in the “Escalation Rate” column.





PROJECT: **LBUSD MASTERPLAN PROJECT LIST**  
LOCATION: **LONG BEACH, CA**  
CLIENT: **LONG BEACH UNIFIED SCHOOL DISTRICT**  
DESCRIPTION: **ESCALATION STUDY**

JOB NUMBER: **14-005.14**  
PREPARED BY: **AP**  
CHECKED BY: **IS**  
ESTIMATE DATE: **10/21/2015**

---

---

## SECTION II

---

---

# MASTERPLAN PROJECT LIST

## LBUSD Master Plan Project List - Escalation Study/Update 2007 to 2016

**General Maintenance:** The ongoing maintenance and upkeep of a building, extending it's useful life. Some of these funds are budgeted on an annual basis as part of the district's maintenance and operations budget

**Minor Renovation:** Selective upgrades of some systems or building components such as repair or replacement of: flooring; ceiling; lighting; electrical upgrades; and painting. Minor reconfiguration of spaces

**Moderate Renovation:** This is similar to a Major Renovation but the work required would not be as extensive and will primarily include addressing code requirements

**Major Renovation:** Extensive renovation, replacement and reconfiguration of spaces to meet code requirements as well as current and future educational program requirements. This may include replacement or upgrades to: handicapped accessibility; heating/ventilation/air conditioning; roof; electrical; windows; flooring; ceiling; lighting; technology; infrastructure; and signal systems

Proj ID No	Site Code	Site Name	Scope of Work	Area	Group	Renovation Type	New Construction Per IP Y/N	Interim Housing Need Y/N	Scenario A3 Original MP Implementation Estimated Cost 2007 \$ wo/esc	Escalation Rate in % multiplier	Estimated Cost to 2016 \$ wo/2016 esc (Refer to Basis of Escalation)
4	670	PAAL (Relocate)	Relocate to Poly Main Campus	E	1	TBD (See Poly Below)	Yes	Yes	\$81,701,154	1.2061	\$98,539,762
5	671	Avalon K-12	Mod Reno / Addition	G	1	Major	Yes	Yes	\$173,223,532	1.2061	\$208,924,902
6	626	Hill MS	Major Renovation	F	1	Major		Yes	\$18,815,373	1.2061	\$22,693,221
8	658	Millikan HS	Major Renovation	C	1	Major	Yes	Yes	\$173,480,444	1.2061	\$209,234,764
10	659	Thematic 3 (Jordan Acad)	Convert to Thematic HS	A	1	Major	Yes	Yes	\$43,486,514	1.2061	\$52,449,085
11	903	NEW ELEMENTARY 1 - Poly [PAAL]	New Elementary School	E	1	TBD		No	\$36,861,635	1.2061	\$44,458,818
12	612	Hamilton MS	Major Renovation	A	1	Major		Yes	\$26,660,031	1.2061	\$32,154,663
13	458	Twain ES	Major Renovation / Addition	B	1	Major	Yes	Yes	\$16,932,809	1.2061	\$20,422,661
14	429	Garfield ES	Major Renovation / Addition	D	1	Major	yes	Yes	\$23,513,178	1.2061	\$28,359,244
15	417	Burbank ES	Major Renovation / Addition	F	1	Major	Yes	Yes	\$22,373,391	1.2061	\$26,984,547
17	461	Willard ES	Minor Renovation / Addition	F	1	Major	Yes	Yes	\$26,888,561	1.2061	\$32,430,293
18	620	Stephens MS	Major Renovation / Addition	D	1	Major	Yes	Yes	\$39,244,186	1.2061	\$47,332,413
19	410	Addams ES	Major Renovation / Addition	A	1	Major	Yes	Yes	\$19,953,081	1.2061	\$24,065,411
20	454	Stevenson ES	Moderate Renovation / Addition	E	1	Major	Yes	Yes	\$16,974,752	1.2061	\$20,473,248
21	464	Hudson K-8	Major Renovation / Addition	D	1	Major	Yes	Yes	\$37,038,969	1.2061	\$44,672,701
22	434	Holmes ES	Major Renovation / Addition	B	1	Major	Yes	Yes	\$14,772,804	1.2061	\$17,817,479
23	419	Burnett ES	Major Renovation / Addition	E	1	Major	Yes	Yes	\$16,359,427	1.2061	\$19,731,105
24	432	Harte ES	Moderate Renovation / Addition	A	1	Moderate	Yes	Yes	\$22,112,104	1.2061	\$26,669,409
25	451	Riley ES	Major Renovation / Addition	B	1	Major	Yes	Yes	\$15,284,944	1.2061	\$18,435,171
27	435	Keller ES	Major Renovation	C	1	Major		Yes	\$13,453,760	1.2061	\$16,226,580
28	TBD	Thematic 4 (TBD)	New Thematic	F	1	Major		No		1.2061	\$0
29	455	Lindsey MS (Sutter MS)	Major Renovation / Addition	A	1	Major		Yes	\$29,077,138	1.2061	\$35,069,936
31	615	Bancroft MS	Major Renovation	B	1	Major		Yes	\$30,107,231	1.2061	\$36,312,331
32	617	Marshall MS	Major Renovation	C	1	Major	Major	Yes	\$26,658,940	1.2061	\$32,153,348
33	421	Carver ES	Moderate Renovation	C	1	Major		Yes	\$13,149,744	1.2061	\$15,859,906
34	457	Tucker ES	Major Renovation	F	1	Major		Yes	\$13,576,021	1.2061	\$16,374,039
35	918	Hi Hill Outdoor Ed Center	Major Renovation	A	1	Major		TBD	\$40,359,740	1.2061	\$48,677,882
36	902	NEW ELEMENTARY 1 - Jordan	New Elementary School	A	2	NA	Yes	No	\$46,038,166	1.2061	\$55,526,632
37	414	Bixby ES	Moderate Renovation	F	2	Major		Yes	\$12,597,490	1.2061	\$15,193,833
38	416	Buffum ES	Moderate Renovation	F	2	Major		Yes	\$11,615,731	1.2061	\$14,009,733
39	681	Renaissance HS	Moderate Renovation	E	2	Major		Yes	\$55,229,600	1.2061	\$66,612,421
40	459	Webster ES	Major Renovation / Addition	D	2	Major	Yes	Yes	\$22,062,305	1.2061	\$26,609,346
41	448	Muir K-8	Major Renovation / Addition	D	2	Major	Yes	Yes	\$33,815,747	1.2061	\$40,785,172

Proj ID No	Site Code	Site Name	Scope of Work	Area	Group	Renovation Type	New Construction Per IP Y/N	Interim Housing Need Y/N	Scenario A3 Original MP Implementation Estimated Cost 2007 \$ wo/esc	Escalation Rate in % multiplier	Estimated Cost to 2016 \$ wo/2016 esc (Refer to Basis of Escalation)
42	436	King ES	Moderate Renovation / Addition	A	2	Moderate	Yes	Yes	\$20,812,435	1.2061	\$25,101,878
43	450	Prisk ES	Minor Renovation / Addition	C	2	Major	Yes	Yes	\$14,826,847	1.2061	\$17,882,660
44	443	MacArthur ES	Major Renovation	B	2	Major		Yes	\$13,707,827	1.2061	\$16,533,010
46	446	McKinley ES	Major Renovation / Addition	A	2	Major	Yes	Yes	\$18,449,520	1.2061	\$22,251,966
47	430	Gompers K-8	Major Renovation / Addition	B	2	Major	Yes	Yes	\$18,795,035	1.2061	\$22,668,692
48	453	Signal Hill ES	Major Renovation / Addition	E	2	Major	Yes	Yes	\$32,003,781	1.2061	\$38,599,760
49	614	Jefferson MS	Major Renovation	F	2	Major		Yes	\$35,058,722	1.2061	\$42,284,325
50	440	Longfellow ES	Major Renovation / Addition	E	2	Major	Yes	Yes	\$16,508,331	1.2061	\$19,910,698
51	431	Grant ES	Moderate Renovation / Addition	A	2	Major	Yes	Yes	\$22,242,153	1.2061	\$26,826,261
52	418	Burcham K-8	Moderate Renovation	C	2	Major		Yes	\$25,234,442	1.2061	\$30,435,260
53	447	Monroe K-8	Major Renovation / Addition	B	2	Major	Yes	Yes	\$30,135,351	1.2061	\$36,346,247
54	420	Burroughs ES	Major Renovation	E	2	Major		Yes	\$7,512,229	1.2061	\$9,060,499
55	412	Barton ES	Major Renovation / Addition	A	2	Major	Yes	Yes	\$22,152,624	1.2061	\$26,718,280
56	428	Gant ES	Major Renovation / Addition	F	2	Major	Yes	Yes	\$15,526,195	1.2061	\$18,726,144
57	413	Birney ES	Moderate Renovation / Addition	E	2	Major	Yes	Yes	\$15,898,871	1.2061	\$19,175,628
58	442	Lowell ES	Moderate Renovation / Addition	F	2	Major	Yes	Yes	\$23,091,998	1.2061	\$27,851,259
59	613	Hughes MS	Moderate Renovation / Addition	E	2	Major	Yes	Yes	\$32,390,751	1.2061	\$39,066,485
60	415	Bryant ES	Major Renovation	F	2	Major		Yes	\$7,519,962	1.2061	\$9,069,826
61	463	Tincher K-8	Moderate Renovation / Addition	F	2	Major	Yes	Yes	\$34,445,509	1.2061	\$41,544,728
63	904	NEW ELEMENTARY 2- Poly	New Elementary School	E	2	NA	Yes	NA	\$31,921,034	1.2061	\$38,499,959
64	460	Whittier ES	Moderate Renovation / Addition	E	2	Major	Yes	Yes	\$22,365,134	1.2061	\$26,974,588
65	441	Los Cerritos ES	Moderate Renovation / Addition	E	2	Major	Yes	Yes	\$13,658,158	1.2061	\$16,473,104
66	439	Lincoln ES	Minor Renovation	E	2	Major		Yes	\$10,290,099	1.2061	\$12,410,888
67	906	NEW MIDDLE 2 - Poly	New Middle School	E	2	NA	Yes	NA	\$45,550,385	1.2061	\$54,938,319
68	TBD	Thematic 5 (TBD)	Assess need for addtl Thematic every 5 years	TBD	2	NA	Yes	NA	\$48,419,356	1.2061	\$58,398,585
69	TBD	Thematic 6 (TBD)	Assess need for addtl Thematic every 5 years	TBD	2	NA	Yes	NA	\$48,419,356	1.2061	\$58,398,585
70	437	Lafayette ES	Moderate Renovation / Addition	D	3	Major	Yes	Yes	\$22,965,204	1.2061	\$27,698,333
71	423	Cubberley K-8	Moderate Renovation / Addition	C	3	Major	Yes	Yes	\$34,716,131	1.2061	\$41,871,126
72	424	Edison ES	Moderate Renovation	D	3	Major		Yes	\$17,371,193	1.2061	\$20,951,396
73	625	Hoover MS	Moderate Renovation / Addition	B	3	Major	Yes	Yes	\$30,010,393	1.2061	\$36,195,535
74	622	Washington MS	Moderate Renovation	D	3	Major		Yes	\$37,629,895	1.2061	\$45,385,416
75	444	Madison ES	Moderate Renovation / Addition	B	3	Major	Yes	Yes	\$15,501,350	1.2061	\$18,696,178
76	653	Lakewood HS	Moderate Renovation	B	3	Major	Yes	Yes	\$172,501,076	1.2061	\$208,053,548
77	619	Stanford MS	Moderate Renovation	C	3	Major		Yes	\$28,268,402	1.2061	\$34,094,520
78	654	Polytechnic HS	Minor Renovation	E	3	Major	Yes	Yes	\$190,027,452	1.2061	\$229,192,110
79	433	Henry ES	Moderate Renovation	B	3	Major		Yes	\$13,477,801	1.2061	\$16,255,576
80	425	Emerson ES	Minor Renovation / Possible Addition	C	3	Moderate		Yes	\$9,881,330	1.2061	\$11,917,872
81	616	Lindbergh MS	Minor Renovation	A	3	Major		Yes	\$33,175,942	1.2061	\$40,013,504
82	656	Wilson HS	Moderate Renovation	F	3	Major	Yes	Yes	\$188,199,409	1.2061	\$226,987,307
83	422	Cleveland ES	Moderate Renovation	B	3	Major		Yes	\$13,808,146	1.2061	\$16,654,005
84	492	Powell K-8	General Maintenance / Addition	A	3	Moderate	Yes	Yes	\$34,864,215	1.1224	\$39,131,595
85	438	Lee ES	Moderate Renovation	F	3	Major		Yes	\$16,796,168	1.2061	\$20,257,858
86	618	Rogers MS	Minor Renovation / Addition	F	3	Major	Yes	Yes	\$33,700,728	1.2061	\$40,646,448
87	427	Fremont ES	Moderate Renovation / Addition	F	3	Major	Yes	Yes	\$10,208,427	1.2061	\$12,312,384
88	466	Kettering ES	Moderate Renovation	F	3	Major		Yes	\$10,853,695	1.2061	\$13,090,642
89	449	Naples ES	Moderate Renovation / Addition	F	3	Major	Yes	Yes	\$8,575,204	1.2061	\$10,342,554
90	611	Franklin MS	Minor Renovation	E	3	Major		Yes	\$38,229,833	1.2061	\$46,109,002
91	467	Butler K-8	Minor Renovation / Addition	E	3	Major	Yes	Yes	\$32,926,205	1.2061	\$39,712,296
92	445	Mann ES	Minor Renovation / Addition	F	3	Major	Yes	Yes	\$14,157,417	1.2061	\$17,075,261
93	406	Robinson K-8	General Maint / Addition	E	3	Major	Yes	Yes	\$31,206,763	1.1224	\$35,026,471

Proj ID No	Site Code	Site Name	Scope of Work	Area	Group	Renovation Type	New Construction Per IP Y/N	Interim Housing Need Y/N	Scenario A3 Original MP Implementation Estimated Cost 2007 \$ wo/esc	Escalation Rate in % multiplier	Estimated Cost to 2016 \$ wo/2016 esc (Refer to Basis of Escalation)
94	404	Alvarado ES	General Maint / Addition	E	3	Moderate	Yes	Yes	\$10,330,641	1.1224	\$11,595,111
95	407	International ES	General Maintenance	E	3	Moderate	Yes	Yes	\$14,359,262	1.1224	\$16,116,836
96	657	Cabrillo HS	General Maintenance	D	4	Maintenance	Yes	Yes	\$70,538,436	1.1224	\$79,172,341
97	403	Chavez ES	General Maintenance	D	4	Moderate		Yes	\$13,801,512	1.1224	\$15,490,817
98	641	CAMS	General Maintenance	A	4	Moderate		Yes	\$16,196,642	1.1224	\$18,179,111
99	901	Dooley ES	General Maintenance	A	4	Moderate		Yes	\$26,702,430	1.1224	\$29,970,807
		<b>TOTAL COST</b>							<b>\$2,991,335,909</b>		<b>\$3,589,603,648</b>