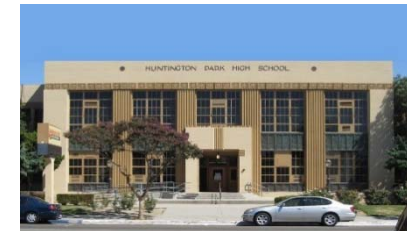# The School Upgrade Program and Comprehensive Modernization Projects

Presentation to the Budget, Facilities & Audit Committee
April 9, 2015

LAUSD Facilities Realities

- Almost Half of the District's Buildings were Constructed at Least 50 Years Ago

- Nearly 800 of the Buildings Were Constructed More Than 75 Years Ago

- The General Fund Allocation for Routine Repair and General Maintenance has Been Reduced by Over 50% Between 2007 and 2014 --This Significant Decrease Makes it Challenging to Keep our Schools in a State of Good Repair

LAUSD Facilities Realities
Continued

- Legacy School Facilities Do Not Meet Current Building Codes

- Legacy School Facilities Do Not Support Current Instructional Vision

- Operational Funding Does Not Keep Up With Capital Need

- It is Estimated that the District Would Need Approximately 10 Times More Funding than is Available to Address All the Capital Needs of All of Our Schools

The School Upgrade Program
Overview

- The Primary Focus of the School Upgrade Program is to Upgrade Legacy School Facilities
  - Prior Phase of Bond Program Focused on Constructing New School Facilities to Eliminate Use of Multi-Track Calendars and Involuntary Busing

- Under the Program, the District will Modernize, Build and Repair School Facilities to Improve Student Health, Safety, and Educational Quality

- Board Program Goals:
  - Schools Should be Physically Safe and Secure
  - School Building Systems Should be Sound and Efficient
  - School Facilities Should Align with Instructional Requirements and Vision

- Program Currently Valued at $7,852,900,000

- 18 Categories of Need/Priorities with Associated Funding Sources

School Upgrade Program
Spending Targets

CATEGORIES OF NEED GOALS DRIVING PROJECT DEVELOPMENT	Spending Target
FACILITIES SERVICES DIVISION STRATEGIC EXECUTION PLAN	**$6,736,708,302**
Major Renovations/Modernizations/Reconfigurations to School Campuses ("Comprehensive Modernization")	$4,293,396,567
Critical School Repair and Safety Improvements to School Building Components	$938,841,200
Leverage Partnerships to Provide After School Activities & Programming and Community Use of Facilities	$50,000,000
Specialized Client Programs	***$1,454,470,535***
IT School Network Infrastructure Upgrades Executed by FSD	$324,486,889
Modernize and Repair School Cafeterias to Make Nutritious Healthy Meals Available to More Students *	$212,000,000
School Upgrades and Reconfigurations to Support Specialized Instructional Programs	$193,973,646
Build New and Repair Aging Early Childhood Education Centers to Promote Learning for Youngest Students*	$110,000,000
Provide/Upgrade Adult and Career Education Facilities Necessary to Provide Career Training and Adult Courses*	$91,900,000
Renovate Special Education Centers for Career/Transition Programs & Increase Special Education Facilities on General Education Campuses	$50,000,000
Districtwide Charter School Facilities - Provide Reasonably Equivalent New and Existing School Facilities*	$402,110,000
Board Member Priority Projects	$35,000,000
Educational Service Center Priority Projects	$35,000,000
INFORMATION TECHNOLOGY DIVISION STRATEGIC EXECUTION PLAN	**$529,761,698**
Technology Infrastructure and System Upgrades - *ISIS, Core IT Network Upgrades, Disaster Recovery Systems*	$151,816,592
Upgrade and Equip Schools with 21st Century Technology - *Common Core Technology Project*	$327,945,106
Upgrade Districtwide Emergency Radio System Servicing Schools	$50,000,000
TRANSPORTATION SERVICES STRATEGIC EXECUTION PLAN	**$46,500,000**
Replace Aging and Polluting School Buses *	$46,500,000
OFFICE OF THE INSPECTOR GENERAL	**$40,000,000**
Conduct Ongoing Inspector General Independent Audits of Bond Projects to Ensure Transparency and Accountability	$40,000,000
UNALLLOCATED	**$500,000,000**
Unallocated funds for to-be-determined needs	$500,000,000
TOTAL SCHOOL UPGRADE PROGRAM	**$7,852,900,000**

Comprehensive Modernization Projects

- Approximately $4 Billion Spending Target to Comprehensively Modernize Legacy School Sites

- Comprehensive Modernization Projects May Include Constructing New Buildings, Reconfiguring Existing Facilities, and/or Upgrading Existing Spaces

- Depending on Specific Site Conditions, Comprehensive Modernization Projects May Address Some or All of the Following Conditions:

  - Earthquake Safety
  - Failing Building Equipment and Systems
  - Physical Safety and Security
  - Inadequate General and Specialized Classrooms
  - Fire-Life Safety
  - Current Building Codes
  - Accessibility
  - Dilapidated Portable Buildings
  - Inadequate Core Facilities and Play Space

Comprehensive Modernization Projects
Continued

- Projects Will Address the Facility Conditions that Must be Improved to Ensure Students Continue to be Provided with a Safe and Healthy Learning Environment, and that Facilities do not Impact the School's Ability to Deliver the Instructional Program or Operate

- The Need to Update Our Schools Far Exceeds Available Funding, as Such, it is Necessary to Develop a Methodology for Prioritizing School Sites to Receive Comprehensive Modernizations

Prioritizing Major Modernization Projects

What Was the Process?

- Assess the Conditions of Our School Facilities
  - Completed Capital Needs Assessment and Master Planning Effort
  - Engaged Stakeholders at Individual School Sites
  - Undertook a Facilities Condition Assessment
  - Throughout the Development of the School-Site Surveys and Master Plans, More than 750 Meetings Were Held with School-Site Stakeholders

- Collect and Analyze Data

- Engage Experts and Stakeholders
  - Convened Internal Committees to Provide Strategic Guidance
  - Convened External Technical Committee to Validate Process
  - Solicited Feedback from Various Stakeholders in Community Meetings
  - Convened/Convening Roundtable to Provide Focused Feedback
  - Developed and Vetted Categories of Data and Weights

Internal and External Committees
Strategic Guidance & Direction and Validation from External Experts

- Internal Committee Provided Strategic Guidance
  - Maureen Diekmann -- Executive Director, Early Childhood Education
  - Mark Hovatter -- Chief Facilities Executive
  - Michelle King -- Chief Deputy Superintendent
  - Rowena Lagrossa -- Executive Director, Parent Community Student Services Branch
  - Byron Maltez -- Instructional Area Superintendent, ESC North
  - Megan Reilly -- Chief Financial Officer
  - Bruce Takeguma -- Director of School Management Services
  - Edgar Zazueta -- Director of External Affairs

- External Technical Committee Validated Process
  - Ronni Ephraim -- 2U/LAUSD (Retired)
  - Mary Filardo -- 21st Century School Fund
  - Gary Lee Moore -- L.A. Department Public Works, Bureau of Engineering
  - Connie Rice -- Advancement Project
  - Miguel Santana -- LA City Administrative Officer
  - Richard Slawson -- LA/OC Building & Construction Trades Council (Retired)
  - Chester Widom -- Division of the State Architect

End User Roundtable Discussions
Feedback, Suggestions and Validation

- Roundtable Discussions with Principals, Teachers, Students and Parents

  - Coeur D'Alene Avenue ES
  - Fairfax HS
  - Washington Preparatory HS
  - Emerson MS
  - Thomas Jefferson HS
  - Walter Reed MS
  - Cesar E. Chavez HS
  - Gates ES
  - Canoga Park HS
  - Bancroft MS
  - Toland Way ES
  - Bell HS
  - Dorsey HS
  - Gardena HS
  - Burroughs MS
  - Solano ES

  - Van Nuys HS
  - Marshall HS
  - Marlton Special Ed.
  - Barton Hill ES
  - Gage MS
  - Huntington Park HS
  - Cortines HS
  - Lawrence MS
  - Gridley ES
  - Westchester HS
  - Gardena HS
  - Burroughs MS
  - Solano ES
  - Van Nuys HS
  - Marshall HS

  - Harry Bridges Span
  - San Fernando HS
  - Lincoln HS
  - Hollywood HS
  - Carson HS
  - Frost MS
  - Roosevelt HS
  - North Hollywood HS
  - 32 Street/USC Performing Arts
  - Grandview ES
  - Evans Community Adult School
  - Pacific Blvd. ES
  - Charles White ES
  - Franklin HS

The Majority of Participants Believe the Physical Conditions Related to Safety Were the Most Important Considerations When Prioritizing Comprehensive Modernization Projects; Consistent with the Methodology Utilized to Identify the First 11 School Sites with the Worst Physical Conditions

Identifying School Sites
Comprehensive Modernization Projects

School Sites are Identified Based on the Following 10 Categories, with the Health and Safety of Our School Facilities Being the Top Priority:

- The Physical Condition of a School's Buildings & Outdoor Areas -- Identified by the 10-Year Facilities Condition Index (FCI), a Comparative Indicator of the Relative Condition of a School's Facilities in Relation to the Current Replacement Value. Where applicable, the FCI score is adjusted to reflect any projects underway and the improved conditions that will be provided.

- The Seismic Risk Factor of a School's Buildings -- Identified Using the Federal Emergency Management Agency's Hazus-MH Model for Determining the Probability of Failure Based on the Predicted Earthquake Magnitude Generated by Specific Faults, Year of Construction, Type of Construction, Number of Stories, and Code and Construction Quality at the Time of Construction.

- Size of Food Service Facility, Multi-Purpose Room/Auditorium, and Library -- Determined by an Assessment of the Difference Between the Size of the Core Facility and the Design Standard for Construction of a New Facility.

- Size of Play Space -- Determined by an Assessment of the Difference Between the Size of a School's Play Area and the Size Recommended Under the Rodriguez Consent Decree.

- Percentage of Classrooms in Portable Buildings -- Number of Classrooms in Portable Buildings Versus Number of Classrooms in Permanent Buildings.

- Adequacy of Controlled Public Access Point -- Assessment of Whether a Campus Has a Secured Single Point of Entry or an Intercom/Camera System that Controls Visitor Access to the School Site.

- Site Density -- Determined by an Examination of the Amount of Square Footage Per Student at a School Site.

Weights Applied to Each Category	
10-Year Building FCI	26.23%
10-Year Grounds FCI	13.11%
Seismic Risk Factor	21.31%
Food Services	5.94%
MPR/Auditorium	5.94%
Library	5.94%
Play Space	5.94%
Portable Classrooms	5.19%
Controlled Public Access	5.19%
Site Density	5.19%

Scoring Methodology/Formula

The "Weighted Sum" Method

$$w_1(\text{Score}_1) + w_2(\text{Score}_2) + w_3(\text{Score}_3)\ldots = \text{Total Site Score}$$

The Higher the Score = the Greater the Need for Facilities Improvements and a Comprehensive Modernization Project

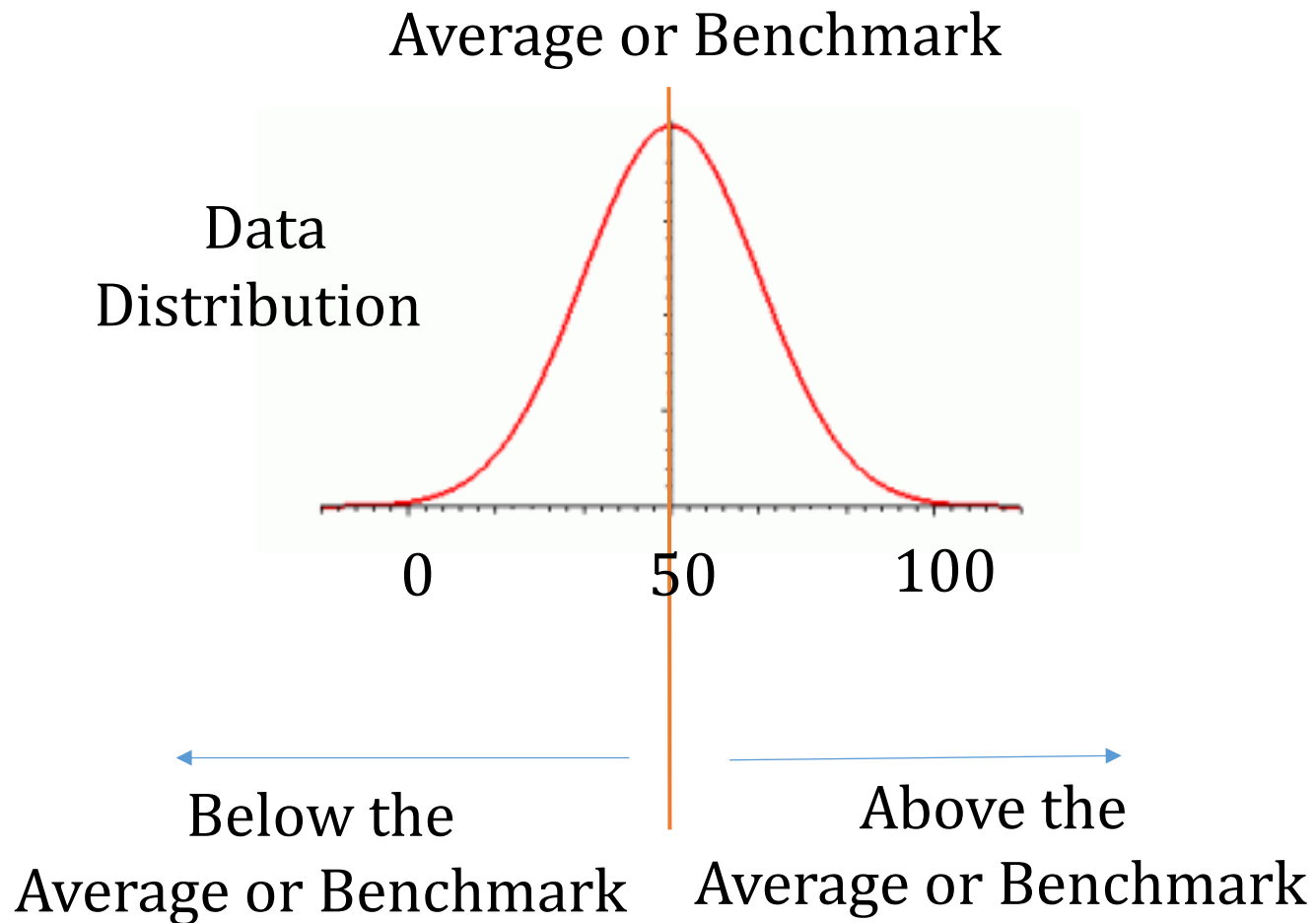# Scoring Methodology/Formula

Scoring of Datasets

- Each Data-Set is in Different Units

- Each Data-Set Has Different Yard Sticks

- Ideally, Comparison is Done on a Scale of 0-100

Goal:
"Oranges to Oranges"
Scoring

Scoring Methodology/Formula

Scoring Methodology/Formula
How is the Data in Each Category Scored?

START

Raw Score

Raw Score is the raw data point per school site.

Z-Score
(Goal: Normalize)

T-Score
(Goal: Standardized)

For example....
High School A has 8 acres of play acreage.

$$w_1(Score_1) + w_2(Score\ _2) + w_3(Score\ _3)..... = \text{Total Site Score}$$

Scoring Methodology/Formula
How is the Data in Each Category Scored?

A "Z Score" is the Measurement of the Gap Between a Raw Data and the Benchmark or Average Used for Comparison, Expressed in Standard Deviations
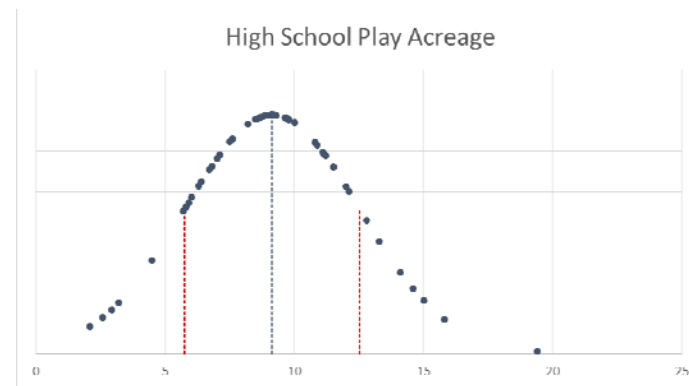
START

Raw Score

Z-Score
(Goal: Normalize)

T-Score
(Goal: Standardized)

$$\frac{(\text{School Raw Score}) - (\text{Benchmark for Data Set})}{\text{Standard Deviation of that Data Set}}$$

High School Play Acreage

$$w_1(\text{Score}_1) + w_2(\text{Score}_2) + w_3(\text{Score}_3)..... = \text{Total Site Score}$$

Scoring Methodology/Formula
How is the Data in Each Category Scored?

T-Score is the Conversion of the
Z-Score for Ease of Comparison
on a Larger Scale 0 to 100

START

Raw Score

T-Score = (Z-Score) x10 + 50)

Z-Score
(Goal: Normalize)

$(- 0.30)$x10 + 50 = 46.97

Need to reverse score to reflect 'worse'

T-Score
(Goal: Standardized)

100 - 46.97 = **53.03 T-Score**

$$w_1(Score_1) + w_2(Score\ _2) + w_3(Score\ _3)..... = Total\ Site\ Score$$

Prioritizing Comprehensive Modernization Projects
Key Points

- School Sites that have Data for all 10 Categories have been Scored and Weighted
  - Legacy Secondary School Sites were Scored and Weighted Based on Data and Conditions as of December 2014
  - Legacy Elementary School Sites FCA Underway -- Anticipate FCI Data in Fall 2015

- Scores in Each of the Categories are Calculated Based on a Standard Deviation From a Norm
  - As Data from Legacy Elementary School Sites is Added to the Model, Legacy Secondary School Site's Scores Within Each Category Will Likely Change

- A Prioritized List of all Legacy School Sites Will be Developed Based on the Same Assessment of the 10 Categories That Led to the Identification of the First 11 School Sites
  - A Complete List of All Legacy School Sites with Site Vitals, Scores and Weighted Scores Will be Presented After the Elementary School Data is Available and Incorporated into the Model

First 11 School Sites
Schools with Critical Physical Conditions

- North Hollywood High School

- Huntington Park High School

- Grant High School

- Sherman Oaks Center for Enriched Studies Magnet

- Roosevelt High School

- Polytechnic High School

- Cleveland High School

- Burroughs Middle School

- Venice High School

- San Pedro High School

- Jefferson High School

11 Comprehensive Modernization Projects
Development of Project Definitions

- Staff Anticipates Beginning to Bring Project Definition Proposals to the BOC and Board in the Fall of 2015

- Due Diligence and Pre-Design Activities Are Underway

  - Stakeholder Engagement

  - Site Survey and Analysis

  - Space Programming

  - Educational Programming

  - Seismic Evaluations

  - Geotechnical Investigations

  - Preliminary Environmental Studies

- Above Activities are Necessary to Develop Well-Defined Project Budgets, Scopes and Schedules

11 Comprehensive Modernization Projects
Where are We?

- Project Teams Have Met with All Principals, Educational Service Center Leadership and Complex Project Managers
  - Requested Each Principal and ESC to Prepare the Educational Program for Use by Facilities Team
  - Discussed Structure for School Site Stakeholder Engagement

- Project Teams are Negotiating with Architects
  - Preliminary Site Analysis Pending
    - Investigate and Evaluate Facilities
    - Analyze Conditions and Needs
    - Propose and Develop Ideas/Options for the Comprehensive Modernization Project at Each Site

- Project Team Goal is to Hold the First Community Meeting at Each School Site Before Summer Break

Questions???