LBUSD 2022 Facility Master Plan

Long Beach Unified School District



CANNONDESIGN

July 2022

CannonDesign and our partner firms Vinzant Group, GIS, and DMH Food Service **Design** extend sincere appreciation to the dozens of students, parents, teachers, school administrators, civil servants, elected officials, and community members who contributed to the development of the Facility Master Plan.

Your passion for students and the role that public education plays in the Long Beach community is an inspiration to all.

This report is dedicated to you.

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1 Purpose



opportunity.

- LBUSD parent

If every student and their family had to go to every school in the district along their K-12 journey, we might start to see more things happen to bring equity.

- LBUSD student

All students in all schools should have equal access to resources, budgets, curriculum, and

Purpose

Providing safe and inviting schools that will nurture and inspire an increasingly diverse student population



In 2021 Long Beach Unified School District embarked on the development of an updated *Facility Master Plan*, a long-range strategic plan providing a roadmap for equitably defining, prioritizing, and implementing public school facility projects districtwide, resulting in **an inspiring**, **high-quality school environment for every child**, **regardless of which school they attend in Long Beach**.

This latest update since LBUSD's \$1.5 billion Measure E bond measure was developed by the CannonDesign team in collaboration with LBUSD's dedicated executive leadership team and over 600 school stakeholders who were engaged in a transparent, data-driven process.

The Facility Master Plan outlines a sequence of strategic capital investments that provide modern facilities and technologies for all students and teachers to enjoy a **safe, comfortable, and healthy environment** to teach and learn in, with enough capacity in permanent facilities in each community to provide **a space for every student**.

It also prescribes flexible, fully equipped classrooms needed to support best practices in **modern**, **student-centered instruction and learning**, as well as equity-driven facilities to house vital community support programs that serve the **unique needs of LBUSD' most vulnerable populations**.

Background

A large, urban public school system facing a wide range of educational and operational challenges

Long Beach Unified School District (LBUSD), the fourth largest school system in California and the 45th largest in the United States, operates and maintains nearly 8 million square feet of buildings that serve approximately 69,700 Pre-K to high school students attending 85 different schools.

LBUSD schools span the 380 square miles of the dynamic cities Long Beach, Lakewood, and Signal Hill as well as Avalon on Catalina Island.

Schools range in size from specialized alternative education centers serving less than 100 students up to comprehensive high schools as large as the 4,000 students served at Long Beach Polytechnic High School. Under the district's long-standing open enrollment choice policy, LBUSD families may choose from a wide variety of programs of various sizes and grade configurations, including TK-8 or TK-5 elementary and 6-8 middle schools, as well as specialized magnet programs.

In 2022, LBUSD faces three mounting trends presenting strategic challenges in administering the ongoing capital improvement program.



1. Aging facilities built for a different era of education

Facility Age and Condition. LBUSD's operational school buildings date back to 1922, and even with several new state of the art facilities constructed since 2000, the average building is 67 years old (weighted by square foot).

LBUSD should be congratulated for effectively prioritizing and implementing maintenance, as confirmed in the Facility Condition Assessment (FCA) performed as a component of the FMP, which found relatively low facility condition indexes and low levels of Priority 1 deficiencies. However, many of LBUSD's aging facilities require age-driven upkeep that has begun to outpace current funding levels, with approximately \$600M in near term building system repairs forecasted through the 2026-27 school year.

Educational Equity. At the same time, most LBUSD public school buildings were originally designed to support an outdated instructional model that has since evolved. While several schools have benefited from recent Bond-funded projects renovating and replacing aging facilities, many campuses still need their buildings to be updated to support 21st century learning programs.

As determined in the Facility Assessment, most LBUSD schools fall short to some degree against state minimum standards and local Educational Specifications, lacking sufficient up-to-date and specialized facilities for critical academic content areas of Science, Technology, Engineering, and Math (STEM), Career Technical Education (CTE), and Visual and Performing Arts, as well as specialized spaces for the delivery of special education and language learner services and building strategies to provide school security.

LBUSD aims to refresh its portfolio from outdated buildings to modern, 21st century educational facilities that support best practices in teaching pedagogy. Modern facilities built new or retrofitted today provide a diverse array of learning spaces, arranged such that students and teachers have access to a variety of learning environments and tools in close-proximity with visual transparency and acoustic separation.







Original Construction Year



2. Declining enrollment and underutilized capacity

Declining enrollment. After decades of dramatic enrollment growth leading to a historic peak of nearly 98,000 students in 2004, the district has experienced steady enrollment decline for nearly 20 years, with less than 70,000 students currently attending LBUSD's schools – a drop of nearly 30,000 students since 2004.

Independent demographic studies indicate that this 1.6% annual decline will continue, with total district enrollment dipping below 60,000 students within the next 10 years. This decline has and will continue to be experienced at virtually all of LBUSD schools.

Capacity Underutilization. Schools are ideally enrolled within a balanced range of 80% - 100% of permanent capacity, but a majority of LBUSD schools operate outside of this optimal range, with several extreme outlier cases. By the 2026-27 school year, it is projected that LBUSD's schools will operate at 75% of permanent capacity, with over 23,000 total surplus capacity in permanent buildings and an additional 26,000 surplus capacity in portables.

Trade-offs. While some extra space can be a benefit to schools, extreme underutilization is a trade-off with material consequences to district operations. The continued demographic shift that LBUSD is experiencing results in reduced school sizes that stretch shrinking district operational resources. While operational budgets shrink with the student population, fixed costs for maintenance, utilities, transportation, and administration to operate under-enrolled buildings effectively dilute the remaining operational budget for educational programs and student supports.

Portables. Over the years the District has built new schools and classroom additions to keep up with the student population while modernizing existing facilities over a series of successful bond programs. Like other large school districts, LBUSD also deployed approximately 1100 relocatable classrooms and restroom trailers as a fast, economical capacity solution during periods of rapid growth. This strategy fulfilled its intended purpose of relieving crowded schools and has helped LBUSD avoid hundreds of millions of dollars of new construction that otherwise would have been required to meet the early 2000's enrollment peak.

Referred to as portables, modulars, and bungalows, these buildings currently house 1,100 (more than one fourth) of the district's 4,200 classrooms.

While enrollment continues to decline, these buildings remain dispersed across most LBUSD school campuses and present many obstacles to collaborative education, energy efficiency, visual appeal, maintenance budgets, and suitable space for outdoor recreation.

LBUSD's unfilled capacity is equivalent in size to the eighth largest school district in California.





57,627 capacity filled perm

3,192 capacity filled temp

3. Expanding needs for a diverse student population

One of the Long Beach community's greatest and most cherished strengths is its rich diversity. LBUSD students increasingly come from a broad variety of cultural, ethnic, and socioeconomic backgrounds, as well as varying physical and mental health conditions creating many opportunities for learners to build empathetic social skills and appreciation for others. This diversity also presents challenges and requires schools to provide a wide variety and heightened degree of academic, social, and health supports.

Diversity of needs. This diversity is born out in student demographic data. Minority students comprise more than 85% of the total student population, with approximately 15% of LBUSD students enrolled in English Learner programs. More than 61% of the total student body is eligible for free or reduced meals, and of concern is a growing body of LBUSD students facing the challenge of homelessness, for whom the school building may offer a haven of security in an otherwise unstable environment. In addition, 11% of LBUSD students receive special education services, and LBUSD serves hundreds of students with disabilities. Many require specialized education programs to ensure that they achieve academic progress and personal development, ranging from one-on-one or small group instruction, to assistance from in-class aides, to electronic devices and programs to support their accommodation into the regular school environment.

Emotional and behavioral health. Moreover, the evolving pandemic has inflicted ubiquitous isolation, learning loss, and unprecedented emotional trauma to countless students, demanding a renewed focus on student mental health. At the same time, LBUSD's dedicated staff have endured these extreme challenges to the point of burn-out.

Pre-K/T-K. Additionally, LBUSD is leading evidencebased professional development and capital investments to expand pre- and transitionalkindergarten opportunities for the youngest LBUSD students in partnership with other local, state, and federal pre-kindergarten programs. Preliminary demographic analysis suggests that LBUSD's desire to serve the equivalent of a kindergarten cohort of full-day pre-k students at all elementary schools would raise the pre-k population from the current 1,000 students served districtwide to 5,000, which implies the need for additional staff and new and repurposed facilities to support a robust pre-school program.

Data-driven equity. Working in tandem with LBUSD, CannonDesign developed an enhanced equity framework for the FMP facility assessment, which accommodates the unique needs of each school's student population, variably raising facility standards as dictated by student demographic indicators. This approach also factors any unmet equity needs into each school's benchmarked assessment scores, elevating the schedule priority of schools serving students who struggle with equity gaps.



EQUITY

Assess and plan facilities based on a minimum standard plus additional supports for each school's differentiated needs



Solution

A Strategic Capital Roadmap Founded on Values, Data, Stakeholder Voice, and Equity

It is within the context of these challenges that elected leaders and civil service staff from Long Beach Unified School District envisioned launching the next phase of the successful Bond Program with a refreshed approach to planning facility projects that would improve opportunities and outcomes for all LBUSD students, no matter where they live or which school they attend.

In mid 2021, the Facility Master Plan (FMP) update was launched, LBUSD' first combined facility assessment and facility master planning initiative since 2008 to review all buildings comprehensively, while engaging the community for guidance and input under a transparent, structured, data-driven planning process. This plan provides a multi-year roadmap for equitably prioritizing and implementing public school facility projects districtwide, and to achieve the following primary goals:

- It provides a long-term overview of facility needs, balancing current demands with future requirements and creating an orderly process to accommodate the many competing factors that affect decisions about the utilization and enhancement of school facilities.
- The planning process establishes a forum for discussion where all stakeholders, from students to community members to government officials, can express their views, nurturing the community engagement that is essential in a democratic society.
- When agreed to, it represents a stable guideline for future action, preserving the essential goals and structure of the initial decisions while providing a flexible structure within which

detailed decisions on project scope, schedule, and cost will be made over many years.

- In an environment of fiscally constrained capital resources, it allows the District to reasonably predict the funding required for school construction, so that facility needs can be balanced with other pressing imperatives.
- It allows the staff of Long Beach Unified School District to rationally plan for the staffing and other resources it will need to carry out its ambitious, complex capital program.

Facility Master Plan







Facility Condition Assessment

Facility Adequacy Assessment





Engagement

Sustainability Plan

Community



Equity Analysis



Capacity Utilization



Food Service Plan



Furniture Refresh Design





supported.

- LBUSD parent

If we aspire to be the most equitable district, it means that everyone would feel heard and

Process

Uplifting Student and Community Voice in Long-Range Capital Planning



The FMP is being developed with the participation of **more than 100 LBUSD** stakeholders from all parts of the district who volunteered their time with the united goal to improve their schools by participating in a collaborative, transparent planning process tailored to meet the needs of Long Beach Unified School District's unique communities. Moreover, interim recommendations have been informed by survey responses from more than 401 students, parents, teachers, administrators and community members representing all of LBUSD' 85 school communities.

The FMP is:

• A plan for all of LBUSD' 85 public schools with an extensive assessment and analysis of facility condition, capacity, enrollment, and funding, making this the first comprehensive strategic plan of its kind in LBUSD in over 14 years.

• A partnership between LBUSD leadership, district schools, and the community in which cross-sectional focus groups and planning committees collaborated iteratively to articulate a long-range vision, review data, and weigh in on decision criteria.

 Developed with overt engagement of LBUSD stakeholders under a structured planning process allowing community values and grassroots agency to drive outcomes.

• Data-driven with consideration of a comprehensive study of the condition and design of each campus, as well as projected enrollment and capacity of each school and the availability of capital funding. These measurable degrees of need ensure consistency and equity for all schools districtwide.

• The product of collaboration, conceived and developed in respectful "safe-zone" discussions with an openminded "yes, if..." perspective about obstacles (instead of dismissing ideas with a facile "no, because ... "), resulting in innovative, transformative recommendations that genuinely reflect community needs and preferences.

Process Overview

Designing 'with, not for'

The Facility Master Plan was launched during the evolving pandemic with partial disruption of face-toface community functions. CannonDesign worked closely with LBUSD to design the process necessary to deliver on the project's intent while keeping everyone safe. Deploying innovative technologies such as web-based video-conferencing, virtual breakout rooms, cloud-based documents, and live polling, unprecedented challenges were overcome to facilitate critical interactive educational visioning workshops, building early momentum and stakeholder enthusiasm.

With the goal of establishing consensus among Long Beach's diverse stakeholders, the FMP planning process features authentic school community engagement in which stakeholders are actively involved in the strategic design process.

Participants

CannonDesign helped LBUSD commission crosssectional representative committees of internal and external school stakeholders working in facilitated partnership to define guiding principals, validate and understand planning data, and co-design and vet operational and capital scenarios.

To achieve transparency and procedural equity,

participants were organized in an intentional committee framework and sequence of steps to participate in developing facility plans on a districtwide scale, weighing in on the needs of all students at all schools. These participants served in two cross-sectional committees:

- District Planning Committee (DPC) was comprised of 41 educational and operational leadership of the district's administration, who reviewed data findings, suggested operational and capital options, considered community and Stakeholder Advisory Committee input, and informed consultant third party recommendations.
- Stakeholder Advisory Committee (SAC) comprised of 29 students, teachers, parents, and local business and community leaders. SAC members were assembled with intentionally balanced cross-sectional composition, to ensure diversity of perspective, location/school affinity, and role/relationship to LBUSD. The role of the SAC membership was to act as liaisons to the community at large, study background data, review and provide feedback on the DPC's draft options in diverse small groups, and inform the DPC with their relative level of support for proposed recommendations.

All participating stakeholder committee members are listed in Appendix F acknowledging their contributions to FMP and a positive equitable future for all Long Beach students.





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Community Engagement

Central to the engagement strategy was a series of open-invitation virtual community forums highlighted by small group workshops and live polls with facilitated discussion.

- 2 Community Forums (CF) were held in-person with open invitation to the community at large in which they had an opportunity to review proposed options and considerations, and provide feedback, both through virtual meetings and online surveys.
- 1 Community Survey conducted to in English, Spanish, and Khmer to 1) inform objective needsweighting for facility assessments, and 2) inform strategic priorities and decision criteria.

Valoramos su opinión.

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Votre contribution est appréciée.

Using an online survey deployed in the district's three most prevalent languages, input from more than 401 community members was successfully solicited including dozens of students, yielding measures of stakeholder values and broad understanding of affinity patterns. By harnessing objective survey data disaggregated by role, neighborhood, language, and ethnicity, scenario design discussions are heightened with otherwise immeasurable perspective into the different needs and values of all students and community groups, empowering FMP participants to confidently embrace nuanced solutions to accommodate differences.

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corners of the district.

- LBUSD student

We need infrastructure that promotes physical exercise, involvement with nature, and socialemotional wellness.

- LBUSD teacher

More trees, less concrete...

- LBUSD parent

We shouldn't have to travel across the city to access special programs – build them in all

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Results

Achieving districtwide equity through a consistent, disciplined approach to prioritizing projects

With preliminary facility assessment findings captured and analyzed and district stakeholders engaged in open, transparent, and data-driven forums, several major categories of facility needs were identified for deeper study, options development, and prioritization.

Parametric costs estimates were performed to determine the scale of facility needs versus the magnitude of LBUSD's recent bond programs, requiring careful consideration of community priorities and available resources. By applying an equitable prioritization rationale described below, the following outcomes were successfully achieved:

- A capital improvement plan that fits LBUSD's typical bond budget.
- Schools not covered in Measure E could be improved within eight years.
- Significant investments in healthy schools and sustainability.
- Removal of portables and greening of school sites in communities where it is needed the most.
- Projects expand equity and educational opportunity districtwide.
- Expanded Pre-K districtwide.

Community Priorities

Framing a capital strategy informed by well-aligned stakeholder feedback

The FMP community survey conducted in spring of 2022 garnered 401 responses with representation from all of LBUSD's school communities. The survey gauged stakeholder input into decision-making criteria, revealing key strategic implications for master plan priorities:

1. Priority on green spaces, equitable access, and student wellness. When asked to rank several facility strategies to promote healthy, innovative school culture, the top-three responses of access to green space, equitable access to programs, and wellness centers measurably stood out from other facility enhancements such as art and flexible furniture. This underscores both qualitative feedback and assessment findings

identifying over-paved campuses and socialemotional health challenges, and outdated facilities in need of programmatic upgrades.

- 2. STEM, Arts, and CTE. Asked to rank which programs are of personal interest and most in need of improvement, stakeholders consistently indicated a preference for S.T.E.A.M. and Career Technical Education.
- 3. Openness to change. Asked to rate support for various strategies for balancing capacity utilization, a majority of stakeholders from all communities and backgrounds stood expressed favor toward taking various organizational and facility actions, even potentially controversial changes such as school consolidation. In fact of all of the alternatives presented, only shifting/ limiting school choice policy was deemed unsupportable by the majority of LBUSD stakeholders.



(Avg Rank of 398 responses)

- 1 Access to green spaces
- Inclusive and equitable access to 2 programs
- 3 Wellness/Caring Centers
- Curriculum that is representative of Long Δ Beach's diversity
- 5 Project-Based-Learning/Maker Spaces
- Flexibility in the design and use of spaces 6
- 7 Art, murals, and photographs
- **Flexible furniture** 8

high quality education for all students. (Avg from 1 to 397 responses)







Please rate your support for strategies to balance capacity with enrollment, critical to providing

Disgree/Oppose Strongly Disgre.

Needs and Budget

Balancing needs with available budget

Measuring Capital Needs

The preliminary cost impact of facility needs in existing buildings measured in the ongoing FMP assessments totals \$3.5 to \$3.8 billion.

It is important to note that this cost reflects the needs of systemic repairs and educational enhancements in current facilities and does not account for potential school portfolio changes such as new/replacement schools, alterations for new magnet programs, grade reconfiguration, or consolidations, which may surface during future strategic planning and prioritization phases.

While the scope of these discrete improvements would provide responsible upkeep of facilities and dramatic educational and equity enhancements in many parts of each campus, it does not represent complete gut-renovation overhauls or widespread building demolition-replacement projects, which if applied at districtwide scale would more than double this already out-of-reach total.

Capital Improvement Program Budget

As an update to previous Facility Master Plans leading to successful Bond Measures occurring every 6-8 years, this measured need is compared to LBUSD's 2016 \$1.5B Measure E Bond Program to gauge the relative extent of possible implementation. This timeline is also confirmed by LBUSD stakeholder survey feedback for reasonable timelines for renovation.

Not all schools will require extensive investment within the next Capital Improvement Program (CIP) cycle, particularly LBUSD' newer and more recently renovated campuses whose facility assessments indicate low levels of need. However, based on building system life-cycle renewal schedules, at

minimum it is recommended to plan for minor renovations at each school within this timeframe.

Cost Assumptions:

- Due to schedule uncertainty for discrete projects, all FMP project cost estimates are expressed in current baseline 2022 figures and should be budgeted each year with actual escalated cost figures at the point of implementation.
- It is assumed that CIP budgets will gradually increase over time at an average rate equivalent to market escalation.
- In accordance with industry standard best practices, these estimates are based on local cost per square foot figures for construction, and consistent application of California-specific models for site development and nonconstruction soft-costs, such as professional architecture and engineering design services.
- Class size assumptions accurately model LBUSD' prevailing practice and preferred ed spec design standards.
- In light of recent impacts of the pandemic on the construction industry, it is recommended that throughout the course of implementing projects LBUSD conduct in-depth review of costs and reconsider project scopes accordingly.
- The actual scope of each project must be developed at the time of design and may vary from the discrete improvements identified through the FMP assessment. In order for LBUSD' equity objectives to be upheld, consistent and disciplined of managing scope within budget is strongly recommended.



Renovation Cost per Square Foot





Measure E Budget (2016)

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Closing the Budget Gap

To address such a large discrepancy between the estimated \$3.5- \$3.8B need and available resources, a disciplined approach to prioritizing, scoping, scheduling, and funding projects is required.

Effectively, only three paths exist (or a combination): to extend the timeframe for carrying out the work; to increase the annual funding level; or to reduce the scope of projects:

- Extending the timeframe. At the current rate of LBUSD's ongoing bond program, it would require over 20 years to address all measured needs. While nominal extensions of project timelines are reasonably accommodated, delaying high priority projects to such an extreme would result in accelerated degradation of facility conditions, as well as heightened capital outlay due to escalating construction costs.
- Increasing capital funding. Another route is to renew the CIP with another Bond Measure, raise local taxes, acquire additional State funding, or garner alternative funding sources through public private partnerships.

Any bond campaign would require extensive information campaigns to communicate the long-term economic and social benefits of increased investments in public education.

Local Education Agencies in the United States are only beginning to capitalize on **alternative funding sources** such as the Public Private Partnerships (PPP or P3) arrangements that have been used effectively in Canada and European nations. The concept is manifested in numerous ways, and essentially leverages the agency's capital land value through long-term leases to private entities in exchange for front-end capital investments. P3 implies risk and requires experienced oversight to deliver successfully.

• **Reduction of scope.** Given the undesirability of extending the FMP timeframe beyond an unreasonable number of years, and the likelihood that a new bond measures would fall within range of the \$1.5 B Measure E, the most realistic avenue to accomplishing the program equitably is to reduce the overall scope of the work across all regions of LBUSD. Using a Prioritized Renovation approach, addressing objectively measures higher needs and the most essential educational deficiencies and building systems would be addressed.



Extend Time

20 +years



More/New Funding

new bond

private partnerships & alternative funding



Reduce Scope

prioritized renovations

Prioritization

Achieving districtwide equity through a consistent, disciplined approach to prioritizing projects

Even with a new bond measure the magnitude of Measure E, current capital funding falls far short of addressing the needs identified through the FMP process. Therefore, it is essential to prioritize projects on an objective basis, and to consistently adjust the scope of projects so that the most students possible will benefit from improvements within a reasonable timeframe.

In order to carry this out, all needs are analyzed by strategic project categories in alignment with LBUSD's educational and public service initiatives as outlined below. Each category is recommended to be funded at a level to advance each initiative in the near term while addressing highest priority needs first based on objective data-driven, and equitable measures:

- Facility Enhancement Projects are applicable to LBUSD schools that haven't benefited from recent bond projects that represent transformational educational and wellness improvements, including HVAC, child nutrition, and supports for LBUSD's neediest students. It is recommended to dedicate the bulk of available budget to renovating these schools and/or retiring older schools for a 'newerfewer' portfolio strategy, to be defined in partnership with LBUSD stakeholders in future prioritization phases.
- Wellness & Green Spaces include redevelopment of LBUSD's campuses for a healthier, more inviting environment, removal of unneeded portables, and provision of shade trees and structures.

- Pre-K/T-K Expansion includes TK classroom conversions, restrooms, playgrounds, and safe vehicular drop-off to support LBUSD's planned expansion of Pre-K programs with the goal of offering Universal Pre-K with community partners.
- Sustainability will further the District's commitment to reducing its carbon footprint while creating a healthier, more equitable environment.
- Health & Fitness will close equity gaps and expand access to recreational fitness and athletic opportunities.
- <u>Safe Campuses</u> will provide critical renovations to improve pedestrian safety and provide passive and technological controls to ensure the security of LBUSD students and staff.
- Instructional Technology will replace outdated network infrastructure critical to modern instruction.
- <u>Career & Technical Education</u> will support new and expanded career pathways targeted to increase access, reduce travel, recruit technical teachers, and provide students new opportunities.
- Community & Professional Development projects will provide a more centrally-located Administrative Service, Professional Development, and Community Engagement Center necessary to improve public access, efficiency, collaboration, and community service responsiveness.
- Media Center projects will transform LBUSD's mostly outdated school libraries into new collaborative learning hubs.









FMP Recommendation

4 Recommendations



- LBUSD student

in middle school.

- LBUSD teacher

more problems equals more funding.

- LBUSD community member

We must take a stand and be the innovator in sustainability and the example others look to.

We need to promote curiosity and learning starting in Pre-K and career development starting

Funding for facilities should be based on need;

Recommendations

Transformative outcomes for all LBUSD's students.

Commissioned by Long Beach Unified School District and developed by the CannonDesign team in collaboration with over 50 school stakeholders and input from hundreds of community members in a transparent, data-driven assessment process, the **Facility Master Plan** is a multi-year capital improvement plan that outlines a strategic framework for project implementation and prioritized sequence of capital investments.

This framework describes goals, intended scope, baseline budgets, recommended actions, schedule milestones, and benefits for 10 strategic classifications of capital projects.







Facility Enhancements

Creating next generation learning environments where students can

Recommended Actions:

- Modernizations of aging school facilities. Improvements may include energy efficient lighting, replacement of interior finishes, exterior finish upgrades, play area apparatus replacement, hardscape and landscape repairs and improvements.
- Complete the districtwide HVAC modernization of all outstanding school campuses with aging and inefficient systems.
- Replace outdated and low performing building systems with energy efficient and carbon neutral upgrades to reduce operating costs and support a sustainable future.
- Improve nutritional services, including kitchen modernizations that provide upgrades to aging facilities, minimize waste, increase efficiency, and align with an improved healthy meal plan. Provide an elevated student dining experience, including improved queuing, upgraded dining facility interiors / branding, and expanded access to outdoor dining that includes ample shade and a variety of seating options for students.
- Implement furniture replacement plan districtwide to better support project-based learning that supports a variety of small group and large group learning configurations. Offering light weight, mobile furniture will help facilitate the rapid reconfiguration of classrooms, supporting new styles of learning that were not previously possible, while minimizing downtime for instruction and engagement.



Educational Program

2.2

Wellness

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Schedule / Milestones

- Complete prioritization phase and vet portfolio scenarios through stakeholder committees in fall/winter of 2022-23.
- Develop and publish project priority lists for transparent implementation.

Long Beach Unified School District | Facility Master Plan | Recommendations

Benefit to LBUSD Students

Refreshed facilities will improve wellness of students and staff, expand educational opportunities for all students, and close equity gaps for LBUSD's most vulnerable students.



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Wellness & Green Spaces

Offering spaces that improve cognitive development, mental wellbeing, and physical health

Recommended Actions:

- Remove aging and used portables, creating new opportunities where outdoor learning and outdoor green play areas can occur. (46 schools have sufficient permanent capacity to house projected enrollment without portables.)
- Replacement of portables with multi-story permanent addition/s should be given consideration in cases where there is insufficient permanent capacity among neighboring school to house projected enrollment, clearing space for reclaimed green space.
- Offer drought-tolerant green space opportunities that maximize adjacencies to clusters of same grade classrooms, providing new opportunities for outdoor same grade learning and collaboration. Include outdoor shade structures and other shaded elements that maximize use as outdoor learning space.
- Generate drought-tolerant green spaces that offer a variety of natural spaces for play, learning, pollinator gardens, student gardens, and tree planting that supports a science and nature curriculum.
- Areas of asphalt paving at play areas will incorporate areas of reflective paint at existing ground games to
 reduce solar heat gain and urban heat island effect, providing an improved experience for students while at
 play.
- Offer outdoor drought-tolerant green play spaces immediately adjacent to all PK/TK/K classrooms that is secure and that offers soft space for our youngest learners, as well as space for outdoor snacks, outdoor art projects and other uses. Include shade trees and low height seating that allows early learners to move freely from the classroom to outdoor learning areas.
- Priority should be determined with consideration of current condition of school grounds, location's heat island effect, proportion of students with low-socio-economic indicators, distance to and condition of nearest park, and community input.

Sahadula	/ Milestones
Scheudle /	

- Generate prioritization list for portable removal.
- Create project timeline for implementation.
- Develop drought-tolerant designs and budget for implementation at each school campus.

Benefit to LBUSD Students

- Create opportunities for learning outdoors that includes space for outdoor classrooms, outdoor group learning, art and science projects.
- Improve outdoor play experience, including soft spaces for recreational play and socialization, including ample opportunities for shade in outdoor areas.
- Provide new opportunities for students to gather at lunch outdoors in a variety of settings.





Wellness & Green Spaces

Offering spaces that improve cognitive development, mental wellbeing, and physical health

Example: Whittier Elementary School Proposed Greening & Site Transformation

- Eliminate Portables from campus and restore site with new zoned drought-tolerant green spaces.
- New TK-Kinder and general play yards.
- Preserve all recent apparatus in place (6).
- Outdoor classroom/reading room.
- Maintain outdoor covered dining area.
- New shade trees, sails, or structures.
- New/expanded school vegetable garden.
- Incorporate reflective paint to reduce solar heat gain and urban heat island effect.
- Enable community access for afterschool and weekend recreation activities, gatherings, and events.



Current Status

Long Beach Unified School District | Facility Master Plan | Recommendations



After Greening



Recommended Actions:

Continue LBUSD's research and professional development for the strategic expansion of preschool programs in concert with other local, State, and Federally-funded early education programs, leading to intended expansion of full-day Transitional-Kindergarten for students in number approximating an entire grade cohort at every LBUSD elementary school.

Priority should be determined with consideration of community needs, proportion of students with low-socioeconomic indicators, and feasibility of converting underutilized existing space into appropriate TK facilities at lower cost than new construction.

Capital projects should provide sufficient capacity for a full cohort of students with target 20 students per standard 1350 SF TK/K classroom, in co-located spaces with age-appropriate restrooms and storage in the classrooms. TK/K centers should have immediate adjacency to a secured outdoor play area, and if possible have provisions for vehicular pull-in and safe drop off.

Where possible, Pre-K facility improvements should be economically and effectively combined with other renovations projects for maximum efficiency and minimal school disruption.

Monitor legislative requirements, geographical demand, availability of private partners, and advocate for additional State funding.

Schedule / Milestones

 Continue to monitor legislative requirements, demand, capacity of private vendors, and advocate for additional State funding.

Benefit to LBUSD Students

- Early skills development in language and literacy, thinking, socialization, and self-esteem.
- Closes equity gaps.
- Provides parents with more choices for the early instruction of their children.





Example: Riley Elementary School Proposed TK Expansion

- Enlarge and renovate TK-K building for planned expansion and class size reduction of early childhood program.
- Right-size TK/K classrooms to standard 1350 SF.
- Add new age-appropriate restrooms and storage in classrooms.
- Include immediate adjacency to secured outdoor play.
- Create new professional learning center for TK/K staff.
- Add new vehicular pull-in and parking for safe drop off.
- Three displaced general classrooms can be accommodated within surplus capacity within the existing building.
- Consider concurrent removal of adjacent portables and restoration of site with new green spaces.



Current Status



After TK Expansion

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Recommended Actions:

Follow guidance detailed in LBUSD Board Policy 3510.1 Green School Operations Energy Policy.

- Prioritize investments that achieve the greatest emissions reduction and minimize greenhouse gas emissions by aggressively transitioning to zero-emissions vehicles and machinery as rapidly as recapitalization cycles and budgets allow.
- Reduce energy and water consumption, maximizing the use of renewable and clean energy technologies.
- Purchase clean renewable energy (direct purchase or offsets) from the utility provider or Energy Service Company so long as there are competitive market prices available to meet 100% clean, renewable energy for the overall operational demands for the District.
- Ensure that facilities construction and renovation projects comply with green building standards, specifically ensuring all new and replacement machinery is zero-emissions, pursuant to 24 CCR 101.1-703.1, and focus on sustainability and student health in the design and implementation of facilities modernization projects.
- Decarbonize machinery and equipment in all end-use energy sectors, including heating, ventilation, air conditioning (HVAC), cooking, water heating, laundry, landscape maintenance, and transportation.
- Develop a phase-out plan for existing infrastructure that still relies on fossil fuels (natural gas or other).
- Reducing vehicle emissions to campuses/facilities by encouraging students to walk, bicycle, carpool, or use district or public transportation. Prioritize zero-emission school buses and vehicles using reduced or zero-emission school buses and vehicles and providing accompanying infrastructure such as charging stations.
- Limit unnecessary idling of personal vehicles by encouraging parents/guardians, through signage or other means of communication, to turn off their vehicles when parked on and around school grounds. Limit unnecessary idling of school buses and District vehicles in accordance with 13 CCR 2480.
- Actions will be reported to an oversight task force so that it can fulfill its monitoring and shared accountability responsibilities.

Schedule / Milestones

- In alignment with ongoing LBUSD policy and sustainability master planning efforts, complete financial and climate impact of discrete project scopes to harvest sustainable energy and water sources, reduce energy consumption, and goodbehavior.
- Develop prioritized implementation plan based on social, health, equity, and financial returns.

Benefit to LBUSD Students

Commitment to Climate Change and Justice Emissions Reduction Reducing Energy Use Reducing Water Use Renewable Energy Student Health Reducing Vehicle Emissions Reducing Waste Environmentally Preferable Products Reducing Toxins



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Prioritization Example:

Use facility and student demographics data to define and transparently communicate priorities, as in this data dashboard analytic tool for identifying greening projects that yield the most benefit to LBUSD students, staff, and community. In this example, school campuses are color coded for the quality of their existing grounds with halos indicating the schools' relative socio-economic status and are scatterplotted by the California EPA's Urban Heat Island Index and distance from the nearest public park. In this fashion it is quickly determined which schools are in most need of greening in the hottest parts of LBUSD with the most students with less means to travel the farthest distances to access a green space.

Overlaying sundry data sources in this fashion will build stakeholder trust and confirm that capital investments are directed where they will yield the most benefit and uphold LBUSD's equity objectives.

Long Beach Unified School District

Campus Greening Priority Tool

(Data Sources: CA-EPA, California Protected Areas Database, LBUSD student data)

In order to identify best candidates for greening projects, schools are plotted by Urban Heat Island Index and distance from nearest public park, with color indicators for current campus greening quality and % of students with low socio-economic status.



Campus Greenspace Quality

% Students w/

Low Socio-Economic Status

Fair

Por

Good

0%

Average





Recommended Actions:

- Provide parity across all district high schools, with all high school students having equal access to gymnasium and outdoor athletic facilities, including recreational exercise.
- Provide parity across all district K8 and middle schools, with all middle school students having equal access to gymnasium and outdoor athletic facilities, including recreational exercise.

Schedule / Milestones

 Prioritize projects in coordination with other renovations and location data for alternative programs.

Benefit to LBUSD Students

- Closes equity gaps, promoting healthy lifestyles.
- May inspire families opting out of District school alternatives to stay in LBUSD.





Example: Cubberley TK-8 School Proposed Health and Fitness Center

- Remove majority of portables to accommodate new fitness center building, to include gymnasium and lockers.
- Demolish and restore asphalt pavement with new zoned play yard.
- Keep recent apparatus in place (1).
- Incorporate reflective paint to reduce solar heat gain and urban heat island effect.
- Include new central drought-tolerant green campus commons for multi-purpose educational, athletic, and community functions.
- Enable community access for afterschool and weekend recreation activities, gatherings, and events.
- Example projects at Cubberley, Muir, Robinson, and Tincher would provide 6-8th grade students equitable access to athletics and fitness programs as their peers at 6-8 Middle Schools and Newcomb and Powell TK-8.





After Health & Fitness Improvements

Current Status



Recommended Actions:

- Based on facility assessment findings, develop and implement projects to separate vehicular traffic from pedestrian routes.
- Install electronic access lock system at all schools as part of a keyless entry for all employee. System offers enhanced school safety, through ease of management controls, activation, deactivation and tracking.
- Increase camera surveillance at all campuses.
- Improve after hours access controls at secondary schools.

Schedule / Milestones

 Safety projects of highest priority and risk levels should be accelerated ahead of other renovations on each site. Consider horizontal procurement strategy to gain efficiencies.

Benefit to LBUSD Students

- Reduced safety and security risks.





Instructional Technology

Building a high-speed technology future that supports project-based learning, where instruction and collaboration can occur anywhere and everywhere

Recommended Actions:

Tier 1 Level Improvements:

- Replace districtwide aging cabling that was installed in early 2000's. Upgrade to Cat6 / Cat7 cabling across all campuses and support facilities.
- Upgrade MDF's and IDF's across district to handle higher speed networks as a component of replacing aging cabling.
- Develop and deploy back-up WAN services for all schools.
- Increase wireless capacity to all classrooms.

Tier 2 Level Improvements:

- Provide outdoor wireless access at new FMP outdoor learning environments.
- Increase wireless capacity to support CTE across various sites.
- Provide improved technology support for project-based learning classrooms with multi-wall classroom teaching technology.

Schedule / Milestones

- Assess districtwide deployment challenges/opportunities, develop requirements, equipment lists, and long-range model.
- Develop prioritization categories for deployment, generate timeline for construction, approach and cost.

Benefit to LBUSD Students

- Technology performance and speed that meets demand. Technology that improves wireless capacity in classrooms to better support learning.
- Technology that better supports mobile teaching environments to support project-based learning.





Career & Technical Education

Develop technical skills, knowledge and training for students to succeed in future careers

Recommended Actions:

Tier 1

- Provide parity across all district high schools, via equal access to specialized learning that centers on career and technical education (CTE) programs. Offer programs that provide access to certification and college credit coursework that do not currently exist at all high schools. Build CTE programs and facilities at all underserved high schools.
- Determine curriculum, instructional approach, and programs to be offered at underserved high schools. Engage local community partners that may offer access to additional resources and on-the-job training that pairs with CTE offerings.
- Design and build CTE facilities to support new CTE programs on existing high school campuses.

Tier 2

• Develop and implement CTE programs within the district that includes early introduction to career and technical education at the middle school level. Develop curriculum and instructional CTE programs at all middle schools and K8 schools across the district as a component of a progressive learning model that prepares middle school students for high school.

Schedule / Milestones

- Determine scope of CTE curriculum for all underserved high schools.
- Develop individual CTE curriculum and program needs associated with new offerings.
- Determine project timelines, staffing and budgets.
- Design and build facilities that compliment the needs of individual CTE programs.

Benefit to LBUSD Students

- Offer high school students opportunities that integrate core academic knowledge with technical and occupational knowledge, providing students with pathways to postsecondary education and careers.
- Generate opportunities for students to receive college credit and on-the-job training prior to graduation.





Career & Technical Education

Develop technical skills, knowledge and training for students to succeed in future careers

Example: Polytechnic High School Proposed Center for MEDS Medical Pathway

- Within context of a long-range phased campus master plan, construct new 12-classroom building addition to house Poly's MEDS program.
- Pathway spaces to include a real-world patient care lab classroom, computer lab, healthcare administration lab, mental health and wellness lab, as well as group collaboration areas. Also included are integrated special education and support space.





Community & Professional Development

Heightened access, public service, and instructional preparation

Recommended Actions:

- Relocate Board and administration staff from current Administration building located at 1515 Hughes Way to new centralized site to provide improved public access and service responsiveness to schools and LBUSD community.
- Develop workplace strategy for all LBUSD administrative functions to co-locate district departments improving collaboration and efficiency under one roof.
- Build new Teacher Resource Center, designed to accommodate professional development services that support teachers and staff districtwide. Provide replacement facilities for existing TRC portables located at 1299 E 32nd Street that are inefficient and und undersized. Create new permanent facilities that are adequately sized to support the wide range of needs and continuing education programs that will better support our teachers and staff, offering new opportunities to excel and thrive.
- Create additional centers for community across the district, expanding upon the community resource at Browning High School.

Schedule / Milestones

 Determine site, program, and project timeline for new District Administration Center including Community Board Room, and Teacher Resource Center.

Benefit to LBUSD Students

- Improved public access and service responsiveness to schools and LBUSD community.
- Reduced transportation will improve collaboration and efficiencies, save unproductive staff road time, and lower operational costs, as well as improve the District's carbon footprint.





Community & Professional Development

Heightened access, public service, and instructional preparation

Projects: New Centers for LBUSD Community Service, Administration and Professional Development

- Repurpose existing LBUSD property or acquire new property/properties, new lease, or land swap to house a new centrally-located Community Service and Administration Center and/or Professional Development Center.
- Relocate Board and administration staff from current Administration building located at 1515 Hughes Way to new centralized site to provide improved public access and service responsiveness to schools and LBUSD community.
- Reduced transportation will save unproductive staff road time, and lower operational costs, as well as improve the District's carbon footprint.
- Develop workplace strategy for all LBUSD administrative functions to co-locate district departments improving collaboration and efficiency.
- New facility will replace Teacher Resource Center, currently housed in aging portable buildings behind Burroughs Elementary School.





Media Centers

Reimagining LBUSD's libraries as the campus hub of relationships and collaboration

Recommended Actions:

- Reconfigure high school and middle school libraries and media centers, using Jordan High School as a template, creating reimagined and expanded access to resources, including physical book inventory, digital resource spaces, social spaces, collaboration spaces, resource and digital media rooms, access to maker lab tools (3D printing), as well as community conference space and multi-class flex collaboration space.
- Using FMP facility assessment findings of smallest and poorest outfitted libraries, develop equity-based priorities for districtwide implementation.

Project Example Jordan High School:

As component of the multi-phased revitalization of the Jordan High School campus, a newly transformed library featuring modern technology and furniture serves the school community with an inviting hang-out space where groups and individuals can meet and work.

A committee made up of librarians from across the district helped shape the renovation of Jordan's nearly 50year-old library. Today, the library's interior features flexible seating, laptop charging stations and distinct areas for individual and collaborative learning.

Schedule / Milestones

- Prioritization based on assessment of existing conditions.

Benefit to LBUSD Students

- Enhanced school culture and community.
- Opportunities for individual and team projectbased learning
- Resource for campuswide gathering and functions.



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