

# Beyond Master Planning: The Visioning Process

AUTHORED BY DARA YOUNGDALE, HKIT ARCHITECTS &  
KIM MCNEELY, LIVERMORE VALLEY JOINT UNIFIED SCHOOL DISTRICT

## Introduction

### Why does a School District need to do Master Planning?

It is very common and often a necessity for school districts to engage in a robust master planning process for their district's campuses enabling them to plan for, manage and communicate desired physical improvements to their facilities over time. The master planning timeline will vary for individual districts and may be used to establish a long-range plan for improvements over decades or may focus on immediate needs and be used to help establish priority projects for available funding.

There are numerous reasons that drive the development of master plans. Many school districts have older campuses constructed in the 1950's and 1960's, or earlier, with aging infrastructure, failing building envelopes, building systems and utilities. Where districts have relied on portable classrooms to house students, many may be poorly located, or in very poor condition, having exceeded their useful life. Neither permanent nor modular classrooms may have the technology backbone, equipment, or furnishings to align with best educational practices, nor adjoining outdoor learning environments to extend the classroom to the outdoors. Flexible science, arts and maker labs may be inadequate or non-existent.

In districts with newer campuses, or significant infill, there can be a lack of equity in schools across the community. Or, at some districts, bond projects have been undertaken successfully, but the improvements may be uneven with significant projects remaining. Many times, campuses are housing double the original student population, putting a strain on classroom support spaces including administrative and pullout spaces, assembly and dining facilities, playground, sports, and athletic facilities as well as inadequate parking and drop-off. Outdoor spaces may be undefined and unusable, with residual spaces that are not accessible or welcoming.

## Master Planning Process Overview

The master planning process should start with the physical assessment of facilities and the evaluation of existing building, infrastructure, site, and utility conditions. This evaluation will form the baseline for required improvements and is best created with a team of district Facility, School Site Staff, and Maintenance & Operations personnel with assistance from experienced architects and other design professionals. A critical layer of assessment is that of program fit – or lack of fit - on each campus and the identification of missing educational, social, and physical educational components or opportunities. The site assessment data should be reviewed through the lens of district goals, equity, demographics, community use and overall student safety among others. This analysis is best performed by a team of facility planners, educators, school leadership and school design architects. Once this information is gathered and vetted, the data can be used to generate program guidelines for each of the district's campuses.

Once site analysis and district programming are complete, physical design work can begin with studies that provide options for modifications to existing facilities, removal, and replacement with new construction all with district goals in mind. Although nuanced, a very useful tool at this stage is the establishment of a simplified matrix to direct the physical planning work; Remove, Refresh, Renovate or Replace to guide major design moves. Through an iterative process, the best plan option or options may be selected for refinement, followed by professional cost estimating. Cost estimating will allow the team to refine and prioritize project goals. The preferred design options, related costs and planning considerations should be vetted with school sites, the Board and community at large during this process.



## Purpose of Master Planning

The purpose of a master planning process is to provide a district with a long-range vision for improvements making each campus improvement decision in a strategic, thoughtful, and cost-efficient way. A well-formed plan will set up the district to be proactive and manage their financial resources in a responsible and transparent way. It will facilitate community engagement and provide accountability throughout the process. It will also serve as a check that improvements are in line with the district's mission, such as successful student outcomes, support of educational goals, parity, campus equity, safety and environmental stewardship among others.

Transparent communication is essential to the overall planning and development process. Lines of communication, individual roles and terms of engagement are best established at the on-set of the work and followed through during each stage of the process. Input from leadership, staff and students is critical for a collaborative approach in setting and reaching goals. Community engagement and neighborhood buy-in is essential for smoothing the path to a successful implementation plan. Master planning often provides a roadmap with objectives and deliverables along the way, accompanied by timelines with key milestones. Having a thorough communication plan in place with clear messaging from the begin to end will help to keep all parties informed including the celebration of each achievement and completed construction project. Master planning at its best is a multidisciplinary highly collaborative process.



Vision for Junction Avenue



## CASE STUDY:

# Livermore Valley Joint Unified School District

## Overview

In spring 2020, HKIT was invited by the Livermore Valley Joint USD (LVJUSD), to join them in a **Visioning Process** which aspired to understand the district's needs, create a plan to address the needs and begin the thoughtful design transformation of the district. Building upon the solid work from the previous Bond Implementation Plan, April 2017, this new work led by Ms. Kim McNeely, Bond Program Director was envisioned as a design driven exercise, one that would result ultimately in school designs that would respond to needs by inspiring and exciting school leadership, staff and students as well as members of the community of Livermore. The goal was to conceptualize what could be; to strengthen partnerships with local agencies to make improvements within the fabric of city to benefit all. The endgame was to provide an imagined destination, with a roadmap and the route to get there developed through future implementation planning.

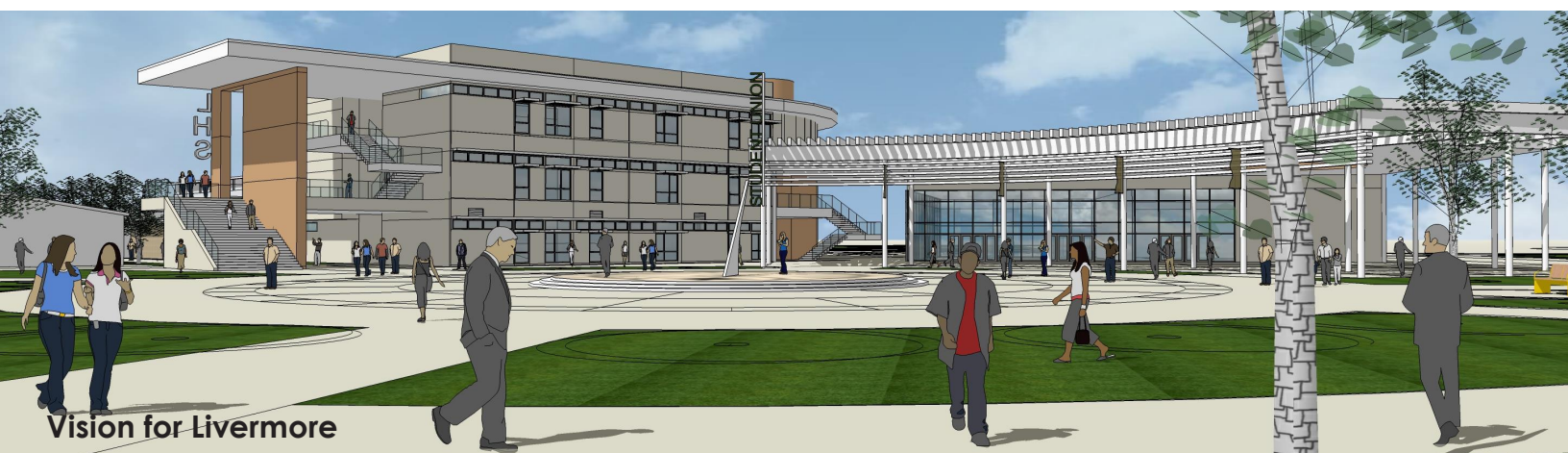
LVJUSD, located in Northern California, serves over 13,400 students in grades T-K through 12. Currently, the campuses consist of ten (10) elementary schools, two (2) K-8 schools, three (3) middle schools, three (3) specialty campuses, and two (2) comprehensive high schools. The campuses are spread out geographically throughout the City of Livermore, located in both older established residential neighborhoods and newer developments. The school buildings range in age from the 1920's though present-day new construction.



Vision for Granada

Over the following year, HKIT Architects, joined by HED Architects and Cumming Cost Estimators, worked in close collaboration with district leadership, facilities staff, school site leadership and teachers throughout the process to create the **Facilities Master Plan (FMP) 2021**, approved by their Board in late spring 2021. Major steps included goal setting and defining a shared set of values, the evaluation of educational program expectations and program fit, and the review of previous planning studies, facility assessments and completed bond projects. The team performed on-site overviews of physical conditions at each campus with focused attention on the question of useful life/reuse vs replacement, program, zoning, the availability and access to usable outdoor areas, un-built campus areas and energy resources. Other considerations included current campus populations, demographic trends, equity across the district and safety. Also, as there are many valued outside service providers located at various LVJUSD campuses, the location of their facilities, access to and from their program areas and safety for students and user groups were taken into consideration.

Existing conditions were recorded, and a matrix of improvement and program needs were developed. Each campus element was assigned a category of proposed improvement: Minor Modernization, Major Modernization or New Construction. Based on these recommendations, site concepts and building plans were created to reflect the vision for each campus with site plans. Several campuses were identified for more significant improvements. These campuses were identified as "Transformational", and 3-D renderings were developed in addition to site plans. Based on campus data coupled with square footage and site acreage, total project costs were estimated. While the resulting work is named a Facilities Master Plan, it is in fact a physical **Expression of District Values** and a **Vision for each of the District's 20 campuses**, with thematic design concepts that can be used to propel the district forward as they renew and transform their schools over the next 75 years.



## The Approach – Starting with Vision

Master Planning efforts most often spring from an assessment of the existing physical plant and found deficiencies. Those defects may include aging infrastructure and failing building systems, building envelopes that have aged poorly, outdated classroom with worn finishes and outmoded equipment, campus-wide technology and security systems that are insufficient or non-existent. Other features such as parking lots, circulation pathways, outdoor assembly areas and playgrounds, track and fields may be worn or insufficient to serve current student populations. These components are all critical to a well-functioning school campus and should to be in good repair. However, if the physical plant is the starting point and **only** focal point for master planning, the result may simply be a reiteration of what is existing, rather than a vision. The LVJUSD believed it was important to create a vision as the basis for its facility planning efforts.



The district's goals were aspirational, with the goal of transformational design, warranting a robust visioning process. The springboard for planning was the district's Core Values. Organized into three areas: Teaching & Learning, Budget Development and Planning & Facilities Planning, key values within these categories became the guiding principles for "seeing" each campus and envisioning renewal. Stated values included;

Enhancing Learning & Teaching Opportunities, Innovative Teaching & Learning, Inclusive, Supports the Whole Student, Engaging, Equitable, Maintainable, Community, Flexible, Tools for 21st Century Instruction, Source of Pride.

In early planning sessions, the team agreed that the development of our **Vision = Expression of Values**. Therefore, each of these stated values became a lens through which we imaged campus modifications, renewal, and infill. All resulting design decisions were driven by these values.

Our combined planning team comprised of seasoned district staff, forward-thinking educational leaders and highly experienced architectural teams also melded decades of school design experience, evolved knowledge, refined thinking and "let's do this right attitude" to the project. Together, a collection of **Shared Design Values** was crafted, whose themes provided the design language for the master planning and visioning process.

Those themes included:

Inspiring, Reimagined, Adaptable, Learner Centered, Intentional, Healthy, Thoughtful, Value Driven, Connecting, Future Forward, Activated Outdoor Space, Transformation.

The resulting planning process, vetting and designs were the realization of the **District's Core Values** and the **Planning Team's Shared Design Values**. A process that allowed for collaborative development of values, language and goals allows for highly effective advocacy as plans were shared.



## Goals and Process

The purpose of the visioning process was to set a long-range destination for district facility improvements, imagining thoughtful and transformative design to be implemented over time. Springing from Core District Values and Shared Design Values, the resulting plans were aspirational and forward thinking. Each campus was reimagined as learner-centered with new and revitalized classroom, support spaces and easily accessed outdoor environments to inspire students and staff, excite the community and demonstrate district values.

The design visioning process included the identification of values, goal setting, and assessment of program fit on each campus. Missing or undersized educational, social, and physical educational components were identified. Each campus and building were assessed, relying on both previous assessments and physical walk-throughs to evaluate overall age, condition, program fit, and adaptability to support current and projected educational program needs. Some buildings were determined to have the characteristics needed to serve district needs for decades to come and would remain. Others were assessed to have served their useful life and slated for removal. An equally important evaluation, not always considered, was an assessment of current building locations, their relational fit within the overall campus, their positive or negative impact on educational opportunities based on location, including educational zoning and the residual unbuilt outdoors created by their placement. At most campuses, the team found deficiencies in educational program zoning, access to outdoor spaces and/or accessibility to useful outdoor spaces.



Vision for Granada



The next step of testing site and building plan options and reaching consensus on design was unique to each campus and each school site was considered on its own merits, rather than taking a cookie cutter approach to design. To that end, the school site principals and leadership were engaged throughout the process along with district Leadership to provide input and critical thinking at each juncture. Master plans were tested to confirm a logical, cost effective approach to implementation. As plans materialized, high level cost estimates were performed to provide long-term funding information for future planning, prioritization, and implementation. However, project costs were not the driver in the visioning process, rather best value. That included measuring if a building had served its useful life, if the costs to fully renovate were on par with new construction, and most importantly, if it would serve the district and students by providing an **“Inspiring, Adaptable, Learner Centered, Healthy space.”**



ARROYO SECO

Vision for Transformation

LEGEND	EXIST / MINOR MOD.	MAJOR MOD.	NEW CONS.
CLASSROOMS			
MPR			
ADMIN			
LIBRARY			
PARKING			
HARDSCAPE / PLAYGROUND			
LANDSCAPE			
NON-DISTRICT / STORAGE			
REMOVAL OF BUILDING			

## Design

The design team developed graphic materials for each of the 20 school site campuses including Site Context maps, Existing Condition Plans and a Vision for Transformation, the proposed future site plan with existing, modernized, and new construction depicted. For the 4 transformational sites, renderings were developed to illustrate plans for the new campus vision. Several examples of how the team realized the **District's Core Values** and **Shared Design Values** are shared below. These graphics allowed for clear effective communication of the vision as well as an opportunity to confirm stakeholders were on the same page

### Design – Equity

One of the guiding goals in the planning process was to provide equity across the district, affording consistent program opportunities for each student on every campus in concert with district values. For the design team, this meant evaluating what was in place, assessing if those facilities were not only currently adequate, but if they were ideally situated and potentially adaptable to align with educational objectives in the future. Our assessments demonstrated that not all facilities were serving students equitably, some specialty learning spaces were missing, poorly located or inadequate at some campuses. Many classrooms were lacking access to usable outdoor environments, oftentimes with portables in the way. Dining, assembly areas and administrative spaces were limited and undersized to serve student capacity at elementary, middle and high schools.

At elementary schools, campuses were reimagined with portables being reduced or removed, maker spaces and science labs proximate to one another were added, and new classroom infill wings were designed with adjacent, easily activated outdoor learning areas. Thoughtful modifications were made to kindergarten building complexes, with new classrooms located to define play space and enhance safety. Where missing, new covered lunch shelters were provided with direct access from assembly rooms expanding lunchtime capacity and ease of service. Administration spaces were modified or expanded to create similar facilities district-wide and new front doors positioned to create welcoming entries if previously hidden.

## Design – Activated Outdoor Space

A design goal incorporated throughout the process was the activation of useful outdoors spaces. This goal resulted in the removal of poorly sited buildings, both portable structures and older permanent buildings and the positioning of new buildings to create flexible, directly assessable outdoor learning areas. Proposed new buildings, including two and three story structures had multiple points of entry to allow for smooth circulation and create short distances to a variety of outdoor learning areas as well as using valuable site space more effectively. Large outdoor student courtyards were planned for the larger campuses and connected dining canopies were created at select elementary, middle schools the two comprehensive high school campuses to support dining, academics, and student life for these large student populations.

## Design – Learning Centered and Healthy Environments

A shared value was that classrooms be healthy learning centered environments. As the team imagined major modernization and new construction projects, these became the design drivers. Classroom design features included the inclusion of excellent natural and artificial light, adequate fresh air, and circulation, state-of-the-art technology with flexible equipment and furnishings. Spatial relationships to related classrooms, labs and usable outdoor spaces were key to the development of the designs. Where new construction was envisioned, adaptable spaces, controlled natural light, building orientation and potential heat gain were major design considerations. The classroom buildings were envisioned with open corridors, stairways and circulation allowing for the provisions of multiple points of exposure for natural light and ventilation in the classrooms. These unconditioned spaces would increase the connection to the outdoors, the health of classrooms and decrease the required energy consumption.





## Design – Thoughtful and Value Driven

The team understood that the work needed to be thoughtful and driven by long-range value. This was a departure from some master planning experiences where the focus is on maintaining and modernizing all buildings within a given budget. For this visioning project, the destination timeline was set at 75 years with an appropriate educational plan. Therefore, existing buildings were evaluated in terms of their age, useful life, and cost to provide major modernization and/or remodeling to support educational programs. Many of the existing buildings, notably portables and selective older one-story finger wing classroom buildings were not considered to be of significant value to off-set other costs and slated for removal. As mentioned earlier, factors such as spatial relationships, zoning and the creation of outdoor areas were also factors in the decision making process.

## Design – Transformational Projects

Like many districts, LVJUSD has a broad range of campuses typologies, age of construction, features, and amenities with varying degrees of appropriate educational response. The district has done an excellent job maintaining facilities, so the need for major improvements and transformation runs much deeper than current functionality and appearances. As evaluation and assessments were underway, 4 campuses were deemed in need of major transformational design, one elementary school, one K-8 school and the two comprehensive high schools. The four projects and corresponding key Design Values are highlighted below.



Vision for Granada

## Rancho Las Positas Elementary – Inspiring & Intentional Design



The Rancho school campus tucked deep into the property, was not visible from the street. Years of added structures mask the front of the campus. The original permanent structure was undersized, and the rows of portables located along edge of the site and separate modular classroom buildings created a disjointed campus lacking cohesive outdoor spaces. The decision was made to rebuild most of the school, intentionally locating highly visible new contemporary administrative, MPR, library and maker structures along with parking and drop-off at the front of the school. A new “learner centered” two-story classroom building defined the edge of the maker space courtyard and created more usable and contiguous yard area to the south. An attached dining canopy at the south face of the MPR building extended usable indoor/outdoor space and opened to the play yard. Long-range plans include the construction of a second two-story building, eventually replacing existing modular classrooms. This vision allowed for more educationally appropriate zoning which has been blurred by years of additions.



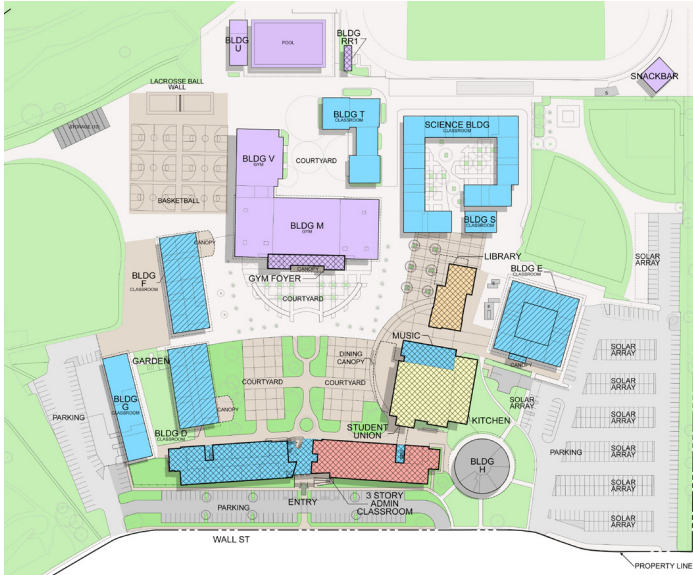
## Junction Avenue TK-8 – Reimagined, Connecting, Future Forward



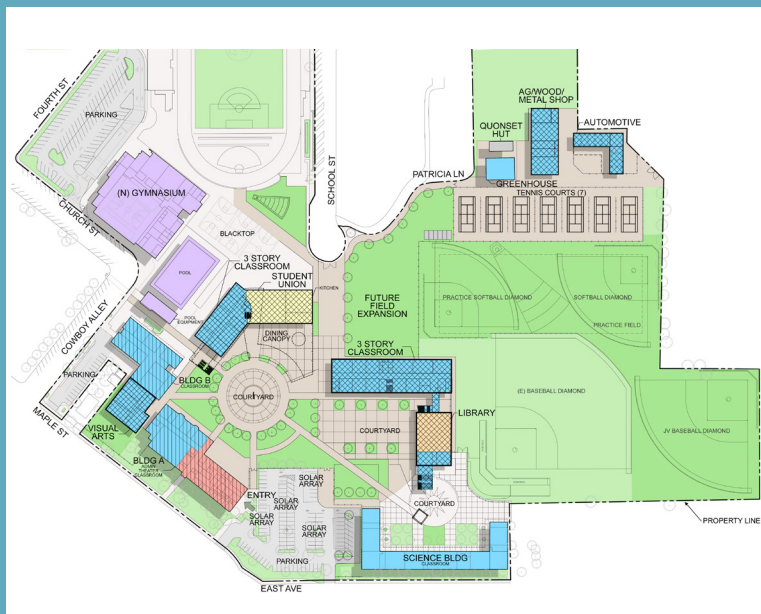
The TK-8 school occupies one portion of a very large site, with many portables having been added over time to accommodate the student population and changes in program over time from elementary to middle school to its current configuration of a TK-8 school. The portables, which house upper grades are located behind the original finger wing classroom buildings, essentially using up play yard, and blocking access to the large fields beyond. The decision was made to reimagine the campus connections and layout while retaining existing permanent buildings. The concept included removing portables and designing a new classroom building at the end of the classroom wings to house upper grade students establishing educational zones that support the current grade configuration. Other new construction projects included the relocation of the kitchen from the front of the campus to the side of the MPR and the addition of a new welcoming administrative space at the front of the campus. These moves were driven by the desire to reconnect the 1-5 students to their own playground and field space beyond, providing stronger physical and symbolic connections to the active community groups at the front of the campus and to build future forward classrooms for the 6-8 students. By rezoning this campus and developing a new portion of the site, the classroom buildings would have stronger connections to outdoor areas and the upper grade students would have a state-of-the art classroom building and stronger connection to existing specialty classroom space. Middle school students will now have an area to make their own.



## Granada High School and Livermore High School - ALL Design Values



All the Design Values set out in the visioning process had a role in the transformational design of the two high school campuses; Inspiring, Reimagined, Adaptable, Learner Centered, Intentional, Healthy, Thoughtful, Value Driven, Connecting, Future Forward, Activated Outdoor Space, Transformation. At both campuses, the overall layout and zoning were reimagined, by intentionally locating new buildings in positions that defined student quads, circulation spines and outdoor learning areas establishing new thematic identities for both schools. Undersized administrative and dining facilities were replaced with new, student focused spaces creating stronger connections within the campuses with a focus on making all spaces flexible allowing multiple uses including gathering, eating, and studying.



Two and three story, learning centered, adaptable, and healthy classroom buildings were conceived for both campuses, replacing dated, one story, acreage consuming finger-wings. The contemporary, flexible designs with an emphasis on student learning and resource efficiency will inspire students and the transformational projects will act as an expression of the value the community places in education. By adopting the concept of building vertically, land area will become available for a wide variety of student learning and specialty educational programs, allowing the district to re-emphasize outdoor spaces as viable instructional spaces with improved zoning of program areas.

## Conclusion

The work developed in this visioning process sets a course for the district's future. For each of the 20 campuses, the context, data, assessments, and master plans contained in the report offers the district the vision for transforming facilities over time that reflect the **District's Core Values** and the Planning Team's **Shared Design Values**. Most importantly, the master plan will create instructional opportunities for students for many years to come.

April 2022

## CONTACTS

Kim McNeely  
Bond Program Administrator  
Livermore Valley Joint Unified School District  
925.606.3200  
kmcneely@lvjUSD.org

Jeff Evans, AIA, LEED AP BD+C  
Principal  
HKIT Architects  
510.625.9800  
jevans@hkit.com