

*James D. MacConnell
Award Submittal | 2014*

E R N E S T
McBRIDE
HIGH SCHOOL



Ernest McBride, Sr. High School is a result of the **community's aspirations** to provide every student with the opportunity for a high performing & an **interactive learning** experience in a place where you can see, touch and **experience** the connections between what we learn and what our future holds.

T h i s s t o r y i s a b o u t
c o n n e c t i o n s



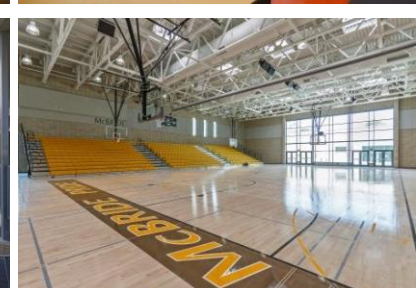
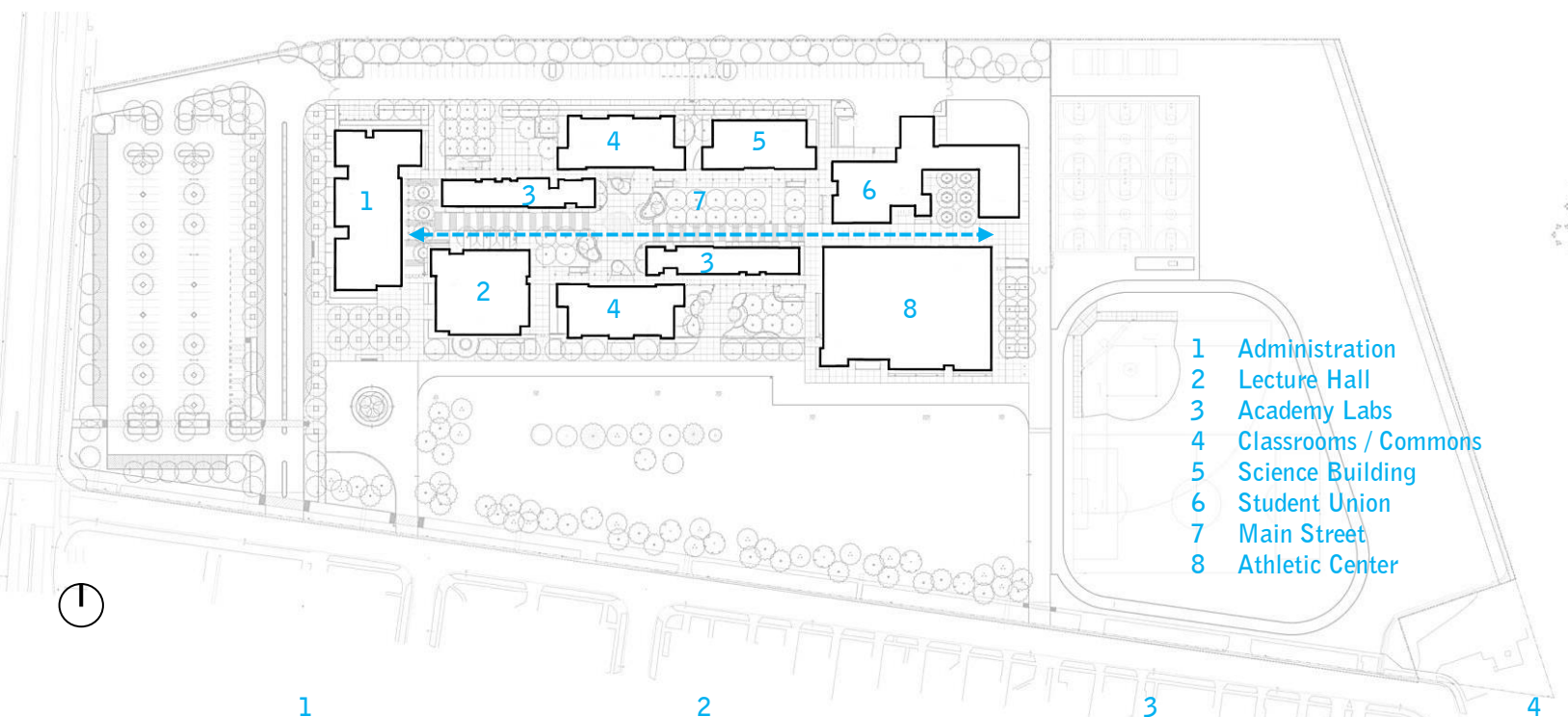
EXECUTIVE SUMMARY

McBride is the district's **first new thematic high school** and is in contrast to existing comprehensive 4000 student campuses. A collaborative approach to the design involved local business partners, research of emerging technologies, and development of new curriculum and education standards. Through internships and projects with local businesses, the school fosters student engagement by knowing students well and building a strong sense of community. McBride High coursework is focused on making graduates college and career-ready in three fields:

- Law Enforcement / Public Services
- Health / Medical Academy
- Engineering Academy



SCOPE OF WORK



project FACTS

Grade Levels
9-12

Funding Source
Local Bond / Measure K

Planned Enrollment
1080 Students

School Opening
August 2013

Campus Size
24 acre site
150,000 sf

Sustainability
CHPS Designed

Project Budget
\$75M

CONTEXT



Long Beach Unified School District is the third largest school district in California with nearly 81,000 students and 84 public schools. It has many of the same challenges as other [urban school districts](#) around the US. However, it has high attendance rates, low absentee rates and had been recognized by the Global Education Study as one of the world's five highest performing school districts. Their biggest challenge...overcrowded high schools.



**COMMUNITY
ENGAGEMENT
PROCESS**

The process for developing a new high school was the result of an early integrated engagement; this can be described in three phases – the district wide facility master plan, the curriculum planning development and the integrated campus design.

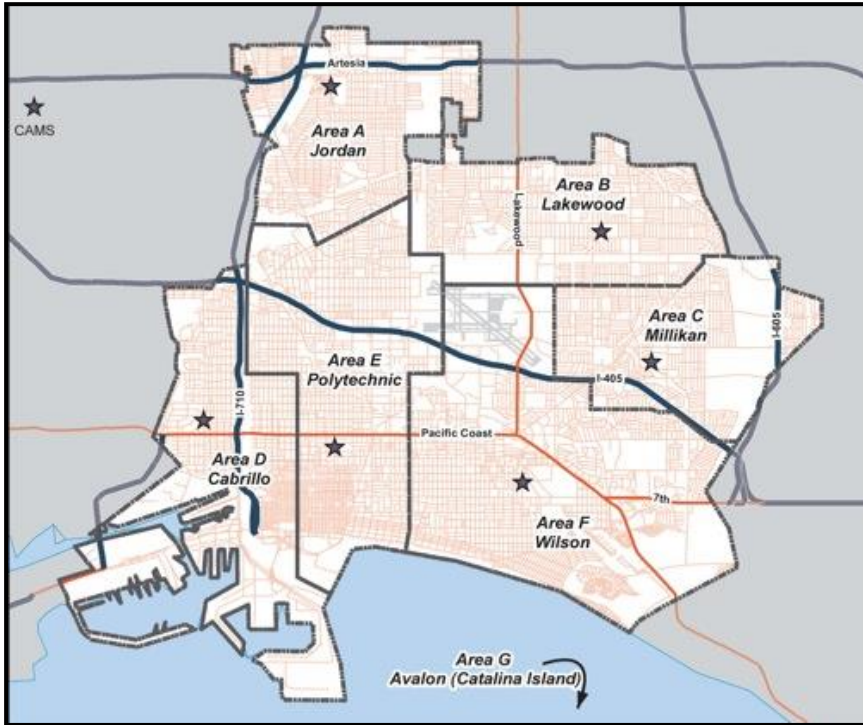
**T h e c o m m u n i t y w a s
e n g a g e d i n a l l l e v e l s
o f t h e p r o c e s s - f r o m
i n c e p t i o n t o o c c u p a n c y .**





COMMUNITY ENGAGEMENT PROCESS

The Long Beach Unified School District was faced with issues of overcrowded high schools and deteriorating facilities that did not meet the needs of the innovative programs that were starting to emerge in Long Beach schools. The district embarked on a year-long District-Wide Facility Master Plan that examined the educational framework, the condition of the existing schools, the cost of remodel and/or replacement and the enrollment projections in the district.

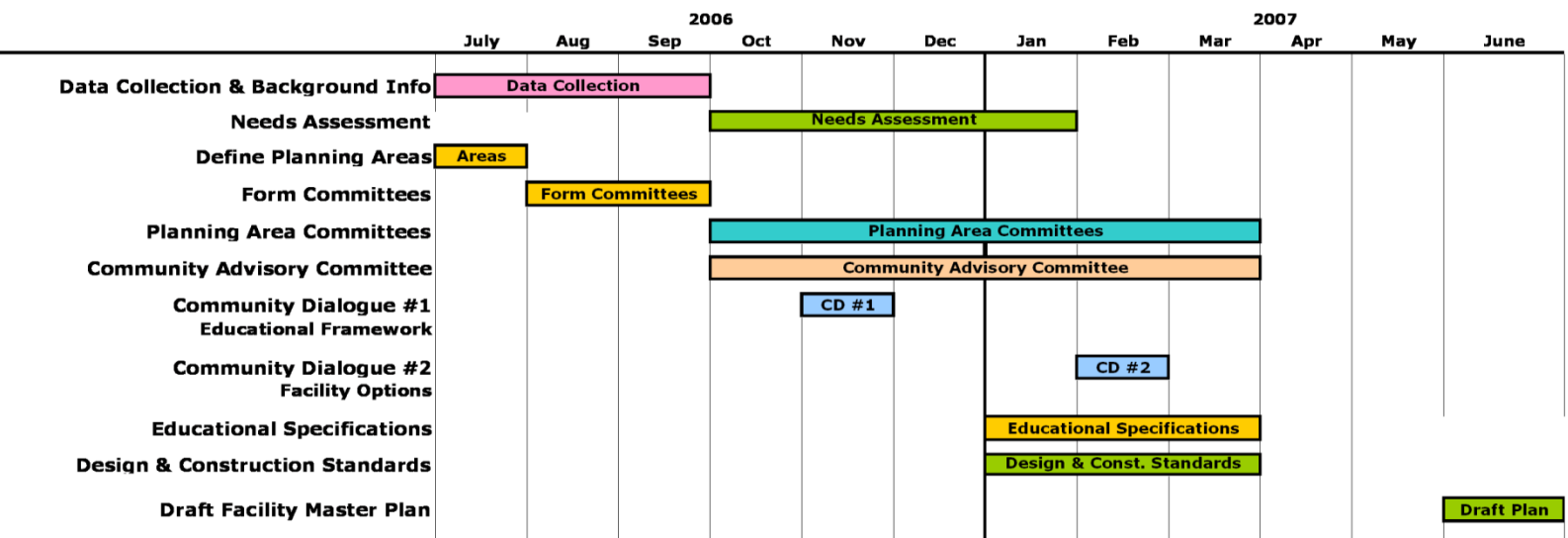


The organizational structure of the FMP consisted of an overarching District Steering Committee with 7 Planning Area Committees, engaging of over 30 participants in each. Stakeholders included Parents, Teachers, District Staff, and Community and College Partners.

- A – Jordan
- B – Lakewood
- C – Millikan
- D – Cabrillo
- E – Poly
- F – Wilson
- G - Avalon

7 PLANNING AREAS

Long Beach Unified School District Facility Master Planning Timeline



Through additional Community Advisory Committees and Community Outreach Surveys the process included over **4,000** participants in a transparent and valuable process.



DISTRICT-WIDE GUIDING PRINCIPLES

Through the LBUSD Facility Master Planning Process, key principles emerged or were developed; these shaped the Facility Master Plan and guided development of its recommendations. The planning principles reflect the Facility Master Plan theme of **Building on Success; Schools for the Next Generation of Learning** and included:

- Creating learning environments to meet schools for the next generation: This meant understanding the learner, different pedagogies and really transforming the learning environment
- Renovation and replacing aging infrastructure: two-thirds of the schools in LBUSD are over 50 years old, the FMP opened opportunities for re-use or replacement of aging facilities.
- Declining Enrollment & Elimination of Portables on Campus
- Changing the size and types of high schools + opening choice thematic high schools, a paradigm shift for LBUSD
- Opportunities for Joint Use + Maintaining a safe and secure school environment

The collaboration included a planning team, master architect, engineering disciplines, community advisory committee, 7 district planning committees and input from thousands of stakeholders. The innovative result is a **new educational delivery system.**



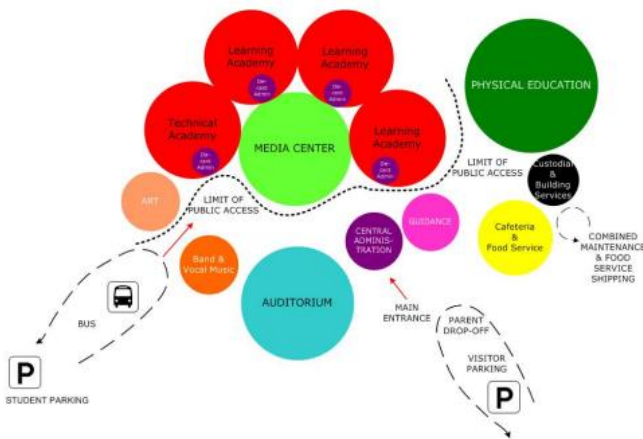


EDUCATIONAL GUIDELINES

The High School Educational Specification is a critical component of the Long Beach Unified School District Facility Master Plan. Developed as a component of that overall process, the Educational Specification detailed the essential components of each high school facility to be built in Long Beach as part of the Master Plan. It is a City-wide statement, and was applied to McBride High School

The District-Wide specifications stated are scalable for different sized High Schools; 600; 1,200; 1,800; 2,400; 3,000; and 3,600 students.

The Educational Specification outlines essential educational concepts and detailed facility needs. It includes considerations of community values, current and future instructional strategies, impact of technology on education, and cost constraints.



The Educational Specification is organized into distinct sections:

- Executive Summary
- Creating 21st Century Learning Environments
- Visioning
- 21st Century Best Practices
- Technology
- Safety + Security
- Site Issues
- Aesthetics
- Community Use
- School within a School / Clustering Program Areas

The focus of is centered on incorporation of thematic instruction, academic achievement and providing a variety of activities to explore greater possibilities for independent thinking.

The concept of McBride High School is a direct result of the community engaged Facility Master Plan.



CHALLENGES AHEAD

The LBUSD Master Plan became an aggressive effort to address the district's infrastructure and aging facility needs. Implementing this plan was critical to making a real change to the physical learning environments to support student achievement and the school communities. Serious challenges still remained:

- Balance the Short-Term and Long-Term Needs
- Location of Sites for New Schools
- Finding Interim Housing for Students
- Funding the Facility Master Plan
- Capacity to Implement Projects
- Operational Staffing Impact
- Re-Work of the School Boundary and Consolidation Planning

While these issues faced the District as a whole, the future McBride High School also had its more site-specific challenges. As the first of 7 new Thematic High Schools for the district, **McBride HS overcame challenges** ranging from site-selection and phasing to curriculum and pathway development. The success is largely due to guidance from the Thematic HS #1 Curriculum Planning + Development Committee.





CURRICULUM PLANNING + DEVELOPMENT ORGANIZATION

In establishing a new thematic high school, the planning committee began a broad-based process to define the school's Career Technical Educational curriculum. The district partnered with local colleges, business, and agencies to determine Career Academies that would offer students a sequence of courses in order to promote specialized training in specific career pathways. Once site selection was established, the committee realized that converting a five-decade old middle school in the heart of a vibrant neighborhood to a new high school would be no simple task; the LBUUSD reached out to neighborhood residents, teachers, school staff and members of the local community to foster a collaborative approach to the new school's design and program.



COMMITTEE MEMBERS / STAKEHOLDERS

LBUUSD STAFF

Curriculum, Instruction and Professional Development
Economic Development Department
Office of Grants and Resource Development
ROP Department Leaders
Board Member

INDUSTRY PARTNERS

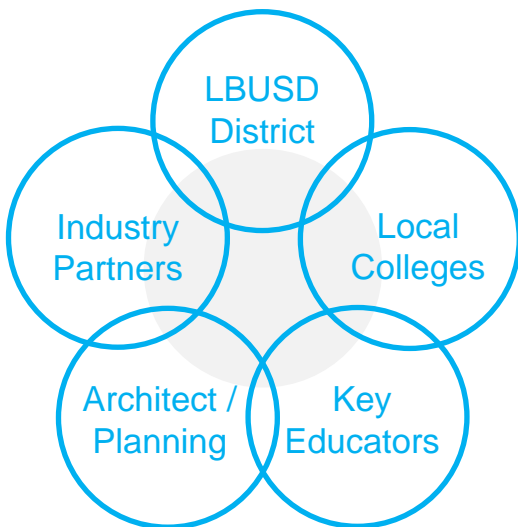
Tech International
Boeing
PBS International
Port of Los Angeles, Long Beach
LB Molina Medical Center
Capitol Criminal Scene Investigators

LOCAL COLLEGES

California State University, Long Beach
Long Beach Community College /

EDUCATORS

High School Principles
High School Teachers





CURRICULUM PLANNING + DEVELOPMENT

The tasks of this group included the following:

- Understand students of the next generation
- Identify continuous community relationships
- Develop or confirm the Governance and Organizational Structure
- Define the program impact on students and the community
- Create a mission and goals statement
- Agree on Educational Strategies
- Develop the Educational Program
- Develop a Phase-In or Transition Plan
- Develop a Financial Plan
- Develop an implementation Plan



THE PROCESS

OVERVIEW + PLANNING COMMITTEE ASPIRATIONS

From the beginning of the process, the committee maintained transparent communication and collaboration. The initial meetings included establishing key-milestones for decision making and identifying the potential programs that could occur at the new high school. The focus started with and revolved around the need for student engagement in real-world learning and creating a path for student success.

CASE STUDY / SITE TOURS + INDUSTRY IMMERSION

The Curriculum and Planning Committee established an innovative process to learn from the success of other schools across the nation. This led to the creation of 5 sub-committees that would embark on a research-based, student-led series of tours to Career Technical and Small Learning Community Schools across the United States.

Additionally, several committee members – including the Design Team - participated in full Industry Immersion Days to gain insight into the career focused and technology needs of the pathways.

Brought back to the larger committee, these tours provided the inspiration that led to the definition of the career pathways for a new thematic high school. The resulting school size and grade level configuration were also established based on lessons-learned from these tours.



THE PROCESS

NEXT GENERATION OF LEARNERS

Research-based discussions, facilitated by both Educators and Planners allowed the Committee to establish educational goals and characteristics of the environment that would provide agile learning spaces for all types of learners. The brainstorming sessions became the catalyst for the design at McBride HS where ‘learning-studios’ are clustered around a ‘shared commons’ that would have access to programmed outdoor space and social space.

EDUCATIONAL PROGRAM DEVELOPMENT

Conversations around the program development also occurred at the community level with the Curriculum Planning Committee. Facilitated by the Architect, the committee participated in workshops to develop adjacency diagrams, a list of specialized labs, and shared spaces that would be multi-functional for the student’s use based on need or activity.

IMPLEMENTATION, PHASING AND BUDGET ANALYSIS

Developing a new Thematic High School on an existing Middle School Site required thorough analysis by the Curriculum Planning Committee. The early variations ranged from major to minimal re-use of existing facilities, with budget estimates provided for review.

However, with the engagement of the neighboring community – the priority became an intentional effort to re-establish a connection with the adjacent 2 ½ mile long Heartwell Park, creating a “**School within a Park,**” and this participation is what defines McBride High School today.



Resulting Program Goals:

1. Inspire Collegiate and Career Aspirations
2. Make Learning Relevant
3. Empower Collaborative + Individual Modes of Learning
4. Model Sustainability
5. Authentic + Integrated Design Process



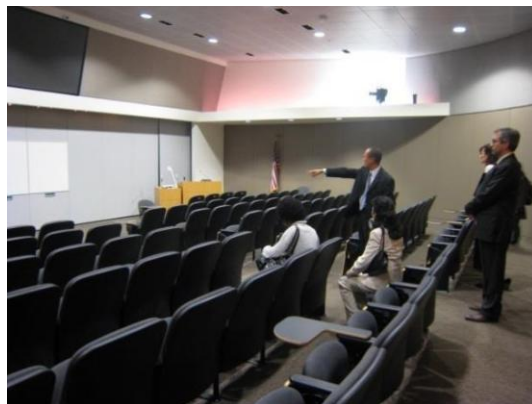
CASE STUDY TOURS + INDUSTRY IMMERSION

SCHOOL SITE TOURS

- Wunsche High School | Spring ,TX
- East Valley Institute of Technology (EVIT) | Mesa, AZ
- High Tech High | San Diego, CA
- Saddleback Community College Health Sciences Center | Mission Viejo, CA

INDUSTRY IMMERSION DAYS

- Boeing International Design and Engineering Laboratory
- Trade + Business Center at the Port of Long Beach
- Long Beach Community Medical Center
- Long Beach Regional Police Training Center + Crime Laboratory

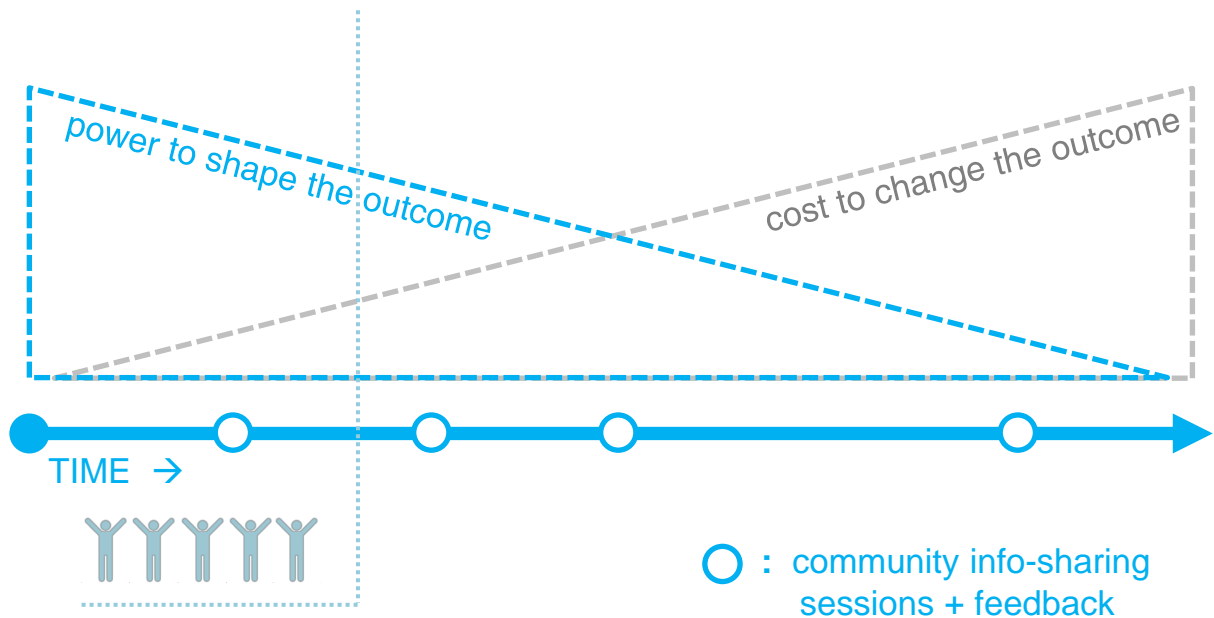


SHIFT IN EDUCATIONAL DELIVERY

Active participation by the planning community strengthened the engagement and created awareness of the opportunities for how the learning environment can contribute and impact the learning experience and, in effect – the learning outcome for all students.



INTEGRATED CAMPUS DESIGN




Over time, the power to shape the outcome of a project diminishes. At the same time, the cost of influencing the outcome increases. McBride High School was conceived, designed and constructed using an integrated process.

Continuing the momentum of the planning, the campus design process for McBride High School was an integrated effort that included early engagement with the Community, the District, the Planners / Architect, the Engineers and the Builders.

A holistic understanding of all the competing criteria developed by [integrating the design process](#). These began to drive the building’s form, material selection, and site solutions – creating an authentic and “aspirational” spaces for learning. This was a collaborative work ethic that worked to seek out the problems at the beginning of the process.

PROJECT VALUE + ASSETS

- Meets the school district’s Academic and Career Success for all Students Initiative with the focus of the curriculum as career technical education in conjunction with college readiness
- Engages and Connects with Community Business Partners
- Incorporates, through collaboration with the City of Long Beach, a signal modification as well as improved public and student safety
- Will prepare students for high-demand, high performing careers
- Creates environments with a diverse community base that come together to become **“thinkers + doers.”**



EDUCATIONAL +
PHYSICAL
ENVIRONMENT

Ernest McBride, Sr. High School

Mission: To support all students' personal and intellectual success through the development of interdisciplinary and action-oriented lessons, the creation of a safe learning environment, and the fostering of collaborative pathway communities.

M c B r i d e H S M a n t r a
H o m e o f T h i n k e r s
a n d D o e r s



EDUCATIONAL ENVIRONMENT McBride has three pathways, McBride Engineering, McBride Health Medical and McBride Public Services-Forensics. All three pathways engage students around their interests, find relevant connections to real world activities, and gauge the student's learning through collaborative, hands-on projects. All three pathways prepare students for the demands of college and the workforce. With workplace learning experiences in their 12th grade year, the pathways empower and inspire students to make their own path and determine their own future.



“The school looks different than any other school in the District. With Career Labs and other specialized spaces, students will demonstrate what they have learned through projects, team collaboration + connections with industry partners who mentor and coach our students”

-McBride HS engineering teacher

“Addressing subjects at each grade level and centered on a career-themed course, students will see the natural connections between the theme of their pathway and English, History, Science and Math.”

-McBride English Teacher

All three pathways focus on completing the UC and CSU Entrance requirements with a sequence of courses that are aligned to college expectations.

Each Pathway expects to create options for students to earn college credits while in high school.

LINKED-LEARNING ENVIRONMENT

McBride has three pathways that combine rigorous academic subjects with challenging Career Technical Education.

The students are exposed to Interdisciplinary cross-curricular connections and Project Based Learning activities. The four-year coursework of study based on career pathways will give students the awareness and exposure to what their futures could be.

- Engaging environments that encourage agility in the learning space
- Learning happens EVERYWHERE
- The process of learning should be on display / the energy is contagious
- Flexibility is seen throughout with multiple uses for any one space
- Outdoor environments are programmed for academy-focused activities
- Shared learning environments occur in all scales, small – medium – and large

This school is an example of
“if you build it, they will come”

The concept of small learning communities with a thematic focus was a direct result of the district-wide facility master plan. The design for McBride High School aligned these ideas...

building not just a school but a
community of **“thinkers and doers”**



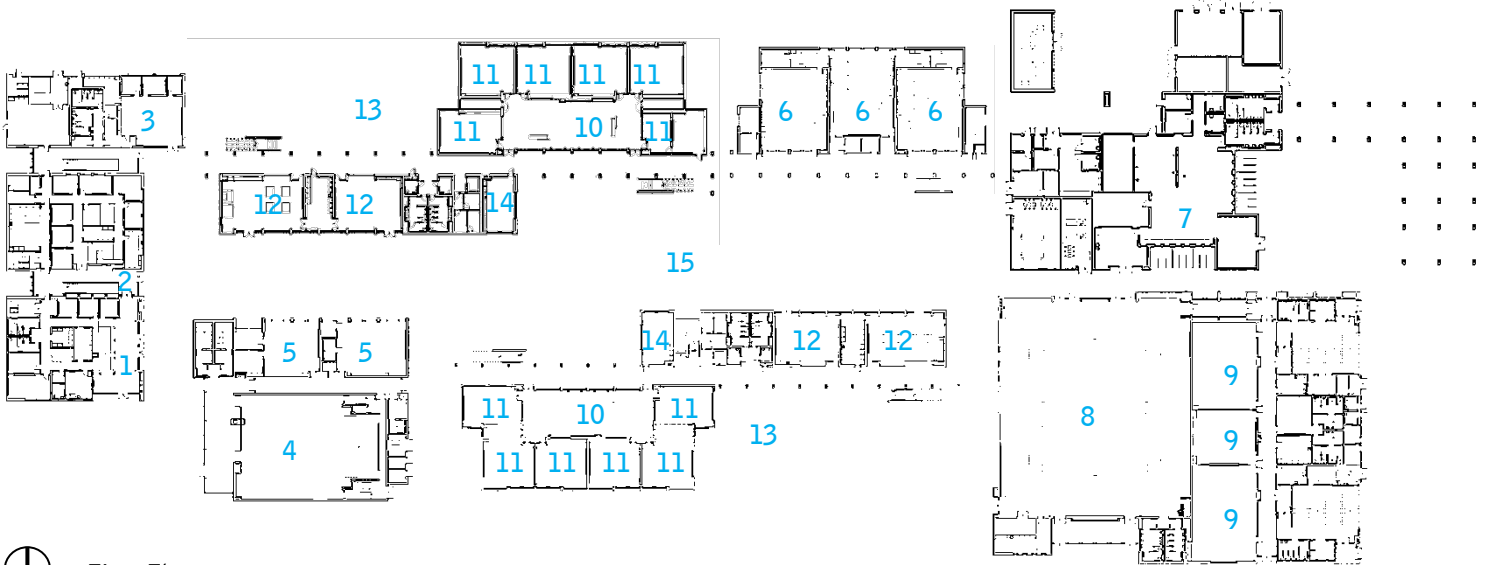
Understanding the social aspects for learning and programming outdoor environments that are scaled to meet the student's different needs, resulted in a sense of student ownership at McBride High School.





The environment at McBride High School encourages student independence and is relevant to their learning styles, preparing college and career-ready students.

EDUCATIONAL ENVIRONMENT



🕒 First Floor

- 1 Administration
- 2 Student Services
- 3 Career and Internship Center
- 4 Shared Lecture Hall
- 5 Art + Design Labs
- 6 Science Labs
- 7 Student Union
- 8 Gymnasium
- 9 Training, Fitness and Wellness Spaces
- 10 Academy Commons
- 11 Academy Classrooms
- 12 Academy Labs
- 13 Academy Courtyard
- 14 Academy Student + Faculty Center
- 15 Main Street

The environment supports a culture of learning by creating personalized spaces for CTE as well as shared environments that allow the students to come together either as a team in the Commons, as an entire academy in the Lecture Hall or as an entire school community in the Gym.

- Academy Clusters include classrooms, labs, commons outdoor labs, and a student / faculty resource center
- The Furniture and Technology needs meet the aspirations of the community and industry
- McBride has scaled spaces for collaboration and social learning
- The labs open to both their outdoor labs and to Main Street to encourage transparency and a culture of sharing knowledge.

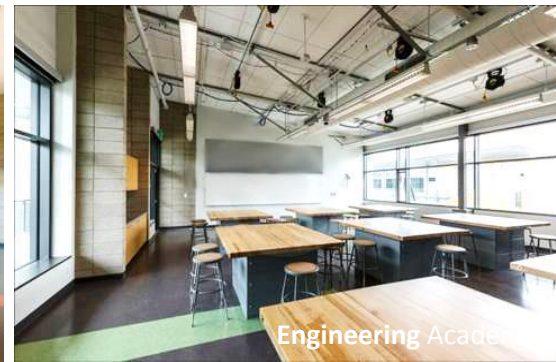


FUNCTIONAL ADAPTABILITY

Through the planning and design phases, one of the challenges was not having a 'user' to gain insight about the activities that would occur in the labs or classrooms. This proved to become an asset for the team, as the solutions were now driven by creating ultimate flexibility and providing opportunities for future adaptability to occur. The Labs are almost universal 'project' or 'messy' labs...it is what goes into these labs, FF&E and the Technology that makes them so specialized. Allowing the Furniture and Equipment to define the Academy provides a "pedagogy-on-demand" environment.

Additional features that provide a functional space that is adaptable to the lesson, activity or user are:

- transparent connections to outdoors, garage door opening
- ceiling suspended utilities in the labs
- acoustical and daylighting controls to allow for specialized activities
- resilient materials
- ceiling mounted Unistrut for project experiments or display



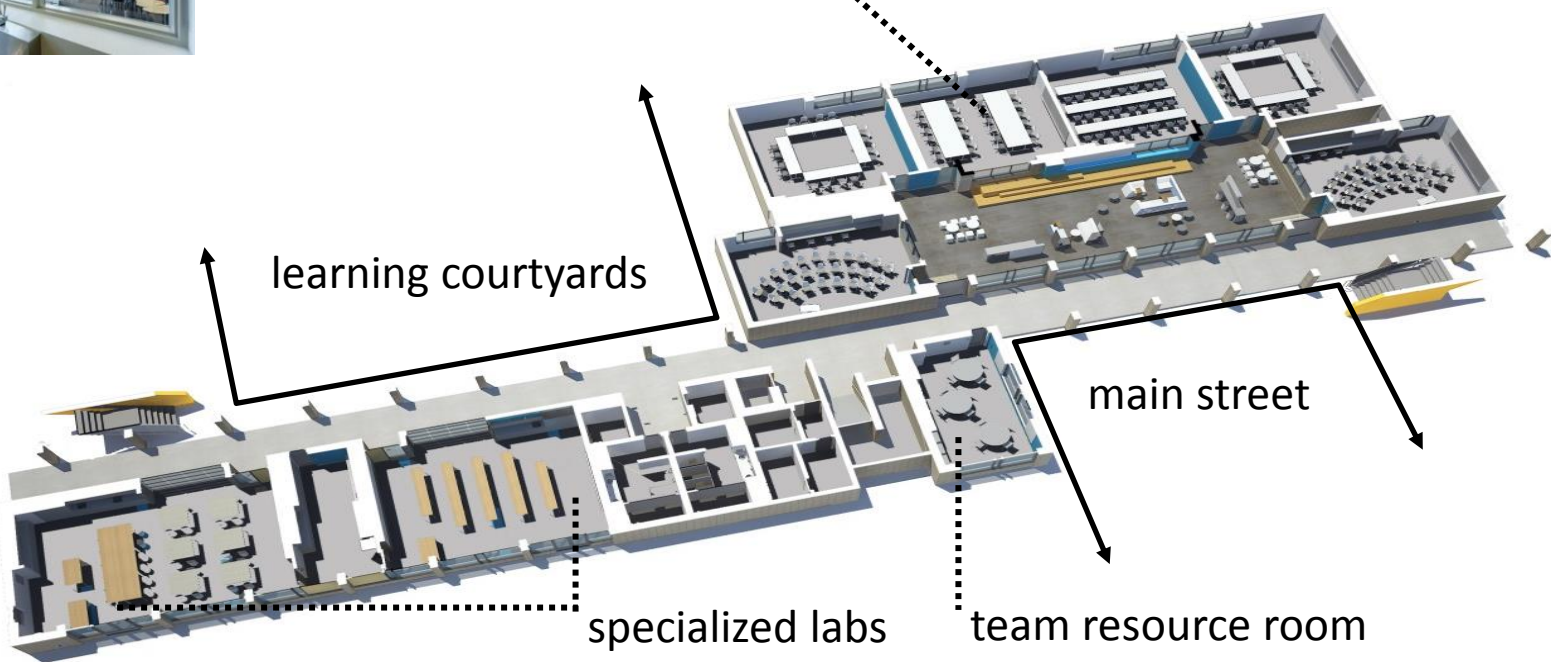
interdisciplinary learning studios

learning courtyards

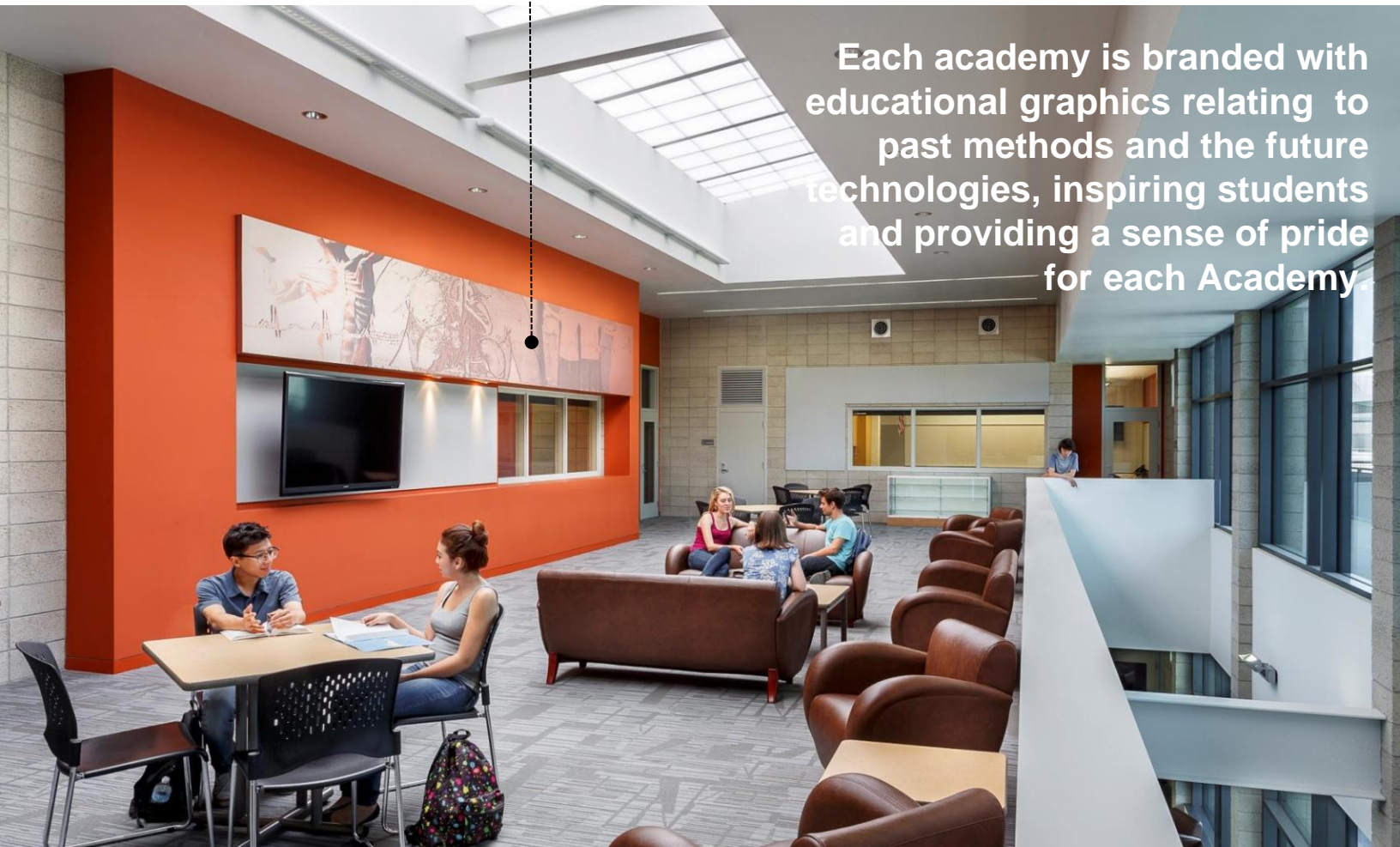
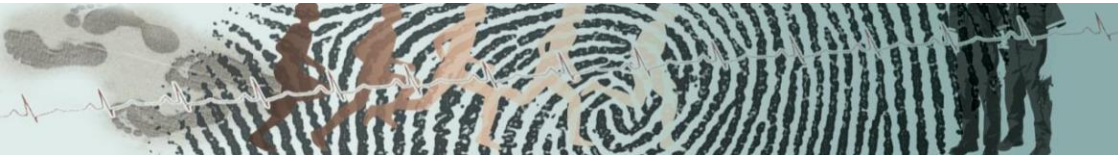
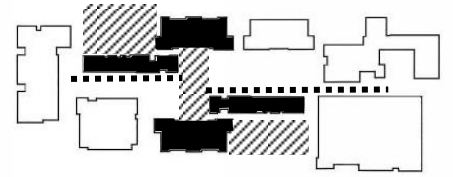
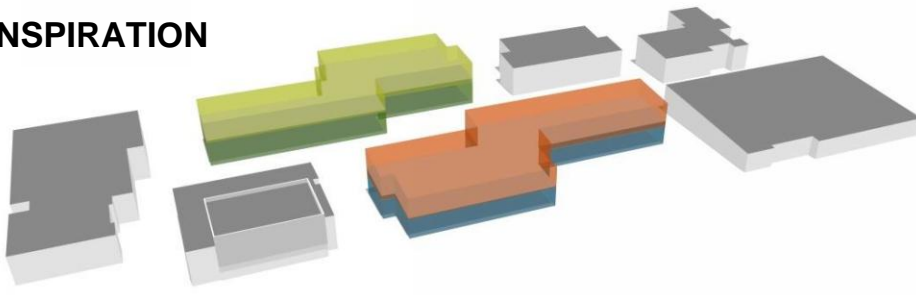
main street

specialized labs

team resource room



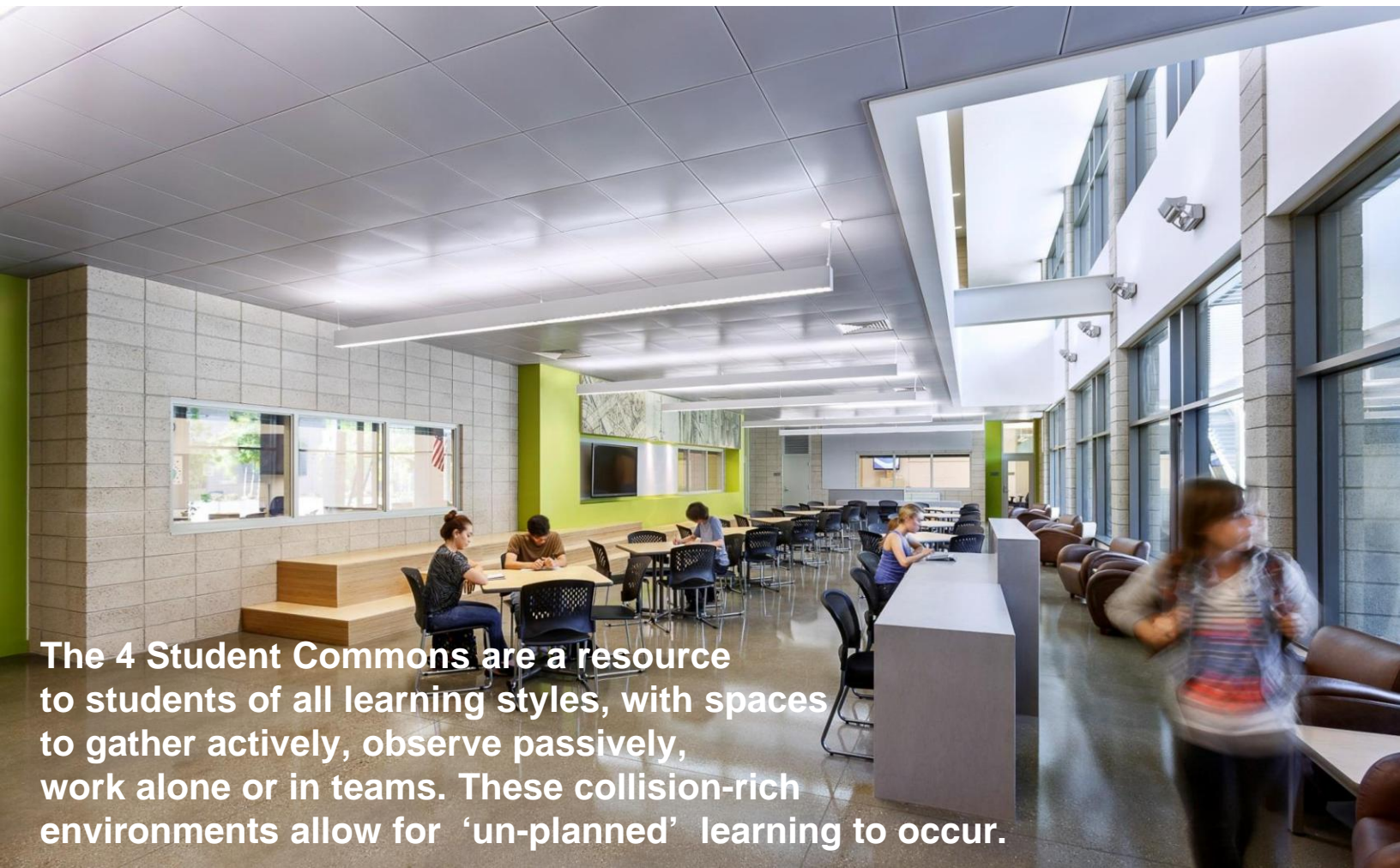
INSPIRATION



Each academy is branded with educational graphics relating to past methods and the future technologies, inspiring students and providing a sense of pride for each Academy.

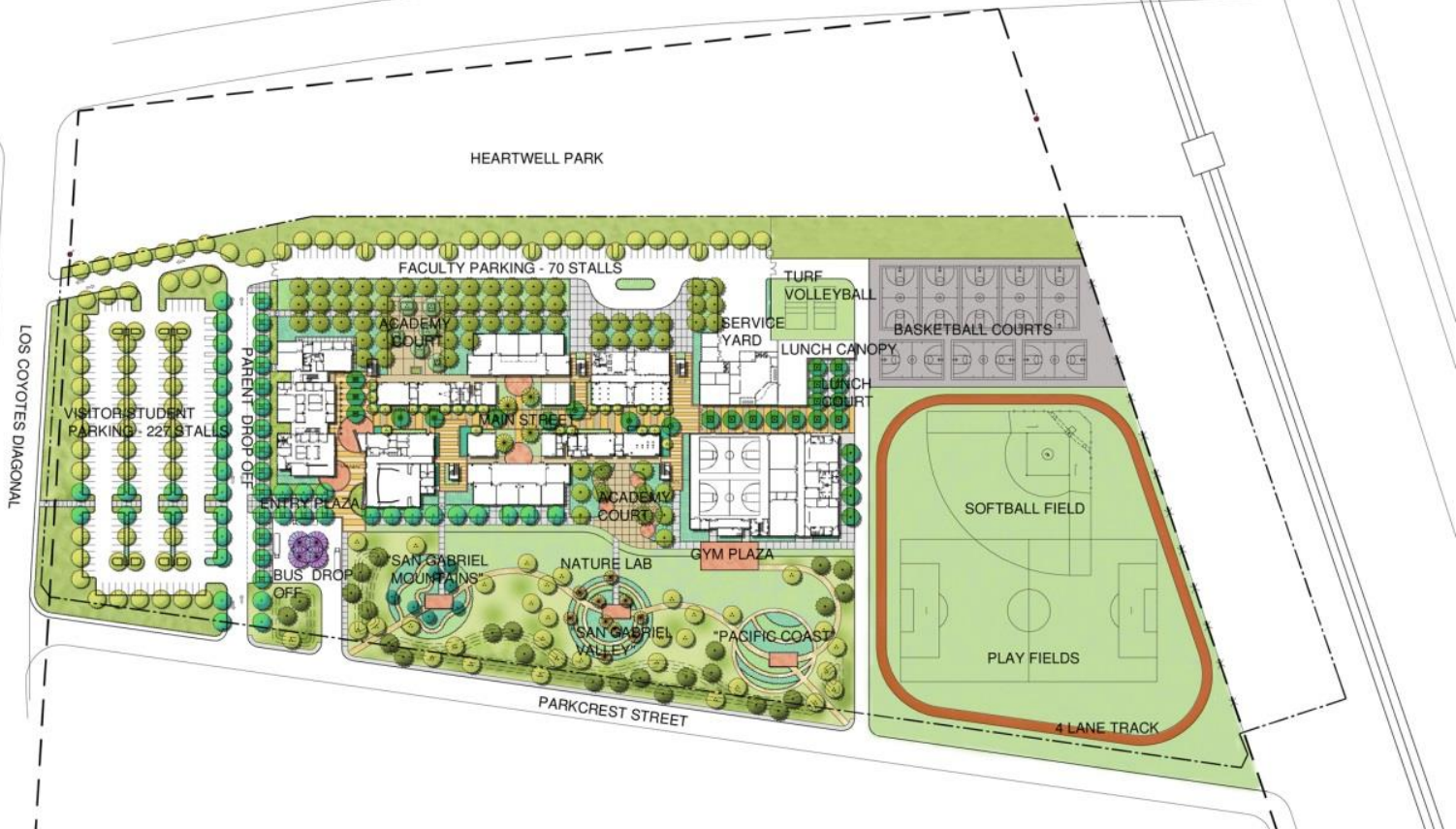
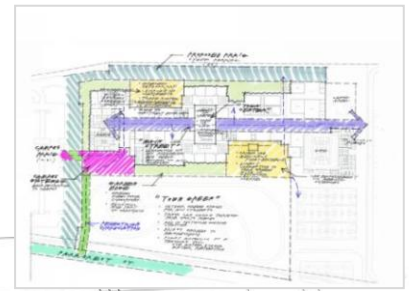


Career + Collegiate aspirations are met. McBride HS re-defines the social interaction at a high school, influencing students by teaching exposure, ownership and respect.



The 4 Student Commons are a resource to students of all learning styles, with spaces to gather actively, observe passively, work alone or in teams. These collision-rich environments allow for 'un-planned' learning to occur.

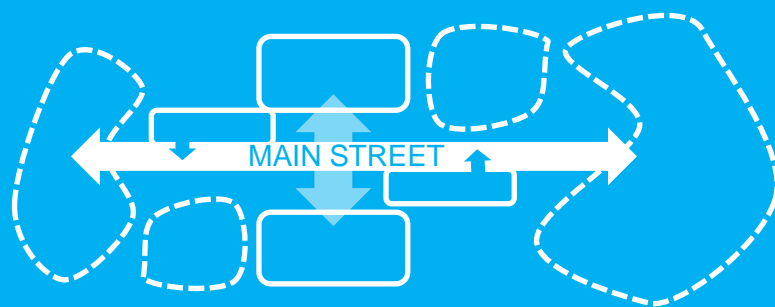
CAMPUS SITE PLAN The “school within a park” concept kept the campus to the north of the site, allowing for community engagement on the fields and along the natural edge at the south.





PHYSICAL ENVIRONMENT

Main Street broadens at the commons to celebrate the connections on campus, both indoor and out. The Student Services building anchors the west end with civic-minded inspiration on the feature wall. The east end celebrates health, wellness and student pride with the Gym and Student Union – opening to the community and fields at the west end of the park. The Academy Labs are directly on Main Street, with storefront openings and transparency to allow for learning to be on display.





**PROCESS
+
PROJECT
RESULTS**

McBride High School exceeds the district and **community aspirations** to address overcrowding in the schools of Long Beach. This is the first of several new thematic high schools in the district. The process and engagement with the neighborhood and the industry will be an example for others that follow.

**T h e r e s u l t i n g p r o j e c t
b r i n g s p r i d e t o t h e
c o m m u n i t y**



PROCESS RESULTS

What makes Long Beach so unique is that it is a large school district with very large schools, but yet is a successful urban district academically. This facility master plan was a major effort that involved more than 4,000 community members. It successfully demonstrated that you can break a large district into smaller areas for planning purposes, create area plans that meet local needs and at the same time **build a city-wide agreement on school facilities**. The plan resulted in a successful bond election giving the district the assets needed to make these aspirations a reality.

The community engagement continued from that inception through the occupancy of the project at McBride High School. The Grand Opening Ceremony included family members of Ernest McBride, Sr. (a civil rights activist and local community leader). The school and the district hosted **Community Tours**, district and student led, to share their story about the new environment.

Additionally, the Design Team initiated and facilitated interactive **Campus-Immersion Walks**. This was a significant moment for all involved, the faculty and administration of the school were able to hear first hand from the architect, landscape designer, interior designer, planners and engineers about the intentional design of the spaces, a how-to guide of the building. The McBride Community that was only established at the end of the construction phase was now part of the planning family and process.



Over 2,000 community members attended the McBride High School Opening Ceremony

Of the criteria used to rank school districts for the Global Education Study, one stood out that was used to characterize the Long Beach Unified School District; it was that the people of Long Beach and the leadership of the District share a **“Cultural Expectation of Value”**.

This was evidenced by the District’s track record as an incubator of home-grown innovative programs within the existing schools. Now, the environment at McBride High School meets the expectations of the District.



shared-use community meeting

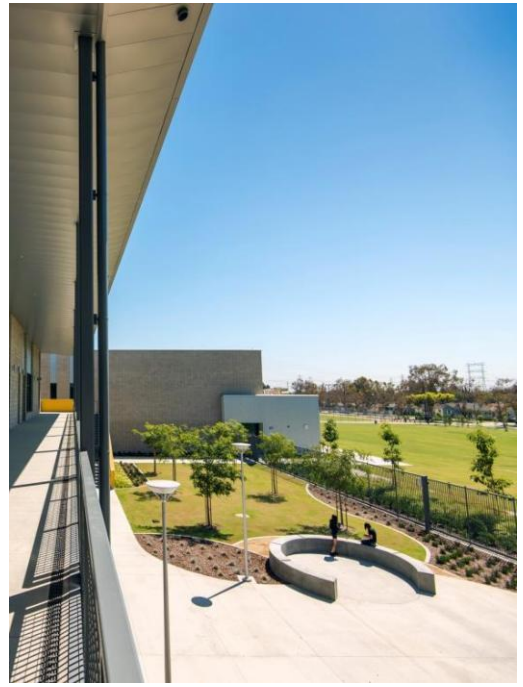


open house





CONTEXT / School in a Park



CONNECTIONS FOR COMMUNITY RESOURCE

The design sought to maximize open space, minimize the building footprint and extend the city park to encompass the school campus, diminishing the impact of a high school to the adjacent residential neighborhood. The school will draw students from throughout the district, the entrance is adjacent to two public bus routes and bike storage provides alternative means of transportation. Addressing neighborhood concerns about a High School in the community, McBride is now a resource to neighbors and a celebration of the community park.

An integrated design process shaped the outcome for sustainable success.



SUSTAINABLE RESULTS

Designed to qualify for the Collaborative for High Performance Schools (CHPS) Verified Program, the McBride campus exceeds California Title-24 energy standards by 40% and is a model of sustainability:

- Daylighting is provided for over 95% of the occupants
- 75% of the construction waste was diverted from landfills
- CMU block is used for both structure and enclosure, providing excellent thermal mass and durability for a long-lasting, sustainable solution
- A 277-KW photovoltaic system meets 60% of the estimated energy use. A monitor in the lobby illustrates the performance for students to see
- Stormwater percolates into the playfields for polishing and groundwater regeneration without burdening the existing city storm drain system





“Because McBride is an experimental school in many ways, many of the learning techniques are new and a great deal of technology is used in our daily activities. The use of our new procedures may someday be standard in all high schools, and I am very proud to be one of the first students to use them and to be a part of them.”

“Everyone has an opportunity to be involved in one way or another, and I think that's great. Even when the school is at its maximum capacity with all four grade levels, we all still will feel included and like we belong. We know one another's names, and we are all friends. It really feels like we are one big, happy family here.”

-Jessica Dowdy, class of 2014

