

# PK-12 Education





**We Build Community**



# Who We Are

**FGM Architects works with people and organizations that serve others and impact lives.**

**At FGMA, we call ourselves a “community-based” architecture firm. That is, our practice is dedicated to enhancing communities through environments that make up the landscape of our daily lives. Over our 74+ year history as a business—and through our work with countless schools and school districts—we have honed a set of values that have at their core commitment, integrity and people. These guide everything we do.**

FGMA delivers world-class design that is right-sized to the scope, schedule and budget of each of our clients.

We’ve found that how we work with our clients is just as important as what we design. We believe in face time, listening and observing how users interact with their environment.

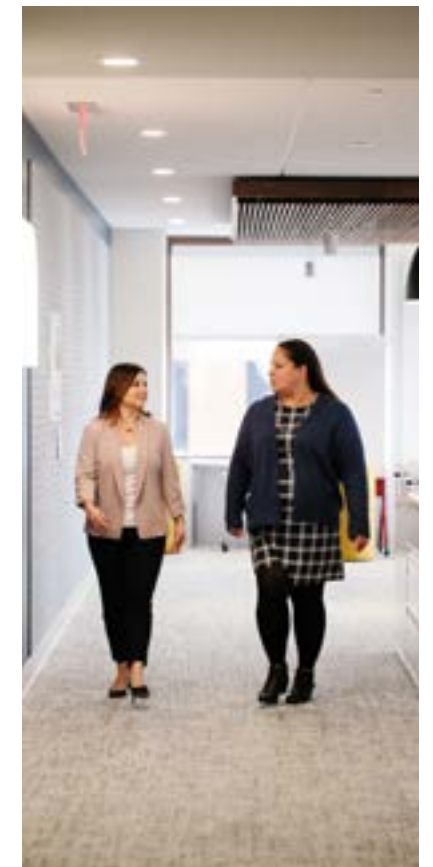
Because we work almost solely with publicly-funded and not-for-profit organizations, we understand that the people we serve extend well beyond those we report to on a daily basis. As such, one of the most important things we do is involve stakeholders in every step of a project. The end result is a design solution backed by solid consensus; everyone has participated in its creation and understands the logic of the planning process. We help lead this process and act as a trusted advisor, providing our clients with

the information and technical advice they need to make decisions quickly and confidently.

We are your education partner. We bring a balanced, common-sense design approach that considers all aspects of a building, not just the aesthetic.

Moreover, as a firm, we structure our services to minimize the risks associated with building projects, including revenue risk, financing risk, capital cost risk and operating cost risk. Above all, it’s the client’s mission that determines project priorities.

No project is ever a one-off. We fully expect to be with our designs for years to come. We are proud that we’ve worked with some communities for decades and know that small projects can have just as profound an impact on the user experience as multimillion-dollar ones.



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**1945**

YEAR FOUNDED

**135+**

ARCHITECTURE  
PROFESSIONALS

**6**

OFFICES IN AUSTIN,  
CHICAGO, OAK BROOK,  
MILWAUKEE, O'FALLON,  
AND ST. LOUIS

**100+**

DESIGN AWARDS  
RECEIVED SINCE 2000

**90+**

SCHOOL DISTRICT  
CLIENTS

**1,000+**

NEW SCHOOLS

## We Build Community

We provide architecture, planning and interiors services to a diverse clientele by assembling an integrated professional team who develops strong relationships and works collaboratively with the client to meet the client's present and future needs.



## Our Values:

### COMMITMENT TO OUR CLIENTS

We build long-term relationships by providing quality design and service that meets our clients' needs, values and interests.

### COMMITMENT TO THE PEOPLE OF FGMA

We offer opportunity for quality professional life and support for quality personal life to all.

### ETHICAL CONDUCT

We bring integrity, respect, fairness and honesty to all our relationships.

### COMMITMENT TO FGMA

We apply sustainable business practices. These include responsible fiscal management, market diversity and development of future leaders.

## We are your education partner.

Serving schools since 1945 has been and continues to be the foundation our architectural practice is built on.

Our philosophy regarding design of school buildings is driven by our core belief that the curriculum should shape your school buildings.

FGMA creates inclusive and thoughtful planning processes to help our clients achieve their goals. Through an intense immersion process, we work to understand the integration

of pedagogy (curriculum), technology (digital space), and buildings (learning space) to create future-ready learning environments.

The owner is vested with the most intimate knowledge of a project's value and strategic objectives. Users understand how a facility needs to perform and what will make it successful. Community members understand and appreciate the impact that a project will have on their neighborhood.

Through listening and discovery, we offer fresh, innovative solutions that will challenge your present options.

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## We Specialize in Architecture for Education

**Since 1945, serving schools has been the foundation our architectural practice is built upon.**

**We understand the connection between the classroom**

### LEADERSHIP

At the root of our practice is our ability to offer leadership to our clients to help them navigate the overall process of facility, evaluation, design and maintenance. Our education design team has devoted most of their careers to creating spaces that inspire a lifelong love of learning and meet the ever-evolving needs of education

### MASTER PLANNING AND FACILITY EVALUATION

Our Facility Master Planning process helps create a fiscally responsible, long-term facilities plan to support academic goals and the next generation of learners.

### NATIONAL LEADERS IN FUTURE-READY LEARNING SPACES

Our leadership in national organizations focused on the intersection of changing ideas of pedagogy and spaces to support teaching and learning enables us to understand the need to have educational designs that change, adapt, and evolve over time. We design "Future Ready" spaces that are flexible, adaptable, agile, inspirational, comfortable, technology rich and inspirational and help students develop the 4C skills needed in the future – communication, collaboration, critical thinking and creativity.



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### SUSTAINABLE DESIGN

FGMA is committed to preserving the environment through sustainable design and energy conservation practices that contribute to the development of healthy, safe, energy-efficient facilities. **FGMA has 24 LEED Accredited Professionals on staff.**

### WELL-BUILDING DESIGN

The International WELL Building Institute and the program, WELL, is the leading tool for advancing health and well-being in buildings globally. The WELL Building Standard uses innovative, research-based strategies to advance health, happiness, mindfulness and productivity in our buildings and communities. **FGMA has several team members who have completed the WELL certification process.**

### RESILIENT DESIGN

Resilient design is the intentional design of buildings, landscapes, communities, and regions in response to vulnerabilities such as shocks and stresses that can be both manmade and naturally occurring. Creating safe building environments is a key component of FGMA's Resilient Communities initiative. In addition, we have a municipal practice that offers experience designing hardened facilities for law enforcement, the fire service and municipalities. **FGMA's Ray Lee is Crime Prevention Through Environmental Design (CPTED) certified.**

### ARCHITECTURAL CHARACTER

Developing architectural solutions that not only meet the needs of today and tomorrow but also complement the existing architecture is a specialty of FGMA's PK-12 design team.

### LIFE SAFETY PROJECTS

FGMA has written hundreds of Health and Life Safety studies and completed thousands of health and life safety projects for our PK-12 clients.

### REFERENDUM ASSISTANCE & GRANT APPLICATION SUPPORT

Creating funding sources for schools requires a strong partnership between the Architect, the School District and the Community. Funding support can include referendum support, fundraising or grant application support. We have helped clients obtain more than three quarters of a billion dollars in referendum and grant funding.

### INTERIOR DESIGN, WAYFINDING/SIGNAGE/GRAPHICS, FF&E SELECTION

Our interiors group assists clients in planning spaces that are comfortable and welcoming for students, teachers and the community. We design inspirational, welcoming & comforting schools by creating functional & appropriate spaces. Budget is always top of mind and our designers maximize your budget by developing conscientious designs as well as solutions that can be phased to accommodate client funding.





# Educational Facilities Need to Evolve

Education has changed and educational facilities are evolving. How space within a school building was intended to be used at the time they were planned is often different from how they are used today. School buildings and spaces often reflect a very traditional approach to PK-12 education. Districts need to

*An exceptional learning environment is cultivated with intention and care. We need to continually assess how the physical resources of the building and site are used to support the intellectual and social development of the students and staff. Educational leadership should work with school planning and design experts to understand the connections between pedagogy, technology and the physical environment. Together, they can then identify and prioritize facility improvements based on educational need and the use of space in the service of the students' learning. Some of the trends and factors influencing the learning environment of the future that are incorporated in the design of today's 21st century schools are:*

## PHYSICAL COMFORT

We all know, and research confirms, that rooms that are well-ventilated, are a comfortable temperature, have acoustics that promote ease of hearing and where there is no direct sunlight or glare to make it difficult to see a screen or a presentation have positive effects on learning and students' performance. Today, a growing use of data, measurement and verification help to provide a more comfortable and healthy learning environment.

## EMOTIONAL COMFORT

Students need to be ready to learn and emotional comfort is enhanced by the sense of being in



a safe environment. Providing the appropriate level of safety and a sense of security at entries is a start. Within the building, the manipulation of space, materials and color all contribute to creating a sense of comfort for students, staff and parents. Removing the distraction of concern or fear leaves more room for focused learning.

## LIBRARIES

The 21st century library remains a place that instills a love of reading, learning and discovery, where a child can find a comfortable place to curl up and read a book. However, libraries are now also a place of energy, excitement, shared resources and yes- noise. Libraries are often used for productions, group projects and active learning utilizing technological resources.



## 4C SPACES: COMMUNICATION, COLLABORATION, CRITICAL THINKING, AND CREATIVITY

New spaces are being built or existing spaces transformed into 4C spaces to support learning by doing, not just listening. Today schools must inspire the development of essential skills crucial to a child's education. Hands-on learning requires different sizes and arrangement of spaces for multiple and varied activities. Power, data, water and ventilation requirements need to be tailored to specific activities.

## FLEXIBLE SIZED GROUPINGS

In the evolution to 21st century learning, teachers no longer work with the same prescribed group of 22-28 students for long stretches of the day. Instead, breakout spaces for project work or one-on-one spaces for collaboration have become just as necessary as larger spaces where students can work on projects for more than a 40-minute period. A cluster of small and large spaces, each serving specific learning activities, better suits the needs of today's education than a series of 800 square foot rooms arranged like cells on either side of a corridor. What happens when a grade level is not 3 classrooms, 3 teachers and 25 students each in their own space but becomes a series of spaces with 3 educational leaders and 75 students?

## EXTENDED LEARNING AREAS

Learning happens everywhere—small group activities, one-on-one instruction and project-based learning can happen outside the classrooms in space also designed for circulation, in areas specifically planned for extended learning, or in flexible spaces with more than one use. Twenty-first century educational design incorporates adaptable space for adaptable learning situations.





### OUTDOOR LEARNING

Developing and maintaining outdoor learning spaces for specific learning events, including play, is the expression of the entire site being part of the educational environment.

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### NON-TRADITIONAL LEARNING

Designing for students who may spend part or all of the day outside of the traditional educational environment or learning in the community, at a community college or a specialized cooperative facility has an impact on planning and design. **Housing cooperative programs within your school creates different traffic patterns and building zoning.**



### COMMUNITY USE OF FACILITIES

Designing for use of a school building by the community affects the layout and planning of the building and the site. **Shared or co-located spaces for park districts, libraries or other community program should be considered.**

### SOCIAL LEARNING

Spaces can be designed for a high degree of interaction and shared experience; often, access to food and drink is provided. The meeting or conversation over a meal provides opportunities for the synthesis of ideas from the classroom. **Peer-to-peer and in small groups, learning continues in social spaces in a less structured way throughout the school day and into the non-school hours.**

### PERFORMANCE AND PRESENTATION

**These are no longer activities confined to the stage or the wing of a building dedicated to the arts, media or other creative endeavors.** Communication and presentation, demonstrating proficiency in what you have learned, occurs in all subject areas and needs to be planned for in both formal and informal settings throughout the building.

### ADAPTING EXISTING SPACE

Many of the schools of the future will be in buildings that are already built. The challenge is to adapt these spaces through the use of doors, movable walls or panels and other features such as glass to provide transparency and to reconfigure existing space for current and future needs.



### TECHNOLOGY

**Connectivity and bandwidth as well as power to run and charge devices continue to exist as a need for modern educational spaces.** Listening to and viewing media and remote connections bring their own requirements. Control of light and sight lines as well as image size and legibility must be considered for group presentations. Technological considerations also include audio enhancement systems, internal communications systems and operational controls to help the building run more efficiently.



### SUSTAINABILITY AND ENVIRONMENTAL LITERACY

In meeting today's needs, we should be respectful of future generations. There should be a robust and focused dialogue on using less energy and other natural resources, implementing performance standards for operation and maintenance practices that promote a healthy high-performing building. **The measurement and verification of goals is a key component of implementing a sustainability plan.** The integration and practice of environmental literacy within the curriculum should connect to goals for energy use, material consumption and environmental practices.

Every child learns in a different way; a variety of learning activities and learning styles are present in schools on a daily and hourly basis. The experiences of the learner and of the teacher need to be considered as part of the design process. This requires the design of the learning environment to consider specific activities and ergonomic needs and a more granular approach to design focusing on furniture that best serves planned and future needs. The entire school must be consciously designed to support the learning experience.

### CREATIVE SPACES THAT INSPIRE

We are all attracted to cool and creative spaces. Whether it be materials and colors juxtaposed or used in a novel way, an interesting view framed by an opening, raw spaces for projects, high tech areas or the use of glass to put learning on display, we need to use design to draw students into the environment and engage them in learning. **Increasing sensory perception will augment their fascination and connectivity with a space.**



Resilient Communities Thrive by Design

Our broad vision of Resilient Design covers four focus areas.



RESIST SHOCKS & STRESSES

Our communities are subject to acute shocks (catastrophic events such as tornadoes, floods, and violence) and long-term, ongoing stresses (such as climate change, deteriorating or outdated building systems, and inflexible environments). The intentional design of buildings, landscapes, and regions to minimize the effects of these shocks and stresses – and to recover quickly from the more significant ones – is critical to creating Resilient Communities.



PROTECT THE ENVIRONMENT

Incorporating an appropriate and well-considered level of sustainable design in a project is a means to energy savings, increased occupant comfort, and stewardship of our natural resources. Guidelines and rating systems such, as the U. S. Green Building Council's Leadership in Energy and Environmental Design (LEED), offer recognized industry standards for sustainability, but **FGMA recommends an approach that is attuned to each project's program, budget and overall objectives.**



ENHANCE WELL-BEING

The health and comfort of the people who use a building should be addressed from a variety of perspectives – spatial, thermal comfort, color and finish, ergonomics, etc. The recently-developed WELL-Building Standard, like LEED, provides research-backed, holistic guidelines meant to enhance inhabited spaces and support the activities that occur there - teaching, learning, working, playing, etc. The goal is to improve learning, productivity, retention . . . and the general well-being of your staff, students or visitors.



INCREASE SECURITY

Tragic events over the last two decades have spurred designers to consider a full palette of strategies to create safer environments for their clients. Implementing Crime Prevention through Environmental Design (CPTED) design principles, for example, can influence behavior and deter crime through the careful planning of the physical setting. **Assessing potential risks and determining appropriate responses – through good design, technology and effective day-to-day operations – will bolster the resilience of communities to manmade threats and hazards.**



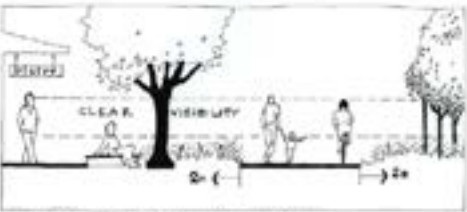
**Engaging project stakeholders in a design workshop** to discuss key components of Resilient Communities, review and assess potential design strategies, and determine those strategies best aligned to the project's specific goals and objectives.



**Understanding the larger community** – proximity to emergency services, potential for sharing resources in the wake of a tornado or flood, clear communication network – can strengthen the resilience of the individual building and its neighbors.

FGM ARCHITECTS			
SHOCKS AND STRESSES ASSESSMENT			
ID	Description	Shock/ Stress	Likelihood of Occurrence (0-10)
U	Unintentional Act		7
U1	Fire/Explosion	Shock	9
U2	Health Emergency	Shock	8
U3	Hazardous Material Spill or Release	Shock	7
U4	Transportation Accident	Shock	5
I	Intentional Act		5
I1	Terrorism	Shock	1
I2	Cyber Attack	Shock	5
I3	Arson	Shock	8
I4	Theft	Shock	4

**FGMA's Resilient Community Best Practices checklist** is used to identify and assess the wide range of potential design strategies to resist shocks and stresses, promote sustainability and security, and foster the well-being of those whom the project will serve. Strategies will be assessed in regard to their applicability to the specific project, their cost impact, and their effectiveness.



Assessing and addressing **manmade threats and hazards** through good design improves safety and resilience.



**Sustainable design practices** should be appropriate to the building type, the geographical region, and the client's goals and objectives.



Ergonomically-designed furniture that is functional and durable will enhance the **health and comfort** of those who use the building.

Safety and Security Design

FGM Architects provides an additional level of service in providing building-level **safety and security design services under the umbrella of Resilient Design.**

We employ a security assessment and recommendation strategy that involves the evaluation and development of security and protection programs for educational

SECURITY SENSITIVITY OF THE ARCHITECTURAL, SITE/ CIVIL, STRUCTURAL, MEP, AND LANDSCAPE DESIGNS

The process begins with an in-depth evaluation and understanding of each client’s mission, how the facility must operate and how the architectural, site/civil, structural, MEP and landscape designs either support or degrade the security and safety aspects of the building and student occupancy. These designs must take into consideration the facility’s educational program and the district’s operational security concerns, and are perhaps the most important component in developing a safe and secure school.



SPECIFICATION OF SECURITY RESPONSIVE MATERIALS

Careful specification of the materials and components, which constitute the architectural, site civil and landscape design concepts, will provide the necessary physical security to delay forced entry, deter criminal activity and provide the appropriate time for law enforcement and/or fire department response to reduce or eliminate the possibility of crimes against persons and property. Many of these site development features (i.e. standoff landscaping, berms, raingardens, etc.) and building systems (i.e. brick masonry, reinforced concrete block, impact resistant glazing and hardened door locking systems, etc.) are already employed in traditional construction. However, it is through the careful analysis and use of these materials that can make the difference in providing a safe and secure school for students.





# WELL Building

WELL is an investment in the world’s most valuable asset: people.

Spanning 108 features and 10 concepts, WELL is a roadmap for improving the quality of our air, water and light with inspired design decisions that not only keep us connected but facilitate a good night’s sleep, support our mental health and help us do our best work everyday.

LIGHT



Provides and helps advance daylighting and electric lighting systems designed to increase alertness, enhance experience and promote optimal sleep patterns

THERMAL COMFORT



Optimizes the indoor environment and improves individual control to provide productive and comfortable indoor environments

AIR



Establishes and promotes strategies to reduce or minimize sources of indoor air pollution

SOUND



Ensures optimal acoustical comfort to reduce distractions and promote focus

WATER



Promotes safe and clean water through the implementation of proper filtration techniques and regular testing for building occupants to receive optimal quality of water for various uses

MATERIALS



Improves human health through use of safer materials and finishes

NOURISHMENT



Makes healthy foods the easy choice and encourages a better food culture

MIND



Supports cognitive and emotional health through design, technology and treatment strategies

MOVEMENT



Encourages the integration of activity and fitness into everyday life

COMMUNITY

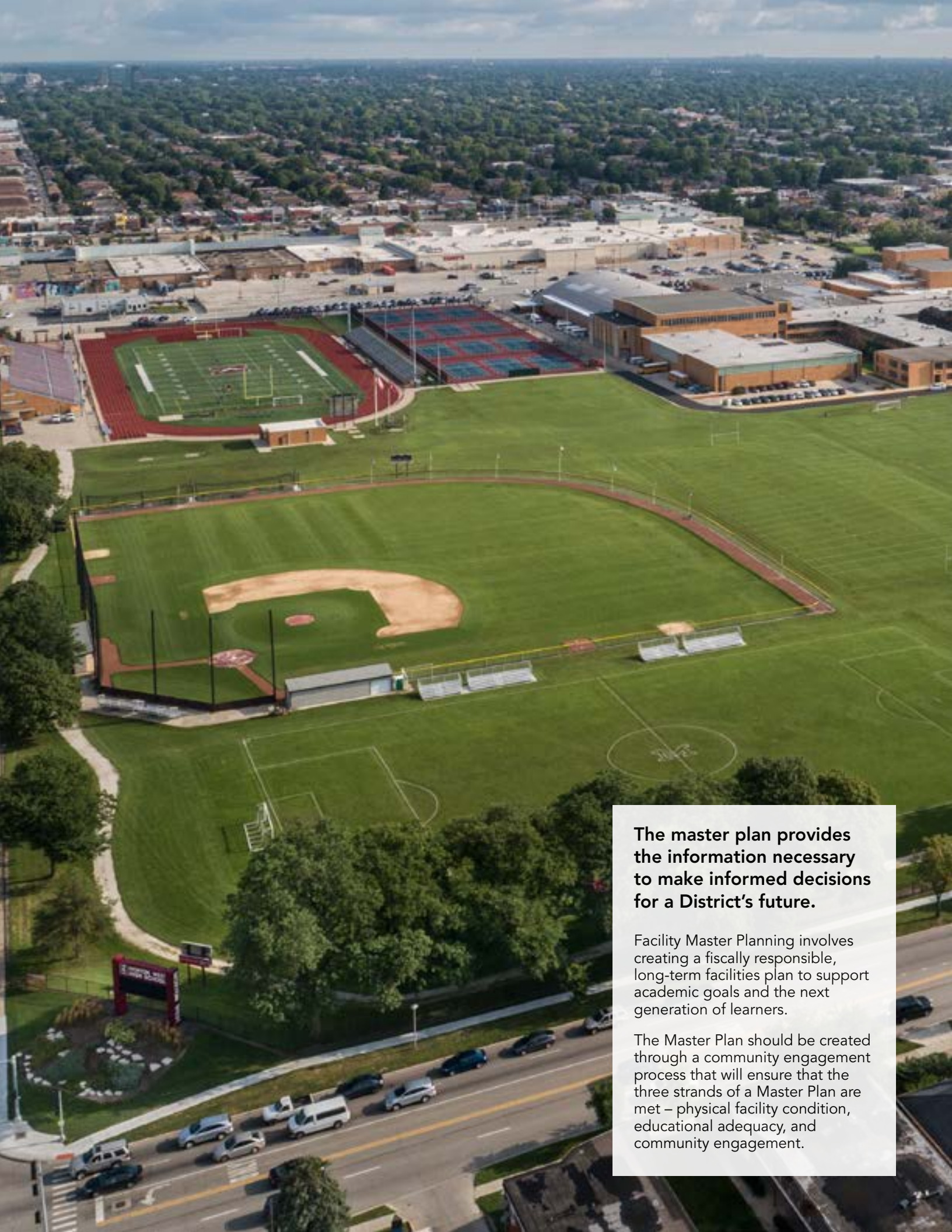


Fosters community engagement and social support through improved access and proactive initiatives

# Continual Improvement Process







# Master Planning



**The master plan provides the information necessary to make informed decisions for a District's future.**

Facility Master Planning involves creating a fiscally responsible, long-term facilities plan to support academic goals and the next generation of learners.

The Master Plan should be created through a community engagement process that will ensure that the three strands of a Master Plan are met – physical facility condition, educational adequacy, and community engagement.



**FGMA analyzes the existing physical characteristics of a campus or building.**

We relate them to the institution's strategic plan and programmatic needs to document existing conditions and develop a viable planning guide for the future.



Elementary Schools



**Schools and school districts today face challenges on every front.**

FGMA helps educators overcome these challenges by creating quality learning environments that support their educational mission.







## Elementary Schools



**FGMA has completed more than 500 elementary school projects in the last ten years.**

We recognize the importance of a school not only to its students, faculty, staff and administrators, but to the entire community as well.



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Middle/Jr. High Schools



As students enter middle/junior high school, they are faced with unprecedented choices and pressures.

By developing a successful educational program, these schools have the potential to meet the needs of these adolescents.







## Middle/Jr. High Schools

These educational facilities act as community resources, create a positive aesthetic that communicates the importance of the school as a resource, support the celebration of learning and adapt to the future of learning by being technology intensive.







## High Schools



With a clear vision, collaborative process and attention to detail, we strive to create rich, sustainable learning environments that provide a proud heritage for decades to come.

As we lead our clients through the project, we can advise them beyond the building, to ensure that all needs are met.



High Schools



Our process involves five structured steps: data gathering, creation of the project's vision, development of the program, exploration of alternative solutions and analysis and decision-making to arrive at the best solution.

**The results create projects that achieve the client's vision.**





# We Build Community



**FGM Architects Inc.**

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