

2016 Exhibition of School Planning and Architecture

# CREC Public Safety Academy

Category: New Construction

Hartford County

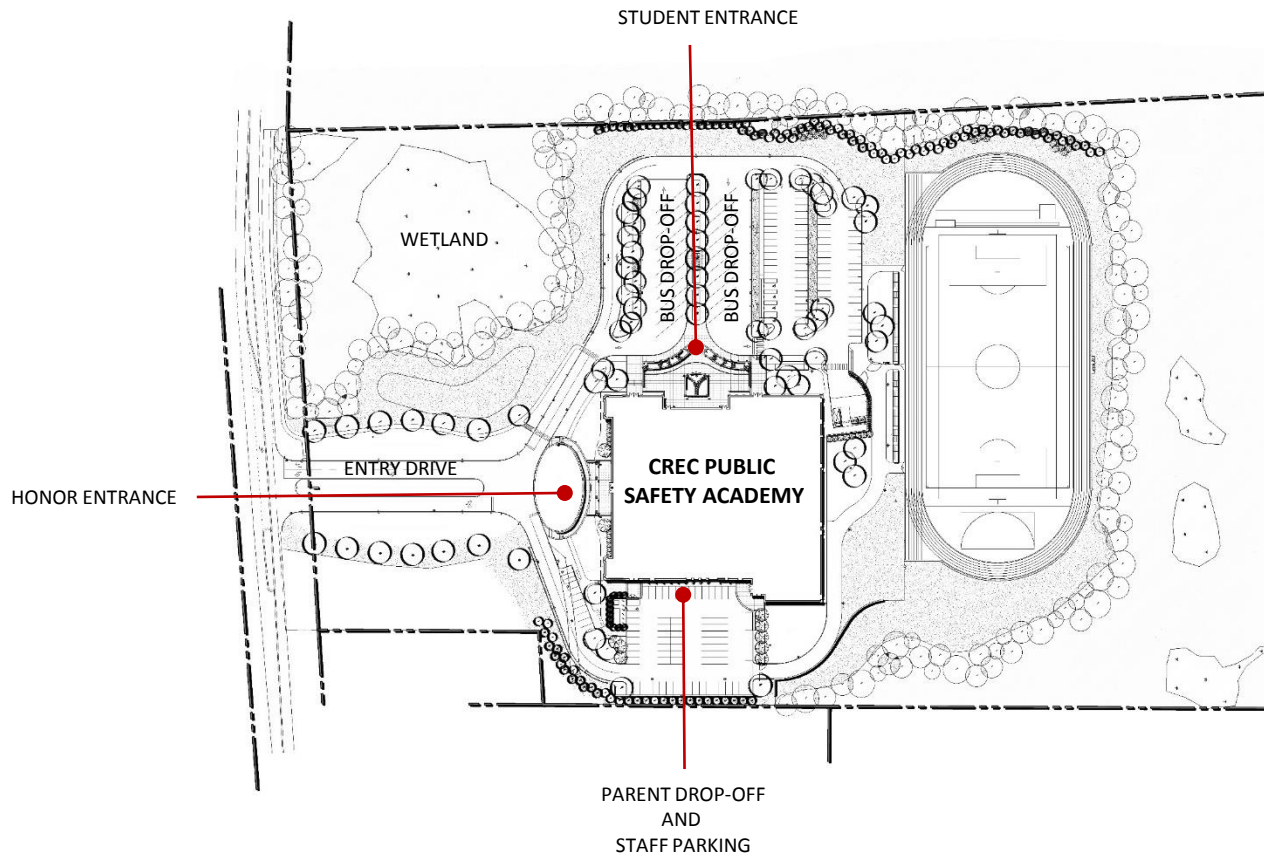
Enfield, CT



*“Inspiring tomorrow’s leaders through,  
academic excellence, service and duty.”*









*“This is absolutely a unique project. The range of specialized program spaces encompasses a broad spectrum of highly technical activities, as well as the development of each student’s sense of personal integrity and collective service to society. Combined, these aspects formed an epic journey of discovery for us as a design team. “*

Rick Herzer, AIA, LEED AP, Design Architect





## Community Environment:

The immediate goal of the CREC Public Safety Academy (PSA) is to engage students early on and prepare them for a career in public safety and community services including police, fire, law, and emergency medical services. The ultimate goal of the facility is to help meet the demand for emergency personnel, while increasing the number of qualified women and minorities in these fields, in which there is an overall shortage of qualified individuals.

The community is a crucial aspect of PSA's curriculum goals and was an important factor in the programming, planning and design efforts. A community advisory committee on the project included active police, fire, emergency medical, hospital, and emergency management professionals. School staff, a retired State Police lieutenant, Connecticut professional state police and fire training academies were all influences for the school's programming, planning and design.

Because it was important that the new facility have the appeal and physical elements for hands-on practice, the planning committee and design team held workshops with professionals and toured real command centers to learn about the spaces and technology necessary for a comprehensive education program.







## Community Environment Cont'd:

The design team toured and investigated the Henry C. Lee Institute of Forensic Science at the University of New Haven, including the Fire Safety program; The Connecticut Fire Academy; The Connecticut State Police Academy; The Dispatch Center of Connecticut; The Manchester Command Center; and The Connecticut Command Center at the State Armory.

These professionals advised on individual program processes, training, and future collaboration with other service providers (i.e. advice on equipment selection and PSA's potential as a training center for state emergency personnel) and, advice on the best way to bring large emergency vehicles, such as fire and ladder trucks into the atrium for demonstrations to students and community.

Each of these organizations continued to provide feedback while planning and designing the facility, truly creating a community effort in decision-making for the new school throughout the process.

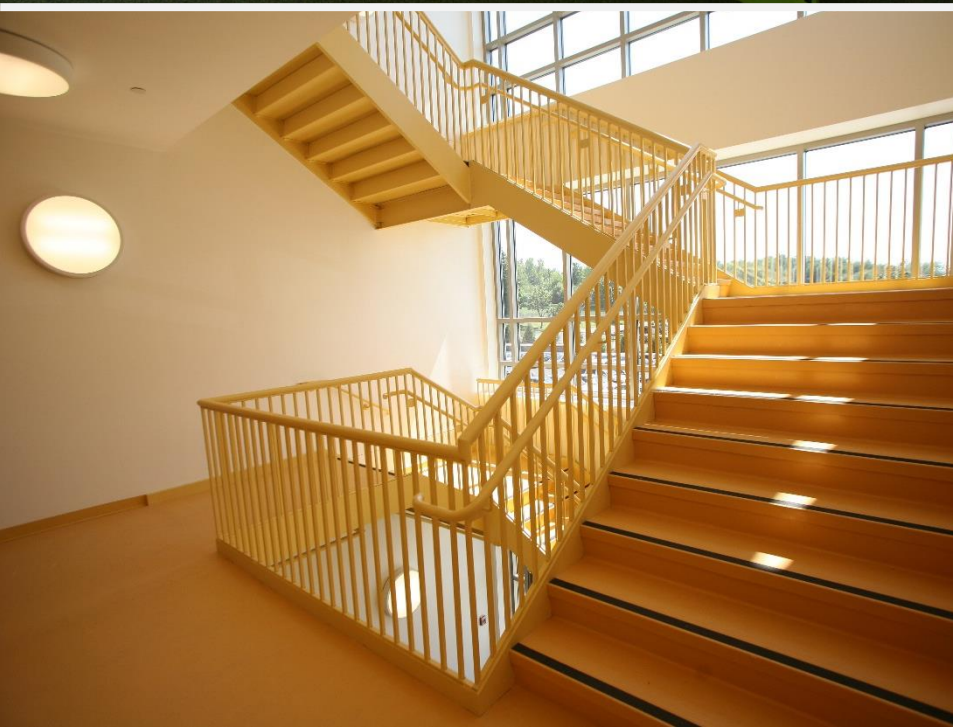


EMT Training





Colored stairwells enhance wayfinding and provide structure, aligning each program's focus with the physical environment.



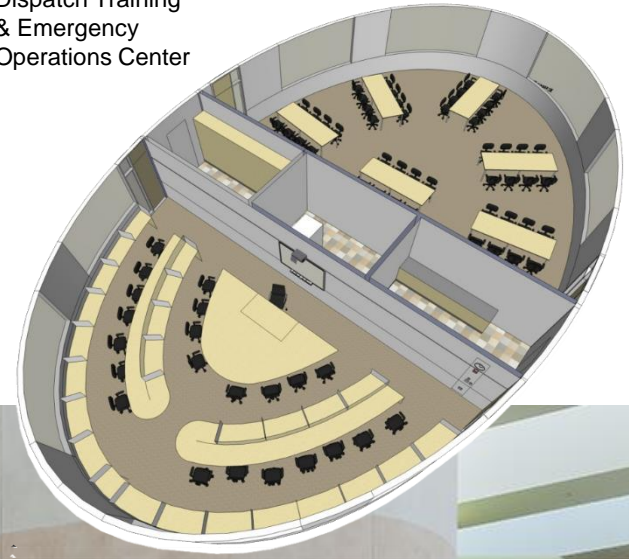


## Learning Environment:

The program and design of the PSA aligns with the core components of the school's mission statement of not only providing a core academic middle/high school curriculum, but also preparing students for specialized curriculum and training; providing field experience; developing leadership, cooperation, and communication skills; and preparing students for a career path in public service or further training and higher education.

The new facility provides space for 700 students in grades 6-12 allowing an integration of the core curriculum using concepts and examples from the public safety programs. The building includes numerous simulation spaces to create crime scenes, emergency situations, etc. to replicate real-world conditions.

Dispatch Training  
& Emergency  
Operations Center



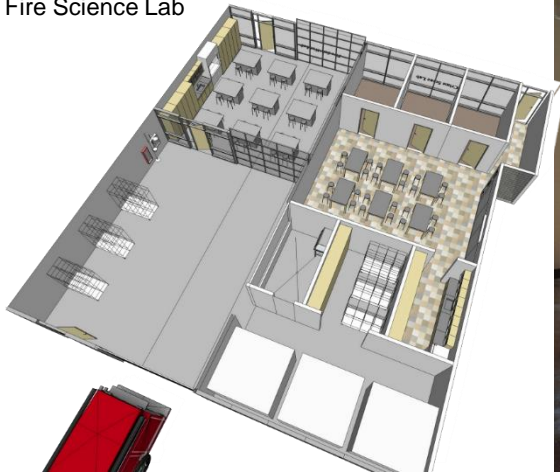


## Learning Environment Cont'd:

More specifically, the program includes a number of specialized educational environments including Fire Science, a Crime Scene Lab, Digital Photography, Emergency Medical Treatment, an Emergency Operations Center, Dispatch Training, Specialized Physical Fitness, Specialty Wet Labs with Sprinkler Testing Booths, Simulated Rescue Stations, a Command Operations Center, Moot Courtroom and an EMS Lab. Other spaces accommodate programs for physical education, visual and performing arts.

Beginning in sixth grade, students work with professional firefighters, police officers, Connecticut Homeland Security personnel, correctional institutions personnel, and EMS professionals, who provide threshold experiences in public safety careers. Formality is incorporated into the day-to-day process, underscoring concepts of Integrity, Honor, and Values.

Fire Science Lab







High ceilings with light monitors bring natural light into the depth of the space.







## Physical Environment:

Because it is important to capture student interest early on while also retaining it throughout the program, the building was designed in a three-story scheme. Many of the unique hands-on learning facilities are located on the first floor and visible from the multi-purpose atrium. The middle school facilities are located on the second floor, and the high school level facilities are located on the third floor of the building. This allows the design of the building to align with the progression of the school's program by level and grade while enticing students to experience more spaces as they progress through the school's curriculum.

General academic classrooms are all designed to support active learning for the core courses required of every student. These spaces are flexible both in configuration and technology to support various pedagogies and learning styles. Middle school classrooms are organized in grade-level teams, supported by a single middle school faculty work/collaboration area. High School faculty are likewise supported by a work room to facilitate collaboration.

As students progress in grade level, they can also progress physically within the building utilizing all of the unique spaces over time. A multipurpose room became a central atrium of the building, serving as an organizational element around which all classrooms and labs are arranged. Specialty labs are located adjacent to the multi-purpose room and atrium on multiple floor levels.



## Physical Environment Cont'd:

The atrium space is surrounded by burn rooms, forensic labs, virtual crime scenes, moot courtrooms, etc. on the perimeter. The central unifying triple-height atrium evokes a town square aesthetic and is subdivided by "The Egg," – an elliptical-shaped volume containing various spaces centralized for use by all grades.

The size and shape of the atrium addresses unique requirements and activities such as special drills or gatherings. It is also a large vehicle deployment space, into which specialty vehicles, such as fire ladder trucks, can be brought into the atrium through an instructional area and drive-in bay. The ladder can then be extended, and the truck's apparatus can be operated for demonstration and training.

The Egg includes moot courtrooms with alternate furniture stored in the center; a mock emergency operations center which also serves as active learning space for students; a library media center on the second floor; and a multi-media lab on the third floor. Other spaces in the building include core facilities to support conventional education including performing arts, band and choral classrooms; a fitness room; ropes course; climbing wall; gymnasium; and a dividable auditorium.

A smaller portion of the atrium has two-story space for cafeteria seating, and connects visually with classroom corridors above.







## Physical Environment Cont'd:

PSA has an impressive entrance sequence to the school's formal front from the main road. Brick and stone underscore its substance. Its significant presence represents the important nature of the activities inside. The new Honor Entrance links to the multi-purpose atrium which serves as a central hub of activity used for formal events including graduations, student gatherings, physical training and boot camp drills.

Public- and after-hours facilities such as the auditorium, gym, and fitness center, are accessed through separate entrances from the two parking areas. The full impact of the school's mission continues upon entering. The excitement and relevance of the activities inside the specialty labs, multi-purpose room, and atrium is palpable.

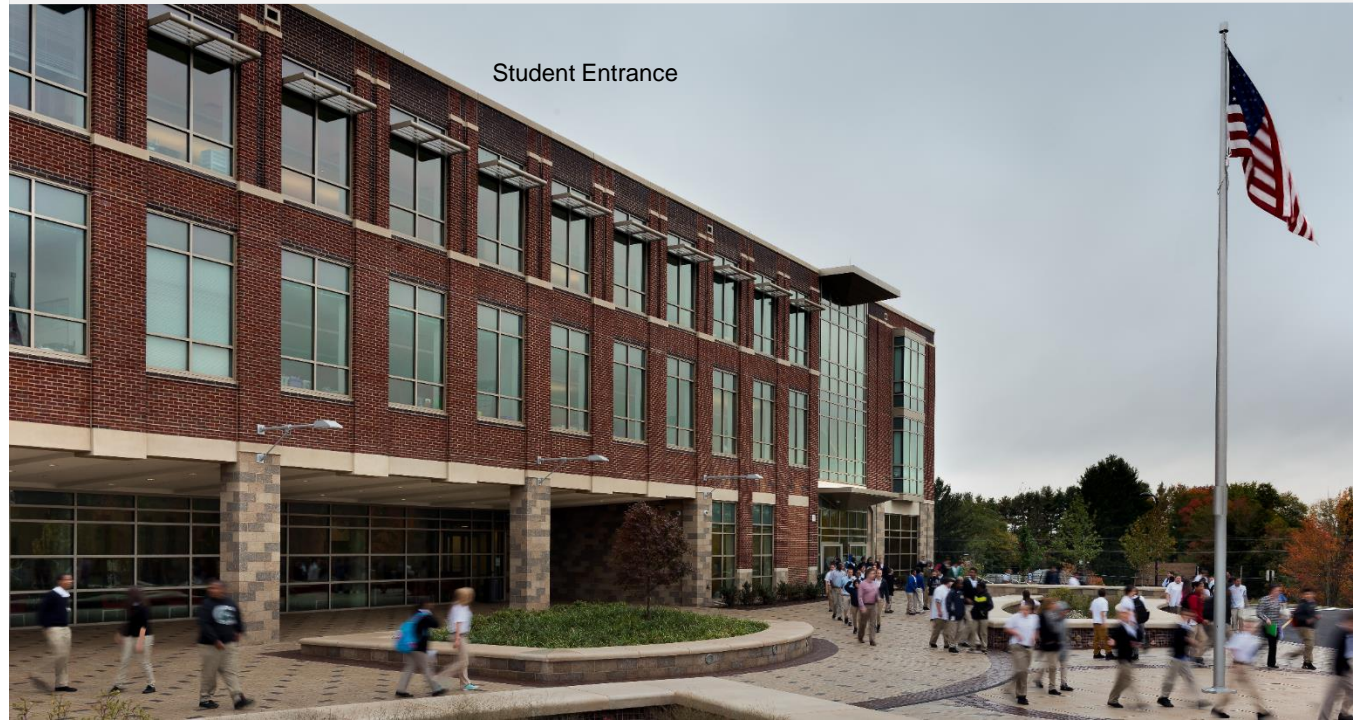




## Planning Process:

As it was important to design a facility which supported a formal program of instruction, the impressive ceremonial front was an important planning aspect representative of the school's culture, used for ceremonial events. The formality of the Honor Entrance is portrayed in the site configuration where it was important to plan the entrances in alignment with the idea that students would always enter through the day-to-day Student Entrance until the day they graduate symbolizing growth and achievement of the students. All other programmatic elements and spaces were planned in relation to the symbolic placement of the entrances.

Another important consideration in the planning of this project was an environmental issue that had to be considered. There were wetland challenges on the site where a few vernal pools had to be avoided requiring a zone change and local, state, and federal approvals including: STC, CT DEEP, and ACOE, in order to ensure an endangered species of frogs and other wildlife were not affected. Another aspect of the site involved the owner portioning off the rear of the site, and donating it to a local land trust.







## Planning Process Cont'd:

The multi-purpose atrium was designed to serve as the focal point of the school, locating all other spaces and specialty labs adjacent to it.

It was important to provide space which could hold the entire student body, in order to provide hands-on training within the school's curriculum. This space allows for specialty vehicles, such as fire engines and ladder trucks to be driven inside for the purpose of demonstrations and hands-on training for students. It also was designed to provide space for holding formal events such as graduations, student gatherings, physical training and boot camp drills, or for seating students during lunch hours.

Currently, the CREC Public Safety Academy is the most comprehensive program of its kind in the country in terms of age groups and variety of programs. The design supports vital esprit de corps which the school strives for, along with multi-grade teams to help nurture the character development necessary for careers in public service.



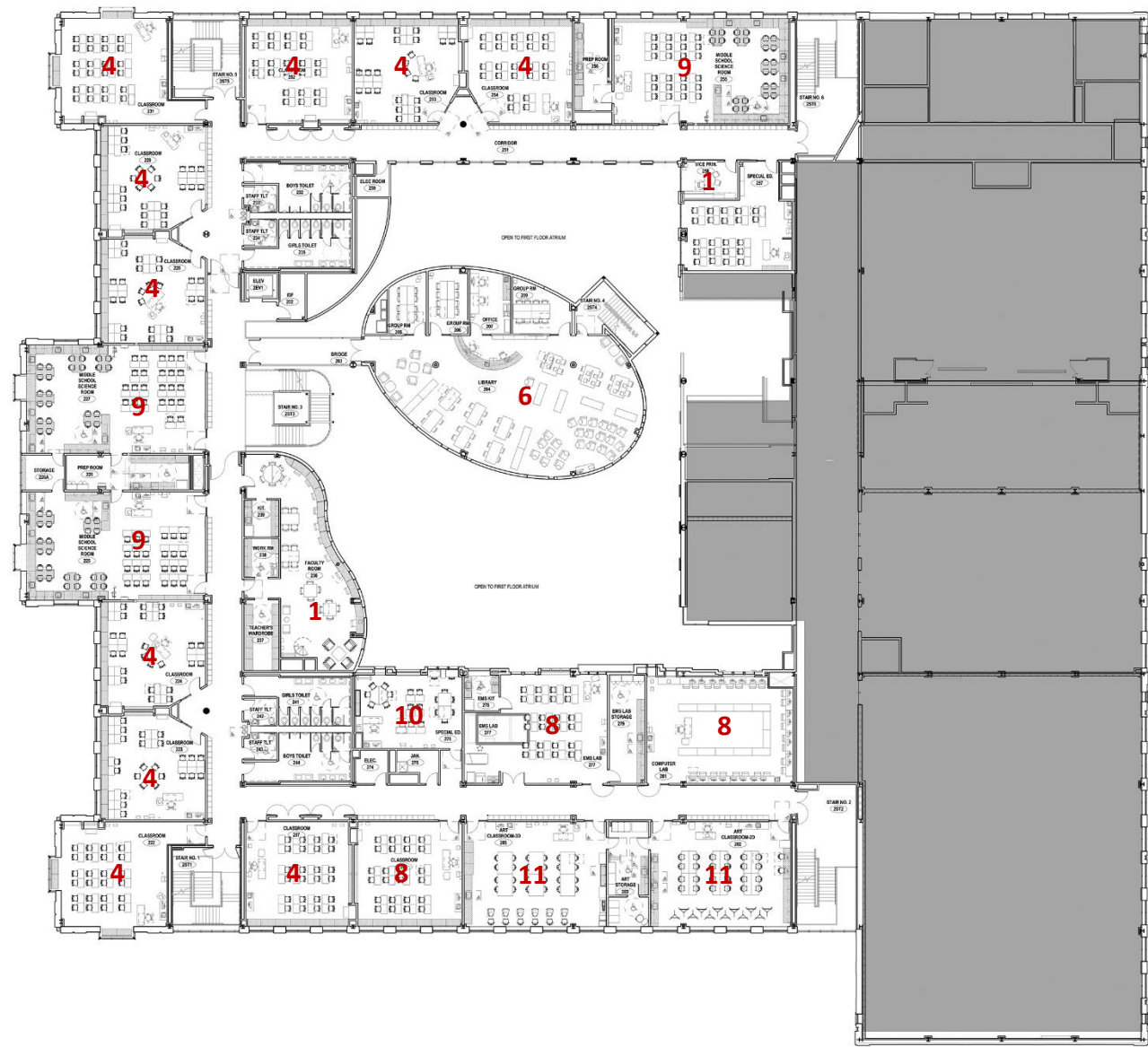
# First Floor Plan



- 1 Administration
- 2 Auditorium
- 3 Cafeteria
- 4 Classroom
- 5 Food Service
- 6 Library Media Center
- 7 Physical Education
- 8 PS Specialty Lab
- 9 Science Lab
- 10 Special Education
- 11 Visual Arts



# Second Floor Plan



- 1 Administration
- 2 Auditorium
- 3 Cafeteria
- 4 Classroom
- 5 Food Service
- 6 Library Media Center
- 7 Physical Education
- 8 PS Specialty Lab
- 9 Science Lab
- 10 Special Education
- 11 Visual Arts



# Third Floor Plan



- 1 Administration
- 2 Auditorium
- 3 Cafeteria
- 4 Classroom
- 5 Food Service
- 6 Library Media Center
- 7 Physical Education
- 8 PS Specialty Lab
- 9 Science Lab
- 10 Special Education
- 11 Visual Arts



# Exhibition of School Planning and Architecture

## Project Data

Submitting Firm :	The S/L/A/M Collaborative
Project Role	Architect, Landscape Architect, Interior Designer
Project Contact	Glenn R. Gollenberg, AIA
Title	Principal
Address	80 Glastonbury Boulevard
City, State or Province, Country	Glastonbury, CT
Phone	860-368-2319

Other Firm:	Szewczak Associates Consulting Engineers
Project Role	Structural Engineer
Project Contact	Richard Szewczak
Title	Principal
Address	200 Fisher Drive
City, State or Province, Country	Avon, CT 06001
Phone	860-677-4570

Other Firm:	Consulting Engineering Services
Project Role	MEP/FP Engineer
Project Contact	Douglas S. Lajoie, PE, LEED AP
Title	Principal
Address	811 Middle Street
City, State or Province, Country	Middletown, CT
Phone	860-632-1682

Construction Firm:	FIP Construction, Inc.
Project Role	Construction Manager
Project Contact	Chris Shugrue
Title	Project Manager
Address	308 Farmington Avenue
City, State or Province, Country	Farmington, CT 06032
Phone	203-271-0356



# Exhibition of School Planning and Architecture

## Project Details

<b>Project Name</b>	CREC Public Safety Academy
<b>City</b>	Enfield
<b>State</b>	CT
<b>District Name</b>	Hartford County
<b>Supt/President</b>	Jeff Larson, Principal
<b>Occupancy Date</b>	9/16/2014
<b>Grades Housed</b>	6-12
<b>Capacity(Students)</b>	700 students
<b>Site Size (acres)</b>	27 acres
<b>Gross Area (sq. ft.)</b>	145,000 SF
<b>Per Occupant(pupil)</b>	207 SF per Student
<b>gross/net please indicate</b>	67.1%
<b>Design and Build?</b>	No
<b>If yes, Total Cost:</b>	
<b>Includes:</b>	
<b>If no,</b>	
<b>Site Development:</b>	\$9,935,000
<b>Building Construction:</b>	\$42,195,000
<b>Fixed Equipment:</b>	\$3,625,000
<b>Other:</b>	
<b>Total:</b>	\$55,755,000