



# **Facilities Master Plan**

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## **Educational Adequacy Assessment Report**

BY PERKINS+WILL

DECEMBER 8, 2015



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# FACILITIES MASTER PLAN

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## FACILITIES MASTER PLAN

### BACKGROUND

In May of 2015 Upper Arlington Schools (UAS) retained the Moody Nolan/Perkins+Will/Hilliard Jeane team to assist the district with the preparation of a district-wide Facilities Master Plan (FMP). As an important part of the process leading toward a final FMP the design team needed to understand the current context of UAS facilities. Therefore, all UAS schools were reviewed for both physical adequacy (adequacy of physical components such as: roofs, walls, windows, mechanical systems, etc.) as well as educational adequacy (qualitative assessment of the physical environment such as: space size, amenities, relationship, type, etc.) and how facilities support or detract from the learning process. The Moody Nolan team performed the physical adequacy review while the Perkins+Will/Hilliard Jeane team performed the educational adequacy review. This report outlines the findings of the educational adequacy review. Provided below is an Executive Summary of general district-wide findings followed by more detailed findings on each individual school.

### Executive Summary

Upper Arlington is a very stable first-ring suburb to Columbus, Ohio. Founded in 1918 and covering a geographic area of almost ten square miles, UA developed over the decades following its founding and was almost completely built-out by the 1970's. While development does still occur it is rarely on virgin parcels of land. As a result of the age of the community seven of nine UA schools were constructed in response to post-WWII Baby Boom population growth during a 20 year span from approximately 1950 to 1970. Two schools that pre-date this time period are Jones Middle School (1923, the original UA High School) and Barrington Elementary School (1939). The last school to be built, Burbank Elementary School (now the district's early childhood center), was constructed in 1971.

All of Upper Arlington's schools were designed and built for a different educational model, a different economy, and different expectations around learning outcomes. Namely, these school facilities represent a "teacher-centered" model where the teacher was the focus, the "keeper", of all knowledge and where classrooms were designed for students to learn via direct instruction -- teacher at the front of the classroom transmitting information to students arrayed in tidy rows of desks. Schools of this generation, common throughout the United States, are typified by equally sized (but small by today's standards) classrooms primarily designed for one teacher and approximately 25 students organized on opposite sides of a corridor. Schools for older students divide the building by subject area and add supplemental spaces for specialized functions (theaters, technical labs, etc.).

This model was efficient and reflected expectations during the decades when the schools were built.

By contrast, today's learners need to prepare for what futurists predict will be relentless change, ferocious competition, unstoppable innovation, and rapid globalization. Therefore, students face an interesting, but uncertain future as the global economy and competitive landscape continue to shift. Some speculate that students today will likely have as many as different 17 jobs in their lifetime and that many of those jobs have yet to be invented. Today and in the future, the competencies and habits-of-mind necessary to successfully navigate and compete in this environment have evolved. While knowledge - the content of learning - is critical, so too are skills and dispositions such as: good interpersonal communication; the ability to collaborate; the capacity to synthesize disparate information into new ideas; adeptness at creative problem solving; demonstrating grit and resilience, to name a few. Traditional "teacher-centered" education was aimed at knowledge transfer and not necessarily at the formation of these other core skills and competencies.

It is in this context and using the lens of the Guiding Principles (below) established during a June 2015 working session with UA district administrators and community members, that all school facilities were evaluated.

## **GUIDING PRINCIPLES: OUR DISTRICT'S EDUCATIONAL ENVIRONMENTS...**

### **1. WILL CHAMPION UNIQUELY ACCOMPLISHED LEARNERS**

- a. Support a personalized learning experience so each student succeeds
- b. Maintain a steadfast commitment to the arts
- c. Promote the continued importance of service learning
- d. Support extracurricular activities and athletics
- e. Pursue excellence by supporting collaborative, creative, flexible, engaging and authentic learning environments for all

### **2. WILL BE FISCALLY RESPONSIBLE AND COMMUNITY RESPONSIVE**

- a. Provide the best return on investment, both financially and academically
- b. Honor our past with a focus on the future
- c. Reflect what our community values
- d. Be environmentally sustainable

### **3. WILL FOSTER AND ENGAGE RELATIONSHIPS**

- a. Serve as a center of the school community
- b. Advance leadership at all levels, for students and educators, within the community and nationally
- c. Cultivate relationships between the students, educators, parents and the community
- d. Encourage collaboration with community organizations, business, universities and other school districts

### **4. WILL BOLSTER COLLABORATION AND CREATIVITY**

- a. Support social, emotional and academic learning options and opportunities within and beyond the classroom
- b. Create adaptable, flexible and agile environments to meet the changing needs of all learners
- c. Empower students and educators to serve, lead and succeed

### **5. WILL RECOGNIZE THE NEED TO CREATE A SAFE PLACE TO LEARN AND WORK**

- a. Hold paramount the need to utilize best practices around physical safety and security
- b. Create a supportive culture whereby students and staff feel emotionally safe and supported
- c. Create an academically safe environment where students are encouraged to tackle challenges and take academic risks

This evaluation included on-site interviews and tours at each school while school was in session so that the evaluating team could witness the schools occupied and active. These visits took place the week of September 28, 2015 and were a part of a broader schedule of Building Team meetings where further input was received which took place over several months (see below).



### Common Themes

Compiled below are general, district-wide, findings relative to the educational adequacy from the perspective of how the school sites and buildings support the educational objectives contained in the Guiding Principles. As each school is unique, general findings should be viewed as pertaining to many, but perhaps not all buildings and sites. Reports on individual schools follow this Executive Summary and are comprised of a brief overview of that school, followed by a printed PowerPoint presentation for each school as shared at Building Team meetings the week of November 9, 2015. It should be stressed that this report highlights findings only and does not address remedies. Various possible remedies will be developed during Phase II – The Options Phase - of the Facilities Master Plan project.

### General School Data

Known for academic excellence, Upper Arlington School’s enjoy a long history of successfully preparing students for success beyond high school providing its students with a plethora of academic and extracurricular opportunities.

Nine school buildings and two district-wide administrative buildings make up the real estate portfolio of Upper Arlington Schools. The schools are comprised of one early childhood center, five elementary schools, two middle schools and one high school. Combined, the schools total just over 892,000 square feet. (refer to other building data below)

School Name	Current Enrollment	Current Site Area (Acres)	Recommended site size (Acres, per 2013 OFCC guideline based on current enrollment)	Current Building Area (SF)	Current SF/Student	Projected Enrollment Year 2025 (10yr.)	SF/Student Year 2025 (assume no added area except at Tremont ES)	Projected Enrollment Growth (10 yr.)
Burbank Early Childhood	215	10.14	N/A	37,997	177	N/A	N/A	N/A
Barrington Elementary	758	8.70	17.58	85,062	112	887	96	129
Greensview Elementary	418	9.00	14.18	48,126	115	526	91	108
Tremont Elementary*	598	15.00	15.98	56,136	94	749	106	151
Wickliffe Elementary	508	6.50	15.08	50,846	100	589	86	81
Windermere Elementary	407	6.60	14.07	55,020	135	494	111	87
Hastings Middle School	701	14.50	27.01	134,140	191	717	187	16
Jones Middle School	706	10.00	27.06	130,878	185	806	162	100
Upper Arlington High School	1,816	34.00	48.16	293,824	162	1,947	151	131
<b>Total</b>	<b>6127</b>	<b>114.44</b>		<b>892,029</b>		<b>6,715</b>		<b>588</b>

\* Over the next two years Tremont Elementary School will receive two planned additions totaling approximately 23,460 of additional area. No additions were factored into the "Current Building Area (SF)" nor the "Current SF/Student" columns and both additions were factored into the "SF/Student Year 2025" column.

For the ease of reading and reviewing the common district-wide issues as well as the school-specific issues that will follow, findings will be presented in bulleted fashion and will be contained in two categories: "school buildings" and "school sites".

### School Buildings

- **Age:** As is indicated in the table to the right, the average age of original construction is over 61 years however, all buildings with the exception of Burbank have received several additions as needs dictated.
- **Interior environment:** Generally, while reasonably well maintained (given budget constraints) the interior environments reflect the period in which the buildings were built. Solid, durable materials have served well over time but do convey an "institutional" feel.
- **Typical Classroom Size:** A finding of primary concern is the size of classrooms. Average existing classroom size was calculated for Kindergarten, regular and science classrooms (see chart below). All three classroom types are considerably smaller than the current OFCC standard and current best practices. Small classrooms limit the number of possible student configurations (collaborative groups for instance), overall flexibility, reduce organized storage opportunities, and have an overall cramped feel.

School Name	Year of Original Construction	Age in 2015
Burbank Early Childhood	1971	44
Barrington Elementary	1939	76
Greensview Elementary	1965	50
Tremont Elementary*	1952	63
Wickliffe Elementary	1956	59
Windermere Elementary	1958	57
Hastings Middle School	1961	54
Jones Middle School	1923	92
Upper Arlington High School	1956	59
<b>Average Age in 2015</b>		<b>61.6</b>

	Elementary Schools			Middle Schools			High School		
	UA Elementary Schools (ave existing size)	OFCC Standard Size	Above (Below) Standard	UA Middle Schools (ave existing size)	OFCC Standard Size	Above (Below) Standard	UA High School (ave existing size)	OFCC Standard Size	Above (Below) Standard
Kindergarten Classroom	813	1,200	(387)						
"Regular" Classroom	721	900	(179)	704	900	(196)	651	900	(249)
Science Classroom		1,000		891	1,000	(109)	794	1,200	(406)

- Instructional Material Storage: Smaller classrooms limit the amount and type of storage. In many cases (especially at the elementary level) already small classrooms are somewhat cluttered with materials creating a potential source of distraction and further congestion.
- Flexibility of Instructional Group Sizes: An issue common to all schools is the lack of variation in instructional spaces. Classrooms designed for approximately 25 students are the norm with little, if any, variation from that model. For example, spaces for smaller (4-8 students) or larger (45-60 student) are very limited.
- Collaborative Space: Intentionally designed areas for student collaboration are extremely few but do exist (i.e. commons at Hastings). In some cases students are sent to the hallway for this function and some libraries are support this function (and in some cases like Jones Middle School, the library is the only place this can happen). As the support of collaboration is a primary Guiding Principle serious consideration should be given to the creation of these spaces.
- Student Furniture: In many cases student furniture is dated, in some cases in poor condition, and not designed to support collaboration, flexibility or current ergonomic standards.
- Acoustics: Many instructional spaces are served with unit ventilators (mechanical system most often attached to the exterior wall). As the fans of this type of system reside in the unit and therefore in the classroom, noise during unit operation can be an issue. Best practices around acoustics for classroom would warrant consideration of other systems that offer better acoustical properties (and greater energy efficiency).
- Daylighting: Research points toward the positive educational benefits of learning environments which use proper daylighting. While many classrooms in the district do have reasonable daylighting there are many instances of "buried" classrooms (not access to an exterior wall for daylight) and other cases (the high school) where what were once continuous windows were replace with single "punched" window openings thereby reducing the amount of daylight.
- Community Use: Upper Arlington schools are used extensively after normal school hours by UA residents (mainly around athletics) and this use is consistent with an established Guiding Principal. UA elementary schools are generally configured – through the use of gates - to allow reasonable segregation of gyms from other spaces or evening and weekend use. UA middle schools both have major public functions contained within the mass of the building and surrounded by other spaces. Both theaters, for instance, are internalized spaces creating access control issues to other portions of the building. While UAHS can segregate the theater and main gym from other parts of the building, this is done through the manipulation of numerous gates which themselves pose issues.

- Security: Building security, a Guiding Principal added by the community via Community Engagement Session #1, is a critical issue for any school. All UA schools currently have access control via electronic locks and cameras at the main school entry. Best practices around access control for school buildings places the main administrative office adjacent to the school's main entry and linked together with a secure vestibule. Secure vestibules allow the school to operationally contain visitors within the vestibule while identity and intent are established. Hastings and UAHS have this arrangement (Tremont will have it via a future addition/renovation). The balance of the schools rely on the electronic lock and camera arrangement.
- Technology: Recent upgrades in bandwidth and access points have situated all UA schools with a rather robust technology infrastructure. This will be especially critical as one-to-one technology integration happens.

### School Sites

- Context: Given the developed age of the Upper Arlington community most schools are surrounded primarily by single-family and in some cases multi-family housing.
- Size: Select school sites are somewhat constricted in size creating limited opportunities for outdoor learning areas (beyond playgrounds and playfields). However, a number of school sites (Burbank, Greensview, Tremont and Hastings) enjoy access to adjacent parks allowing providing more open green space and the potential for enhanced outdoor activities.
- Size: Several school sites (i.e. Jones and UAHS) are very constricted in size posing challenges for further building expansions and in the case of UAHS presenting equity issues with playfields.
- Traffic: While there are exceptions, in many cases parent and bus drop-off/pick-up take place in the street at curb-side, sometimes in traffic "lay-bys" (recessed curb areas that permit vehicles to pull to the side out of active traffic lanes). Many schools report traffic "challenges" surrounding drop-off and pick-up functions.
  - Although on-street drop-off and pick-up is not uncommon for schools on more constricted sites, ideally, this would be fully contained on the school site as this is the safest way to perform this function and the least inhibiting for traffic patterns. However, providing this capacity would require the elimination of valuable green space, playfields, or parking areas.
- Parking: Parking is generally limited with most schools requiring some faculty to park on residential streets. Event parking often overflows into surrounding neighborhoods.
- Accessibility: While most sites have accessible routes some school sites do present accessibility challenges for handicapped individuals.
- Storm Water: Select schools report storm water drainage issues that can and have impacted instruction through ponding water (reduced available space for PE) and in some cases buildings take on water during heavier storm events.

As the process moves into Phase Two, The Options Phase, it will be necessary to bear in mind the findings of both the physical adequacy surveys and the educational adequacy surveys for all schools. In this next phase these assessments along with input from the community at-large and particularly the Building Teams will inform the individualized solutions for each campus.

END OF EXECUTIVE SUMMARY

# UPPER ARLINGTON SCHOOLS

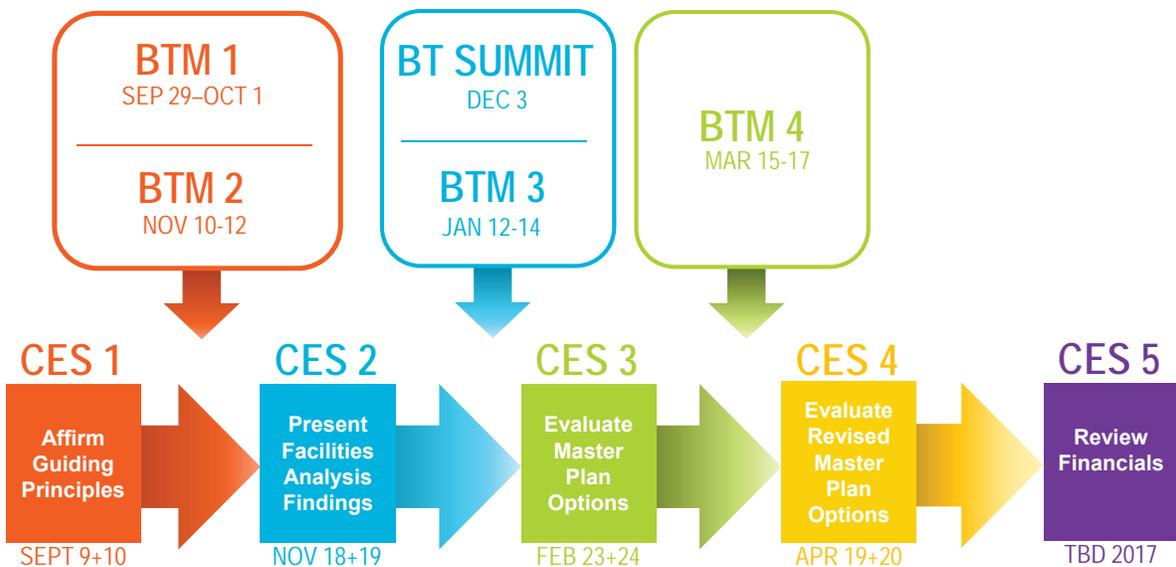
## Appendix Report to Board of Education Educational Adequacy Assessments

DECEMBER 8, 2015



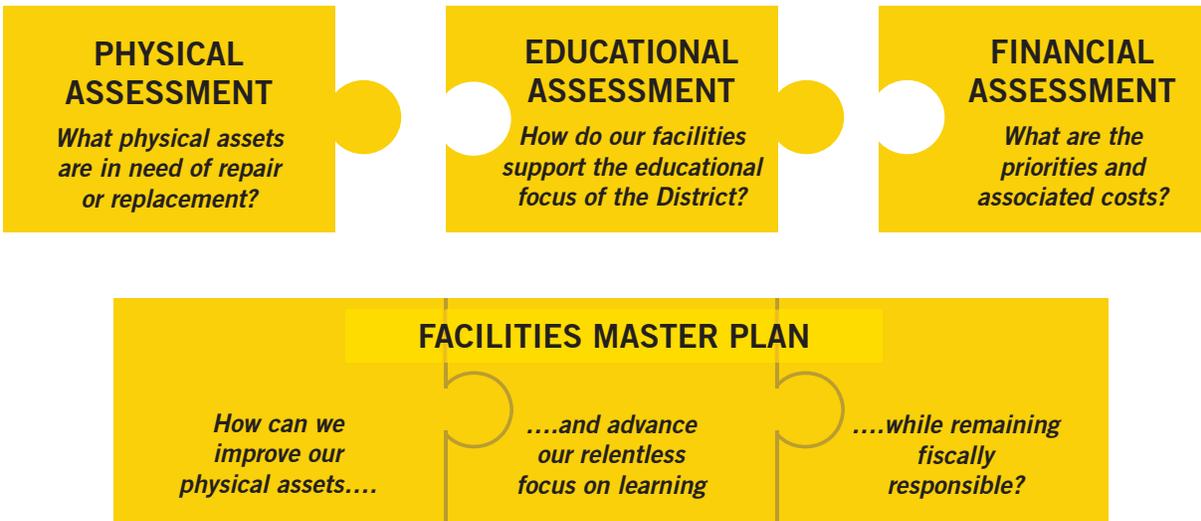
MOODY NOLAN | PERKINS+WILL | HILLIARD JEANE

### OUR PROGRESS



## WHAT IS A FACILITIES MASTER PLAN?

Master Planning Process



## GUIDING PRINCIPLES

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- Promote the continued importance of service learning
- Support extracurricular activities and athletics
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## GUIDING PRINCIPLES

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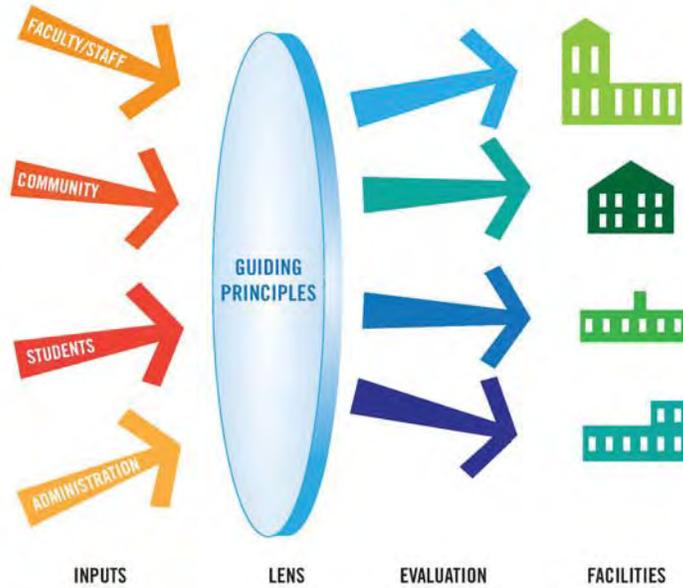
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## WHAT IS A FACILITIES MASTER PLAN?

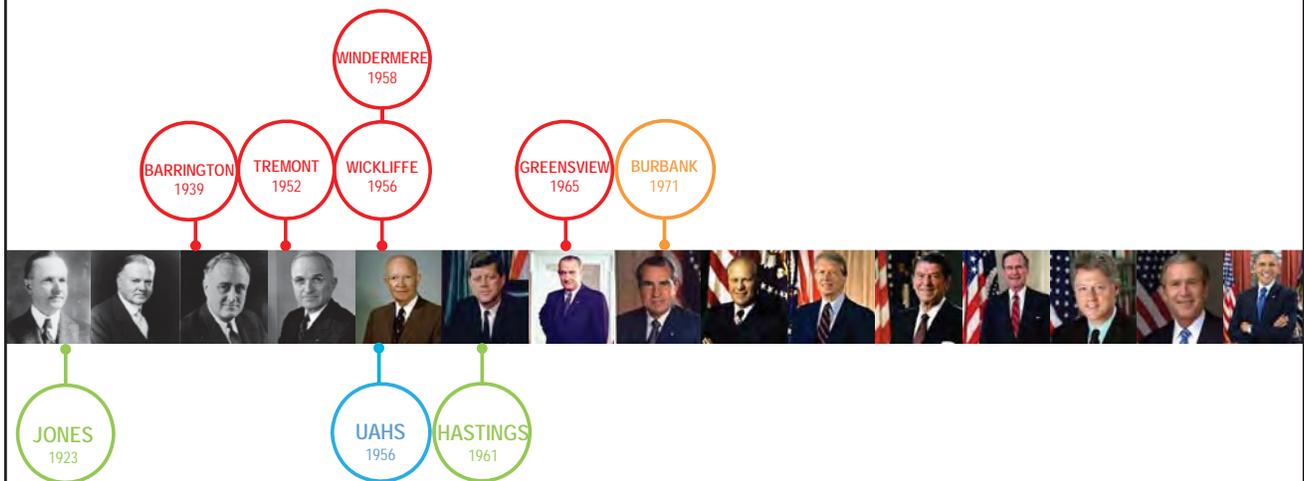
Guiding Principles



## FACILITY AGE

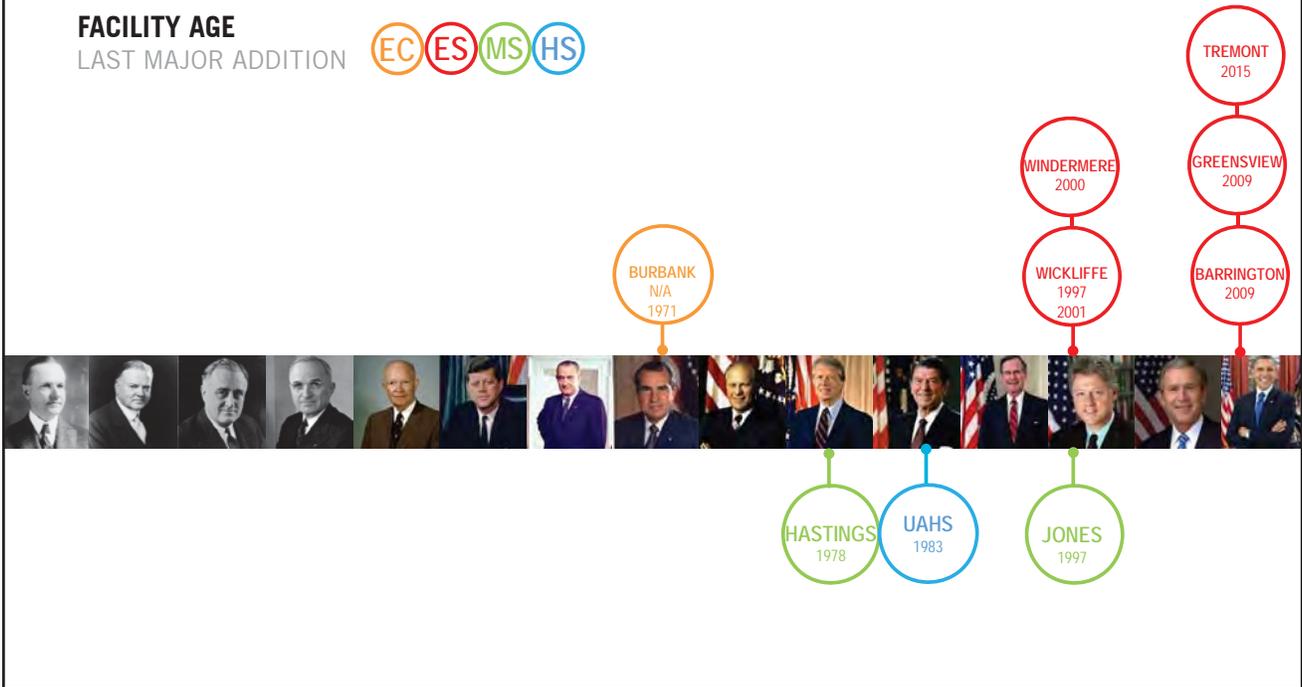
ORIGINAL BUILDING

EC ES MS HS



## FACILITY AGE

LAST MAJOR ADDITION



## EDUCATIONAL ASSESSMENT

How did we do it?



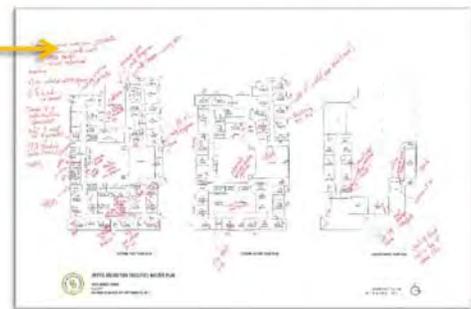
Student Focus Groups

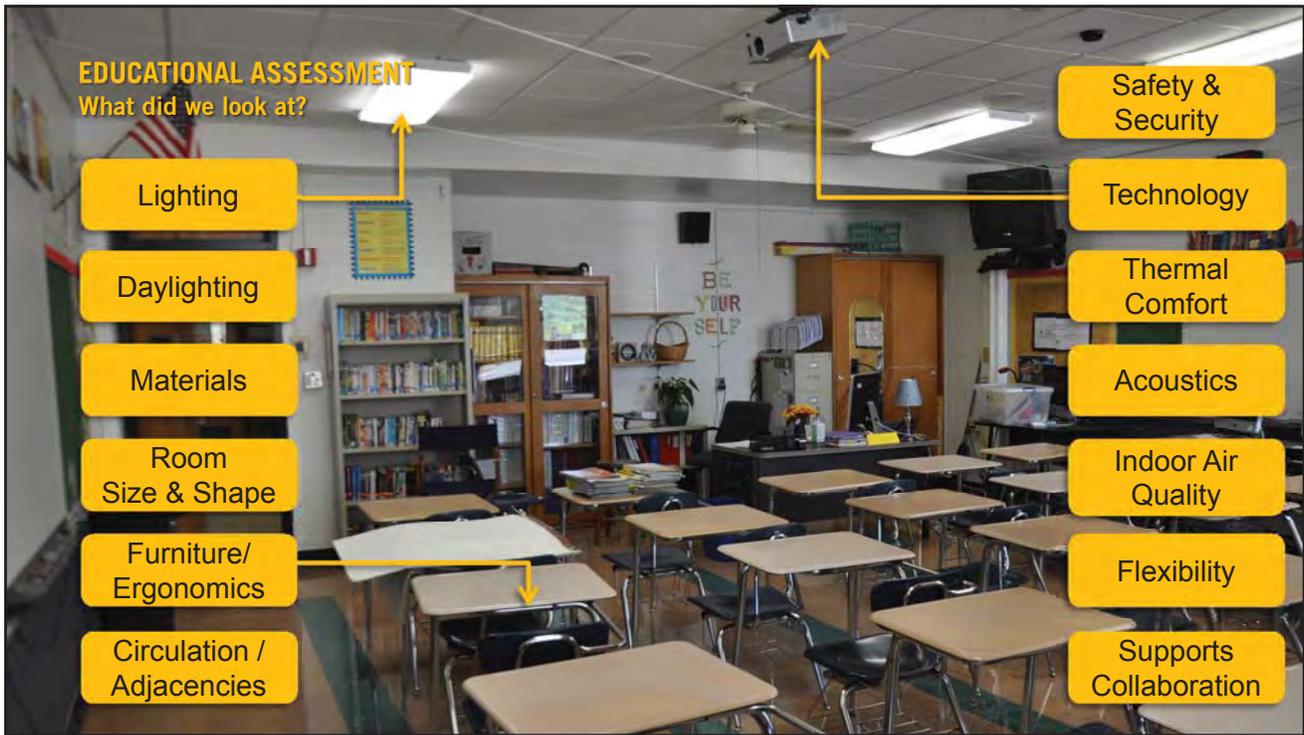


Building Team Meetings

Principal Meetings + Site Visits

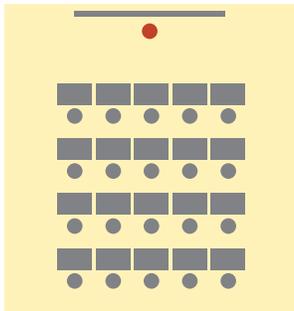
A handwritten table with columns for 'Academics & Other Issues' and rows for various assessment items. The table contains numerical data and handwritten notes in red ink.





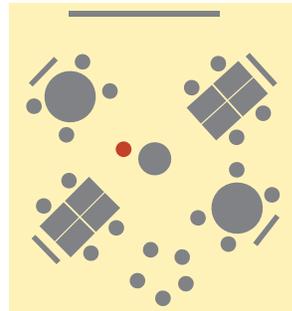
## TODAY'S CLASSROOM

FLEXIBLE / AGILE / ACTIVE



### 20<sup>th</sup> Century

- Teacher-centered
- Passive learning
- Organized by age/subject
- Rote memorization
- Industrial efficiency



### 21<sup>st</sup> Century

- Student-centered
- Active learning
- Multi-age learning communities
- Project based and experiential
- Students not tied to fixed location

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**TODAY'S CLASSROOM**

FLEXIBLE / AGILE / ACTIVE

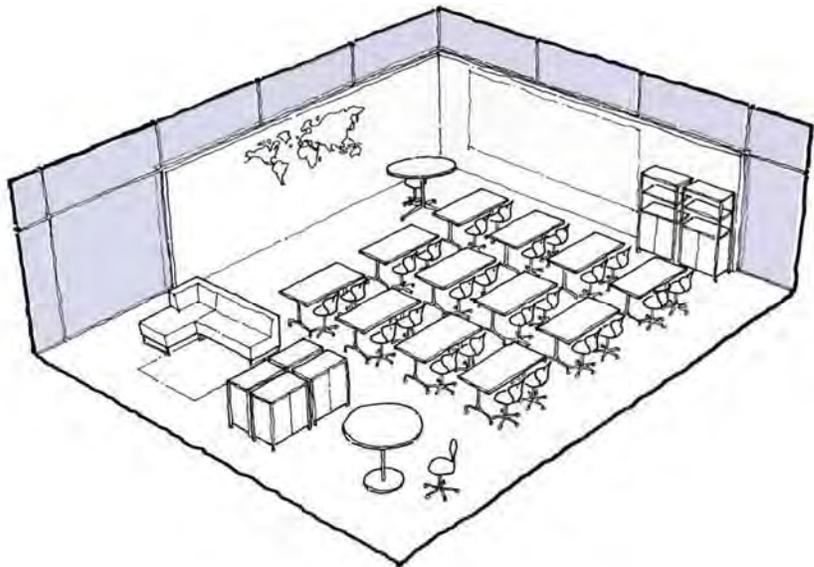
*adaptable*



**TODAY'S CLASSROOM**

FLEXIBLE / AGILE / ACTIVE

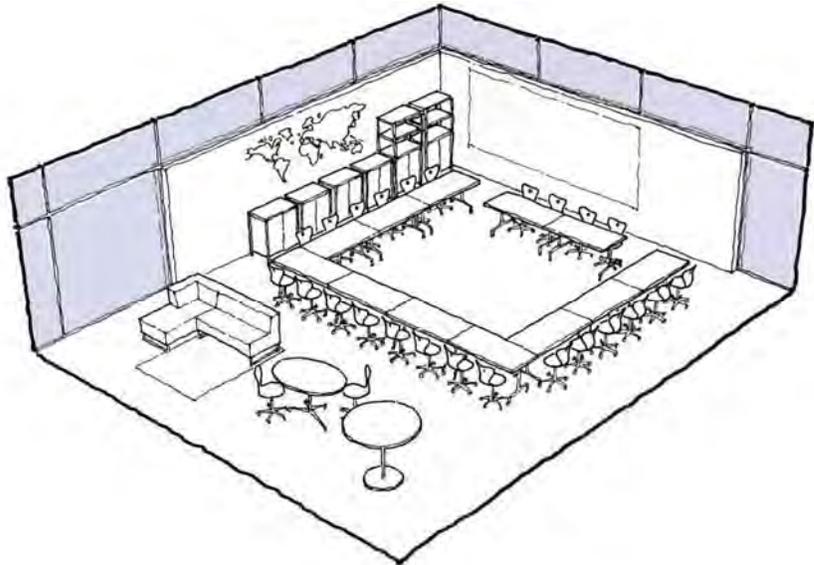
*traditional lecture*



**TODAY'S CLASSROOM**

FLEXIBLE / AGILE / ACTIVE

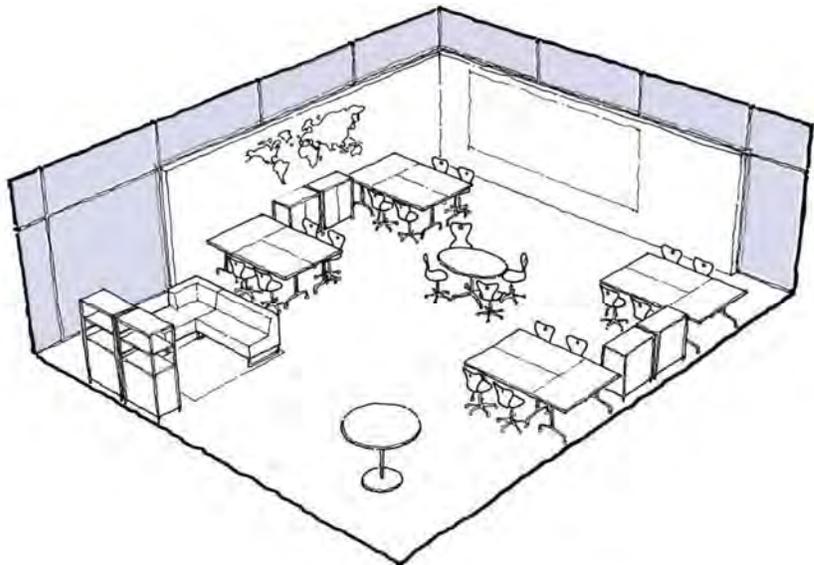
*seminar*



**TODAY'S CLASSROOM**

FLEXIBLE / AGILE / ACTIVE

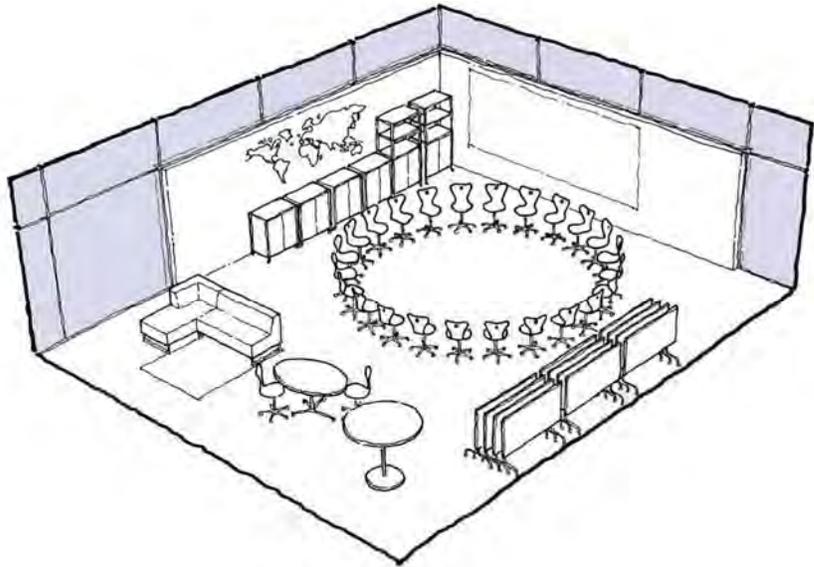
*project teams*



## TODAY'S CLASSROOM

FLEXIBLE / AGILE / ACTIVE

*group discussions*



## SQUARE FEET PER STUDENT

	CURRENT ENROLLMENT	CURRENT SF/STUDENT	10 YEAR PROJECTION <sup>1</sup>	10 YEAR SF/STUDENT
BURBANK	215	177 SF	N/A	N/A
BARRINGTON	758	112 SF	887	96 SF
GREENSVIEW	418	115 SF	526	91 SF
TREMONT	598	133 SF*	749	106 SF
WICKLIFFE	508	100 SF	589	86 SF
WINDERMERE	407	135 SF	494	111 SF

<sup>1</sup> Source: Upper Arlington Enrollment Projections-(November 2015)

\* With planned additions

## SQUARE FEET PER STUDENT

	CURRENT ENROLLMENT	CURRENT SF/STUDENT	10 YEAR PROJECTION <sup>1</sup>	10 YEAR SF/STUDENT
HASTINGS	701	191 SF	717	187 SF
JONES	705	186 SF	806	162 SF
UAHS	1,816	162 SF	1,947	151 SF

<sup>1</sup> Source: Upper Arlington Enrollment Projections-(November 2015)

## WHY DO TODAY'S SCHOOLS NEED MORE SPACE?

- More robust technology
- PE/Athletics provided for all students (Title IX)
- Increasing recognition of special education students
- Americans With Disabilities Act (ADA)
- Smaller class size
- Increase in programs / classes offered
- Additional pre-kindergarten and full-day kindergarten
- Additional support staff
- Change in concept of food service / cafeterias
- Space for adult and community use
- Project based learning encouraging collaboration
- Flexible furniture
- Flexible space

Source: School Planning & Management  
(July 2010)





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## SUMMARY - BURBANK EARLY CHILDHOOD SCHOOL

Burbank Early Childhood School was constructed in 1971. The building was originally built as an elementary school but was converted to an early childhood school in 1983. It currently serves 215 pre-kindergarten and kindergarten students ages 3-5. The kindergarten program is currently a half day program, potentially changing to all day in the future. The building also contains the district offices for the SACC (School-Age Child Care) program and Intervention Services, as well as some district conference rooms and storage functions. The 37,997 square foot building has not had any building additions and is currently 44 years old.

### MAJOR CHALLENGES - BUILDING

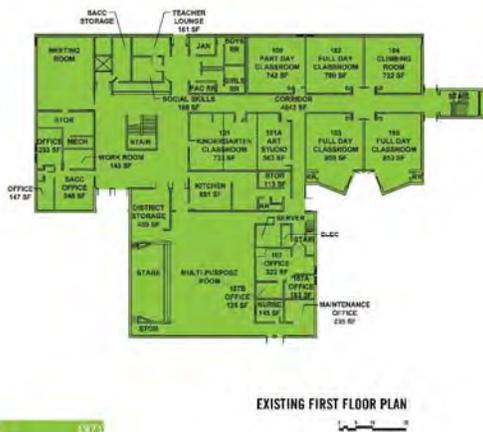
- Main administration office walls are not full height, therefore acoustics for private conversations are challenging
- Main administration is not located by parent/visitor entry
- Lack of secure vestibule entry at main entry and minimally secure parent/visitor entry (entry code is widely distributed and entry grants direct access to classroom corridor)
- Student storage/cubbies are located in corridors, minimizing circulation space
- Size of classrooms are small, not meeting current standards
- Small windows limit daylight in most classrooms, some classrooms have no direct access to natural light
- No collaborative space
- Limited therapy space
- Use of building by other district functions takes up program space for early childhood
- Size of library and art room
- Location (in multi-purpose room) and lack of toilet/cot area in nurse's office
- Size of multi-purpose room / stage in multi-purpose room is not usable for PK-K activities
- Social skills room is attached to the teacher's lounge because of required access to heating/ventilation, therefore it lacks acoustical privacy
- Size and condition of teacher lounge does not meet current standards
- Need for spaces or transparency to support observation, and important part of individual evaluations at the PK-K level
- Some ADA compliance challenges

### MAJOR CHALLENGES - SITE

- Secure play areas (not fenced)
- Groups utilizing adjacent play fields use toilets inside the school. Outdoor restroom access would better maintain security.

# BURBANK EARLY CHILDHOOD

## BURBANK EARLY CHILDHOOD CHRONOLOGY DIAGRAM



## **BURBANK EARLY CHILDHOOD**

### SUMMARY

GRADES: PS / PK / K

HEIGHT: TWO STORIES

SITE SIZE: 10.14 ACRES

BUILDING SIZE: 37,997 SF

NUMBER OF STUDENTS: 215

SF/STUDENT: 177 SF

## **BURBANK EARLY CHILDHOOD**

### MAJOR CHALLENGES

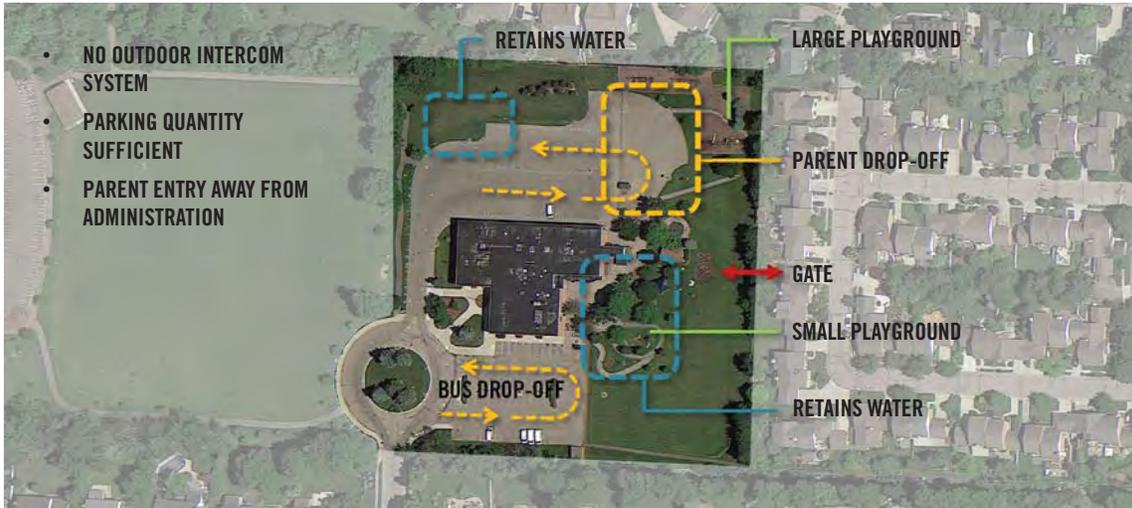
#### BUILDING:

- MAIN ADMINISTRATION LOCATION AND ACOUSTICS
- LACK OF SECURE VESTIBULE ENTRY AND SECURE PARENT ENTRY
- STUDENT STORAGE IN CORRIDORS
- SIZE OF CLASSROOMS
- LIMITED / NO DAYLIGHT IN CLASSROOMS
- NO COLLABORATIVE SPACE
- LIMITED THERAPY SPACE
- USE OF BUILDING BY OTHER DISTRICT FUNCTIONS TAKES UP PROGRAM SPACE FOR EARLY CHILDHOOD
- SIZE OF LIBRARY AND ART ROOM
- LOCATION / CONDITION OF NURSE'S OFFICE
- SIZE OF MPR / USE OF STAGE
- PRIVACY OF SOCIAL SKILLS ROOM
- SIZE AND CONDITION OF TEACHER LOUNGE
- NEED FOR SPACES TO SUPPORT OBSERVATION

#### SITE:

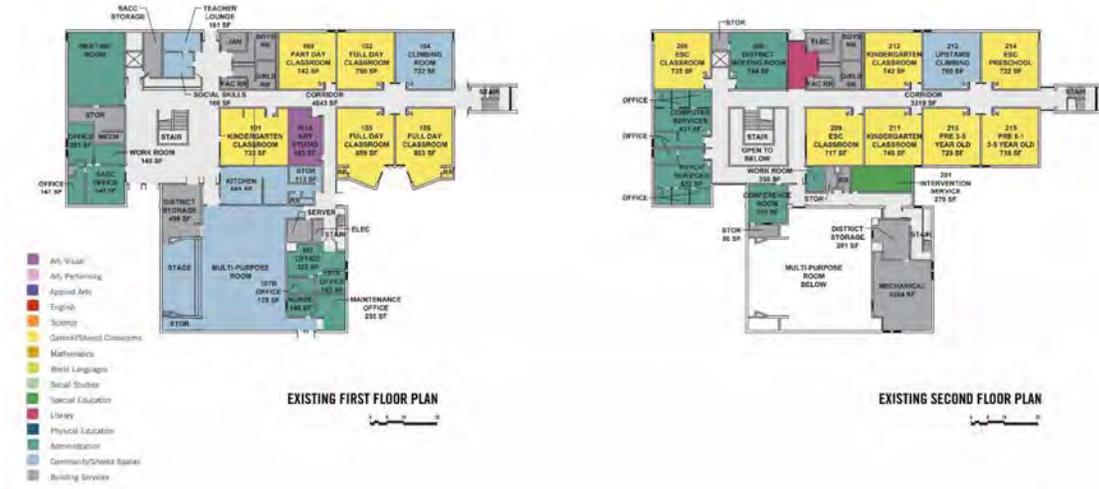
- SECURE PLAY AREAS
- OUTDOOR RESTROOM ACCESS

## BURBANK EARLY CHILDHOOD SITE DIAGRAM

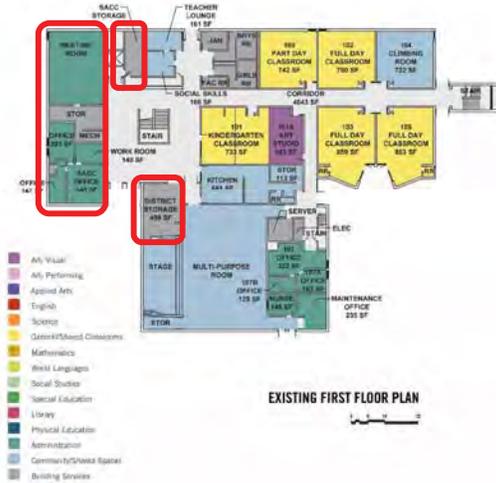


- NO OUTDOOR INTERCOM SYSTEM
- PARKING QUANTITY SUFFICIENT
- PARENT ENTRY AWAY FROM ADMINISTRATION

## BURBANK EARLY CHILDHOOD FUNCTIONAL ZONING ANALYSIS



## BURBANK EARLY CHILDHOOD NON-EARLY CHILDHOOD USE



## BURBANK EARLY CHILDHOOD LIBRARY SIZE / LOCATION



## BURBANK EARLY CHILDHOOD NURSE LOCATION

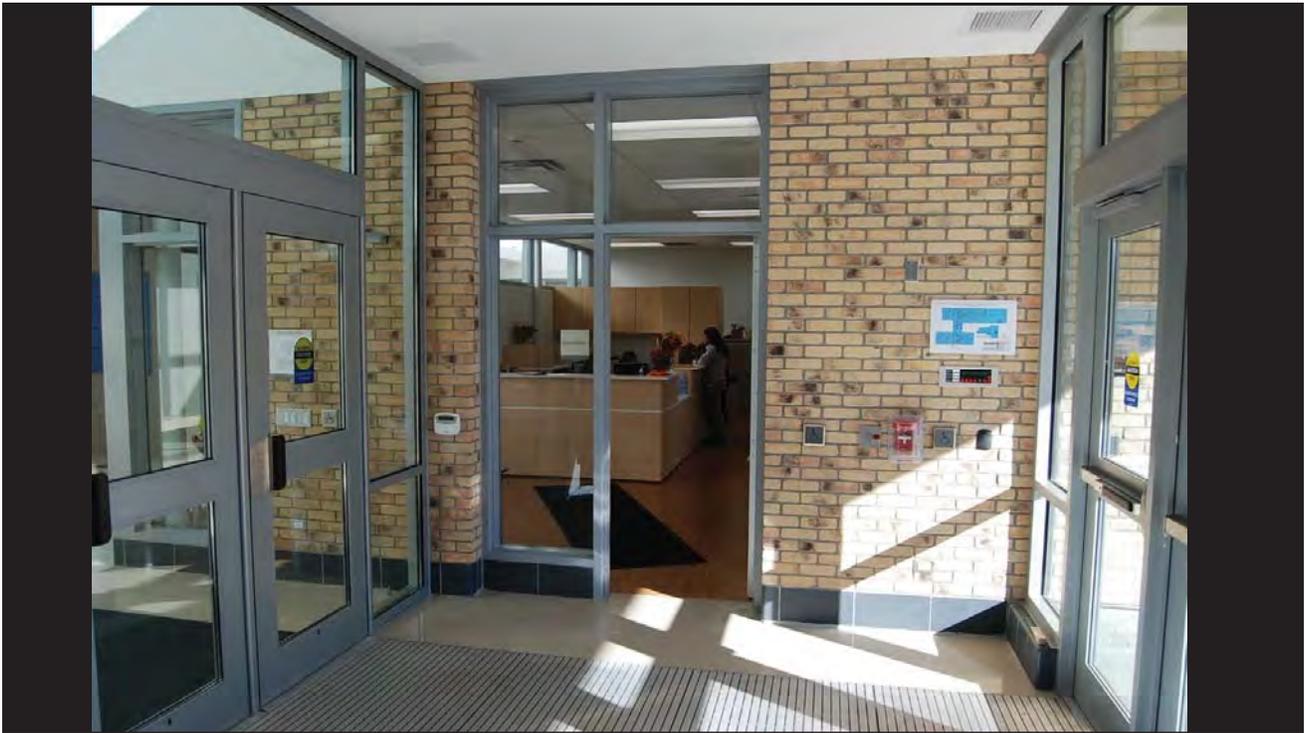
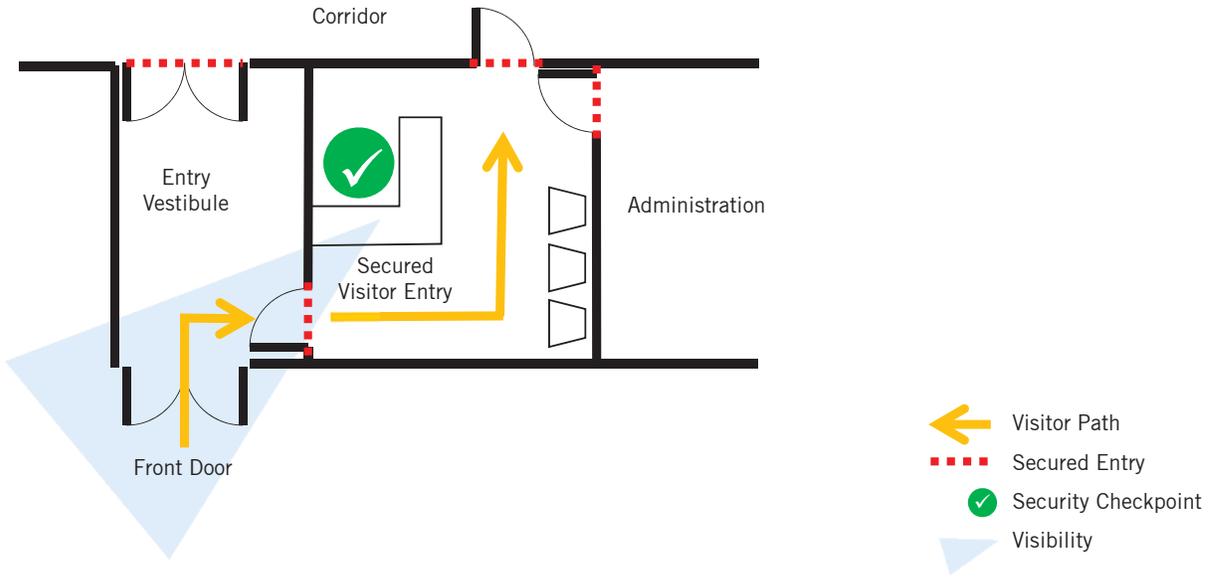


## BURBANK EARLY CHILDHOOD CLASSROOM SIZE ANALYSIS

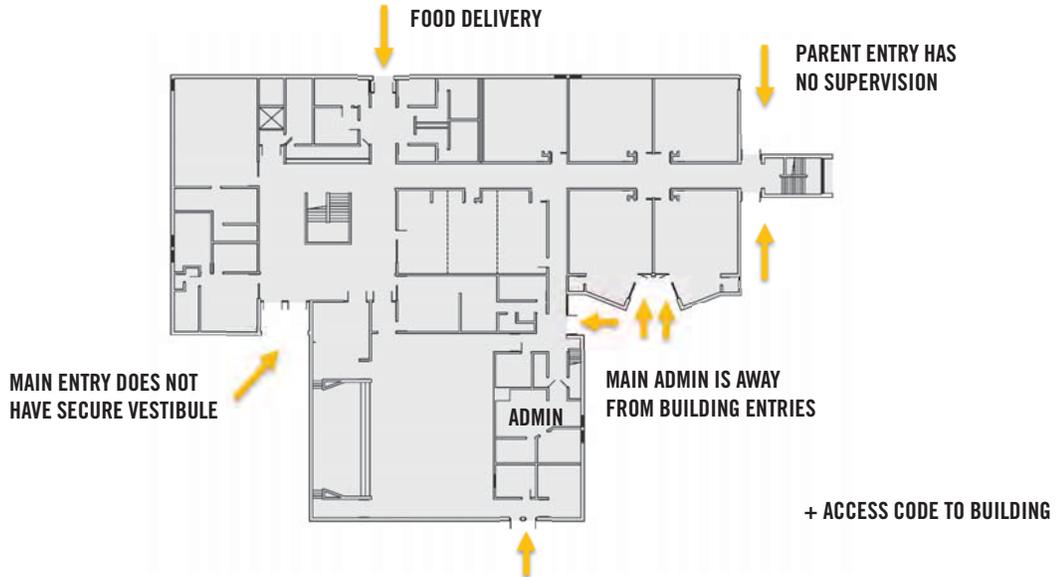


## BUILDING SECURITY

### FACILITY ENTRY - BEST PRACTICES



## BURBANK EARLY CHILDHOOD SECURITY ANALYSIS



## DAYLIGHTING BEST PRACTICES



Daylighting has been linked to **“better performance of students** – as much as 20% improvement in math and 26% in reading on standardized tests”

*(Heschong Mahone Group, 1999)*



# BURBANK EARLY CHILDHOOD

## DAYLIGHT ANALYSIS





**ACOUSTICS**  
BEST PRACTICES



**ACOUSTICS**

Noise influences children's information processing strategies and feelings of personal control  
*(Cohen & Weinstein, 1981)*



## ACOUSTICS

### BEST PRACTICES

In many classrooms . . . with normal hearing understand only 75 of the words from a list. reading a textbook every fourth word , and being expected understand the material be tested on . Sounds ridiculous? Well is exactly the facing students every in schools . .



## ACOUSTICS

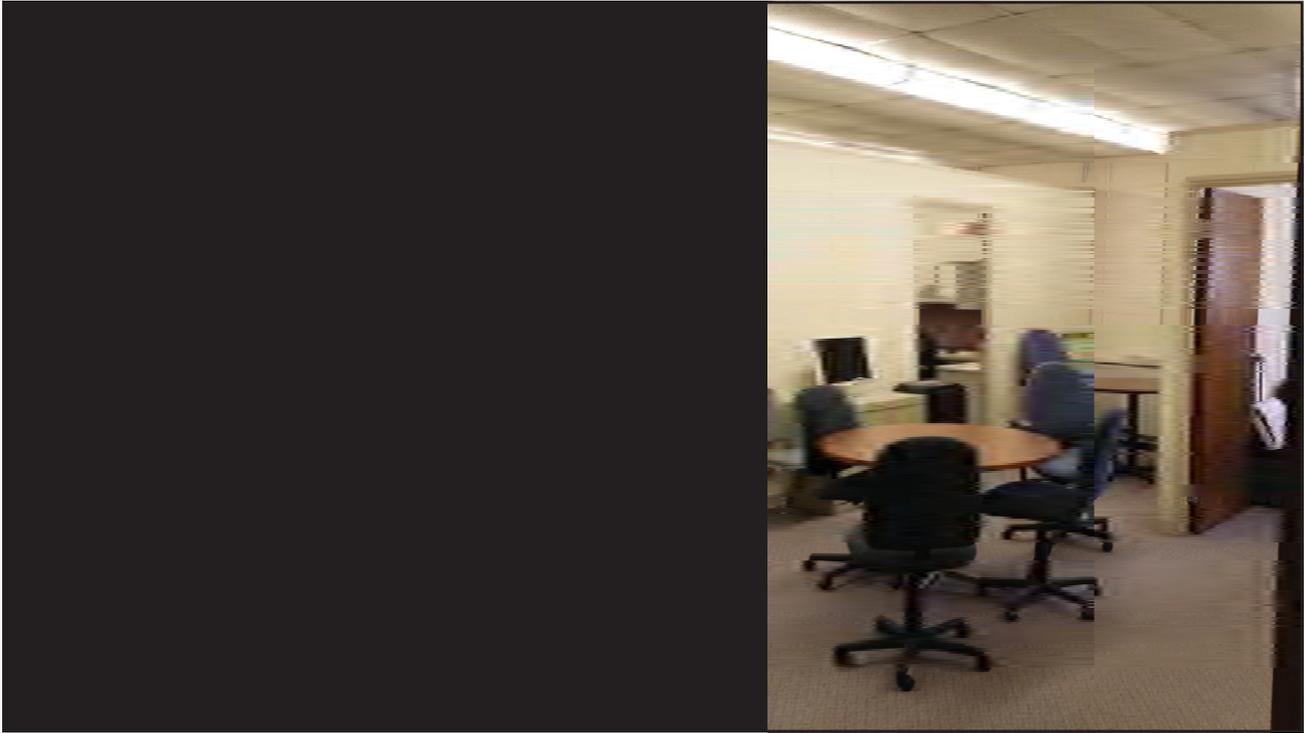
### BEST PRACTICES

In many classrooms . . . **listeners** with normal hearing **can** understand only 75 **percent** of the words **read** from a list. **Imagine** reading a textbook **with** every fourth word **missing**, and being expected **to** understand the material **and** be tested on **it**. Sounds ridiculous? Well **that** is exactly the **situation** facing students every **day** in schools . .













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## SUMMARY – BARRINGTON ELEMENTARY SCHOOL

The original Barrington Elementary School was constructed in 1939, the first elementary school for the Upper Arlington School District. It currently serves 758 students, kindergarten through fifth grade. Recent ten year enrollment projections predict up to 887 students. The kindergarten program is currently a half day program, potentially changing to all day in the future.

The 85,062 square foot building has had many building additions over the years in 1949, 1958 and most recently in 2009. The most recent addition accommodated population growth by renovating some existing spaces, adding a new gym, and connecting the “pod” classrooms to the main building by enclosing circulation and adding a new media center. The original building is seventy-six years old, while the latest addition is six years old.

### MAJOR CHALLENGES - BUILDING

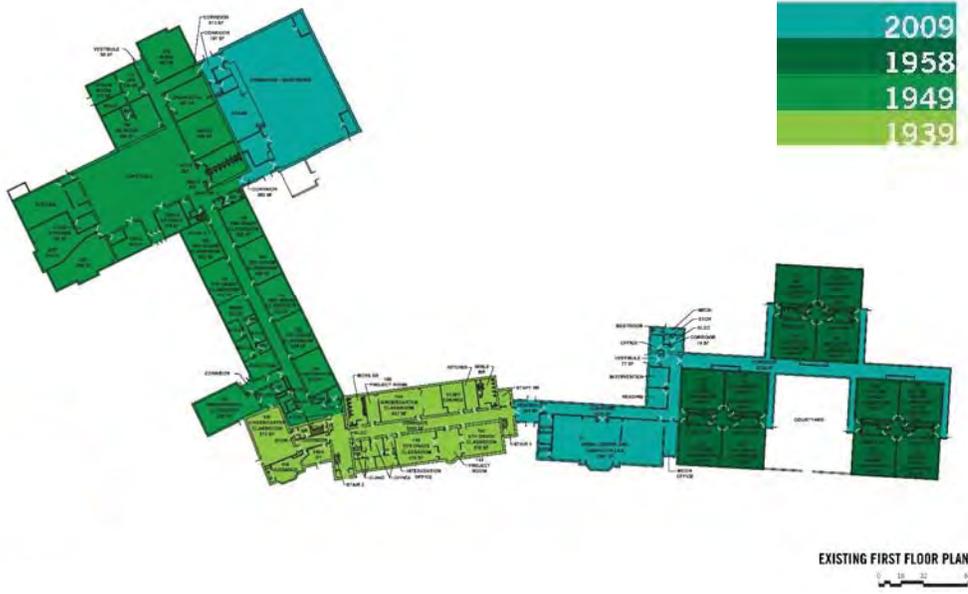
- Lack of secure entry vestibule – visitors are not contained to “check-in” after being granted entry
- Size of classrooms are small, not meeting current standards
- Disparity of project rooms – some classrooms have them and some do not
- Lack of collaborative space
- Narrow interior circulation
- Long corridors increase travel time to shared spaces
- Food service configuration increases time to get food
- Disjointed support office locations
- Special education MD room is not centrally located
- Some special education rooms are too small, not meeting current standards
- Library configuration does not support collaboration
- Many ADA compliance challenges

### MAJOR CHALLENGES - SITE

- Not enough parking for staff
- Challenging pick-up and drop-off due to limited on-site vehicle circulation
- Limited engaging play areas or different types of learner
- Lack of clear main entry - entry has moved from original location due to building growth over time
- There are some unpaved pathways where pedestrian drop-off occurs

# BARRINGTON ELEMENTARY SCHOOL

## BARRINGTON ELEMENTARY SCHOOL CHRONOLOGY DIAGRAM



## **BARRINGTON ELEMENTARY SCHOOL**

### SUMMARY

GRADES: K-5

HEIGHT: TWO STORIES

SITE SIZE: 8.70 ACRES

BUILDING SIZE: 85,062 SF

NUMBER OF STUDENTS: 758

CURRENT SF/STUDENT: 112 SF

10 YEAR ENROLLMENT  
PROJECTION: 887

10 YEAR SF/ STUDENT: 96

## **BARRINGTON ELEMENTARY SCHOOL**

### MAJOR CHALLENGES

#### BUILDING:

- LACK OF SECURE ENTRY VESTIBULE
- SIZE OF CLASSROOMS
- DISPARITY OF PROJECT ROOMS
- LACK OF COLLABORATIVE SPACE
- NARROW INTERIOR CIRCULATION
- LONG CORRIDORS / TRAVEL TIME TO SHARED SPACES
- FOOD SERVICE CONFIGURATION INCREASES TIME TO GET FOOD
- DISJOINTED SUPPORT OFFICE LOCATIONS
- SP ED - MD ROOM FEELS ISOLATED, SOME SP ED ROOMS ARE TOO SMALL
- LIBRARY CONFIGURATION DOES NOT SUPPORT COLLABORATION

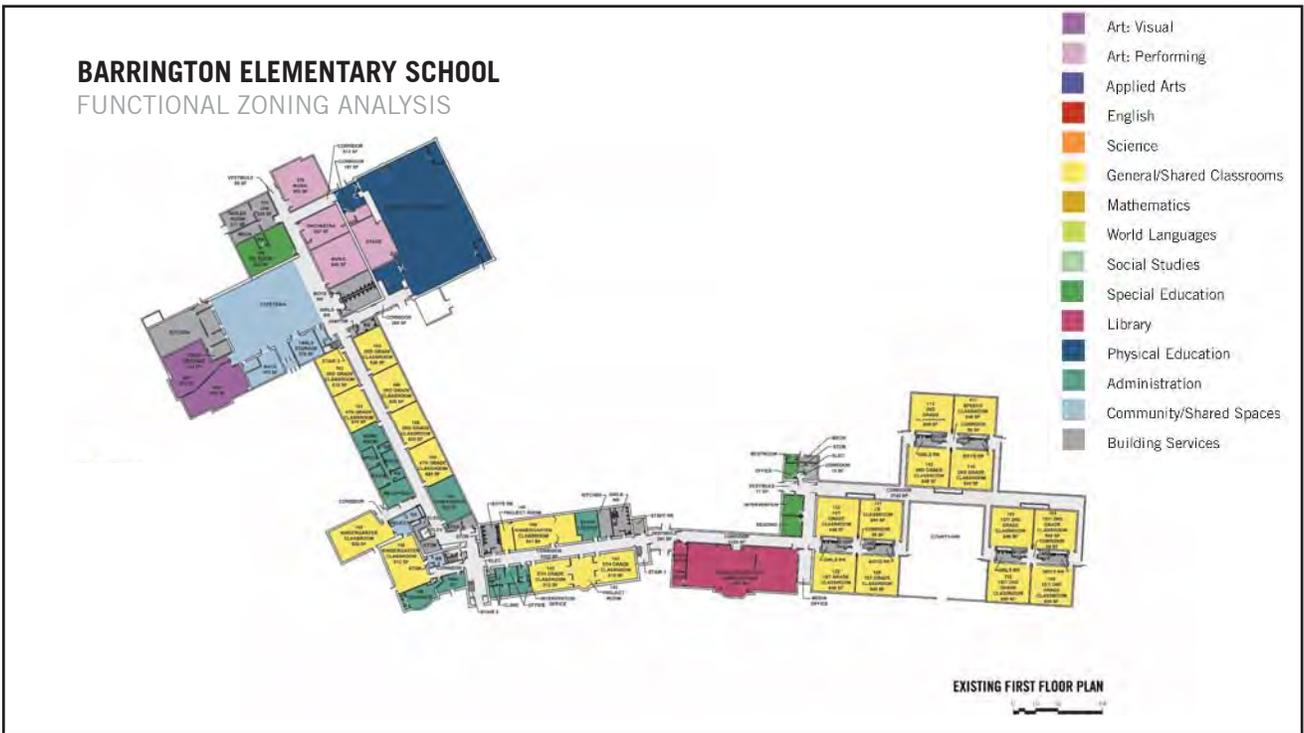
#### SITE:

- NOT ENOUGH PARKING FOR STAFF
- CHALLENGING PICK-UP AND DROP-OFF
- LIMITED ENGAGING PLAY AREAS
- LACK OF CLEAR MAIN ENTRY
- UNPAVED PATHWAYS FOR PEDESTRIAN DROP-OFF

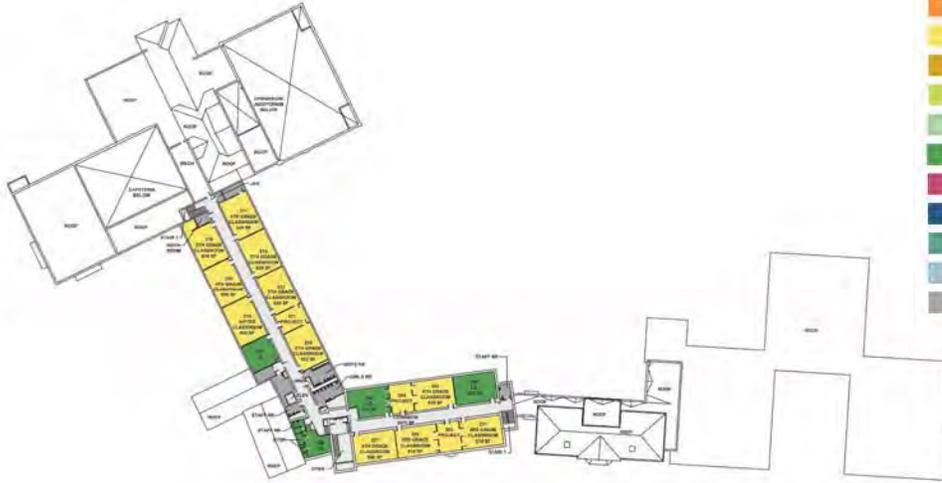
**BARRINGTON ELEMENTARY SCHOOL**  
SITE DIAGRAM





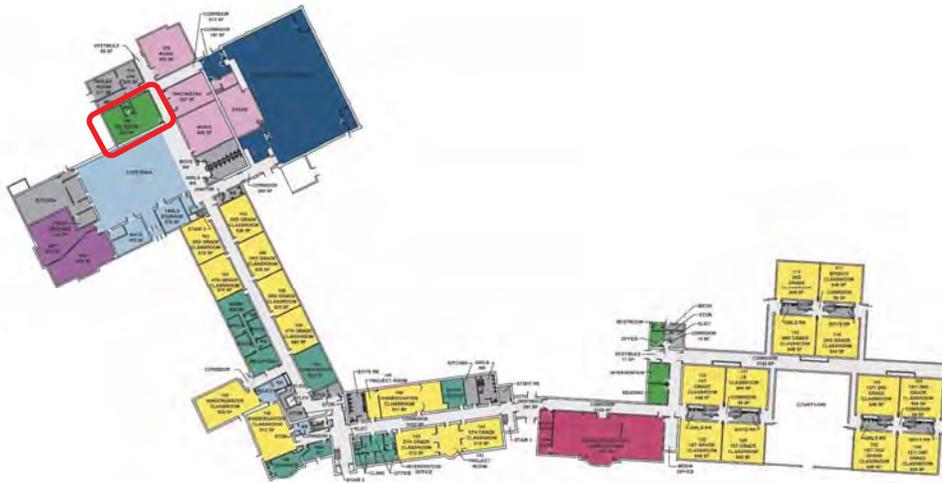


**BARRINGTON ELEMENTARY SCHOOL**  
FUNCTIONAL ZONING ANALYSIS



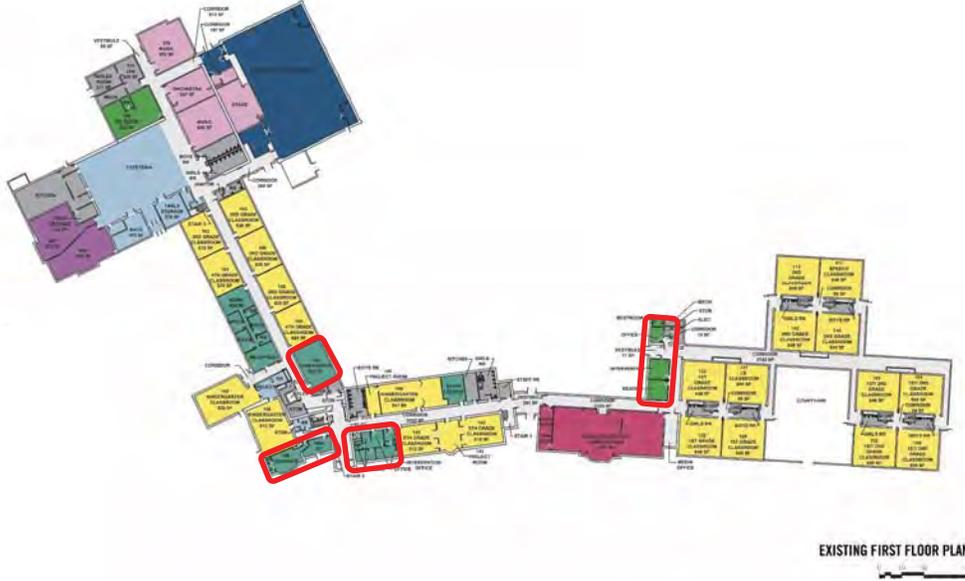
EXISTING SECOND FLOOR PLAN

**BARRINGTON ELEMENTARY SCHOOL**  
LOCATION OF MH ROOM

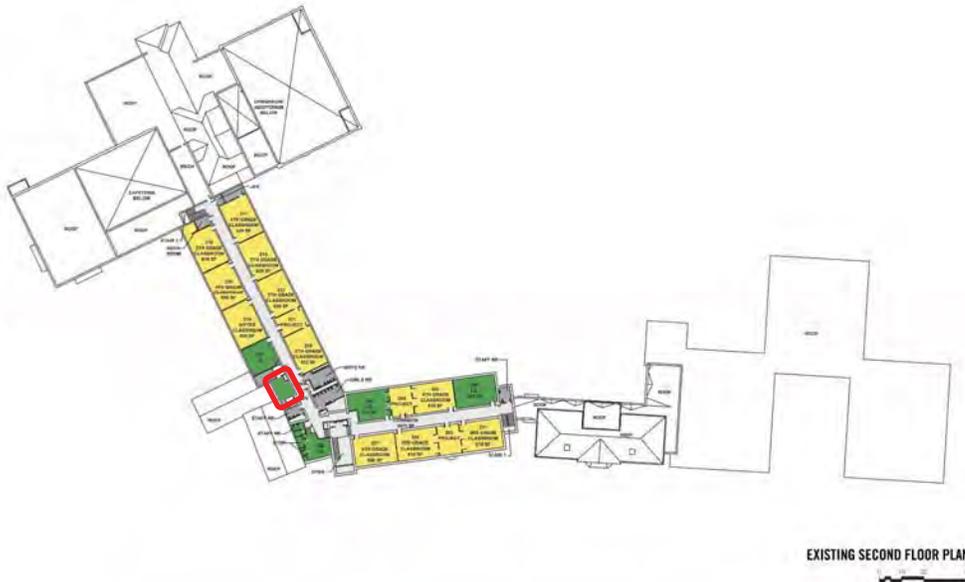


EXISTING FIRST FLOOR PLAN

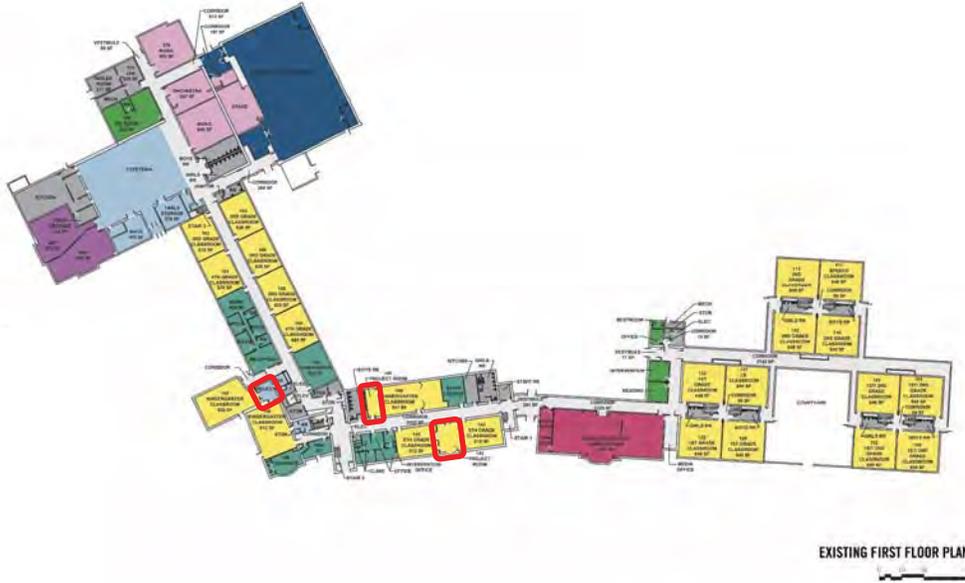
**BARRINGTON ELEMENTARY SCHOOL**  
LOCATION OF SUPPORT OFFICES



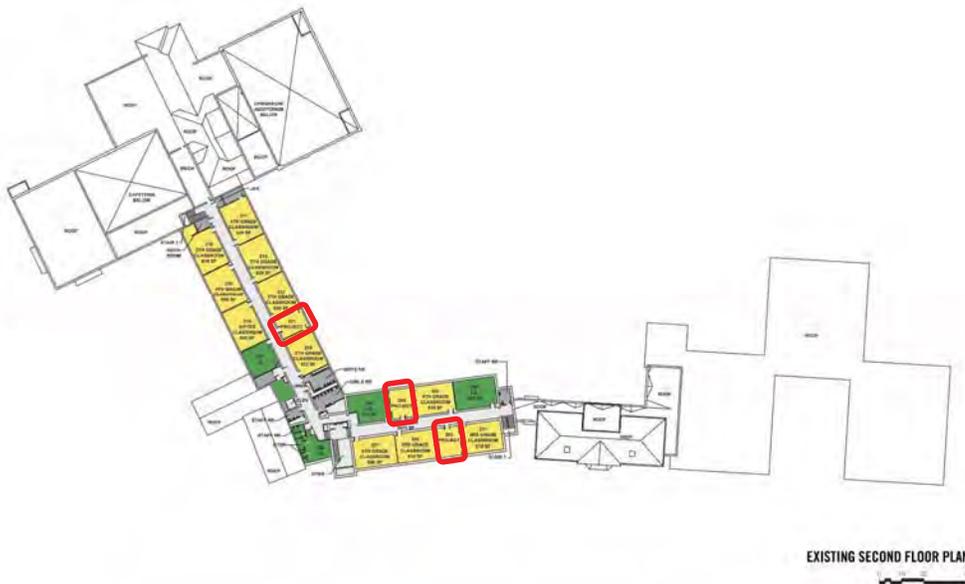
**BARRINGTON ELEMENTARY SCHOOL**  
LOCATION OF SUPPORT OFFICES



**BARRINGTON ELEMENTARY SCHOOL**  
DISPARATE PROJECT ROOMS

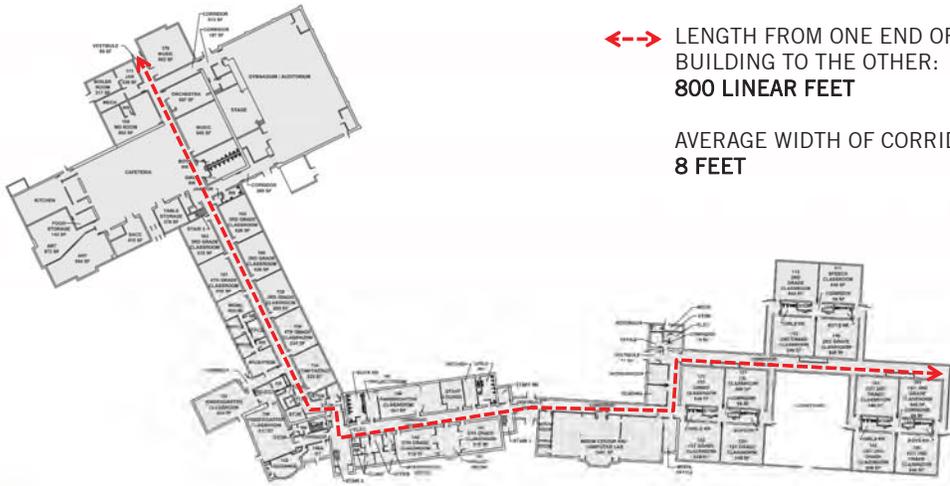


**BARRINGTON ELEMENTARY SCHOOL**  
DISPARATE PROJECT ROOMS





**BARRINGTON ELEMENTARY SCHOOL**  
CIRCULATION ANALYSIS

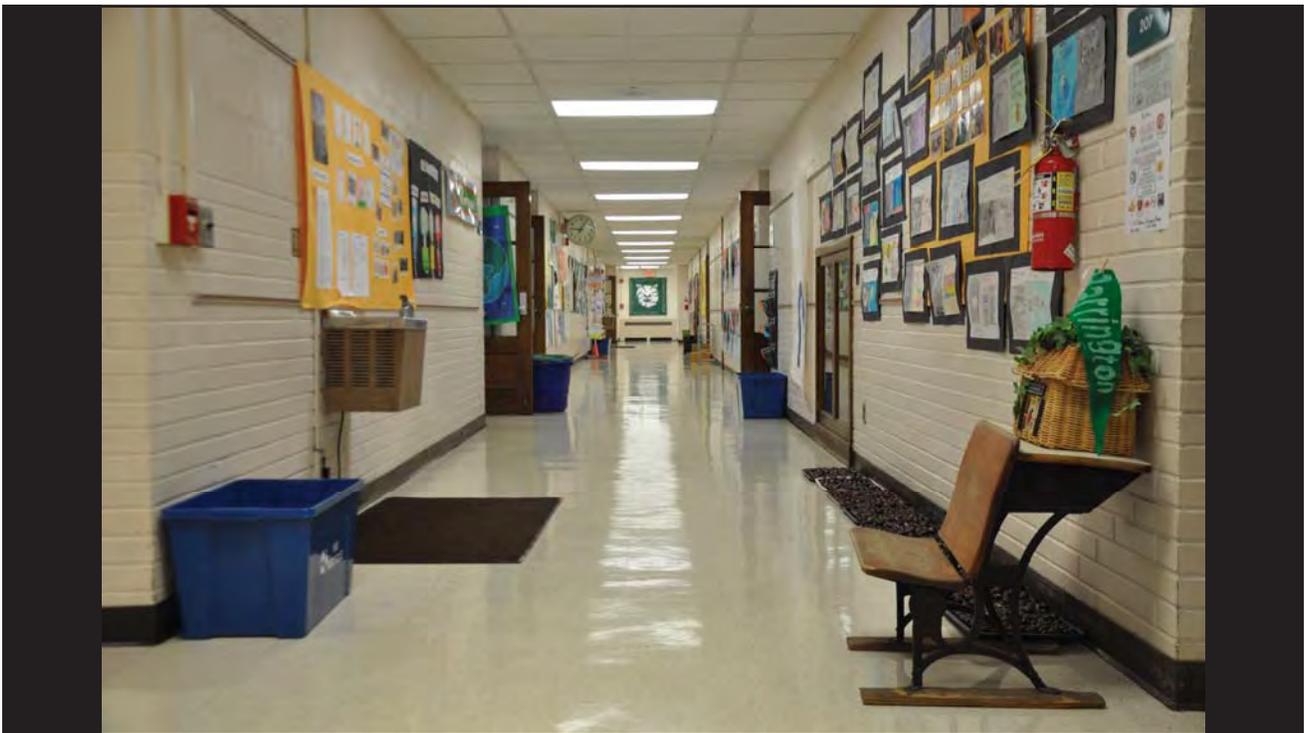
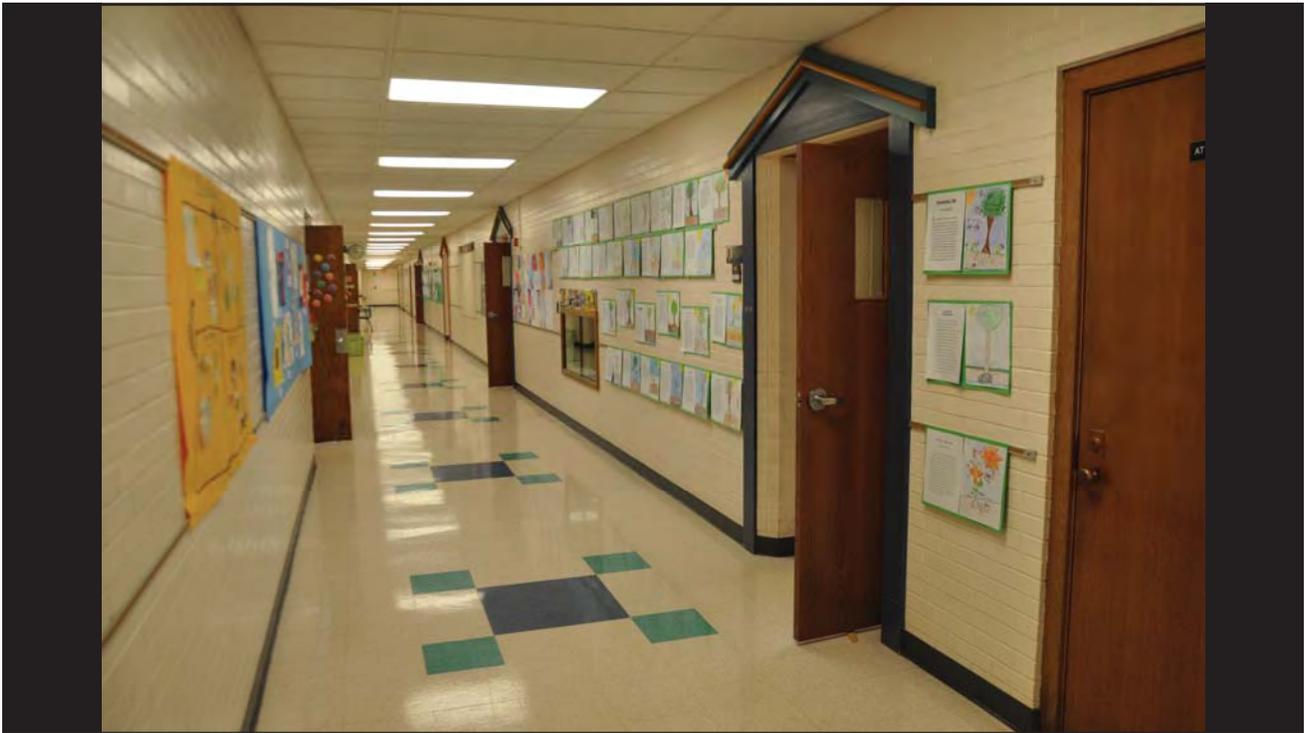


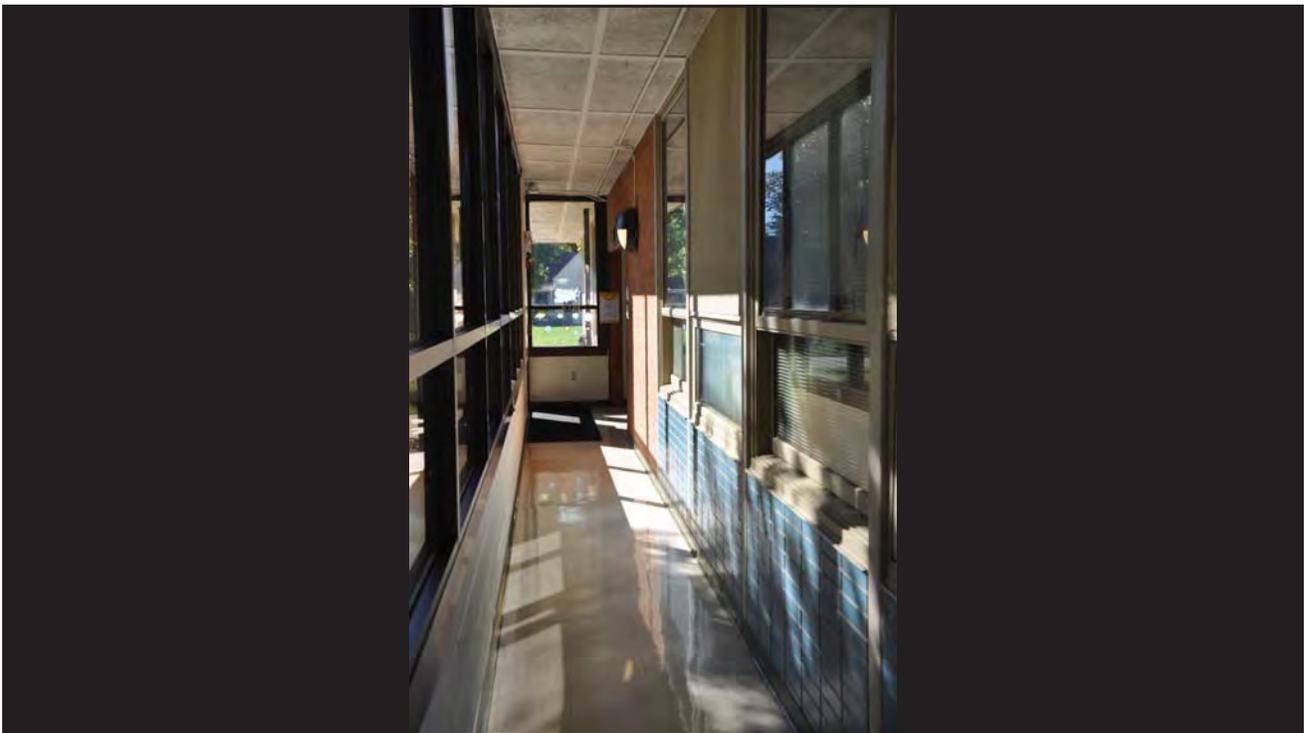
↔ LENGTH FROM ONE END OF THE BUILDING TO THE OTHER:  
**800 LINEAR FEET**

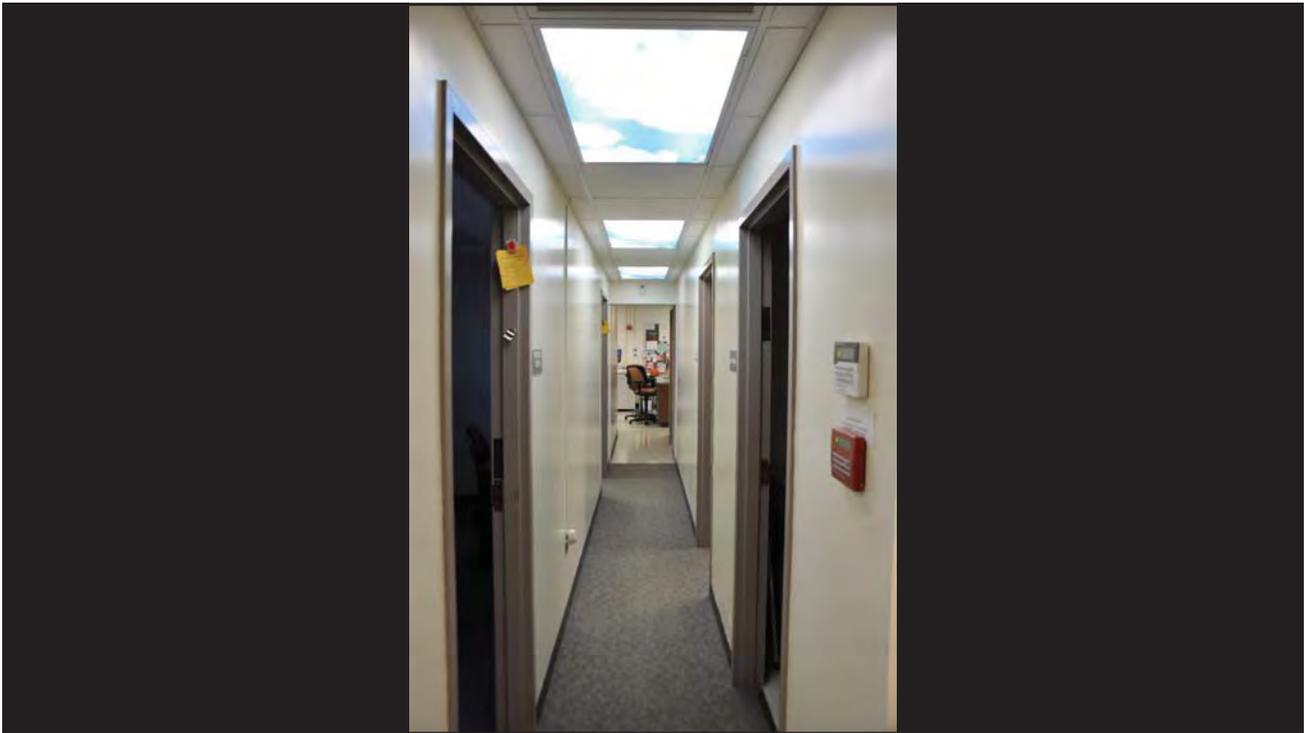
AVERAGE WIDTH OF CORRIDOR:  
**8 FEET**

EXISTING FIRST FLOOR PLAN

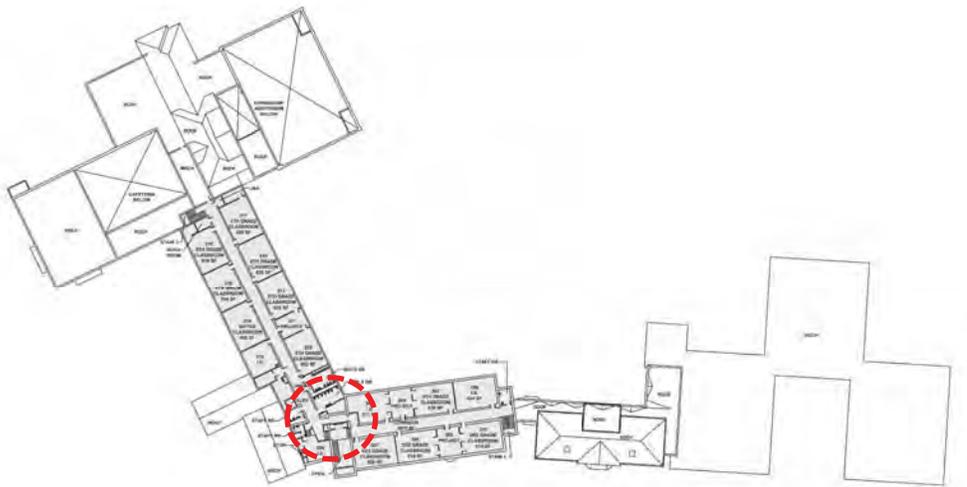




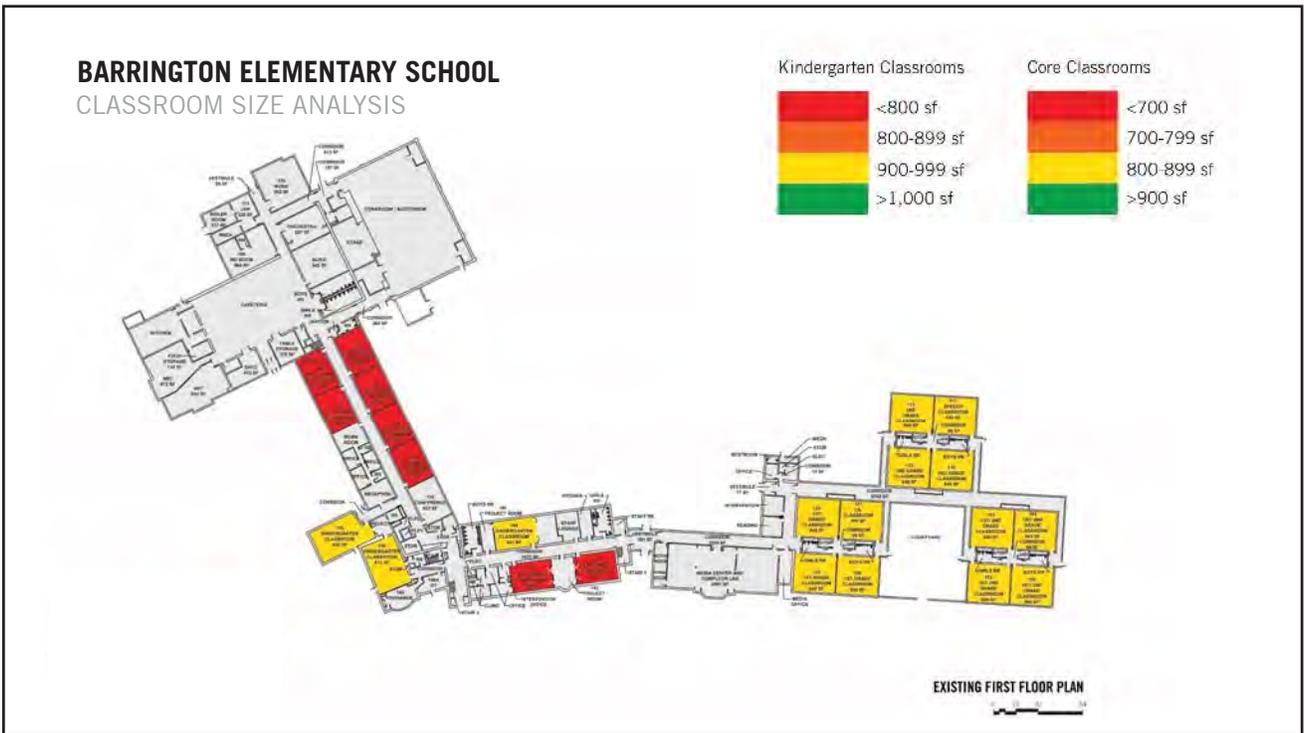
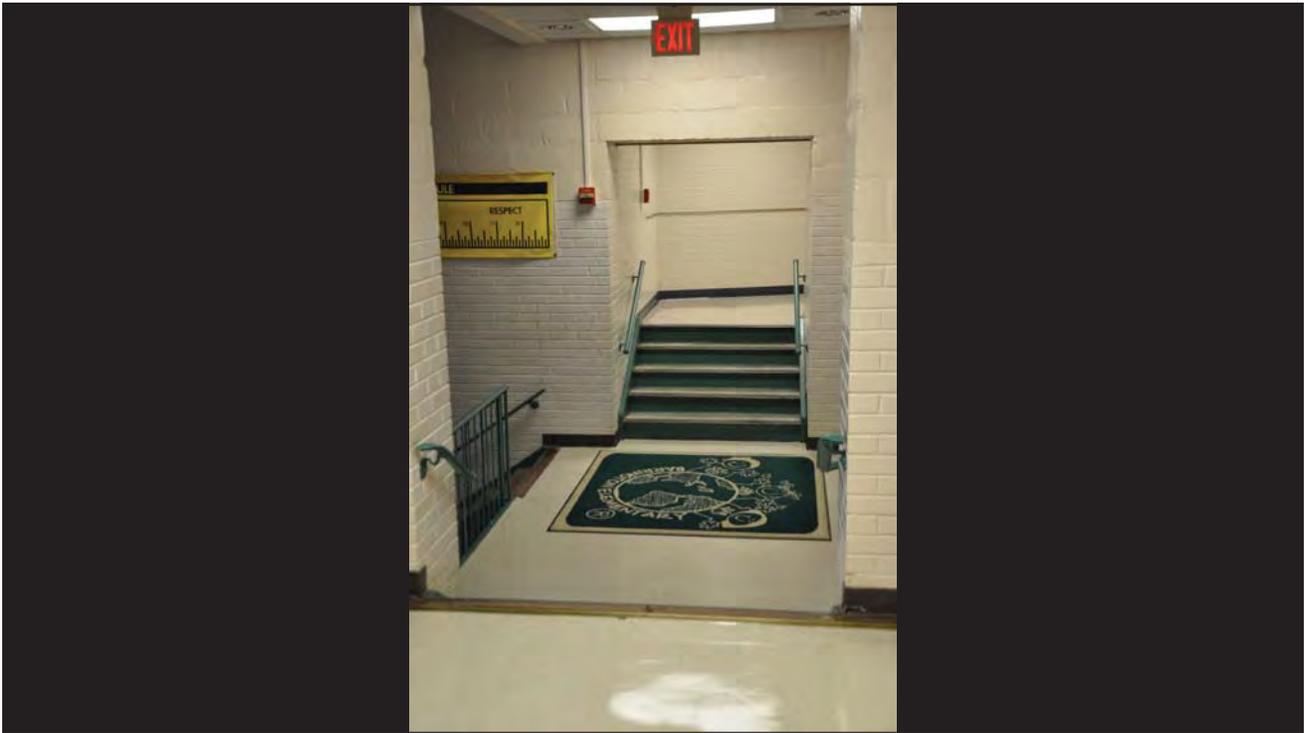




**BARRINGTON ELEMENTARY SCHOOL**  
CIRCULATION ANALYSIS



EXISTING SECOND FLOOR PLAN



**BARRINGTON ELEMENTARY SCHOOL**  
CLASSROOM SIZE ANALYSIS



EXISTING SECOND FLOOR PLAN







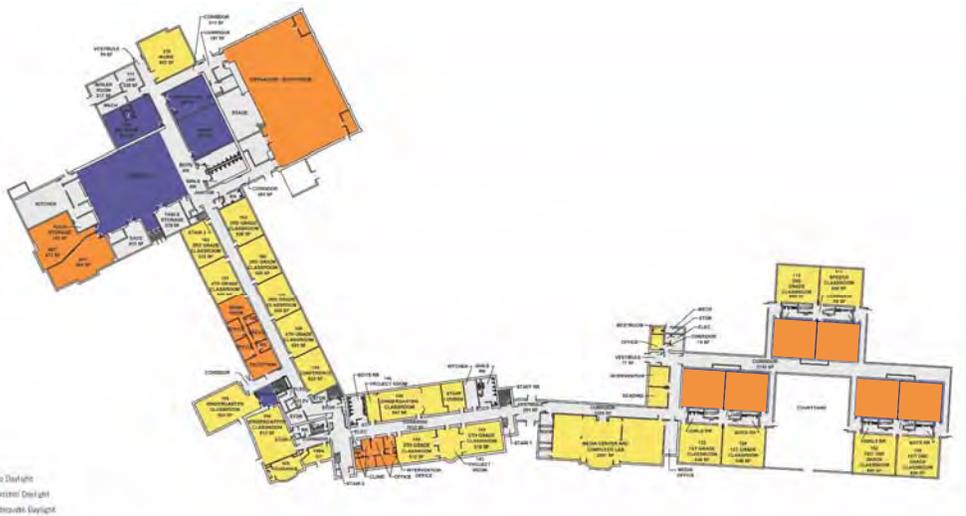
**DAYLIGHTING**  
BEST PRACTICES



Daylighting has been linked to **“better performance of students** – as much as 20% improvement in math and 26% in reading on standardized tests”  
*(Heschong Mahone Group, 1999)*



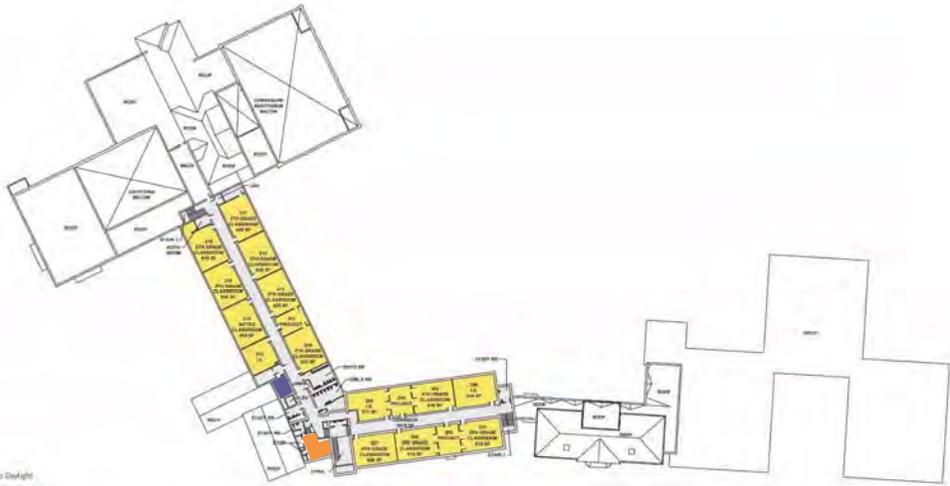
**BARRINGTON ELEMENTARY SCHOOL**  
DAYLIGHT ANALYSIS



EXISTING FIRST FLOOR PLAN

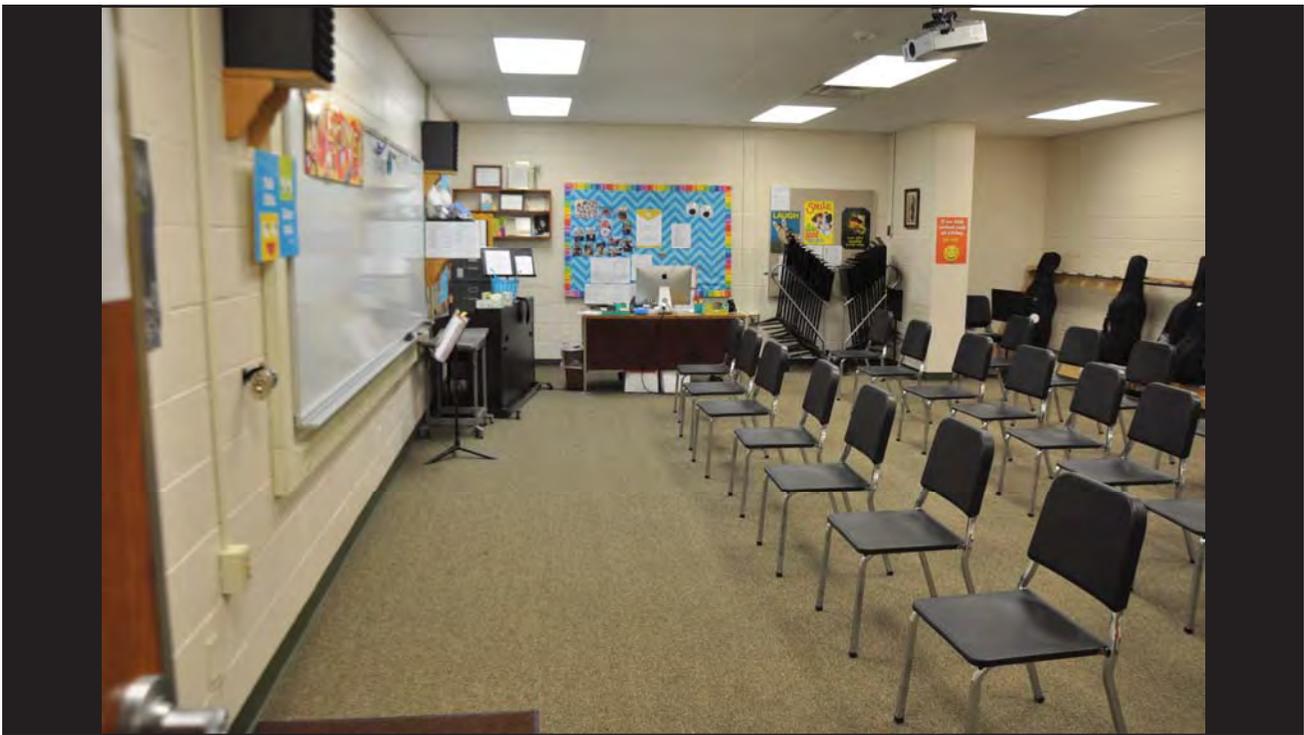
# BARRINGTON ELEMENTARY SCHOOL

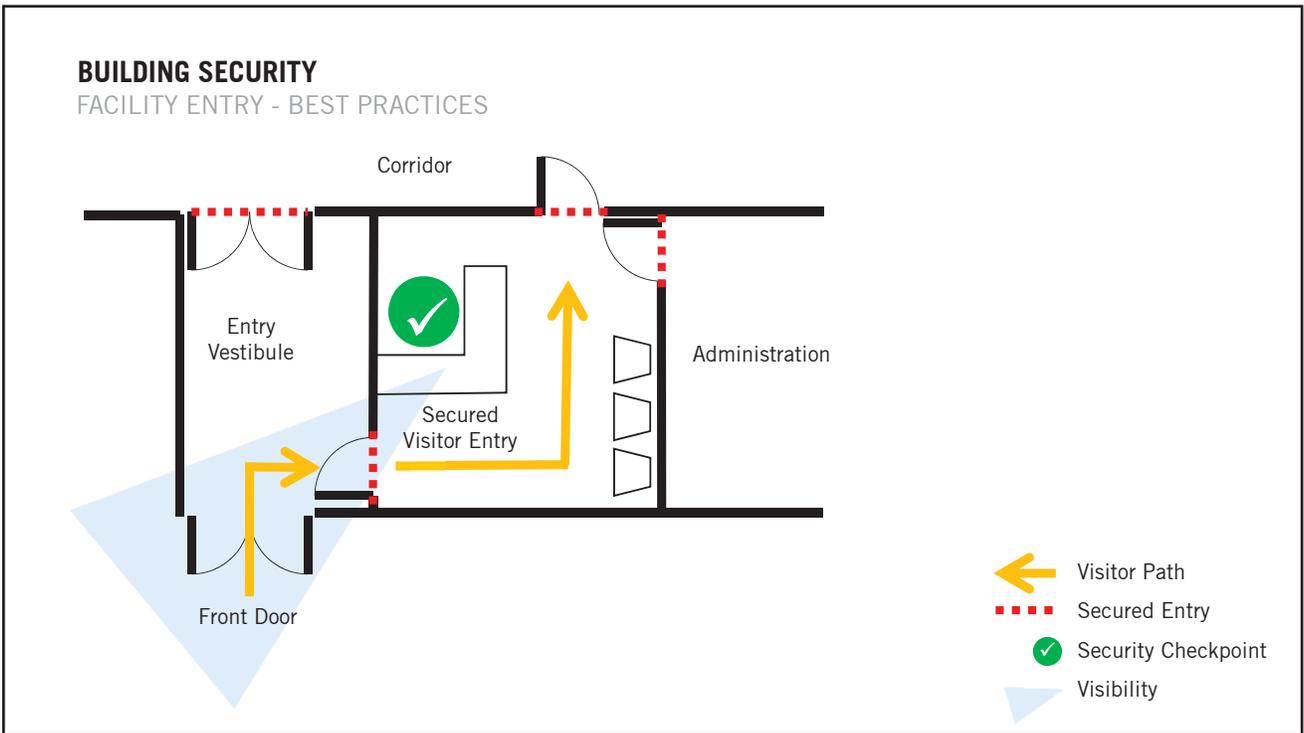
## DAYLIGHT ANALYSIS



EXISTING SECOND FLOOR PLAN









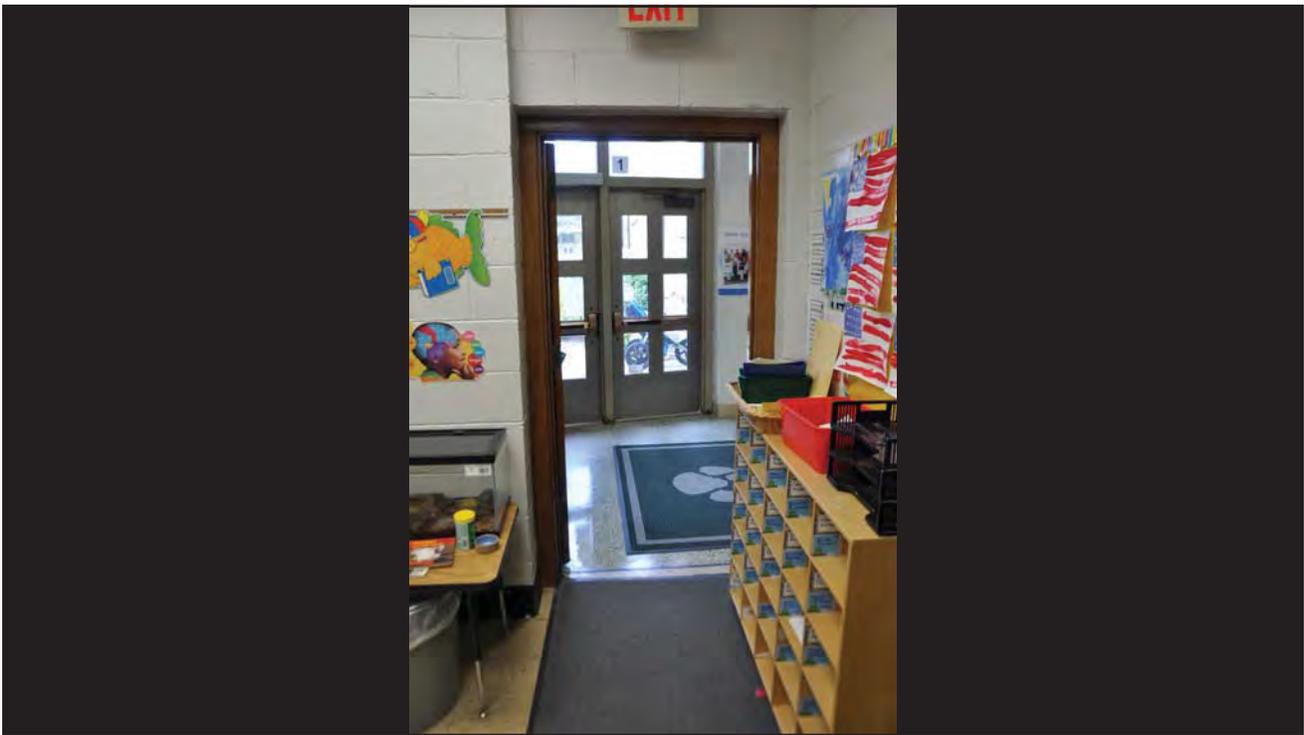
**BARRINGTON ELEMENTARY SCHOOL**  
SECURITY ANALYSIS



**BARRINGTON ELEMENTARY SCHOOL**  
SECURITY ANALYSIS

**DIRECT ACCESS TO KINDERGARTEN  
ROOM BEFORE SECURITY CHECKPOINT**







## SUMMARY – GREENSVIEW ELEMENTARY SCHOOL

The original Greensview Elementary School was constructed in 1965. It currently serves 418 students, kindergarten through fifth grade. Recent ten year enrollment projections predict up to 526 students. The kindergarten program is currently a half day program, potentially changing to all day in the future. The 48,126 square foot building has had many building additions over the years in 1969, 1997 and most recently in 2009. The most recent additions accommodated population growth by adding a new gym, art classroom, music classrooms, special education classroom, gifted classroom and other support spaces. The original building is fifty-five years old, while the latest addition is six years old.

### MAJOR CHALLENGES - BUILDING

- Lack of secure entry vestibule – visitors are not contained after being granted entry to the building to check-in
- Building is not securely zoned for after-hours public access (i.e. – public has access to entire building to utilize shared space, such as the gym)
- Size of classrooms are small, not meeting current standards
- Library size and configuration does not support collaboration
- Lack of collaborative space
- Food service configuration increases time to get food
- Some disjointed support office locations
- Special education MD room is not centrally located
- Limited adjacent storage for multi-purpose room
- Not enough student storage in classrooms (students share lockers) and poor condition of student storage
- No room for spectator seating in the gym
- Some ADA compliance challenges

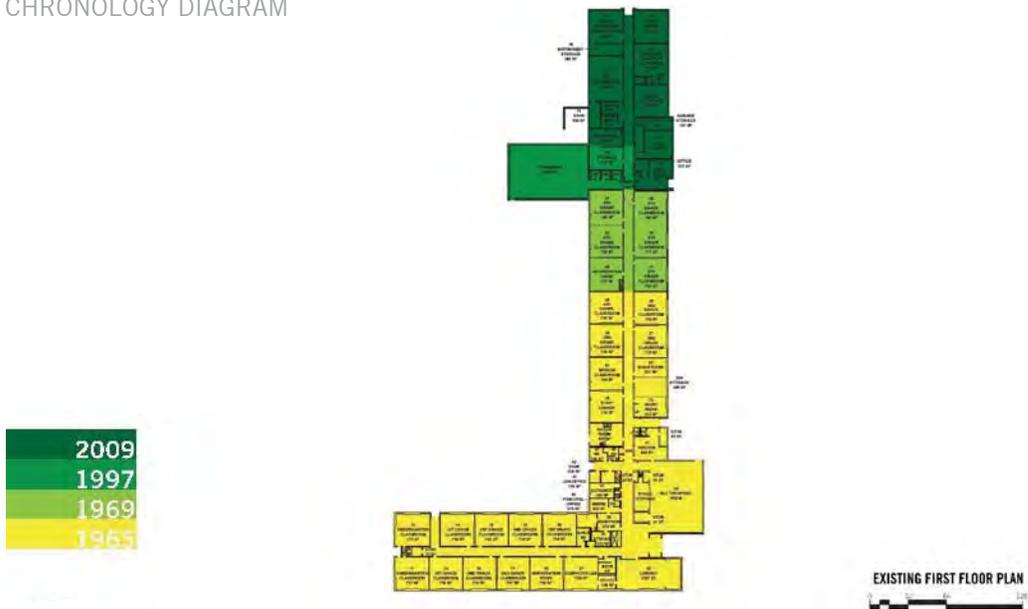
### MAJOR CHALLENGES - SITE

- Lack of clear main entry - visitors coming from the parking lot are not directed to the main entry by visual cues
- No secure outdoor learning space

# GREENSVIEW ELEMENTARY SCHOOL

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## GREENSVIEW ELEMENTARY SCHOOL CHRONOLOGY DIAGRAM



## **GREENSVIEW ELEMENTARY SCHOOL**

### SUMMARY

GRADES: K-5

HEIGHT: ONE STORY

SITE SIZE: 9.00 ACRES

BUILDING SIZE: 48,126 SF

CURRENT NUMBER OF STUDENTS: 418

CURRENT SF/STUDENT: 115 SF

10 YEAR ENROLLMENT PROJECTION: 526

10 YEAR SF/STUDENT: 91 SF

## **GREENSVIEW ELEMENTARY SCHOOL**

### MAJOR CHALLENGES

#### BUILDING:

- LACK OF SECURE ENTRY VESTIBULE
- BUILDING NOT SECURITY ZONED FOR AFTER-HOURS PUBLIC ACCESS
- SIZE OF CLASSROOMS
- LIBRARY SIZE AND CONFIGURATION DOES NOT SUPPORT COLLABORATION
- LACK OF COLLABORATIVE SPACE
- FOOD SERVICE CONFIGURATION INCREASES TIME TO GET FOOD
- SOME DISJOINTED SUPPORT OFFICE LOCATIONS
- SP ED - MD ROOM IS NOT CENTRALLY LOCATED
- LIMITED ADJACENT STORAGE FOR MPR
- NOT ENOUGH STUDENT STORAGE, CONDITION OF STUDENT STORAGE
- NO ROOM FOR SEATING IN THE GYM

#### SITE:

- LACK OF CLEAR MAIN ENTRY
- NO SECURE OUTDOOR LEARNING SPACE

**GREENSVIEW ELEMENTARY SCHOOL**  
SITE DIAGRAM



**GREENSVIEW ELEMENTARY SCHOOL**  
FUNCTIONAL ZONING ANALYSIS



**GREENSVIEW ELEMENTARY SCHOOL**  
MH ROOM LOCATION

- Art: Visual
- Art: Performing
- Applied Arts
- English
- Science
- General/Shared Classrooms
- Mathematics
- World Languages
- Social Studies
- Special Education
- Library
- Physical Education
- Administration
- Community/Shared Spaces
- Building Services



EXISTING FIRST FLOOR PLAN

**GREENSVIEW ELEMENTARY SCHOOL**  
CIRCULATION ANALYSIS

STEPS FROM GYM TO OUTSIDE, NOT WHEELCHAIR ACCESSIBLE

←→ LENGTH FROM ONE END OF THE BUILDING TO THE OTHER:  
**625 LINEAR FEET**

AVERAGE WIDTH OF CORRIDOR:  
**8 FEET**



EXISTING FIRST FLOOR PLAN



**GREENSVIEW ELEMENTARY SCHOOL**  
 CLASSROOM SIZE ANALYSIS

Kindergarten Classrooms



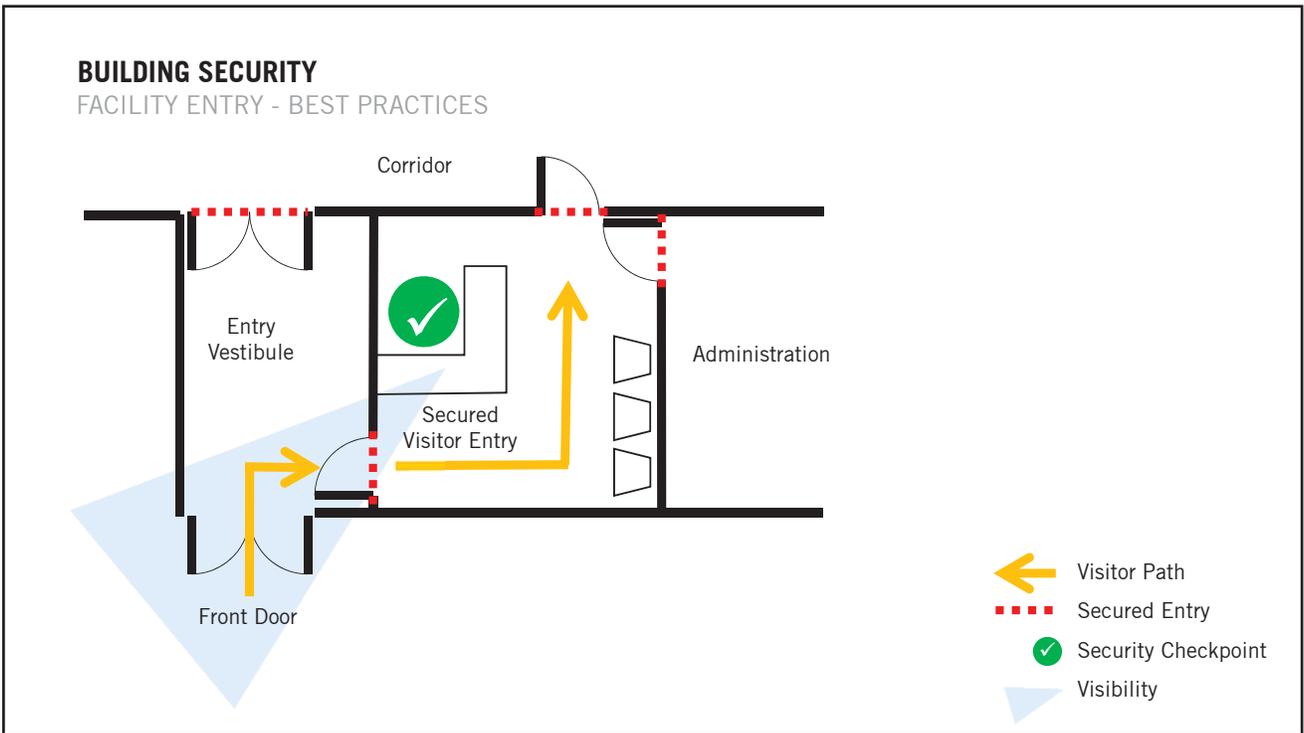
Core Classrooms

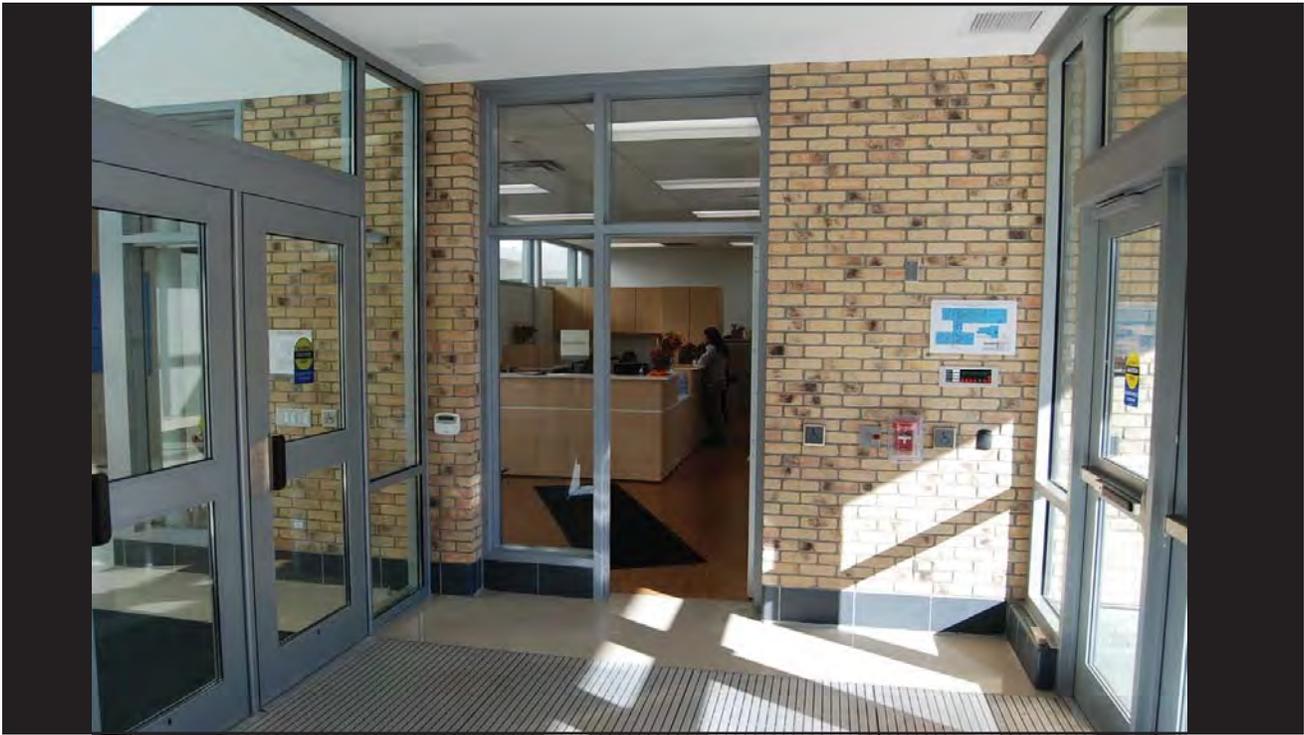


EXISTING FIRST FLOOR PLAN

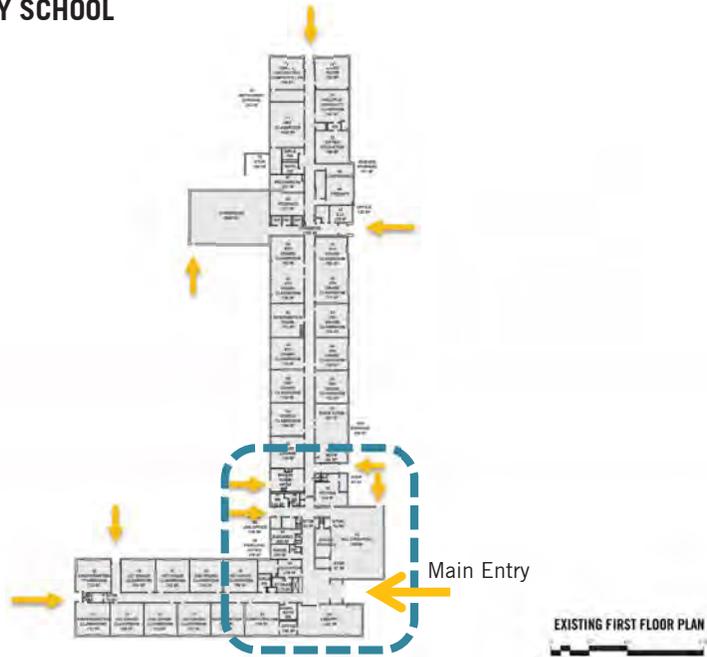




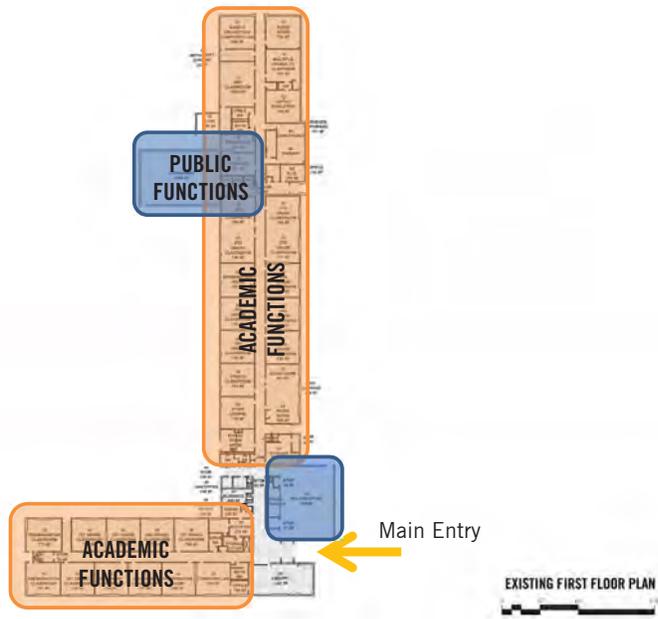




**GREENSVIEW ELEMENTARY SCHOOL**  
SECURITY ANALYSIS

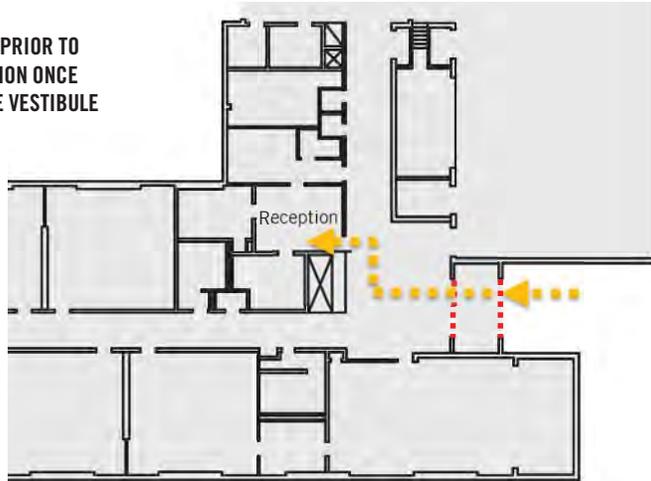


**GREENSVIEW ELEMENTARY SCHOOL**  
SECURITY ANALYSIS



**GREENSVIEW ELEMENTARY SCHOOL**  
SECURITY ANALYSIS

SCHOOL CAN BE ACCESSED PRIOR TO  
CHECKING IN WITH RECEPTION ONCE  
ALLOWED THROUGH SECURE VESTIBULE



**GREENSVIEW ELEMENTARY SCHOOL**  
SECURITY ANALYSIS

SCHOOL CAN BE ACCESSED PRIOR TO  
CHECKING IN WITH RECEPTION ONCE  
ALLOWED THROUGH SECURE VESTIBULE









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## SUMMARY – TREMONT ELEMENTARY SCHOOL

The original Tremont Elementary School was constructed in 1952. It currently serves 598 students, kindergarten through fifth grade. Recent ten year enrollment projections predict up to 749 students. The kindergarten program is currently a half day program, potentially changing to all day in the future.

The 56,136 square foot building has had many building additions over the years in 1953, 1959 and is currently undergoing additions and renovations which will bring up the building square footage to 79,596 square feet. The current addition will accommodate population growth by adding classrooms, a media center, a new gym and support spaces, as well as renovation of some of the existing building. The original building is sixty three years old, while the latest addition is currently under construction.

### MAJOR CHALLENGES - BUILDING

- Lack of secure entry vestibule – visitors are not contained after being granted entry to the building to check-in (*will be rectified in new addition*)
- Size of classrooms are small (*except in new addition*), not meeting current standards
- Not enough student storage in classrooms (students share lockers) and poor condition of student storage
- Shared spaces are not centrally zoned, increasing travel time
- Lack of collaborative space
- Food service configuration increases time to get food (*will be rectified in new addition*)
- Resource teachers not conveniently located
- Some ADA compliance challenges (*some will be rectified in new addition*)

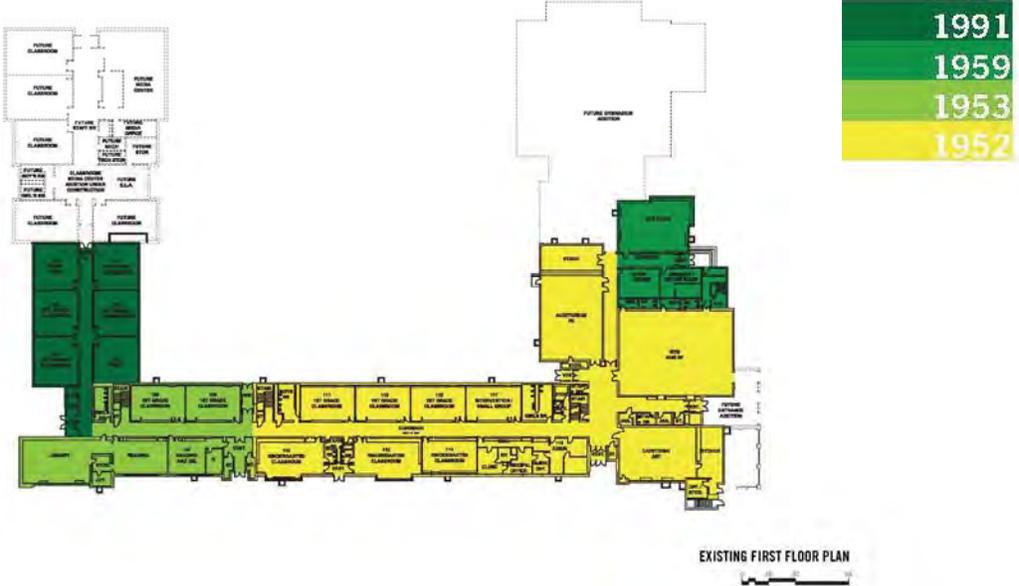
### MAJOR CHALLENGES - SITE

- Lack of clear main entry - visitors coming from the parking lot are not directed to the main entry by visual cues (*will be rectified in new addition*)

# TREMONT ELEMENTARY SCHOOL

perkinswill.com 129

## TREMONT ELEMENTARY SCHOOL CHRONOLOGY DIAGRAM



**TREMONT ELEMENTARY SCHOOL**

EDUCATIONAL ASSESSMENT SUMMARY

GRADES: K-5

HEIGHT: TWO STORIES

SITE SIZE: 15.00 ACRES

BUILDING SIZE: 56,136 SF —————> *WITH PLANNED ADDITIONS: 79,596 SF*

CURRENT NUMBER OF STUDENTS: 598

CURRENT SF/STUDENT: 94 SF —————> *WITH PLANNED ADDITIONS SF/STUDENT: 133 SF*

10 YEAR ENROLLMENT PROJECTION: 749

10 YEAR SF/STUDENT: 106 SF

**TREMONT ELEMENTARY SCHOOL**

MAJOR CHALLENGES

BUILDING:

- LACK OF SECURE ENTRY VESTIBULE (*WILL BE RECTIFIED IN NEW ADDITION*)
- SIZE OF CLASSROOMS (*EXCEPT THOSE IN NEW ADDITION*)
- SHARED SPACES ARE NOT CENTRALLY ZONED / TRAVEL TIME
- LACK OF COLLABORATIVE SPACE
- FOOD SERVICE CONFIGURATION INCREASES TIME TO GET FOOD (*WILL BE RECTIFIED IN NEW ADDITION*)
- RESOURCE TEACHERS NOT CONVENIENTLY LOCATED
- NOT ENOUGH STUDENT STORAGE, CONDITION OF STUDENT STORAGE

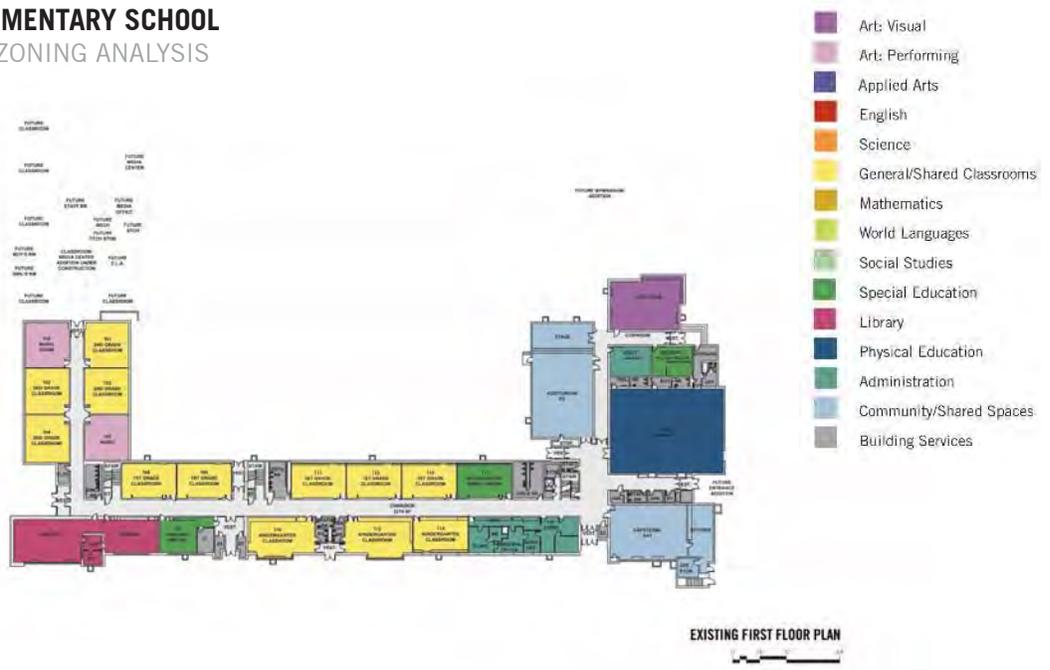
SITE:

- LACK OF CLEAR MAIN ENTRY (*WILL BE RECTIFIED IN NEW ADDITION*)

**TREMONT ELEMENTARY SCHOOL**  
SITE DIAGRAM



**TREMONT ELEMENTARY SCHOOL**  
FUNCTIONAL ZONING ANALYSIS

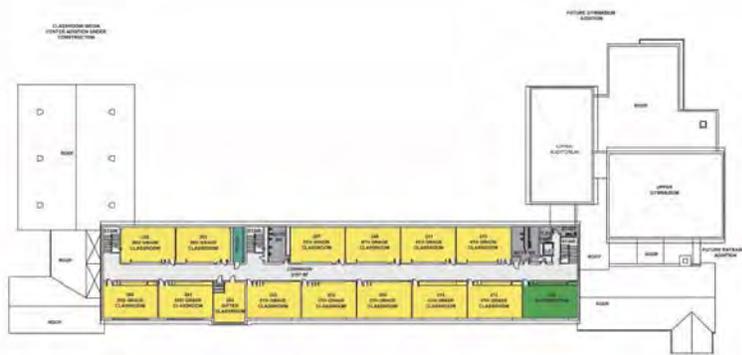


**TREMONT ELEMENTARY SCHOOL**  
FUNCTIONAL ZONING ANALYSIS



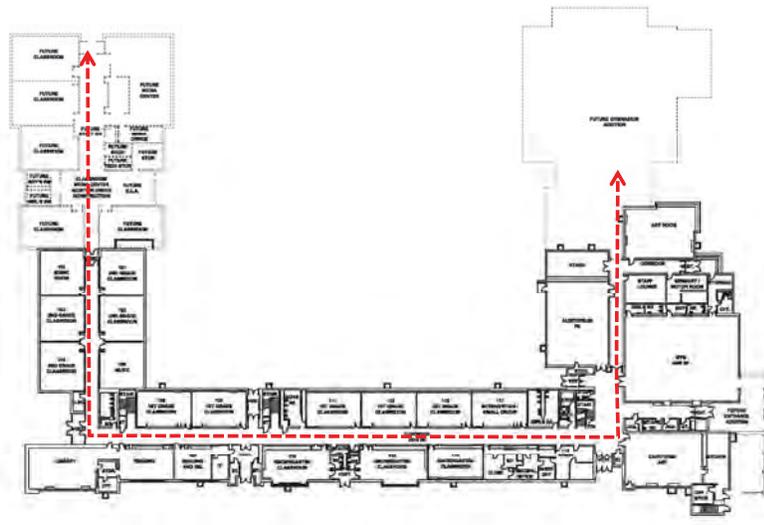
- Art: Visual
- Art: Performing
- Applied Arts
- English
- Science
- General/Shared Classrooms
- Mathematics
- World Languages
- Social Studies
- Special Education
- Library
- Physical Education
- Administration
- Community/Shared Spaces
- Building Services

**TREMONT ELEMENTARY SCHOOL**  
FUNCTIONAL ZONING ANALYSIS



EXISTING SECOND FLOOR PLAN

**TREMONT ELEMENTARY SCHOOL**  
CIRCULATION ANALYSIS



←→ LENGTH FROM ONE END OF THE BUILDING TO THE OTHER:  
**720 LINEAR FEET**  
*(CURRENT IS 490 LINEAR FEET)*

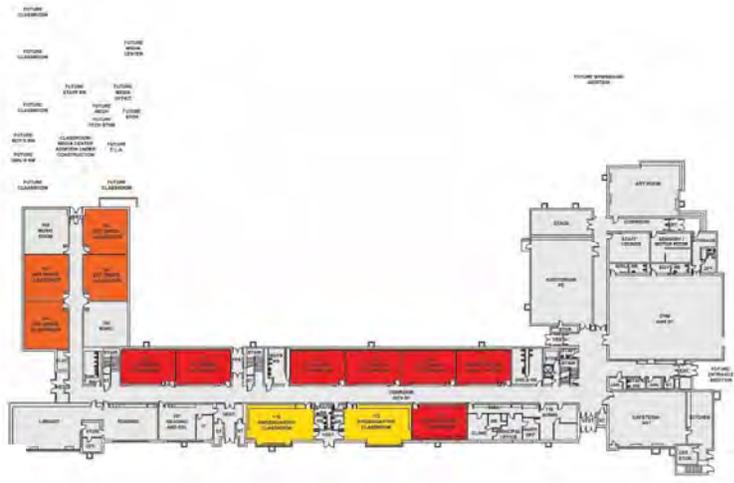
AVERAGE WIDTH OF CORRIDOR:  
**9'-8"**

EXISTING FIRST FLOOR PLAN





**TREMONT ELEMENTARY SCHOOL**  
CLASSROOM SIZE ANALYSIS



Kindergarten Classrooms



Core Classrooms



EXISTING FIRST FLOOR PLAN



**TREMONT ELEMENTARY SCHOOL**  
CLASSROOM SIZE ANALYSIS



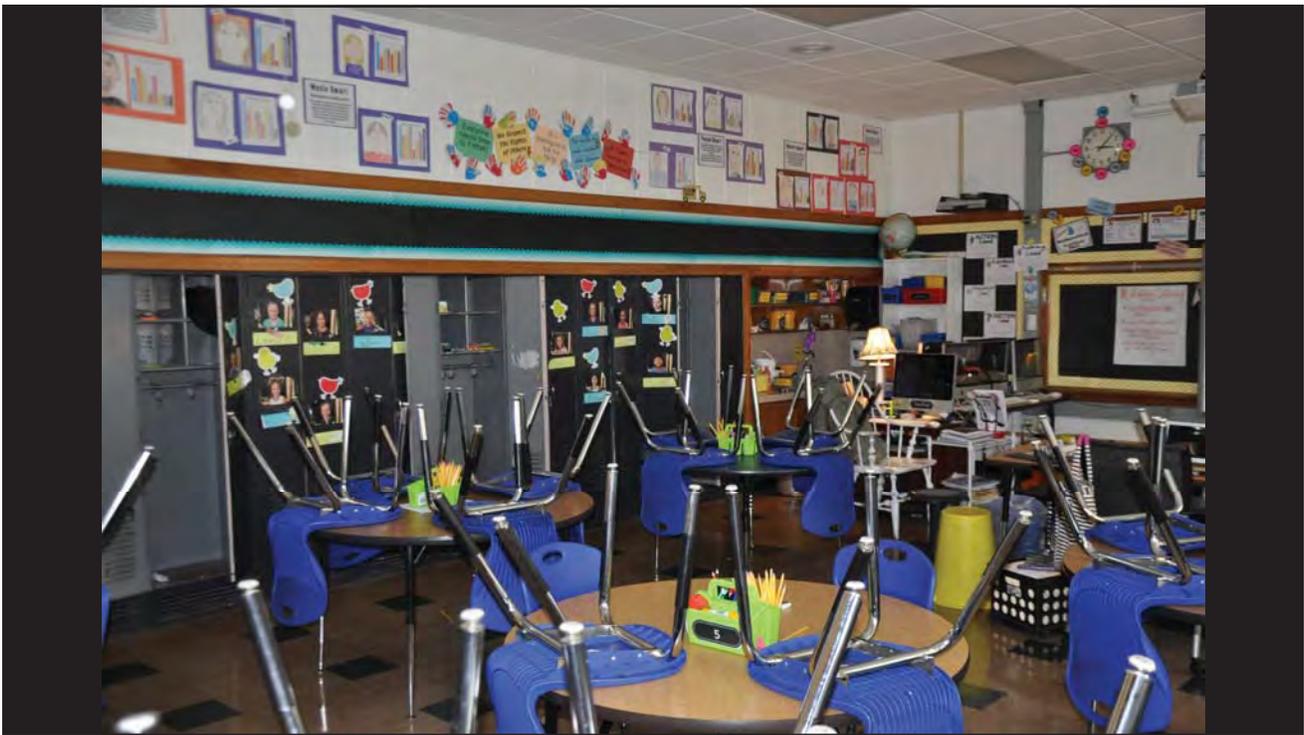
Kindergarten Classrooms



Core Classrooms

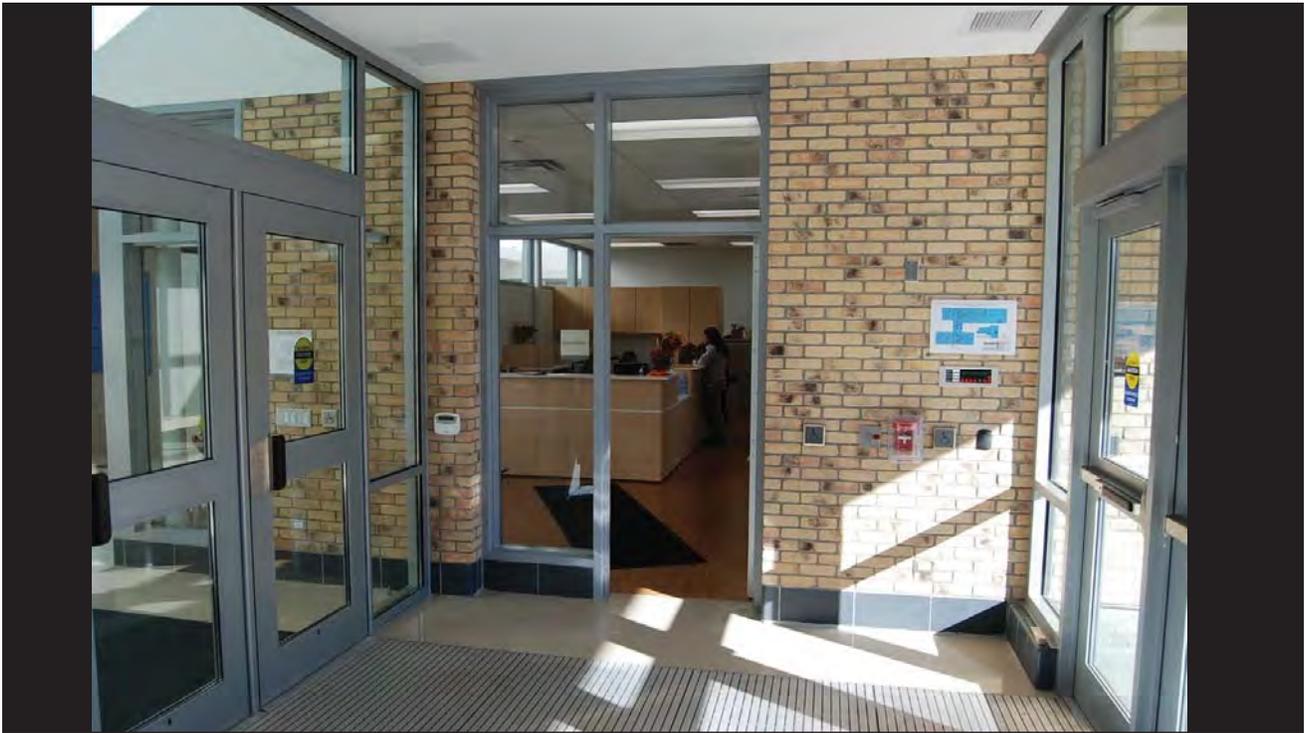
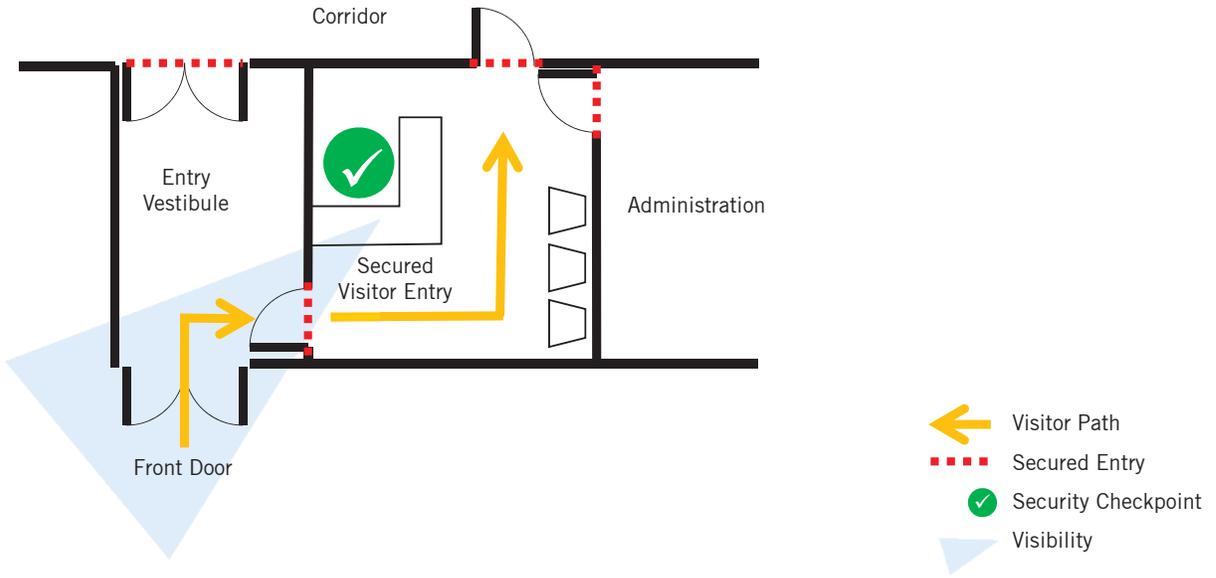




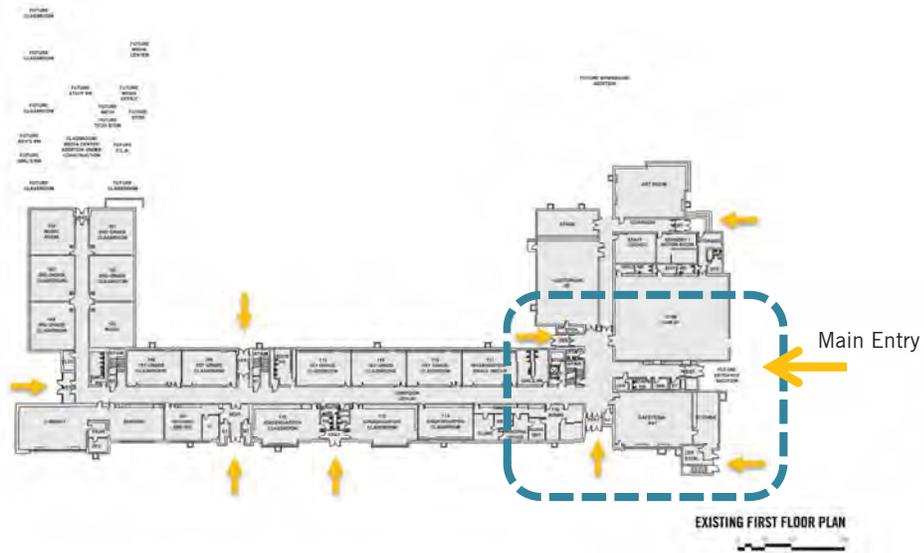


## BUILDING SECURITY

### FACILITY ENTRY - BEST PRACTICES

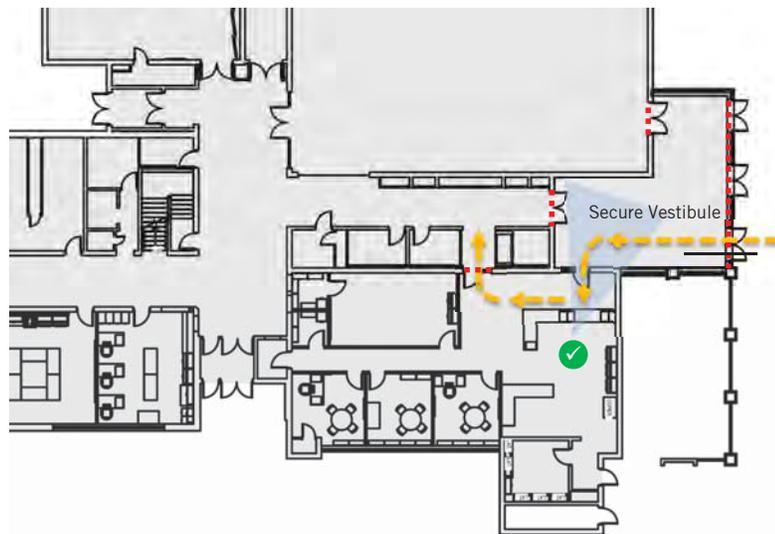


**TREMONT ELEMENTARY SCHOOL**  
SECURITY ANALYSIS



**TREMONT ELEMENTARY SCHOOL**  
SECURITY ANALYSIS

**NEW ENTRY VESTIBULE PROVIDES  
SECURE ENTRY WITH CHECKPOINT**





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## SUMMARY – WICKLIFFE PROGRESSIVE ELEMENTARY SCHOOL

The original Wickliffe Progressive Elementary School was constructed in 1956. It currently serves 508 students, kindergarten through fifth grade. Recent ten year enrollment projections predict up to 589 students. The kindergarten program is currently a half day program, potentially changing to all day in the future. The 50,846 square foot building has had many building additions over the years in 1966, 1997 and most recently a small storage addition in 2011. The most recent additions accommodated population growth by adding a new entry vestibule, gym and kitchen with support spaces. The original building is fifty-nine years old, while the latest storage addition is five years old.

### MAJOR CHALLENGES - BUILDING

- Lack of secure entry vestibule – visitors are not contained after being granted entry to the building to check-in (multi-purpose room door prevents true secure entry vestibule)
- Size of classrooms are small, not meeting current standards
- Lack of space for project storage
- Library size and configuration does not support collaboration
- Lack of collaborative space
- Narrow interior circulation
- Food service configuration increases time to get food
- Lack of ADA accessibility to library and some other ADA compliance challenges

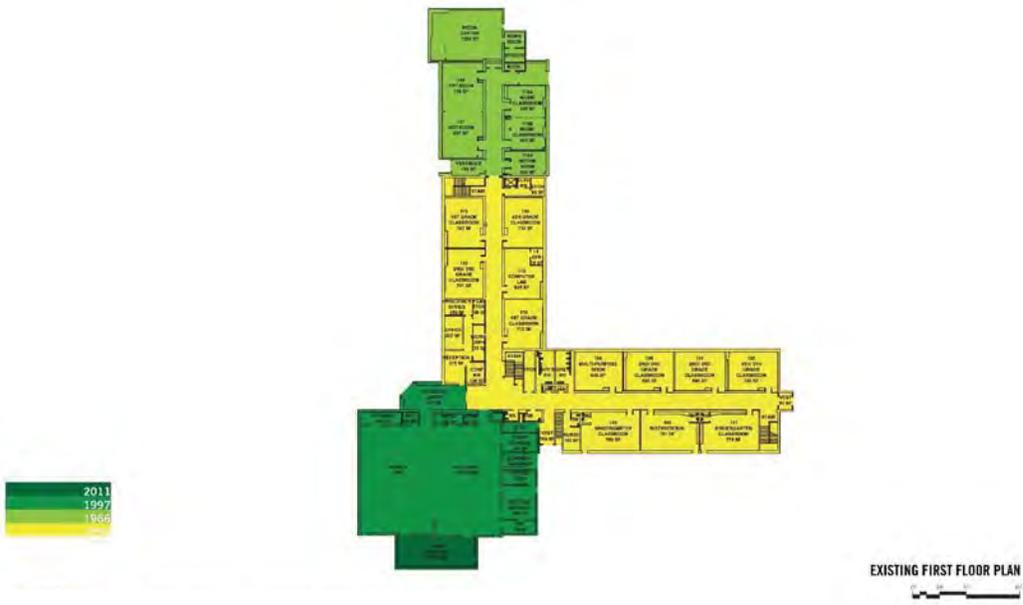
### MAJOR CHALLENGES - SITE

- No visitor parking
- Congestion issues at pick-up and drop-off

# WICKLIFFE PROGRESSIVE SCHOOL

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## WICKLIFFE PROGRESSIVE SCHOOL CHRONOLOGY DIAGRAM



## **WICKLIFFE PROGRESSIVE SCHOOL**

### SUMMARY

GRADES: K-5

HEIGHT: TWO STORIES

SITE SIZE: 6.50 ACRES

BUILDING SIZE: 50,846 SF

CURRENT NUMBER OF STUDENTS: 508

CURRENT SF/STUDENT: 102 SF

10 YEAR ENROLLMENT PROJECTION: 589

10 YEAR SF/STUDENT: 86 SF

## **WICKLIFFE PROGRESSIVE SCHOOL**

### MAJOR CHALLENGES

#### BUILDING:

- SIZE OF CLASSROOMS DO NOT SUPPORT PROJECT BASED LEARNING
- NO COLLABORATIVE SPACE
- NARROW INTERIOR CIRCULATION
- FOOD SERVICE CONFIGURATION INCREASES TIME TO GET FOOD
- SIZE AND CONFIGURATION OF MEDIA CENTER DOES NOT SUPPORT COLLABORATION
- ADA ACCESSIBILITY TO MEDIA CENTER
- LACK OF SPACE FOR PROJECT STORAGE
- MPR DOOR PREVENTS TRUE SECURE ENTRY VESTIBULE

#### SITE:

- NO VISITOR PARKING
- CONGESTION ISSUES AT PICK-UP AND DROP-OFF

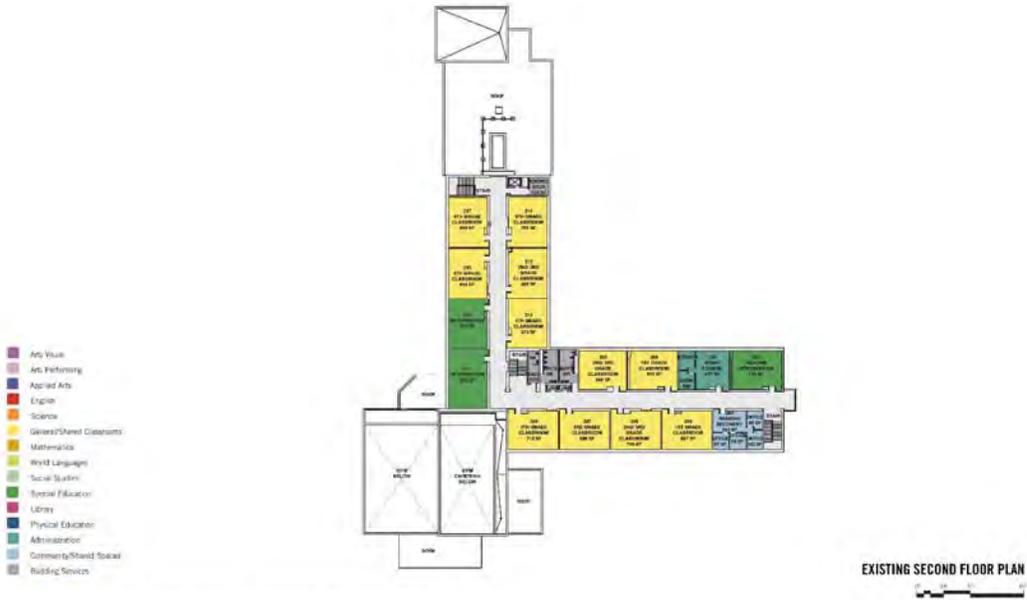
**WICKLIFFE PROGRESSIVE SCHOOL**  
SITE DIAGRAM

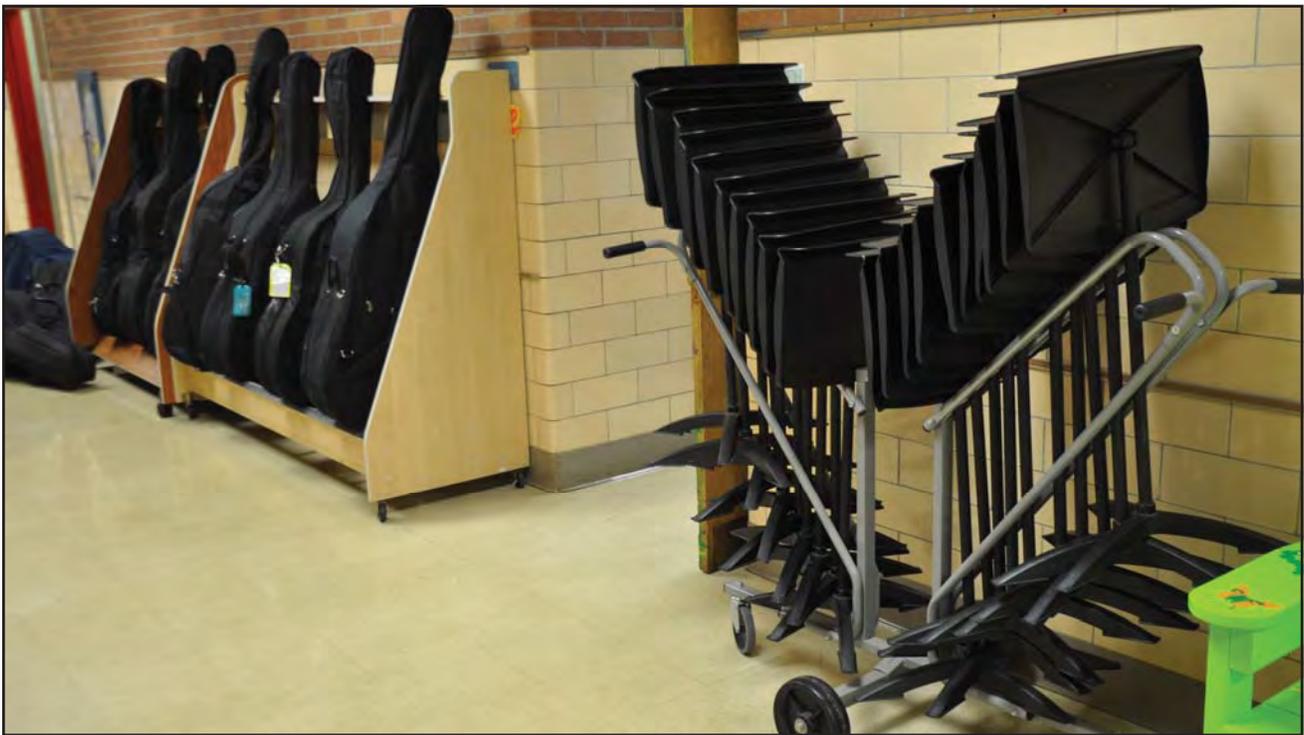


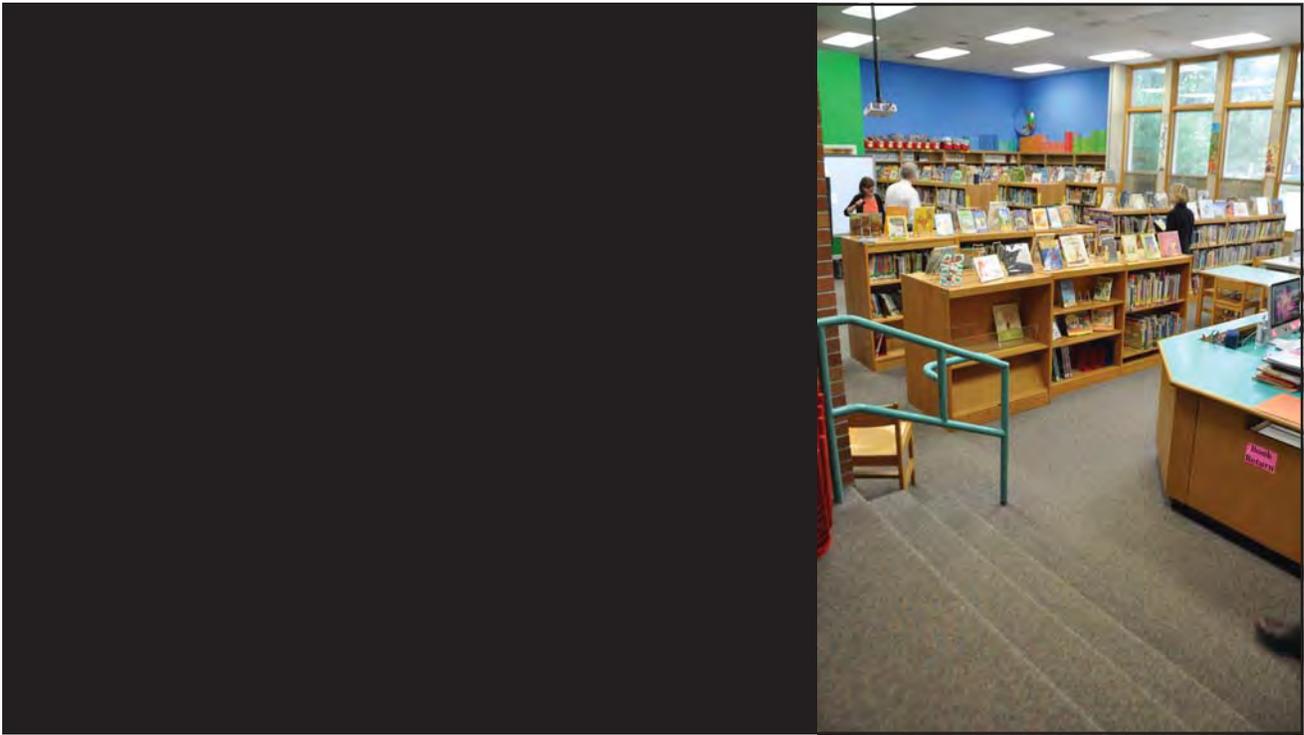
**WICKLIFFE PROGRESSIVE SCHOOL**  
FUNCTIONAL ZONING ANALYSIS



**WICKLIFFE PROGRESSIVE SCHOOL**  
FUNCTIONAL ZONING ANALYSIS







**WICKLIFFE PROGRESSIVE SCHOOL**  
CLASSROOM SIZE ANALYSIS



**WICKLIFFE PROGRESSIVE SCHOOL**  
CLASSROOM SIZE ANALYSIS

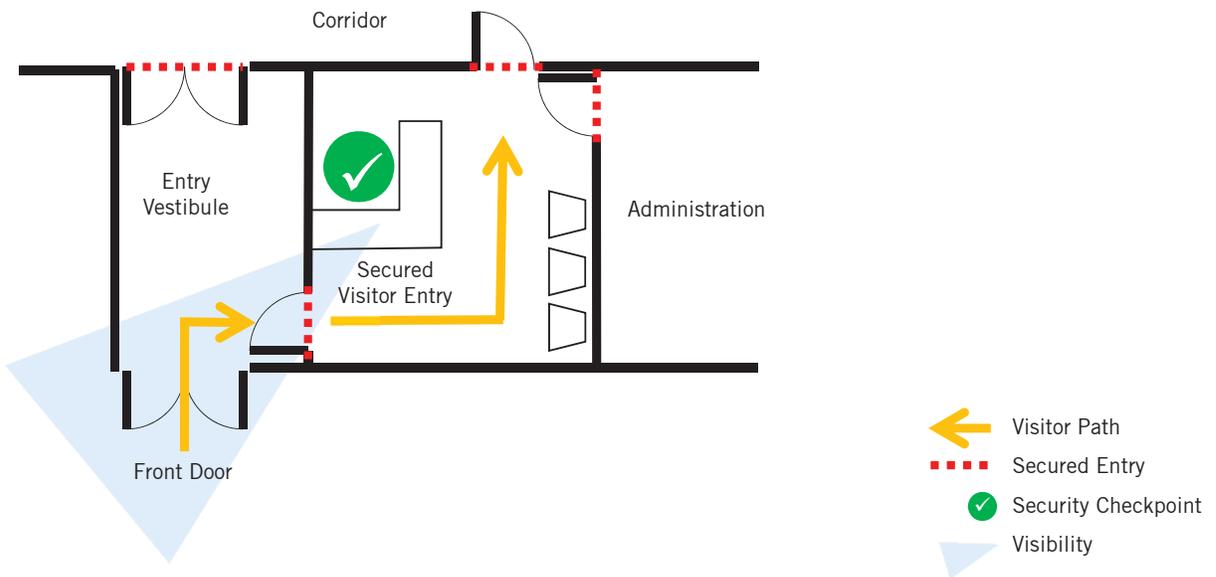


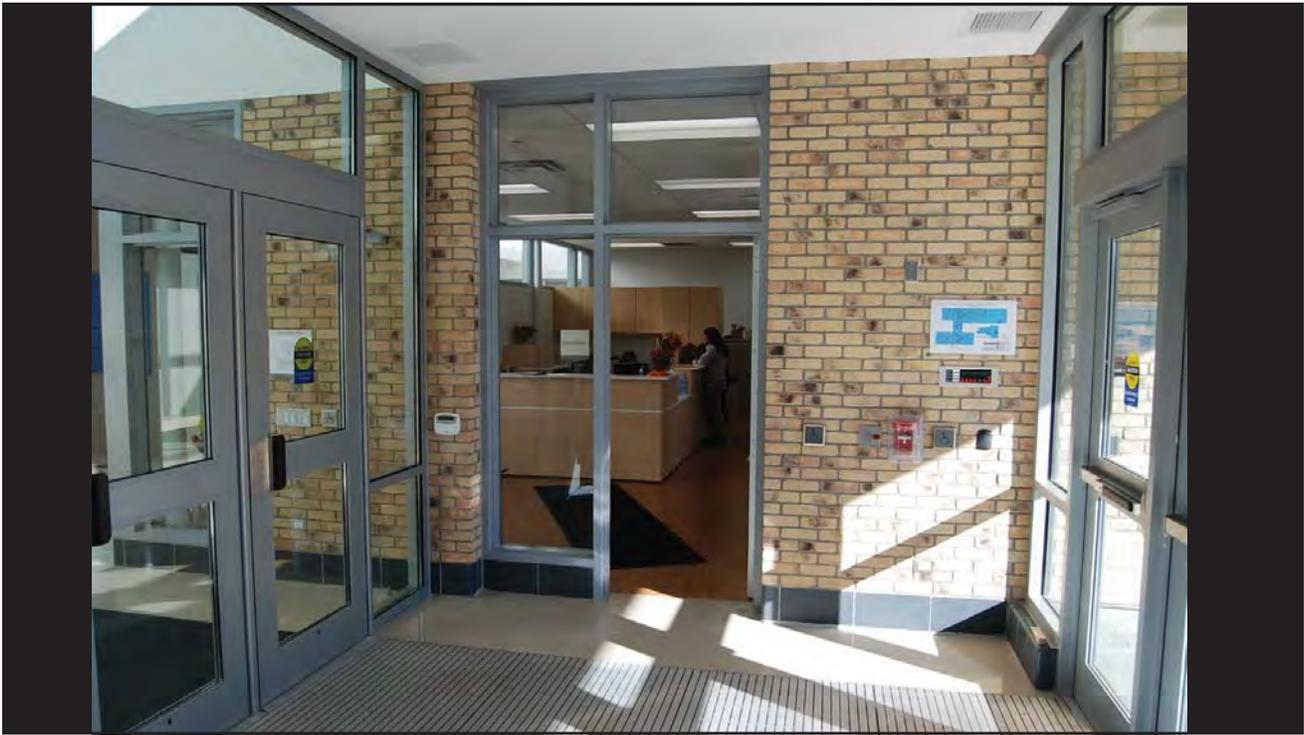




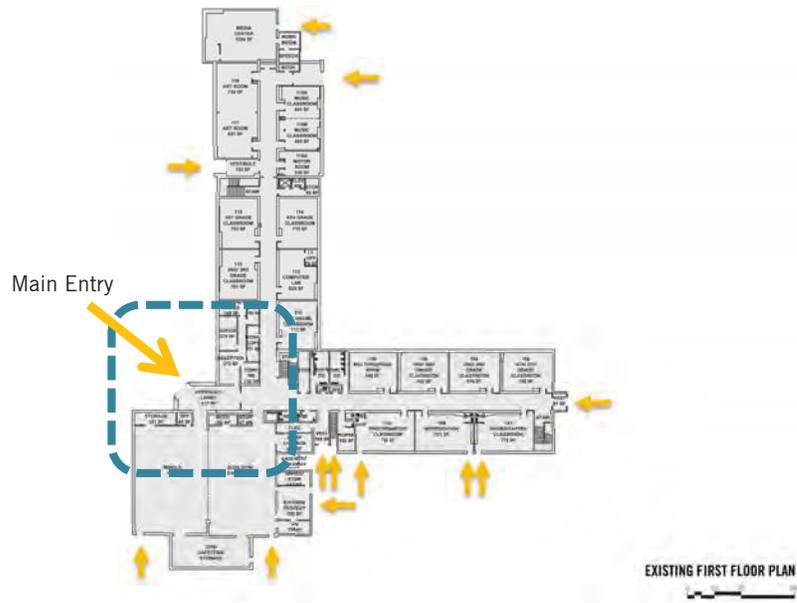
## BUILDING SECURITY

### FACILITY ENTRY - BEST PRACTICES





**WICKLIFFE PROGRESSIVE SCHOOL**  
SECURITY ANALYSIS



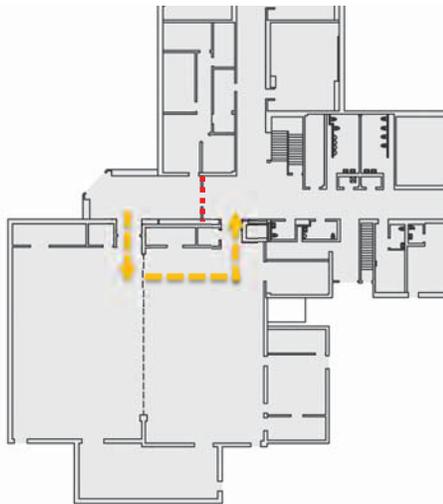


## WICKLIFFE PROGRESSIVE SCHOOL

### SECURITY ANALYSIS

DOORS HAVE BEEN  
REMOVED AT VESTIBULE

MPR DOOR PREVENTS  
TRUE SECURE VESTIBULE  
OPPORTUNITY





---

## SUMMARY – WINDERMERE ELEMENTARY SCHOOL

The original Windermere Elementary School was constructed in 1958. It currently serves 407 students, kindergarten through fifth grade. Recent ten year enrollment projections predict up to 494 students. The kindergarten program is currently a half day program, potentially changing to all day in the future. The 50,020 square foot building has had many building additions over the years in 1962, 1966 and most recently in 2000. The most recent additions accommodated population growth by adding a new gym and other support spaces. The original building is fifty-seven years old, while the latest addition is fifteen years old.

### MAJOR CHALLENGES - BUILDING

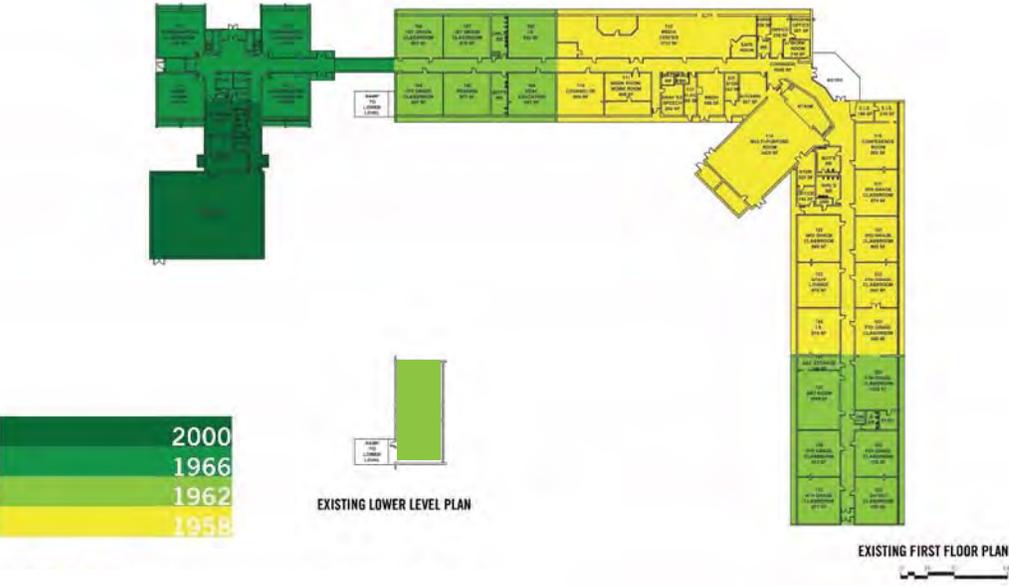
- Lack of secure entry vestibule – visitors are not contained after being granted entry to the building to check-in
- Building is not securely zoned for after-hours public access (i.e. – public has access to entire building to utilize shared space, such as the gym)
- Size of classrooms are small, not meeting current standards
- Disconnected 2<sup>nd</sup> grade and music in second floor pod
- Size of music rooms (and non-central location as a shared space)
- Lack of collaborative space
- Narrow interior circulation
- Lack of storage for kindergarten
- Not enough student storage in classrooms (students share lockers) and poor condition of student storage
- Limited / inadequate office space
- Poor condition of much furniture
- Questions of air quality
- Proportion of media center is long and narrow, preventing optimum use of space
- Some ADA compliance challenges

### MAJOR CHALLENGES - SITE

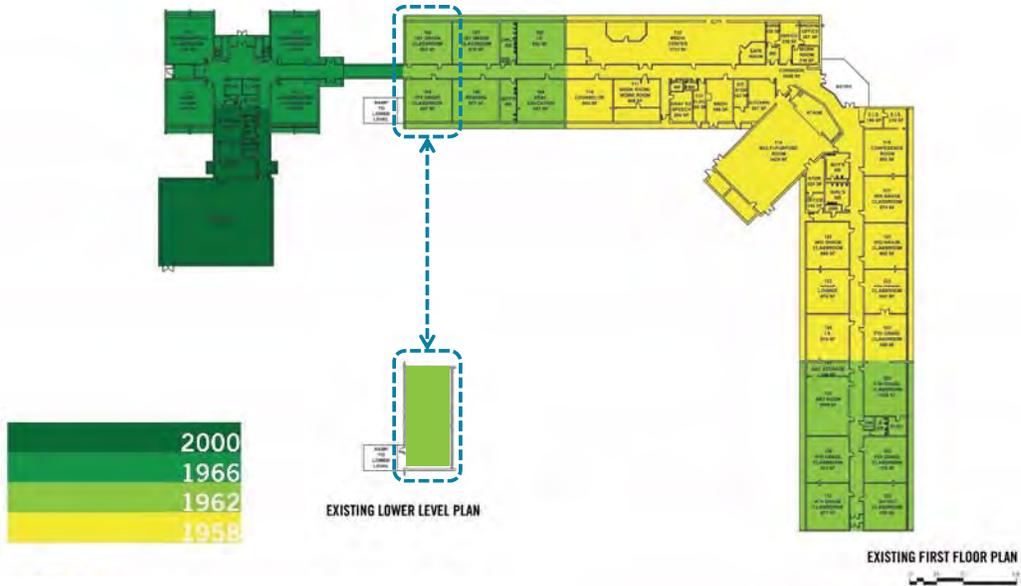
- Limited parking – no visitor parking
- No opportunities for outdoor learning
- Challenging pick-up and drop-off due to limited on-site vehicle circulation

# WINDERMERE ELEMENTARY SCHOOL

## WINDERMERE ELEMENTARY SCHOOL CHRONOLOGY DIAGRAM



**WINDERMERE ELEMENTARY SCHOOL**  
 CHRONOLOGY DIAGRAM



**WINDERMERE ELEMENTARY SCHOOL**  
 SUMMARY

GRADES: K-5

HEIGHT: TWO STORIES

SITE SIZE: 6.60 ACRES

BUILDING SIZE: 55,020 SF

NUMBER OF STUDENTS: 407

CURRENT SF/STUDENT: 135 SF

10 YEAR ENROLLMENT PROJECTION: 494

CURRENT SF/STUDENT: 111 SF

## WINDERMERE ELEMENTARY SCHOOL

### MAJOR CHALLENGES

#### BUILDING:

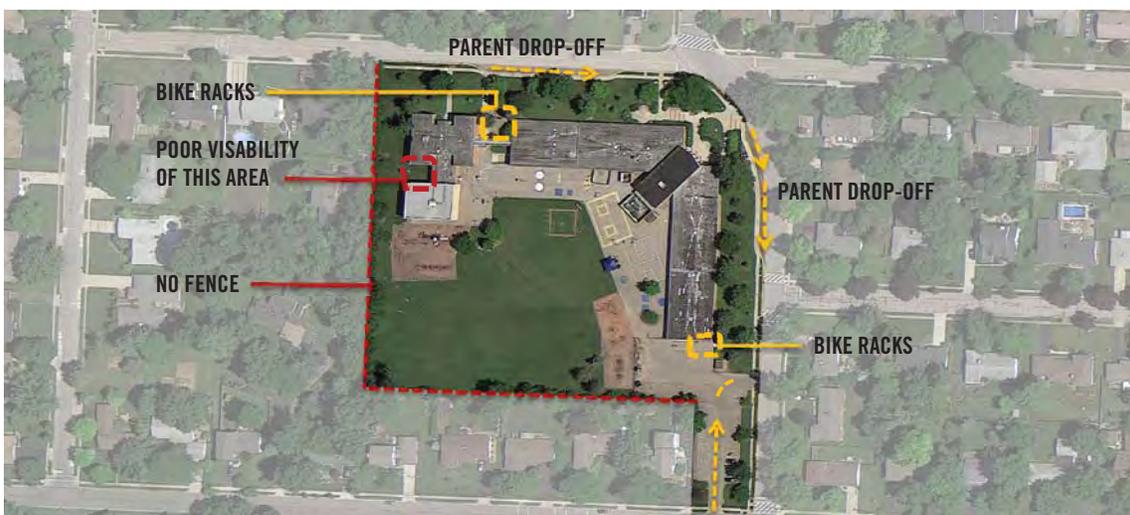
- LACK OF SECURE ENTRY VESTIBULE
- LACK OF SECURED ZONING OF BUILDING FOR AFTER HOURS USE
- SIZE OF CLASSROOMS
- DISCONNECTED 2<sup>ND</sup> GRADE AND MUSIC IN SECOND FLOOR POD
- SIZE OF MUSIC ROOMS, LOCATION OF MUSIC ROOMS (NOT CENTRAL)
- NO COLLABORATIVE SPACE
- NARROW INTERIOR CIRCULATION
- LACK OF STORAGE FOR KINDERGARTEN
- SHARED STUDENT STORAGE
- LIMITED / INADEQUATE OFFICE SPACE
- CONDITION OF FURNITURE
- QUESTIONS OF AIR QUALITY
- PROPORTION OF MEDIA CENTER

#### SITE:

- LIMITED PARKING – NO VISITOR PARKING
- NO OPPORTUNITIES FOR OUTDOOR LEARNING
- PICK-UP AND DROP-OFF CHALLENGES

## WINDERMERE ELEMENTARY SCHOOL

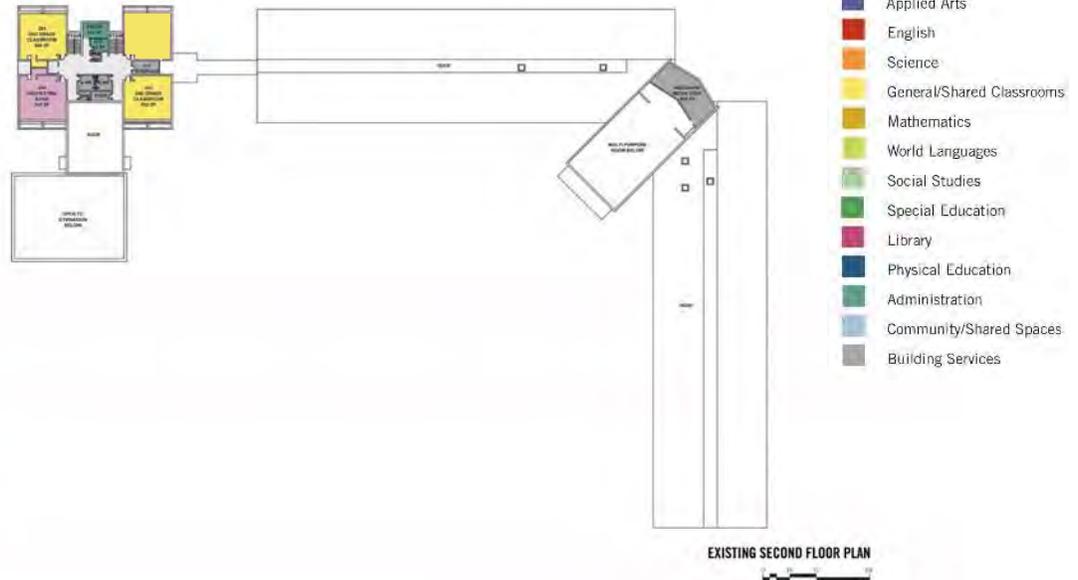
### SITE DIAGRAM



**WINDERMERE ELEMENTARY SCHOOL**  
FUNCTIONAL ZONING ANALYSIS



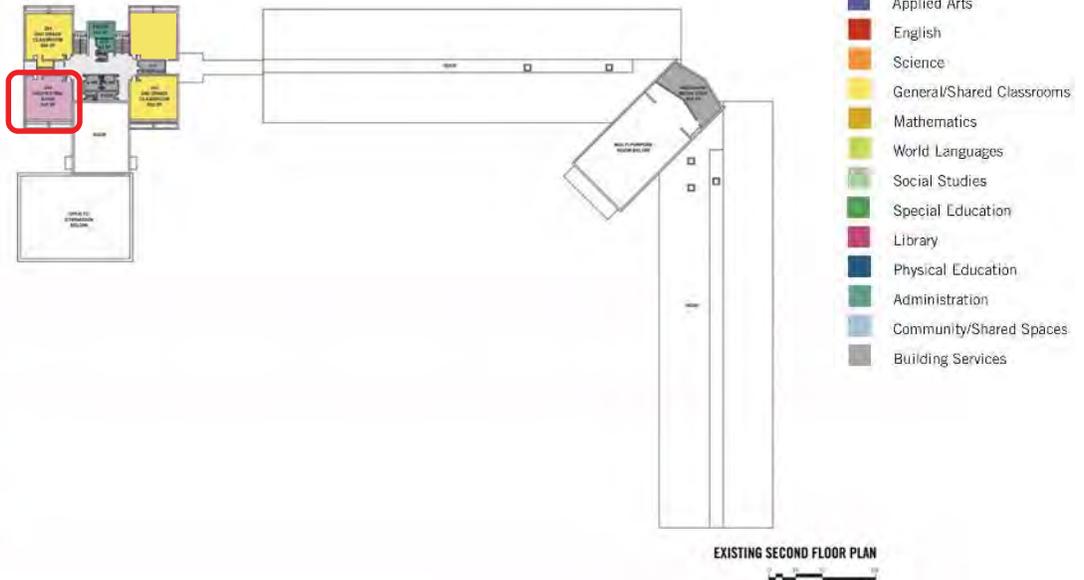
**WINDERMERE ELEMENTARY SCHOOL**  
FUNCTIONAL ZONING ANALYSIS



**WINDERMERE ELEMENTARY SCHOOL**  
FUNCTIONAL ZONING ANALYSIS



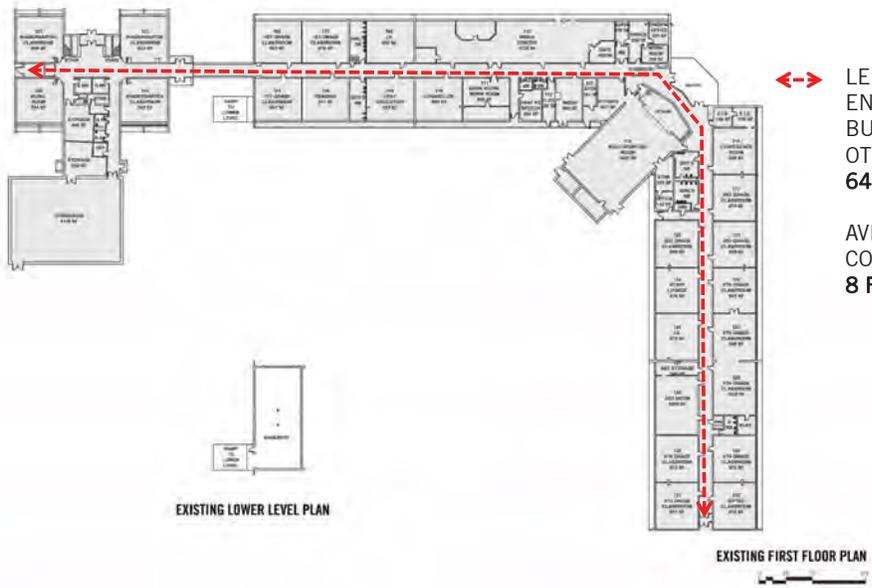
**WINDERMERE ELEMENTARY SCHOOL**  
FUNCTIONAL ZONING ANALYSIS



**WINDERMERE ELEMENTARY SCHOOL**  
 MEDIA CENTER PROPORTION



**WINDERMERE ELEMENTARY SCHOOL**  
CIRCULATION ANALYSIS

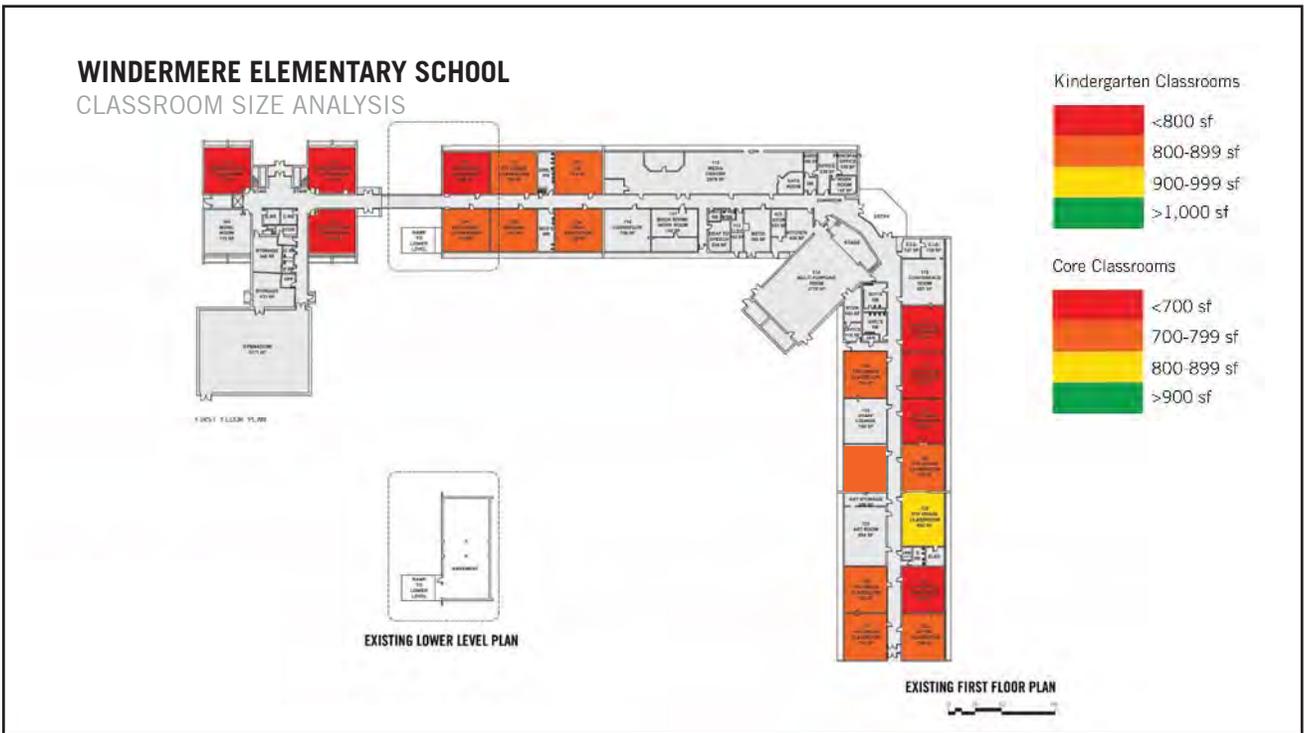


LENGTH FROM ONE  
END OF THE  
BUILDING TO THE  
OTHER:  
**640 LINEAR FEET**

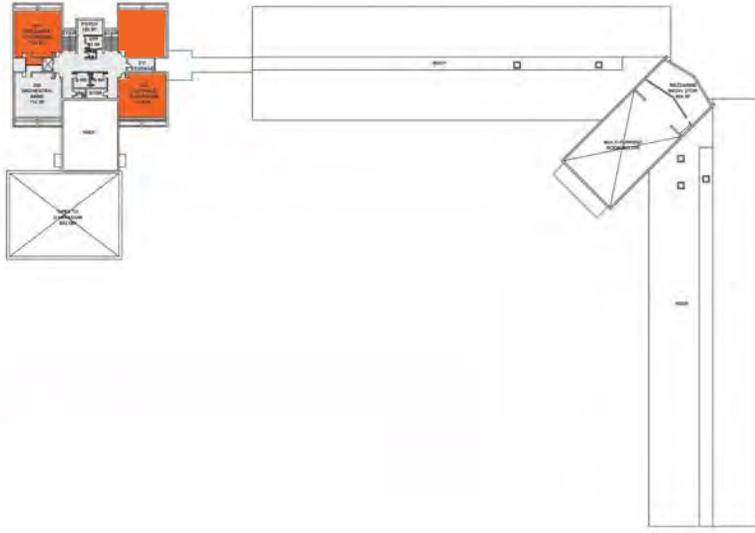
AVERAGE WIDTH OF  
CORRIDOR:  
**8 FEET**







**WINDERMERE ELEMENTARY SCHOOL**  
 CLASSROOM SIZE ANALYSIS



Kindergarten Classrooms

- <800 sf
- 800-899 sf
- 900-999 sf
- >1,000 sf

Core Classrooms

- <700 sf
- 700-799 sf
- 800-899 sf
- >900 sf

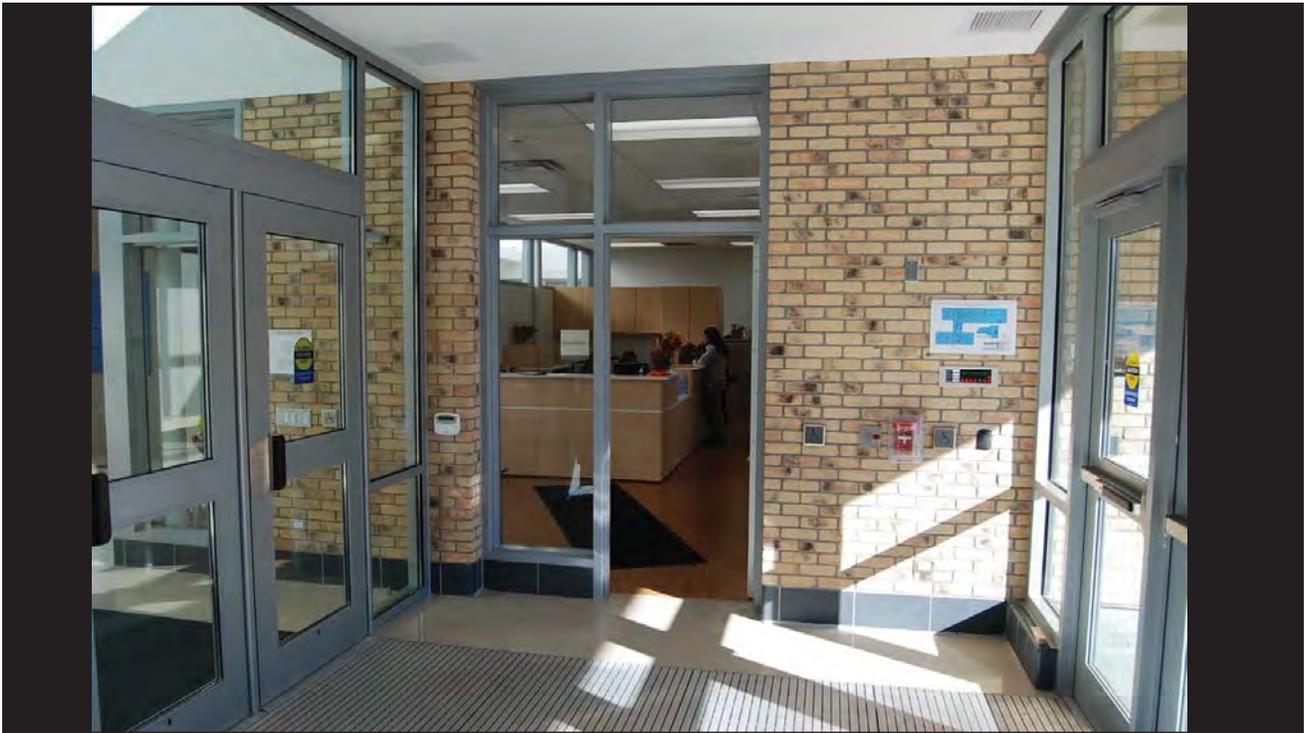
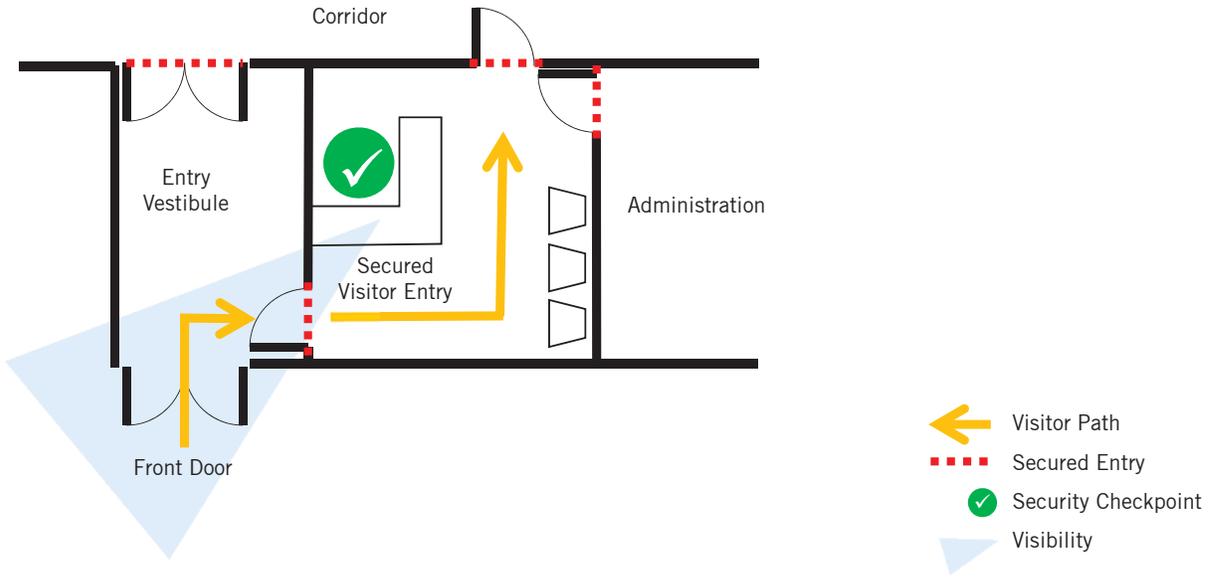
EXISTING SECOND FLOOR PLAN

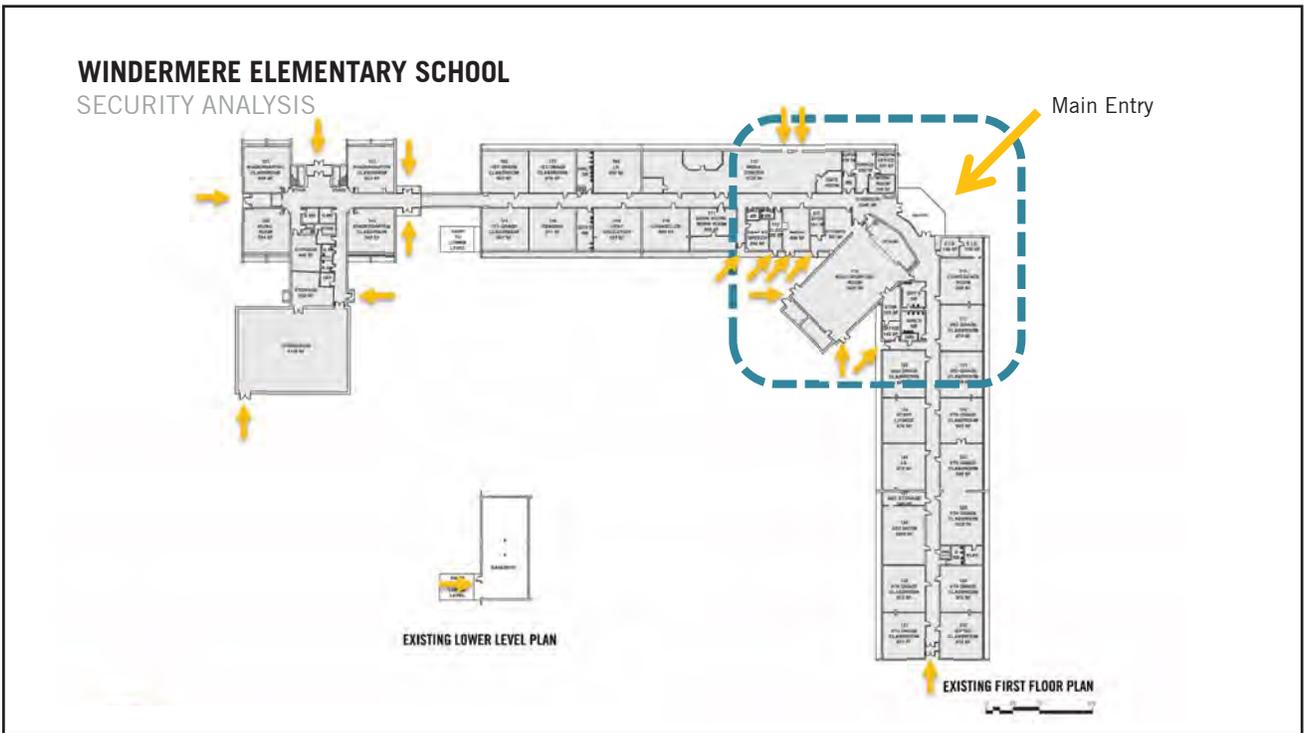




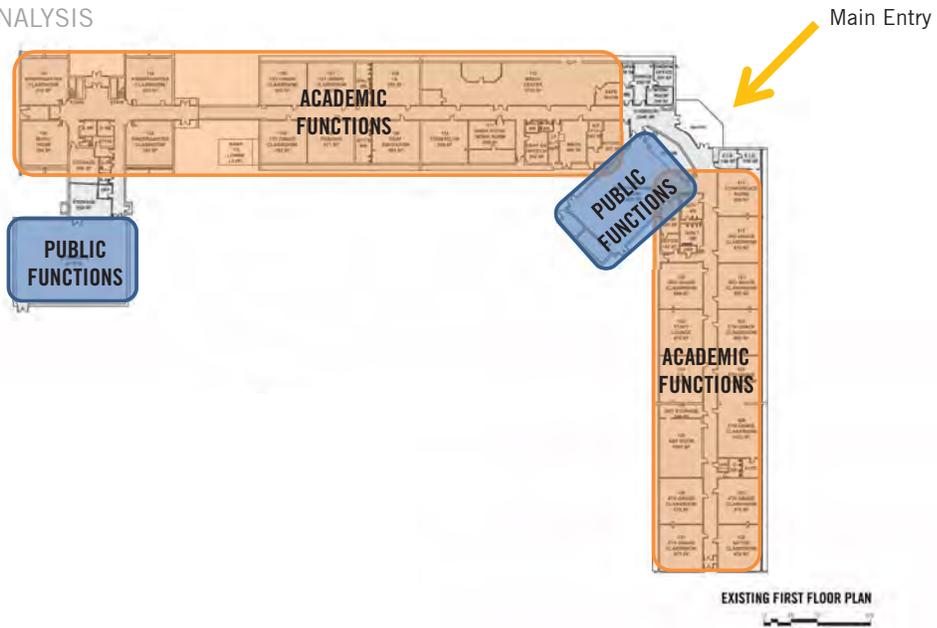
## BUILDING SECURITY

### FACILITY ENTRY - BEST PRACTICES

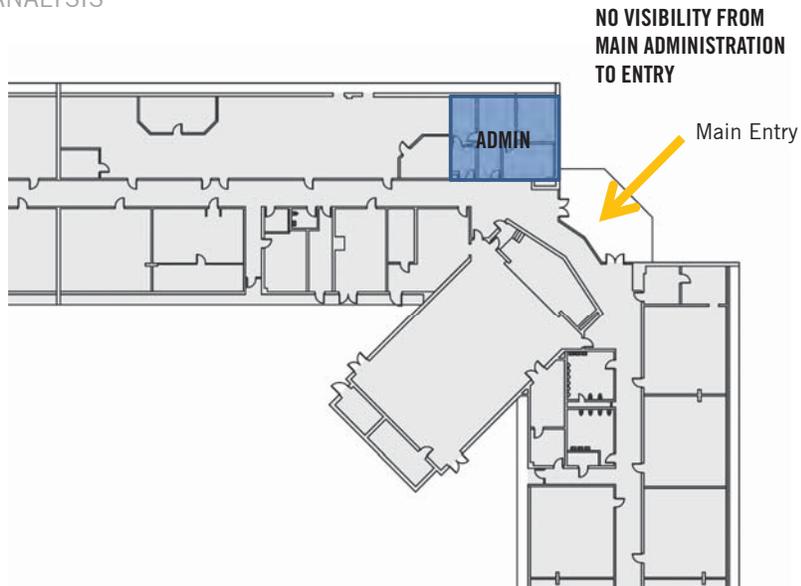




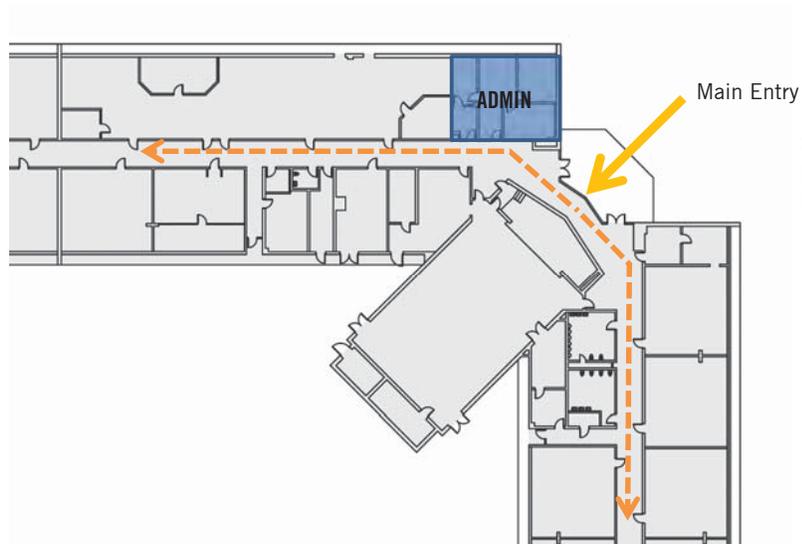
**WINDERMERE ELEMENTARY SCHOOL**  
SECURITY ANALYSIS



**WINDERMERE ELEMENTARY SCHOOL**  
SECURITY ANALYSIS



**WINDERMERE ELEMENTARY SCHOOL**  
SECURITY ANALYSIS



**SCHOOL CAN BE ACCESSED  
PRIOR TO CHECKING IN WITH  
RECEPTION ONCE ALLOWED  
THROUGH MAIN ENTRY**

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## SUMMARY – HASTINGS MIDDLE SCHOOL

The original Hastings Middle School was constructed in 1961. It currently serves 701 students, sixth through eighth grades. Recent ten year enrollment projections predict up to 717 students.

The 134,140 square foot building has had a couple of building additions over the years in 1966 and most recently in 1978. The most recent addition accommodated population growth by adding a new media center and other support spaces. The original building is fifty-four years old, while the latest addition is thirty-seven years old.

### MAJOR CHALLENGES - BUILDING

- Size of classrooms are small, not meeting current standards
- Library size and configuration does not support collaboration
- Limited collaborative space
- No air conditioning in the gym, ceiling height does not meet current standards
- Need of an multi-purpose physical educations space (due to limited size of weight room / training room)
- Need of additional space to accommodate music curriculum
- Auditorium – AV systems need work
- Need of additional storage for visual and performing arts
- Location of restrooms within classroom wing / MH restroom
- Size of Tech Ed classrooms do not meet current standards, not centrally located, limiting visibility and access to the program
- Some ADA compliance challenges

### MAJOR CHALLENGES - SITE

- Limited event parking
- Poor condition of asphalt
- Need of additional exterior support facilities for athletics

# HASTINGS MIDDLE SCHOOL

## HASTINGS MIDDLE SCHOOL CHRONOLOGY DIAGRAM



## **HASTINGS MIDDLE SCHOOL**

### SUMMARY

GRADES: 6-8

HEIGHT: TWO STORIES

SITE SIZE: 14.50 ACRES

BUILDING SIZE: 134,140 SF

CURRENT NUMBER OF STUDENTS: 701

CURRENT SF/STUDENT: 191 SF

10 YEAR ENROLLMENT PROJECTION: 717

10 YEAR SF/STUDENT: 187 SF

## **HASTINGS MIDDLE SCHOOL**

### MAJOR CHALLENGES

#### BUILDING:

- PE – NO AC IN GYM, CEILING TOO LOW
- NEED OF MPR SPACE (SIZE OF WEIGHT ROOM / TRAINING ROOM)
- AUDITORIUM – AV NEEDS WORK
- ADDITIONAL SPACE NEEDED TO ACCOMMODATE MUSIC CURRICULUM
- NEED STORAGE FOR VISUAL AND PERFORMING ARTS
- LIMITED COLLABORATIVE SPACE
- CLASSROOM SIZE
- LOCATION OF RESTROOMS WITHIN CLASSROOM WING / MH RESTROOM
- SIZE AND LOCATION OF TECH ED

#### SITE:

- LIMITED EVENT PARKING
- POOR CONDITION OF ASPHALT

## HASTINGS MIDDLE SCHOOL SITE DIAGRAM



## HASTINGS MIDDLE SCHOOL FUNCTIONAL ZONING ANALYSIS



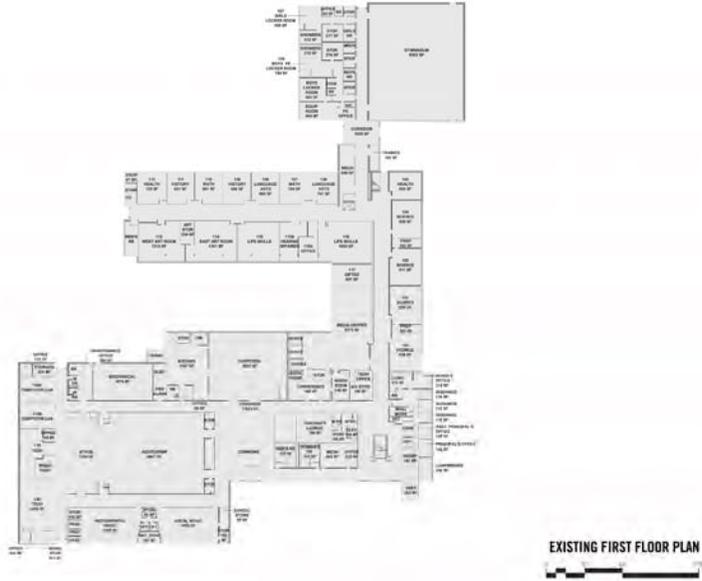
**HASTINGS MIDDLE SCHOOL**  
FUNCTIONAL ZONING ANALYSIS



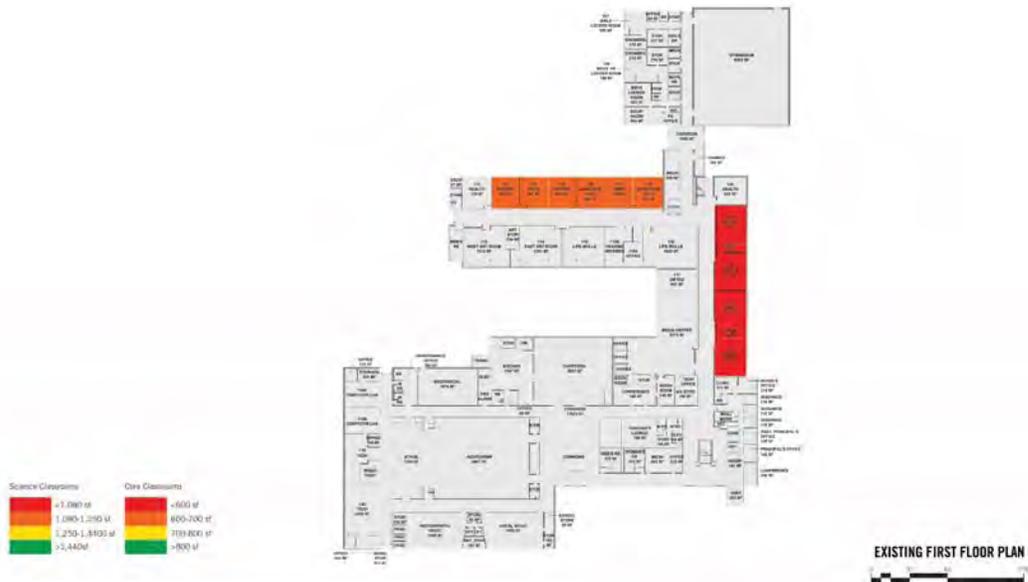
**HASTINGS MIDDLE SCHOOL**  
MH ROOM / RESTROOM LOCATION



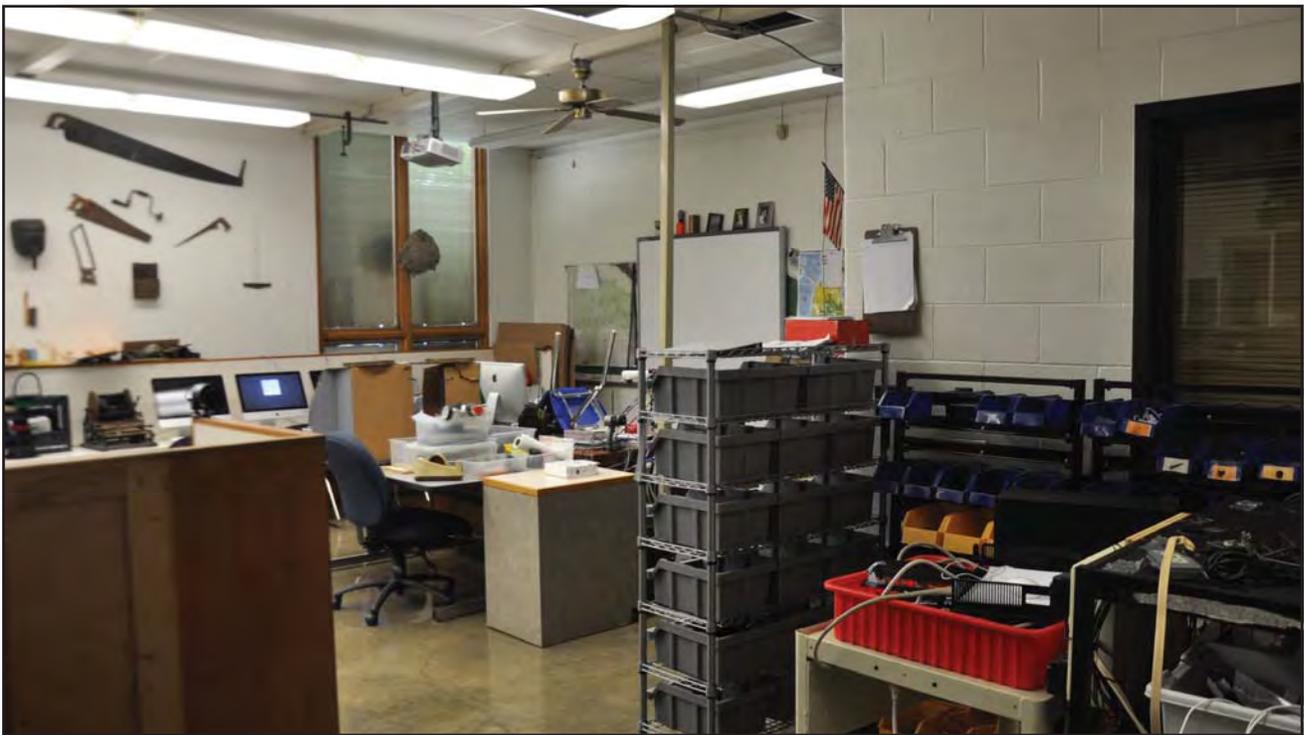
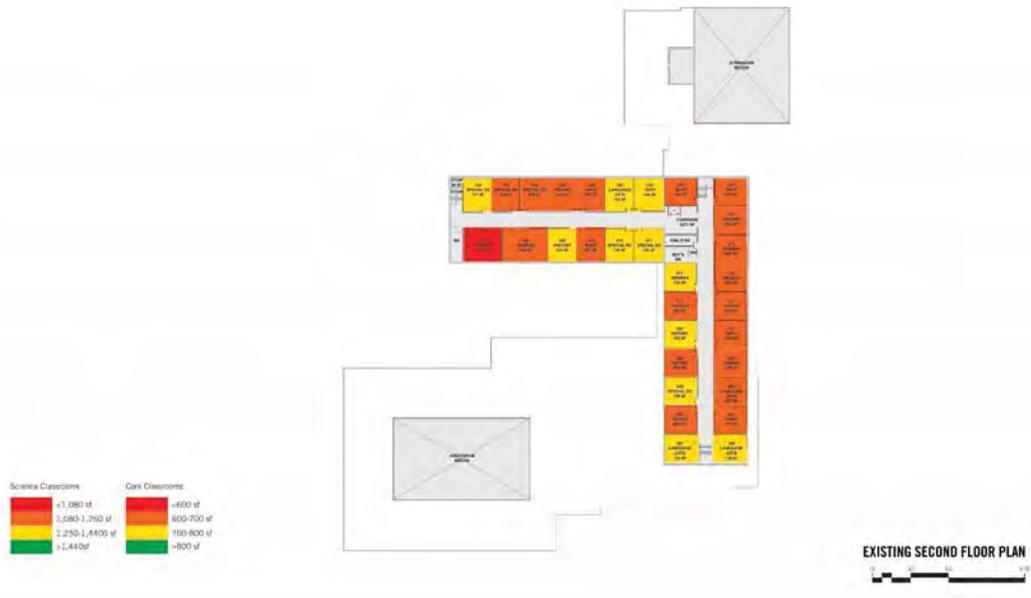
**HASTINGS MIDDLE SCHOOL**  
CIRCULATION ANALYSIS



**HASTINGS MIDDLE SCHOOL**  
CLASSROOM SIZE ANALYSIS



**HASTINGS MIDDLE SCHOOL**  
CLASSROOM SIZE ANALYSIS

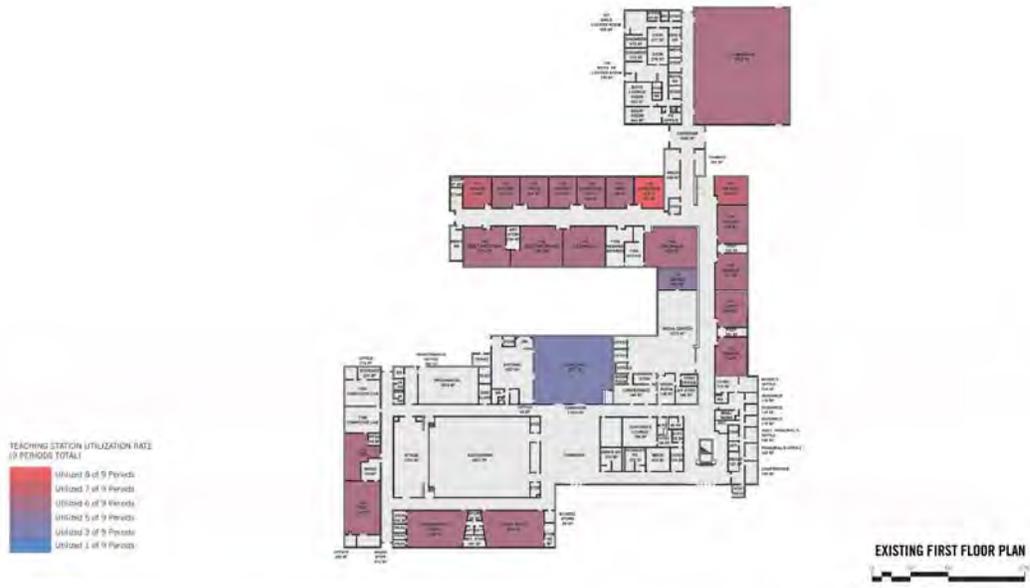




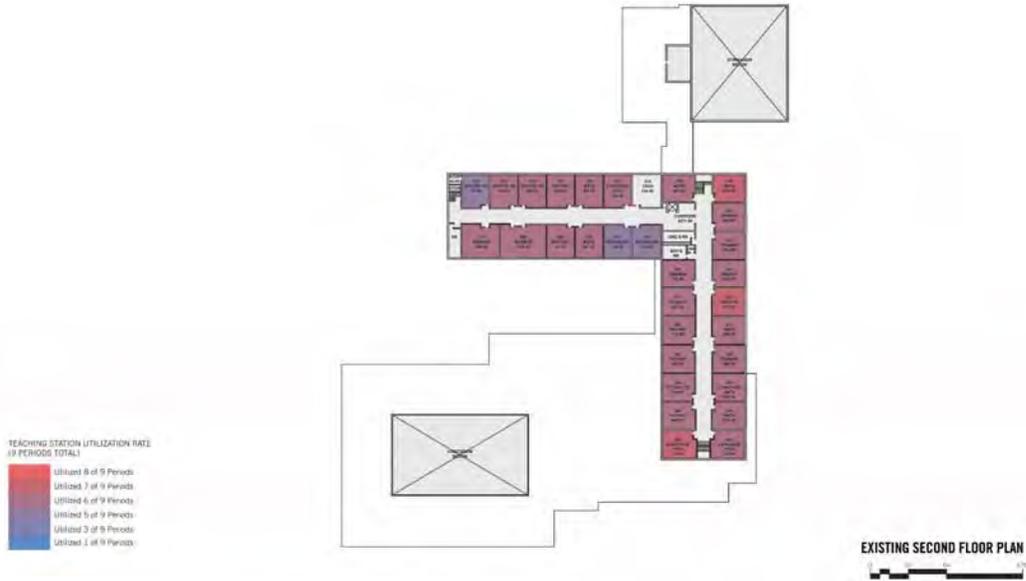




**HASTINGS MIDDLE SCHOOL**  
ACADEMIC UTILIZATION ANALYSIS

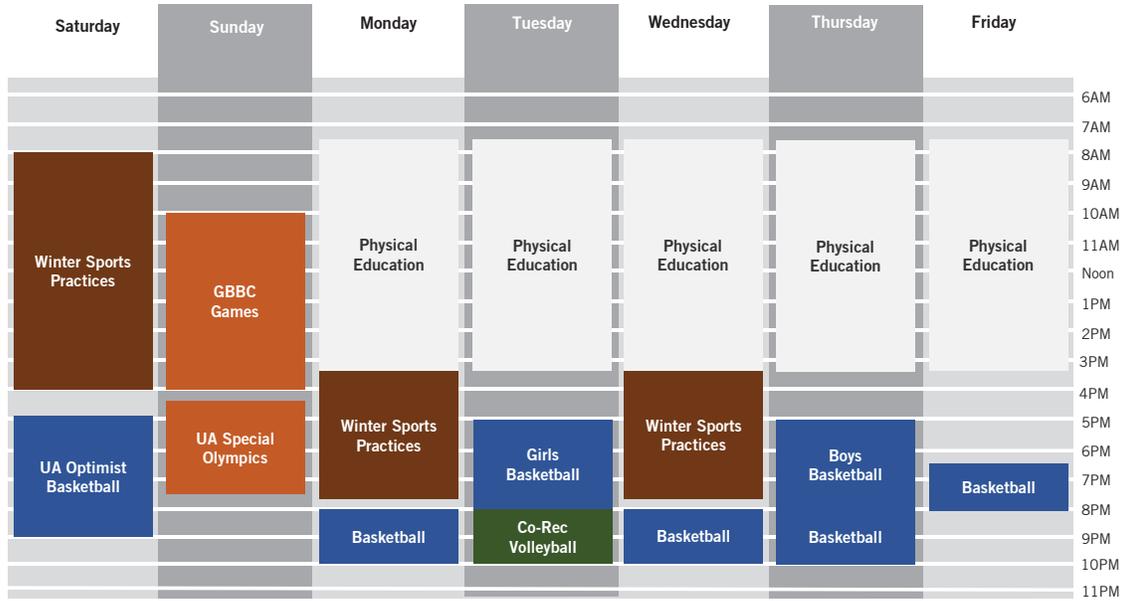


**HASTINGS MIDDLE SCHOOL**  
ACADEMIC UTILIZATION ANALYSIS



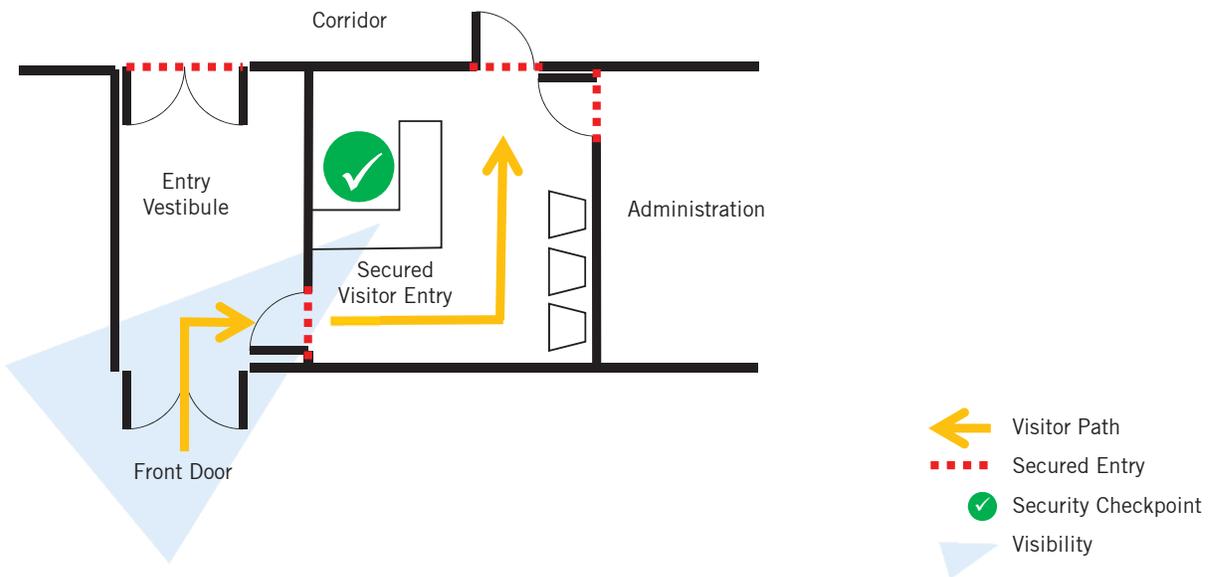
### HASTINGS MIDDLE SCHOOL

Gym Utilization – Winter Schedule Snapshot



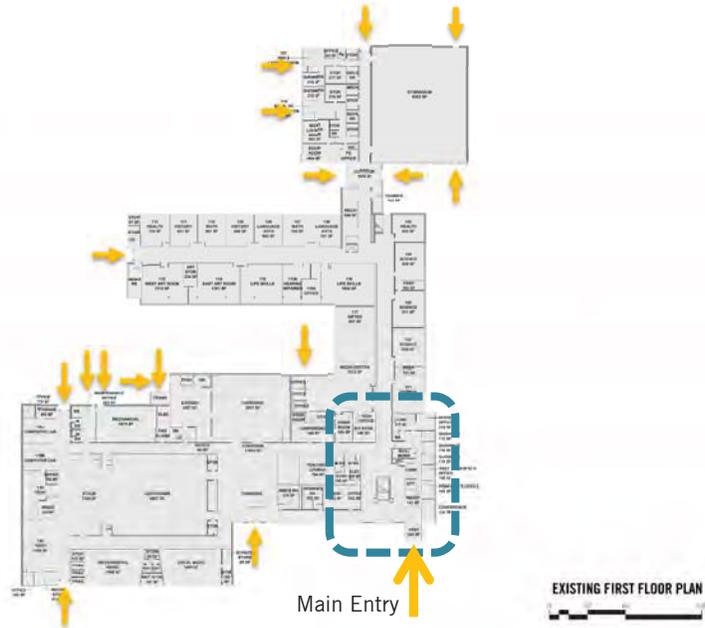
### BUILDING SECURITY

FACILITY ENTRY - BEST PRACTICES





**HASTINGS MIDDLE SCHOOL**  
SECURITY ANALYSIS



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## SUMMARY – JONES MIDDLE SCHOOL

The original Jones Middle School was constructed in 1923, and served as Upper Arlington High School until 1956, when the current UAHS construction was completed. It currently serves 705 students, sixth through eighth grades. Recent ten year enrollment projections predict up to 806 students.

The 130,878 square foot building has had several building additions over the years in 1926, 1930, 1936, 1960, 1967 and most recently in 1997. The most recent addition accommodated population growth by adding a new cafeteria, media center and other support spaces. The original building is ninety-two years old, while the latest addition is eighteen years old.

### MAJOR CHALLENGES - BUILDING

- Lack of secure entry vestibule – visitors are not contained after being granted entry to the building to check-in
- Building is not securely zoned for after-hours public access (i.e. – public has access to entire building to utilize shared space, such as the gym)
- Size of classrooms are small, not meeting current standards
- Size of Tech Ed does not meet current standards
- Lack of collaborative space
- No ADA access to main entry of the building, some other ADA compliance challenges
- Auditorium – AV systems need work
- Gym size (minimal boundaries around court and need for 750 spectator seats)
- Simultaneous gym use with auditorium causes acoustical and available stage size challenges
- Narrow interior circulation
- Disconnect from music (3<sup>rd</sup> floor) to main performance space (1<sup>st</sup> floor)
- Ramp in cafeteria is not an ideal configuration for efficiency of food service

### MAJOR CHALLENGES - SITE

- Limited parking – especially for events
- No opportunities for outdoor learning
- Site fully utilized with existing functions



## **JONES MIDDLE SCHOOL**

### SUMMARY

GRADES: 6-8

HEIGHT: THREE STORIES

SITE SIZE: 10.00 ACRES

BUILDING SIZE: 130,878 SF

CURRENT NUMBER OF STUDENTS: 705

CURRENT SF/STUDENT: 186 SF

10 YEAR ENROLLMENT PROJECTION: 806

10 YEAR SF/STUDENT: 162 SF

## **JONES MIDDLE SCHOOL**

### MAJOR CHALLENGES

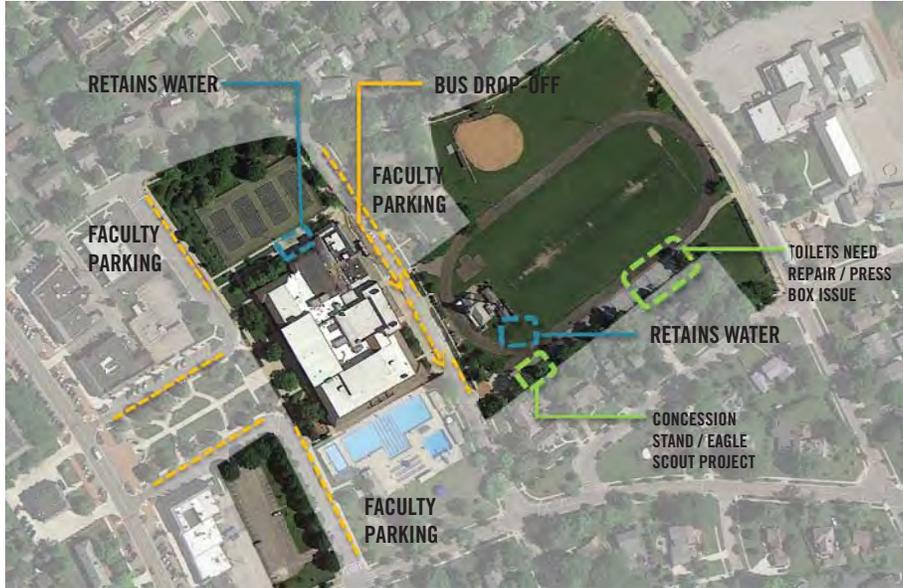
#### BUILDING:

- GYM – SIZE AND SIMULTANEOUS USE (NEED FOR 750 SEATS)
- AUDITORIUM – AV NEEDS WORK
- NO COLLABORATIVE SPACE
- SIZE OF TECH ED
- LACK OF SECURE ENTRY VESTIBULE
- NARROW INTERIOR CIRCULATION
- CLASSROOM SIZE
- DISCONNECT FROM MUSIC TO MAIN PERFORMANCE SPACE
- LACK OF SECURED ZONING OF BUILDING FOR AFTER HOURS USE

#### SITE:

- LIMITED PARKING – ESPECIALLY FOR EVENTS
- NO OPPORTUNITIES FOR OUTDOOR LEARNING
- SITE FULLY UTILIZED WITH EXISTING FUNCTIONS

**JONES MIDDLE SCHOOL**  
SITE DIAGRAM

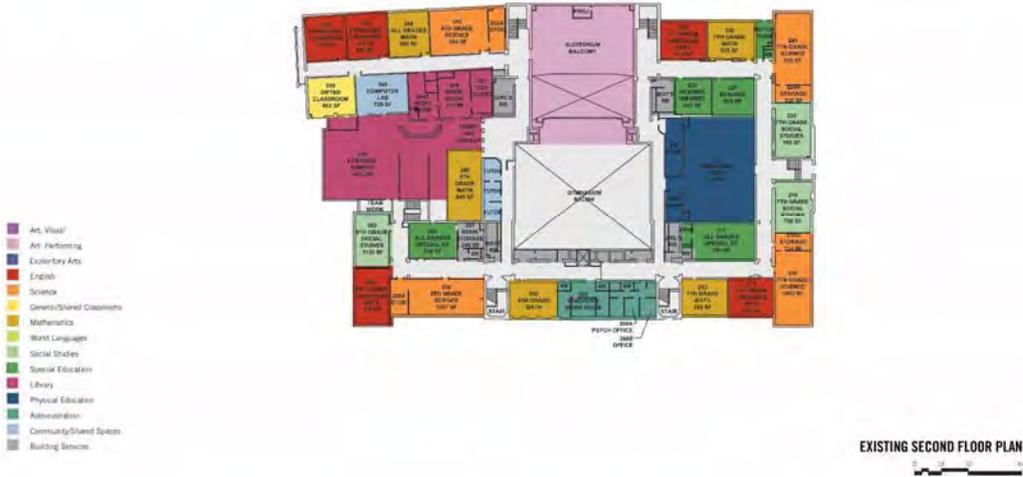


**JONES MIDDLE SCHOOL**  
FUNCTIONAL ZONING ANALYSIS



# JONES MIDDLE SCHOOL

## FUNCTIONAL ZONING ANALYSIS



# JONES MIDDLE SCHOOL

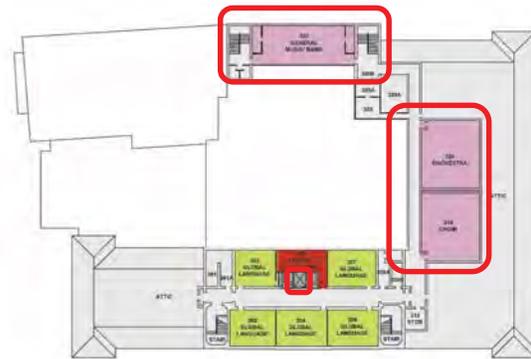
## FUNCTIONAL ZONING ANALYSIS



**JONES MIDDLE SCHOOL**  
MUSIC / PERFORMING ARTS LOCATIONS



EXISTING FIRST FLOOR



EXISTING THIRD FLOOR

**JONES MIDDLE SCHOOL**  
CIRCULATION ANALYSIS

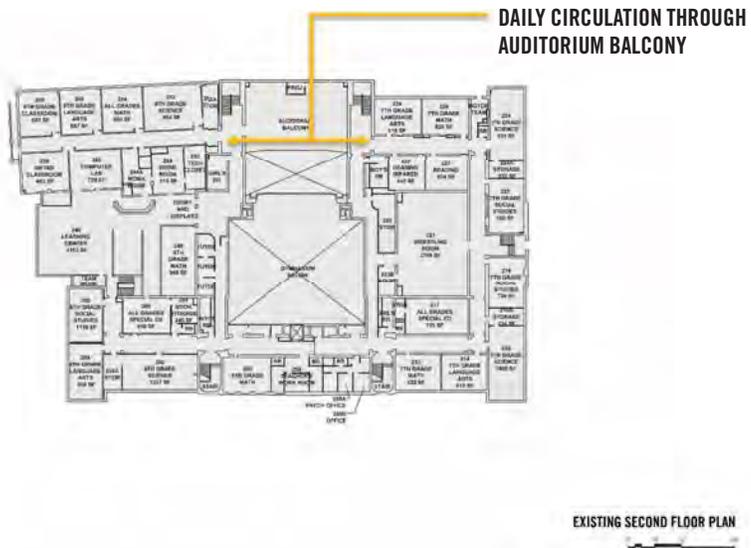
RAMP FROM SERVRY  
TO CAFETERIA



EXISTING FIRST FLOOR PLAN



**JONES MIDDLE SCHOOL**  
CIRCULATION ANALYSIS







# JONES MIDDLE SCHOOL

## CLASSROOM SIZE ANALYSIS

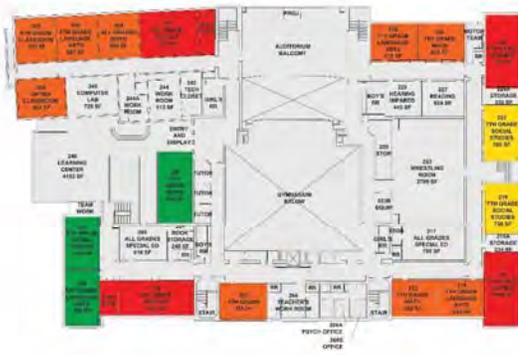


Science Classrooms	Core Classrooms
1,080-1,250 sq ft	<600 sq ft
1,250-1,440 sq ft	600-700 sq ft
1,440-1,600 sq ft	700-800 sq ft
1,600-1,800 sq ft	>800 sq ft

EXISTING FIRST FLOOR PLAN

# JONES MIDDLE SCHOOL

## CLASSROOM SIZE ANALYSIS



Science Classrooms	Core Classrooms
1,080-1,250 sq ft	<600 sq ft
1,250-1,440 sq ft	600-700 sq ft
1,440-1,600 sq ft	700-800 sq ft
1,600-1,800 sq ft	>800 sq ft

EXISTING SECOND FLOOR PLAN

**JONES MIDDLE SCHOOL**  
CLASSROOM SIZE ANALYSIS



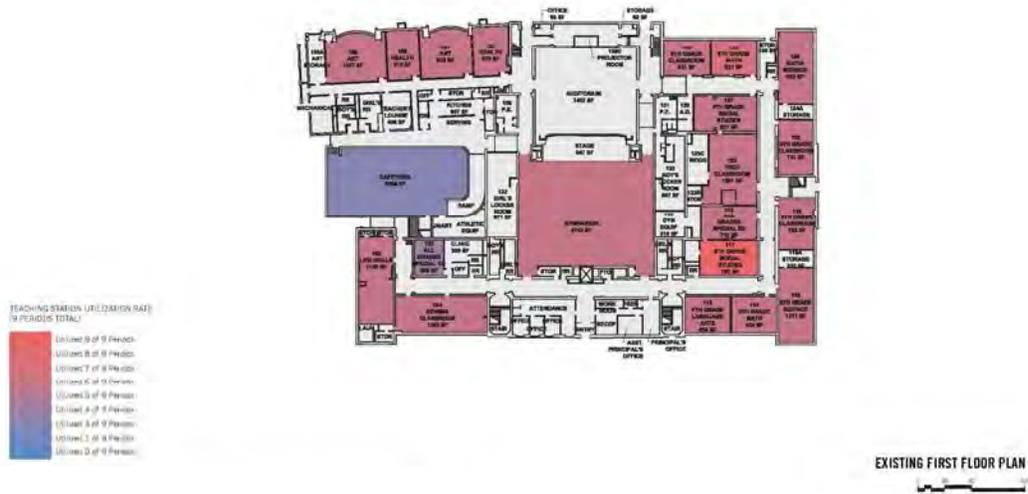
EXISTING THIRD FLOOR PLAN





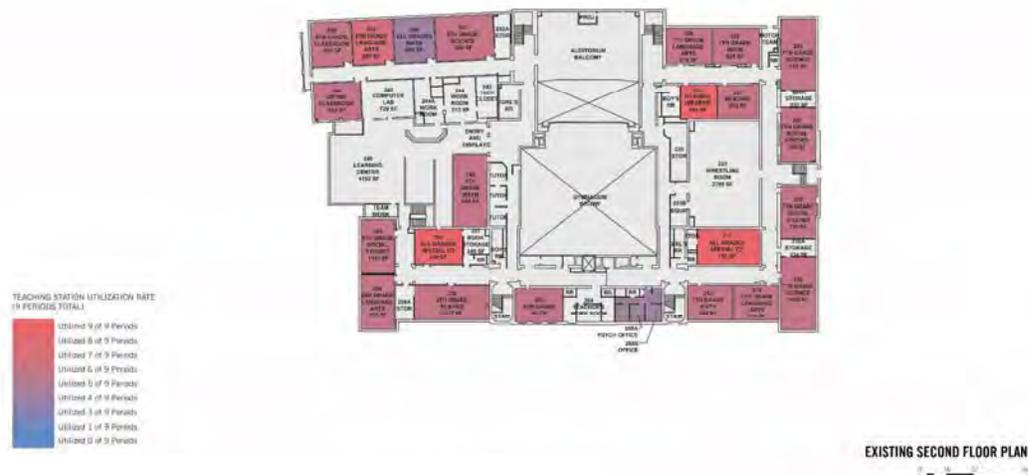
# JONES MIDDLE SCHOOL

## ACADEMIC UTILIZATION ANALYSIS



# JONES MIDDLE SCHOOL

## ACADEMIC UTILIZATION ANALYSIS





## ACOUSTICS

### BEST PRACTICES

In many classrooms . . . with normal hearing understand only 75 of the words from a list. reading a textbook every fourth word , and being expected understand the material be tested on . Sounds ridiculous? Well is exactly the facing students every in schools . .

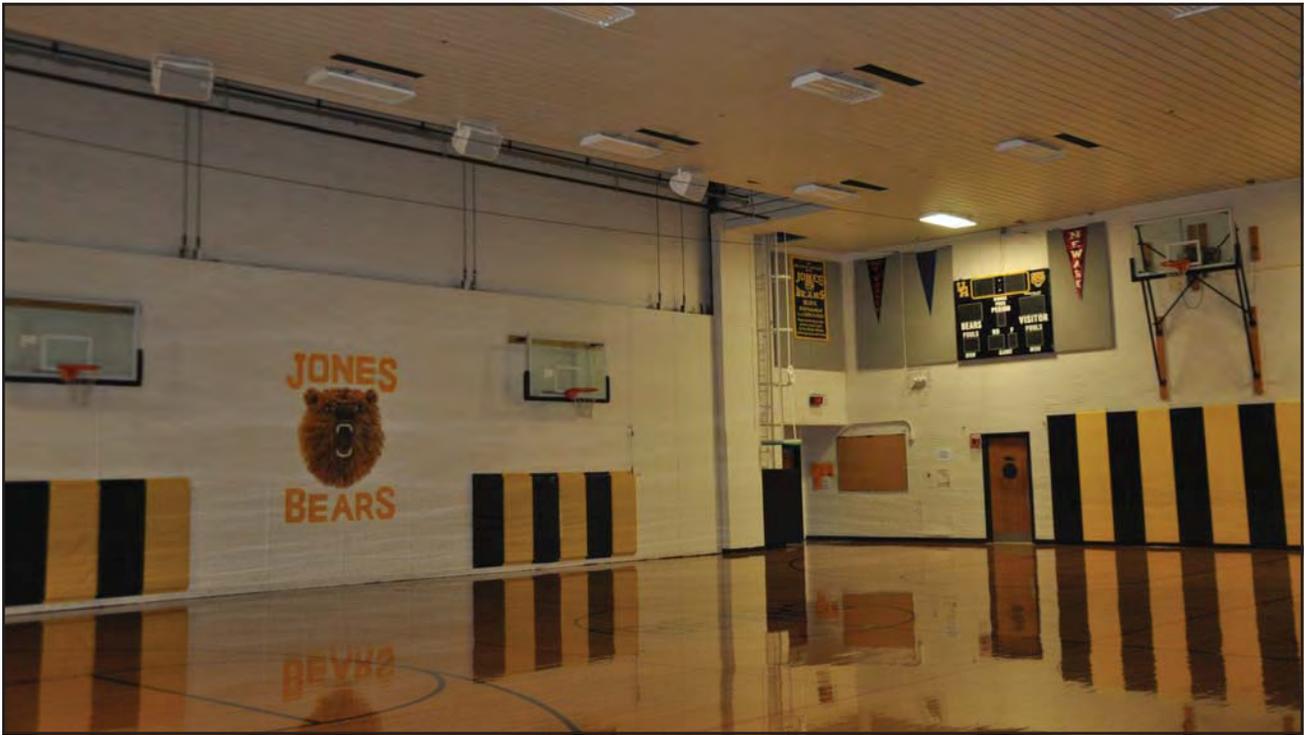


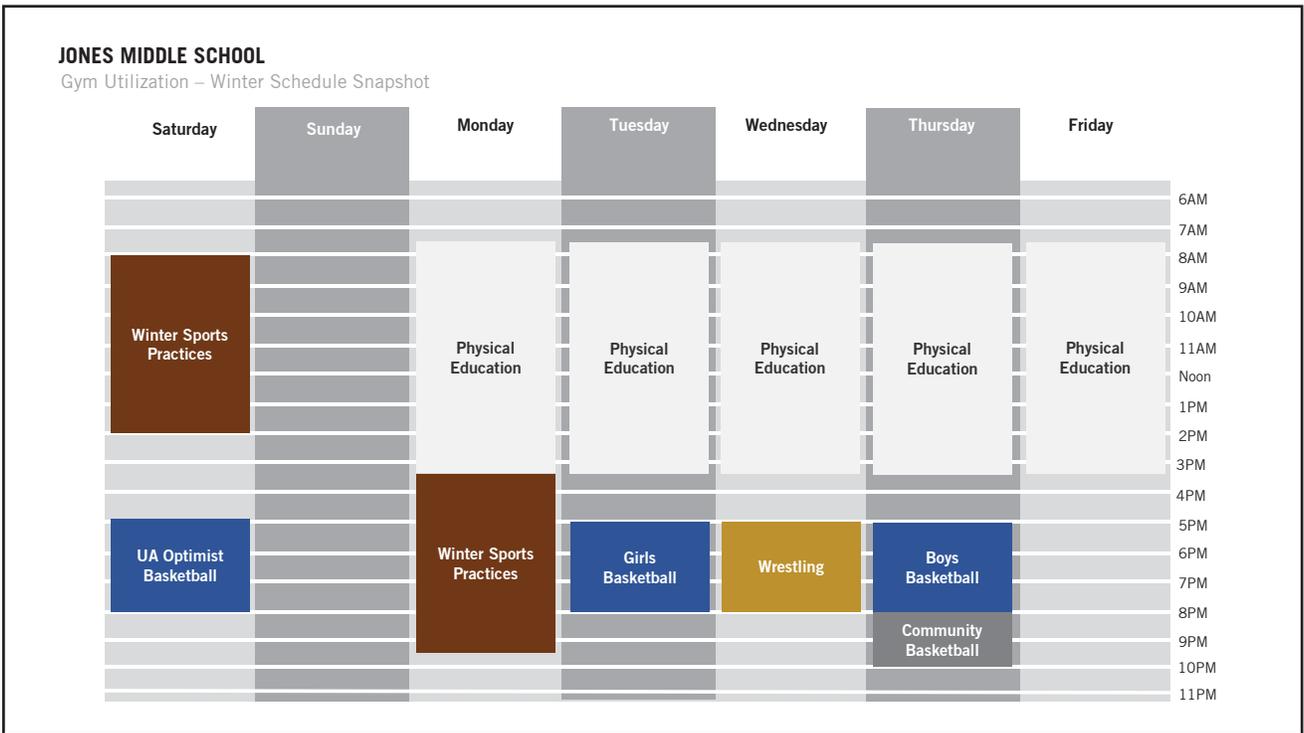
## ACOUSTICS

### BEST PRACTICES

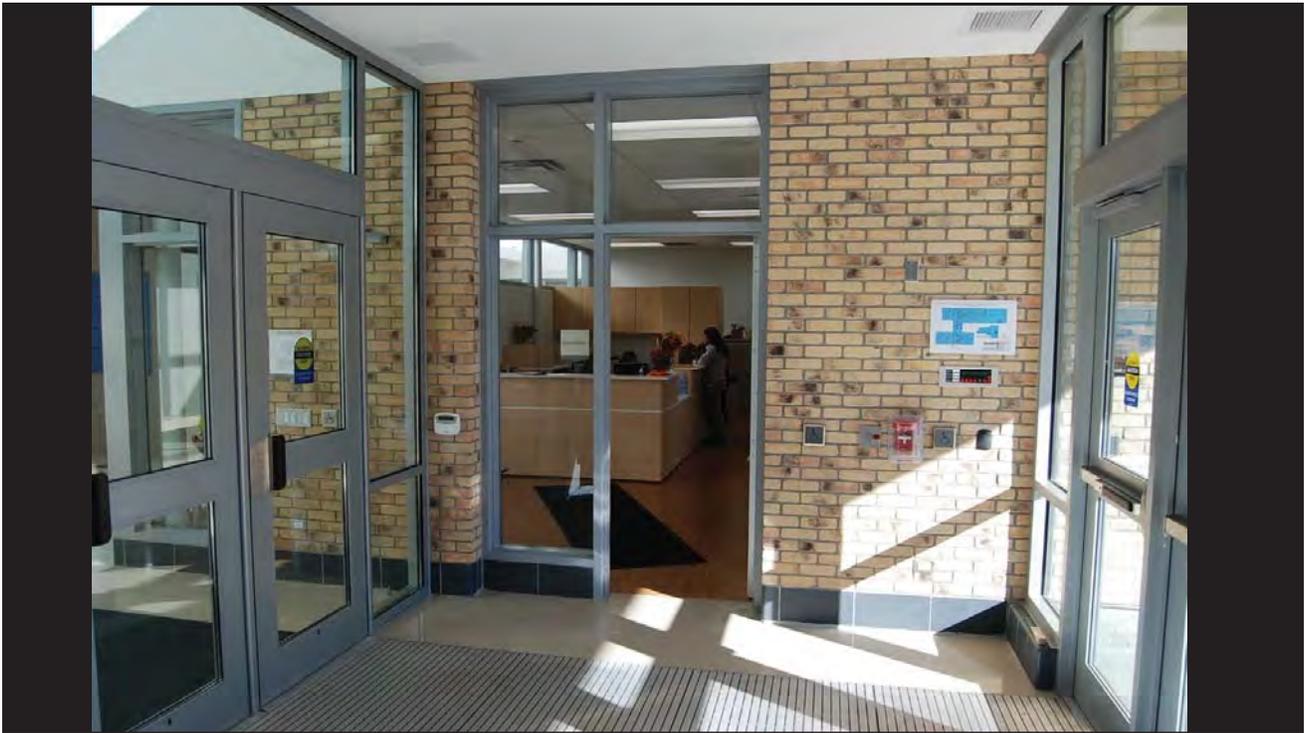
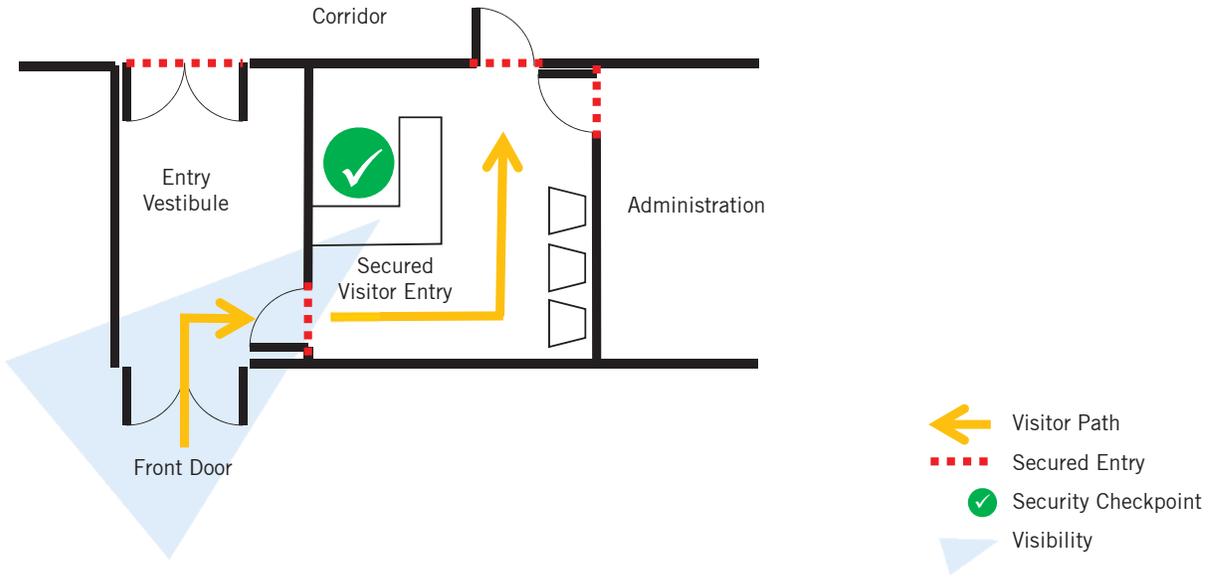
In many classrooms . . . **listeners** with normal hearing **can** understand only 75 **percent** of the words **read** from a list. **Imagine** reading a textbook **with** every fourth word **missing**, and being expected **to** understand the material **and** be tested on **it**. Sounds ridiculous? Well **that** is exactly the **situation** facing students every **day** in schools . .





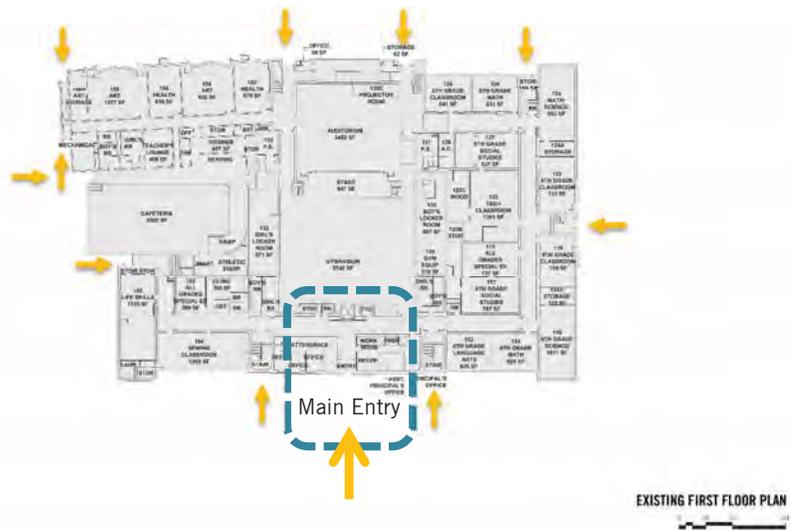


**BUILDING SECURITY**  
FACILITY ENTRY - BEST PRACTICES

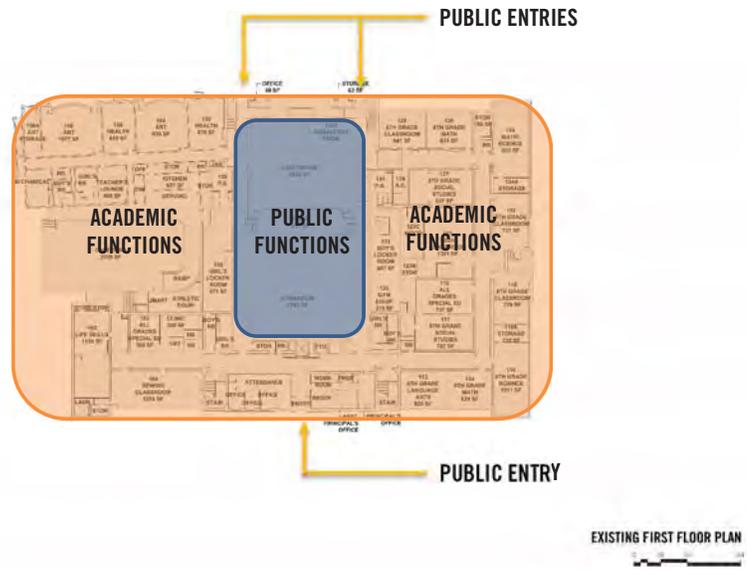




**JONES MIDDLE SCHOOL**  
SECURITY ANALYSIS



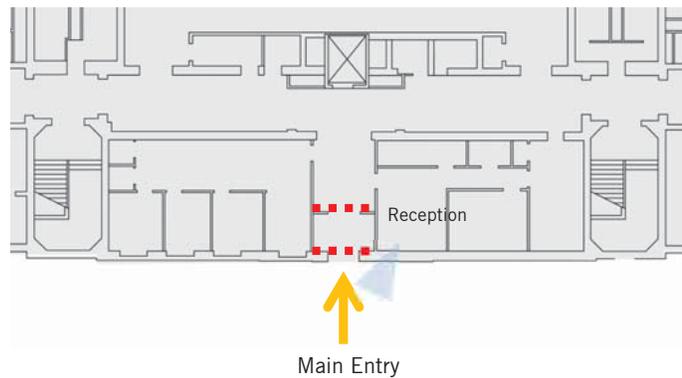
**JONES MIDDLE SCHOOL**  
SECURITY ANALYSIS - ZONING



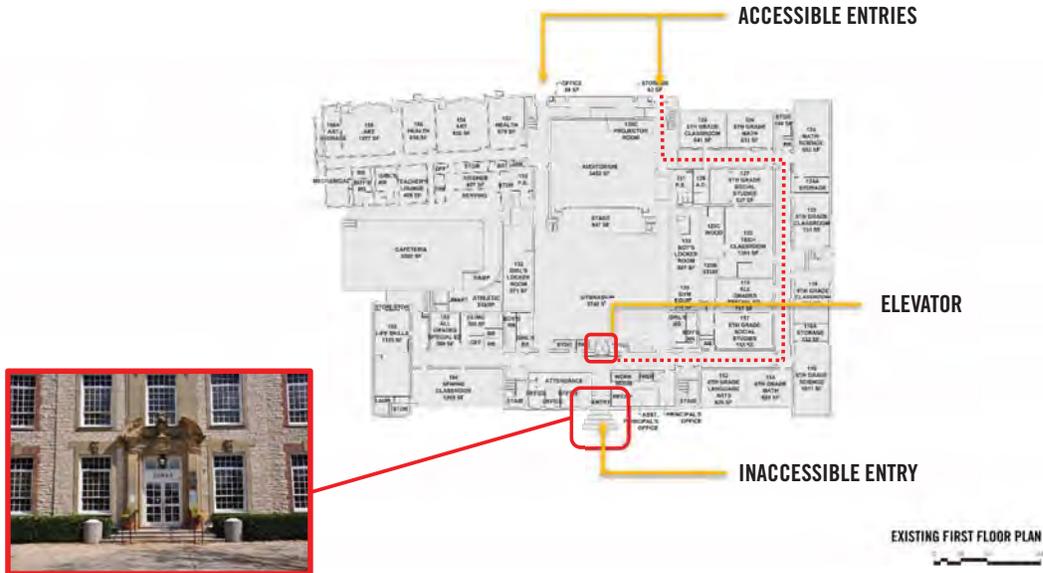
**JONES MIDDLE SCHOOL**  
SECURITY ANALYSIS - MAIN ENTRY

**VISITORS DO NOT PASS THROUGH CHECKPOINT IN RECEPTION PRIOR TO ENTERING BUILDING**

**GOOD VISIBILITY**



**JONES MIDDLE SCHOOL**  
ACCESSIBILITY ANALYSIS



**DAYLIGHTING**  
BEST PRACTICES



Daylighting has been linked to **“better performance of students** – as much as 20% improvement in math and 26% in reading on standardized tests”

*(Heschong Mahone Group, 1999)*



# JONES MIDDLE SCHOOL

## DAYLIGHT ANALYSIS



EXISTING FIRST FLOOR PLAN

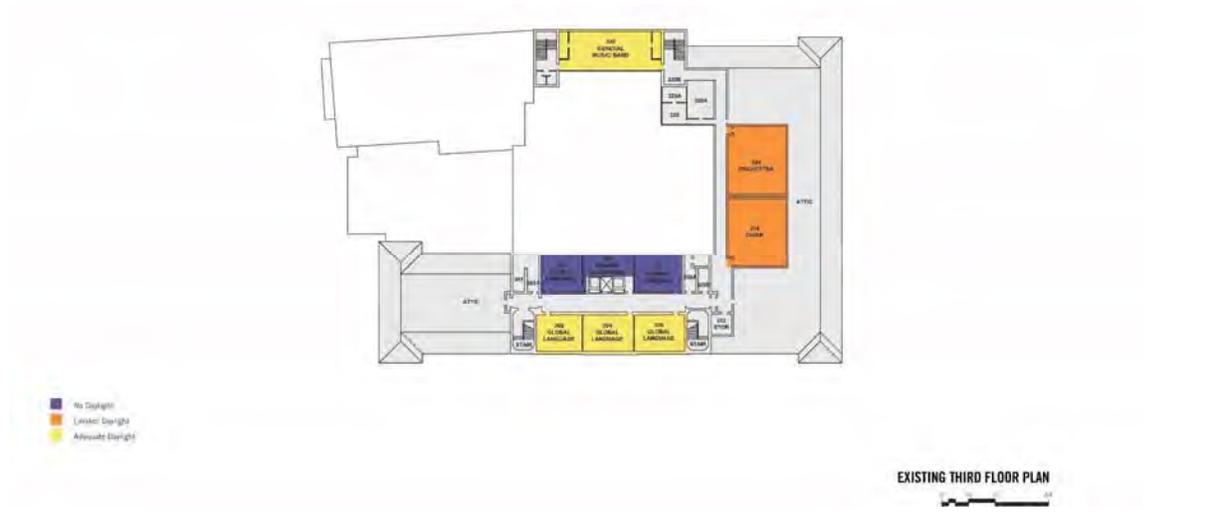
# JONES MIDDLE SCHOOL

## DAYLIGHT ANALYSIS



EXISTING SECOND FLOOR PLAN

**JONES MIDDLE SCHOOL**  
DAYLIGHT ANALYSIS



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## SUMMARY – UPPER ARLINGTON HIGH SCHOOL

The original Upper Arlington High School was constructed in 1956, and currently serves 1,816 students, in ninth through twelfth grades. Recent ten year enrollment projections predict up to 1,974 students.

The 293,824 square foot building has had several building additions over the years in 1959, 1964, 1965, 1971 and most recently in 1983. The most recent addition accommodated population growth by adding a new freshman gym and associated support spaces. The original building is fifty-nine years old, while the latest addition is thirty-two years old.

### MAJOR CHALLENGES - BUILDING

- Building is not securely zoned for after-hours public access (i.e. – public has access to entire building to utilize shared space, such as the gym)
- Security of 31 building entries with multiple ADA concerns
- Size of classrooms are small, not meeting current standards
- Limited daylight in many core classrooms
- Isolated arts, tech arts and music, with narrow circulation
- Isolated location of MH special education classrooms
- Inadequate and disparate teacher office space
- Disconnected administrative offices
- General circulation congestion
- Lack of collaborative space
- Lack of meeting space
- Lack of air conditioning in the gymnasiums
- Intense usage of gymnasiums
- Condition and functional size of natatorium (including lack of spectator separation from pool deck)
- Simultaneous gym use with auditorium use causes congestion and acoustical challenges
- Compliance with Title IX (locker rooms)
- Learning Center use and condition does not meet current standards
- General condition of furniture
- Location of individual student storage (lockers) renders many impractical for use
- Size of cafeteria does not accommodate population / food service program
- Reports of indoor air quality concerns (Little Theater, PE/Athletics, Learning Center)



## SUMMARY – UPPER ARLINGTON HIGH SCHOOL, CONTINUED

### MAJOR CHALLENGES - SITE

- Limited parking – especially for events
- Secure entry challenges
- Limited opportunities for outdoor learning
- Pick-up and drop-off challenges
- Compliance with Title IX (2<sup>nd</sup> softball field, no women’s softball locker room, equity of athletic lockers at stadium)
- Limited practice fields (need 2 additional)
- No visitor restrooms, no ADA seats for visitors, limited ADA access on north end of stadium
- Condition of track
- Condition of tennis courts

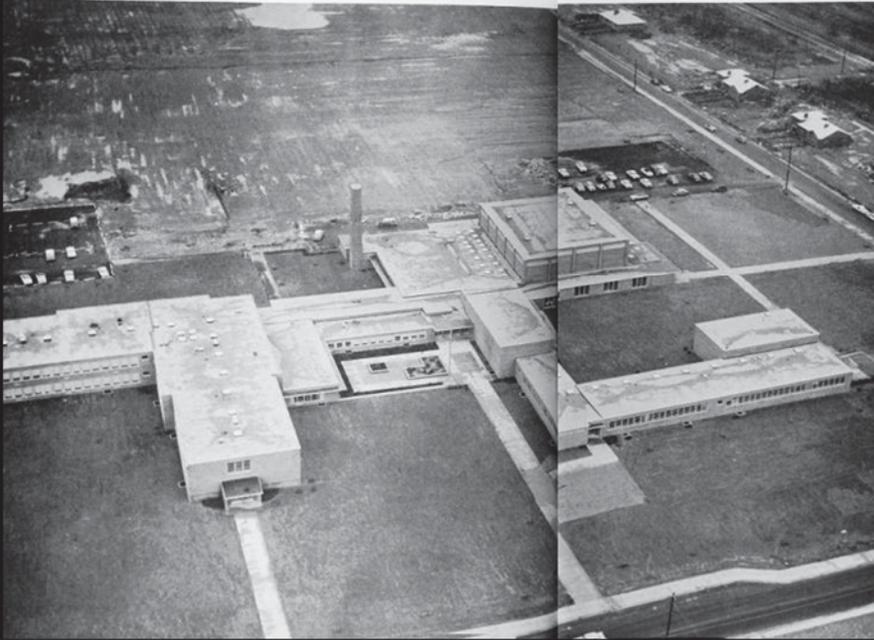
# UPPER ARLINGTON HIGH SCHOOL

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## UPPER ARLINGTON HIGH SCHOOL CHRONOLOGY DIAGRAM



"Oh Arlington, dear Arlington, our hearts w e'er forget"



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## UPPER ARLINGTON HIGH SCHOOL

### SUMMARY

GRADES: 9-12

HEIGHT: TWO STORIES

SITE SIZE: 34.00 ACRES

BUILDING SIZE: 293,824 SF

CURRENT NUMBER OF STUDENTS: 1,816

CURRENT SF/STUDENT: 162 SF

10 YEAR ENROLLMENT PROJECTION: 1,947

10 YEAR SF/STUDENT: 151 SF

## **UPPER ARLINGTON HIGH SCHOOL**

### MAJOR CHALLENGES

#### BUILDING:

- LOCATION OF MH SPECIAL ED
- ISOLATED ARTS, TECH ARTS AND MUSIC WITH NARROW CIRCULATION
- SIZE OF CLASSROOMS
- LIMITED DAYLIGHT IN MANY CORE CLASSROOMS
- INADEQUATE AND DISPARATE TEACHER OFFICE SPACE
- DISCONNECTED ADMINISTRATIVE OFFICES
- LACK OF MEETING SPACE
- NO COLLABORATIVE SPACE
- CONDITION OF FURNITURE
- LOCATION OF INDIVIDUAL STUDENT STORAGE
- LACK OF SECURED ZONING OF BUILDING FOR AFTER HOURS USE
- 31 BUILDING ENTRIES WITH MULTIPLE ADA CONCERNS
- CIRCULATION CONGESTION
- LEARNING CENTER USE AND CONDITION
- COMPLIANCE WITH TITLE IX (LOCKER ROOMS)
- SIZE OF CAFETERIA/ FOOD SERVICE PROGRAM
- REPORTS OF INDOOR AIR QUALITY CONCERNS (LITTLE THEATER, PE/ATHLETICS, LEARNING CNTR)
- CONDITION AND FUNCTIONAL SIZE OF NATATORIUM
- LACK OF AC IN THE GYMS, INTENSE USAGE OF GYMS
- SIMULTANEOUS EVENT USE OF GYMS AND AUDITORIUM

## **UPPER ARLINGTON HIGH SCHOOL**

### MAJOR CHALLENGES

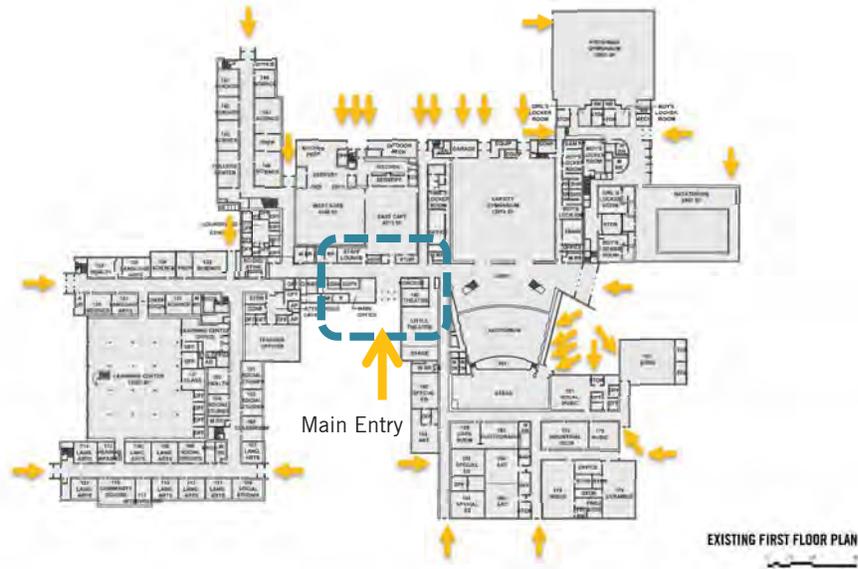
#### SITE:

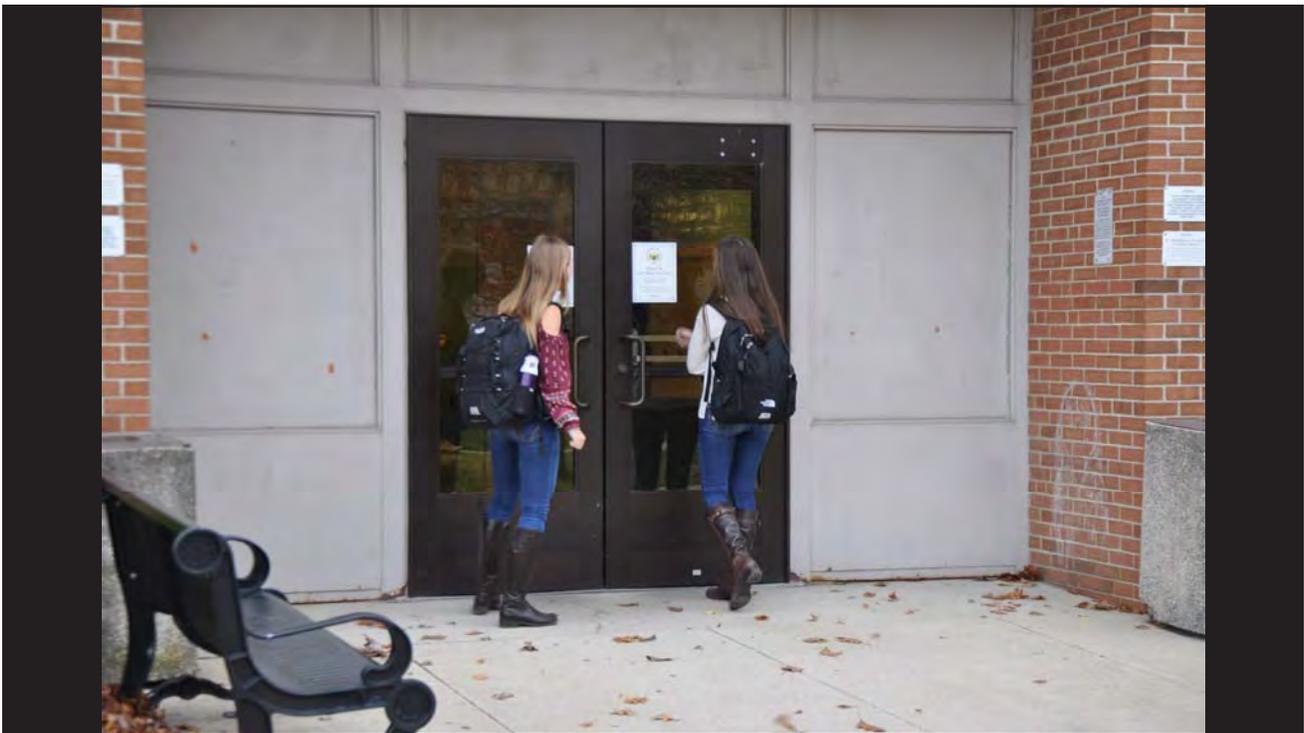
- LIMITED PARKING – ESPECIALLY FOR EVENTS
- SECURE ENTRY CHALLENGES
- LIMITED OPPORTUNITIES FOR OUTDOOR LEARNING
- PICK-UP AND DROP-OFF CHALLENGES
- COMPLIANCE WITH TITLE IX (2<sup>nd</sup> SOFTBALL FIELD, NO WOMEN'S SOFTBALL LOCKER ROOM, EQUITY OF ATHLETIC LOCKERS AT STADIUM)
- LIMITED PRACTICE FIELDS (NEED 2 ADDITIONAL)
- NO VISITOR RESTROOMS, NO ADA SEATS FOR VISITORS, LIMITED ADA ACCESS ON NORTH END OF STADIUM
- CONDITION OF TRACK
- CONDITION OF TENNIS COURTS

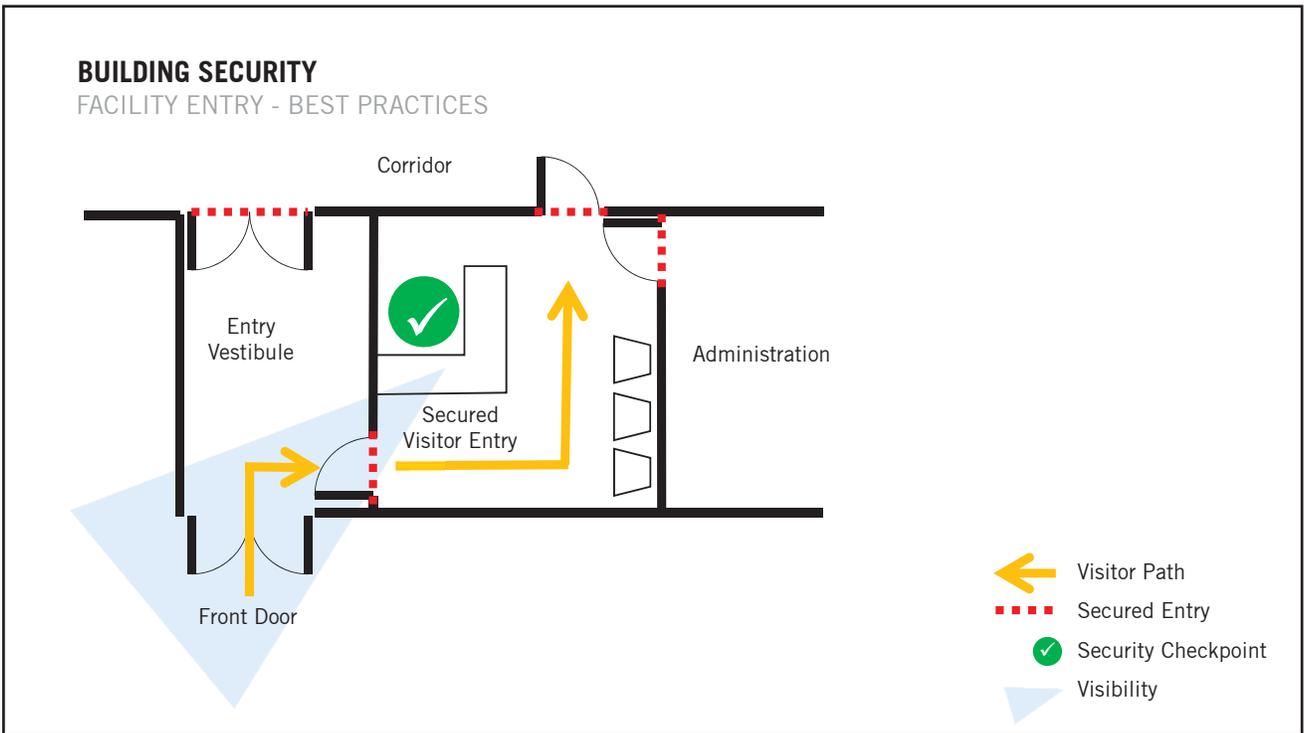
**UPPER ARLINGTON HIGH SCHOOL**  
SITE DIAGRAM



**UPPER ARLINGTON HIGH SCHOOL**  
SECURITY ANALYSIS



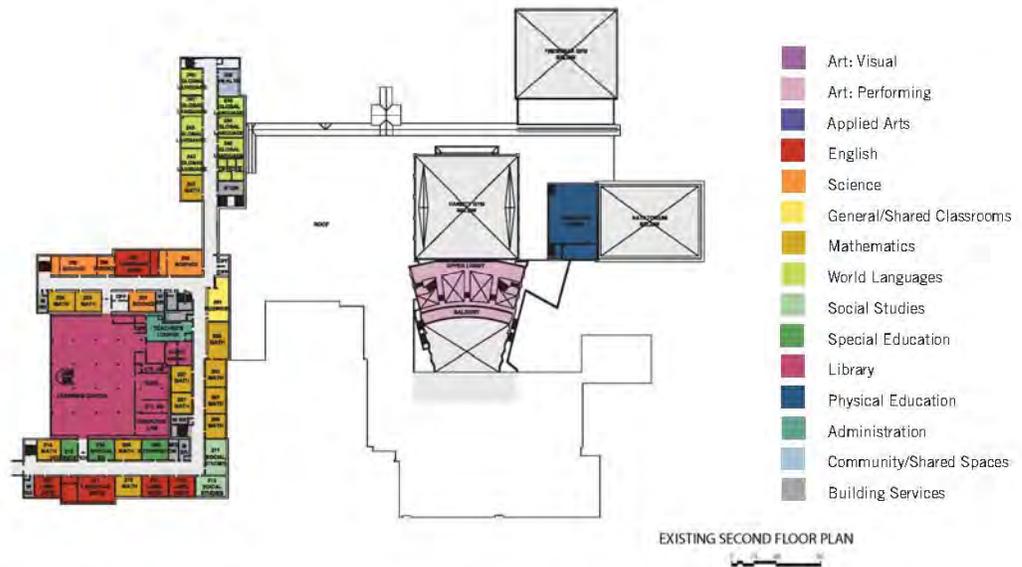




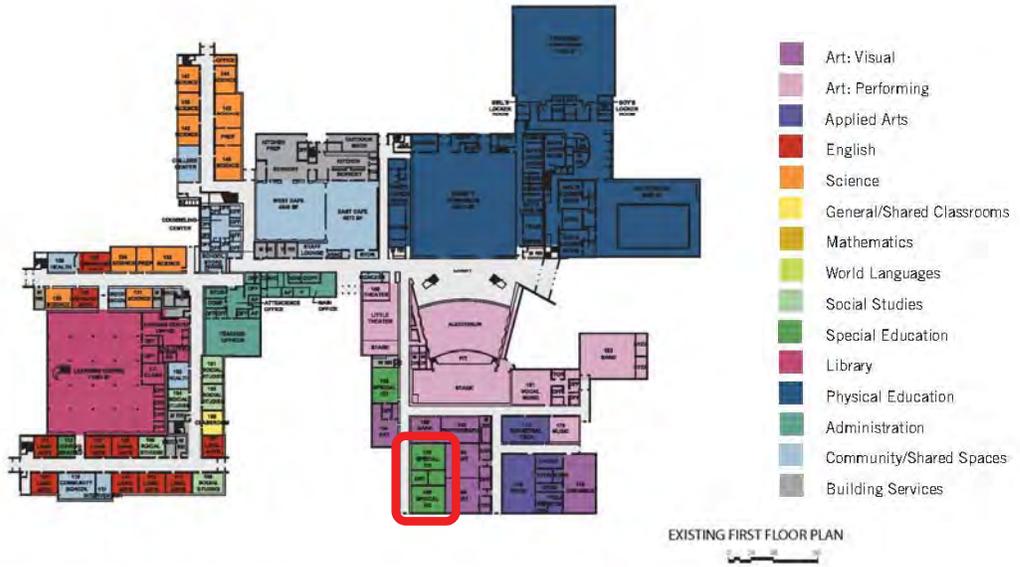
**UPPER ARLINGTON HIGH SCHOOL**  
FUNCTIONAL ZONING ANALYSIS



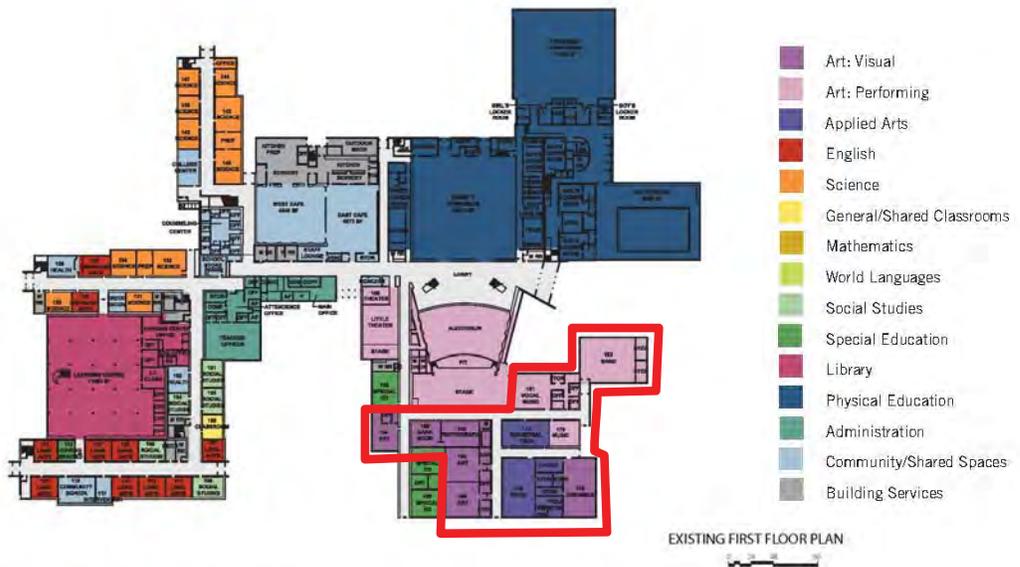
**UPPER ARLINGTON HIGH SCHOOL**  
FUNCTIONAL ZONING ANALYSIS



**UPPER ARLINGTON HIGH SCHOOL**  
MH LOCATION

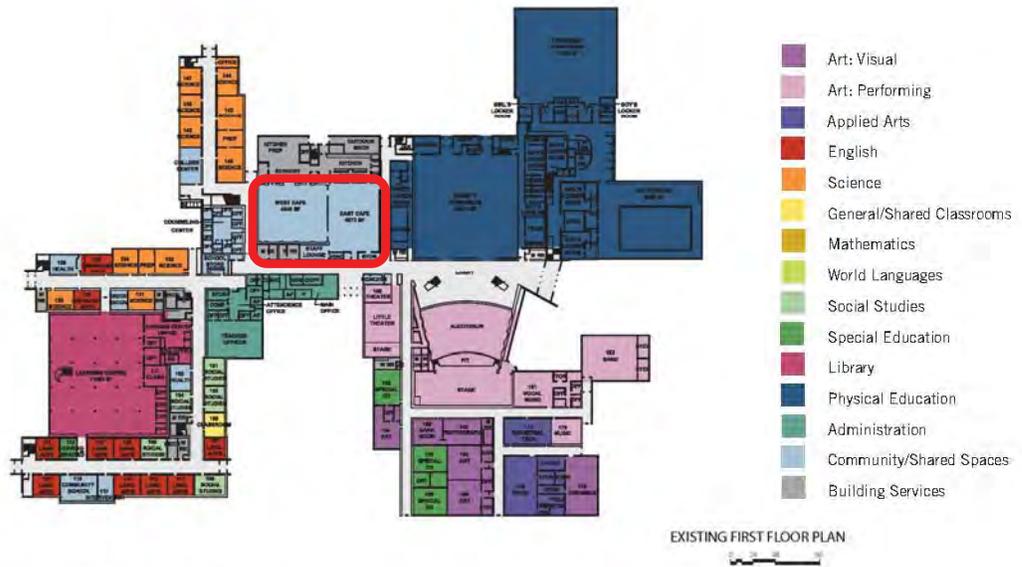


**UPPER ARLINGTON HIGH SCHOOL**  
ARTS/TECH ARTS LOCATION



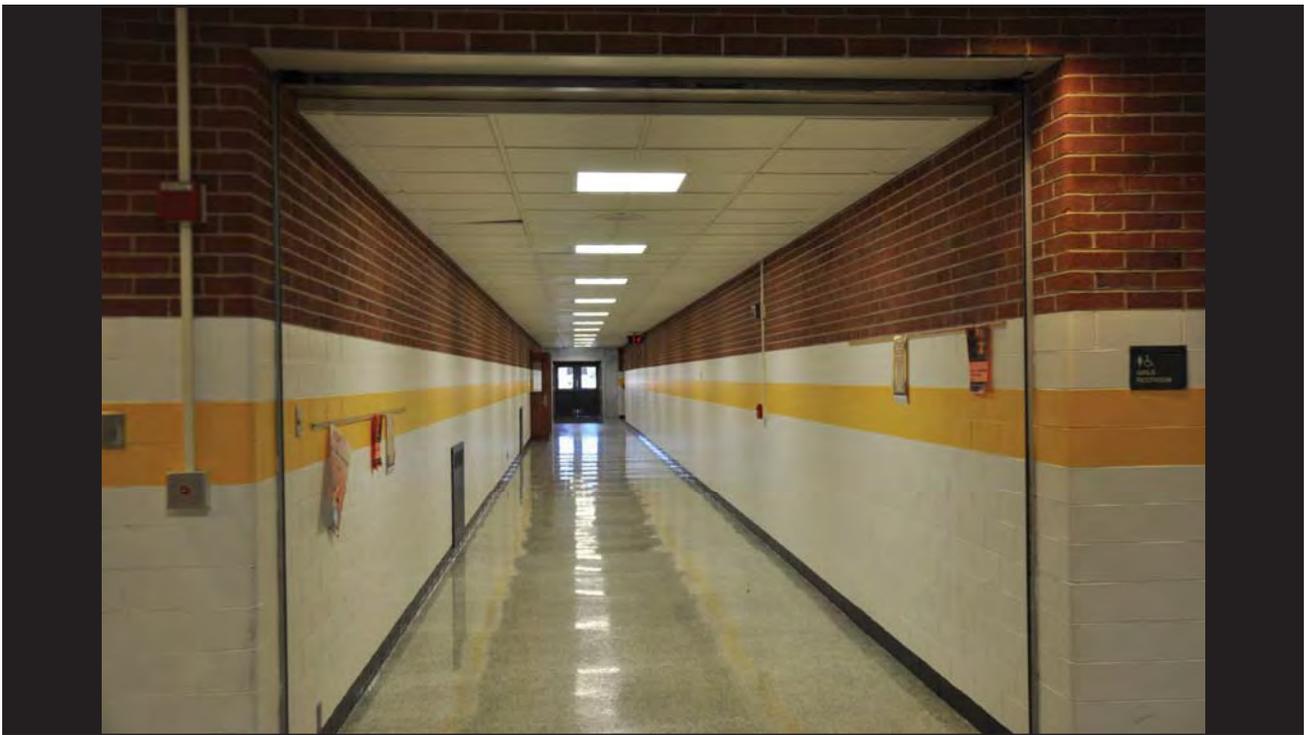
# UPPER ARLINGTON HIGH SCHOOL

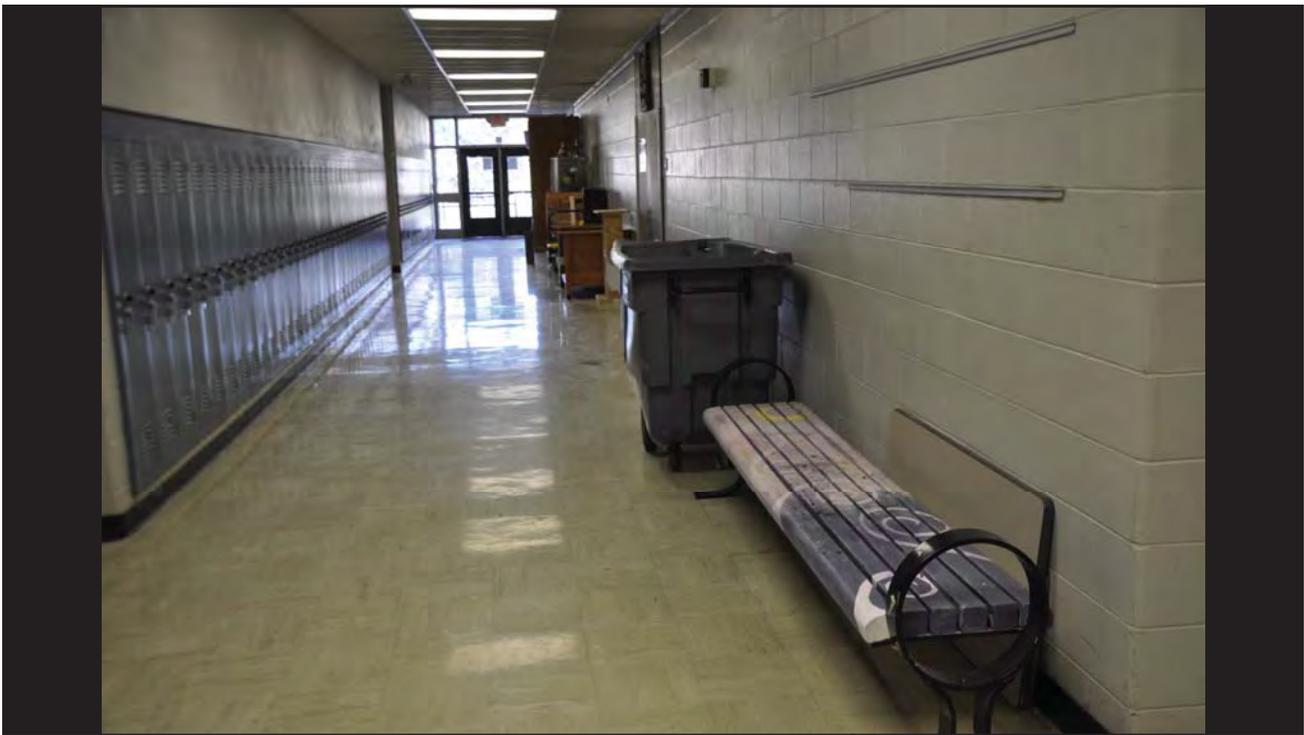
## SIZE OF CAFETERIAS / FOOD SERVICE PROGRAM











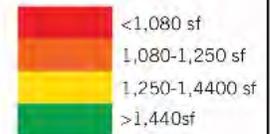
**UPPER ARLINGTON HIGH SCHOOL**  
CLASSROOM SIZE ANALYSIS



Core Classrooms

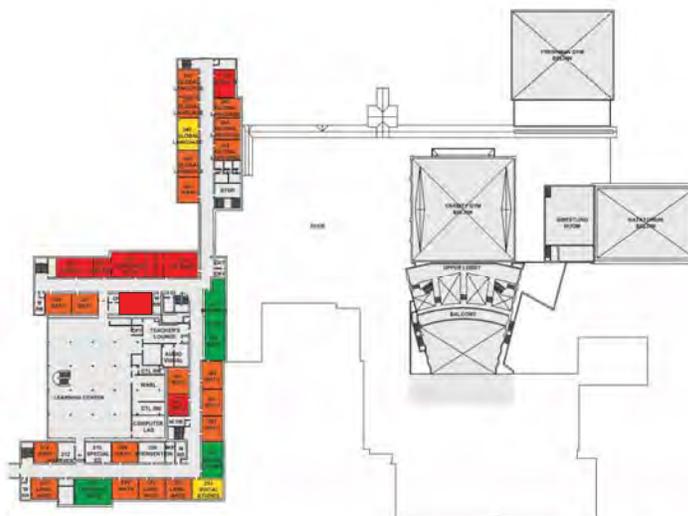


Science Classrooms



EXISTING FIRST FLOOR PLAN

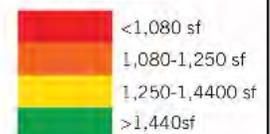
**UPPER ARLINGTON HIGH SCHOOL**  
CLASSROOM SIZE ANALYSIS



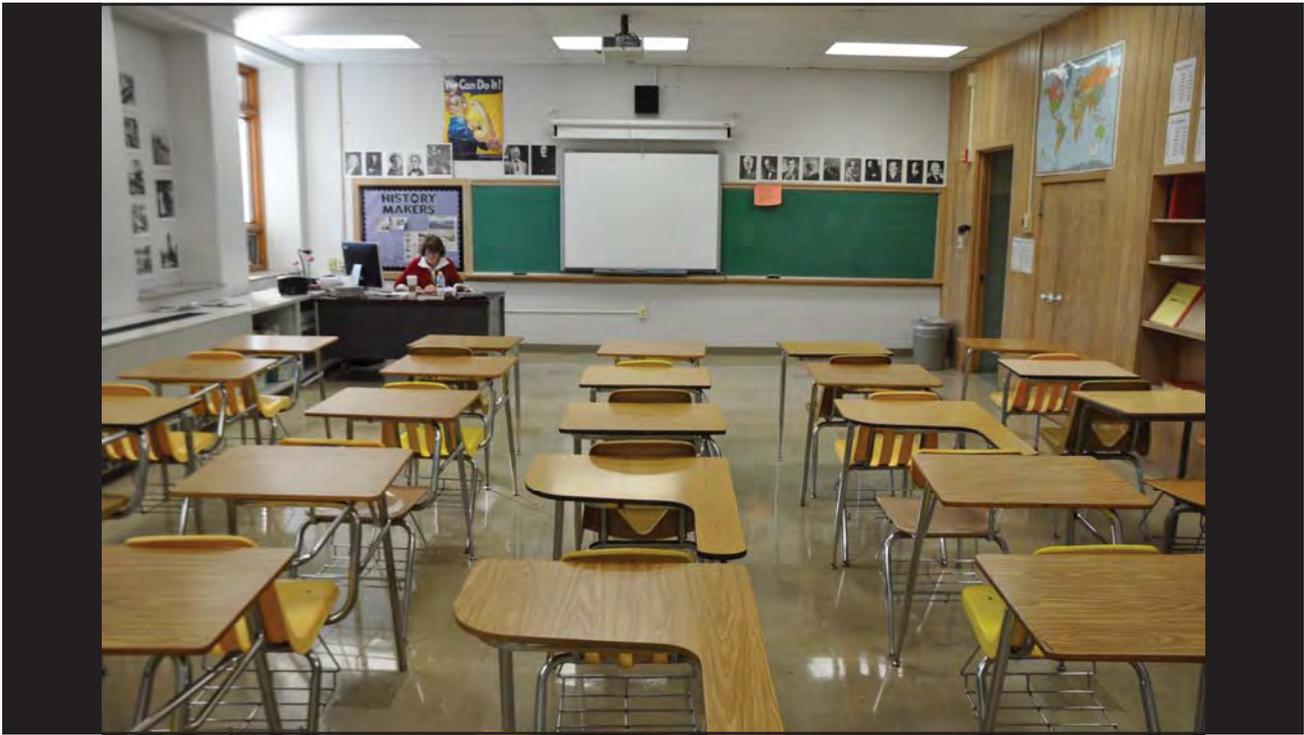
Core Classrooms



Science Classrooms



EXISTING SECOND FLOOR PLAN







**DAYLIGHTING**  
BEST PRACTICES



Daylighting has been linked to **“better performance of students** – as much as 20% improvement in math and 26% in reading on standardized tests”

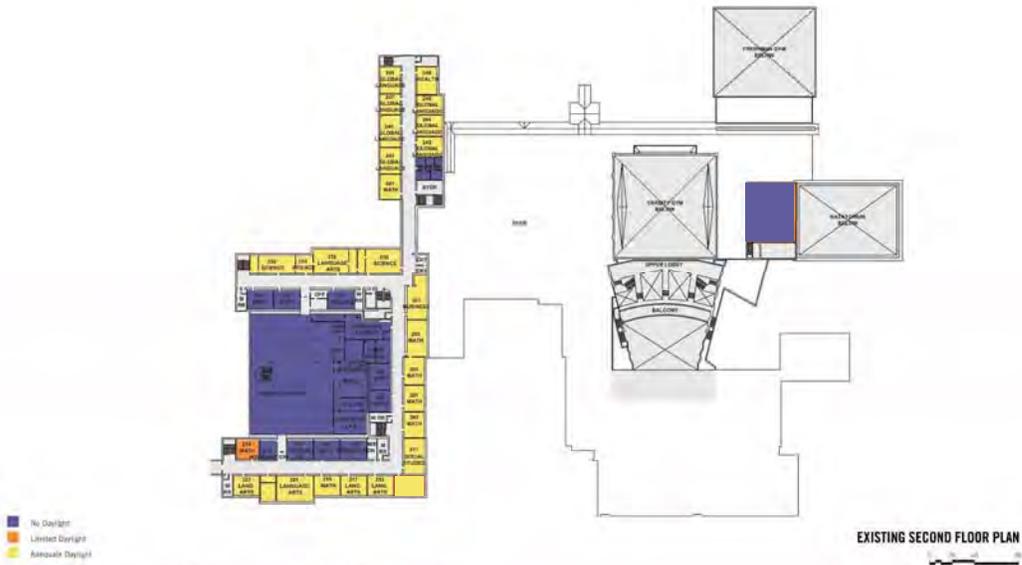
*(Heschong Mahone Group, 1999)*



**UPPER ARLINGTON HIGH SCHOOL**  
NATURAL LIGHT ANALYSIS

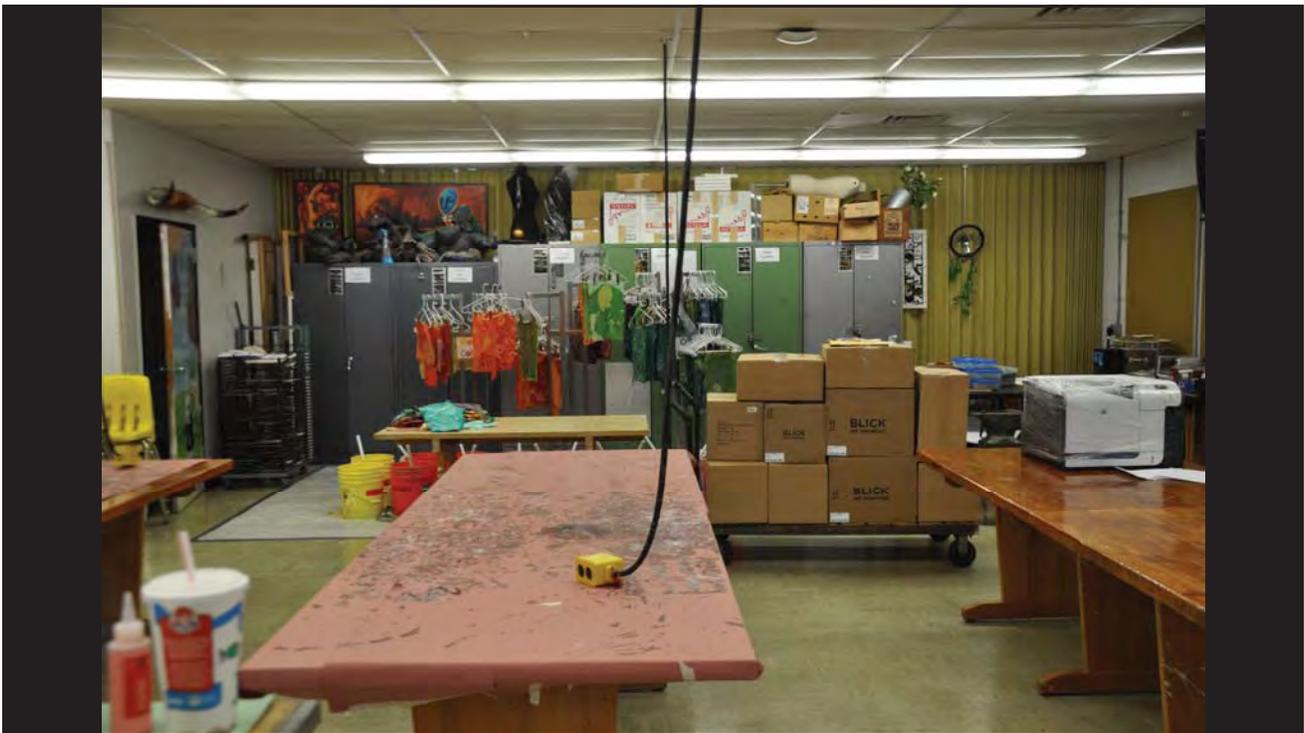


**UPPER ARLINGTON HIGH SCHOOL**  
NATURAL LIGHT ANALYSIS

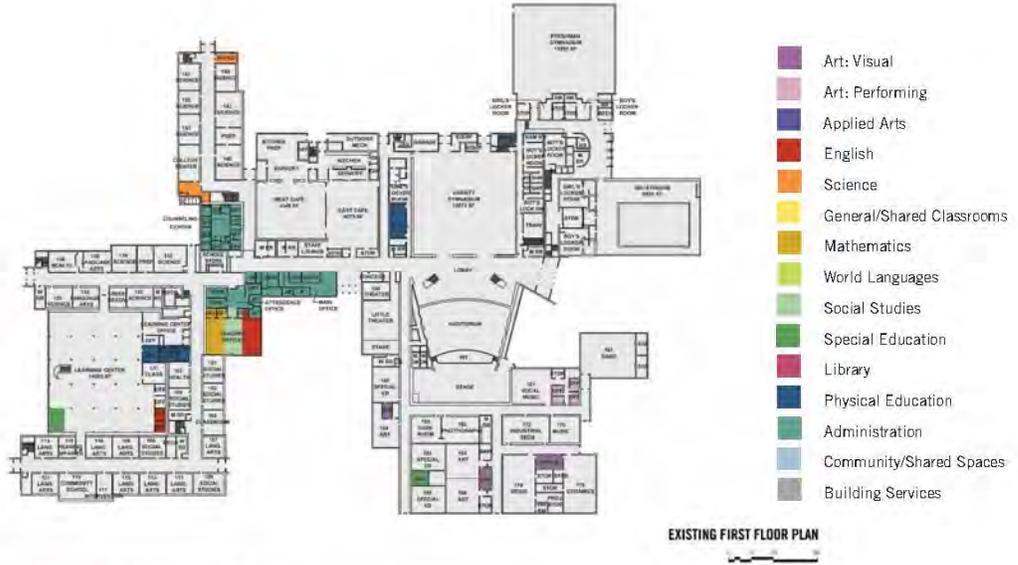




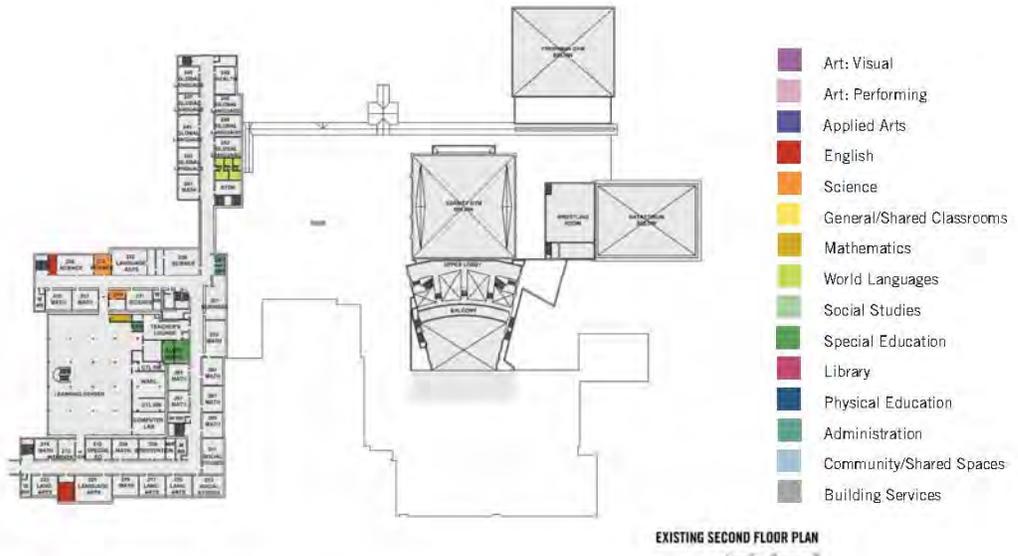




**UPPER ARLINGTON HIGH SCHOOL**  
TEACHER OFFICE ANALYSIS



**UPPER ARLINGTON HIGH SCHOOL**  
TEACHER OFFICE ANALYSIS





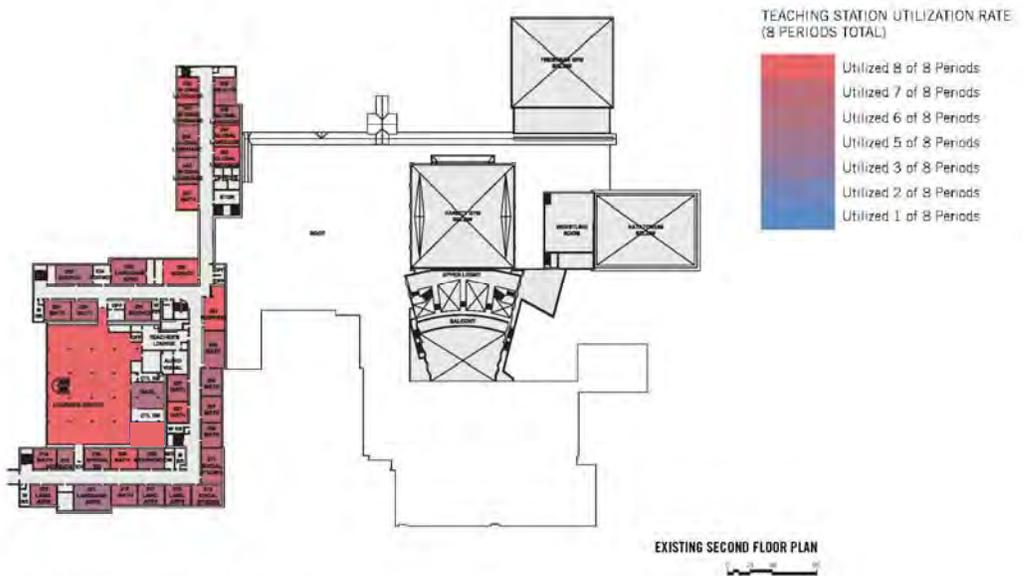




**UPPER ARLINGTON HIGH SCHOOL**  
ACADEMIC UTILIZATION ANALYSIS

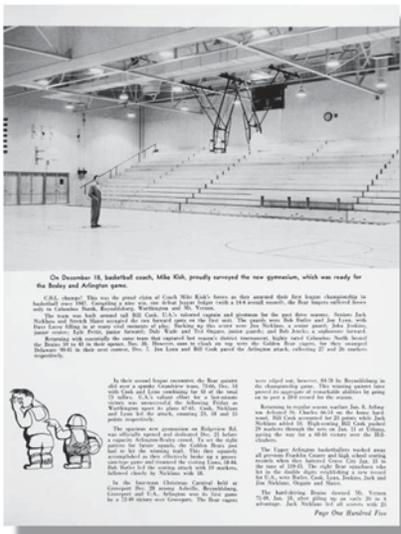


**UPPER ARLINGTON HIGH SCHOOL**  
ACADEMIC UTILIZATION ANALYSIS





## UPPER ARLINGTON HIGH SCHOOL ATHLETIC SCHEDULE THEN AND NOW



1957

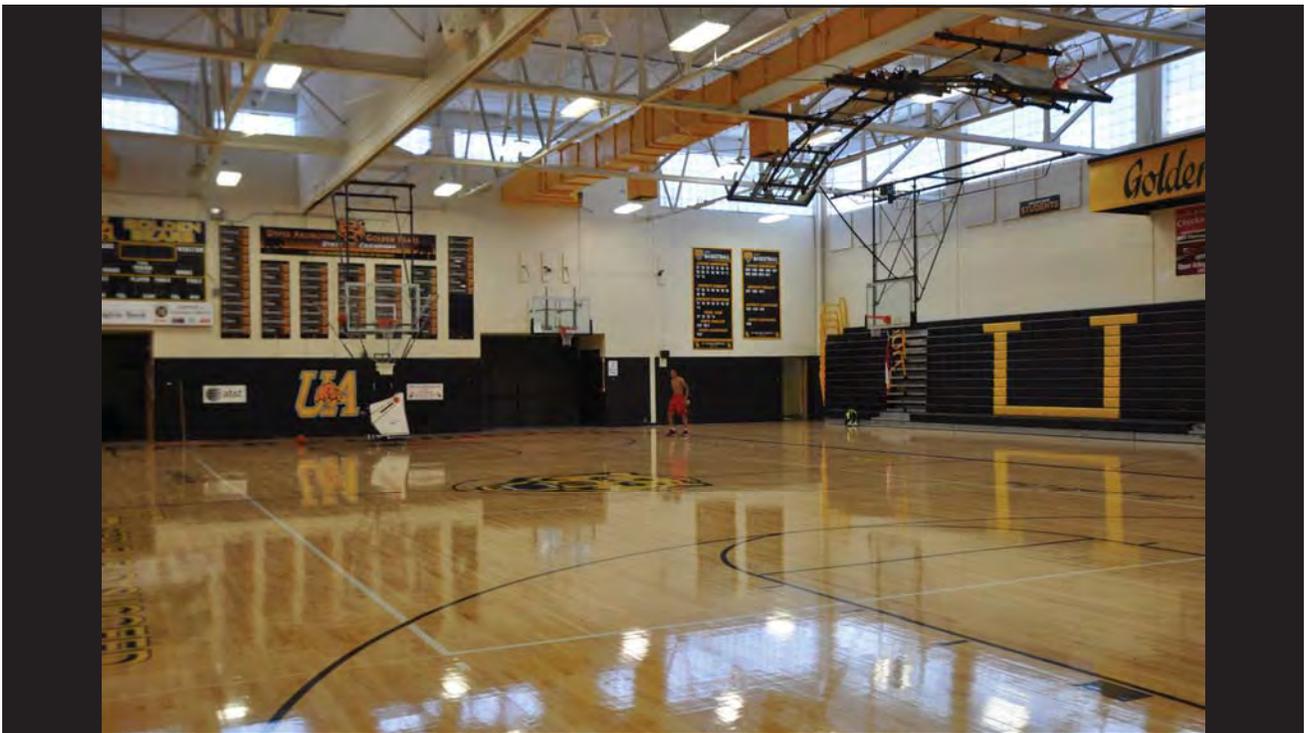
- Boys' Baseball
- Boys' Basketball
- Boys' Cross Country
- Boys' Football
- Boys' Golf
- Boys' Swimming
- Boys' Tennis
- Boys' Track
- Boys' Wrestling

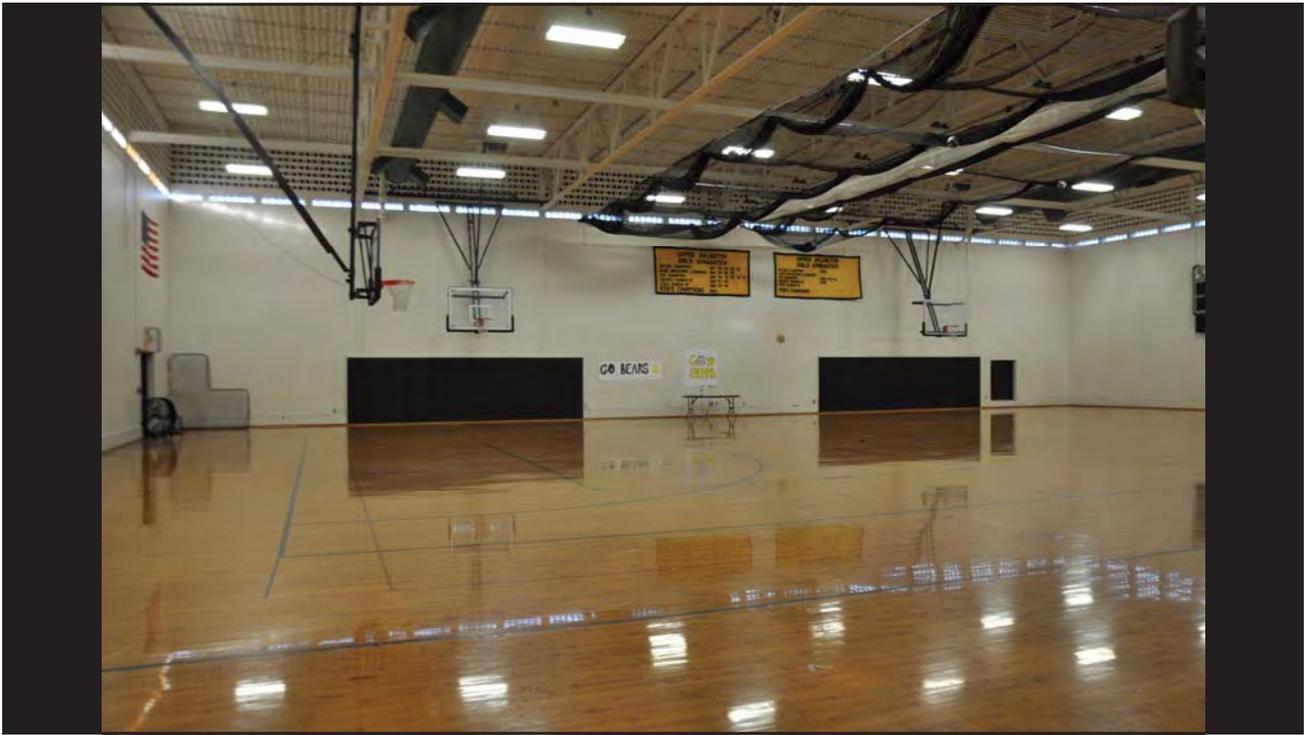
2015

- Boys' Baseball
- Girls' Field Hockey
- Boys' Basketball
- Girls' Basketball
- Boys' Cross Country
- Girls' Cross Country
- Girls' Cheerleading
- Boys' Crew
- Girls' Crew
- Boys' Football
- Boys' Golf
- Girls' Golf
- Boys' Ice Hockey
- Girls' Gymnastics
- Boys' Lacrosse
- Girls' Lacrosse
- Boys' Soccer
- Girls' Soccer
- Girls' Softball
- Boys' Swim + Diving
- Girls' Swim + Diving
- Boys' Tennis
- Girls' Tennis
- Boys' Track & Field
- Girls' Track & Field
- Boys' Volleyball
- Girls' Volleyball
- Boys' Water Polo
- Girls' Water Polo
- Boys' Wrestling

## UPPER ARLINGTON HIGH SCHOOL GYM UTILIZATION – WINTER SCHEDULE SNAPSHOT

Saturday		Sunday		Monday		Tuesday		Wednesday		Thursday		Friday		
FR Gym	VAR Gym	FR Gym	VAR Gym	FR Gym	VAR Gym	FR Gym	VAR Gym	FR Gym	VAR Gym	FR Gym	VAR Gym	FR Gym	VAR Gym	
					HIIT IT	Track & Field	HIIT IT		HIIT IT		HIIT IT		HIIT IT	6AM
Girls Basketball				PE		PE		PE		PE		PE		7AM
	Boys Youth Basketball													8AM
Girls Youth Basketball					PE		PE		PE		PE		PE	9AM
	Boys Basketball	Boys Youth Basketball	Boys Youth Basketball											10AM
Cheer														11AM
Boys Lacrosse		Girls Youth Volleyball		Cheer	Boys Basketball	Baseball			Boys Basketball	Girls Basketball	Boys Basketball	Track & Field	Boys Basketball	Noon
Men's Optimist Basketball	Boys Basketball		Boys Basketball	Boys Basketball	Girls Basketball	Softball	Boys Basketball	Girls Gymnastics	Girls Basketball	Boys Basketball	Softball	Baseball	Girls Basketball	1PM
		Boys Basketball		Cheer	Girls Gymnastics	Speed	Boys Lacrosse		Boys Basketball		Boys Wrestling			2PM
					Men's Basketball	Men's Basketball								3PM
														4PM
														5PM
														6PM
														7PM
														8PM
														9PM
														10PM
														11PM





**UPPER ARLINGTON HIGH SCHOOL**  
Pool Utilization – Winter Schedule Snapshot

Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	
		Aquatics Practice	6AM				
		Physical Education	7AM				
							8AM
							9AM
							10AM
UASC Practice							11AM
							Noon
Swimming & Diving	UA P&R Sunday Swim						1PM
	UA SwimAmerica	Swimming & Diving	Swimming & Diving	Swimming & Diving	Swimming & Diving		2PM
	UASC Practice	Swimming & Diving	3PM				
		UASC Practice	UASC Practice	UASC Practice	UASC Practice		4PM
							5PM
							6PM
							7PM
							8PM
							9PM
							10PM
							11PM

