Mequon Thiensville SCHOOL DISTRICT

FRAMEWORK FOR OUR FUTURE

LONG-RANGE MASTER PLAN

eua

JULY 12, 2019

EUA PROJECT: 318480

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Mequon Thiensville SCHOOL DISTRICT

FRAMEWORK FOR OUR FUTURE

SECTION 1:

SPACE NEEDS SUMMARY

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JULY 12, 2019

EUA PROJECT: 318480

SPACE NEEDS SUMMARY

INTRODUCTION

Eppstein Uhen Architects (EUA) was hired by the Mequon-Thiensville School District (MTSD) in November of 2018 to facilitate long-range master planning for the district. As the first step of this effort, EUA conducted interviews and walk-throughs at each school site to identify educational shortcomings and space needs. Interviews were conducted between December 6, 2018 and January 10, 2019 and included each building principal, assistant principals where applicable, the facilities coordinator for each site, and the director of buildings and grounds. This document provides an overview of identified needs at each site.

The district's facilities were originally built between 1955 and 1968 and have received various additions since that time. The buildings are generally well maintained, and the district has an ongoing maintenance program in place to prioritize and address building condition issues. Additional planning for maintenance needs is included as an appendix to this report.

The highest priority safety needs have already been addressed at each building site. All school entrances have been remodeled to require visitors to buzz into a secure office environment before gaining entrance to academic areas of the buildings. Security camera systems are in place and have been recently upgraded to meet the most pressing district needs. Security doors have also been installed that allow academic areas of buildings to be electronically closed off from the more public areas for after hour activities or for additional security during building lock-down procedures. All entrance doors throughout the district are electronically monitored and secured via a programmable key fob system.

The district also has an ongoing technology plan which has addressed the highest priority needs including wireless connectivity, computers and electronic devices, and digital display technologies in every classroom. Inquiry and Collaboration Centers (ICC's) at the elementary and middle schools were recently remodeled to create collaborative spaces that support small and large group learning.

There are, however, significant needs in the district as well. These needs are summarized in the following pages, both generally, and at each facility.

GENERAL FINDINGS

Specific findings for each school site are included under a separate heading for each site. General findings across all sites however include the following items:

- **Outdated classroom configurations**. Classrooms generally function well for large group instruction but were not designed to accommodate small group and cooperative learning methodologies which are fundamental components in educational standards today.

- **Lack of core classroom space** at the elementary school level (most severe at Oriole Lane).

- **Shortage of specialty space** most significantly at the elementary school level including space for learning specialists, special education, art, and music.

- **Lack of gymnasium space** throughout the district. While the existing gym spaces meet most of the physical education needs for the district, there is significant pressure on the gymnasiums to meet co-curricular and community recreation needs throughout the district.

- **Accessibility issues** for those in wheelchairs, especially at restrooms.

- **Outdated furniture.** Updated furniture would allow for easier reconfiguration of space, and more adaptability for innovative teaching practices.

- **Site circulation and traffic flow** concerns during pickup and drop off periods. Traffic circulation is not as intuitive as desired and can lead to significant congestion and potential safety concerns.

DONGES BAY ELEMENTARY SCHOOL

Donges Bay was constructed in 1965 with various additions and renovations in 1989, 1993 and 2016. Educationally, the building functions more or less as originally designed in 1965. Donges Bay currently serves students from 4K through fifth grade as a three-section elementary school. Some specific needs include:

- **Collaborative/Breakout Space:** Classrooms function well for large group instruction, but there is insufficient space within the classrooms and no adjacent space outside the classrooms to facilitate small group and cooperative learning opportunities.

- **Flexible Furniture:** Much of the classroom furniture is outdated and inflexible. More lightweight, mobile furniture would allow for easier reconfiguration of space, and more adaptability for innovative teaching practices.

- **Gym Space:** The existing gym is equipped with a divider curtain but is too small to effectively serve two simultaneous functions. Additional gym space could better accommodate multiple uses.

- **Orchestra and Band Space:** The orchestra space is undersized and located in a former storage room off the gymnasium. Band utilizes the gymnasium stage for their rehearsal space, which provides adequate room, but poor acoustics and can only be accessed through a maintenance corridor. The stage is also inaccessible for those with mobility impairments.

- **Art Classroom:** The art classroom is a converted standard classroom. As such it lacks adjacent and appropriate art storage space, kiln space, and appropriate sinks/plumbing. An art storage room with a ceramics kiln is currently located remotely in the receiving area of the building.

- **Early Childhood Classroom:** The early childhood classroom serves children with special needs who are not yet of kindergarten age. This occurs in a standard classroom. The classrooms share a toilet room with an adjacent 4K classroom. This classroom would ideally have a dedicated bathroom and dedicated storage closet.

- **Accessibility:** Some restrooms in the older portions of the building lack wheelchair accessible stalls and entrance pathways. All boys' restrooms lack appropriate urinal privacy screening. The stage and basement levels of the building are accessible only by stairs. Playground equipment is not fully accessible.

- **Storage Space:** There is a general lack of storage space throughout the building. Former storage spaces, in many cases, have been co-opted for specialist and student support space. Basement level storage space is difficult to access and inefficient for daily use.

- **Site Circulation/Traffic Flow:** There are ongoing concerns/difficulties with traffic control during pickup and drop off hours. There are separate bus and parent lanes, but traffic circulation is not as intuitive as desired, and can create significant congestion and potential safety concerns.

- **General Site Conditions:** Hard surface playground areas become crowded during inclement weather. Water drainage issues on portions of the site can further compound this concern. Some of the playground equipment is also older and approaching the end of its life cycle, and there is no perimeter fencing separating play area from the surrounding woods.

ORIOLE LANE ELEMENTARY SCHOOL

Oriole Lane was constructed in 1963 with various additions and renovations in 1973, 1989, 1993 and 2016. Educationally, the building functions more or less as originally designed in 1963. Oriole Lane currently serves students from 4K through fifth grade as a three-section elementary school. Generally, Oriole Lane appears to be the school with the most critical space needs in the district. Some specific needs include:

- **Collaborative/Breakout Space:** Classrooms function well for large group instruction, but there is insufficient space within the classrooms and no adjacent space outside the classrooms to facilitate small group and cooperative learning opportunities.

- **Flexible Furniture:** Some of the classroom furniture is outdated and inflexible. More lightweight, mobile furniture would allow for easier reconfiguration of space, and more adaptability for innovative teaching practices.

- **Gym Space:** The existing gym is equipped with a divider curtain but is too small to effectively serve two simultaneous functions. Additional gym space could better accommodate multiple uses.

- **Orchestra and Band Space:** Orchestra and Band share a small space accessed only through the cafeteria. More adequate space with better acoustics, larger size and better access is desired.

- **Additional Classroom Space:** Classroom space is very tight and there is a need for at least one additional core classroom to accommodate grade level bubbles in student enrollment.

- **Special Education Space:** There appears to be insufficient space for current special education needs. The equivalent of one additional classroom space appears to be needed. Existing spaces could also benefit from redesign to make them function more effectively for the needs of the students who access these spaces.

- **Support/Specialist Space:** In order to accommodate the current enrollment, virtually all available space in the building has been taken for classroom space, leaving a shortage of space for specialists and support staff. Many specialists share office spaces and do not have sufficient or appropriate space to meet with students.

- **Accessibility:** All restrooms except those in the 1993 addition lack wheelchair accessible stalls and some lack accessible entrance pathways. All boys' restrooms lack appropriate urinal privacy screening. The basement storage/mechanical space is not accessible. Playground equipment is not fully accessible.

- **Storage Space:** There is a general lack of storage space throughout the building. Former storage spaces, in many cases, have been co-opted for specialist and student support space.

- **Cafeteria Storage:** The cafeteria is at capacity. Original table design allows tables to fold up into the walls when not in use, but additional tables must be used, and there is no place to store these additional tables when not in use.

- **Site Circulation/Traffic Flow:** There are ongoing concerns/difficulties with traffic control during pickup and drop off hours. There are separate bus and parent lanes but traffic circulation is not as intuitive as desired, and can create significant congestion and potential safety concerns.

- **General Site Conditions:** Hard surface playground area is adequately sized, but a dedicated kindergarten playground would provide opportunities for more age-appropriate activities.

WILSON ELEMENTARY SCHOOL

Wilson was constructed in 1957 with various additions and renovations in 1972, 1989, 1993 and 2016. Educationally, the building functions more or less as originally designed in 1957. Wilson currently serves students from 4K through fifth grade as a four-section elementary school (with five sections of fifth grade). The site adjoins the site of Steffen Middle School. Specific needs include:

- **Collaborative/Breakout Space:** Classrooms function well for large group instruction, but there is insufficient space within the classrooms and no adjacent space outside the classrooms to facilitate small group and cooperative learning opportunities.

- **Flexible Furniture:** Much of the classroom furniture is outdated and inflexible. More lightweight, mobile furniture would allow for easier reconfiguration of space, and more adaptability for innovative teaching practices.

- **Gym Space:** The existing gym is equipped with a divider curtain to allow two sections of physical education to be taught in the space simultaneously. However, additional gym space could better accommodate simultaneous uses. This is especially significant at Wilson because the gym is smaller and the enrollment is larger than the other elementary schools.

- **Orchestra Rehearsal Space:** Current space works sufficiently for small group practices, but large group rehearsals occur in the cafeteria, which can be difficult to schedule.

- **Art Classroom:** Because of the higher enrollment at this school, an additional art classroom is needed. Currently, some art classes are taught from a mobile cart. Additionally, the ceramics kiln is located remotely from the art room on an inaccessible Mechanical Mezzanine.

- **Special Education Space:** There appears to be sufficient classroom space, but additional space for speech and physical therapist offices are desired. Space that could be used by special education nearer in proximity to kindergarten classrooms is also desired.

- **Academic Classroom Acoustics:** Classroom walls located in the 1989 addition do not provide adequate sound separation between classrooms.

- **Accessibility:** Some restrooms in the older portions of the building lack wheelchair accessible stalls. All boys' restrooms lack appropriate urinal privacy screening. Stage level (used by after school care program) is inaccessible. Playground equipment is not fully accessible.

- **Cafeteria Space:** The current cafeteria is undersized. The cafeteria is too small to serve two grades at one time, which has required the use of additional lunch periods.

- **Restrooms:** There is a need for another set of restrooms near the west end of the school to provide better adjacencies for fourth and fifth grade students.

- **Site Circulation/Traffic Flow:** There are ongoing concerns/difficulties with traffic control during pickup and drop off hours. There are separate bus and parent lanes, but traffic circulation is not as intuitive as desired, and can create significant congestion and potential safety concerns. Wilson does not have enough stalls in main parking lot. Parents sometimes park in access drive for neighboring business, which has generated complaints. Fencing along this drive is desired to improve safety and provide better control.

- **General Site Conditions:** Hard surface playground area is adequately sized, but a dedicated kindergarten playground would provide opportunities for more age-appropriate activities. Green space is shared with Steffen Middle School site which can be problematic at times.

LAKE SHORE MIDDLE SCHOOL

Lake Shore was constructed in 1968 with a major addition in 1989 and renovations in 2016. The original two-story 1968 design featured an open concept, but was later enclosed to create a more traditional learning environment. Lake Shore currently serves students from 6th through 8th grade, and also houses gymnasium and field space for both middle and high school athletics. The site adjoins the site of the Range Line Community Center. Some specific needs include:

- **Collaborative/Breakout Space:** Classrooms function well for large group instruction, but there is insufficient space within the classrooms and little space outside the classrooms to facilitate small group and cooperative learning opportunities. This is especially difficult in classrooms that are smaller in size. Corridors are wide in this school and are sometimes co-opted for this purpose, including an area designated for this purpose outside the ICC.

- **Flexible Furniture:** Much of the school furniture is outdated and inflexible. More lightweight, mobile furniture would allow for easier reconfiguration of space, and more adaptability for innovative teaching practices.

- **Gym Space:** The existing gym is equipped with a divider curtain to allow two sections of physical education to be taught in the space simultaneously. However, additional gym space could better accommodate simultaneous uses and athletic needs. Seating for events is also limited. Locker Rooms are outdated, and group showers are used primarily as storage.

- **Music Suite:** Choir room is undersized and can be accessed only through the cafeteria. Corridor access to the Orchestra Room is too narrow by current code and accessibility standards.

- **Art Classroom:** Art storage space is lacking, and the ceramics kiln is located remotely in a mechanical space.

- **Family and Consumer Science Classroom:** This space reflects an older “Home Economics” design and is in need of casework and equipment upgrades.

- **Classroom Adjacencies:** While there is sufficient classroom space within the building, some classroom adjacencies are problematic. Sixth grade is currently split between the north wing and the south side of the lower building level.

- **Classroom Daylighting:** Windows throughout the facility are small, and several interior and lower level classrooms have no daylighting whatsoever.

- **Accessibility:** Restrooms throughout the building lack wheelchair accessible stalls and some restrooms do not have adequate clearance for wheelchairs at the entrances. All boys’ restrooms lack appropriate urinal privacy screening.

- **Site Circulation/Traffic Flow:** There are ongoing concerns/difficulties with traffic control during pickup and drop off hours. There are separate bus and parent lanes, and more space available for queuing compared to some of the other buildings, Traffic circulation is not as intuitive as desired, and can create significant congestion and potential safety concerns.

STEFFEN MIDDLE SCHOOL

Steffen was constructed in 1965 with additions in 1972 and 1993, and renovations in 2016. Educationally, the building functions more or less as originally designed in 1965. Steffen currently serves students from 6th through 8th grade, and also houses gymnasium and field space for both middle and high school athletics. The site adjoins the site of Wilson Elementary School. Some specific needs include:

- **Collaborative/Breakout Space:** Classrooms function well for large group instruction, but there is insufficient space within the classrooms and little space outside the classrooms to facilitate small group and cooperative learning opportunities.

- **Flexible Furniture:** Much of the school furniture is outdated and inflexible. More lightweight, mobile furniture would allow for easier reconfiguration of space, and more adaptability for innovative teaching practices.

- **Gym Space:** The existing gym is equipped with a divider curtain to allow two sections of physical education to be taught in the space simultaneously. However, additional gym space could better accommodate simultaneous uses and athletic needs. Seating for events is also limited. Mobile bleachers for event seating are stored in adjacent hallway. Locker rooms are outdated, and group showers are used primarily as storage.

- **Music Suite:** Choir and Orchestra rooms are undersized for current class sizes. Choir room is not adjacent to band and orchestra.

- **Additional Classroom Space:** While there are sufficient classroom numbers for current enrollment, there does not appear to be room for growth in this facility. Some classrooms are undersized.

- **Special Education Space:** Special education space is maxed out for current needs. There may be a need to go from the current three room space allocation to four rooms in the near future.

- **Support/Specialist Space:** Many specialists share space and do not have adequate space for student groups. The English Language Learners (ELL) and math specialists share a space that can be accessed only through the cafeteria.

- **Family and Consumer Science Classroom:** This space reflects an older “Home Economics” design and is in need of casework and equipment upgrades.

- **Accessibility:** Some restrooms in the building lack wheelchair accessible stalls and some restrooms do not have adequate clearance for wheelchairs at the entrances. All boys’ restrooms lack appropriate urinal privacy screening.

- **Cafeteria Space:** Current schedule requires two grades to overlap in the cafeteria. The cafeteria can accommodate one grade adequately, but is undersized to serve two grades at one time.

- **Site Circulation/Traffic Flow:** There are ongoing concerns/difficulties with traffic control during pickup and drop off hours. There are separate bus and parent lanes, and more space available for queuing compared to some of the other buildings, but there are ongoing concerns/difficulties with traffic control during pickup and drop off hours. Traffic circulation is not as intuitive as desired, and can create significant congestion and potential safety concerns.

HOMESTEAD HIGH SCHOOL

Homestead was constructed in 1955 with additions in 1962, 1968, 1978, 1999, and renovations in 2016. Educationally, the building functions more or less as originally designed in 1955. Homestead currently serves students from 9th through 12th grade. Specific needs include:

- **Collaborative/Breakout Space:** Classrooms function well for large group instruction, but there is insufficient space within the classrooms and little adjacent space outside classrooms to facilitate small group and cooperative learning opportunities. Some recent remodels have begun to create isolated opportunities for this kind of learning, including the remodel of a former library support space into "Inquiry Wing - Zone 2" and the remodel of a former lecture hall into "Inquiry Wing - Zone 3." These modernized spaces have proven to be successful for the school and are heavily utilized. There is a desire to expand/remodel hallway spaces to create additional "hubs" for more collaborative, student-centered learning opportunities throughout the building.

- **Flexible Furniture:** Much of the school furniture is outdated and inflexible. More lightweight, mobile furniture would allow for easier reconfiguration of space, and more adaptability for innovative teaching practices.

- **Visual Arts Department:** Some of these spaces lack natural light and are undersized.

- **S.T.E.M. Wing Spaces:** Former Tech Ed spaces are now used to support a STEM curriculum. Some remodel has occurred (STEM lab), but continued rethinking and development of these spaces to meet current needs is desired. Art & Technology have a great relationship and the school would like to move to more of a STEAM curriculum.

- **Science Classrooms:** These rooms are large, but have outdated casework and furnishings. These could be remodeled to create more flexible, dynamic, hands-on learning opportunities for high school students.

- **ICC (Inquiry Wing - Zone 1):** This area is spacious and full of potential, but is outdated in both form and function like that of a more traditional library. A re-imagining of this space could allow for expanded resource and learning opportunities.

- **Accessibility:** Some restrooms in the building lack wheelchair accessible stalls and some restrooms do not have adequate clearance for wheelchairs at the entrances. All boys' restrooms lack appropriate urinal privacy screening.

- **Identifiable/Secure Main Entrance:** Main High School Entrance door location is not intuitive for visitors, requiring an over-reliance on directional signs. Office location is also remote from the main entry.

- **Main Office Space:** The main office is undersized, feels disjointed, lacks space for conferencing, and does not function well for current uses.

- **Outdoor Courtyard:** The courtyard adjacent to the cafeteria could be remodeled to serve as an outdoor dining/gathering area to provide additional opportunities for student use.

- **Site Circulation/Traffic Flow:** There are ongoing concerns/difficulties with traffic control during pickup and drop off hours. There is plenty of space for buses and student traffic, but circulation is not as intuitive as desired, and can create significant congestion and potential safety concerns. A fencing/gate system is needed to keep visitors out of maintenance areas.

DISTRICT OFFICES

MTSD Offices are located at the high school site, in a separate but attached building adjacent to the main entrance. District staff prefer the high school site location because of the proximity to the greatest number of students/parents at this location. However, there are a number of challenges as well:

- **Identifiable Main Entrance/Wayfinding:** First time visitors often struggle to know where to enter the District Office facilities. Parking location for District Office is also not as intuitive as it could be. Lack of separation from High School parking/building areas contributes to this issue.

- **Main Office Location:** There are currently 14 staff housed at the main district office location. Several staff are located in other places throughout the high school and the district because there is insufficient space at District Offices. Five additional offices/workstations are currently desired to house:
    - Department of Student Services (3)
    - Department of Educational Services (2)

- **Technology Offices:** District technology staff (8) are located in a separate area of the high school near the Inquiry Wing - Zone 1 (ICC). This location works well for the department, but additional space is needed for a conference room, storage space for IT repair and supplies, and potentially for student work areas as students begin to serve a larger role in this department.

- **Office Space:** Some of the existing main office spaces are undersized for occasions when staff need to meet privately with guests. In addition, support staff do not all have the appropriate adjacencies with their directors or other team members which can allow for inefficiencies.

- **Conference Room Space:** There is currently only one conference room in the main office area, which means that meetings often need to utilize space in the high school building or off site. This problem is exacerbated by the small office sizes, necessitating more meetings outside of the offices themselves.

- **Reception Area/Waiting Space:** Waiting area for District Office visitors is undersized and can often fill quickly. Proximity of waiting area to office areas can also create privacy concerns.

- **Community Meeting Space:** Board meetings and other large community functions typically happen at the large conference space at the Range Line Community Center. This is the only readily available large meeting space that is easily isolated from academic areas in the district.

PHYSICAL EDUCATION AND ATHLETICS

MTSD has extensive offerings for its students in the areas of physical education and athletics. Homestead High School offers 30 varsity level athletics programs and had 1132 participants as of the 2018-2019 school year. An additional 10 athletic programs are offered for students at Lake Shore and Steffen Middle Schools. To support the needs of physical education, district athletics, the recreation department, and community rentals, athletic facilities at the high school, middle schools, and elementary schools are all heavily utilized. Additionally, the athletic department utilizes off-site facilities for baseball (Rennicke Field and Rotary Park), boys and girls hockey (Ozaukee Ice Arena), JV softball (River Barn Park), cross country (Mequon Nature Preserve), golf, gymnastics, and downhill skiing. Specific needs include:

Exterior Field and Stadium Needs

- **Stadium Plaza/Entry Feature**: The high school stadium lacks an identifiable main pedestrian entrance where ticketing and visitor access could be controlled.
- **High School Athletic Field Wayfinding:** Visitors have difficulty finding where to park and what field to go to when attending events at Homestead.
- **Expanded Bleachers:** Current bleachers are undersized and in need of replacement. New bleachers could offer expanded seating, a larger press box to adequately accommodate coaches/media from visiting teams, and additional space for team/training rooms (beneath the bleachers).
- **Discus Area:** The track and field event area provides inadequate space for discus. Consider relocating discus to avoid potential errant throws encroaching on track area. An alternate approach would be to provide netting to separate discus area from other event areas.
- **Paved Access Drive:** This would provide for better access and easier maintenance during inclement weather related conditions.
- **Soccer Field Upgrades:** Replacing natural turf with artificial turf would allow for more use of this field, reduced maintenance, and faster recovery times after inclement weather. Dedicated bleachers, lighting, and sound systems are also needed to better accommodate events.
- **Tennis Courts:** Lighting for night uses and enhanced seating for spectators is desired.
- **Wall-Ball Nook:** This would be an enclosed practice area with a bounce wall and netting for lacrosse, golf, and other sports.
- **Pitching and Batting Cages for Softball:** This would include a concrete floor for a permanent outdoor location.

- **Artificial Turf Infield for Softball:** This would allow for reduced maintenance and faster recovery times after inclement weather.

- **Additional District Softball Field:** An additional field would allow all softball practices and games to be housed on district managed sites. This would ideally be located at the high school site, but could potentially be located at the Range Line facility as space permits. Artificial turf would allow for reduced maintenance and faster recovery times after inclement weather.

- **On-Site Baseball Fields:** On-site fields are desired to reduce travel/logistical concerns. Ideally two regulation fields would be located at the high school site. Artificial turf would allow for reduced maintenance and faster recovery times after inclement weather.

Indoor Gym and Athletic Needs

- **Expanded Gymnasium Space:** Additional gym space is needed for athletic practices and tournaments.
    - Consider creating either an additional field house at the high school or expanding each of the middle school gymnasiums to allow for three stations at each site.

- **New/Enlarged Weight Room:** Existing weight room is undersized for number of students served.

- **New/Enlarged Training Room:** Existing training room does not adequately meet current needs.

- **Remodel Team/Locker Room Areas:** Existing locker rooms are outdated and need to be remodeled for enhanced privacy and team uses.

- **Netting for Field House:** Additional netting at the existing field house would allow for more simultaneous uses, including the ability to use basketball courts and indoor track facilities simultaneously.

- **Lifts for Wrestling Mats:** This would allow for the existing facility to be changed over more quickly for other uses.

- **Gymnastics/Dance/Cheer Areas:** The district does not have a dedicated space to serve Gymnastics/Dance and Cheer teams.

- **Indoor Practice Facilities:** The district is interested in exploring the possibility of an indoor practice facility(s) to expand program offerings throughout the district.
    - A permanent indoor turf facility at the high school site would provide year-round activity areas for physical education, athletics, and community uses.

COMMUNITY RECREATION DEPARTMENT

The MTSD operates the Community Recreation Department, whose offices are located in the School District's Range Line Community Center. The Recreation Department runs programs in the gymnasium, cafeteria, and classrooms at Range Line, and at other school facilities throughout the district. Programming includes before and after school care, community sports programs, student academic support programs, adult education programs, activities for senior citizens, and many others. The Range Line Community Center also houses the district's community collaborative partner for 4K and daycare, Ozaukee County Alternative High School, and the MTSD Health and Wellness Center. Specific needs for the Recreation Department include:

Needs at Range Line Community Center

- **Gymnasium Improvements:** A larger gymnasium that could be subdivided to allow for multiple activities is desired.
    - Better Americans with Disabilities Act (ADA) access is needed. Current lift is difficult to use and maintain.
    - Bleachers/spectator seating in the gymnasium is needed for some activities.
    - Storage on the same level as the gym is needed to allow easy access for set up and take down of tables and other equipment.
    - New flooring is needed at the gym and the associated stage. A floor more suitable to dance and performance is desired for the stage area.

- **Wayfinding and Identity:** A more intuitive path from the parking lot to Rec Department offices would help patrons access program administrators.

- **Remodel of Cafeteria and Cafeteria Bathrooms:** This area hosts a number of community functions, but its finishes are worn and in need of renewal. Restrooms are not ADA compliant.

- **Exterior Pickleball or Tennis Courts:** Community demand for this programming would support expanded offerings. Tennis courts could also be utilized by adjacent middle school.

- **Upgrade Playground Equipment:** Several programs for small children utilize this playground, which is older and could be made more age appropriate. Playground equipment is not fully accessible.

- **Convert former Dance Studio to Digital Technology Space:** This space is underutilized, and there is growing need for space for computer-based programming. This space could be designed to accommodate multiple uses.

- **Convert Abandoned Steam Boiler Room for District Maintenance Uses:** This space is not currently used, but could serve a useful role as a district maintenance space.

- **Repair or Eliminate Failing Exterior Concrete Steps and Well House:** This exterior area is

failing structurally. Consider eliminating and bringing this down to grade.

- **General Maintenance and Upkeep:** Range Line has the most maintenance needs of all the district's facilities. Significant upgrades to the mechanical, electrical, and plumbing infrastructure are all needed. Various flooring, ceiling, and finish upgrades are needed in the conference room and in many other areas.

Recreation Department Needs at other District Sites

- **Dedicated Space for Before and After School Care:** This typically occurs in elementary school gyms and cafeterias after school hours. In some instances, inaccessible stage areas are also utilized. Dedicated storage areas would be helpful.
    - Separate gymnasiums or gyms large enough to be effectively subdivided would allow for simultaneous uses by after school care and other community programming
    - A dedicated and accessible storage area of 200-400 sf at each elementary school is desired for after school care supplies.

- **Dedicated Space for Wrap-around Care:** There is a growing community need at each elementary site for dedicated space for wrap-around programming during the school day, especially for 4K aged students.

- **Additional Gymnasium Space:** Larger gymnasiums at each school would lead to extended opportunities for community programming and rentals. Recreation programming is limited in its current offerings because gyms are currently so heavily utilized by district athletic uses. Ideally each gymnasium space would also allow for dedicated entrances, and the ability to separate evening rental activities from dedicated school areas.
    - Two gymnasium sections at each elementary school could be readily utilized.
    - Three gymnasium sections at each middle school would allow for expanded programming.
    - An additional field house and/or indoor turf practice facility at high school would also be heavily utilized by both community groups and district athletics.

- **Multi-Purpose Cafeteria Design:** Existing cafeterias work well for school lunch uses, but do not provide flexibility for different uses both during the school day, and for potential alternate community uses after school hours.
    - Consider improving aesthetics and providing more flexible furniture options to allow for additional program offerings.

- **Outdoor Athletic Programming:** Many of the district's outdoor spaces are utilized for recreational programming. Some of the most significant needs include:
    - Wilson/Steffen Youth Baseball Complex: This baseball four-plex would benefit from improvements including a concession/restroom facility, bleachers, fencing, and artificial turf infields.
    - Oriole Lane Youth Baseball Complex: Consider duplicating the Wilson/Steffen four-plex to create a youth baseball center on the northern end of the district.
    - Youth Soccer: Expanded soccer field options are needed. Consider creating additional soccer fields at Donges Bay or Range Line to expand community offerings.

Mequon Thiensville SCHOOL DISTRICT

SECTION 2:

CAPACITY AND UTILIZATION ANALYSES

eua

JULY 12, 2019

EUA PROJECT: 318480

MEQUON-THIENSVILLE SCHOOL DISTRICT

CAPACITY AND UTILIZATION ANALYSES

This study provides an objective analysis of present site and building capabilities, and is a critical step needed to understand how today's facilities support the goals of the district. The information presented was gathered by EUA's team of professionals through on-site tours, as well as interviews with building administrators. It serves as a foundational resource document to support the development of immediate solutions as well as long-range planning.

SITE CAPACITY ANALYSIS

The Site generally refers to the land associated with an educational facility and the improvements made on that land which include buildings, parking lots, athletic fields, etc. The total area of the land often allows or limits the amount of improvements or amenities that can be offered to a specific student population. The information below analyzes the existing site area against the recommended site area for programs of that type.

The following school site information comes from the Council of Educational Facility Planners International (CEFPI) Planning Guide (now referred to as Association for Learning Environments (A4LE)):

- Elementary sites should be a minimum of 10 acres plus an additional acre for each 100 students.
- Middle School sites should be a minimum of 20 acres plus an additional acre for each 100 students.
- High School sites should be a minimum of 30 acres plus an additional acre for each 100 students.

There are other publications with slight variation on these general best practices, but in our experience, these recommendations have provided a fairly reliable benchmark for assessing general site conditions. Of course specific conditions (e.g. need for stadium parking, on-site septic, well, etc.) may require additional area, and in tight urban sites the benchmark numbers may be unattainable.

It should also be noted that the best practice site size assumes the entire property is buildable. If the site has easements, wetlands, open water, unsuitable soils, or drastic topography that would not lend to the construction of buildings, parking, drives, or play areas the site size would have to increase based on the size of the unbuildable area.

SITE CAPACITY

SITE CAPACITY					
SCHOOL SITE	TOTAL EXISTING SITE AREA [d]	CURRENT ENROLLMENT (SEPT 2018)	OTHER USES ON SITE [f]	CURRENTLY UTILIZED SITE AREA	BEST PRACTICE SITE AREA
Donges Bay Elementary	15.2 acres	448 students [e]	2.7 acres (natural areas)	**12.5 acres** [a]	**14 acres** [a]
Oriole Lane Elementary	37.0 acres	466 students [e]	14.5 acres (natural areas)	**22.5 acres** [a]	**15 acres** [a]
Wilson Elementary Shared with Steffen Middle	24.0 acres	583 students [e]	13.6 acres (Steffen Middle)	**10.4 acres** [a]	**16 acres** [a]
Lake Shore Middle School Shared with Range Line Facility	24.0 acres	385 students	5.1 (Range Line) 7.1 (natural areas)	**11.8 acres** [b]	**25 acres** [b]
Steffen Middle School Shared with Wilson Elementary	24.0 acres	464 students	10.4 acres (Wilson Elementary)	**13.6 acres** [b]	**24 acres** [b]
Homestead High School	79.3 acres	1327 students	18.8 acres (natural areas)	**60.5 acres** [c]	**43 acres** [c]

a. Best Practice Site Areas for Elementary Schools are based on 10 acres plus one additional acre for each 100 students.

b. Best Practice Site Areas for Middle Schools are based on 20 acres plus one additional acre for each 100 students.

c. Best Practice Site Areas for High Schools are based on 30 acres plus one additional acre for each 100 students.

d. Total Existing Site Areas are derived from the Ozaukee County GIS online mapping service.

e. For Elementary Schools, current enrollment includes the higher total of either morning or afternoon 4K kindergarten, but not both.

f. Other Uses on Site are uses that do not contribute to core school functions, and are size estimates based on aerial photography.

MEQUON-THIENSVILLE SCHOOL DISTRICT

BUILDING CAPACITY METHODOLOGY

As enrollment fluctuations affect school districts nationwide, the physical capabilities of each building will determine whether or not capacity could increase beyond its present level, or if it will be necessary to move students or make changes to buildings to accommodate such enrollment shifts. This analysis should provide a guide to measure each building's capability to handle a student population and provide a measuring stick to keep up with changing needs.

HISTORICAL PERSPECTIVE ON SCHOOL CAPACITY

It is worthwhile to briefly cover why older schools may not be able to contain the same number of students as when they were originally constructed. America's public schools can be traced back to 1640 when founders assumed families bore the responsibility of raising and educating a child. Gradually, programs were added by Federal and State mandates that have dramatically affected the educational environment. The trend of increasing responsibilities for public schools has accelerated ever since.

1900-1930
- Health Education
- Physical Education
- Vocational Education

1940's
- Business Education
- Art & Music
- Speech & Drama
- Half-Day Kindergarten
- Lunch provided

1950's
- Expanded Science & Math
- Expanded Art & Music
- Foreign Language

1960's
- Advanced Placement
- Head Start
- Title I (Reading)
- Consumer & Career Education

1970's
- Special Education

1980's
- Computer Education
- English as a Second Language
- Early Childhood
- Full-Day Kindergarten
- At-Risk Programs
- After School Programs

1990's
- Expanded Computers / Internet
- Inclusion of Special Education Learners
- School-to-Work Programs

2000's
- Standardized Testing
- Personalized Learning
- Common Core Standards
- One-to-One Initiatives
- Career Readiness
- Maker Spaces
- Behavior Adjustment
- Breakfast Provisions
- Title IX (gender equality including athletics)

In many districts, spaces that were once used as standard classrooms have been transformed into other educational environments that act as offices, space for small group intervention, reference libraries, or other areas associated with Special Education. One of the most dramatic program requirements of the past 30 years may become obsolete in the near future. Computers first made their presence in schools around 1983 when a single Apple II was assigned to one building. The computer labs created in the 90's and early 2000's are now transitioning as laptops and hand-held tablets become the norm for student production and research. The bottom line is the demand on educational space is always changing, and it should be expected that buildings need to change along with those programs.

TYPES OF CAPACITY CALCULATIONS

For this study, EUA is using (3) methods to calculate student capacity:

1. Functional Capacity Based on District Desired Class Size

Historically, building capacity has been determined by counting the number of available teaching stations and multiplying by the district's desired number of students per class. The number of students per class is set by the district based on a practical understanding of how many students a teacher can effectively manage while maintaining district expectations for quality and control. The following guidance has been provided by the school district:

DISTRICT DESIRED CLASS SIZE	
GRADE LEVEL	MAX GOAL
4K	18 students
5K - Grade 1	24 students
Grades 2 - 3	26 students
Grades 4 - 5	28 students
Grades 6 - 8	29 students
Grades 9 - 12	30 students

At the elementary level, only regular homerooms are included in the capacity analysis because students remain in their assigned classroom most of the day. At the middle and high school level, all regularly scheduled instructional spaces are used in the calculation because students are not expected to return to a homeroom after instruction in other spaces. Several areas are not included in this calculation:

- Special education rooms are not typically included because it is unlikely that other students would fill the seats of these students while they are receiving additional instruction elsewhere in the building.
- Most resource areas and labs are not factored into this calculation because these areas are intended to supplement instruction for learning areas located somewhere else in the school. For example, a computer lab dedicated to an English Department would not be included if students who use the lab are simultaneously assigned to another classroom space.

The number generated by this calculation is sometimes referred to as the "Maximum Capacity" for the building. This number, however, can be misleading because it is unlikely that every room will be used at 100% capacity all the time. At the middle and high school levels, the capacity calculation needs to account for teacher prep time, bell schedules, and tutoring needs which would drop the total utilization of any one space. Even at the elementary school level, because of fluctuations in student population it is impractical to expect every classroom to be filled completely to maximum capacity in any given school year. Taking school schedules, programmatic issues, and fluctuations in student populations into consideration, the Maximum Capacity is multiplied by a utilization rate to create the final "Functional Capacity."

Utilizations rates can very district-to-district depending on school size, scheduling procedure, and availability of resource space. Target utilization rates, however, generally fall within the following ranges:

- Elementary schools: 90 - 95% utilization
- Middle and high schools: 70 - 80% utilization

When the maximum capacity is modified to reflect the appropriate utilization rate, the resulting **Functional Capacity based on District Desired Class Size** provides a reasonably accurate representation of how many students a school can accommodate with little or no change to room configuration or staffing policies.

2. Functional Capacity Based on Learning Environment Area

While class size calculations provide a reasonable estimation of capacity based on current room usage, they do not account for spaces whose physical areas are either too small or too large for their intended uses. They also do not readily account for the potential of non-traditional learning spaces outside of classroom environments. To better understand what a building's potential capacity could be, a space by space analyses of available learning area is often required.

Based on the best practice data currently available, it is possible to define the square footage (SF) per student needed for optimum performance in each learning space:

- Kindergarten Level Learning Areas (4K and 5K): 50 – 60 SF per student
- Elementary Grade Level Learning Areas (1-5): 30 – 40 SF per student
- Middle/High School Level Learning Areas (6-12): 25 – 35 SF per student

Specialty instruction areas like shops, art rooms, and lab spaces have their own "Best Practice" square foot allowances per student. To calculate the total capacity of a building, then, each academic space is analyzed to determine its area in square feet (SF). This area is then divided by the recommended SF/ student to determine the maximum number of occupants for each learning space.

The Maximum Capacity can then be calculated by totaling the number of occupants in each individual learning space. As in method one, at the elementary level, only "homeroom" learning environments are included in the calculation, whereas all available instructional spaces are included at the middle and high school levels. This resulting Maximum Capacity is multiplied by the target utilization rate to determine the final Functional Capacity.

The **Functional Capacity based on Learning Area** provides a clearer picture of what a building's capacity could be if all learning areas were utilized at optimal efficiencies. It is important to note that achieving this level of efficiency may have direct impacts on staffing procedures, or even require the reconfiguration of space. For example, two extra-large classrooms may contain enough area within them to support three classes worth of students. To utilize that potential, however, additional staff may be required to support the unusually large class sizes, or the spaces may need to be reconfigured to create three individual rooms.

3. Capacity Based on Gross Building Area

Gross Building Area refers to the total size of the building including instructional space, support space, mechanical space, circulation and walls. Capacity Based on Gross Building Area, then, is a more general calculation which evaluates the capacity based not only on learning space, but on guidelines for total building area per student.

Total building area standards are derived from historic data compilation, optimal planning models for space utilization, and from regional and national educational research and planning organizations. There is no recognized national standard for school size, and only a few states publish area guidelines. The Minnesota Department of Children, Families & Learning - Guide for Planning Construction Projects (Published 2002) is one such guideline. It provides a range of acceptable areas based on school size. Smaller schools generally require more area per student than larger schools.

- Elem. School: 125 – 155 sq. ft. per student
- Middle School: 170 – 200 sq. ft. per student
- High School: 200 – 320 sq. ft. per student

We have found these ranges to be reasonably consistent with gross square footage of school building projects built in Wisconsin over the past fifteen years.

- Elem. School: 125 – 170 sq.ft. per student
- Middle School: 150 – 220 sq.ft. per student
- High School: 200 – 260 sq.ft. per student

These two sources of information can be averaged to create a recommended area per student for each building type. The **Capacity based on Gross Building Area** can then be calculated by dividing the existing building SF by the average recommended SF per student. The resulting data can then be used as an indicator for how the school compares with regional norms.

Gross building area per student recommendations are often used as a baseline guide for planning and analysis. For existing schools, however, capacity calculations based on Gross Building Area can serve as indicators for overall building efficiencies. Lower SF to student ratios would typically indicate that there is less auxiliary or support space present within the building. High SF per student numbers may reflect the presence of amenities that may not always be typical for schools of comparable size (i.e. more specialist or intervention space, more gym or cafeteria space, auditorium space, etc.). Smaller schools are typically less efficient than larger schools.

SPECIAL EDUCATION AREA ALLOCATIONS

One area of particular concern for MTSD is resource space for students with special needs. The district has seen a fairly dramatic increase in the complexity of the interventions needed to serve students with specialized needs especially at the elementary school level. In order to help objectively quantify the associated space needs, EUA worked with the district to develop a space formula to assess current space allocations for special education at each elementary school. The formula looks at space needs as a function of the district's projected number of Individualized Education Plans (IEPs) and the expected amount of time students would spend in non-traditional environments (Inclusion Rate):

Total SE Space Required = Core Resource Space + Student Space

- **Core Resource Space** is support space needed at each school:
  - Office Space at 100 sf per each FTE
  - Enhanced Toilet Facility (1 per 100 IEPs) at 150 sf each
  - Sensory/Motor Skills Areas (1 per 30 IEPs) at 300 sf each
  - IEP Conference Facilities large enough for 10-12 people

- **Student Space** is a product of the anticipated number of Students and Area per Student:
  - Students = Projected IEPs X (1-Inclusion Rate)
  - Projected IEPs = Projected Enrollment X IEP Percentage
  - Area per Student = 100 sf/student

Each Elementary School was evaluated based on the above formula. The resulting calculation can be summarized as follows:

- **Donges Bay Elementary** has more than sufficient space for current building enrollment at current IEP percentages and average inclusion rates. Existing space allocation of 3500 sf is approximately 850 sf ***above*** the calculated requirement of 2650 sf. Based on this calculation, one existing classroom currently used for special education could legitimately be used as a core classroom if necessary, and was therefore included in the total capacity calculation.
- **Oriole Lane Elementary** has a significant shortage of space for current building capacity at current IEP percentages and average inclusion rates. Existing space allocation of 1900 sf is approximately 850 sf ***below*** the calculated requirement of 2750 sf. Based on this calculation, one existing classroom currently used as a core classroom, is needed for special education and was therefore omitted from the total capacity calculation.
- **Wilson Elementary** has an appropriate overall amount of space for current building capacity at current IEP percentages and average inclusion rates. Existing space allocation of 3400 sf is only 50 sf below the calculated requirement of 3450 sf.

The number of core classrooms at each of the above elementary schools was adjusted in the capacity calculations to reflect the appropriate special education space allocation. Room assignments that were adjusted by this calculation are highlighted in the final capacity total calculations for each school.

MEQUON-THIENSVILLE SCHOOL DISTRICT

BUILDING CAPACITY SUMMARY

It is important to note that the capacity of a building can change over time, even if the building footprint does not. Over the past decade, recommended space provided per student has increased as teaching methodologies have evolved, and student learning now occurs in a variety of ways and in many non-traditional environments. Factors that have historically impacted school district capacity across the state of Wisconsin have included:

- Space needs to support learning environments for small and large-group collaboration
- Space needs to accommodate technology use, equipment and infrastructure
- Space needs to support children with special needs in the least restrictive environments
- Space needs to support title IX equitable athletic opportunities
- Space needs to support specialists/interventionists, speech, occupational and physical therapy services and Title I programs
- Space needs to support increased community use of school facilities and site

The following table summarizes current enrollment versus calculated capacities in each school:

BUILDING CAPACITY				
BUILDING	CURRENT ENROLLMENT SEPTEMBER 2018 [e]	FUNCTIONAL CAPACITY [c] BY DESIRED CLASS SIZE [b]	FUNCTIONAL CAPACITY [c] BY LEARNING AREA [a]	CAPACITY BASED ON GROSS BUILDING AREA [d]
Donges Bay Elementary	448 students	477 students	446 students	448 students
Oriole Lane Elementary	466 students	428 students	411 students	404 students
Wilson Elementary	583 students	619 students	533 students	471 students
Lake Shore Middle School	385 students	496 students	484 students	474 students
Steffen Middle School	464 students	496 students	484 students	439 students
Homestead High School	1327 students	1769 students	1900 students	2134 students

a. Based on 55 SF per Kindergarten student, 35 SF per student grades 1-5, and 30 SF per student for general classrooms grades 6-12. Science Rooms, FACE Labs, and Art Rooms use 50 SF per student. Tech Ed Lab spaces use 50-100 sq. ft. per student depending on specific use.

b. Based on maximum target goal of students per instructional space as provided by Mequon-Thiensville School District.

c. Functional Design Capacity is 90% of maximum capacity at elementary and middle schools, and 80% at high school.

d. Based on 150 SF per student at elementary, 180 SF per student at middle, and 230 SF per student at high schools.

e. For Elementary Schools, current enrollment includes the higher total of either morning or afternoon 4K kindergarten, but not both.

DONGES BAY ELEMENTARY SCHOOL
BUILDING CAPACITY SUMMARY

Donges Bay Elementary serves grades 4K through fifth-grade for the Mequon-Thiensville School District. The school is configured as a three-section elementary. As of September 2018, enrollment, excluding afternoon 4K students, was **448 students**. For the purposes of this study, capacity was calculated in three different ways.

- Functional Capacity based on District Desired Class Size is the method that most realistically captures capacity numbers for the building in its existing configuration. This calculation yields a functional capacity of **477 students**, which would mean that the building is nearing capacity but could theoretically support an additional 29 students over current enrollment. In order to realize this full capacity, one room currently utilized as a special education space would have to be returned to a core classroom. This calculation, however, does not take into account the size of the individual classrooms, or the need for support space outside of the classroom.

- Functional Capacity based on Learning Area yields a smaller capacity of **446 students**. Based on learning area, the building is just over capacity by 2 students. The disparity between this capacity total verses the capacity by district desired class size is indicative of classrooms that may be slightly undersized to meet the district's maximum class size goals. However, this calculation still does not account for the amount of support space outside of the classroom.

- Capacity based on Gross Building Area suggests a capacity of **448 students**. This means that the overall size of the building is very close to what would be expected based on current enrollment. The alignment of this number with the other numbers also tends to indicate that there is an appropriate level of support space including circulation areas, specialists, physical education and other amenities. It is important to note, however, that there is very little space in the building dedicated to student breakout and collaboration space outside of the primary classroom environment.

CONCLUSION

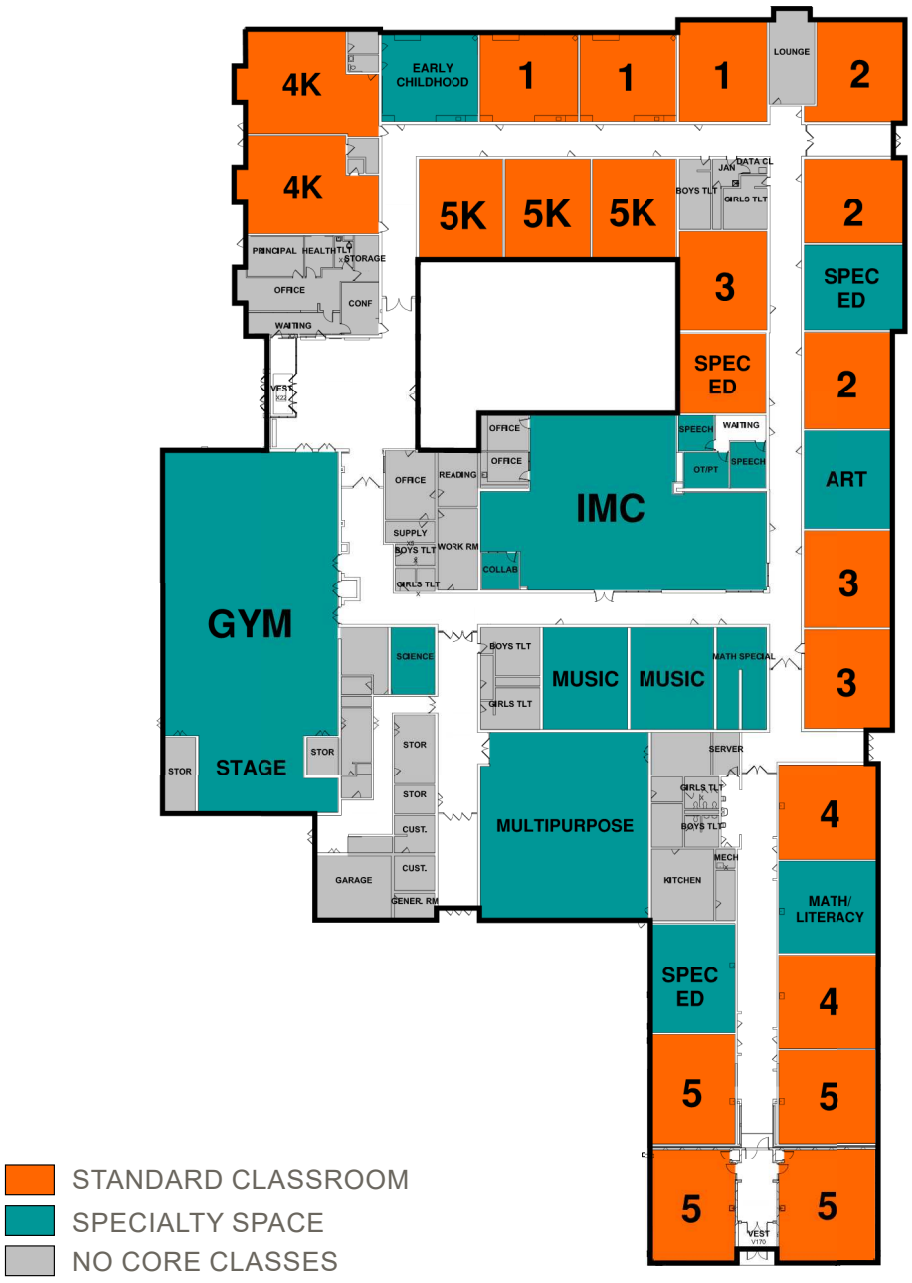
Based on all three calculations, Donges Bay is nearing or at capacity, and there is little room for growth in this facility. Based on an analysis of existing special education space, however, there is one special education classroom that could be used as a core classroom if necessary. Beyond this room, any reconfiguration or re-purposing of space to address current trends in educational design could prove difficult to accomplish within the existing building footprint due to lack of extra space. Diagrams on the following pages illustrate the current building utilization, and the calculations used to generate the building capacities.

DONGES BAY CAPACITY CALCULATION

Room Number	Room Name	Room Area (SF)	Capacity by Desired Class Size	Capacity by Learning Area	Capacity by Gross Building Area of 67,156 sf
45	Early Childhood	835			
8	4k Kindergarten (Half Day)	1233	**18**	**22**	
43	4k Kindergarten (Half Day)	1274	**18**	**23**	
27	5k Kindergarten	833	**24**	**15**	
28	5k Kindergarten	836	**24**	**15**	
39	5k Kindergarten	835	**24**	**15**	
46	1st Grade Classroom	823	**24**	**24**	
47	1st Grade Classroom	833	**24**	**24**	
48	1st Grade Classroom	872	**24**	**25**	
50	2nd Grade Classroom	912	**26**	**26**	
55	2nd Grade Classroom	849	**26**	**24**	
52	2nd Grade Classroom	846	**26**	**24**	
40	3rd Grade Classroom	860	**26**	**25**	
52	3rd Grade Classroom	851	**26**	**24**	
51	3rd Grade Classroom	855	**26**	**24**	
	4th Grade Classroom	935	**28**	**27**	
	4th Grade Classroom	938	**28**	**27**	
166	4th Grade Classroom	917	**28**	**26**	
170	5th Grade Classroom	1123	**28**	**32**	
171	5th Grade Classroom	952	**28**	**27**	
165	5th Grade Classroom	914	**28**	**26**	
	Math/Literacy	850			
31	Spec Ed	690	**26**	**20**	
53	Art Room	856			
	Math/Literacy	901			
70	Spec Ed	927			
58	Spec Needs/Sensory	517			
57	Music	1785			
	Cafeteria	3225			
37	ICC	3869			
	Speech	160			
	Speech	167			
	Gifted/Talented	124			
	OT/PT	174			
	Office	173			
	Collab	136			
25	Break/Work Room	327			
6	ELL	219			
4	Psych	340			
165	Orchestra	577			
172	Office	278			
179	Stage	954			
180	Gym	5057			
15	Conference	191			
13	Office	352			
23	Principal Office	227			
9	Health	96			
	Max Capacity		530	496	
	Functional Capacity (90%)		**477**	**446**	**448**
	Sept 2018 Enrollment	448*			

** Total September 2018 Enrollment of 462 has been adjusted to to reflect AM (larger) 4K enrollment only*

DONGES BAY UTILIZATION PLAN



STANDARD CLASSROOM
SPECIALTY SPACE
NO CORE CLASSES

ORIOLE LANE ELEMENTARY SCHOOL
BUILDING CAPACITY SUMMARY

Oriole Lane Elementary serves grades 4K through fifth-grade for the Mequon-Thiensville School District. The school is currently configured as a three-section elementary. As of September 2018, enrollment, excluding morning 4K students, was **466 students**. For the purposes of this study, capacity was calculated in three different ways.

- Functional Capacity based on District Desired Class Size is the method that most realistically captures capacity numbers for the building in its existing configuration. This calculation yields a functional capacity of **428 students**, which would mean that the building is over capacity by 38 students. It is important to note in these calculations that the building is lacking one needed special education classroom. The capacity numbers have been reduced by one classroom to reflect this need.

- Functional Capacity based on Learning Area yields a capacity of only **411 students**. Based on available learning area, the building is even further over capacity by 55 students. The slight disparity between this capacity total verses the capacity by district desired class size is indicative of classrooms that may be slightly undersized to meet the district's maximum class size goals. However, this calculation still does not account for the amount of support space outside of the classroom.

- Capacity based on Gross Building Area suggests the smallest total capacity of **404 students**, or 62 students over capacity. This means that the overall size of the building is significantly smaller than what would be expected based on current enrollment. This lower capacity verses the other calculations also tends to indicate that there are additional pressures on space typically required for support, including circulation, specialists, physical education and other amenities. It is also important to note, that there is very little space in the building dedicated to student breakout and collaboration space outside of the primary classroom environment.

CONCLUSION

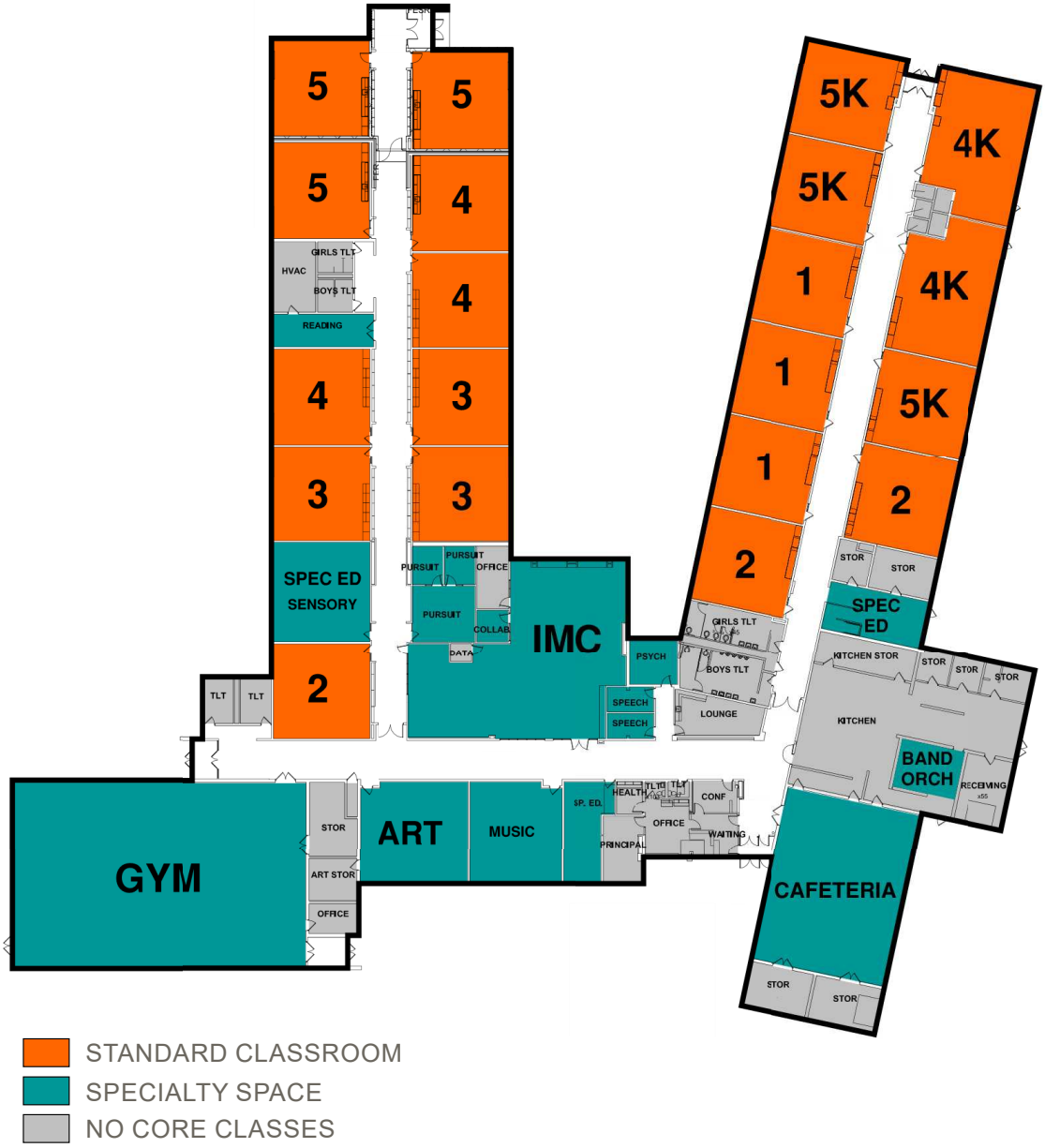
The different capacity totals demonstrate that the building is currently over capacity, and that there is a general lack of student support space within the building. There is no room for growth at the facility, and any reconfiguration of space to address current trends in educational design would be difficult to accomplish. Based on conversations with staff, and additional space analysis, there is already a shortage of one special education classroom for the building. Diagrams on the following pages illustrate the current building utilization, and the calculations used to generate the building capacities. Please note that the missing special education room is represented as a negative number in the capacity calculations.

ORIOLE LANE CAPACITY CALCULATION

Room Number	Room Name	Room Area (SF)	Capacity by Desired Class Size	Capacity by Learning Area	Capacity by Gross Building Area of 60,654
2	4K Classroom (Half Day)	1250	**18**	**23**	
4	4K Classroom (Half Day)	1259	**18**	**23**	
1	5K Classroom	899	**24**	**16**	
3	5K Classroom	888	**24**	**16**	
6	5K Classroom	868	**24**	**16**	
5	1st Grade Classroom	888	**24**	**25**	
7	1st Grade Classroom	888	**24**	**25**	
9	1st Grade Classroom	888	**24**	**25**	
8	2nd Grade Classroom	919	**26**	**26**	
11	2nd Grade Classroom	888	**26**	**25**	
24	2nd Grade Classroom	908	**26**	**26**	
25	3rd Grade Classroom	915	**26**	**26**	
28	3rd Grade Classroom	913	**26**	**26**	
27	3rd Grade Classroom	903	**26**	**26**	
30	4th Grade Classroom	920	**28**	**26**	
29	4th Grade Classroom	902	**28**	**26**	
31	4th Grade Classroom	900	**28**	**26**	
34	5th Grade Classroom	920	**28**	**26**	
33	5th Grade Classroom	932	**28**	**27**	
36	5th Grade Classroom	905	**28**	**26**	
	Spec Ed (Needed)		**-28**	**-26**	
	Spec Ed	139			
	Band/Orch	308			
35	Cafeteria	2317			
	Workroom	323			
	Psych	211			
	Speech	112			
	Speech	110			
16	Reading Spec	432			
15	ICC	2879			
	Collab	97			
	ICC Office	194			
23A	Spec Ed	138			
23B	Spec Ed	112			
23	Room	339			
18	Music	916			
20	Art	1084			
22	Gym	5421			
26	Sensory	951			
32	Math Spec/G.T./ELL	321			
	Max Capacity		476	456	
	Functional Capacity (90%)		**428**	**411**	**404**
	Sept 2018 Enrollment	466*			

** Total September 2018 Enrollment of 485 has been adjusted to to reflect PM (larger) 4K enrollment only*

ORIOLE LANE UTILIZATION PLAN



STANDARD CLASSROOM
SPECIALTY SPACE
NO CORE CLASSES

WILSON ELEMENTARY SCHOOL
BUILDING CAPACITY SUMMARY

Wilson Elementary serves grades 4K through fifth-grade for the Mequon-Thiensville School District. The school is currently configured as a four-section elementary. As of September 2018, enrollment, excluding afternoon 4K students, was **583 students**. For the purposes of this study, capacity was calculated in three different ways.

- Functional Capacity based on District Desired Class Size is the method that most realistically captures capacity numbers for the building in its existing configuration. This calculation yields a functional capacity of **619 students**, which would mean that the building is nearing capacity, but could theoretically serve up to an additional 36 students.

- Functional Capacity based on Learning Area yields a much smaller capacity of **533 students**. Based on available learning area, the building is over capacity by 50 students. The disparity between this capacity total verses the capacity by district desired class size is indicative of classrooms that are undersized to meet the district's maximum class size goals. However, this calculation still does not account for the amount of support space outside of the classroom.

- Capacity based on Gross Building Area suggests the smallest total capacity of **471 students**, which would put the building significantly over capacity by 112 students. This means that the overall size of the building is much smaller than what would be expected based on current enrollment. This lower capacity verses the other calculations also tends to indicate that there are additional pressures on space typically required for support, including circulation, specialists, physical education and other amenities. Site visits confirmed that both the cafeteria and the gymnasium are somewhat undersized, which would contribute to this disparity. It is also important to note that there is very little space in the building dedicated to student breakout and collaboration space outside of the primary classroom environment.

CONCLUSION

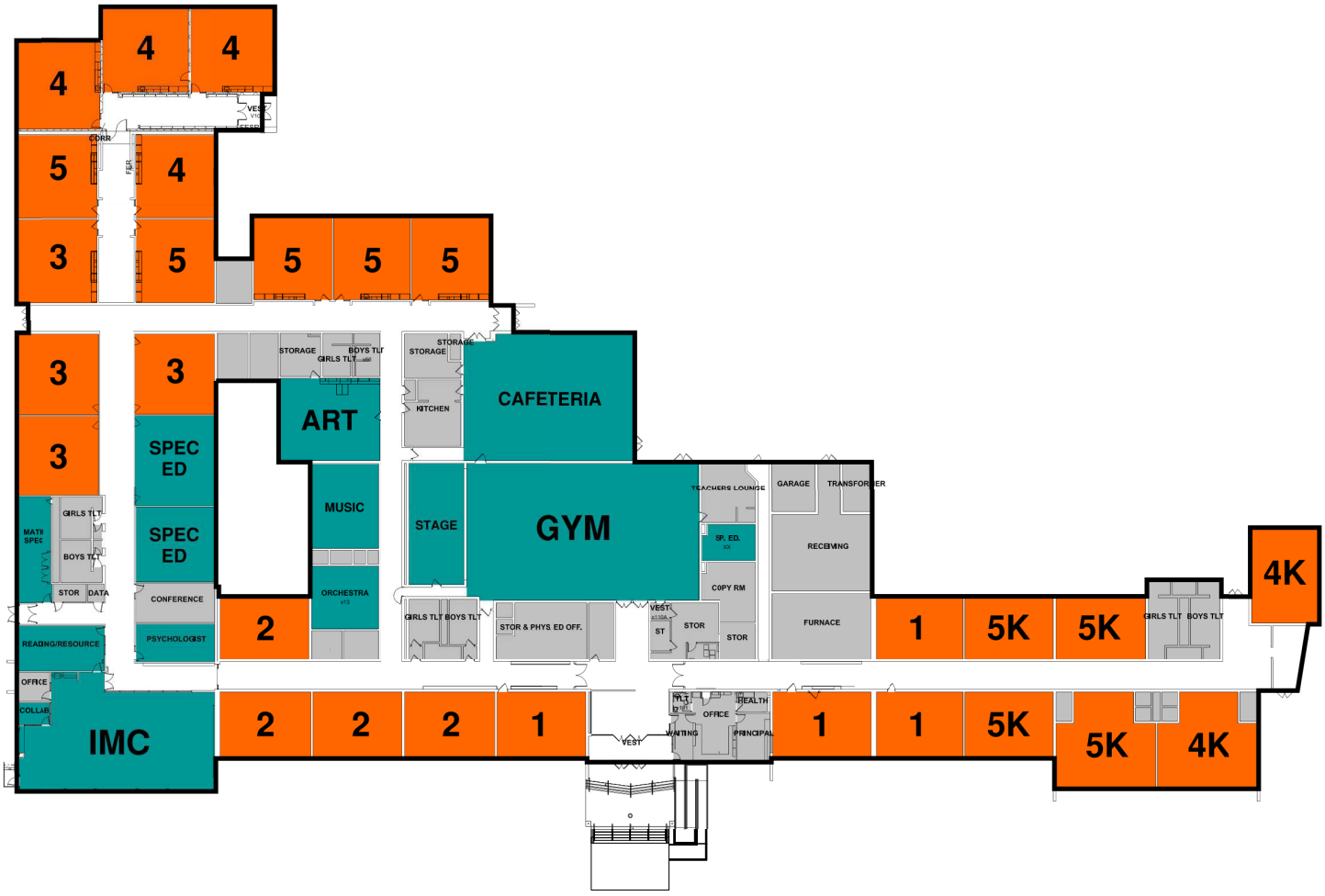
The different capacity totals demonstrate that while there are sufficient classroom numbers in the building to accommodate current enrollment, classrooms are undersized, and the building is lacking in student support space areas. There is no room for growth at the facility, and any reconfiguration of space to address current trends in educational design would be difficult to accomplish. Diagrams on the following pages illustrate the current building utilization, and the calculations used to generate the building capacities.

WILSON CAPACITY CALCULATION

Room Number	Room Name	Room Area (SF)	Capacity by Desired Class Size	Capacity by Learning Area	Capacity by Gross Building Area of 70,708 sf
1	4K Classroom (Half Day)	814	**18**	**15**	
2	4K Classroom (Half Day)	1096	**18**	**20**	
3	5K Classroom	752	**24**	**14**	
4	5K Classroom	1091	**24**	**20**	
5	5K Classroom	720	**24**	**13**	
6	5K Classroom	742	**24**	**13**	
7	1st Grade Classroom	725	**24**	**21**	
8	1st Grade Classroom	749	**24**	**21**	
9	1st Grade Classroom	826	**24**	**24**	
17	1st Grade Classroom	756	**24**	**22**	
18	2nd Grade Classroom	769	**26**	**22**	
19	2nd Grade Classroom	767	**26**	**22**	
21	2nd Grade Classroom	732	**26**	**21**	
22	2nd Grade Classroom	760	**26**	**22**	
28	3rd Grade Classroom	856	**26**	**24**	
30	3rd Grade Classroom	860	**26**	**25**	
31	3rd Grade Classroom	856	**26**	**24**	
32	3rd Grade Classroom	862	**26**	**25**	
34	4th Grade Classroom	932	**28**	**27**	
35	4th Grade Classroom	930	**28**	**27**	
36	4th Grade Classroom	900	**28**	**26**	
37	4th Grade Classroom	887	**28**	**25**	
33	5th Grade Classroom	867	**28**	**25**	
38	5th Grade Classroom	875	**28**	**25**	
43	5th Grade Classroom	835	**28**	**24**	
44	5th Grade Classroom	828	**28**	**24**	
45	5th Grade Classroom	840	**28**	**24**	
42	Cafeteria	2831			
15	Gymnasium	4207			
14	Stage	880			
12	Sensory	255			
13	Work Room	371			
49	OT	136			
20	Intervention	117			
24B	Conference	414			
24A	Special Ed	401			
25	Reading Spec	536			
25A	Math Specialist	460			
26	Special Ed	788			
29	Special Ed	969			
35	Room	202			
40	Speech	182			
41	Social/Emotional	167			
46	Art	1086			
47	Music	763			
48	Music	558			
50	ICC	2449			
51	Collab	87			
52	Office	52			
	Max Capacity		688	592	
	Functional Capacity (90%)		**619**	**533**	**471**
	Sept 2018 Enrollment	583*			

** Total September 2018 Enrollment of 617 has been adjusted to reflect AM (larger) 4K enrollment only*

WILSON UTILIZATION PLAN



STANDARD CLASSROOM
SPECIALTY SPACE
NO CORE CLASSES

LAKE SHORE MIDDLE SCHOOL
BUILDING CAPACITY SUMMARY

Lake Shore Middle School serves 6th through 8th grades and is one of two middle schools in the Mequon-Thiensville School District. As of September 2018, enrollment was **385 students** accommodated on two floor levels. For the purposes of this study, capacity was calculated in three different ways:

- Functional Capacity based on District Desired Class Size is the method that most realistically captures capacity numbers for the building in its existing configuration. This calculation yields a functional capacity of **496 students**, which would mean that the building could have significant room for growth, and could theoretically serve up to an additional 111 students. It is important to note that in order to realize this full capacity, a computer lab and a science room that are now used as resource space would need to be re-purposed as core classrooms.

- Functional Capacity based on Learning Area yields a slightly smaller capacity of **484 students**. Based on available learning area, the building could still support up to an additional 99 students. The relative alignment of this capacity total verses the capacity by district desired class size is indicative of classrooms that are near or slightly under the sizes that would be expected to meet the district's maximum class size goals. However, this calculation still does not account for the amount of support space outside of the classroom.

- Capacity based on Gross Building Area suggests a similar total capacity of **474 students**, which would still theoretically leave room for an additional 89 students. The general alignment of all three calculations indicates that the overall size of the building is approximately what would be expected based on the amount of classroom space. This tends to indicate an appropriate overall level of building support space including space required for circulation, specialists, physical education and other amenities. It is important to note, however, that there is very little space in the building dedicated to student breakout and collaboration space outside of the primary classroom environment.

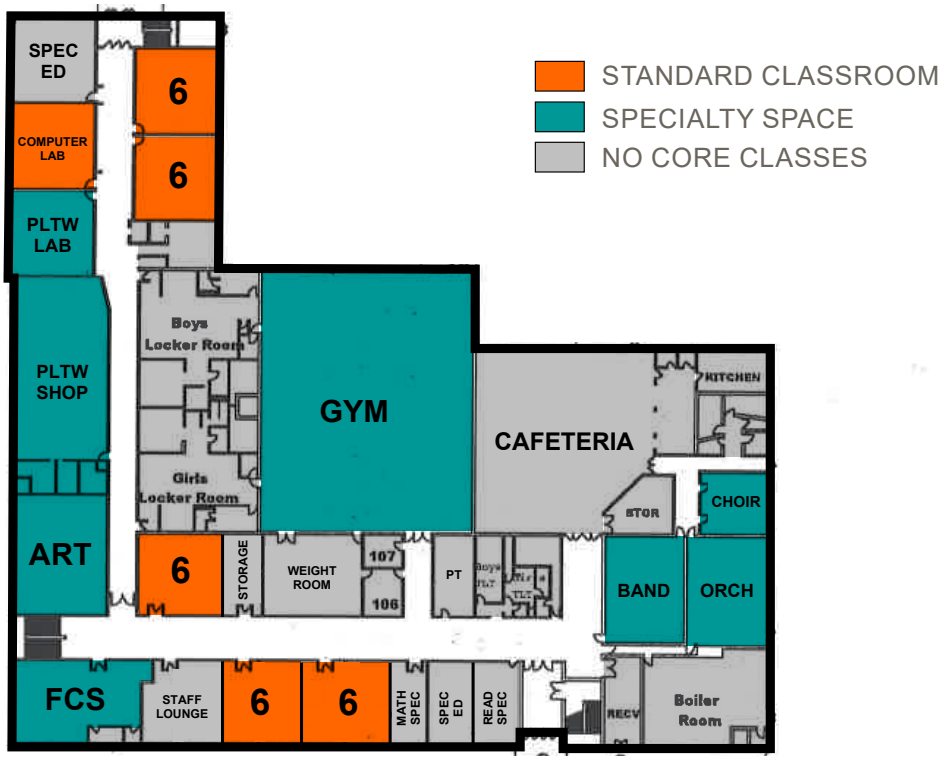
CONCLUSION

The different capacity totals demonstrate that the building has more than enough capacity for current enrollment with significant room for growth. However, should substantial growth occur, support spaces may need to be re-evaluated. The following diagrams illustrate the current building utilization, and the calculations used to generate each total.

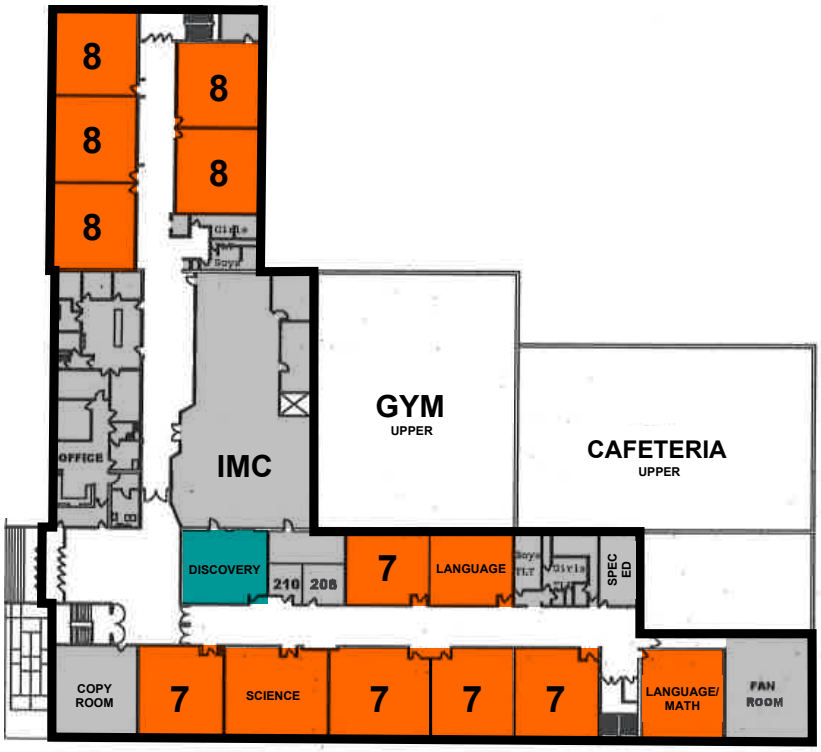
LAKE SHORE CAPACITY CALCULATION

Room No.	Primary Use of Room (Subject)	S.F. Area	Capacity by Desired Class Size	Capacity by Learning Area	Capacity by Gross Building Area of 85,298 sf
	Cafeteria	3,704			
	Gym	6,631			
100	Choir	475			
101	Orchestra	1,007			
102	Band	1,018			
103	Reading Specialist	424			
104	Special Education	424			
105	Speech	376			
106	Spin Aerobics	211			
107	Special Lunch	155			
108	Math Specialist	351			
109	Weight Room	938			
110	Classroom - 6th	798	**29**	**27**	
111	Storage - Science	398			
112	Classroom - 6th	799	**29**	**27**	
113	Staff Lounge	733			
114	Classsroom - 6th	758	**29**	**25**	
115	Family/Consumer Sciences	1,139			
116	Art	1,324			
117	PLTW - Vocational Lab	2,079			
118	PLTW - Computer Lab	867			
119	Computer Lab	856	**29**	**29**	
120	Classroom - 6th	837	**29**	**28**	
121	Classroom - 6th	855	**29**	**29**	
122	Special Education	870			
200	Language/Math	859	**29**	**29**	
202	Special Education	325			
203	Classroom - 7th	881	**29**	**29**	
204	Classroom - Language	719	**29**	**24**	
205	Classroom - 7th	871	**29**	**29**	
206	Classroom - 7th	1,067	**29**	**36**	
207	Classroom - 7th	704	**29**	**23**	
	Gifted/Talented	286			
208	School Store				
209	Science Classroom (Lab)	1,060	**29**	**35**	
211	Discovery Classroom (ICC)	721			
	ICC	3,198			
212	Classroom - 7th	883	**29**	**29**	
213	Staff Work Room	914			
	Main Office	2,282			
217	Classroom - 8th	827	**29**	**28**	
218	Classroom - 8th	870	**29**	**29**	
219	Classroom - 8th	827	**29**	**28**	
220	Classroom - 8th	827	**29**	**28**	
221	Classroom - 8th	841	**29**	**28**	
AVERAGE					
	Max Capacity		551	538	
	Functional Capacity (90%)		**496**	**484**	**474**
	Sept 2018 Enrollment	**385**			
	Actual Hourly Total				

LAKE SHORE UTILIZATION PLAN



FIRST FLOOR



LOWER LEVEL

STEFFEN MIDDLE SCHOOL
BUILDING CAPACITY SUMMARY

Steffen Middle School serves 6th through 8th grades and is one of the two middle schools for the Mequon-Thiensville School District. As of September 2018, enrollment was **465 students**. For the purposes of this study, capacity was calculated in three different ways:

- Functional Capacity based on District Desired Class Size is the method that most realistically captures capacity numbers for the building in its existing configuration. This calculation yields a functional capacity of **496 students**, which would mean that the building is nearing capacity, but could theoretically serve up to an additional 31 students.

- Functional Capacity based on Learning Area yields a slightly smaller capacity of **484 students**. Based on available learning area, the building could theoretically support an additional 19 students. The relative alignment of this capacity total verses the capacity by district desired class size is indicative of classrooms that are near or slightly under the sizes that would be expected to meet the district's maximum class size goals. However, this calculation still does not account for the amount of support space outside of the classroom.

- Capacity based on Gross Building Area suggests a somewhat smaller total capacity of **439 students**, which would still theoretically mean that the building is already over capacity by 26 students. The relative discrepancy between these calculations tends to indicate that the overall size of the building is somewhat smaller than what would be expected based on the other capacity calculations. This may create some additional pressures on space typically required for support, including circulation, specialists, physical education and other amenities. It is also important to note that there is very little space in the building dedicated to student breakout and collaboration space outside of the primary classroom environment.

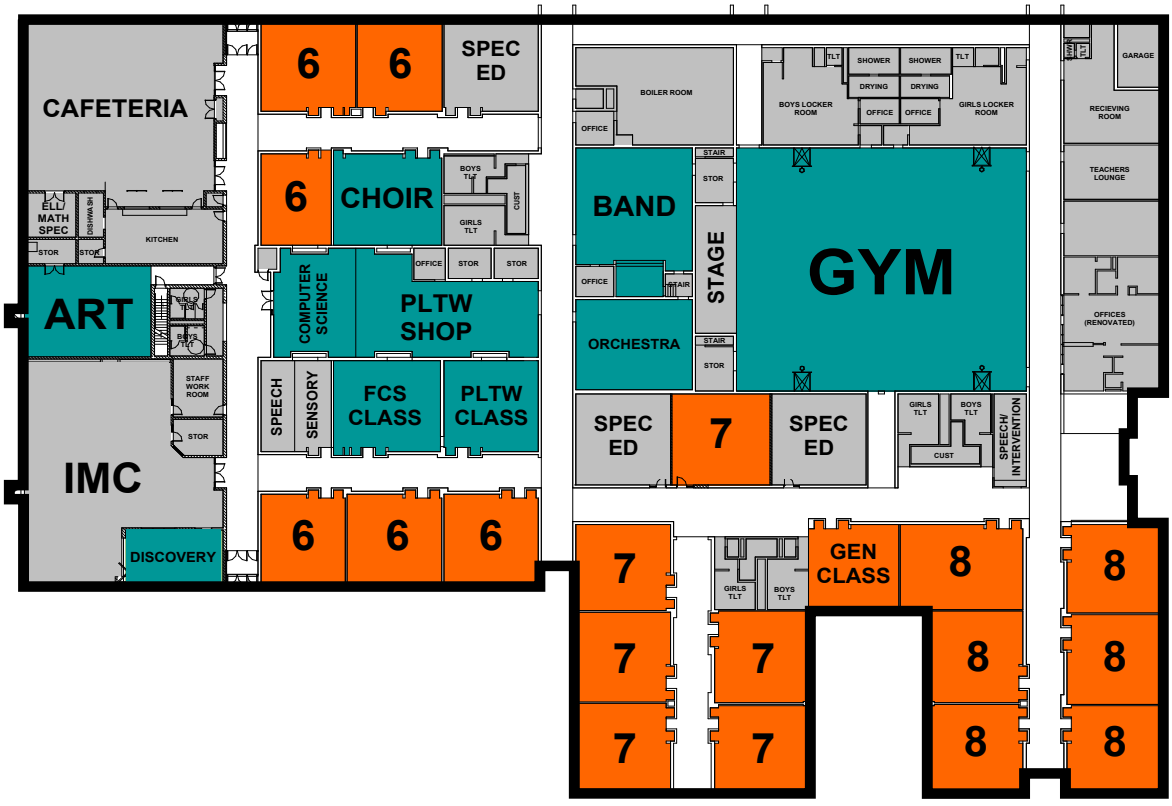
CONCLUSION

The different capacity totals provide a somewhat mixed picture of capacity at Steffen Middle School. There appears to be sufficient academic space for current enrollment. However, the building is slightly over capacity from a gross building area standpoint. It is likely that support space would need to be expanded if any future additions or increases in enrollment were to be considered. The following diagrams illustrate the current building utilization, and the calculations used to generate each total.

STEFFEN CAPACITY CALCULATION

Room No.	Primary Use of Room (Subject)	S.F. Area	District Desired Max Class Size	Available SF per Learning Area	Total Building Area in SF 78,930
1	Classroom - 8th	908	**29**	**30**	
2	Classroom - 8th	886	**29**	**30**	
3	Classroom - 8th	851	**29**	**28**	
4	Classroom - 8th	857	**29**	**29**	
5	Classroom - 8th	901	**29**	**30**	
6	Science - 8th	1,096	**29**	**22**	
7	Classroom	794	**29**	**26**	
8	Classroom - 7th	902	**29**	**30**	
9	Classroom - 7th	849	**29**	**28**	
10	Classroom - 7th	878	**29**	**29**	
11	Classroom - 7th	886	**29**	**30**	
12	Classroom - 7th	851	**29**	**28**	
13	Classroom - 6th	901	**29**	**30**	
14	Classroom - 6th	901	**29**	**30**	
15	Classroom - 6th	801	**29**	**27**	
16	PLTW - Classroom	901			
17	Family/Consumer Sciences	1,030			
17A	Sensory	349			
17B	Speech	320			
18	PLTW - Vocaltional Lab	1,576			
19	Choir	1,057			
20	Classroom - 6th	680	**29**	**23**	
21	Classroom - 6th	903	**29**	**30**	
22	Classroom - 6th	807	**29**	**27**	
23	Special Education	901			
24	Band	1,601			
25	Orchestra	1,098			
26	Special Education	900			
27	Classroom - 7th	935	**29**	**31**	
28	Special Education	900			
30	Main Office	2,242			
31	Office - Social/Psych				
32	Staff Lounge	558			
33	Receiving	801			
34	Mechanical	1,332			
35	Storage				
36	Cafeteria	3,580			
36A	Specialists - ELL/Math	239			
37	Kitchen	672			
38	Art	1,205			
39	Staff Work Room	303			
40	Inquiry Collaboration Center	3,530			
40B	ICC	557			
	Gymnasium	7,360			
AVERAGE					
	Max Capacity		551	538	
	Functional Capacity (90%)		**496**	**484**	**439**
	Sept 2018 Enrollment	**464**			
	Actual Hourly Total				

STEFFEN UTILIZATION PLAN



STANDARD CLASSROOM
SPECIALTY SPACE
NO CORE CLASSES

HOMESTEAD HIGH SCHOOL
BUILDING CAPACITY SUMMARY

Homestead High School serves all students in 9th through 12th grades for the Mequon-Thiensville School District. As of September 2018, enrollment was **1327 students**. For the purposes of this study, capacity was calculated in three different ways:

- Functional Capacity based on District Desired Class Size is the method that most realistically captures capacity numbers for the building in its existing configuration. This calculation yields a functional capacity of **1755 students**, which means the building could theoretically house up to 428 additional students. Based on the current bell schedule, optimal scheduling would utilize each room for instruction an average of 4 out of 5 periods (excluding lunch) or 80% of the time. This would allow the classroom to be open for one prep period and for lunch each day. Actual utilization rates were significantly lower at 3.1 out of 5 periods or 61% of the time. It is important to note that this calculation includes all regularly scheduled class spaces, but does not take unscheduled spaces for breakout groups or interventions into account.

- Functional Capacity based on Learning Area yields an even higher capacity of **1945 students**. Based on available learning area, the building could theoretically accommodate up to 618 additional students. The increase in capacity from this calculation may indicate that some classrooms or activity spaces are likely oversized for the district's maximum class size goals. For some high schools, space required for athletics can also be underutilized during school hours. It is important to note that this calculation does not account for any usage of unscheduled spaces for breakout or intervention work.

- Capacity based on Gross Building Area suggests the largest total capacity of **2134 students**, or 807 students above current enrollment. This means that the overall size of the building is significantly larger than would be expected for a new high school of similar enrollment. The discrepancy between this capacity calculation and the other methods tends to indicate an above average amount of space dedicated to support services, circulation, cafeteria, and gymnasium areas.

CONCLUSION

The different capacity totals provide a consistent picture of capacity at Homestead High School. There is more than sufficient classroom and support space for current enrollment, and there is room for significant future growth. The following diagrams illustrate the current building utilization, and the calculations used to generate each total.

HOMESTEAD CAPACITY AND UTILIZATION

Room No.	Primary Use of Room (Subject)	S.F. Area	Capacity by Desired Class Size	Capacity by Learning Area	Capacity by Gross Buillding Area of 490,866 sf	Periods 1 7:25-8:39	2 8:45-10:03	Lunch A / 3A 10:09-11:23	Lunch B / 3B 10:45-11:59	4 12:05-1:18	5 1:24-2:37	Avrg Class Size	# periods used (X)	% of use (X/5)
101	Science Classroom	1,490	**24**	**30**		22	19	26		23	20	**22**	**5**	**100**
102	Science Classroom	1,490	**24**	**30**									**0**	**0**
103	Science Classroom	1,490	**24**	**30**		23	24	19			19	**21**	**4**	**80**
104	Science Classroom	1,490	**24**	**30**		23	19			24	18	**21**	**4**	**80**
105	Undesignated Room	864												
106	Science Classroom	1,490	**24**	**30**			24	16		24	15	**20**	**4**	**80**
107	Science Classroom	1,489	**24**	**30**									**0**	**0**
108	Science Classroom	1,489	**24**	**30**									**0**	**0**
109	Science Classroom	1,489	**24**	**30**		21	21	16			17	**19**	**4**	**80**
110	Science Classroom	1,490	**24**	**30**		14	23	21			17	**19**	**4**	**80**
111	Science Classroom	1,490	**24**	**30**		23	21					**22**	**2**	**40**
112	Science Classroom	1,482	**24**	**30**			17			19	19	**18**	**3**	**60**
113	Science Classroom	1,489	**24**	**30**		22	24	21			21	**22**	**4**	**80**
115	Science Classroom	1,478	**24**	**30**		21		19		15	12	**17**	**4**	**80**
201	Green Room (Computers)	824	**30**	**27**									**0**	**0**
202	Math Classroom	817	**30**	**27**		24			23	20	19	**22**	**4**	**80**
203	Math Classroom	825	**30**	**28**		20	17		18		13	**17**	**4**	**80**
204	Math Classroom	825	**30**	**28**		24			28	26	25	**26**	**4**	**80**
205	Math Classroom	825	**30**	**28**		28	27		13	22		**23**	**4**	**80**
206	Computer Science	825	**30**	**28**		24	23		22	24	18	**22**	**5**	**100**
207	Computer Science	1,124	**30**	**22**		18	22		20		8	**17**	**4**	**80**
208	Math Classroom	825	**30**	**28**		24			24	26	25	**25**	**4**	**80**
209	Computer Science	1,078	**30**	**22**		13	20		23	19	18	**19**	**5**	**100**
210	Math Classroom	825	**30**	**28**		21	28		22		24	**24**	**4**	**80**
212	Math Classroom	817	**30**	**27**		29			26	30	23	**27**	**4**	**80**
301	Special Ed Conf Room	818												
302	Foreign Language	818	**30**	**27**			26	20		19		**22**	**3**	**60**
303	Foreign Language	826	**30**	**28**		23	16	20				**20**	**3**	**60**
304	Testing Room	836				1	2	3		3				
305	Foreign Language	825	**30**	**28**				13		13	24	**17**	**3**	**60**
306	Foreign Language	816	**30**	**27**		28	29	23			18	**25**	**4**	**80**
307	Foreign Language	828	**30**	**28**		29	27	23			21	**25**	**4**	**80**
308	Foreign Language	825	**30**	**28**		26	30	21			25	**26**	**4**	**80**
309	Foreign Language	820	**30**	**27**									**0**	**0**
310	Foreign Language	839	**30**	**28**			17	17		22	16	**18**	**4**	**80**
311	Foreign Language	824	**30**	**27**						27	18	**23**	**2**	**40**
312	Special Education	802						12		7				
401	Special Education	814												
402	Special Education	605												
403	Special Education	1,453									1			
404	Special Education	825				8								
405	Publications Lab/English	1,237	**30**	**41**			12	19		17		**16**	**3**	**80**
406	Business Classroom	1,035	**30**	**35**		28	25		25		29	**27**	**4**	**40**
408	Business Classroom	1,028	**30**	**34**		29				26		**28**	**2**	**40**
501	Storage	395												
502	Storage/District Data Hub	826												
503	Math Support Teacher	826												
504	Math Classroom	826	**30**	**28**		30			28	26	26	**28**	**4**	**80**
505	Math Classroom	826	**30**	**28**		23	19			27	19	**22**	**4**	**80**
506	Math Classroom	825	**30**	**28**		22			25	29	26	**26**	**4**	**80**
507	Special Education	826												
508	Literacy Specialist	816												
509	Math Specialist	826												
510/512	Academic Success Center	2,028				10	15	10		13	5			
511	English Classroom	826	**30**	**28**			19	27		29		**25**	**3**	**60**
513	Social Studies Classroom	1,460	**30**	**22**		22	25		2	16	26	**18**	**5**	**100**
601	STEM Lab	1,965	**30**	**39**						23	21	**22**	**2**	**40**
606	Art Classroom	1,066	**30**	**21**		24		24		28	21	**24**	**4**	**80**
608	Photo Lab	1,248												
609	Art Classroom	1,268	**30**	**25**		29	23	27			27	**27**	**4**	**80**
611	Art Classroom	1,241	**30**	**25**		27	27			28	17	**25**	**4**	**80**
	Pool	16,100	**30**	**54**									**0**	**0**
	Main Gym	11,396	**30**	**57**		28	20	31		29	23	**26**	**5**	**100**

HOMESTEAD CAPACITY AND UTILIZATION

Room No.	Primary Use of Room (Subject)	S.F. Area	Capacity by Desired Class Size	Capacity by Learning Area	Capacity by Gross Buillding Area of 490,866 sf	Periods 1 7:25-8:39	2 8:45-10:03	Lunch A / 3A 10:09-11:23	Lunch B / 3B 10:45-11:59	4 12:05-1:18	5 1:24-2:37	Avrg Class Size	# periods used (X)	% of use (X/5)
	Auxiliary Gym	7,880	**30**	**39**						31	20	**26**	**2**	**40**
	Field House	35,103	**60**	**117**		29		26		30	25	**28**	**4**	**80**
	Weight Room	2,690	**30**	**27**		33	34					**34**	**2**	**40**
701	PE Classroom	777	**30**	**26**									**0**	**0**
702	Flex Room	756	**30**	**25**									**0**	**0**
	Black Box Theater	2,694	**30**	**54**			27			28	22	**26**	**3**	**60**
704	Band	4,352	**75**	**87**					51		42	**47**	**2**	**40**
	Orchestra B	4,338	**75**	**87**		35	32		50		30	**37**	**4**	**80**
706	Choir	3,494	**50**	**100**		13			32		52	**32**	**3**	**60**
801	English Classroom	819	**30**	**27**		25	29		19	18		**23**	**4**	**80**
802	Health Class	819	**30**	**27**		30	29	30		30	30	**30**	**5**	**100**
803	English Class	825	**30**	**28**		28	24	30				**27**	**3**	**60**
804	English Class	825	**30**	**28**		20		25		21		**22**	**3**	**60**
805	Computer Lab	825	**30**	**28**									**0**	**0**
806	English Class	823	**30**	**27**			30	25		30	22	**27**	**4**	**80**
807	English Class	818	**30**	**27**			30	21		30	27	**27**	**4**	**80**
808	English Class	825	**30**	**28**			25	19		18		**21**	**3**	**60**
809	English Class	813	**30**	**27**		50	50	26		22		**37**	**4**	**80**
810	English Class	828	**30**	**28**									**0**	**0**
811	Book Storage	370												
812	Special Education	408												
813	English Classroom	827	**30**	**28**					20	26		**23**	**2**	**40**
814	Special Education	828					15						**1**	
816	English Classroom	818	**30**	**27**									**0**	**0**
815	ELL Classroom									12				
901	District Office Room	810												
902	District Office Room	825												
903	Social Studies Classroom	802	**30**	**27**									**0**	**0**
904	Social Studies Classroom	825	**30**	**28**		27	25			23	26	**25**	**4**	**80**
905	Social Studies Classroom	825	**30**	**28**		11	26			12	26	**19**	**4**	**80**
906	Social Studies Classroom	825	**30**	**28**		25	22			26	24	**24**	**4**	**80**
907	Social Studies Classroom	829	**30**	**28**		30	26			25	22	**26**	**4**	**80**
908	Special Education	825									16			
909/911	Study Hall	1,664	**60**	**55**		40	42		50	50	31	**43**	**5**	**100**
910	Social Studies Classroom	825	**30**	**28**		26	23			30	25	**26**	**4**	**80**
912	Social Studies Classroom	817	**30**	**27**			22	27		28	28	**26**	**4**	**80**
913	Social Studies Classroom	826	**30**	**28**			22	28		11	20	**20**	**4**	**80**
	Inquiry Wing 1 (Library)	8,403	**60**	**84**		50	50	60		66	28	**51**	**5**	**100**
	Inquiry Wing 2	1,140	**30**	**38**		21	22	22				**22**	**3**	**60**
	Inquiry Wing 3	3,184												
AVERAGE													**3.1**	**62**
	Max Capacity		2492	2676										
	Functional Capacity (80%)		**1769**	**1900**	**2134**									
	Sept 2018 Enrollment	**1327**												
	Actual Hourly Total													

HOMESTEAD HIGH SCHOOL UTILIZATION PLAN

Mequon Thiensville
SCHOOL DISTRICT

SECTION 3:

LONG-RANGE
MASTER PLAN OPTIONS

eua

JULY 12, 2019

EUA PROJECT: 318480

LONG-RANGE PLANNING COMPONENTS

Following the completion of the space needs analysis and capacity study, the District held a series of community workshops in the Spring of 2019 to help inform the planning process. Many community members participated, and their feedback helped outline a framework for the future. This framework forms a long-range master plan consisting of the following core components:

- **Modern Learning Environments:** While the district's facilities have been well-maintained, the existing classrooms were not designed to accommodate today's cooperative learning practices. The district's long-range plan would address the need for modernized learning environments across the district's schools. This includes creating breakout space for small-group learning; increasing transparency for better supervision of interconnected spaces; and continued upgrades to both furniture and technology for enhanced learning opportunities.

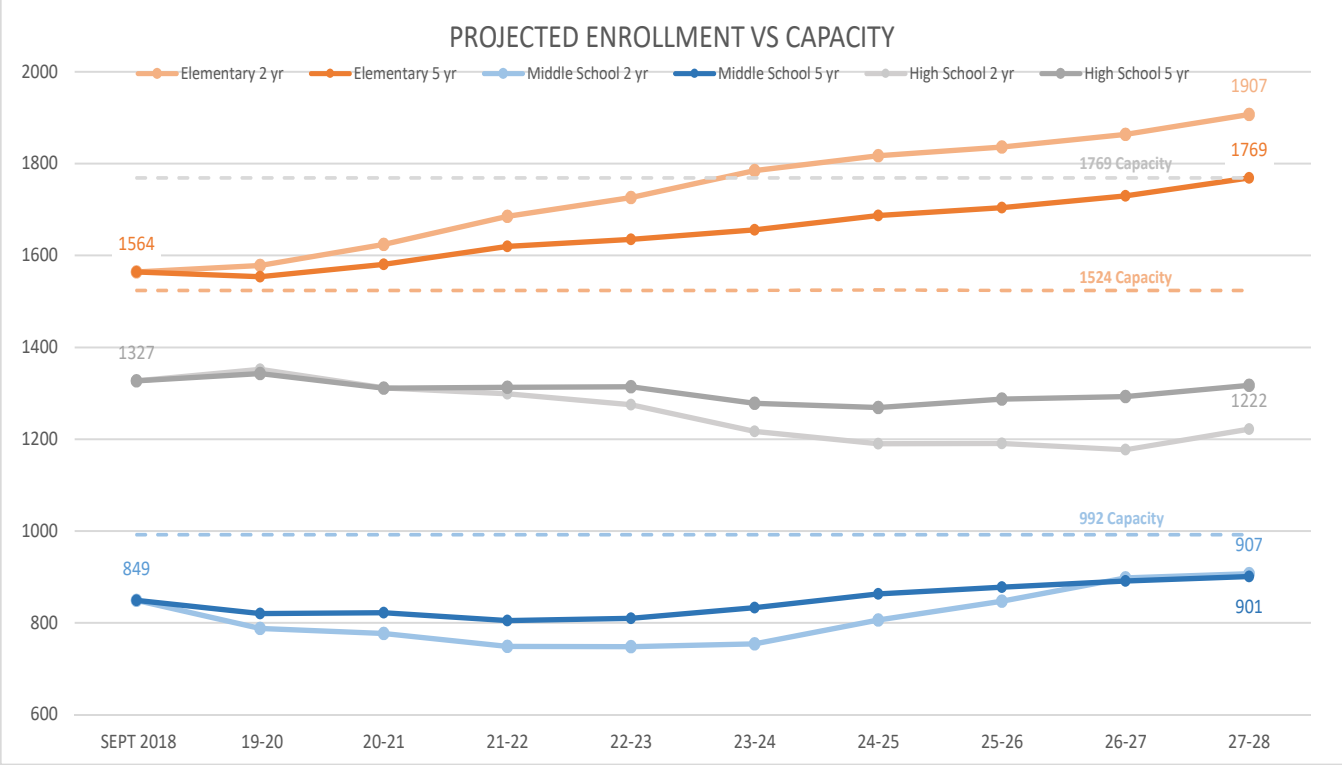
- **Safety & Security:** Much has already been done in the district to address security concerns, but continuous improvement in this area remains a district priority. This component of the plan includes improving site circulation and traffic flow at all schools; enhancing security for events and activities at each campus; addressing accessibility issues for those with mobility impairments; and creating a new, identifiable visitor entrance at the high school campus.

- **Maintenance:** Because of investments made as a result of the 2014 referendum and the district's ongoing commitment to maintenance and upkeep, the overall condition of the district's buildings is above average. However, a number of larger-scale maintenance items are included as part of the long-range master plan. Additional information is captured in a separate maintenance report, attached as an appendix to this study. Some of the more significant items included in the plan are:
    - Completion of LED lighting upgrades
    - Continued flooring, ceiling and restroom upgrades
    - Partial window replacements at Lake Shore and Oriole Lane
    - Bleacher expansion and replacement at the High School stadium
    - Replacement of the High School field house synthetic flooring and Steffen gym flooring
    - Repair/replacement of High School pool deck
    - Miscellaneous soffit/siding repairs and painting at the High School campus
    - Improved efficiency and automation for building mechanical systems
    - Air conditioning at all schools
      (Only the High School and part of Oriole Lane are currently air conditioned)
    - Addition of fire sprinkler systems at all schools
    - Conversion from well water to municipal water supply at all schools

- **School District Athletics:** While the district's athletic programs are extensive and successful, improvements to athletic fields and venues are included as a component of the long range plan. Specific improvements include expanded gymnasium space at the elementary, middle, and high school levels; the creation of a dedicated multipurpose indoor practice/activity facility at the high school; dedicated space for gymnastics, dance, and cheer; expanded weight/training room facilities; remodeled locker rooms; improvements to existing athletic fields; and on-site baseball fields at the high school campus.

- **Community Use & Recreation:** The Mequon-Thiensville School District is also responsible for the operations of the community recreation department. This program is widely utilized, and the district is committed to its long-term success. The long-range master plan includes additional gym space at each site for improved community programming; dedicated space at each elementary school for before and after school care programs; expanded fields for youth baseball and soccer programs; and various upgrades to the Range Line Community Center including entrance improvements, playground improvements, cafeteria improvements, enhanced gym access, and public restroom accommodations.

- **Enrollment & Growth:** Potentially the most pressing of the district's needs is the lack of core capacity for projected enrollment growth at the elementary school level. Projected enrollment is based on an independent study that was conducted by the UW-Madison Applied Population Lab (APL) in 2017. For the purposes of this study, the APL 5-year trend line was utilized as a baseline for all enrollment projections. APL projected enrollment versus current capacity is represented by the following chart. Utilizing this data, Oriole Lane is already over capacity, and all elementary schools are projected to be over capacity within two to three years. To meet this need, the long-range master plan includes three strategic options to address core classroom capacity and create the additional space required for music, art, specialists, special education, cafeterias, and physical education. The long-range master plan options are outlined in detail on the following pages.



LONG-RANGE MASTER PLAN OPTIONS

Together, the planning components listed in the previous section form a long-range master plan that the district will use to inform future facilities work in both the short and long term. Within this plan, there are three strategic options that the district could pursue to address future enrollment and growth. These options are intended to create a logical framework for the future while still providing the district flexibility to adapt as future needs continue to evolve. The master plan options are described as follows:

- DO NOTHING: If the district makes no significant changes to its existing facilities, the needs outlined in this report will continue to grow. Most significantly, class sizes would need to be increased to accommodate projected growth in student enrollment at the elementary school level. Base on APL-5-year trend projections, class size for elementary students would need to increase from a current 5K-5th class size average of 23.1 to a projected average of 26.3 by 2027-2028.

- OPTION 1 - ELEMENTARY ADDITIONS: This option would address enrollment and growth concerns at the elementary school level by creating building additions for elementary capacity at each elementary school. The largest additions would occur at Oriole Lane and Donges Bay, which would allow all three of the district's elementary schools to serve four sections at each grade from 4K-5th grade students. Modifications at Lake Shore Middle School would allow each middle school to serve up to six sections of 6th-8th grade students. Additional renovations and expansions at all district schools would be needed to address modern learning, safety and security, maintenance, school district athletics and community use and recreation as outlined in the previous section of this report. Some changes to district boundaries and operations would likely be required as part of this solution.

- OPTION 2 - MOVE 5th GRADE TO MIDDLE SCHOOL: This option would address enrollment and growth concerns at the elementary school level by shifting fifth grade out of the elementary facilities and into the middle school. In order to accommodate the increased number of students at the middle school, substantial additions to Lake Shore and Steffen middle schools would be needed. Each middle school would grow to accommodate up to six sections of 5th-8th grade students, while the elementary schools would be reconfigured to support four sections each of 4K-4th grade. As in other options, previously identified needs in modern learning, safety and security, maintenance, school district athletics, and community use and recreation would also be addressed. Some changes to district boundaries and operations would likely be required as part of this solution.

- OPTION 3 - MOVE 7th AND 8th GRADE TO HIGH SCHOOL: The final option would address enrollment and growth concerns at the elementary school level by shifting 4th and 5th grade out of the elementary facilities to the middle school. 7th and 8th grade students would then be shifted to the high school campus and a 7th/8th grade junior high school would be created. The result would be four sections at each elementary (primary) school grades 4K-3rd, six sections at each middle (upper elementary) school grades 4th-6th, and a new 7th-12th grade high school with 22 core classrooms dedicated to 7th and 8th grade. As in the other options, this would also address other components of the long-range master plan. Because there is some available space at the high school, this option has the potential to address capacity concerns with comparatively smaller building additions. Some changes to district boundaries and operations would likely be required as part of this solution.

LONG-RANGE OPTIONS TABLE

CAPACITY VERSUS PROJECTED ENROLLMENT

The table presented on this page and the following page is intended to illustrate the impact each long-range master plan option would have on the district's ability to meet projected growth in enrollment. Following the table, each option is also represented diagrammatically to demonstrate the scope of work which would be required to bring the option to fruition. Please note that each option represents a long-term solution. It is anticipated that the district would likely implement any long-range master plan in phases over an extended period of time.

OPTION	SCOPE OF WORK	CORE CLASSROOM ADJUSTMENTS	OTHER SPACE ADJUSTMENTS	MODERN LEARNING	RESULTING CAPACITY	GRADE CONFIG
0	**DO NOTHING**					
	Elementary School - No Change	None	None	None	**1524**	4K-5
	Middle School - No Change	None	None	None	**992**	6-8
	High School - No Change	None	None	None	**1769**	9-12
1	**ELEMENTARY ADDITIONS**					
	Elementary School - Three 4-Section Schools	**18 New** @ 357 st	**Gym/Café/Specials**	**18 RSRC**	**1881**	4K-5
	Middle School - No Capacity Changes	None	Gym/Café/Specials	**6 RSRC**	**992**	6-8
	High School - No Capacity Changes	None	Entry/Athletics/DO	**MISC**	**1769**	9-12
2	**MOVE 5th GRADE TO MIDDLE SCHOOL**					
	Elementary - Eliminate 5th Grade	**4 New** + 10 Repurposed	Gym/Café/Specials	**15 RSRC**	**1578**	**4K-4**
	Middle School - Add 5th Grade	**10 New** @ 252 st	**Gym/Café/Specials**	**8 RSRC**	**1244**	**5-8**
	High School - No Capacity Change	None	Entry/Athletics/DO	**MISC**	**1769**	9-12
3	**MOVE 7th & 8th GRADE TO HIGH SCHOOL**					
	Elementary - Eliminate 4th and 5th Grade	20 repurposed	None	**12 RSRC**	**1298**	**4K-3**
	Middle School - Shift to 4th thru 6th Grade Intermediate	None	Gym/Café/Specials	**6 RSRC**	**970**	**4-6**
	High School - Create 7th-8th Grade Jr High Wing	**8 New** + 14 Repurposed	Identity/Entry/Athletics/DO	**MISC**	**1954**	**7-8**,9-12

NOTES:

- Elementary, Middle, and High School APL 5-year trend line is used for all enrollment projections
- Projected Enrollments for Elementary School include both K5 and K4 kindergarten students
- Capacity totals assume full-day 4K or wrap around care offered in each elementary school (currently 4K is only half-day)
- RSRC is an abbreviation for resource space. Each RSRC represents the space equivalent of one classroom
- Students are abbreviated as "st"

LONG-RANGE OPTIONS TABLE

CAPACITY VERSUS PROJECTED ENROLLMENT

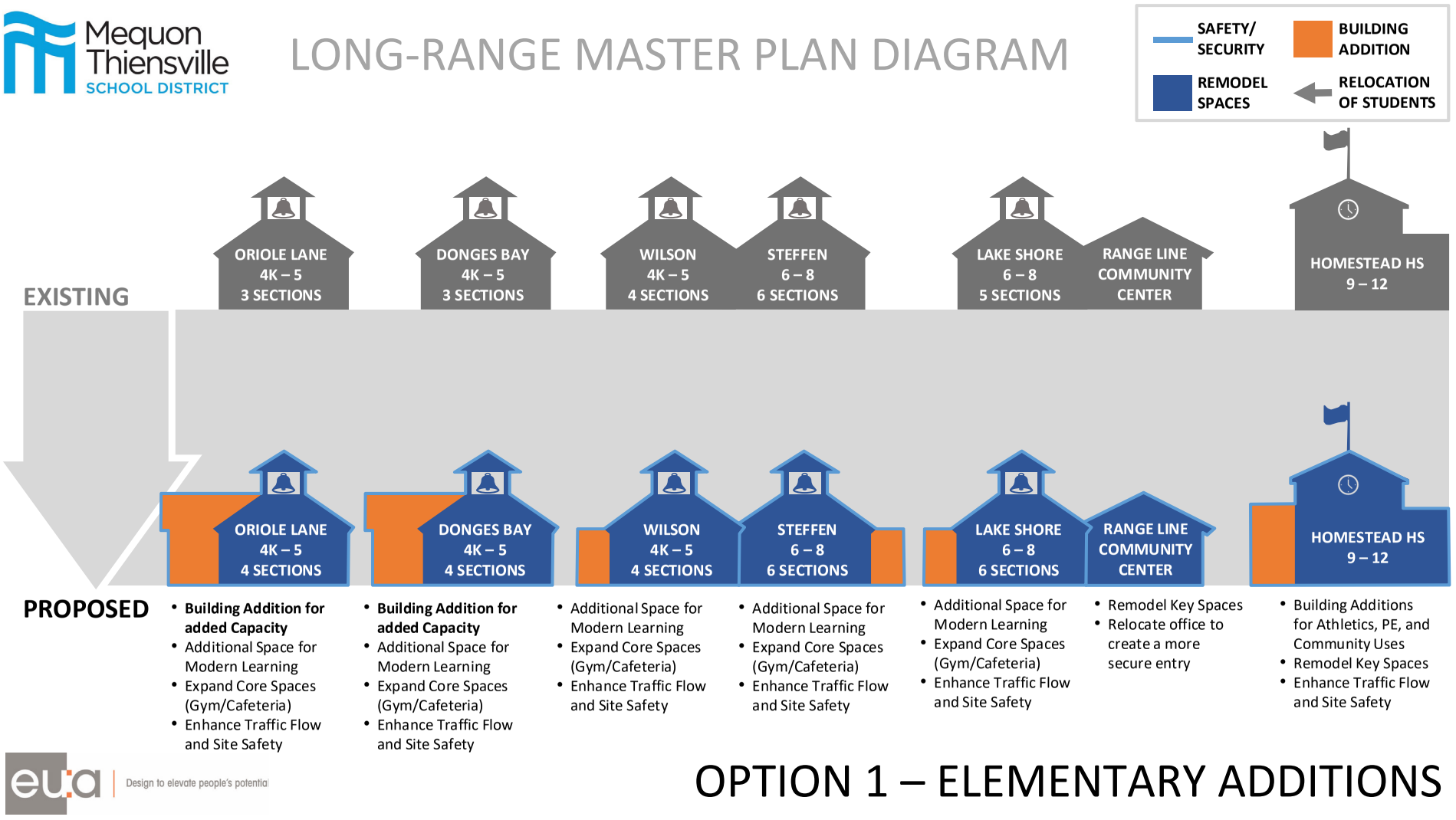
OPTION	GRADE CONFIG	ACTUAL	PROJECTED ENROLLMENT BY ACADEMIC YEAR								CAPACITY VS 27-28 PROJECTED
		SEPT 2018	19-20	20-21	21-22	22-23	23-24	24-25	25-26	26-27	27-28	
0												
	4K-5	1564	1554	1581	1620	1635	1656	1687	1704	1730	1769	-245
	6-8	849	820	822	805	810	833	863	878	891	901	91
	9-12	1327	1343	1311	1313	1314	1278	1269	1287	1293	1317	452
1												
	4K-5	1564	1554	1581	1620	1635	1656	1687	1704	1730	1769	112
	6-8	849	820	822	805	810	833	863	878	891	901	91
	9-12	1327	1343	1311	1313	1314	1278	1269	1287	1293	1317	452
2												
	4K-4	**1292**	**1304**	**1339**	**1348**	**1363**	**1387**	**1400**	**1419**	**1452**	**1485**	93
	5-8	**1121**	**1070**	**1064**	**1077**	**1082**	**1102**	**1150**	**1163**	**1169**	**1185**	59
	9-12	1327	1343	1311	1313	1314	1278	1269	1287	1293	1317	452
3												
	4K-3	**1065**	**1071**	**1076**	**1086**	**1104**	**1111**	**1125**	**1151**	**1178**	**1203**	95
	4-6	**782**	**761**	**766**	**786**	**815**	**829**	**842**	**852**	**849**	**855**	115
	7-8,9-12	**1892**	**1885**	**1872**	**1866**	**1841**	**1827**	**1852**	**1866**	**1887**	**1929**	25

Key:

- Signifies the enrollment is more than 250 students **SIGNIFICANTLY UNDER CAPACITY**
- Signifies the enrollment is 50-250 students **UNDER CAPACITY**
- Signifies the enrollment is **AT CAPACITY** +/- 50 students (+/- 20 at 4K/5K Center)
- Signifies the enrollment is more than 50 students **OVER CAPACITY**

Mequon Thiensville SCHOOL DISTRICT

LONG-RANGE MASTER PLAN DIAGRAM



- **Building Addition for added Capacity**
- Additional Space for Modern Learning
- Expand Core Spaces (Gym/Cafeteria)
- Enhance Traffic Flow and Site Safety

- **Building Addition for added Capacity**
- Additional Space for Modern Learning
- Expand Core Spaces (Gym/Cafeteria)
- Enhance Traffic Flow and Site Safety

- Additional Space for Modern Learning
- Expand Core Spaces (Gym/Cafeteria)
- Enhance Traffic Flow and Site Safety

- Additional Space for Modern Learning
- Expand Core Spaces (Gym/Cafeteria)
- Enhance Traffic Flow and Site Safety

- Additional Space for Modern Learning
- Expand Core Spaces (Gym/Cafeteria)
- Enhance Traffic Flow and Site Safety

- Remodel Key Spaces
- Relocate office to create a more secure entry

- Building Additions for Athletics, PE, and Community Uses
- Remodel Key Spaces
- Enhance Traffic Flow and Site Safety

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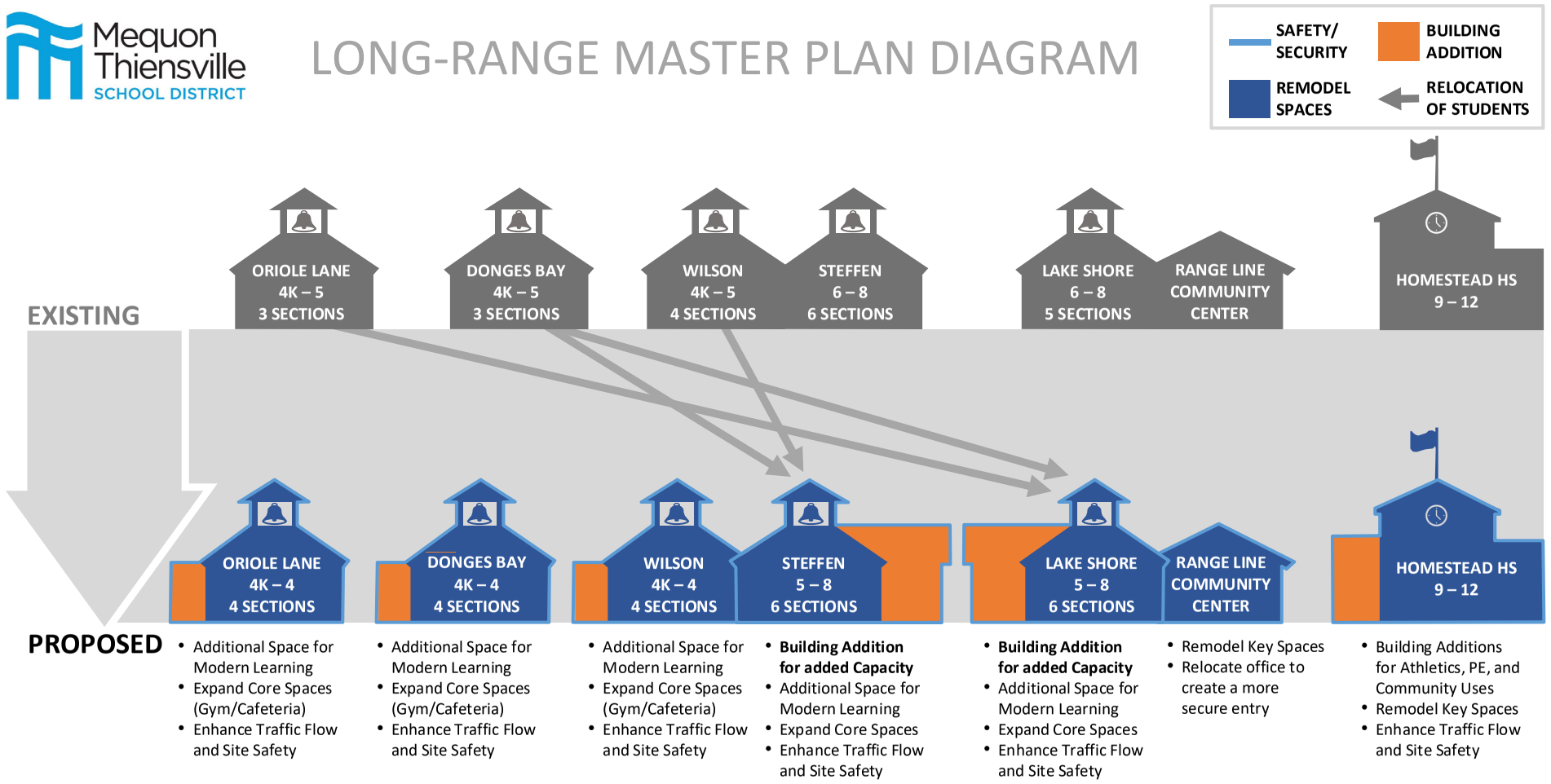
OPTION 1 – ELEMENTARY ADDITIONS

Mequon Thiensville SCHOOL DISTRICT

LONG-RANGE MASTER PLAN DIAGRAM



- Additional Space for Modern Learning
- Expand Core Spaces (Gym/Cafeteria)
- Enhance Traffic Flow and Site Safety

- Additional Space for Modern Learning
- Expand Core Spaces (Gym/Cafeteria)
- Enhance Traffic Flow and Site Safety

- Additional Space for Modern Learning
- Expand Core Spaces (Gym/Cafeteria)
- Enhance Traffic Flow and Site Safety

- **Building Addition for added Capacity**
- Additional Space for Modern Learning
- Expand Core Spaces
- Enhance Traffic Flow and Site Safety

- **Building Addition for added Capacity**
- Additional Space for Modern Learning
- Expand Core Spaces
- Enhance Traffic Flow and Site Safety

- Remodel Key Spaces
- Relocate office to create a more secure entry

- Building Additions for Athletics, PE, and Community Uses
- Remodel Key Spaces
- Enhance Traffic Flow and Site Safety

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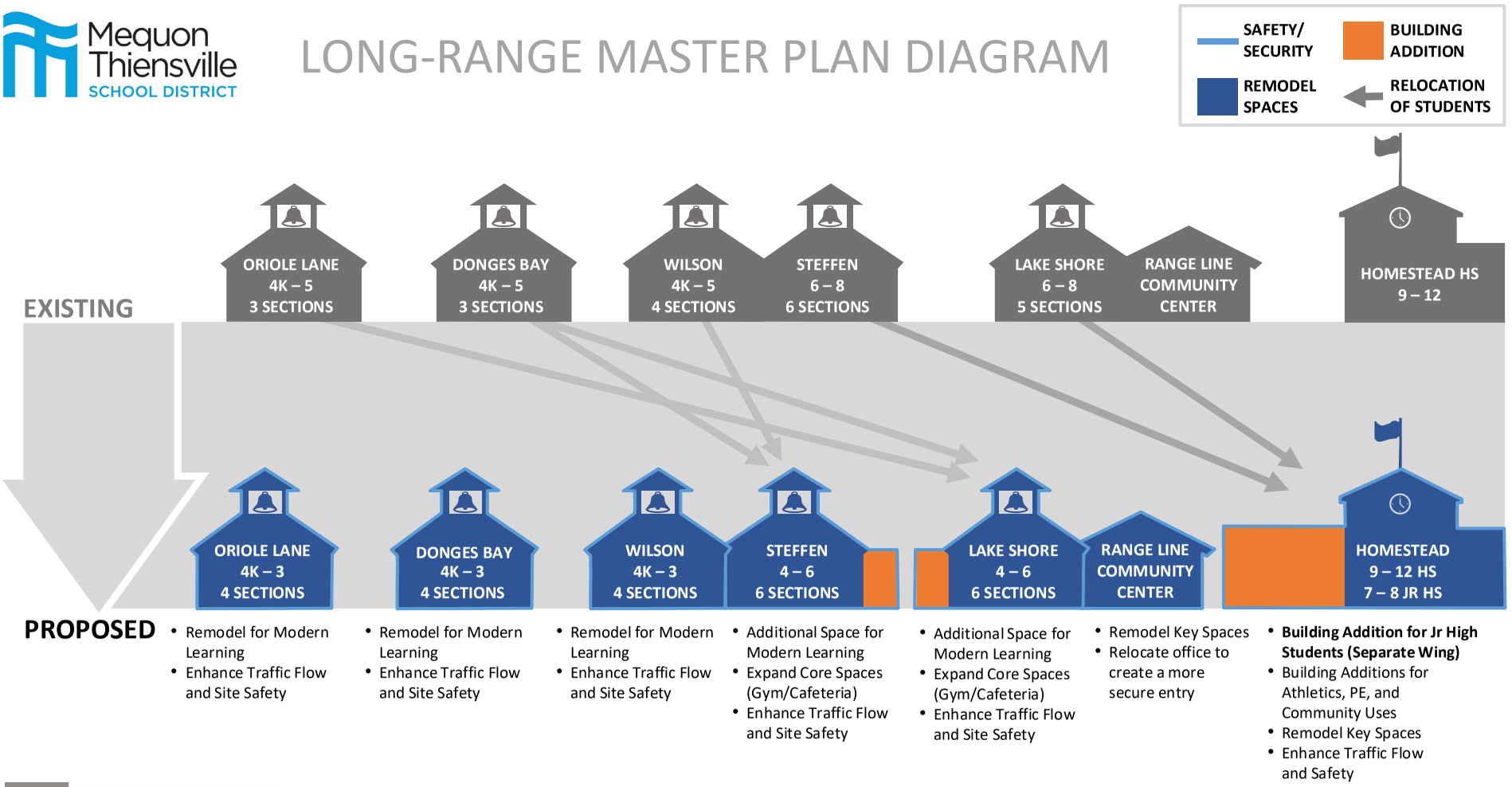
OPTION 2 – MOVE 5th GRADE TO MIDDLE SCHOOL

Mequon Thiensville SCHOOL DISTRICT

LONG-RANGE MASTER PLAN DIAGRAM



- Remodel for Modern Learning
- Enhance Traffic Flow and Site Safety

- Remodel for Modern Learning
- Enhance Traffic Flow and Site Safety

- Remodel for Modern Learning
- Enhance Traffic Flow and Site Safety

- Additional Space for Modern Learning
- Expand Core Spaces (Gym/Cafeteria)
- Enhance Traffic Flow and Site Safety

- Additional Space for Modern Learning
- Expand Core Spaces (Gym/Cafeteria)
- Enhance Traffic Flow and Site Safety

- Remodel Key Spaces
- Relocate office to create a more secure entry

- **Building Addition for Jr High Students (Separate Wing)**
- Building Additions for Athletics, PE, and Community Uses
- Remodel Key Spaces
- Enhance Traffic Flow and Safety

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OPTION 3 – MOVE 7th AND 8th GRADE TO HIGH SCHOOL

CONCLUSION

The Mequon-Thiensville School District seeks to ignite each student's passion for learning, preparing for a life of infinite possibilities. We believe the facilities in which students learn can play a significant role in creating those opportunities.

Over an eight month period, EUA worked with the district to understand needs, analyze building utilization and capacity, explore potential solutions, and develop a long-range master plan. This plan provides a broad framework for the future and should be used to help inform decisions and prioritize work related to your school sites and buildings in years to come. The plan outlines key areas for improvements in the categories of modern learning, safety and security, maintenance, school district athletics, and community use and recreation. It also provides options for the district to consider as it pursues next steps regarding pressing concerns for enrollment and growth.

We believe architecture has the power to unleash true human potential. The power to inspire; and enable people to be their best. It is our hope that this master plan will help you create the best possible future for the students of Mequon-Thiensville School District. Thank you for the opportunity to be your partner in this important and strategic work. If you have any questions or concerns regarding this information, please feel free to contact the EUA team.

Sincerely,

Robert Morris
Associate | Senior Design Architect

Mequon Thiensville SCHOOL DISTRICT

APPENDIX A:

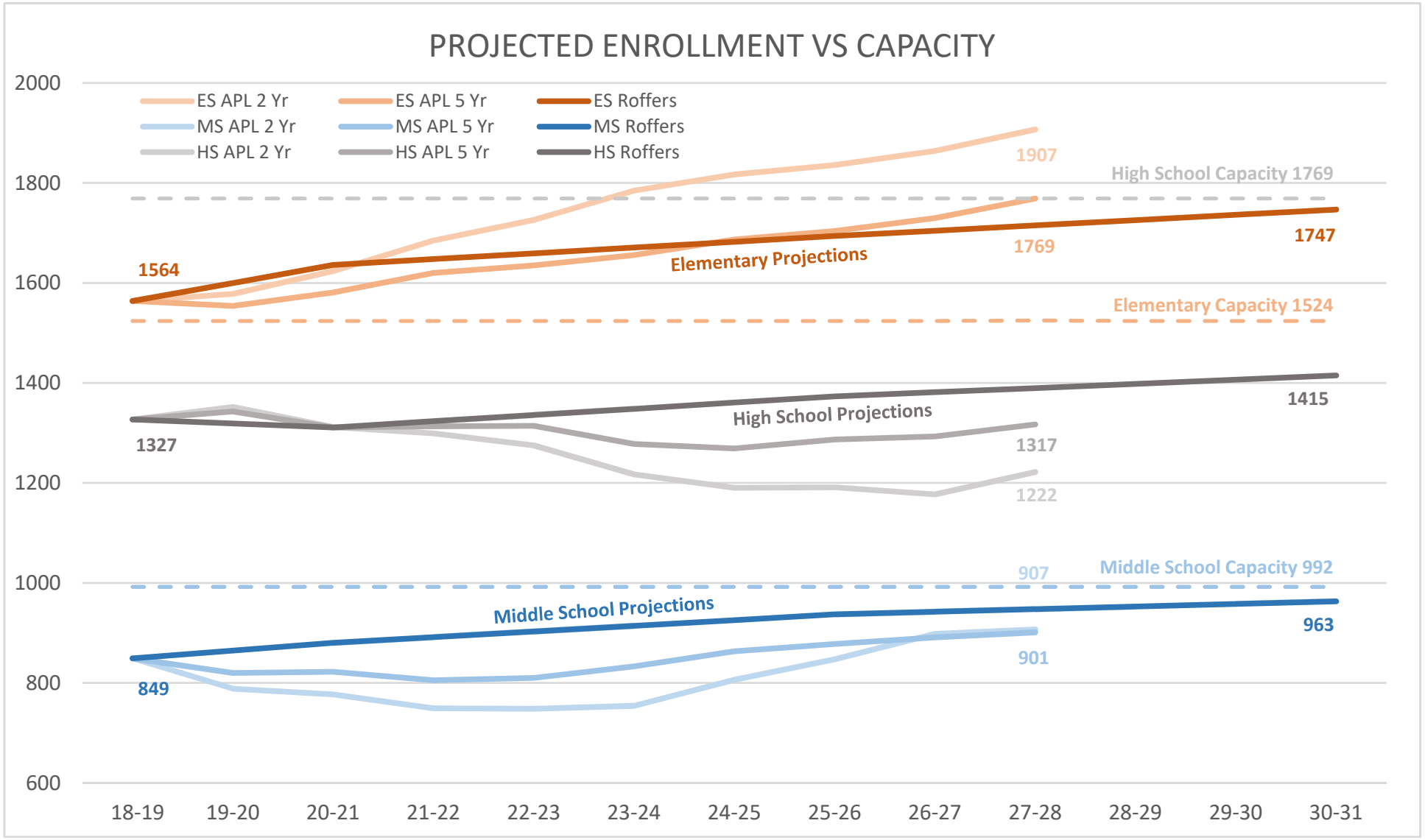
MDROFFERS CONSULTING

The Mequon-Thiensville School District contracted with MDRoffers Consulting in order to expand the research methodology in the development of enrollment projections. MDRoffer's projection methodology is based upon a professional analysis of local and regional plans, the plans and subdivisions of private housing developers and emerging house growth and market trends. The methodology used in the MDRoffers study considers the dynamics within the range of older, emerging, and future neighborhoods that represent the Mequon-Thiensville School District. The Roffers team examined the intricacies of the Mequon-Thiensville community, including engaging at length with City of Mequon and Village of Thiensville officials. Appendix A includes updated 10-year enrollment projections that incorporate the MDRoffers findings. This replaces the chart found in section 3, page 4 of this plan. Appendix A also includes a revised Options Table that incorporates the MDRoffers projections. This replaces the Options Table that can be found in section 3, pages 6 and 7.

eu:a

AUGUST 20, 2019

EUA PROJECT: 318480


PROJECTED ENROLLMENT VS CAPACITY
2000
1800
1600
1400
1200
1000
800
600
ES APL 2 Yr
ES APL 5 Yr
ES Roffers
MS APL 2 Yr
MS APL 5 Yr
MS Roffers
HS APL 2 Yr
HS APL 5 Yr
HS Roffers
1907
High School Capacity 1769
1564
Elementary Projections
1769
1747
Elementary Capacity 1524
1415
High School Projections
1327
1317
1222
907
Middle School Capacity 992
Middle School Projections
963
901
849
18-19
19-20
20-21
21-22
22-23
23-24
24-25
25-26
26-27
27-28
28-29
29-30
30-31

eppstein uhen : architects

LONG TERM OPTIONS SUMMARY - M.D. ROFFERS PROJECTION TRENDS

Mequon-Thiensville School District

revised: 08.16.2019

OPTION	SCOPE OF WORK	CORE CLASSROOM ADJUSTMENTS	OTHER SPACE ADJUSTMENTS	MODERN LEARNING	RESULTING CAPACITY	GRADE CONFIG	ACTUAL SEPT	PROJECTED ENROLLMENT BY ACADEMIC YEAR											CAPACITY VS 30-31 PROJECTED	ROUGH COSTS
							18-19	19-20	20-21	21-22	22-23	23-24	24-25	25-26	26-27	27-28	28-29	29-30	30-31	
0	**DO NOTHING**								Roffers Data					Roffers Data					Roffers Data		
	Elementary School - No Change	None	None	None	**1524**	4K-5	1564	1600	1636	1648	1659	1671	1682	1694	1705	1715	1726	1736	1747	**-223**	
	Middle School - No Change	None	None	None	**992**	6-8	849	865	880	891	903	914	926	937	942	947	953	958	963	**29**	
	High School - No Change	None	None	None	**1769**	9-12	1327	1319	1311	1323	1336	1348	1361	1373	1381	1390	1398	1407	1415	**354**	
1	**ELEMENTARY ADDITIONS**										Line indicates earliest feasible date for plan implementation										
	Elementary School - Three 4-Section Schools	**18 New** @ 357 st	**Gym/Café/Specials**	**18 RSRC**	**1881**	4K-5	1564	1600	1636	1648	1659	1671	1682	1694	1705	1715	1726	1736	1747	**166**	
	Middle School - No Capacity Changes	None	Gym/Café/Specials	**6 RSRC**	**992**	6-8	849	865	880	891	903	914	926	937	942	947	953	958	963	**45**	
	High School - No Capacity Changes	None	Entry/Athletics/DO	**MISC**	**1769**	9-12	1327	1319	1311	1323	1336	1348	1361	1373	1381	1390	1398	1407	1415	**379**	
2	**MOVE 5th GRADE TO MIDDLE SCHOOL**										Line indicates earliest feasible date for plan implementation										
	Elementary - Eliminate 5th Grade	**4 New** + 10 Repurposed	Gym/Café/Specials	**15 RSRC**	**1578**	**4K-4**	1332	1363	1394	1404	1414	1424	1434	1444	1453	1462	1471	1480	1489	**116**	
	Middle School - Add 5th Grade	**10 New** @ 252 st	**Gym/Café/Specials**	**8 RSRC**	**1244**	**5-8**	1082	1102	1122	1135	1148	1161	1174	1187	1194	1201	1207	1214	1221	**44**	
	High School - No Capacity Change	None	Entry/Athletics/DO	**MISC**	**1769**	9-12	1327	1319	1311	1323	1336	1348	1361	1373	1381	1390	1398	1407	1415	**379**	
3	**MOVE 7th & 8th GRADE TO HIGH SCHOOL**										Line indicates earliest feasible date for plan implementation										
	Elementary - Eliminate 4th and 5th Grade	20 repurposed	None	**12 RSRC**	**1298**	**4K-3**	1099	1125	1151	1160	1169	1177	1186	1194	1202	1209	1216	1224	1231	**89**	
	Middle School - Shift to 4th thru 6th Grade	None	Gym/Café/Specials	**6 RSRC**	**970**	**4-6**	748	763	778	785	792	798	805	812	817	822	827	832	837	**148**	
	High School - Create 7th-8th Grade Jr High	**8 New** + 14 Repurposed	Identity/Entry/Athletics/DO	**MISC**	**1954**	**7-8**,9-12	1893	1895	1898	1918	1938	1958	1978	1998	2010	2021	2033	2045	2057	**-67**	

Notes:

All enrollment projections are based on data provided by M.D. Roffers report dated August 5th, 2019

Projected enrollments for specific grades and specific years are exrapolated from broader data provided by M.D. Roffers

Projections assume no change in open enrollment numbers (+44 Elementary, + 47 Middle School, + 78 High School)

Capacity totals assume the district will shift to all day 4K (currently district utilizes half-day 4K)

Key:

Signifies the enrollment is more than 250 students **SIGNIFICANTLY UNDER CAPACITY**

Signifies the enrollment is 50-250 students **UNDER CAPACITY**

Signifies the enrollment is **AT CAPACITY** +/- 50 students

Signifies the enrollment is more than 50 students **OVER CAPACITY**

Mequon Thiensville SCHOOL DISTRICT

APPENDIX B:

DISTRICT MAINTENANCE NEEDS

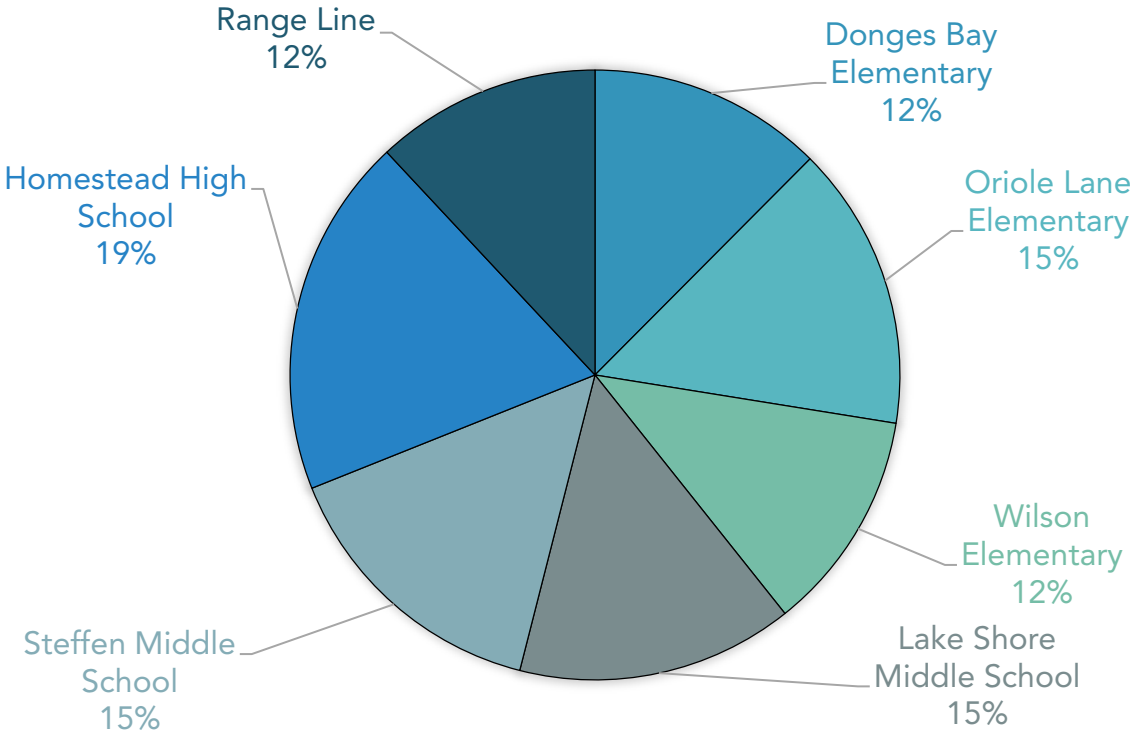
The Mequon-Thiensville School District's 10 Year Maintenance Plan is designed to ensure a consistent maintenance program is in place so the business of education can be conducted in schools that are safe, healthy, and functionally efficient. The District's ongoing facilities and maintenance program provides a strategic method of long-range planning to ensure the best use of budget dollars and the efficient use of operations and maintenance resources, gaining the most return on the taxpayers' investment. The data that follows provides a summary and current snapshot of the District's maintenance needs, as indicated in the 10 Year Maintenance Plan.

eu:a

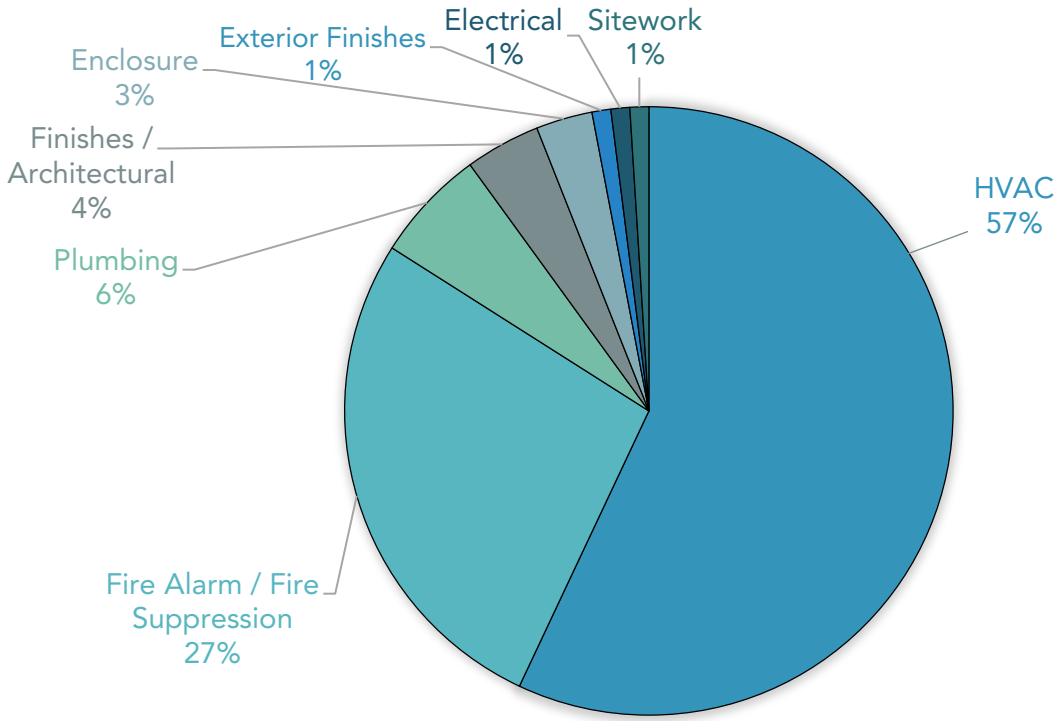
JULY 12, 2019

EUA PROJECT: 318480

District-wide Capital Maintenance Needs by School



District-wide Capital Maintenance Needs by Category



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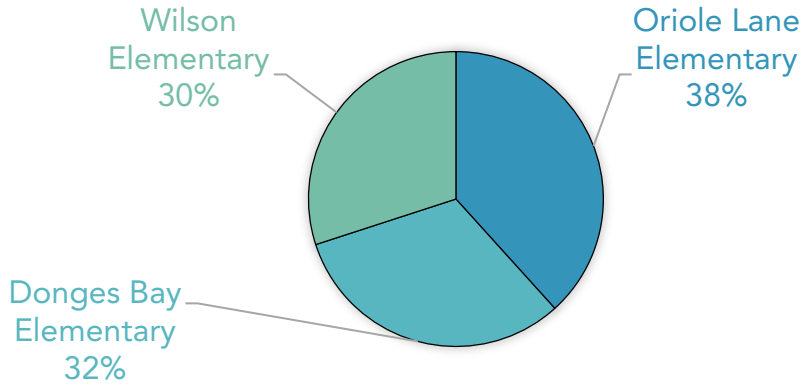
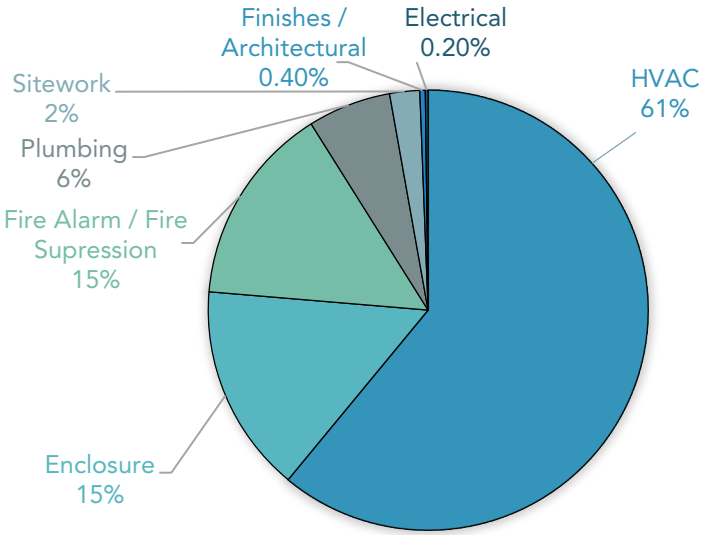
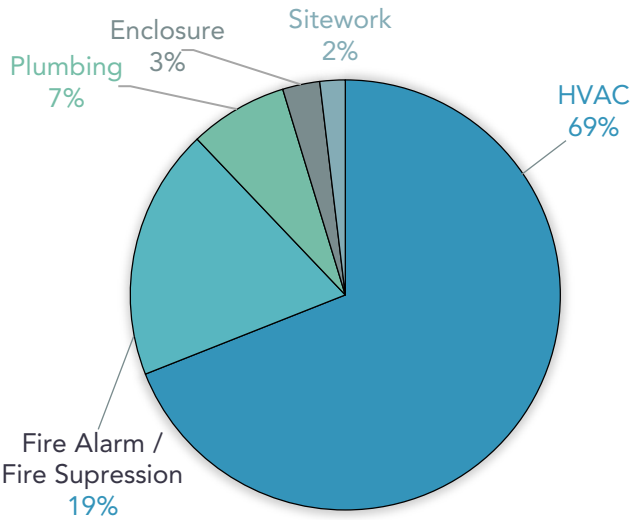
Elementary Schools – Capital Maintenance Needs



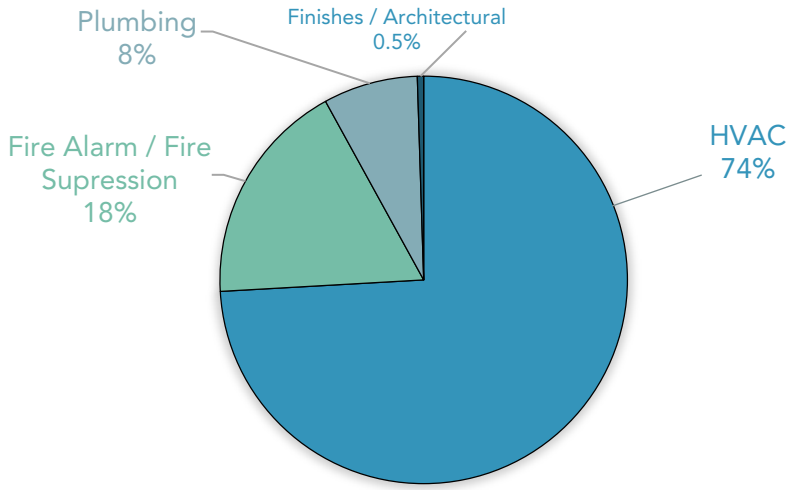
Oriole Lane Elementary



Donges Bay Elementary



Wilson Elementary



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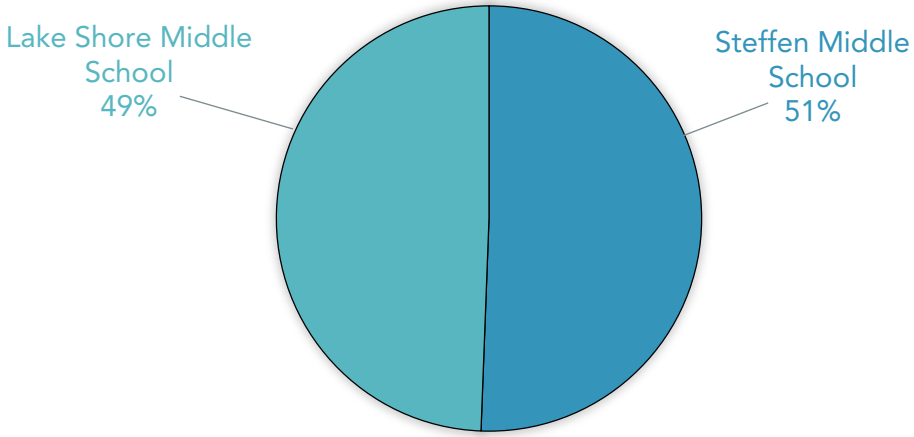
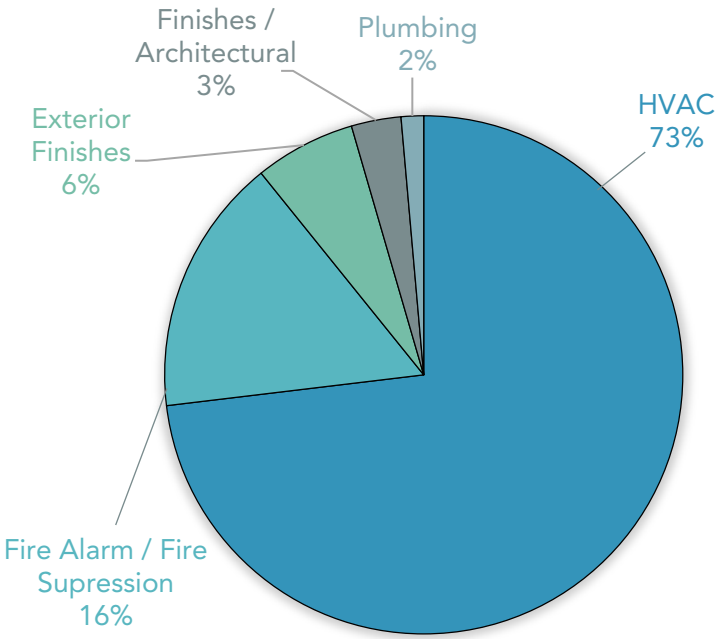
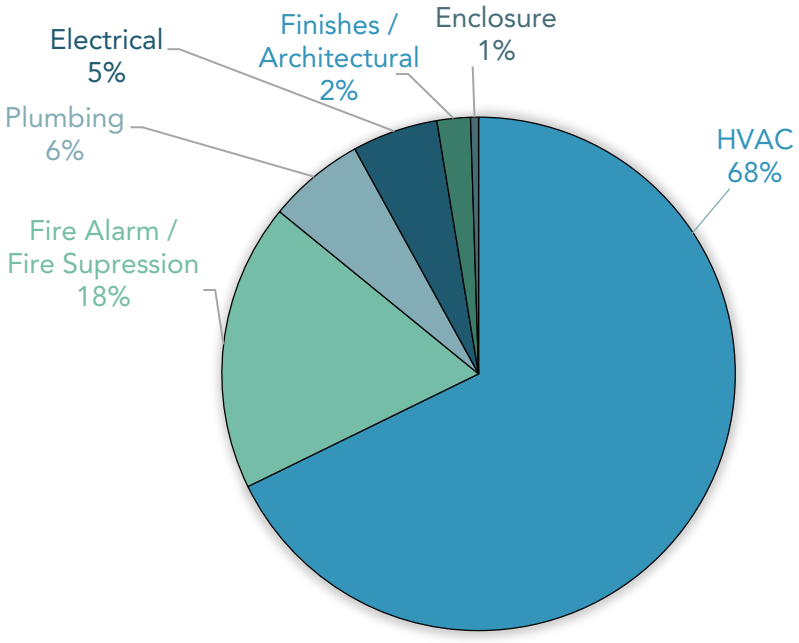
Middle Schools – Capital Maintenance Needs



Lake Shore Middle School



Steffen Middle School



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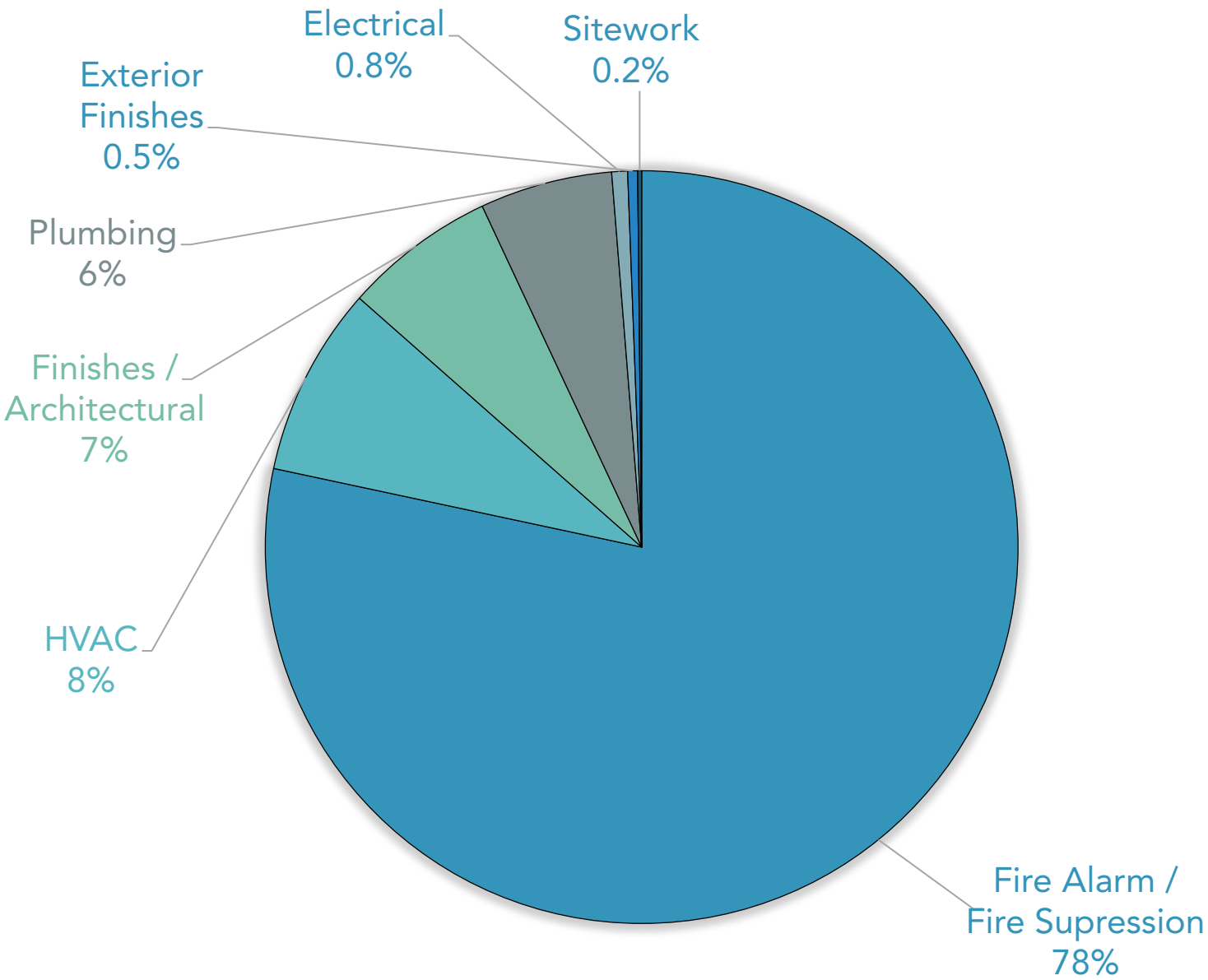
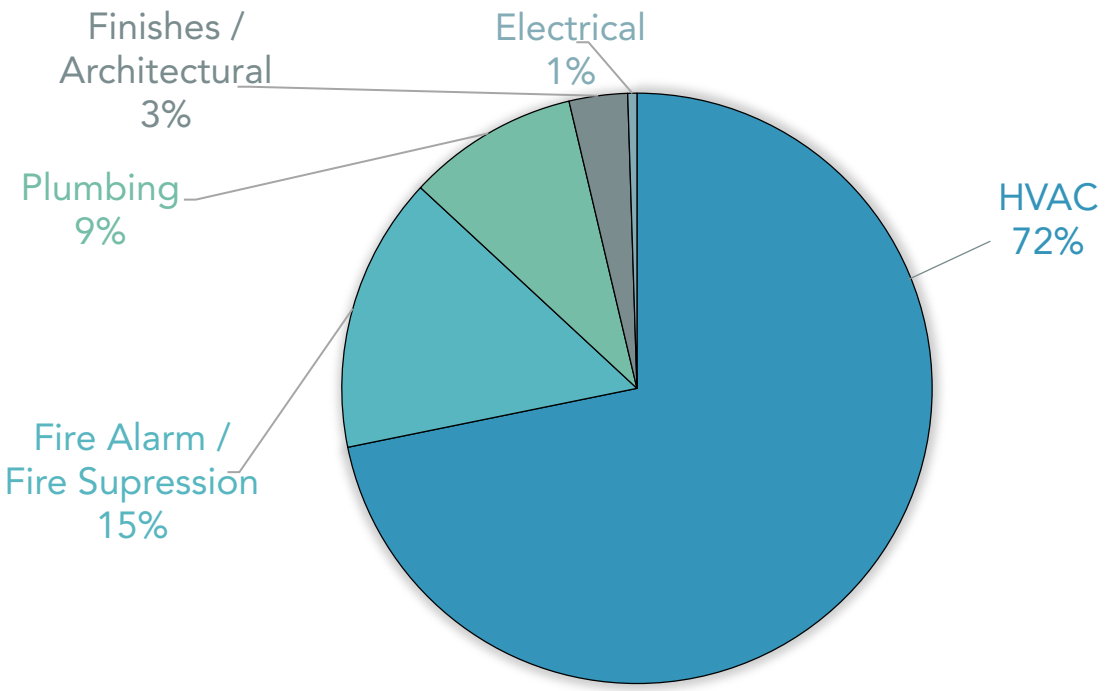
High School – Capital Maintenance Needs

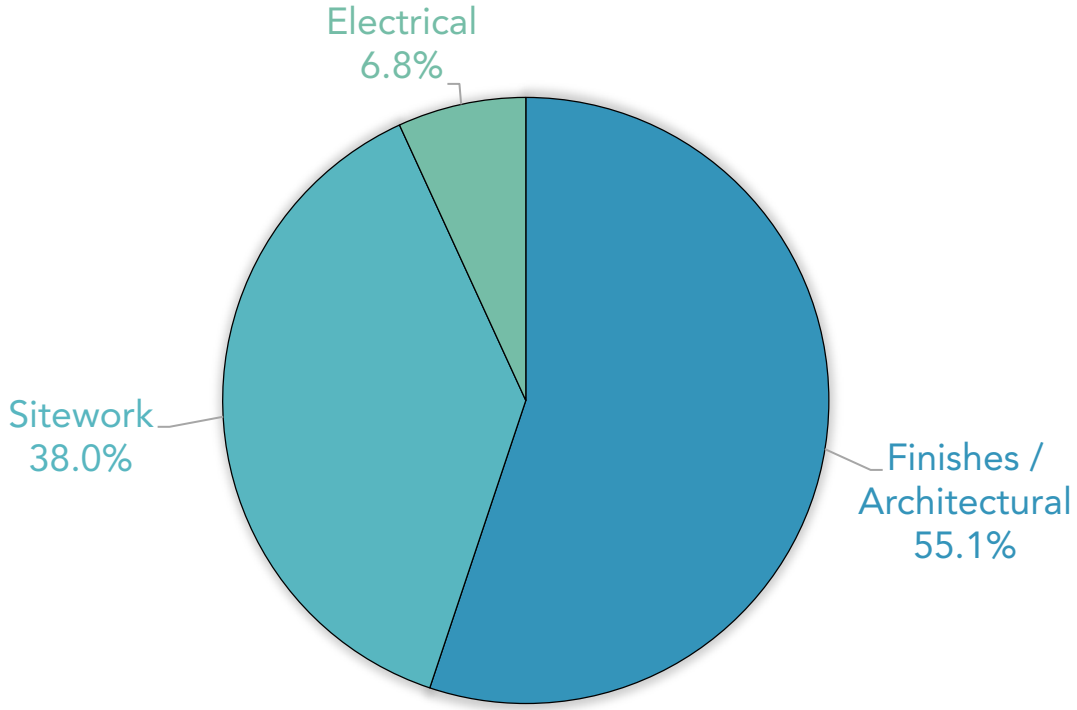


Other District Capital Maintenance Needs

Range Line Community Center



Athletics / Equipment



10 YEAR MAINTENANCE PLAN

Athletics

Athletics

- Bleacher Replacement Field House
- Curtain Replacement Main Gym
- Install Turf for Softball
- Replace Lockers at Pool
- Replace Lockers at Team Room 5
- Tennis Court Resurfacing

Community Center

Range Line

- Conference Room Air Conditioning
- Install Air Conditioning Throughout Building
- Install City Water
- Install Fire Suppression System
- New Gym Floor
- Remove Old Boiler and Piping
- Replace existing Boiler for Conference room.
- Replace Lights with LED
- Update Restrooms

District Wide Facility Upgrades

Equipment

- Upgrade Camera Servers

Elementary Schools

Donges Bay

- Fire System Upgrade
- Install Air Conditioning Throughout Building
- Install City Water
- Install Fire Suppression System
- Replace Gym AHU
- Exterior Window Replacement
- Restriping of Parking Lot at Front Entrance
- Resurface 5K Asphalt Play Area

Oriole Lane

- Fence for Playground
- Fire Detection System Upgrade
- LED Lighting Control Upgrades
- Install Air Conditioning Throughout Building

Oriole Lane Cont'd

- Install City Water
- Install Fire Suppression System
- Replace 61 classroom doors
- Replace 93 classroom windows
- Replace Asphalt road from Highland Rd to Oriole Lane
- Replace Cafeteria HVAC Units
- Replace HVAC Unit 89 section
- Replace HVAC Unit 93 section
- Replace windows 89 section

Wilson

- Install Air Conditioning Throughout Building
- Install City Water
- Install Fire Suppression System
- Replace floor base - all school
- Replace floor tiles to match - 3rd, 4th and 5th grade hallways

High School

Homestead

- LED Lighting Upgrades
- HVAC Controls Upgrade
- Exterior Painting and Repair Soffits at Pool
- Install Air Conditioning Throughout Building
- Install City Water
- Install Fire Suppression System
- New Team Room Hallway LED Upgrade
- Receiving and 2015 Hallway LED Upgrade
- Renovate 700 Bathrooms
- Repair Pool Deck and Plaster Lining
- Replace 600 Wing toilet plumbing/sinks
- Replace Team Room Benches
- Renovate 200 Bathrooms
- Renovate 300 Bathrooms
- Seal Asphalt / Paint Lines
- Upgrade to Energy Efficient LED Lights - Emergency Lights
- Upgrades to the Existing HVAC Equipment

10 YEAR MAINTENANCE PLAN

Middle Schools

Lake Shore

- Install Air Conditioning Throughout Building
- Install City Water
- Install Fire Suppression System
- Properly vent the Kitchen
- Rebuild Main Air Handling Unit
- Replace Gym Floor
- Restroom - ground level - toilets re-pipe

Steffen

- Add Hardwood Gym Floor
- Fire System Upgrade
- Install Air Conditioning Throughout Building
- Install City Water
- Install Fire Suppression System
- LED Lighting Upgrades
- LED Lights in 6th Grade wing
- LED Lights in 7th Grade wing
- LED Lights in 8th Grade wing
- LED Lights in Gym
- Replace Gym Air Handling Unit
- Replace interior doors for all rooms
- Replace lockers in Girls and Boys locker room
- Replace skylights around the building