



SCHOOL DISTRICT OF

Reedsburg

Final Deliverable

CAPACITY STUDY



January 6, 2022

EUA PROJECT: 321478-01

SCHOOL DISTRICT of REEDSBURG

CAPACITY STUDY

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 number 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)):

- ① Elementary sites should be a minimum of 10 acres plus an additional acre for each 100 students.
- ① Middle School sites should be a minimum of 20 acres plus an additional acre for each 100 students.
- ① 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

SCHOOL SITE	TOTAL EXISTING SITE AREA ^d	CURRENT ENROLLMENT (SEPT 2021)	BEST PRACTICE SITE AREA
Ironton - LaVale Elementary	8.1 acres	23 students ^e	10 acres ^a
Loganville Elementary	8.0 acres	30 students ^e	10 acres ^a
Pineview Elementary	30.0 acres	308 students ^e	13 acres ^a
Westside Elementary	9.3 acres	195 students ^e	12 acres ^a
Prairie Ridge Intermediate	75.3 acres	508 students	15 acres ^a
Webb Middle School	20.8 acres	574 students	26 acres ^b
Reedsburg Area High School	51.3 acres	890 students	39 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 2016 Facilities Master Planning Document

e. For Elementary Schools, current enrollment includes the higher total of either morning or afternoon 4K and no ECH students.

All the Reedsburg school sites are of adequate size for the students they are serving. Clearly, some of the sites are on the smaller size, but none are so drastically small that they limit current function. Some challenges may arise if a building were to require a substantial addition or if more queuing space for parents is required on-site to alleviate traffic congestion. The district should keep in mind storm water strategies may be required in the future if a building requires a substantial addition and/or increasing any hard surface pavement. These stormwater strategies, whether ponds or bioswales will require acreage that may have been previously used for student playgrounds.

SCHOOL DISTRICT of REEDSBURG

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

- ③ Health Education
- ③ Physical Education
- ③ Vocational Education

1940's

- ③ Business Education
- ③ Art & Music
- ③ Speech & Drama
- ③ Half-Day Kindergarten
- ③ Lunch provided

1950's

- ③ Expanded Science & Math
- ③ Expanded Art & Music
- ③ Foreign Language

1960's

- ③ Advanced Placement
- ③ Head Start
- ③ Title I (Reading)
- ③ Consumer & Career Education

1970's

- ③ Special Education

1980's

- ③ Computer Education
- ③ English as a Second Language
- ③ Early Childhood
- ③ Full-Day Kindergarten
- ③ At-Risk Programs
- ③ After School Programs

1990's

- ③ Expanded Computers / Internet
- ③ Inclusion of Special Education Learners
- ③ School-to-Work Programs

2000's

- ③ Standardized Testing
- ③ Personalized Learning
- ③ Common Core Standards
- ③ One-to-One Initiatives
- ③ Career Readiness
- ③ Maker Spaces
- ③ Behavior Adjustment Services
- ③ Breakfast Provisions
- ③ Title IX (gender equality including athletics)
- ③ 4-year-old Kindergarten

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 have largely become obsolete. 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 Target 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 behavior. The following guidance has been provided by the School District of Reedsburg for the capacity calculations:

DISTRICT DESIRED TARGET CLASS SIZE		
Grade Level	2022 District Desired Target Class Size	2016 District Desired Target Class Size (for reference only)
4K - K	18 students	18 students
Grades 1 - 2	20 students	18 students (SAGE)
Grades 3 - 5	23 students	18-21 students
Grades 6 - 12	25 students	25 students
Lab Instruction	20 students	20 students

As a frame of reference, the class size goals for this 2021 Capacity Study have been adjusted since the 2016 Facilities Master Plan. Naturally, the building capacities will change when the desired class sizes change, even without accounting for the number of the individual learning spaces.

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:

- ① 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.
- ② 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 vary district-to-district depending on school size, scheduling procedure, and availability of resource space. Target utilization rates, however, generally fall within the following ranges:

- ③ Elementary schools: 90 - 95% utilization
- ③ 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 Target 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:

- ③ Kindergarten Level Learning Areas (4K and 5K): 50 – 60 SF per student
- ③ Elementary Grade Level Learning Areas (1-5): 30 – 40 SF per student
- ③ 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.

- ③ Elem. School: 125 – 155 sq. ft. per student
- ③ Middle School: 170 – 200 sq. ft. per student
- ③ 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.

- ③ Elem. School: 125 – 170 sq.ft. per student
- ③ Middle School: 150 – 220 sq.ft. per student
- ③ 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.

SCHOOL DISTRICT OF REEDSBURG

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:

- ③ Space needs to support learning environments for small and large-group collaboration
- ③ Space needs to accommodate technology use, equipment and infrastructure
- ③ Space needs to support children with special needs in the least restrictive environments
- ③ Space needs to support title IX equitable athletic opportunities
- ③ Space needs to support specialists/interventionists, speech, occupational and physical therapy services and Title I programs
- ③ 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 2021 ^e	FUNCTIONAL CAPACITY ^c BY DESIRED TARGET CLASS SIZE ^b	FUNCTIONAL CAPACITY ^c BY LEARNING AREA ^a	CAPACITY BASED ON GROSS BUILDING AREA ^d
Ironton-Lavalle Elementary	23 students	90 students	111 students	149 students
Loganville Elementary	30 students	90 students	111 students	153 students
Pineview Elementary	308 students	293 students	402 students	477 students
Westside Elementary	188 students	189 students	251 students	263 students
Prairie Ridge Intermediate	508 students	476 students	511 students	682 students
Webb Middle School	574 students	612 students	755 students	590 students
Reedsburg Area High School	890 students	992 students	1259 students	964 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 target goal of students per instructional space as provided by School District of Reedsburg.

c. Functional Design Capacity is 90% of maximum capacity at elementary, and 80% at middle school and 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, and does not include ECH

Ironton – LaValle Elementary School

Building Capacity Summary

Ironton - LaValle Elementary serves grades first through second grade for the School District of Reedsburg. The school is configured as a one-section elementary. As of September 2021, enrollment as documented was **23 students**. For the purposes of this study, capacity was calculated in three different ways.

- ③ Functional Capacity based on District Desired Class Size is the method that **most realistically captures capacity** for the building in its existing configuration. This calculation yields a functional capacity of **90 students**, which would mean that the building is well under capacity and could theoretically support an additional 67 students over current enrollment. In order to realize this full capacity, one room currently utilized as a workroom would have to be returned to a core classroom. This calculation, however, does not consider the size of the individual classrooms, or the need for support space outside of the classroom.
- ③ Functional Capacity based on Learning Area yields a larger capacity of **111 students**. Based on learning area, the building is also under capacity by 88 students. The disparity between this capacity total versus the capacity by district desired class size is indicative of classrooms that may be slightly oversized 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.
- ③ Capacity based on Gross Building Area suggests a capacity of **149 students**. This means that the overall size of the building is close to what would be expected based on calculated capacity. 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, due to the age of the building and the educational design philosophy of the time, 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, Ironton-LaValle is vastly under capacity, and there is room for growth in this facility. Special Education could be provided in one of the available office spaces or in a core classroom if the need and availability was warranted. The Main Office space is in a core classroom and has space available to also serve as the staff workroom. The Diagrams on the following pages illustrate the current building utilization, and the calculations used to generate the building capacities.

Ironton – LaValle Elementary Capacity Calculation

Revised 11.19.2021



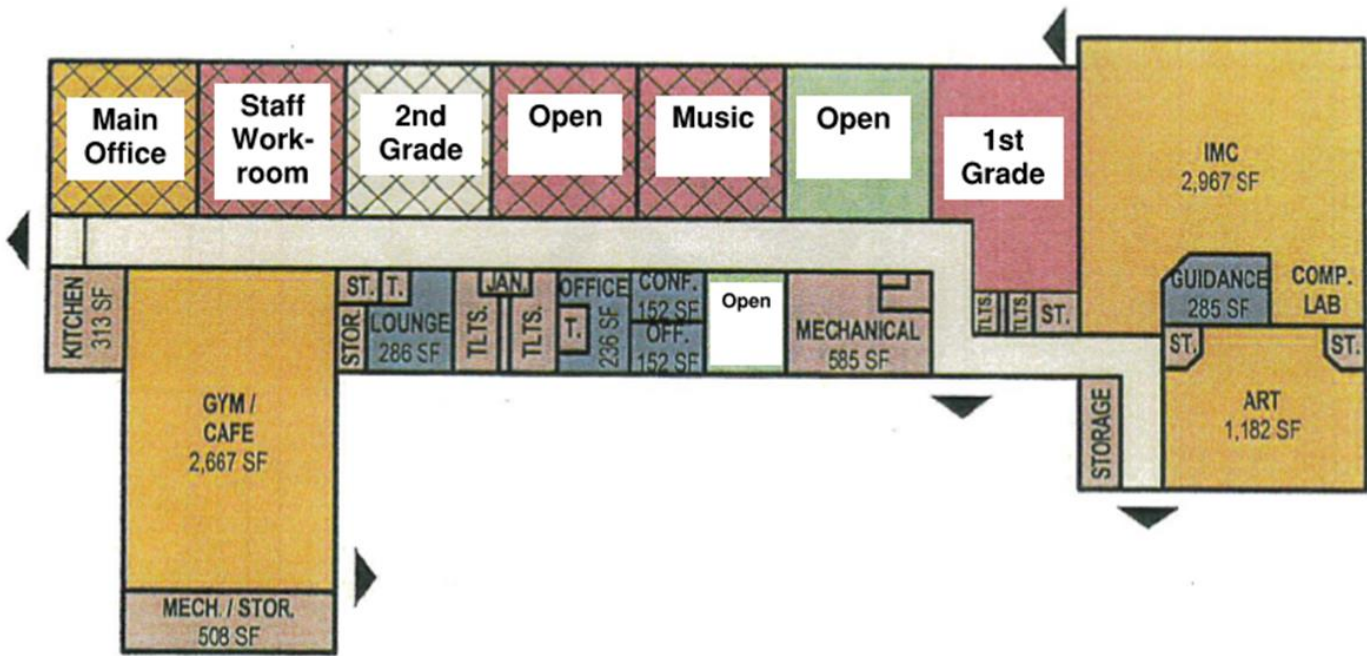
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Ironton-LaValle Elementary

Room Number	Room Name	Room Area (SF)	Capacity by Desired Class Size	Capacity by Learning Area	Capacity by Gross Building Area of 20,288 sf	Notes
	Main Office	889				
	Workroom	889	20	25		Could be combined with main office
	2nd Grade	889	20	25		
	Open Classroom	889	20	25		Could be a core classroom
	Music	889				Could move to IMC with remodeling
	Open Classroom	889	20	25		Could be a core classroom
	1st Grade	1193	20	22		
	IMC / Comp Lab	2967				Large for the school capacity
	Guidance	285				
	Art	1182				
	Open Speech/Lang/SE	324				
	Gym / Cafeteria	2667				Cafeteria 2667/20 = 133 seating
	Max Capacity		100	123	149	
	Functional Capacity (90%)		90	111		
	Sept 2021 Enrollment	23				



Ironton – LaValle Elementary Room Designation



Ironton - LaValle Elementary School



Floor plan image above is adapted from the 2016 Facilities Master Planning report

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Loganville Elementary School

Building Capacity Summary

Loganville Elementary serves grades first through third grade for the School District of Reedsburg. The school is configured as a one-section elementary. As of September 2021, enrollment as documented was **30 students**. For the purposes of this study, capacity was calculated in three different ways.

- ① Functional Capacity based on District Desired Class Size is the method that **most realistically captures capacity** for the building in its existing configuration. This calculation yields a functional capacity of **90 students**, which would mean that the building is well under capacity and could theoretically support an additional 60 students over current enrollment. In order to realize this full capacity, one room currently utilized as a workroom would have to be returned to a core classroom. This calculation, however, does not consider the size of the individual classrooms, or the need for support space outside of the classroom.
- ② Functional Capacity based on Learning Area yields a larger capacity of **111 students**. Based on learning area, the building is also under capacity by 88 students. The disparity between this capacity total versus the capacity by district desired class size is indicative of classrooms that may be slightly oversized 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.
- ③ Capacity based on Gross Building Area suggests a capacity of **153 students**. This means that the overall size of the building is close to what would be expected based on calculated capacity. 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, due to the age of the building and the educational design philosophy of the time, 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, Loganville is vastly under capacity, and there is room for growth in this facility. Special Education could be provided in one of the available office spaces or in a core classroom if the need and availability was warranted. The Main Office space is in a core classroom and has space available to also serve as the staff workroom. The Cafeteria is in a core classroom and could be shared with the gymnasium based on the size of the student population. The Diagrams on the following pages illustrate the current building utilization, and the calculations used to generate the building capacities.

Loganville Elementary Capacity Calculation

Revised 11.19.2021

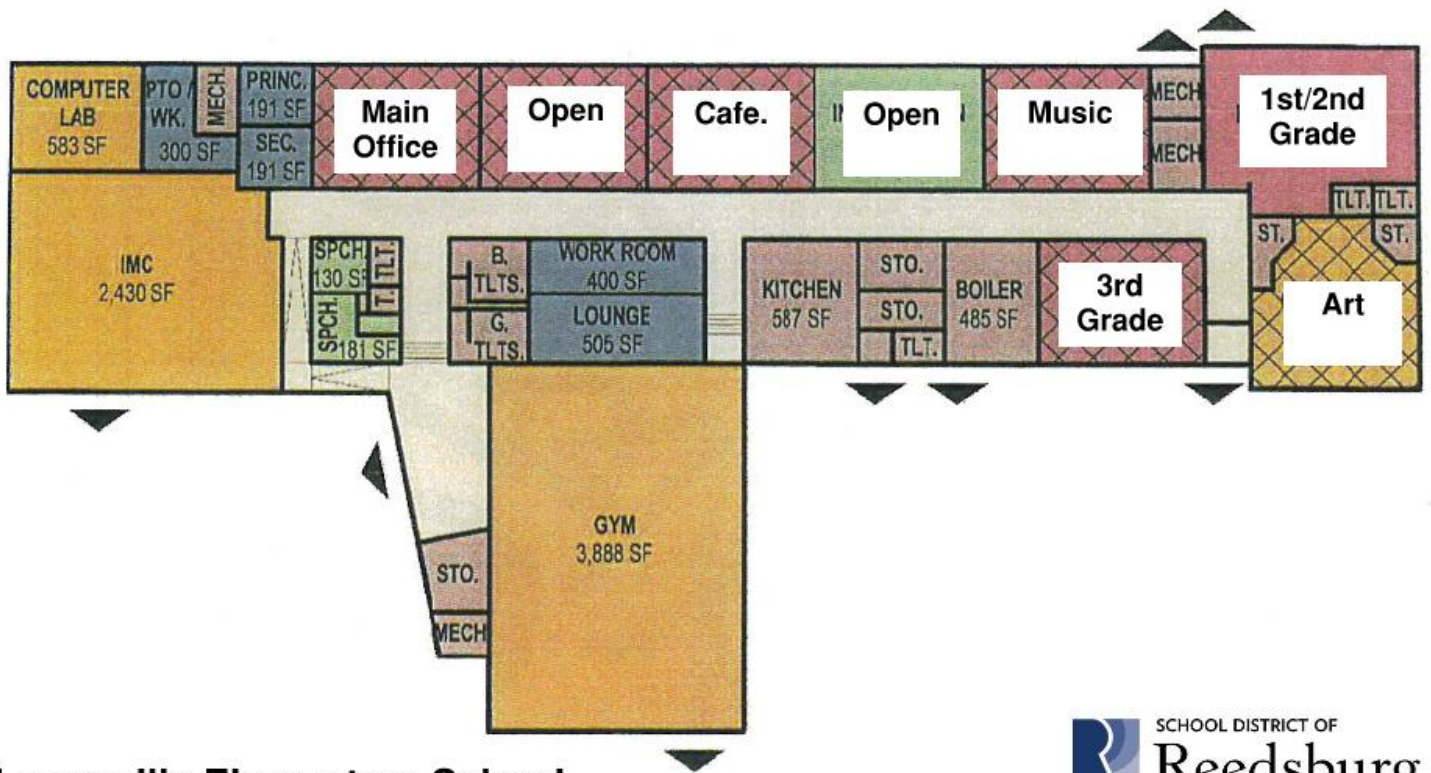


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Loganville Elementary

Room Number	Room Name	Room Area (SF)	Capacity by Desired Class Size	Capacity by Learning Area	Capacity by Gross Building Area of 22,904 sf	Notes
	Computer Lab	583				
	Main Office	867				could include workroom
	Open Classroom	867	20	25		
	Cafeteria	867	20	25		Could be a core classroom
	Open Classroom	867	20	25		
	Music	867				Could move to IMC with remodeling
	1st/2nd grade	1340	20	24		
	Art	1031				
	3rd Grade	854	20	24		
	Work Room	400				Could be a Special Ed room
	Staff Lounge	505				
	Gym (could also be Cafeteria)	3888				Cafeteria 3888/20 = 194 students
	IMC	2430				
	Speech	130				
	Speech	181				
	Max Capacity		100	123	153	
	Functional Capacity (90%)		90	111		
	Sept 2021 Enrollment	30				

Loganville Elementary Room Designation



Loganville Elementary School



Floor plan image above is adapted from the 2016 Facilities Master Planning report

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Pineview Elementary School

Building Capacity Summary

Pineview Elementary serves grades 4K through second grade for the School District of Reedsburg. The school is configured as a five-section elementary. As of September 2021, enrollment as documented was **308 students** if you account for the largest of the AM/PM 4K and not include the early childhood students. For the purposes of this study, capacity was calculated in three different ways.

- ③ Functional Capacity based on District Desired Class Size is the method that **most realistically captures capacity** for the building in its existing configuration. This calculation yields a functional capacity of **293 students**, which would mean that the building is slightly over capacity by 15 students. This calculation, however, does not consider the size of the individual classrooms, or the need for support space outside of the classroom.
- ③ Functional Capacity based on Learning Area yields a larger capacity of **402 students**. Based on learning area, the building is under capacity by 94 students. The disparity between this capacity total verses the capacity by district desired class size is indicative of classrooms that may be slightly oversized 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.
- ③ Capacity based on Gross Building Area suggests a capacity of **477 students**. This means that the overall size of the building is larger than what would be expected based on calculated capacity. The resulting capacity calculation implies there are spaces in this building that are larger than typical for the student population and there are dedicated spaces that do not contribute to the building capacity. It is important to note, however, due to the age of the building and the educational design philosophy of the time, 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, the story around Pineview is complex. The capacity numbers imply individual classrooms are large for the number of students being served, and the building has a number of large spaces dedicated to students who don't contribute to capacity. Specifically, Special Education is being delivered in large core classrooms which is not typical for many school districts. The capacity of the school could be increased if several of the current Special Education spaces were reconfigured to be more efficient and/or if the delivery of Special Education was reimagined to be more immersed into the core classrooms. The Diagrams on the following pages illustrate the current building utilization, and the calculations used to generate the building capacities.

Pineview Elementary Capacity Calculation

Revised 11.19.2021



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Pineview Elementary

Room Number	Room Name	Room Area (SF)	Capacity by Desired Class Size	Capacity by Learning Area	Capacity by Gross Building Area of 71,486 sf	Notes
100	Special Ed	875				Could be a core classroom
101	2nd Grade	914	20	26		
102	2nd Grade	1066	20	30		
103	Speech	490				
104	Intervention	933				Could be a core classroom
105	2nd Grade	933	20	27		
106	1st Grade	1066	20	30		
107	Pupil Services	490				
108	1st Grade	913	20	26		
109	Intervention	959				Could be a core classroom
110	Instructional Coach Office	691				
112	1st Grade	995	20	28		
113	1st Grade	960	20	27		
114	1st Grade	977	20	28		
115	2nd Grade	977	20	28		
116	2nd Grade	977	20	28		
117	Special Ed	912				Could be a core classroom
118	Guidance	283				
119	Sensory					
120	Speech	283				
121	Special Ed	912				Could be a core classroom
122	Special Ed	977				Could be a core classroom
123	After School Office	891				Could be a core classroom
124	Kindergarten	1269	18	23		
125	Kindergarten	1371	18	25		
126	Kindergarten	1274	18	23		
127	Nurse	655				
128	OT/PT					
129	4K PM	1500	18	27		
130	4K AM/PM	1100	18	20		
131	ECH					
132	OT/PT					
134	Kindergarten	1471	18	27		
135	Kindergarten	1198	18	22		
136	Art	932				
137	Music	932				
	Gym	5530				
	Cafeteria	2666				Cafeteria 2666/20 = 133 students
	Max Capacity		326	446	477	
	Functional Capacity (90%)		293	402		
	Sept 2021 Enrollment	308*				

* Total September 2021 Enrollment of 340 has been adjusted to to reflect PM (larger) 4K enrollment and no ECH students



Pineview Elementary Room Designation



Pineview Elementary School



Floor plan image above is adapted from the 2016 Facilities Master Planning report

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Westside Elementary School

Building Capacity Summary

Westside Elementary serves grades 4K through second grade for the School District of Reedsburg. The school is configured as a three-section elementary. As of September 2021, enrollment as documented was **188 students** if you account for the largest of the AM/PM 4K and not include the early childhood students. For the purposes of this study, capacity was calculated in three different ways.

- ③ Functional Capacity based on District Desired Class Size is the method that **most realistically captures capacity** for the building in its existing configuration. This calculation yields a functional capacity of **189 students**, which would mean that the building is slightly over capacity by 1 student. This calculation, however, does not consider the size of the individual classrooms, or the need for support space outside of the classroom.
- ③ Functional Capacity based on Learning Area yields a larger capacity of **251 students**. Based on learning area, the building is under capacity by 63 students. The disparity between this capacity total verses the capacity by district desired class size is indicative of classrooms that may be slightly oversized 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.
- ③ Capacity based on Gross Building Area suggests a capacity of **263 students**. This means that the overall size of the building is larger than what would be expected based on calculated capacity. The resulting capacity calculation implies there are spaces in this building that are larger than typical for the student population and there are dedicated spaces that do not contribute to the building capacity. It is important to note, however, due to the age of the building and the educational design philosophy of the time, 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, the story around Westside is complex. The capacity numbers imply individual classrooms are large for the number of students being served, and the building has a number of large spaces dedicated to students who don't contribute to capacity. Specifically, Special Education is being delivered in large core classrooms which is not typical for many school districts. The capacity of the school could be increased if several of the current Special Education spaces were reconfigured to be more efficient and/or if the delivery of Special Education was reimagined to be more immersed into the core classrooms. The Diagrams on the following pages illustrate the current building utilization, and the calculations used to generate the building capacities.

Westside Elementary Capacity Calculation



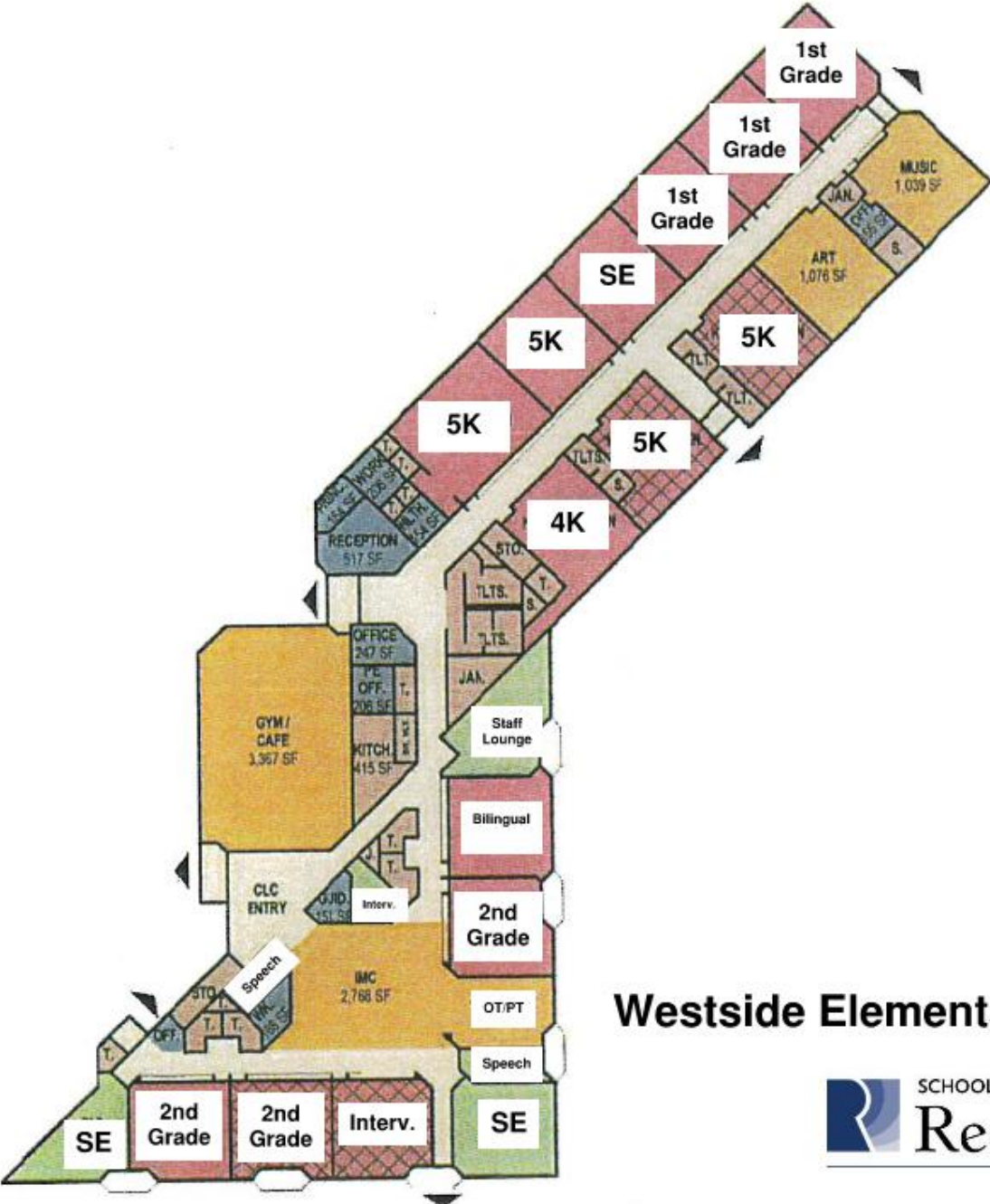
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Westside Elementary

Room Number	Room Name	Room Area (SF)	Capacity by Desired Class Size	Capacity by Learning Area	Capacity by Gross Building Area of 39,412 sf	Notes
209	Special Ed	758				
208	2nd Grade	974	20	28		
207	2nd Grade	949	20	27		
206	Intervention	956				
205	Special Ed	963				Could be a core classroom
	Speech	283				
	IMC	2768				
	OT/PT					
203	2nd Grade	976	20	28		
202	Bilingual	1048				
	Gym / Cafeteria	3367				Cafeteria 3367/20 = 168
201	Staff Lounge	909				
111	4K AM/PM	1224	18	22		
110	Kindergarten	1190	18	22		
109	Kindergarten	1075	18	20		
108	Art	1076				
107	Music	1039				
106	1st Grade	1041	20	30		
105	1st Grade	1015	20	29		
104	1st Grade	1015	20	29		
103	Special Ed	1015				Could be a core classroom
102	Kindergarten	1015	18	18		
101	Kindergarten	1480	18	27		
	Max Capacity		210	279	263	
	Functional Capacity (90%)		189	251		
	Sept 2021 Enrollment	188*				

* Total September 2021 Enrollment of 197 has been adjusted to to reflect AM (larger) 4K enrollment and no ECH students

Westside Elementary Room Designation



Westside Elementary School



Floor plan image above is adapted from the 2016 Facilities Master Planning report

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Prairie Ridge Intermediate School

Building Capacity Summary

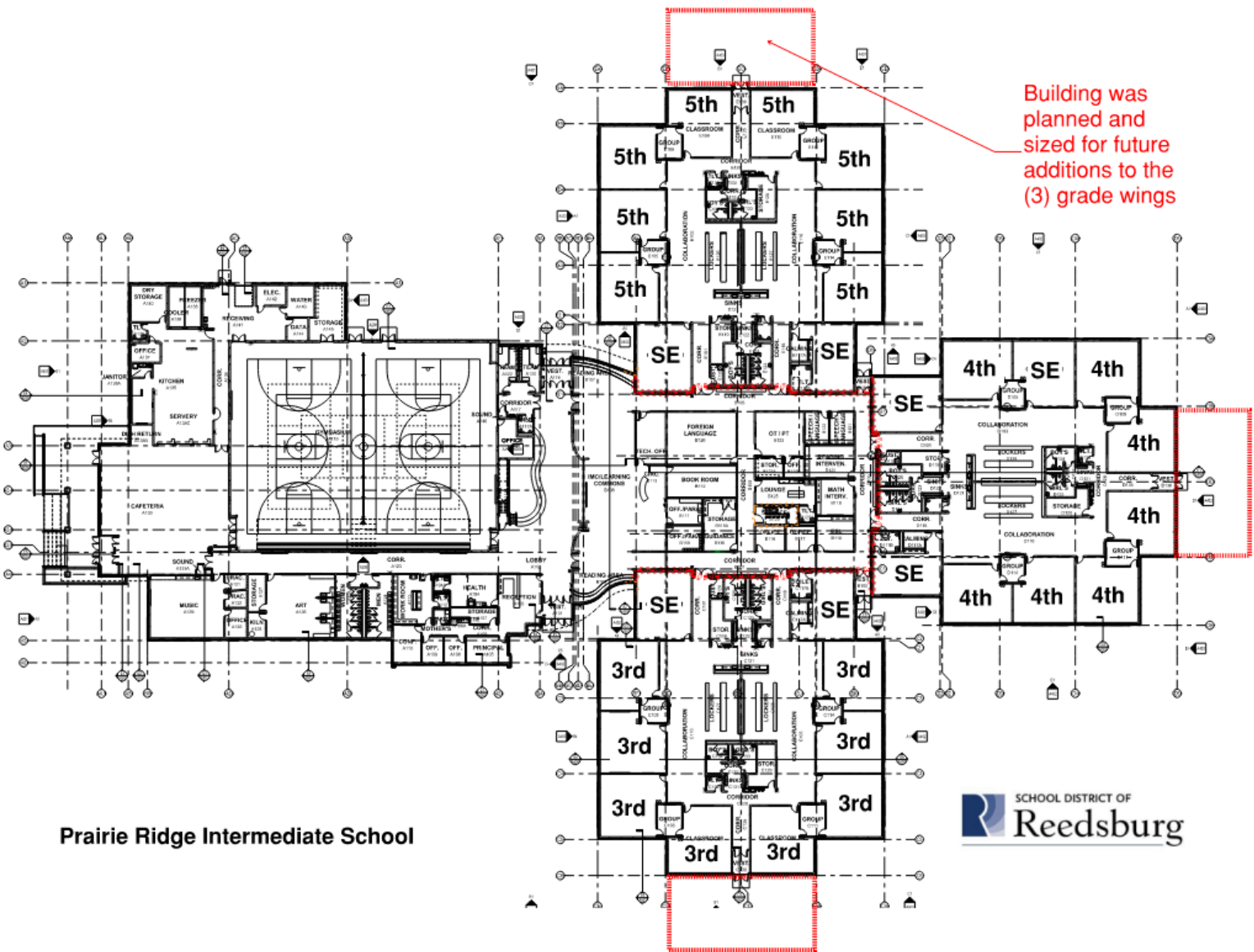
Prairie Ridge Intermediate serves grades third through fifth grade for the School District of Reedsburg. The school is configured as an eight-section elementary. As of September 2021, enrollment as documented was **508 students**. For the purposes of this study, capacity was calculated in three different ways.

- ① Functional Capacity based on District Desired Class Size is the method that **most realistically captures capacity** for the building in its existing configuration. This calculation yields a functional capacity of **476 students**, which would mean that the building is over capacity by 32 students. The building was designed as a nine-section school, but at least one core classroom in each wing is being used as an additional Special Education space. This calculation, however, does not consider the size of the individual classrooms, or the need for support space outside of the classroom.
- ② Functional Capacity based on Learning Area yields a larger capacity of **511 students**. Based on learning area, the building is under capacity by 2 students. This calculation means the learning spaces are appropriately sized for the district's maximum class size goals. However, this calculation still does not account for the amount of support space outside of the classroom.
- ③ Capacity based on Gross Building Area suggests a capacity of **682 students**. This means that the overall size of the building is larger than what would be expected based on calculated capacity. The resulting capacity calculation implies there are spaces in this building that are larger than typical for the student population and there are dedicated spaces that do not contribute to the building capacity.

CONCLUSION

Based on all three calculations, the story around Prairie Ridge is transparent. The capacity numbers imply individual classrooms are appropriately sized for the number of students being served, and the building has several large spaces dedicated to students who don't contribute to capacity. Specifically, Special Education is being delivered in large core classrooms which is not typical for many school districts. The capacity of the school could be increased if several of the current Special Education spaces were reconfigured to be more efficient and/or if the delivery of Special Education was reimagined to be more immersed into the core classrooms. The building footprint and site does allow for an addition to each grade wing if one would be warranted with future needs. The Diagrams on the following pages illustrate the current building utilization, and the calculations used to generate the building capacities.

Prairie Ridge Intermediate Room Designation



Floor plan image above is adapted from the 2016 Facilities Master Planning report

Webb Middle School

Building Capacity Summary

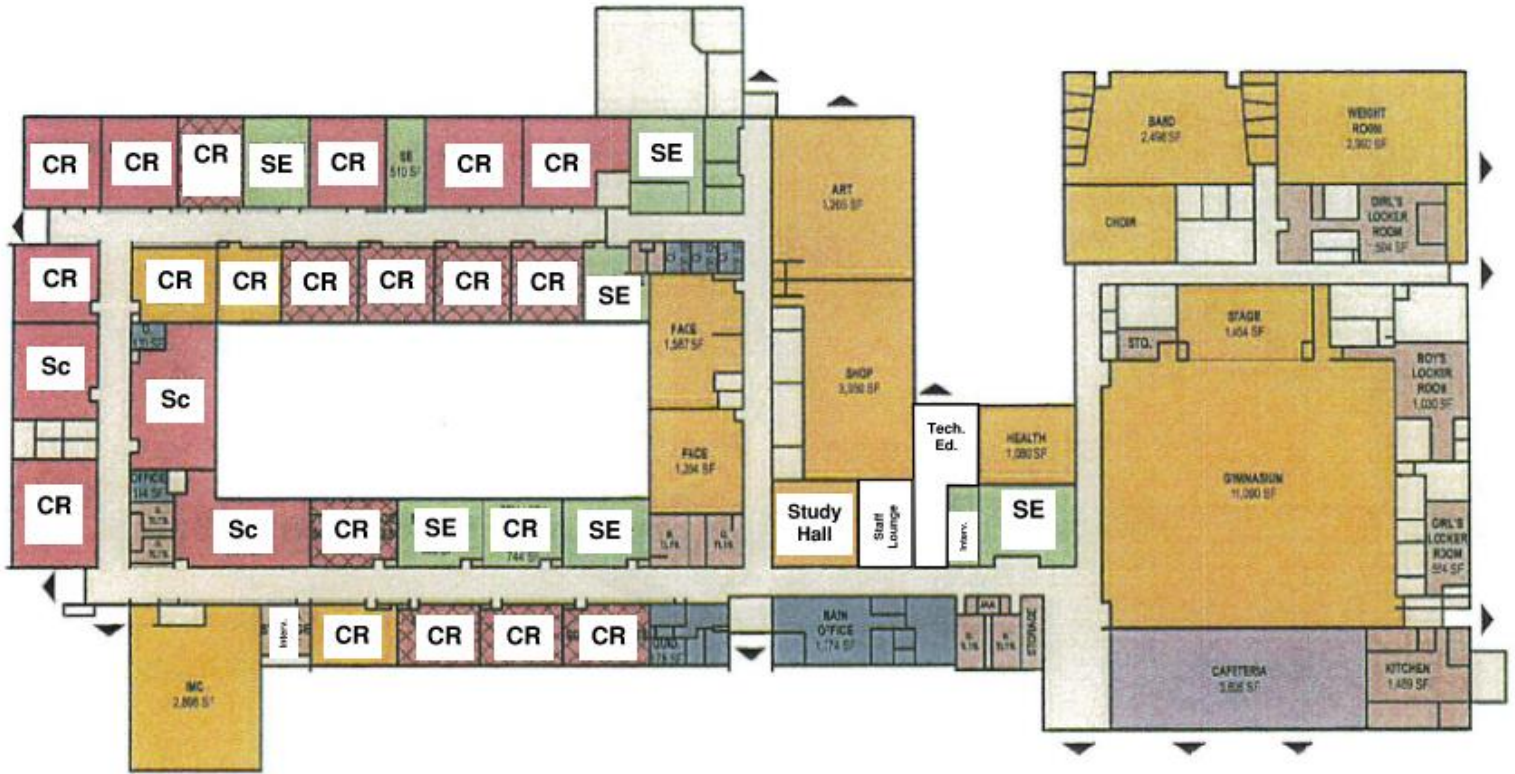
Webb Middle School serves grades sixth through eighth grade for the School District of Reedsburg. Based on conversations with the Principal, the educational spaces are 80% efficient in relation to usage. As of September 2021, enrollment as documented was **574 students**. For the purposes of this study, capacity was calculated in three different ways.

- ① Functional Capacity based on District Desired Class Size is the method that **most realistically captures capacity** for the building in its existing configuration. This calculation yields a functional capacity of **612 students**, which would mean that the building is under capacity by 38 students. This calculation, however, does not consider the size of the individual classrooms, or the need for support space outside of the classroom.
- ① Functional Capacity based on Learning Area yields a larger capacity of **755 students**. Based on learning area, the building is under capacity by 181 students. The disparity between this capacity total verses the capacity by district desired class size is indicative of classrooms that may be oversized in comparison to the district's maximum class size goals. However, this calculation still does not account for the amount of support space outside of the classroom.
- ① Capacity based on Gross Building Area suggests a capacity of **590 students**. This means that the overall area of the building is appropriately sized for the current student enrollment. Seeing as this building was originally designed as the High School and was later converted to be the Middle School, it's not surprising to see the close correlation with this capacity calculation.

CONCLUSION

Based on all three calculations, capacity does not tell the entire story of Webb. The capacity numbers imply individual classrooms are larger than necessary for the number of students being served in each space. Specifically, the Art and Tech Ed spaces are “vast” for the curriculum in each space. The real story about Webb has more to do with the future vision of the School District. Appropriately, the district has a newer High School that serves the entire district and a new Intermediate school that serves the entire district. Sandwiched in between, is the dated Middle School which was never designed to serve that age of students and it is located on a site which tends to flood. The district should consider giving this grade level some attention in the future. The Diagrams on the following pages illustrate the current building utilization, and the calculations used to generate the building capacities.

Webb Middle School Room Designation



Webb Middle School



Floor plan image above is adapted from the 2016 Facilities Master Planning report

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Reedsburg Area High School

Building Capacity Summary

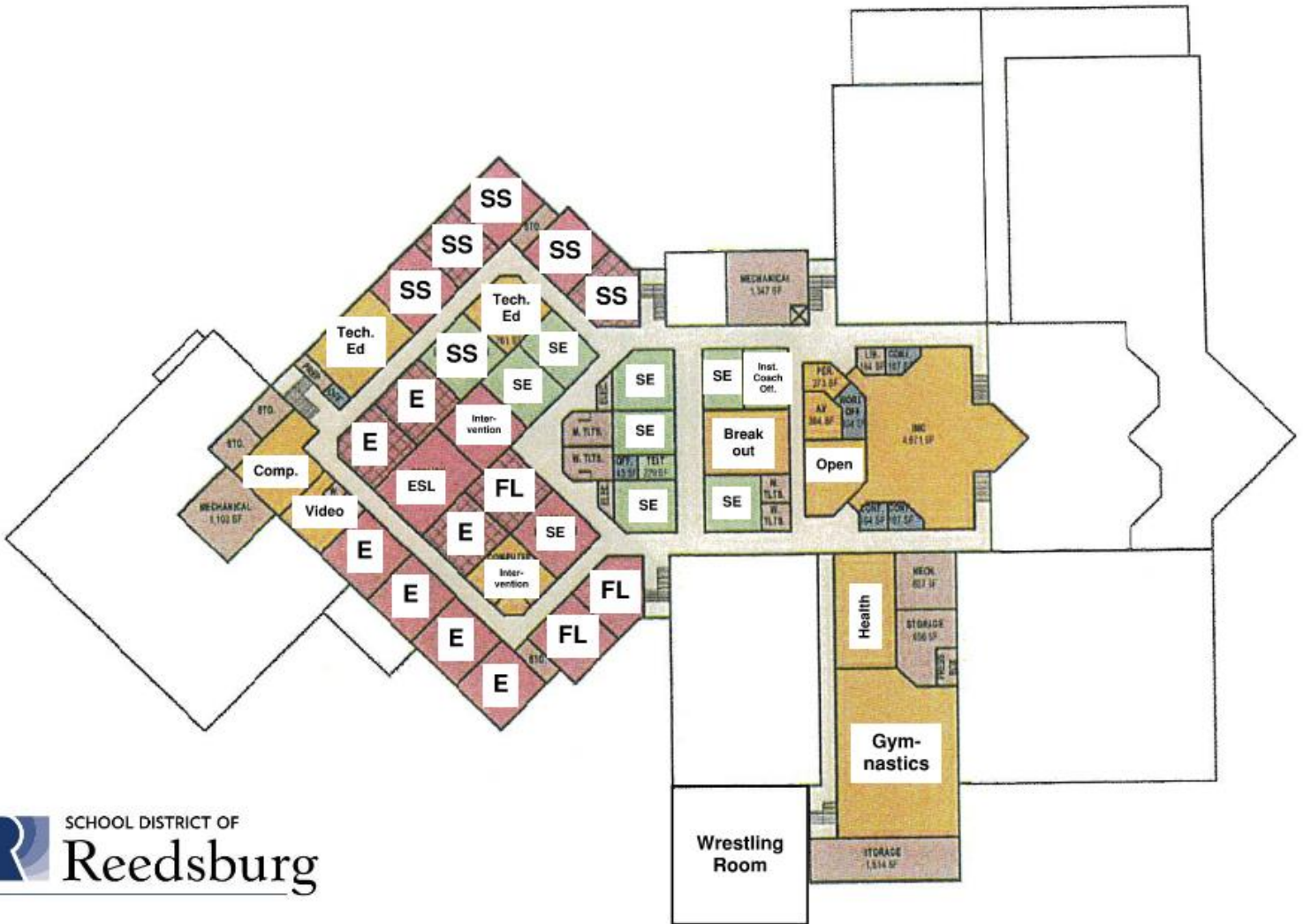
Reedsburg Area High School serves grades ninth through twelfth grade for the School District of Reedsburg. Based on conversations with the Principal, the educational spaces are 80% efficient in relation to usage. As of September 2021, enrollment as documented was **890 students**. For the purposes of this study, capacity was calculated in three different ways.

- ① Functional Capacity based on District Desired Class Size is the method that **most realistically captures capacity** for the building in its existing configuration. This calculation yields a functional capacity of **992 students**, which would mean that the building is under capacity by 102 students. This calculation, however, does not consider the size of the individual classrooms, or the need for support space outside of the classroom.
- ② Functional Capacity based on Learning Area yields a larger capacity of **1259 students**. Based on learning area, the building is under capacity by 369 students. The disparity between this capacity total verses the capacity by district desired class size is indicative of classrooms that may be oversized in comparison to the district's maximum class size goals. However, this calculation still does not account for the amount of support space outside of the classroom.
- ③ Capacity based on Gross Building Area suggests a capacity of **964 students**. This means that the overall area of the building is appropriately sized for the current student enrollment. The total area of the school includes the theater and the new fitness center which was recently added.

CONCLUSION

Based on all three calculations, the building appears to be comfortably under capacity. Many of the educational spaces are large for the number of students being served. Similar to the story in the other schools, Special Education occupies several rooms which could be core classrooms if the need arises. Several rooms in the building do not have a dedicated full-time instructor, which reduces the utilization of the room and does not allow it to contribute to capacity. If there is a need to serve more students in the future, hiring more full-time staff would allow the building to be more utilized and that would add capacity without making any physical changes to the building. There are also opportunities to reimagine the way some rooms are being used. A slight change in curriculum delivery could make some Tech Ed spaces more useful for a greater range of students interested in Agricultural Sciences and Pre-Engineering careers.

Reedsburg Area High School Room Designation



Second Floor Plan



Reedsburg Area High School

Floor plan image above is adapted from the 2016 Facilities Master Planning report

Capacity Observations & Next Step

Based on the results of the capacity study and the on-site conversations, EUA provides the school district with the following observations:

- ③ Ironton – LaValle Elementary and Loganville Elementary are clearly underutilized. Similar to many school districts, Reedsburg is at a crossroad in determining how to address existing rural schools. The district needs to determine where your future students are coming from and where they will be served. Eventually, maintaining two underutilized buildings will catch up to the district’s long-term finances. Adding to an existing school or schools may be needed if these facilities are taken offline.
- ③ Special Education (SE) delivery should be studied. Based on the observation of EUA, Special Education in Reedsburg appears to be more “pull-out” than “immersion” in relation to the core classrooms, which lowers the potential capacity of your schools. As noted on the capacity worksheets, many SE spaces could be core classrooms. The SE curriculum delivery study should be district wide and at all levels. If there is no significant change in this curriculum delivery, an addition at Pineview, Westside, and Prairie Ridge may need to be considered if enrollment continues to increase.
- ③ The district has opportunities to reimagine several educational environments to deliver curriculum that could spark the interest in students.
 - Project Lead the Way at the Middle School and High School levels
 - More intensive Agriculture curriculum at the High School which could include live animal care, crop science, and aquaponics.
 - Consider opportunities at all levels for break-out instruction similar to what exists at Prairie Ridge Intermediate. It’s fortunate that all students will go through that facility, but it is unfortunate they will not have the chance to experience more independent learning and small group instruction at the middle school and high school level.

Next Step

Capacity Studies and Enrollment Projections serve as the base data needed to complete a long-term master plan. This long-term master plan serves as a “road map” and allows the school board to make wise and fiscally responsible decisions for school district’s future. EUA can provide examples of a long-term master plan deliverable and how it has been used by other districts.

Thank you for the opportunity to serve the School District of Reedsburg,



Eric Dufek RA
Senior Design Architect
EUA

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