

SITE CAPACITY

The Site is generally referred to the size of the land associated to an educational facility and the improvements made on that land which include buildings, parking lots, athletic fields, etc. The size of the total 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.

Typical school site area recommendations:

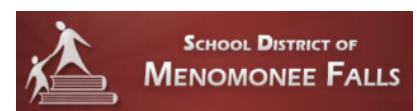
- *Elementary School* sites should be a minimum of 10 acres plus an additional acre for each 100 students.
- *Middle School* sites should be a minimum of 20 acres plus an additional acre for each 100 students.
- *High School* sites should be a minimum of 30 acres plus an additional acre for each 100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

In order to quantify adequacies, inadequacies and inequities at the various schools relative to current practice and future trends, the area information presented has been averaged in the following table. The recommended site size is based on the current enrollment factored into the standard site recommendations previously listed. The resulting data for each building can then be used as an indicator to how the schools and sites compare with National recommendations.

It should also be noted the recommended 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

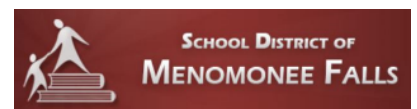
School	Existing site size ^a	Current Enrollment	Recommended site size based on current student population ^b	Existing building size
Ben Franklin Elementary 1963, 1966, 1975, 2010	14 acres	716	17.16 acres	140,264 sq. ft.
Riverside Elementary 1959, 1962	9 acres	374	13.74 acres	Rs 46,383 sq. ft. CC 29,284 sq. ft.
Shady Lane Elementary 1960, 1962, 1995	7.6 acres	408	14.08 acres	67,000 sq. ft.
Valley View Elementary 1966, 1997	11.6 acres	364	13.64 acres	49,800 sq. ft.
Thomas Jefferson 1961	14.5 acres	-	17.57 ^c acres	119,784 sq. ft.
North Middle School 1949, 1950, 1959, 1962, 1965	12.8 acres	882	28.82 acres	258,000 sq. ft.
Menomonee Falls High School 1969, 1985, 2007	39.6 acres	1457	44.57 acres	335,000 sq. ft.



Total	109.1 Acres	4201	149.58 acres	1,016,931 sq. ft.
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Sites	Existing site size ^a	Current Enrollment	Recommended site size based on current student population ^b	Existing building size
Maintenance Building (Sunnyside Property)	1.13 acres	-	-	5,600 sq. ft.
Hiawatha 1957, 1961	3.2 acres	-	-	33,180 sq. ft.
Claas Property	24 acres	-	-	-
Mill Road Property	80 acres	-	-	-
Total	108.33 Acres	-	-	33,180 sq. ft.

- a. Site area based on GIS mapping data and includes building, parking and outdoor activity areas.
- b. Recommended site size is buildable property. This does not include wetlands or areas not suitable for construction.
- c. The recommended site size was based on potential building capacity found in the "Analysis of Building Capacities" section of this report.



BUILDING CAPACITY

There are several ways to evaluate a school's maximum capacity.

1. Functional Design Capacity: Determine the maximum population for instructional spaces based on Best Practice square feet per student.
2. Gross Building Square Footage: Take the existing building overall square footage and divide it by the recommended square footage per student based on Best Practice.
3. Follow Board of Education policy (if available).

As enrollment fluctuations affect school districts nationwide, the physical capability of each building will determine whether or not enrollment should increase beyond its present level, or if it will be necessary to move students to other buildings more capable of accommodating 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 the changing needs.

HISTORICAL PERSPECTIVE ON SCHOOL CAPACITY

It is worthwhile to briefly cover why buildings are not 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 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.

1900-1910

- Health Instruction added

1910-1930

- Physical Education
- Vocational Education (Home Economics & Agriculture)

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
- Title IX (equality for girl's athletics)
- Behavior Adjustment
- Breakfast provided

1980's

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

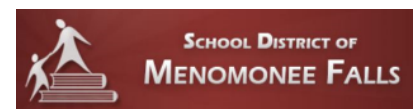
1990's

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

Early 2000's

- Standardized Testing

Many of the spaces that were once used as standard classrooms are now transformed into multiple educational environments that have to act as offices, teaching space for 4-6 students, and reference libraries for several different 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 in many national schools. Now, many elementary schools assign a single lab to each grade, and the future may reverse these spaces back into classrooms as 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

1. FUNCTIONAL DESIGN CAPACITY

Historically, building capacity has been determined by counting the number of classrooms and multiplying by the average number of students. This method of capacity calculation is sometimes called the “Design Capacity.”

A more accurate Design Capacity, however, can be derived from evaluating the best practice square footage allowances per student in each individual room. Based on the best data currently available, we recommend 50 SF (square feet) per student at the kindergarten level, 35 SF per student for grades 1-5, and 30 SF per student at the middle and high school levels. This allows a standard elementary classroom (1250 SF kindergarten, 900 SF grades 1-5) to support a class of 25 students. At the middle school and high school levels, a standard 900 SF classroom can support up to 30 students. To calculate the total capacity of a building, then:

Each academic space (core subjects) has a calculated square footage. This square footage is then divided by the recommended SF/student. Other academic spaces throughout the building have their own “Best Practice” square footage allowances per student. The total population is then calculated by adding the student population of each academic space.

At the elementary level, only standard classrooms are included in the capacity analysis because students remain in their assigned classroom most of the day. At the Middle and High School, all instructional spaces are used in the calculation because students are rarely in the same room for more than one period.

Several areas are not included in this calculation:

- Special Education rooms are not included because it is unlikely that other students would fill their classroom seats while they are getting the additional instruction elsewhere in the building.
- Computer labs are also not factored into this calculation because the intent of these spaces is to serve as resource areas for classes that would otherwise be located somewhere else in the school.
- Pools and auditoriums were also not included in the functional design capacity.

However, the Design Capacity method alone becomes flawed 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 schedule, and tutoring 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 design capacity in any given school year. Taking school schedules, programmatic issues, and fluctuations in student populations into consideration, the Design Capacity is modified to create the final “**Functional Design Capacity.**”

It's important to note that as a rule:

90% utilization is considered to be the **Functional Design Capacity** targeted at the **elementary level.**

80% utilization is considered to be the **Functional Design Capacity** targeted at the **middle and high school levels.**

For example, the targeted utilization at a middle or high school level represents scheduled use of a core subject room 6 to 7 periods out of an 8 period day, or between 75% and 88% of the time available for use.

2. CAPACITY BASED ON GROSS BUILDING SQUARE FOOTAGE

Information for determining recommended school capacity based on a gross square foot per student is typically used for initial analysis of building enrollment capacity. Building area standards are derived from historic data compilation, optimal planning models for space utilization, and are found through regional and national educational research and planning organizations. There is not a recognized national standard for use in such reviews, and available data most current and determined to be most relevant to the School District's locality is utilized. The following ranges shown in the standards consulted indicate regional and program differences between the school districts reviewed. The lower end square foot per student numbers may indicate that few auxiliary type spaces are provided. The higher end square foot per student numbers may indicate that more auxiliary type spaces are provided, i.e. Auditorium, Field House, Natatorium, etc. For smaller schools, the numbers are typically higher than for larger schools.

Typical school building size recommendations based on student occupancy:

Gross square footage for school planning based on school building projects built in Wisconsin over the last 15 years.

- *Elem. School:* 125 – 140 sq.ft. per student (average of 133 sq.ft.)
- *Middle School:* 150 – 170 sq.ft. per student (average of 160 sq.ft.)
- *High School:* 200 – 220 sq.ft. per student (average of 210 sq.ft.)

Gross square footage for school planning recommended by the *Minnesota Department of Children, Families & Learning - Guide for Planning Construction Projects*. This is one of the few State sponsored publications that actually lists size recommendations for educational environments. These area ranges were established to plan for the space needs of technology and new forms of instruction (Published 2002).

- *Elem. School:* 125 – 155 sq. ft. per student (average of 140 sq. ft.)
- *Middle School:* 170 – 200 sq. ft. per student (average of 185 sq. ft.)
- *High School:* 200 – 320 sq. ft. per student (average of 260 sq. ft.)

In order to keep the evaluation current and account for the present and future space needs of technology and new forms of instruction, the Wisconsin data and Minnesota DCFL information has been approximately averaged to create the unit of measure used in this report.

For this particular study, we are using:

- 137 sq. ft. per student for the Elementary Schools
- 170 sq. ft. per student for the Middle School
- 200 sq. ft. per student for the High School

The gross square foot per student recommendations should be considered as a **baseline guide** for planning and analysis, and remain flexible in order to reflect the immediate needs and long term goals of the School District.

The maximum capacity is based on the existing building SF divided by the average recommended SF per student listed. The resulting data for each building can then be used as an indicator to how the schools compare with National and State recommendations.

3. CAPACITY BASED ON THE SCHOOL DISTRICT OF MENOMONEE FALLS' BOARD OF EDUCATION RECOMMENDATION

The School District of Menomonee Falls' Board of Education has identified class sizes in which they would like to operate.

Teacher Pupil Ratios/Optimal	
9 - 12	= 25-30
6 - 8	= 24-30
2 - 5	= 23-25
5K - 1	= 22-23
4K	= 20-22

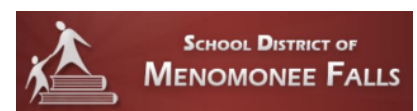
SUMMARY OF CAPACITY

The chart on the following page indicates the current enrollment and the various methods to determine maximum potential enrollments for the existing facilities. The maximum enrollment listed below is broken up into two categories.

1. The first column lists the school analyzed.
2. The second column lists the current enrollment.
3. The third column shows the Design Capacity and the Functional Design Capacity calculation. *Note, due to some classrooms being exceptionally large, a teaching aid may be required in order to functionally have more than 30 students per classroom.*
4. The fourth column shows the capacity based on the gross square footage of the building and the grade structure of the school.
5. The fifth column shows the capacity based on Board of Education policy.

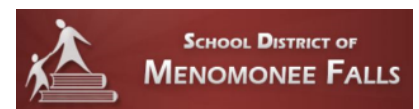
The current enrollment numbers listed are from the Third Friday report from September 2013.

School	Current Enrollment (Third Friday, September 2013)	Functional Design Capacity	Capacity based on total Building Area	Capacity based on Board of Education Guideline – maximum pupil ratio
Ben Franklin Elementary 1963, 1966, 1975, 2010	716	^{b,e} 646	1,023	634
Riverside Elementary 1959, 1962	374	^{b,e} 369	338	420
Shady Lane Elementary 1960, 1962, 1995	408	^{b,e} 401	489	427
Valley View Elementary 1966, 1997	364	^{b,e} 381	363	418
North Middle School 1949, 1950, 1959, 1962, 1965	882	^{c,e} 1,095	1,517	1404



Menomonee Falls High School 1969, 1985, 2007	1457	^{d,e} 1,729	1,675	2155
Total	4,201	4,621	5,405	5,458
Thomas Jefferson 1961	-	^e 757	874	584

- a. Based on 50 sq. ft. per student for Kindergarten, 35 sq. ft. per student for all academic classrooms (grades 1-5), 30 sq. ft. per student for MS & HS. Science Rooms, FACE Labs, PLTW Labs, Band and Orchestra Rooms and Art Rooms use 50 sq. ft. per student. Tech Ed Labs are based on 100 sq. ft. per student. Business Labs are based on 40 sq. ft.
- b. Elementary School Classrooms range in size from 775 sq. ft. – 915 sq. ft. for grades 1-5 and 1,000 sq. ft. – 1,164 sq. ft. for kindergarten.
- c. Middle School General Classrooms range in size from 669 sq. ft. – 930 sq. ft.
- d. High School General Classrooms range in size from 729 sq. ft. – 959 sq. ft.
- e. Functional Design Capacity is 90% of the maximum capacity in Elementary Schools and 80% of the maximum capacity in Middle and High Schools. Elementary students typically have a home classroom and don't utilize other classrooms for academics other than Music, Art, and PE during the day so the utilization factor is higher than at the Middle School and High School.
- f. Board of Education pupil ratios do not include a utilization factor and strictly looks at optimum pupil ratios. IT does not take into account room sizes.



DETAIL – BEN FRANKLIN ELEMENTARY SCHOOL

Functional Design Capacity

The total calculation comes to 718 students if every single primary academic space was occupied to maximum capacity. As stated earlier in the document, this is not practically possible. The Functional Design Capacity, therefore, is 90% of that value which equates to 646 students.

Capacity Based on Building Area

When the total building square footage is divided by the recommended square footage per students, the maximum enrollment creates a similar number: 140,264 SF divided by 137 SF per student, equates to 1023 students.

DETAIL – RIVERSIDE ELEMENTARY SCHOOL

Functional Design Capacity

The total calculation comes to 411 students if every single primary academic space was occupied to maximum capacity. As stated earlier in the document, this is not practically possible. The Functional Design Capacity, therefore, is 90% of that value which equates to 369 students.

Capacity Based on Building Area

When the total building square footage is divided by the recommended square footage per students, the maximum enrollment creates a similar number: 46,383 SF divided by 137 SF per student, equates to 338 students.

DETAIL – SHADY LANE ELEMENTARY SCHOOL

Functional Design Capacity

The total calculation comes to 445 students if every single primary academic space was occupied to maximum capacity. As stated earlier in the document, this is not practically possible. The Functional Design Capacity, therefore, is 90% of that value which equates to 401 students.

Capacity Based on Building Area

When the total building square footage is divided by the recommended square footage per students, the maximum enrollment creates a similar number: 67,000 SF divided by 137 SF per student, equates to 489 students.

DETAIL – VALLEY VIEW ELEMENTARY SCHOOL

Functional Design Capacity

The total calculation comes to 424 students if every single primary academic space was occupied to maximum capacity. As stated earlier in the document, this is not practically possible. The Functional Design Capacity, therefore, is 90% of that value which equates to 381 students.

Capacity Based on Building Area

When the total building square footage is divided by the recommended square footage per students, the maximum enrollment creates a similar number: 49,800 SF divided by 137 SF per student, equates to 363 students.

CONCLUSION

All of the elementary schools are generally in alignment with the calculated capacities of the building with the exception of Ben Franklin. When capacity based on gross square footage is significantly higher than the functional design capacity, this is an indicator that there is a higher proportion of support spaces to academic spaces, e.g. a larger gym, wider corridors, etc.

DETAIL – THOMAS JEFFERSON

Several assumptions were made to calculate an estimated capacity for Thomas Jefferson, a building that most recently functioned as a 5-6 grade building, but now sits empty:

- Four (4) Kindergarten classrooms were assumed.
- Approximately 30% of the classroom spaces were assumed to be for Special Ed, OT/PT, Resource, etc., similar to the other elementary school buildings.
- Academic space in the lower level (an old FaCE lab and a Tech Ed lab) were not included in the calculation.

Functional Design Capacity

The total calculation comes to 841 students if every single primary academic space was occupied to maximum capacity. As stated earlier in the document, this is not practically possible. The Functional Design Capacity, therefore, is 90% of that value which equates to 757 students.

Capacity Based on Building Area

When the total building square footage is divided by the recommended square footage per students, the maximum enrollment creates a similar number: 119,784 SF divided by 137 SF per student, equates to 874 students

DETAIL – NORTH MIDDLE SCHOOL

Functional Design Capacity

This calculation included all regular academic spaces including the gym (2 teaching stations) and fitness rooms. Classrooms that also include are, vocal music, computer labs (used for instruction), health, band, art, business education and technical education. Spaces not included in this calculation include:

- special education classrooms
- reading or other specialist classrooms
- media center
- cafeteria
- locker rooms
- auxiliary gym
- pool
- auditorium
- computer labs

This calculation equates to 1,368 students if each space was occupied to capacity every minute of the day. As stated earlier in this document, the Functional Design Capacity is 80% of that value which equates to 1,095 students.

Capacity Based on Building Area

When the total building square footage is divided by the recommended square footage per students, the maximum enrollment creates the identical number: 258,000 SF divided by 170 SF per student, equates to 1,517 students.

CONCLUSION

The current enrollment for this building is 882 students. Based on the Functional Design Capacity and the capacity based on building square footage, this building could accommodate another 200-600 students. When looking at the capacity though, it needs to be noted that there are a large amount of support or auxiliary spaces such as an auditorium and a pool that may skew the calculated capacity and typical academic class square footages are actually fairly small.

DETAIL – HIGH SCHOOL

Functional Design Capacity

This calculation included all regular academic spaces including both gyms (2 teaching stations each) and fitness rooms. Classrooms that are also included are vocal music, computer labs (used for instruction), health, band, art, business education and technical education. Spaces not included in this calculation include:

- special education classrooms
- reading or other specialist classrooms
- media center
- cafeteria
- locker rooms
- auxiliary gym
- pool
- auditorium
- computer labs

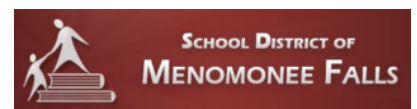
This calculation equates to 2,161 students if each space was occupied to capacity every minute of the day. As stated earlier in this document, the Functional Design Capacity is 80% of that value which equates to 1,729 students.

Capacity Based on Building Area

When the total building square footage is divided by the recommended square footage per students, the maximum enrollment creates a slightly smaller number: 335,000 SF divided by 200 SF per student, equates to 1,675 students.

CONCLUSION

The current enrollment for this building is 1,457 students. Based on the Functional Design Capacity and the capacity based on building square footage, this building could accommodate another 200-300 students. When looking at the capacity though, it needs to be noted that there are a large amount of support or auxiliary spaces such as an auditorium and a pool that may skew the calculated capacity and typical academic class square footages are actually fairly small.



BUILDING UTILIZATION

This report is prepared to provide an objective analysis of the building utilization at North Middle School and the High School in the School District of Menomonee Falls (SDMF). The information presented in this report was gathered through on-site observations of the building, interviews with the building Administration, and documents received from the SDMF describing hourly attendance.

Understanding current building utilization is useful in the facility development process because it allows a true view of what spaces are being used, how often, and to what extent.

The utilization of a school is evaluated based on “Best Practices” or recommendations found in CEFPI (The Council of Educational Facilities Planners International) and other national publications that primarily focus on the design and evaluation of educational facilities.

There are two important aspects to study when determining the utilization of any school:

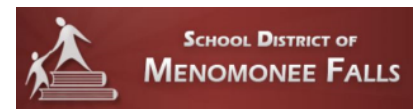
The first is the **Utilization Factor** which is expressed as a percentage. This percentage provides a facility a certain degree of flexibility in the program scheduling of teaching stations. Middle and High Schools are typically considered “at recommended utilization” when the average reaches 80 percent based on the teaching stations in the facility.

The second aspect of utilization is the **Occupant Capacity** of each educational space per hour the space is being used. The school district provided EUA with an occupant count for every space, every hour of the day. Although a space may be “occupied” which is reflected in the utilization, it may not be occupied to the space’s full potential (number of students that can physically fit in the space).

Finally, a note about the eventual findings from this analysis; many school districts are surprised by how low their buildings are utilized and they question the data. Building utilization makes a direct link between the number of educational spaces in a school and the number of staff that are available to teach in the facility. If a school district has a number of staff that only instruct exploratory areas (band, orchestra, art, technical education, etc) and they need to travel between buildings during the day, those dedicated spaces will naturally be lower in utilization. In other words, if there is a reduction in operation spending, a building’s educational spaces will likely not be used to the optimum utilization unless the spaces are shared by multiple curricular programs.

The following pages summarize the observations from the contained utilization charts:

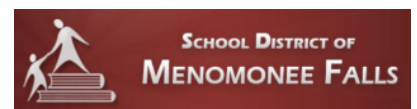
		School District of Menomonee Falls - MS Utilization Study																						
Room No.	Primary Use of Room (Subject)	S.F. Area	Recommen- Occupant Capacity	Periods														Avg Class Size	% of use	# periods used (8)				
				Flex	1	2	3	6 & 7 Gr. 4th	8th Gr Lunch	8th Gr 4th	7th Gr Lunch	6 & 7 Gr 5th	8th Gr Lunch	7 & 8 Gr 5th	6	7								
				7:15- 7:50	7:54- 8:42	8:46- 9:34	9:38- 10:26	10:30- 11:18	10:30- 11:00	11:04- 11:52	11:22- 11:52	11:22- 12:10	12:14- 12:44	11:56- 12:44	12:48- 1:36	1:40- 2:30								
86	Band 6/Band 8	1863	37		42		53										47.5	25.0	2					
88	Flex 7/Orchestra 7/8	1248	25	23	26	55											34.7	37.5	3					
90	Flex 8/Health 7	731	24	23	23			31							30		26.8	50.0	4					
92	Flex 7/Health 7	731	24	23	27	18		32								30	26.0	62.5	5					
94	PE Cardio Room	817	27																					
103	Flex 6/Band 7	2273	45	23												80	51.5	25.0	2					
111	Flex 8/LA 8	737	25	24	28	29				28					21	16	24.3	75.0	6					
113	Flex 8/SS 8	669	22	24	24	25				24					29	25	25.2	75.0	6					
114	Study Hall 7/8	742	25		1	5	3							6	4	5	4.0	75.0	6					
115	Meeting Room	567	19																					
117A	Flex 8/Special Ed	216	7	3		5	7	7							7	5	5.7	75.0	6					
117B	Meeting Room	805	27																					
119	Speech & Language Pathologist Classroom	536	18																					
120	Flex 6/Family & Consumer Ed 6	829	17	21	25												23.0	25.0	2					
121A	Flex 8/SS 8/Study Hall 7/8	703	23	24	20	31				23				20	23	23	23.4	87.5	7					
121B	Flex Intervention 8/LA 8	696	23	6	20	21				36				27	27		22.8	75.0	6					
121C	Flex Intervention 8/Math 8	694	23		26	15				22					23	31	23.4	62.5	5					
122	Flex 8/Special Ed 8	738	49	7		8				6							7.0	37.5	3					
124	Flex 8/Family & Consumer Ed 6/8/Study Hall 7/8	1226	25	24	26	27	27			21							25.0	62.5	5					
125	Flex 7/Tech Ed 7/8	1022	10	22		17	18	19						22	19		19.5	75.0	6					
126	Flex 8/Sci 8	1174	23	24	25	25				23				29		24	25.0	75.0	6					
127	Tech Ed Room	1169	12																					
128	Flex 8/Sci 8	1164	23	24	21	29				25					29	20	24.7	75.0	6					
129	Tech Ed Room	1880	19																					
130	Flex 8/LA 7/LA 8/Study Hall 7/8	1169	23	24	20	22	27			12					21	22	21.1	87.5	7					
131	Flex 8/Tech Ed 6/7/8	1175	24	23	25	18	16							26	25	23	22.3	87.5	7					
135	Curriculum Support Staff Offices	757	8																					
137	Flex Intervention 8/Math 8/Study Hall 7/8	1023	34		16	31				29					26	24	24	25.0	75.0	6				
139	Flex 8/Business Education	1021	26	27	27		18							26	23	29	25.0	75.0	6					
141	Business Education 6, 7 & 8	1884	47				19	26					25		26	19	23.0	62.5	5					
200	Flex Intervention 6/Reading 6/Math 6	765	26	7		24	23					27			19	21	20.2	75.0	6					
201	Meeting Room	612	6																					
202	Flex 6/Reading 6/Sci 6	1134	38	21	24	28						27			29	24	25.5	75.0	6					
203	Flex 6/Reading 6/SS 6	690	23	22	25	25						27			28	27	25.7	75.0	6					
204	Flex 6/Reading 6/LA6/Sci 6	847	17	21	25	25	26								27	26	25.0	75.0	6					
205	Flex Intervention 6/Reading 6/LA 6/Math 6	694	23	5	27	27	26								24	19	21.3	75.0	6					
207	Flex 6/Reading 6/LA 6	665	22	21	26	25						27			27	24	25.0	75.0	6					
208	PC Lab	1101	22																					
209	Flex 6/Special Ed 6	702	23	11		5	6							5			6.8	50.0	4					
210	Flex 6/Reading 6/AVID/Sci 6	1053	21	23	26	24	27					27			26		25.5	75.0	6					
211	Flex 6/Reading 6/LA 6/SS 6	738	25	25	26	26	27							28	24		26.0	75.0	6					
213	Flex 6	539	18	24																				
214	Flex 6/CMC (Special Ed)*	576	19	3	3	1								4	6		3.4	62.5	5					
215	Flex 8/Special Ed 8	569	19	2										5	6		4.3	37.5	3					
216	Flex 7/Spanish	682	23	23	24	27	32							33	29	26	27.7	87.5	7					
217	Flex 6/Reading 6/LA 6/SS 6/Study Hall 6	1034	34	25	17	26	26	27				27			26	24	24.9	87.5	7					
218	Flex 7/German/Spanish/World Languages	773	26	23	26	20	27							26	21		23.8	75.0	6					
219	OT/PT classroom	561	19																					
221A	Mac Lab	547	18																					
221B	Flex 7/LA 7	706	24	23	26	23	22							26	23		23.8	75.0	6					
221C	Flex 7/SS 7	696	23	22	27	21	24							28	26		24.7	75.0	6					
223	Flex Intervention 7/Math 7	694	23	5	24	21	22							25	26		20.5	75.0	6					
224	Flex 6/Sci 7/Sci 8/Spanish	1170	39	23	22	31				21					23	26	24.3	75.0	6					
225	Exp Music 6/Choir 7/8	918	31		16	38											27.0	25.0	2					
226	Flex 7/Sci 7/Study Hall 7/8	1174	39	23	26	25	28								27	27	14	24.3	87.5	7				
227	Flex 7/Study Hall 7/8/Art	1264	25	23	23	31	24	24					27		28	26	25.8	100.0	8					
228	Flex 7/Sci 7	1164	23	23	28	20	25								26	26		24.7	75.0	6				
229	Flex 7/Art	1426	29	24	26	23	28							24	20		24.2	75.0	6					
230	Flex 7/SS 7	1169	39	23	27	24	27							28	27		26.0	75.0	6					
231	Flex 7/Special Ed 7	761	25	10	6	8								7										
233	Flex 7/Special Ed 7	740	25	7	6		5								7		6.3	50.0	4					
235	Flex Interventions 6/VIP Reading	757	25	7	8		6	8						4	5	6	6.3	87.5	7					
237	Flex 7/SS 7/SS 8/AVID 8	1023	34	24	28	19				27					21	30	24.8	75.0	6					
239	Math 7/Math 8	1021	34		29	24				22					21	31	25.4	62.5	5					
241	Flex Intervention 7/Math 7/Math 8	930	31	6	29	23				29					27	23	22.8	75.0	6					
243	Flex Intervention 7/LA 7	787	26	6	26		26							26	25		22.7	75.0	6					
245	Flex Intervention 6/Reading 6/LA 6/Math 6	932	19	6		28	28	26				26			19		22.2	75.0	6					
Cafe	Cafeteria/Study Hall 7/8	4520	151		27	48			307		309		269				192.0	62.5	5					
Gym	PE 6,7,8		50		27	55	43	80						54		58	102	52	0.0					
	Maximum Capacity		1388																					
	Functional Capacity @80%		1095																					
	Current Enrollment		882														25.6	88.4	5.5					
	Actual Hourly Total			880	900	913	879	559		348		284		634	904	851								



The Middle School is essentially programmed around an 8 period day with three lunch periods and a split 5th hour. As stated earlier in the study, the Functional Capacity is calculated to be 1,095 students which is 80% of the Maximum Design Capacity.

For the purpose of this Utilization Study, EUA has noted the following observations of North Middle School:

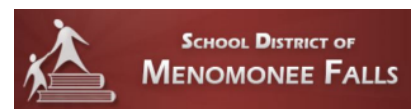
1. Overall, the educational spaces are used an average of 68.4% of the time. Middle schools are considered at recommended utilization when that number averages 80%. Although the utilization of rooms is below the recommended 80%, the rooms are very small.
 - a. As is typical with many schools, the exploratory classrooms (such as Tech Ed, Fa/CE, Band, etc.) do not lend themselves to multiple uses by other curricula. Modern schools are trying to be designed around the concept of not being associated with only one use focus.
2. Many academic spaces are at or above the recommended occupant capacity based on the size of the space. The average class size is 25.6 occupants, whereas the recommended occupancy average for typical classroom spaces is closer to 22 occupants.
3. Special Education rooms are more difficult to track utilization due to the staff moving to academic classrooms for instruction. Many districts are finding that dedicated Special Education rooms are underutilized and changing them into shared offices for SE staff and opening up additional rooms for academic programs.



The High School is essentially programmed around an 8 period day with three lunch periods and a split 5th hour. As stated earlier in the study, the Functional Capacity is calculated to be 1729 students which is 80% of the Maximum Design Capacity.

For the purpose of this Utilization Study, EUA has noted the following observations of Menomonee Falls High School:

1. Overall, the educational spaces are used 67.2% of the time. Schools are considered at recommended utilization when that number averages 80%. Many of the standard classrooms are used 75% which means some of the exploratory programs (Tech Ed, Music, etc) are underutilized many hours of the day.
 - a. As is typical with many schools, the exploratory classrooms do not lend themselves to multiple uses by other curricula. Modern schools are trying to be designed around the concept of not being associated with only one use focus.
2. Many academic spaces are at or within the recommended occupant capacity based on the size of the space. On average, there are 25.4 students per academic space.
3. Special Education rooms are more difficult to track utilization due to the staff moving to academic classrooms for instruction. Many districts are finding that dedicated Special Education rooms are underutilized and changing them into shared offices for SE staff and opening up additional rooms for academic programs.



AMERICANS WITH DISABILITIES ACT (ADA) STUDY

INTRODUCTION

The object of this survey report is to evaluate the compliance level of the School District of Menomonee Fall's school buildings with respect to the American Disabilities Act (ADA) amended August 5, 2005. We have outlined an objective interpretation of the A.D.A. requirements as they apply to the existing facility conditions. This will allow the leaders of the School District of Menomonee Falls to further define their building program for improvements to meet the needs of the students, staff and public users of the facility.

Intermediate concerns should be to determine the compliance level in the facility (i.e., programs, remodeling, maintenance, budgets, and schedules) and make compliance an on-going responsibility. This includes addressing immediate needs to accommodate individuals with disabilities in specific instances, overall barrier removal, and continually amending the school's compliance plan as new regulations are implemented.

ADA OVERVIEW

The body of legislation known as the Americans with Disabilities Act (ADA) was signed into law on July 26, 1990. This law provides comprehensive civil rights protections in the areas of employment, public accommodations, state and local government services and telecommunications to individuals with disabilities. The initial legislation contains five major categories or Titles, which include the following:

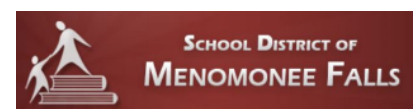
Title I prohibits employers with fifteen or more employees from discriminating against qualified job applicants and workers who are disabled. The law covers all aspects of employment.

Title II prohibits state and local governments from discriminating against disabled individuals in their programs and activities, whether or not they are federally funded. Title II also requires public transportation vehicles and facilities to be accessible to disabled riders.

Title III prohibits privately operated places of public accommodation from denying goods, programs, and services to individuals based on their disabilities. Covered businesses must accommodate disabled patrons by changing policies and practices, providing auxiliary aids, and improving physical accessibility, unless that would impose an 'undue burden'. New and renovated commercial facilities must be accessible. Existing facilities must remove architectural and communication barriers where such removal is "readily achievable".

Title IV requires telephone companies to provide continuous voice transmission relay services that allow hearing and speech-impaired individuals to communicate over the phone through telecommunication devices for the deaf.

Title V covers miscellaneous provisions related to the development of architectural/design guidelines, fees to be awarded to prevailing parties if suits are filed under the A.D.A., the technical assistance to be provided by the federal government.



The School District of Menomonee Falls is a publicly funded school district and as such falls under the jurisdiction of the Title II regulations of the ADA. Therefore the programs and activities within the district's buildings must be offered in the most integrated setting appropriate to the needs of the individual student. This will allow those individuals to participate in "mainstream" programs and activities according to their abilities without being restricted to separate programs designated for the disabled.

The School District of Menomonee Falls sponsors programs and activities that draw the larger community into their school facilities. The diverse needs of the community members create a greater need for initial accessibility to the programs, activities, and services offered. Furthermore, by reference, Title II incorporates the regulations of Section 504 of the Rehabilitation Act of 1973 and Titles I (Employment) and III (Public Accommodations) of the A.D.A. (Provided that they are not inconsistent with or lessen the standards set by Section 504).

In making this facility accessible to both employees and the public, specific attention should be given to the conditions and the priorities established in the ADA. There are specific requirements relative to compliance in New Construction, Alterations and Existing Facilities, as well as priorities outlining what areas of existing facilities need to be addressed as the most immediate needs in the removal of existing barriers to accessibility.

The three (3) categories of facilities are defined as follows:

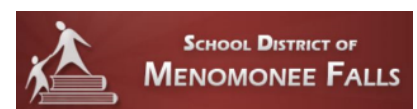
1. **New Construction** will be placed under the most stringent requirements concerning compliance. All new construction first occupied after January 26, 1993 must be in full compliance with all facets of the regulations.
2. **Alterations** made to existing facilities must be made so that to the maximum extent feasible, the altered portions of the facility are readily accessible to and usable by individuals with disabilities. This covers any alterations undertaken after January 26, 1992, and also includes the requirements that facilities that are part of a remodel/alteration must provide an accessible path of travel to the altered area.
3. **Existing Facilities** will be required to remove existing barriers based upon the following priorities:
 - a. Provide access to the facility from public sidewalks, public transportation and parking.
 - b. Provide access to those areas where programs and activities are made available.
 - c. Provide access to toilet facilities.
 - d. Provide other measures necessary to provide access to programs and activities.

Alterations, remodeling, or additions to existing schools affecting the physical layout, use of, or functions within the building will be subject to requirements of the current edition of the International Building Code (IBC) in effect at the time of the changes. There are specific IBC code guidelines that address existing buildings and handicap accessibility that assess the scope of work proposed, determining its proportionality affecting the total area of the building, and whether or not additional conditions need to be addressed. If prescribed percentages of building area are affected, non-compliant building code and handicap accessibility conditions outside of the scope of work proposed will be required to be corrected. All of this must be accomplished with the intent of affording the disabled individual the most integrated setting appropriate to their needs.

THE SURVEY

The building survey reviews the facility for accessibility compliance as defined by the ADA Architectural (ADAAG, ANSI A117.1) Guidelines, and includes the following:

- Access to the facility from public transportation, sidewalks, streets and parking.
- Access within the facility by way of corridors, stairs and/or elevators.



- Access to restrooms within the facility.
- Access to individual rooms.
- Safety of individuals with disabilities within the facility in the event of an emergency.

This summary report for facility compliance is not intended to determine the accessibility of specific programs. Program decisions are beyond its scope and involve judgments that must be made by the School District of Menomonee Falls. Our team at Eppstein Uhen Architects together with the District can assess how various programs can affect the use of the facility and the level of compliance required. See Section 4 for individual building surveys.

