

School Capacity Utilization Fall 2018

Key Findings

1. Most MMSD schools are not over their current capacity. Only two elementary schools (Marquette and Van Hise) and one high school (West) are above their current capacity.
2. Two elementary schools are projected to be above 100% of their current capacity in five years: Falk and Van Hise.

Background

The Research & Program Evaluation Office conducted a review of best practices for the calculation of school building capacity and target capacity utilization during the summer of 2017 and reported the findings in the RPEO report *Analysis of Current Building Capacity Calculation Methods* ([2017-11-3](#)). The current report is the second year the methods described in that report are being used.

Capacity Methodology

At the elementary school level, current capacity calculations are based on the number of available homerooms and the number of students that can sit in a homeroom. The number of available homerooms is calculated by first counting the number of rooms in each building that could serve as a classroom (well-ventilated rooms that are 500 square feet or larger and are not a library, gymnasium, auditorium, or cafeteria). Then, rooms that are used for certain other activities (art, music, OT/PT, strings, alternative programs, 4K, etc.) are subtracted from this count. The room uses for 2018-19 were established through self-reporting by elementary school principals and reviewed by the Research & Program Evaluation Office. The number of rooms available to be used as a homeroom is then multiplied by the ideal number of students who can sit in a homeroom (effective capacity factor) to calculate a current configuration capacity. Because room use can change significantly from year to year, school capacities can vary over time.

A maximum capacity for elementary schools is calculated by subtracting rooms used as K4 homerooms and an additional four rooms from the total number of rooms in each building that can serve as a classroom. The four room deduction is a standard deduction for other common classroom uses (e.g. one room for Art, one room for Music, one room for Occupational and Physical Therapy, and one additional room for other uses). This provides an estimate of the maximum number of students an elementary school building can support if all non-homeroom (KG-5th and K4) uses are moved to a minimum number of spaces. This may require the school to use non-ideal spaces for programmatic uses or use rooms for multiple purposes. This estimate is not reported here because it aligns to long-term planning and this report is focused on short-term (current year and next year) considerations.

The reported percent of current configuration capacity should be understood as the percent of space currently used as homerooms or open rooms which are filled by students. At the elementary school level, a percent of capacity near 100% does not necessarily mean that a school is near its maximum capacity, instead it implies that the rooms currently available for use as homerooms are full. When a building has sufficient space, it is common for schools to have extra pull-outs which are used for programs (e.g. behavior intervention, cross-categorical instruction) and when the number of students enrolled at the school increases these programmatic uses are put into fewer rooms, increasing available capacity.

At the secondary school level, because homerooms are less static and students move more frequently from room to room, school capacities are based on the number of instructional spaces and gyms without any adjustments based on room usage.

The capacity factors (how many students can sit in a room) is multiplied by the effective capacity adjustment (percent of available space in a room ideally filled on average) to calculate the effective capacity factor. The number of rooms available to be used as a homeroom is then multiplied by the effective capacity factor to calculate the school's capacity. The target utilization of a school's effective capacity is 90%, which will give the school enough available space to ensure instructional flexibility.



Capacity Factors

School Type	Maximum Capacity Factors	Effective Capacity Adjustment	Effective Capacity Factor
AGR (formerly SAGE) K-5	22	90%	19.8
AGR K-2	19	90%	17.1
AGR 3-5	24	90%	21.6
Other K-5	25	90%	22.5
K-2	23	90%	20.7
3-5	27	90%	24.3
Middle Schools	28	80%	22.4
Conventional High Schools	28	80%	22.4
Shabazz	21	80%	16.8

Note on Report Usage

The calculated capacities presented in this report are used to determine whether or not a school has sufficient available capacity to accommodate Internal Transfers, students transferring under other programs (e.g. DLI-DBE transfers), Open Enrollment enterers, and students entering the district under other programs (e.g. tuition waivers). The current capacity utilizations also assist the district in prioritizing building expansions, renovations, and the location of Alternative and 4K programming.

When a determination concerning the available space at a school is made an updated review of room usage and possible future changes for the coming school year are considered and updated enrollments are considered in conjunction with projections for the coming school year.

The methodology used here narrowly applies to considerations of the availability of space in a building based on the number of instructional rooms and the type of instructional model at the school. This methodology does not consider:

1. MMSD policy concerning the number of students in a section (recommended minimums, maximums, or ideals);
2. The number of students allowed to attend a school under an existing contract (e.g. Nuestro Mundo, Badger Rock, Wright, Spring Harbor);
3. The size of a building (e.g. small classrooms, wide hallways);
4. The number of available sections at a school in each grade based on instructional model, staffing, and physical space; or
5. The other considerations that are unique to each school, its building, and its programming.

All of these are taken into consideration when administrative decisions are made. This is an estimation of the physically available instructional space at each school and the amount of this available space that is being used at each school on the Third Friday of September count date relative to its ideal capacity utilization based on industry best practices. This report is not meant to cover all administrative considerations taken into account when determining how much space is available at a school and how much of it is being used. The capacity factors used in this report do not insinuate a recommendation about preferred class sizes.

Elementary Capacity Usage

For the 2018-2019 school year, two elementary schools are above 100% of current effective capacity: Marquette (100%) and Van Hise (108%). Both Marquette and Van Hise are shared buildings; Marquette is in the same building as O’Keeffe MS and other programs (e.g. SAPAR and LEAP) and Van Hise is in the same building as Hamilton MS.

Recall that elementary school capacities are based on how many instructional spaces are currently being used as KG-5th grade homerooms or are left open. Therefore, if a school’s enrollment increases they can often switch the use of a room from a non-homeroom use to a homeroom and increase their effective capacity.

Marquette is currently using 15 instructional spaces for purposes other than a K-5 homeroom, with 6 of the 15 being used for LEAP and SAPAR. Therefore, Marquette can adjust room use in the long run to accommodate more students.

In contrast, Van Hise is currently using 4 instructional spaces for purposes other than a K-5 homeroom. This implies that Van Hise would have a more difficult time finding more homeroom space without utilizing rooms currently used by Hamilton MS.

The projection of students at Falk is driven by the current year’s KG enrollment, which is 20 students (29%) higher than the enrollment in 2017-2018. Falk is currently using nine instructional rooms for uses other than a K4 or KG homeroom. Therefore, Falk should be able to accommodate more students over the long term if the projected growth does occur.

The effective capacity factors for the schools above 100% of capacity either currently (Marquette and Van Hise) or in the five-year projection (Falk and Van Hise) are: Falk = 19.8, Marquette = 24.3, and Van Hise = 22.5. If each school were to use all but four classrooms for homeroom (K4-5th grade) or permanent programming (LEAP and SAPAR) purposes their effective capacities would be: Falk = 455, Marquette = 340, and Van Hise = 405.

The five-year percent of effective capacities for the schools in this maximum capacity scenario would be: Falk = 104%, Marquette = 50%, and Van Hise = 103%.

	Current Effective Capacity (2018-2019)	KG-5 Enrollment (2018-2019)	Current Effective Capacity Utilization (2018-2019)	Five-Year Projected Enrollment (2023-2024)	Five-Year Effective Capacity Utilization (2023-2024)
Overall	13804	11797	85.5%	11425	82.8%
East area	3193	2729	85.5%	2592	81.2%
Marquette	194	195	100.3%	169	86.8%
Emerson	416	382	91.9%	383	92.1%
Lapham	207	185	89.4%	187	90.4%
Mendota	337	292	86.7%	304	90.4%
Hawthorne	396	340	85.9%	299	75.5%
Lowell	376	323	85.9%	297	78.9%
Sandburg	515	430	83.5%	403	78.2%
Lake View	317	261	82.4%	257	81.0%
Gompers	238	180	75.8%	168	70.9%
Lindbergh	198	141	71.2%	126	63.6%
La Follette Area	2772	2399	86.5%	2247	81.1%
Nuestro Mundo	317	306	96.6%	299	94.2%
Schenk	455	409	89.8%	426	93.6%
Kennedy	540	471	87.2%	419	77.6%
Glendale	515	445	86.4%	395	76.8%
Elvehjem	450	388	86.2%	339	75.3%
Allis	495	380	76.8%	369	74.5%
Memorial Area	3935	3225	82.0%	3348	85.1%
Crestwood	317	313	98.8%	306	96.5%
Falk	356	329	92.3%	474	133.0%
Chavez	675	607	89.9%	644	95.4%
Huegel	515	448	87.0%	430	83.6%
Muir	455	391	85.9%	415	91.0%
Stephens	608	496	81.6%	446	73.4%
Orchard Ridge	356	235	65.9%	215	60.2%
Olson	653	406	62.2%	419	64.2%
West Area	3904	3444	88.2%	3238	82.9%
Van Hise	405	439	108.4%	417	102.9%
Randall	365	354	97.1%	301	82.6%
Franklin	373	354	95.0%	331	88.9%
Midvale	428	401	93.8%	385	90.1%
Thoreau	436	403	92.5%	374	85.8%
Shorewood	495	442	89.3%	475	96.1%
Leopold	772	643	83.3%	592	76.6%
Lincoln	583	408	70.0%	363	62.2%

Yellow text indicates the percent of capacity used is between 90% and 100%
 Red text indicates the percent of capacity is above 100%

Secondary School Capacity Usage

For the 2018-2019 school year, no middle schools and one high school are above their current effective capacity: West High (100%).

Unlike at the elementary level, all instructional spaces and gyms at secondary schools are taken into account when calculating the effective capacity. Therefore, at the secondary level the capacity of a school is dependent upon what kinds of spaces are counted and not on what the school is currently using those spaces for and is therefore less easily increased when more students enroll.

No middle schools and two high schools are projected to be above their ideal use of capacity (above 90%): Memorial (92%), West (97%).

Recall that secondary school capacity is more stable than at the elementary schools. Therefore, schools cannot generally expand their capacity to accommodate more students without renovations or changing the use of rooms from non-instructional to instructional.

	Current Effective Capacity (2018-2019)	6-12 Enrollment (2018-2019)	Current Effective Capacity Utilization (2018-2019)	Five-Year Projected Enrollment (2023-2024)	Five-Year Effective Capacity Utilization (2023-2024)
Middle Total	8646	5478	63.4%	5086	58.8%
High Total	9654	7530	78.0%	7870	81.5%
East	2666	1611	60.4%	1749	65.6%
Black Hawk	717	414	57.8%	359	50.1%
Sherman	851	428	50.3%	420	49.4%
O'Keeffe	963	450	46.7%	367	38.1%
La Follette	2285	1580	69.2%	1752	76.7%
Whitehorse	650	478	73.6%	402	61.8%
Sennett	1142	676	59.2%	598	52.4%
Badger Rock	157	85	54.2%	104	66.2%
Memorial	2262	1973	87.2%	2090	92.4%
Jefferson	672	556	82.7%	569	84.7%
Spring Harbor	381	265	69.6%	267	70.1%
Toki	963	587	60.9%	518	53.8%
West	2240	2245	100.2%	2177	97.2%
Hamilton	963	746	77.5%	712	73.9%
Cherokee	784	548	69.9%	518	66.1%
Wright	403	245	60.8%	252	62.5%
Shabazz	202	121	60.0%	102	50.8%

Yellow text indicates the percent of capacity used is between 90% and 100%

Red text indicates the percent of capacity is above 100%

Note: In the Fall 2017 report, gyms were not included in secondary schools capacities. Gyms are included here.