



TO:	Members of the Board of Education
FROM:	Bob Soldner, Assistant Superintendent of Financial Services, MMSD on behalf of Contributors Listed Below
DATE:	June 6, 2024
SUBJECT:	Recommendations to Build New or Renovate MMSD Facilities Considered for Potential Referendum 2024

1. Contributors:

A cross-functional team of experts, internal and external to MMSD, worked together to formulate the recommendations outlined in this memo.

Mike Huffman, Partner, Huffman Keel Partners

Jordan Schulz, Partner, Huffman Keel Partners

Steven Kieckhafer AIA, Architect/Partner, Plunkett Raysich Architects llp (PRA)

Dave Chmielewski, Senior Project Manager, J.H. Findorff & Son Inc.

Aaron Zutz, Director of Project Management, J.H. Findorff & Son, Inc.

Bob Soldner, Assistant Superintendent of Financial Services, MMSD

Jen Schoepke, Ph.D., Director of Special Projects, MMSD and UW-Madison School of Education

Svetlin Borisov, Director Building Services, MMSD

Amy Knight, Brand Marketing and Events Officer, MMSD

Michael Hertting, Ph.D., Special Assistant to the Superintendent, MMSD

Mike MacDonald, Assistant Director of Facilities Maintenance, MMSD

2. Executive Summary:

Over the last several years, significant progress has been made on updating a number of Madison Metropolitan School District (MMSD) facilities. However, with 26 facilities that are more than 60 years old, much work remains to be completed and major updates are needed. To facilitate the next stage of updates, the MMSD Board of Education (BOE) accepted the Long Range Facilities Plan (LRFP) on May 20, 2024. This plan contained six primary recommendations, including consideration of "...a Referendum in Fall 2024 with specific recommendations focusing on middle schools and critical need elementary schools."

Prior to the Board's acceptance of the LRFP, MMSD staff provided a wealth of information to guide their decision making, including the MMSD Educational Facility Conditions Assessment and current/projected enrollment, in anticipation of a Fall 2024 referendum. Additionally, information about past and present progress in modernization, building capacities, air



conditioning, progress toward sustainability goals, operational efficiencies, improving accessibility, safety and security was shared.

This memo details the cost to **renovate** in comparison to the cost to **replace** selected facilities named in the 2024 LRFP recommendations, providing additional information to guide further discussion and decision-making on a potential facilities referendum question. This memo does not contain qualitative data, such as the community's connections to existing building architecture, which the Board may want to include in their decision making. Specifically, this memo outlines the recommended scope and scale of potential considerations for the proposed 2024 Referendum:

OPTION 1:

Replace the following buildings at a total estimated cost of \$443M:

Shabazz City / Sherman MS	Recommendation: Replace with new
Blackhawk MS / Samuel Gompers ES	Recommendation: Replace with new
Toki MS / Orchard Ridge ES	Recommendation: Replace with new
Cherokee Hts MS	Recommendation: Replace with new
Sennett MS	Recommendation: Replace with new

OPTION 2:

Replace the above buildings and renovate the following at a total estimated cost of \$507M:

Anana ES	Recommendation: Renovate
Crestwood ES	Recommendation: Renovate

3. Background:

[Long Range Facilities Plan \(LRFP\) and 10-Year Capital Improvement Plan](#)

The LRFP was revised by staff and accepted by the Board of Education on May 20, 2024. The LRFP provided six recommendations:

- Develop a Long Term Capital Improvement Plan
- Conduct an After-Action Review of the Referendum 2020 projects
- Establish a Long Term Capital Improvement Trust Fund (Fund 46)



- Consider a Referendum in Fall 2024 with specific recommendations focusing on middle schools and critical need elementary schools
- Review Detailed Long-Term Enrollment Projections
- Establish a District-Wide Superintendent's Advisory Group

At the May 20, 2024 meeting, the Board also voted to accept the 10-Year Capital Improvement Plan and created a Capital Improvement Trust Fund (Fund 46).

[November 2023 Educational Facility Condition Assessment](#)

Building Services engaged Plunkett Raysich Architects (PRA) in partnership with Design Engineers (DE) to update the conditions assessment of Malcolm Shabazz City High School, MMSD Middle Schools, and MMSD Elementary Schools. District staff presented the [2023 Educational Facility Condition Assessment Report](#) to the Board in November 2023. Fourteen facility components were analyzed and categorized into two sections: Projects to Meet Renewable Energy Resolution Goal (mechanical, electrical, plumbing and fire suppression) and Architectural Components to Complete Facility-Specific Renovations. The 14 components were assessed and a composite letter grade A - F was assigned to each facility. The report provided an approximate cost to renovate each facility, which included some sustainable designs (e.g., geothermal heating, ventilation, and air conditioning). Following the 2023 Educational Facility Condition Assessment Report and for the purpose of referendum planning, additional cost details have been included to estimate the total project costs for design and construction. These updated renovation costs are compared to the cost of building new in the Analysis section of this memo.

Sustainability

Sustainability can mean many things; we consider sustainability strategies in how MMSD can approach sustainable construction project design, site selection, and project cost which can impact the final decision (see Appendix A). What follows are sustainability strategies that the district can consider as we approach sustainable construction design, site selection and project cost.

In April 2024, MMSD committed to reducing Greenhouse Gas (GHG) emissions by 50% by 2035, 75% by 2040, and 100% by 2045. Given that 95% of the District's GHG emissions come from building operations, all facility upgrade projects must meaningfully contribute to these reductions. The most significant change to make is eliminating direct fossil fuel use by converting heating systems to electrically powered geothermal systems. While a much smaller share of the District's overall emissions, fossil fuel use for domestic hot water and kitchen operations will also be eliminated by converting these systems to be electrically powered. All-electric buildings are zero-emissions-ready so that as the District procures an increasing



share of its electricity from non-fossil fuel sources, emissions from upgraded buildings will continue to reduce without any further changes in the buildings themselves.

Some additional considerations as we continue to work on sustainability in the district:

- Building for Environment
 - Reduce the energy use of district buildings
 - Electrify major building systems where possible (Geothermal HVAC)
- Building for Health
 - Improved air quality
 - Access to daylight
 - Thermal comfort
- Building for Resiliency
 - Built to last
 - Flexible
 - Stormwater management

Community Engagement Sessions - Phase II

Sessions were held in May across the district in each of the comprehensive high school feeder patterns. The goal of the family engagement sessions was to foster open communication, transparency, and collaboration between MMSD and our community regarding facilities within each attendance area (see Appendix D). The key objectives included: gathering input and feedback, building trust and transparency, addressing concerns and questions, educating the community, and providing data to the Board. Smaller group facilitated conversations at each session that touched on thoughts regarding Update vs Build New at schools with the most critical needs, desires for teaching and learning, and feeder-specific hopes and dreams.

4. Process:

To deliberate recommendations as to whether the District should build new facilities or renovate existing facilities, a cross-functional team came together from April-June 2024. The cross-functional team consisted of 11 members from four organizations. The team used a method developed by Saint Paul Public Schools (SPPS) to guide their planning and analysis, as detailed in the SPPS document [‘The Decision to Renovate or Replace in SPPS.’](#) This process adapted the SPPS guidelines as a holistic process to determine whether to renovate or replace by examining three categories, where the cross-functional team focused on the long-term value and financial prudence category:

- Long-term value and financial prudence
- Educational and operational strategic value
- Social, cultural, and ecological impact



5. Analysis:

Assumptions Used in this Analysis

- It is our expectation that MMSD facilities should be constructed (e.g., build new) to last +50 years.
- It is our expectation that MMSD facilities should be renovated to last an additional 25-30 years with components that have an expected remaining life of 10 years or less to be replaced as required.
- We conducted a full analysis on one high school/middle school combination (e.g., two schools, one site), two middle school/elementary schools combinations (e.g., four schools, two sites), and two middle schools (e.g., two schools, two sites).
 - Previously, the district has conducted mechanical and electrical evaluations and determined the other two elementary schools with the most critical needs based on age of components; these have been included in this analysis.
- Considering 21st century learning needs, modern educational classrooms often require the addition of square footage, especially in older buildings. The addition of square footage may apply to renovations and new building construction.
- If the cost to renovate exceeds 60% of the cost to replace, then replacement *may* be a more financially prudent approach for the district.
- BOE decisions on whether to renovate or build a new facility are made up of more information than the Cost-to-Replacement Ratio; community input and alignment with long-term district goals is critical to any final decisions the BOE makes.

Cost to Replacement Ratio

Due to a variety of factors, renovating a building is not always the most long-term, cost-effective or prudent approach to achieving the ultimate needs of the district, students, staff, and community. Primary factors that also must be considered include:

1. Improved learning environments and thermal comfort (air conditioning)
2. Improved accessibility
3. Improved safety and security
4. Progress towards sustainability goals
5. Operational efficiencies - reduced maintenance costs

In consideration of both the long-term costs and qualitative impacts on student and staff experience, the team leveraged a method known as Cost-to-Replacement Ratio analysis. The Cost-to-Replacement Ratio method of analysis quantifies the tipping point where the costs associated with renovation and/or additions are more costly to the district *in the long-term* than simply constructing a new building to replace the old. Further, the analysis asserts that if the cost to renovate exceeds 60% of the cost to replace, then replacement may be a more financially prudent approach for the district. It should be noted that this memo considers only the



quantitative cost to replace and the construction-related factors involved with replacement. The cost to replace will vary with specific school and site features; the budgetary cost for new construction is detailed in Appendix B.

The Cost-to-Replacement Ratio analysis does not include a discussion of the aesthetic value of the building to the community. Further discussion with the Board and in-depth community input will guide the Board in deciding the scope of the projects moving forward. The end result of all sources of information will be new or renovated facilities that our students deserve; facilities that are designed with today's standards and can provide 21st century educational outcomes of which our community can be proud.

6. **Recommendations:**

MMSD has held nine sessions over the last four months, engaging the community and collecting their input on this next exciting phase of our potential referendum planning process, focusing on the needs in some of our middle schools and select elementary schools. While this work is unfolding, the cross-functional planning team, crafted the following categories to analyze our middle and elementary school facility needs:

1. **Replacement:** Includes middle and elementary schools with significant capital needs and are recommended for replacement rather than renovation due to:
 - a. Age and condition as per 2023 Educational Facility Condition Assessment Report
 - b. Sufficient space on existing site to build new
 - c. Buildings above the Cost-to-Replacement Ratio threshold of 60%
2. **Renovation:** Includes middle and elementary schools that are in sufficient condition to operate in the near term, however:
 - a. Require more intensive capital investment to extend their useful life for 25 to 30 years with components that have an expected remaining life of 10 years or less to be replaced as required
 - b. Buildings below the Cost-to-Replacement Ratio threshold of 60%
3. **Ongoing Capital Improvements:** Includes middle and elementary schools that are in sufficient condition to operate in the near term:
 - a. Buildings with a composite grade of B or better as defined in the 2023 Educational Facility Condition Assessment Report
 - b. Buildings which require ongoing maintenance and improvements that will be funded through the MMSD operating budget rather than referendum dollars

The Cost-to-Replacement Ratio was applied to selected schools from the list of 14 schools named in the LRFP. Due to the age and condition of these schools, most of the selected eight



schools are over the 60% Cost-to-Replacement Ratio threshold and are therefore recommended to be replaced with new school buildings (see Appendix B). In consideration of the limitations of the construction market, planning staff, design process and others, the MMSD referendum planning team has evaluated two options for consideration as potential 2024 referendum options for the Board ranging from \$443M - \$507M to address the schools listed below. The timeline for the recommendations can be found in Appendix C.

OPTION 1:

Replace the following buildings at a total estimated cost of \$443M:

Shabazz City / Sherman MS	Recommendation: Replace with new
Blackhawk MS / Samuel Gompers ES	Recommendation: Replace with new
Toki MS / Orchard Ridge ES	Recommendation: Replace with new
Cherokee Hts MS	Recommendation: Replace with new
Sennett MS	Recommendation: Replace with new

OPTION 2:

Replace the above buildings and renovate the following at a total estimated cost of \$507M:

Anana ES	Recommendation: Renovate
Crestwood ES	Recommendation: Renovate

7. **Appendix A:**

- a. [Summary on Sustainability](#)

8. **Appendix B:**

- a. [Summary Matrix](#)

9. **Appendix C:**

- a. [Timeline for Recommendations](#)

10. **Appendix D:**

- a. [Map of sites, Periodic Table/Aerial](#)