



MAT-SU BOROUGH
SCHOOL DISTRICT

FACILITIES BLUEPRINT

SEPTEMBER
2022

CONTENTS

1.0 PURPOSE

2.0 INTRODUCTION

- 2.1 Infrastructure
- 2.2 Asset Values
- 2.3 Statutory Responsibilities
- 2.4 Community Use

3.0 MAJOR MAINTENANCE

- 3.1 Bond Debt and Grant Reimbursements
- 3.2 MSBSD Operating Fund Transfer

4.0 MINOR MAINTENANCE

- 4.1 Organization
- 4.2 Preventative Maintenance
- 4.3 Work Orders
- 4.4 Custodial Services
- 4.5 Recycling
- 4.6 Fleet Maintenance
- 4.7 Utilities / Energy Management
- 4.8 Operating Funds
- 4.9 Safety & Security Infrastructure
- 4.10 Compliance
- 4.11 Service Contracts

5.0 CAPITAL PLANNING

- 5.1 Attendance Areas
- 5.2 Facilities Design Criteria Manual
- 5.3 Deferred Maintenance
- 5.4 Funding Plan
- 5.5 Capital Construction

6.0 APPENDICES

- 6.1 Six-Year CIP List

1.0 PURPOSE

The Mat-Su Borough School District's (MSBSD/District) **Facilities Blueprint** is designed to outline and highlight how District facilities are maintained, developed, and planned. The State of Alaska prescribes maintenance plans (including a timeline for projected replacement schedules), to which all districts State-wide adhere. MSBSD recognizes that State-wide maintenance schedules are not always aligned with MSBSD needs, due to differences in materials used, weather changes, and use of space. MSBSD plans and projects finances for facility maintenance and renovation based on actual need, but continues to follow the State's guidelines for replacement and renewal.

In addition to clarifying the aforementioned planning schedule, this document will explain and describe how MSBSD runs its facilities, including daily use, both major and minor maintenance, and capital planning.

Any questions that arise from your reading of this document should be directed to:

MSBSD Facilities Department
3901 E Bogard Rd.
Wasilla, AK 99654
P. 907.864.2000
F. 907.864.2081



Fronteras
Spanish
Immersion
Charter School,
built in 2016,
is 31,000 sq. ft
and serves about
325 students in
grades K-8.

2.0 INTRODUCTION

2.1 INFRASTRUCTURE

The Mat-Su Borough School District supports **48 schools**. These schools range in average enrollment from about 20 students to nearly 2,000 students and span in size from 16,080 to 200,326 square feet (SF). In addition to these 48 sites, MSBSD supports 3 separate administrative buildings located in Palmer and Wasilla. **Total, MSBSD facilities cover about 3,000,000 SF.**

Each facility includes various systems that ensure the proper functioning and performance of the site. Systems include but are not limited to:

- Electrical systems
- Plumbing
- HVAC
- Roofs
- Foundations/substructures
- Exterior doors/windows
- Fire protection/suppression
- Interior doors/walls/ceilings
- Furnishings
- Equipment

2.2 ASSET VALUES

According to the District's FY23 Statement of Values, **MSBSD assets are valued at \$1,052,726,981**. The chart to the right breaks down the asset value by various category.

Building values comprise about 91% of the total asset value District-wide. Building contents make up another 6%, and the remaining 3% consist of physical assets other than the buildings (such as fields, land, etc.) and technology.

- Technology
- Other Than Buildings
- Contents
- Building Values



2.0 INTRODUCTION

2.3 STATUTORY RESPONSIBILITIES

As per State Statute [AS 14.14.060\(f\)](#), the school board shall provide custodial services and routine maintenance for school buildings. Additionally, as per State Statute [AS 14.14.090\(10\)](#), a district is to create a facilities management program that includes preventative maintenance (PM). The five key categories of the PM program are: maintenance management program, energy management plan, custodial program, maintenance training program, and renewal and replacement schedule. These components are spelled out in more detail in [AS 14.11.011\(b\)\(4\)](#), [AS 14.11.100\(j\)\(5\)](#), and [4 AAC 31.013](#). By adhering to these five requirements, MSBSD is eligible to receive State assistance for facilities funding and planning.

According to [AS 14.14.060\(f\)](#), the Mat-Su Borough (Borough) shall provide all major rehabilitation, all construction, and major repairs of school buildings. Given these shared responsibilities, it is important that MSBSD works closely with the Borough to manage facility needs.

2.4 COMMUNITY USE

MSBSD supports the public's use of district facilities. **Through the Community Use program, non-profit organizations, teams, and clubs can use MSBSD space at a reasonable cost.** The fee schedule is designed to cover the cost of utilities, custodial support, and materials.

Board Policy [BP 1330](#) and Administrative Regulation [AR 1330](#) govern the community's use of facilities. MSBSD manages facility access through a community use portal. Generally speaking, facility usage is granted on a first-come, first-served basis, with priority given to school events. Additional information about the Community Use program can be found on the MSBSD website (www.matsuk12.us > [Community](#) > [Community Use](#)).



School
gymnasiums
are frequently
requested via
the
Community
Use portal.

3.0 MAJOR MAINTENANCE

INTRODUCTION

As mentioned, the Mat-Su Borough is responsible for major maintenance of MSBSD facilities. This responsibility includes financing projects and managing capital improvement projects. The State of Alaska Department of Education and Early Development (DEED) administers school capital projects that include State funding. Additionally, DEED annually certifies districts for capital improvement program funding based on requirements outlined in [AS 14.11](#) as well as conducting an on-site certification assessment of school district preventative maintenance and facility management programs every five years.

MSBSD's most recent on-site assessment was completed in February 2022. **The 2022 report findings noted “the performance of the maintenance teams and affiliated personnel is excellent.”** Specific areas receiving laudatory comments were the preventative maintenance program, energy mitigation, custodial program, renewal and replacement efforts, and the cooperative effort between MSBSD and Borough personnel. A copy of the State-wide report can be found [HERE](#).

3.1 BOND DEBT AND GRANT REIMBURSEMENTS

The School Construction Debt Program (i.e. bond debt) allows incorporated cities, boroughs, and municipalities to take advantage of [AS 14.11.100](#) State aid for cost of school construction debt, and receive a reimbursed percentage of approved bond principal and interest payments.

As per [AS 14.11.100](#), the State of Alaska reimburses part of the cost of school construction that exceeds \$200,000, if the required square footage per student is met. Prior to 2015, costs were split 70/30, with the State paying 70% of costs and municipalities paying 30%. However, the Bond Debt Reimbursement program was suspended from January 1, 2015 until July 1, 2025 in order to help address the State's fiscal issues. When the program is reinstated, the split may be 50/50, an even division of costs between the State of Alaska and municipalities.

Aside from the debt program, DEED annually evaluates Capital Improvement Project (CIP) grant applications that are submitted by districts on or before September 1. Applications are scored and prioritized according to the criteria in [AS 14.11](#) and [4 AAC 31](#). Capital improvement grant priority lists are used by the governor and the legislature to determine school construction and major maintenance projects for funding consideration in the State's capital budget. An initial list of projects is released November 5 and a reconsideration list is posted by December 15. A final list is submitted for State Board of Education approval after any district's appeal of the reconsideration is finalized.

To be eligible for State funding, districts must have a six-year CIP plan, a fixed asset inventory system, adequate property loss insurance, and a facility management program certified by the DEED Facilities Department that includes a preventative maintenance program. MSBSD's current six-year CIP list is included in Appendix 6.1.

3.0 MAJOR MAINTENANCE

3.2 MSBSD OPERATING FUND TRANSFER



Annually, the School Board considers requests for major maintenance outside of the State bond debt and grant reimbursement programs. **When approved, these appropriations transfer funding from MSBSD's operating fund into a Capital Improvement Project (CIP) fund.** Capital improvement projects include mechanical improvements, flooring, parking lot repairs, etc. These projects typically require more immediate attention or would not score well when using the State's scoring criteria as described in the previous section.

MSBSD makes efforts to consolidate categories of project needs into District-wide projects for consideration where appropriate. For example, if six gymnasiums throughout MSBSD need lighting upgrades, those six schools are grouped into one "lighting upgrades" project when presenting to the School Board for approval. Appropriations for various safety and security improvements and Americans with Disabilities Act (ADA) improvements are generally funded using this process as well to quickly and effectively meet evolving needs.

Over the last 10 years, MSBSD has contributed over \$34 million to its CIP Fund to support major maintenance needs. MSBSD is committed to the ongoing support of its CIP and major maintenance needs through the development of its long-term strategic financial plan.

Portions of Iditarod Elementary siding were failing and in need of repair.



4.0 MINOR MAINTENANCE

INTRODUCTION

MSBSD's Facilities Department provides minor maintenance, custodial services, energy maintenance, and fleet maintenance District-wide. Centrally located on Bogard Road in Wasilla, the Facilities Department deploys staff daily to meet service request needs.



The Facilities Department utilizes TeamDynamix, MSBSD's online tool for tracking facility and staff service requests and needs. This includes receipt of maintenance requests, assignment of the request to a maintainer, tracking the progress of a request, communicating with the requestor, and closing the request. Analyses are conducted that provide insight to the minor maintenance being assigned to and completed by Facilities staff.

The **Facilities Department employs 48 Full-Time Equivalent (FTE) employees** dedicated to the maintenance and operations of MSBSD buildings. These professionals are committed to providing safe and healthy schools for students, staff, and community use. They oversee the care of MSBSD buildings and physical structures, provide oversight to the energy conservation program and capital improvement projects, and help facilitate other needs, such as snowplowing and support for graduations.

In addition to the FTE mentioned above, the Facilities Department provides a robust summer work program in which students can work as part of the grounds maintenance team and/or assist with construction projects. The grounds maintenance teams are responsible for land maintenance at all MSBSD sites.

Student workers hired on the construction teams are routinely paired with certified teachers each summer to enhance skill development opportunities. These teams complete construction needs related to new portable placement (necessary to accommodate growth) or renovation, including decking, skirting, ramps, and painting.

4.0 MINOR MAINTENANCE

4.1 ORGANIZATION

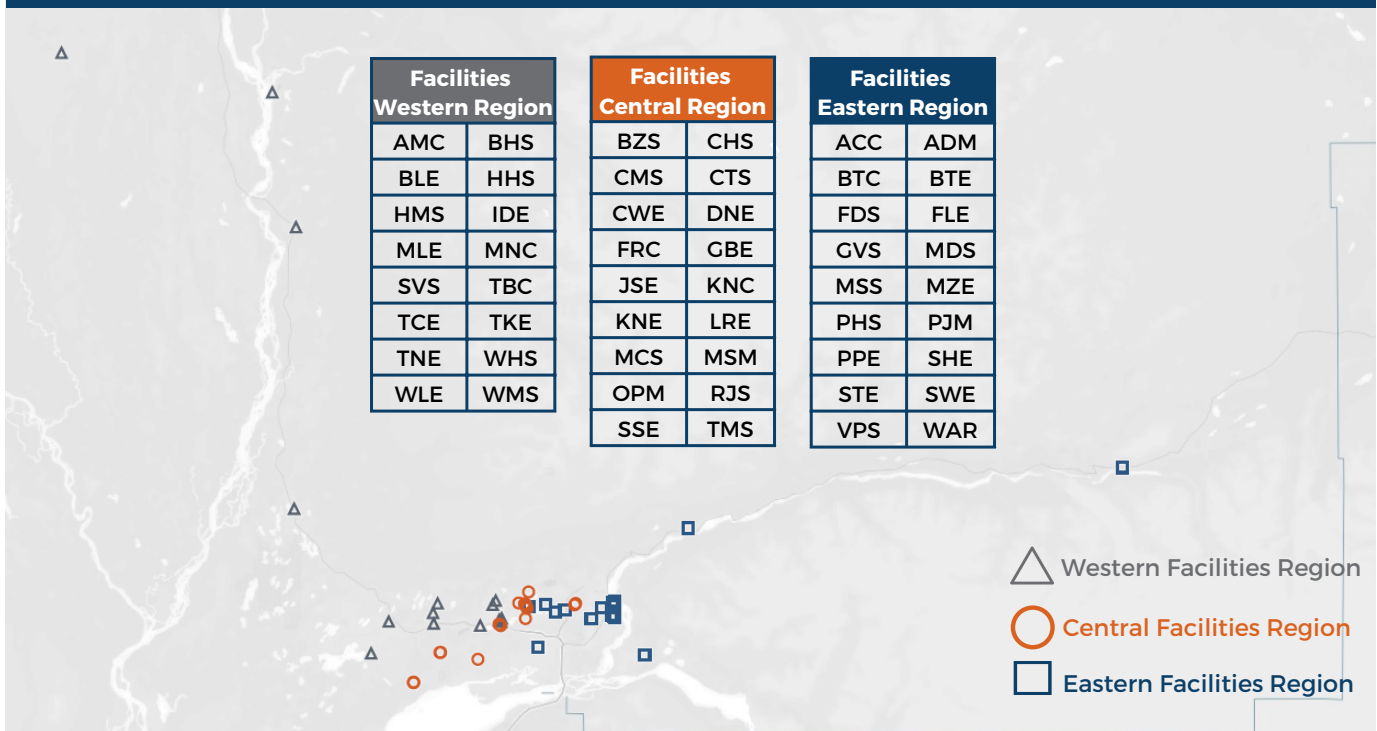
Due to the magnitude of its size and the various locations throughout the District, the Facilities Department operates as four key teams:

- **Western Region**, serving Wasilla and communities north of Wasilla
- **Central Region**, serving the Borough's core area
- **Eastern Region**, serving Palmer and communities north of Palmer
- **Auto Shop**, based at the Facilities Department and servicing all fleet vehicles

Each regional team consists of a foreman, custodial supervisor, and a team of maintainers. The auto shop consists of a supervisor and mechanics.

Facilities Department Support Regions

This map of the Mat-Su Borough highlights the location of schools within each region. Creating regions in the District allows staff to better allocate their time and respond appropriately to needs.



As new schools are added, regions may be re-organized to better meet the needs of schools and to increase the effectiveness of Facilities staff. Some maintainers are split between two or more regions. For example, MSBSD employs just two locksmiths and two refrigeration technicians who split their time between all schools and administrative buildings throughout the District.

4.0 MINOR MAINTENANCE

4.2 PREVENTATIVE MAINTENANCE



Preventative Maintenance (PM) involves pre-scheduled and routine maintenance of building systems and equipment.

The PM program is housed in TeamDynamix. Alaska State Statute mandates that the District has a PM program, which is audited annually, alongside the work order program.

Preventative Maintenance focuses primarily on these crafts:

- Electrical
- HVAC
- Boilers
- Audio/Visual
- Plumbing
- Vehicles

PMs are assigned to maintainers by Facilities Department staff, based on manufacturers' recommendations or best practices. Maintainers are responsible for tracking and performing PM based on the pre-set schedule.

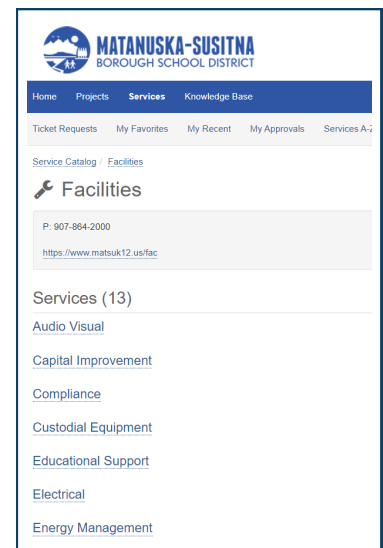
4.3 WORK ORDERS

Maintenance work orders allow staff to respond to breaks, repairs, and other tasks as needed. Like PM, work orders are tracked in TeamDynamix. Work orders can include any number of crafts, such as:

- Doors & Hardware
- Glass/Window Repairs
- Intercoms
- Keys & Locks
- Painting
- Locker Repairs
- Signage
- General Maintenance

The Facilities Department's response rate in completing work orders is favorable: about **75% of work orders are closed within 30 days** of entry. Almost 85% of work orders are closed within 90 days. The remaining 15% of work orders generally include long-term projects, work that requires favorable seasonal conditions, or projects that require additional funding or coordination between several staff, schools, and/or organizations.








By routinely reviewing work orders, MSBSD ensures that staff, students, and facilities receive the timely attention they deserve for work that must be completed to provide safe and healthy environments for all. TeamDynamix provides a dashboard for managers to review and track aggregate data to ensure work is completed in a timely manner and properly prioritized.



4.0 MINOR MAINTENANCE

4.4 CUSTODIAL SERVICES

MSBSD employs 114 custodians, for a total of **103.35 custodial FTE**. Custodians are responsible for cleaning bathrooms, entrances, offices, classrooms, workrooms, and snow removal/sanding of the sidewalks during the winter. Three supervisors within the Facilities Department oversee the custodial workforce, District-wide. Effective FY18, MSBSD implemented the following standardized metrics and work shifts for custodial workforces. FTE per site may vary slightly and are illustrated below in general terms:

<p>These metrics represent a 17% reduction from FY17 staffing levels, resulting in a savings of \$4M in the past five years.</p>	Elementary Schools 2.0 FTE	Middle Schools 4.0 FTE	High Schools 6.0 FTE
	1st Shift 6:00am-2:30pm (Secondary) 7:00am-3:30pm (Elementary)		
	2nd Shift 3:30pm-12:00am (Secondary) 4:30pm-1:00am (Elementary)		
	3rd Shift 10:00pm-6:00am (Secondary)		
 =1.0 Custodial FTE			

4.5 RECYCLING

In FY19, MSBSD launched a **District-wide recycling program** at 31 sites. A recycling pilot program, active for six months during FY18 at three centrally-located schools, proved this model to be effective. In fact, during those six months, 21.32 tons of refuse was diverted from the Mat-Su Borough Landfill. This equates to 20% of all refuse removed from schools during the six month period being recycled.

In addition to mixed bins strategically placed within schools, MSBSD contracts with a vendor to provide cardboard recycling. Cardboard dumpsters are picked up and emptied as needed, about once a month, for recycling. Based on projections, this program has the potential to **divert over 200 tons of refuse** annually from the Borough landfill.

MSBSD and the Facilities Department have enjoyed helping facilitate this recycling service for staff and students.



4.0 MINOR MAINTENANCE

4.6 FLEET MAINTENANCE



MSBSD has a combination of **more than 250 vehicles, heavy equipment, lawn tractors, and generators maintained by three mechanics.** The vehicles and equipment are used primarily for:

- Transporting tools, parts, and equipment
- Snow removal
- Grounds keeping
- Emergency call-outs
- Emergency power

The Auto Shop performs all service requests and preventative maintenance on the vehicles, including oil changes, tire rotations/changes, replacing belts, and regular service checks.

4.7 UTILITIES / ENERGY MANAGEMENT

In order to **maintain a safer and healthier learning environment** and to complement the energy management program, MSBSD manages a preventive maintenance and monitoring plan for its facilities and systems, including heating, ventilation, and air conditioning (HVAC); building envelope; and moisture management. The District employs an Energy Manager who oversees the District's utility usage and manages the District's facility schedules for heating, cooling, and lighting. Facility schedules and temperature set points are managed via building automations and consider facility use and after school activities. Additionally, MSBSD shuts down boiler operations during summer months to conserve energy and regularly looks for capital improvements that include materials that realize utility savings such as LED lighting. Additionally, IT staff utilize software to manage shutdown schedules for computers to save energy during non-school hours.

4.8 OPERATING FUNDS

MSBSD operations and maintenance funding comes from the District's operating budget. In FY21, expenditures related to the operation and maintenance of facilities were 10% of the total General Fund expenditures (including utilities), or \$1,369 per pupil. **The average age of MSBSD facilities is approximately 29 years with 50% of the District's facilities over 34 years of age.**

Current funding for facilities maintenance provides approximately \$2.11 per SF annually. This funding accounts for supplies, equipment, purchased services, and salary and benefits for maintenance staff.



4.0 MINOR MAINTENANCE

4.9 SAFETY & SECURITY INFRASTRUCTURE

School safety infrastructure has significantly improved over the past decade. MSBSD implemented and maintains **14 major safety and security infrastructure standards** across the District. Below is a brief summary of each system and its intended purpose.

1. Keyless Access Control System. This system is used to access District facilities and arm/disarm the intrusion detection system. Staff swipe their badges and enter a security code to arm and disarm the security system. This system allows for scheduling locking and unlocking of exterior doors District-wide. Additionally, the system tracks and logs card access. This reduces utility key costs and supports centralized management of third party access (e.g. facility use, contractors, etc.). This system is integrated with the duress and lockdown system.

2. Video Doorbell and Remote Lock/Unlock. This system allows schools to keep doors locked during the day, admitting only those visitors that have been screened by the school's front office staff.



3. Intrusion Detection System. This system is used to protect facilities against crime and vandalism. The system includes motion detection, exterior door/window in the open position, and glass break sensors.

4. Magnetic Holds. Door magnets are used to release fire rated doors to create a barrier during fire alarm activation. When activated from a lockdown or duress station, the doors close and assist in securing the rest of the school.

5. Duress and Lockdown Call. A duress station activation calls a third party monitoring company and the police; automatically activates the facility exterior strobe emergency indicator; remotely (automatically) locks exterior doors; plays a pre-recorded system announcement school-wide; and closes interior hold-open doors.

6. Radio Communications. Trunked radios are provided to each site as an alternate means of communication for administrators in an emergency situation. Line of sight radios are provided for two-way communications between administrators and staff in order to support both routine communications and emergency communications.

7. Security Cameras. The goal of the security camera system is to protect students, staff, facilities, and assets; and to observe and record actions in and around a facility. A video system provides live and recorded video images. Additionally, it provides forensic evidence and staff training opportunities from recorded video images, the capability to audit compliance with policies/procedures, and remotely view activity and history at a facility.



4.0 MINOR MAINTENANCE

4.9 SAFETY & SECURITY INFRASTRUCTURE, cont.

8. Addressable Fire Alarm and Sprinkler System. Fire detectors and devices are connected back to a central control panel. Each device has an address or location, enabling the exact detector that was triggered to be quickly identified by emergency personnel. These systems are deployed per National Fire Prevention Association (NFPA) Code.



9. Intercom. This system provides amplified communication for the entire school. Intercom benefits include: emergency announcements are activated with a single press of a button, automated messages can notify everyone instantly throughout the facility, and a hands-free intercom allows staff to communicate from the office or a classroom.

10. Automated External Defibrillator (AED)/Stop the Bleed Kits. An AED is a portable device, installed in all schools, that automatically diagnoses life-threatening cardiac arrhythmias of ventricular fibrillation and ventricular tachycardia in a patient and is potentially able to help the heart re-establish an effective rhythm through defibrillation. Schools are also equipped with Stop the Bleed Kits. These kits are designed to provide bystanders and initial first responders with quick and easy access to essential medical equipment for stopping life-threatening bleeding.

11. Interior Roll-Down Gates. Gates provide the means to partition and segment the building into multiple zones and allow for after-hour use of a portion of a facility without creating access to the entire interior of the facility.

12. Exterior Lighting. Lighting illuminates roads, driveways, and entries/exits for safer movement of vehicular traffic. It also illuminates sidewalks, pathways, and entries/exits for safer movement of pedestrian traffic. Lighting reduces areas of darkness and shadows around school grounds discouraging lurking of unauthorized individuals and improving security camera monitoring.

13. Security Fencing. Fencing has many purposes: it defines the perimeter of school property; delineates the transition from public to private property; provides a physical barrier around play areas and sports fields to keep students within appropriate areas and simultaneously restrict access to unauthorized visitors, snow machines, and animals; funnels vehicular and pedestrian traffic to designated entries/exits; and, when combined with exterior vehicular and pedestrian gates, provides a physical barrier to entry.

14. Pedestrian and Vehicle Gates. Gates aid in restricting access to pre-defined scheduled hours, defines and provides the designated entries/exits, and combines with security fencing to provide a physical barrier to entry.

MSBSD takes the safety and security of all students and staff very seriously and is continuously looking for opportunities to make the District a safe and healthy place to learn and work.

4.0 MINOR MAINTENANCE

4.10 COMPLIANCE

Code compliance is at the forefront of the Facilities Department's operations. The department actively monitors **7 major areas of building compliance**.

1. Fire Inspections. Fire inspections are conducted yearly or unannounced. The building under inspection should meet a set of standard codes related to fire safety:

- Fire detection and alarm systems;
- Types and operational state of fire extinguishers;
- Fire hydrants and pump tests; and
- Means of egress and emergency signage.

2. Water Quality Testing. The Facilities Department oversees the operations of 37 water wells. MSBSD works closely with the Alaska Department of Environmental Compliance (ADEC) to ensure the water source, treatment, distribution system, finished water storage, pumping, management, and operations meet ADEC requirements.

3. AHERA. The federal Asbestos Hazard Emergency Response Act (AHERA) requires all public and nonpublic elementary and secondary schools to document all areas of schools that have (or may have) asbestos material. These areas are required to be re-inspected every 3 years for all known, or assumed, asbestos-containing building materials (ACBM). In order to meet these requirements, the Facilities Department maintains a supervisor who is a certified AHERA Manager and several maintenance personnel, from each region, who are certified as AHERA Inspectors.

4. Seismic. Following the November 2018, 7.1 earthquake, the District implemented additional safety measures and continues efforts to bring buildings in-line with current standards and best practices. Some of these efforts include:

- Emergency gas shut-off valves;
- Upgraded drop ceilings; and
- Updated Emergency Operating Procedures (EOP).

5. Elevators. The Facilities Department oversees the operation of 23 elevators and works closely with State of Alaska inspectors to ensure each elevator operates safely and passes the required annual inspection.

6. American Disabilities Act (ADA). MSBSD identifies both operating and capital improvement funds, on an annual basis, to improve and maintain access throughout the District. These improvements often include push-button door openers, ramps, handrails, and bathroom improvements.

7. Radon Testing. In FY 2022, the District completed radon testing and laboratory analysis at 38 school sites. The intent of this effort was to test and monitor air quality of indoor environments for a baseline comparison to the levels recommended by the U.S. Environmental Protection Agency (EPA).

4.0 MINOR MAINTENANCE

4.11 SERVICE CONTRACTS

MSBSD utilizes **multiple service contracts with various providers**. These service contracts augment District staff capacity and provide technical skills unique to different building control and compliance systems. These contracts provide for technical support, troubleshooting, and training for maintenance staff on systems including, but not limited to, building automation/HVAC, fire system, access control, security cameras, fire, and security monitoring.

Service contracts are also used in areas where MSBSD does not retain in-house expertise or does not have sufficient capacity to meet all of the District's needs. An example where the District does not retain in-house expertise or equipment is parking lot maintenance, such as crack sealing, sealcoating, and striping. MSBSD also maintains snow removal contracts for more rural service areas where additional capacity is needed.

FY22 Service Contracts included
(top to bottom right):

- Mat-Su Career & Tech HS parking lot expansion
- Houston HS water tank installation
- Knik Charter portable carpet installation



5.0 CAPITAL PLANNING

INTRODUCTION

Capital Planning is the process by which MSBSD projects future needs, develops plans to meet those needs, secures funding, and implements the plans. Many aspects go into Capital Planning.

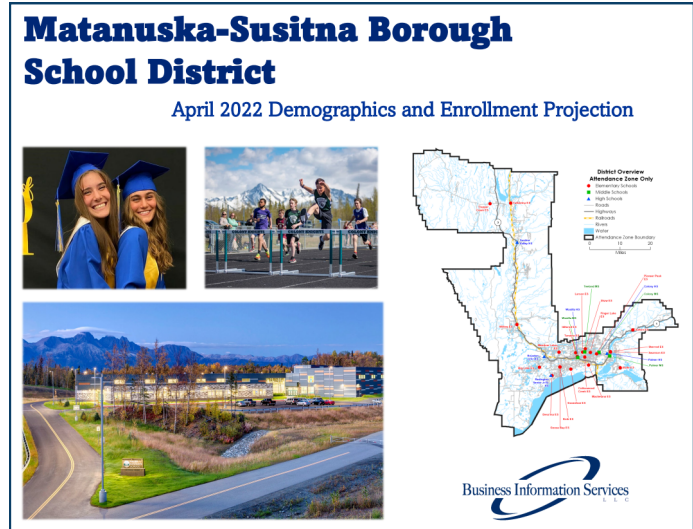
5.1 ATTENDANCE AREAS

Districts in Alaska are divided into attendance areas, which allow them to **calculate remaining capacity and identify over-capacity schools within specified regions**. When an attendance area reaches capacity at the elementary or secondary level, the district may be eligible to build additional schools to meet the needs of these “unhoused students”. DEED calculates allowable space for each school level on a SF-per-student (based on Average Daily Membership, or ADM) metric. The table below gives an example of this calculation:

School	School Level	Gross SF (A)	SF per ADM (B)	Allowable ADM (C) = A / B	FY22 ADM (D)	Remaining Capacity (C - D)
Pioneer Peak Elementary	Elementary	50,864	114	483	502	-19
Teeland Middle	Secondary	135,000	165	818	777	41

During the 2021-2022 school year, the District commissioned a demography study with Business Information Services, LLC. One of the deliverables of the study was to assess facility capacity with respect to both current and projected enrollment. The study found that there is more than enough facility capacity to house current enrollment.

The following is an excerpt from the final report, published in April 2022. “Our calculations show that currently the district should be able to accommodate 21,685 students. With a current enrollment of 18,963 among the 47 current buildings, district-wide our calculations show that in theory there is space for 2,700 additional students. However, in reality, it is unlikely that many students could be housed in the current building footprint ... Also, the large area that the district spans – 25,000 square miles – can make it impractical to try to share some buildings more equitably.” A copy of the demography study can be found [HERE](#).



5.0 CAPITAL PLANNING

5.2 FACILITIES DESIGN CRITERIA MANUAL

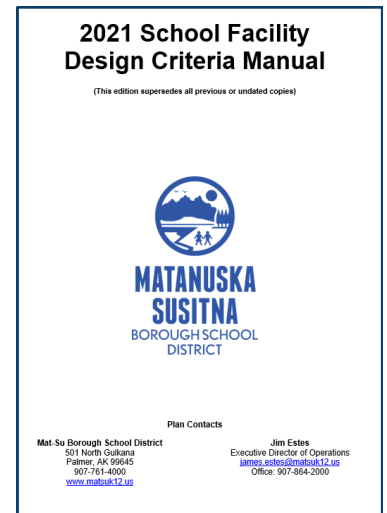
The MSBSD Facility Design Criteria Manual (FDCM) is intended to guide designers, constructors, and tradesman in selecting materials, components, equipment, and systems when designing MSBSD educational facilities. The manual assumes that the projects covered are publicly-funded new construction or major renovations by the State of Alaska and subject to DEED capital project requirements.

The FDCM focuses on **establishing uniform guidelines to achieve a high level of performance and standardization**. Standard materials and equipment create predictable operational and maintenance efficiencies, reducing costs and complexity. Additionally, standards seek to create equally safe, healthy, and maintainable environments for learning across the District. Within the last two years, the FDCM has been completely reviewed and updated by a committee of MSBSD staff.

Preferences and prohibitions are outlined using Construction Specifications Institute (CSI) division format with some areas receiving greater specificity than others. Strategies outlined in the manual include establishing a uniform set of guidelines for product selection based on function and lifecycle and establishing minimum criteria for system design, security systems, and hardware.

The guidelines outlined in the manual intend to accomplish the following goals:

- Provide for optimal learning environments
- Ensure healthy, safe, and secure facilities and grounds
- Standardize maintenance and stocked supplies
- Maximize durability and longevity
- Reduce energy usage
- Provide a complete and finished facility for educational and public use



Joe Redington Jr/Sr HS, home of the Huskies, was built in 2014 and educates approximately 560 students.



5.0 CAPITAL PLANNING

5.3 DEFERRED MAINTENANCE

Deferred maintenance is the act of postponing maintenance needs (such as repairs or replacements) in order to save money, time, or effort. It also refers to the items themselves that have been deferred. The National Council on School Facilities recommends annual funding for capital renewals and deferred maintenance at 2-4% of the current replacement value. When considering MSBSD's building values, this benchmark would require annual funding between \$20-30 million per year.

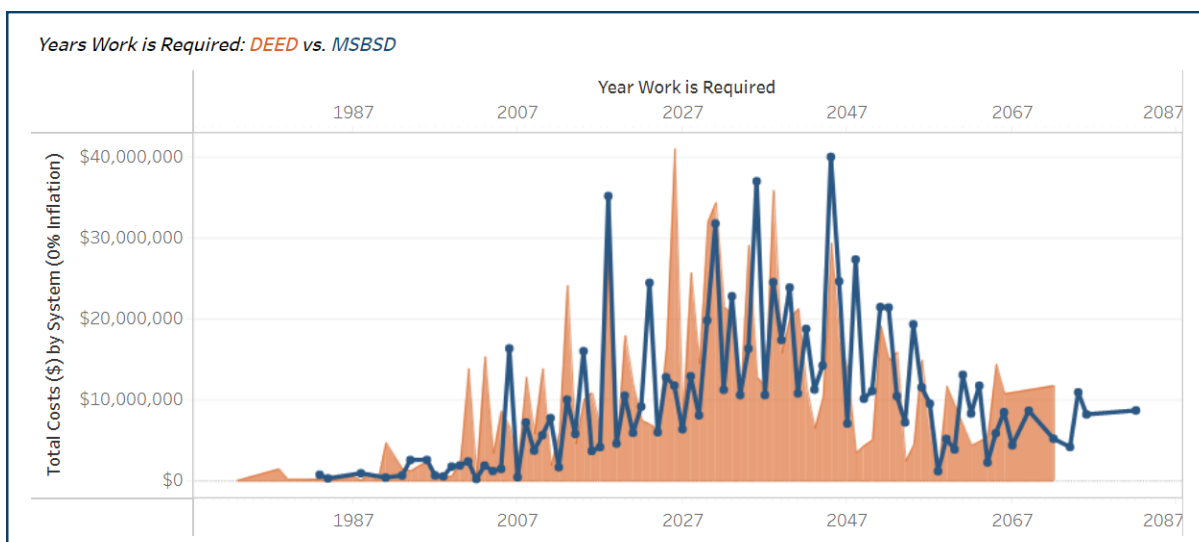
DEED outlines the maintenance schedule for all building systems within each school, statewide. However, differences in the environment, materials available or used, and site type vary greatly between geographic regions of the state. For that reason, MSBSD has calculated a maintenance schedule that more accurately represents the District's needs.

The chart below is a timeline of the year work is required for various building systems as per **DEED's** guides and **MSBSD's** calculations. Generally, MSBSD's calculations allow for several extra years of use before work or replacement is required. Therefore, MSBSD's current deferred maintenance needs are estimated to be \$235 million (**DEED**) and \$166 million (**MSBSD**).

AVERAGE REMAINING SYSTEM LIFESPAN:

5.37 YEARS
(DEED-calculated)

11.17 YEARS
(MSBSD-calculated)



5.0 CAPITAL PLANNING

5.4 FUNDING PLAN

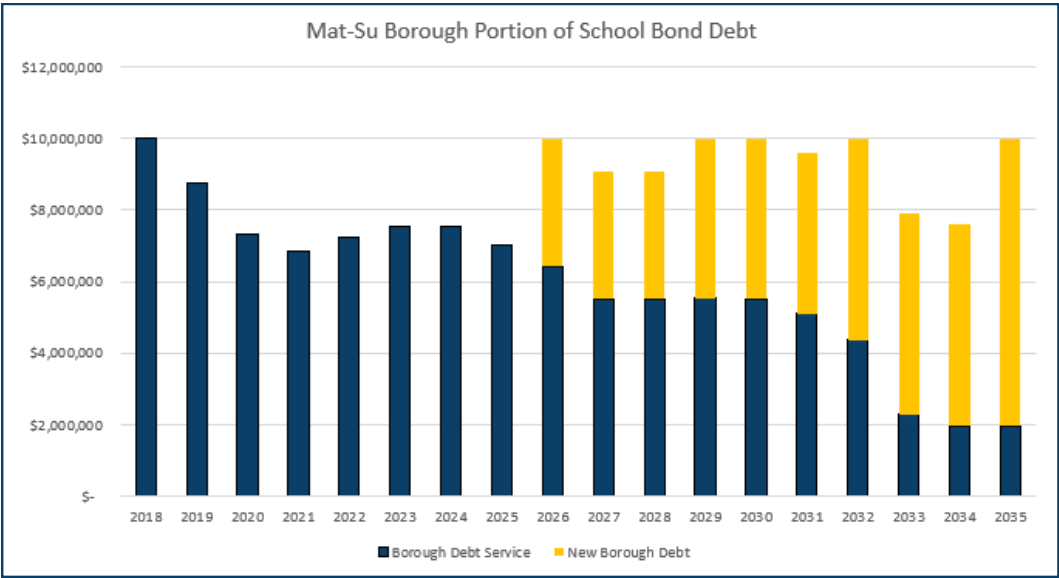
MSBSD’s long-term capital planning efforts are focused on utilizing the Mat-Su Borough’s current level of spending for school bond debt to propose smaller bond issuances. In 2011, Borough residents supported a \$214 million school bond debt issuance. While this “mega bond” was very helpful in addressing the District’s capital needs, large bond issuances every 5 to 10 years make it difficult to align financial resources with evolving facility needs based on growth and/or failing building systems. Therefore, MSBSD wishes to **pursue smaller bond issuances on a more frequent basis to help smooth the resource allocation for school debt service over time.**

Given recent reductions to State funding for the School Bond Debt Reimbursement Program, the District is presenting a moderate revenue scenario where past debt obligations are funded at 70/30 and future payments are fully funded by the Mat-Su Borough. The following tables and charts, depicting future bond issuances under this funding scenario, preserves the historic level of spending and taxation for future bond issuances at approximately 1 mill. These bond issuances do not meet all forecasted deferred maintenance needs (see section 5.3, Deferred Maintenance) and may require additional funding to support new school construction. The future costs are presented in present value (today’s dollar), assuming a 20-year term at a 6% interest rate.

Moderate Scenario

Assumes past debt funded at 70/30 and future debt payments fully funded by the Borough:

Fiscal Year	Bond Issuance	State Contribution	Borough Contribution
2024	\$40,951,759	\$0	\$40,951,759
2027	\$10,297,936	\$0	\$10,297,936
2030	\$13,316,980	\$0	\$13,316,980
2033	\$27,450,435	\$0	\$27,450,435



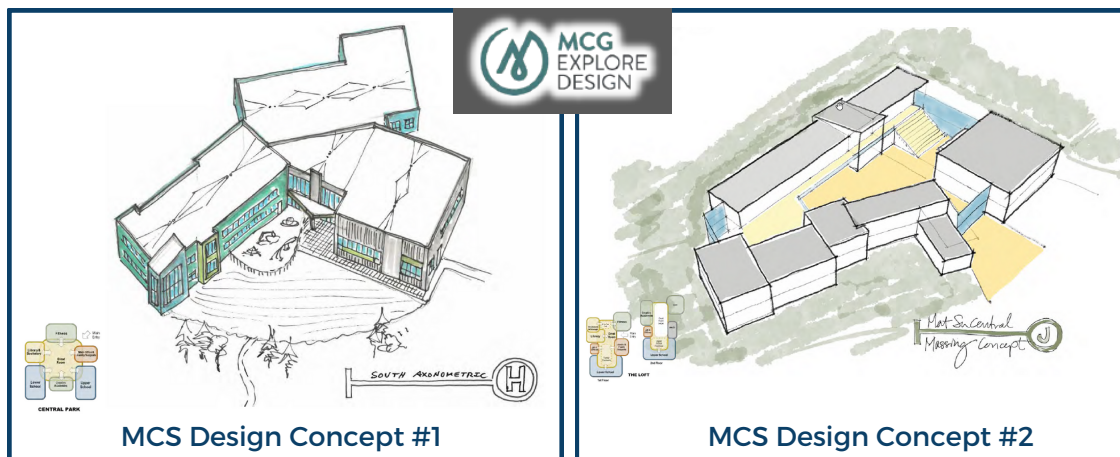
5.0 CAPITAL PLANNING

5.5 CAPITAL CONSTRUCTION

Houston High School: Following the November 2018 earthquake, the Mat-Su Borough moved forward with the demolition of the old facility and the design and construction of a new high school facility to serve the Houston community with a Career & Technical Education focus. Funding for the project did not require the issuance of debt. Instead, project funds included a combination of insurance proceeds, an appropriation from the State of Alaska, and assistance from the Federal Emergency Management Agency (FEMA). The project is under construction with substantial completion scheduled for spring 2023.



Mat-Su Central School: On March 3, 2022, the Mat-Su Borough School District committed \$11.9 million to the District's Capital Improvement Plan (CIP) Fund for design and construction of Mat-Su Central School. In June 2022, the District contracted with MCG Explore for design services. A final design phase is expected to be completed by February 2023. Mat-Su Central School is the largest and fastest growing school in the District, serving over 2,200 students. Mat-Su Central School is a statewide correspondence program that offers students a hybrid learning model with many on-site courses. The school has leased commercial office space for the past 30 years and has outgrown its current facility.



6.0 APPENDIX

6.1 SIX-YEAR CIP LIST

A six-year plan is a document for **planning and anticipating necessary capital improvement projects**. A Capital Improvement Project (CIP) is a substantial, non-recurring expenditure for a physical improvement with a long useful life. Capital improvement projects are not part of the District's preventive (or routine) maintenance or custodial care programs. CIPs are derived from reviewing renewal and replacement schedules, enrollment projections, needs identified by school personnel/professional architects/engineers through a condition survey, recommendations from an energy audit, etc.

This document is required under **AS 14.11.011** for grant or debt reimbursement applications and as a planning and presentation tool for all CIPs, regardless of whether the project will be submitted for **AS 14.11** state aid funding consideration. It is also a valuable tool for the school board in fulfilling its duty under **AS 14.08.101** to approve the district's six-year capital plan. For a state-wide list of CIP projects, click **[HERE](#)**.



Aerial view of Houston Middle School with the new Houston High in the foreground, framed by the beautiful Talkeetna Mountain Range.

6.0 APPENDIX

6.1 SIX-YEAR CIP LIST, cont.

Matanuska-Susitna Borough School District FY 2024 Six-Year Capital Improvement Plan								
District Priority	Project Location & Description	FY24	FY25	FY26	FY27	FY28	FY29	Estimated Cost
1	Mat-Su Central Replacement Facility	\$24,230,364	-	-	-	-	-	\$24,230,364
2	CMS, WMS Roof Replacement	\$4,514,921	-	-	-	-	-	\$4,514,921
3	District Elevators - ADA & Code Compliance	\$1,612,539	-	-	-	-	-	\$1,612,539
4	District Seismic Upgrades	\$12,216,962	-	-	-	-	-	\$12,216,962
5	District Seismic Architectural	\$3,785,344	-	-	-	-	-	\$3,785,344
6	District-Wide HVAC	\$10,618,114	-	-	-	-	-	\$10,618,114
7	District Athletic Field Upgrades	\$10,088,661	-	-	-	-	-	\$10,088,661
8	Box School Renovation - BTE, CWE, PPE, SSE	-	-	-	\$20,320,000	-	-	\$20,320,000
9	District-Wide Emergency Generator Replacement Phase (7 Schools)	-	-	-	\$6,760,486	-	-	\$6,760,486
10	Palmer High Mechanical Upgrade Phase #3	-	-	-	\$3,652,000	-	-	\$3,652,000
	Total	\$67,066,905	-	-	\$30,732,486	-	-	\$97,799,391

