

#### CHARTER SCHOOL OVERVIEW

Mission Achievement and Success (MAS) Charter School's Governing Board, for each school within the district, shall cooperate with leaser of the property in the development of a five-year Facilities and Structure Plan, beginning July 1, 2018. This plan shall be reviewed and updated annually or as needed. An executive summary of the plan shall be completed as part of the overall plan to ensure that the intent and other considerations addressed during the drafting of the plan remain current to the situation as presented at the commencement date of any remolding, replacement, new construction, renovations, repairs, or entrance into a new lease agreement.

The intent of the plan is to be an aid in preserving assets of the school; maintaining clear responsibilities of the leaser versus leasee in respect to facilities and structures; to be a useful resource for the Board in forecasting school needs; assisting the Board with establishing priorities connected with the changing conditions and infrastructure needs; identifying health and safety needs; and to strategically plan for growth.

The health and safety of students at Mission Achievement and Success Charter School is one of the Board's highest priorities. This Plan is to provide a systematic approach in establishing the infrastructure needs, and prioritizing those needs in the form of a five-year Building and Structures Facilities Plan. When completed, the plan will be an aid in preserving assets of the school, and will become a guide to the Board when determining where dollars should be spent, requests for updates or modifications to the landlord, as well as a tool to help educate the public about the needs of the school.

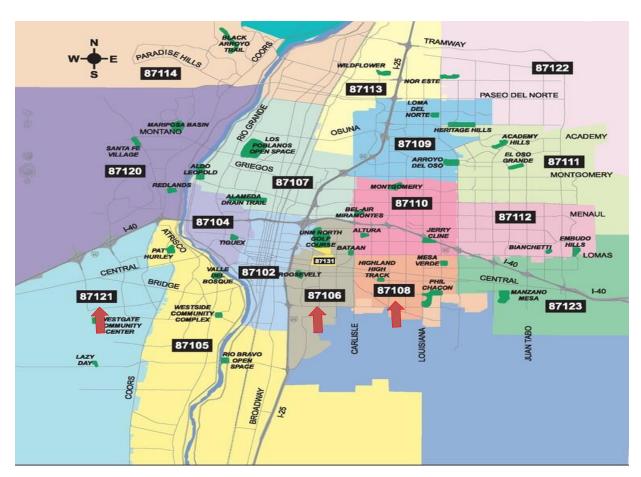
Mission Achievement and Success Charter School was approved by the New Mexico Public Education Commission for operation to commence in the 2012-2013 school year under a five year charter agreement. MAS was also approved to replicate and open a second location. Our second location is at 1255 Old Coors Drive in Albuquerque and the commence date for our new location will be for the 2018-2019 school year. The current charter cap is 1140 students per site and enrollment for the 2018-2019 school year is estimated at 1040 students for the 1718 Yale location and 120 students for the 1255 Old Coors Drive location.

As specified in lease agreements, and as agreed upon by the landlords prior to lease operational periods, all properties must meet the statewide Adequacy Standards as expressed NMAC 6.27.30.

Mission Achievement and Success Charter School was reviewed by the Public Schools Facility Authority in 2018 as assurance to these standards.

#### **SUMMARY**

Mission Achievement and Success Charter School was originally granted charter for the 20122013 school year. The School's charter was recently renewed for an additional term of five years beginning for the 2017-2018 school year through the conclusion of the 2021-2022 school year. MAS Charter School serves students from grades K-12 at our Yale location and will eventually serve the same grade range at our Old Coors Drive location. With that said, for the 2018-2019 school year, Old Coors Drive location will serve students in grades K-1 with a scale up plan to add on average one to two grade levels per year until we serve the full spectrum of grades K-12 at that location as well. The enrollment cap is 1140. The school has an associated not-for-profit foundation which is designated as a component unit of the school. Mission Achievement and Success Charter School serves primarily the Albuquerque Metropolitan area and is located on the Southeast quadrant of Albuquerque, New Mexico. It is within the Albuquerque Public School District with an address of 1718 Yale Blvd. SE 87106 and our new location is at 1255 Old Coors Rd. SW 87121. While students in and out of the APS District may attend MAS, most of MAS students reside in the neighborhoods surrounding the school. Approximately 80% of MAS students reside in the 87108, 87106, and 87121 zip code areas of Albuquerque. The remaining reside in the zip codes near the school as shown on the map below.



#### 1. GOALS/MISSION

#### 1.1 Goals

#### 1.1.1 Mission

The mission of MAS is to prepare students to be successful in college and the competitive world by providing a rigorous college preparatory program in a safe and effective learning environment. Our primary objective is to instill in our students a commitment to high academic achievement, continual goal setting, and principles of personal success.

# Describe the desired state of school's educational programs

Component 1: Laser like focus on academic achievement using data to drive instructional decisions

Component 2: Clear curriculum alignment with common core and state standards

Component 3: Frequent assessment of student progress with multiple opportunities for improvement

Component 4: Emphasis on non-fiction writing

Component 5: Collaborative scoring of student work

Component 6: High expectations

Component 7: Positive school culture with proactive approach to student discipline

Component 8: Inclusive education

Component 9: Ongoing professional development and collaboration

Component 10: Parental and Community Involvement

Component 11: Development of Success Principles Action Plans

# 1.1.2 Briefly describe the general educational philosophy

MAS believes that all children, regardless of race, economic status, or past educational experiences can succeed if they have access to a great education. Providing a great education means surrounding students with a team of dedicated, passionate, and highly effective educators who embrace a "no excuses, whatever it takes" attitude to ensure that our students not only earn a high school diploma, but possess the skills to experience success in college and the competitive world.

#### 1.2 Process

# 1.2.1 Describe process for data gathering and analysis

At MAS, our instruction is driven by one primary goal—outstanding student achievement, and this can only become a reality through intensive, day-to-day monitoring of student progress data. At MAS, teachers assess student learning informally and/or formally on a daily basis and modify their instructional plan accordingly. In each classroom you will find data walls that track classroom progress toward the learning standards and hold us accountable, in part through awareness and transparency. How is our approach different in regard to using student data? What makes us different is that while we hold high standards for our students, we, meaning the adults, ultimately

take full responsibility for the achievement of our students, and daily monitoring of student progress data is one way we maintain responsibility for our students' outcomes.

# Identify individual representing the school authorized as contact on issues and questions related to this submission

Bruce E. Langston, Board Chairman JoAnn Mitchell, Principal/Superintendent Kathy McClendon, Assistant Principal

# Identify process for capital planning and decision-making

In completion of the plan, it should be noted that charter schools have limited access to local school district tax and bond revenues used for school facilities. Instead, they must rely on alternative sources of public and private funds to pay for their facilities. In addition, charter schools that are on lease agreements are prohibited through statute to use public funding to provide improvements to privately owned lease building or property. With this information noted, this five-year plan is a collaboration between the leaser and leasee to forge a mutually satisfying relationship designed to maintain the physical plant and infrastructure of the building, plan for growth, and provide the environment conducive to the learning environment.

## Identify how community input is considered

Mission Achievement and Success holds open board meetings in compliance with the Open Meetings Act of New Mexico and accepts public comment to be read during meetings.

List members that attended planning meetings and their affiliation (i.e. maintenance staff, students, and faculty).

Facility meetings occur in two formants. General staff meeting that are steered by the principal and includes staff member from the various disciplines including executive, administrative, physical plant, and auxiliary as needed. In addition, as referenced above opened meeting are held by the governing board, which includes board members and allows for public comment and committee reports. There is also a facility's committee of the Governing Board.

# Describe the nature of Steering committee involvement and identify members of the steering committee

The steering committee is called the Buildings and Structures Committee and includes the governing board president, vice-chair of the board, principal/superintendent of the school, and facility physical plant personnel.

#### 2. PROJECTED CONDITIONS

## 2.1 Programs and Delivery Methods

MAS Charter school operates a traditional classroom environment augmented by computer automation. The traditional school day is expanded from 8:20 am until 4:20 pm to assist in block style instructional programming.

#### 2.1.1 Programs Overview

Establishing the appropriate educational setting for today's students is becoming increasingly competitive for both students and schools. Students must learn as much and as effectively as they can, and schools must present the best avenues for this learning. The environment, or more correctly stated, the learning environment being a chief component or avenue. It is a school's job to give information to students in the most effective way possible. Building access, classroom conduciveness, available desks, climatic controls, lighting, access to automation, open space and safety all lend to providing maximum comfort, thus and augment learning.

Currently, Mission Achievement and Success Charter School resides at 1718 Yale Blvd. SE. Albuquerque, New Mexico 87106. It is a single structure constructed in 1970s as Guardian Parking. The building went through its first renovation and transformation in the 1980s and was re-designed for manufacturing. In the 1990's it was renovated a second time for its current use as e-occupancy or charter school use.

The building is approximately 65,000 sq. ft., separated into four designated use sections. These include an elementary section, middle school section, high school section and administrative/auxiliary section. As a support to the main building, as additional approximate 12,000 sq. ft. has been opened and utilized as cafeteria, gymnasium, physical education, and athletic space.

Mission Achievement and Success Charter School is phasing in a replicated site for the 20182019 school year at 1255 Old Coors Rd. Albuquerque, New Mexico. At current, that site is a vacant lot located in the Southwest quadrant of Bernalillo County's metropolitan area. The lot is approximately 16 acres, and this plan will be updated annually to reflect the growth and transition into this building/space.

# List anticipated special curricular and extracurricular activities to be accommodated in the facility, if any

MAS Charter school operates a before and after-school program designed to assist and augment student achievement, participates in the New Mexico Activities Associations, and hosts a variety of school clubs and councils accommodated by the facility space.

## 2.2 Proposed Enrollment

There are no additional plans for phased enrollment at 1718 Yale Boulevard as expressed in the charter agreement. There is a phase in plan over the next five years for phased or incremental growth at 1255 Old Coors Road. This phased growth includes a growth plan of 60 students per year for grades K-5 and 120 students per year in grades 6-12, beginning in year 2019-2020 academic year. This phased approach allows MAS charter school to remain with a standard class size of 30 students and in many cases; there are two teachers in each class of 30 students.

Please see below for the first 5 years of operation for 1255 Old Coors. Approximately 40, 000 square feet to include restroom, cafeteria, egress, recreational, and activity space.

Year, Grades, Enrollment, and Classrooms

Year 1: Grades K-1, 120 Students Total, 6 Classrooms

Year 2: Grades K-2, 180 Students Total, 7 Classrooms

Year 3: Grades K-3, 240 Students Total, 10 Classrooms

Year 4: Grades K-6, 480 Students Total, 21 Classrooms

Year 5: Grades K-7, 600 Students Total, 27 Classrooms

#### 2.2.3 Site and Facilities

Mission Achievement and Success Charter utilizes an anticipated enrollment versus a program offering structure to calculate anticipated growth and space needs. Unless otherwise specified, the Load Factor for classrooms shall range from 22 to 25 sq. ft2 per occupant, food service operations from 25 to 27 sq. ft2, and 18 to 20 sq. ft2 for common and auxiliary space.

120	3000	3000	2,160
Growth	Classroom	Café/Operations	Auxiliary
	120 x 25	Food Service	Common/Support Area
		120 x 25	120 x 18
			7,800 Sq. ft2
180	4,500	4,500	3,240
Growth	Classroom	Café/Operations	Auxiliary
	120 x 25	Food Service	Common/Support Area
			12,240 Sq. ft2
240	6,000	6,000	4,320
Growth	Classroom	Café/Operations	Auxiliary
	120 x 25	Food Service	Common/Support Area
			16,320 Sq. ft2
480	12,000	12,000	8,640
Growth	Classroom	Café/Operations	Auxiliary
	120 x 25	Food Service	Common/Support Area
			32,640 Sq. ft2
600	15,000	15,000	10,800
Growth	Classroom	Café/Operations	Auxiliary
	120 x 25	Food Service	Common/Support Area
			40,800 Sq. ft2

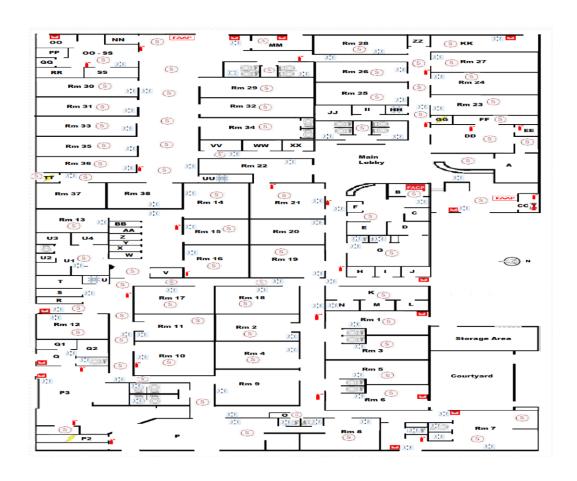
# 542-001 Overhead View 1718 Yale Blvd. SE

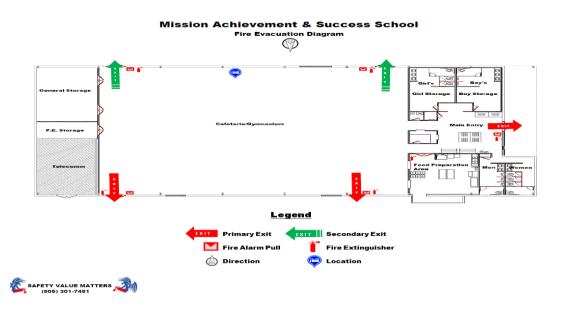


542-001 Overhead View 1255 Old Coors Rd. 87121



# 542-001 Floor Plan View 1718 Yale Blvd. SE





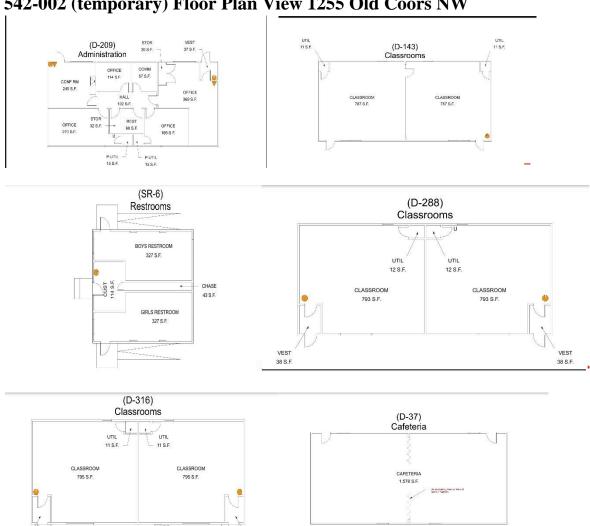
# **Current Building Structures EXTERIOR Assessment 2018-2023**

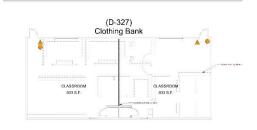
Current Bunuing Structures Extres		13.500.0			
CURRENT CONDTION 1718 YALE BLVD. EXTERIOR				REPLAC	
	GOOD	FAIR	POOR	E	NOTES
Check walkway surfaces, patch and repair.					Landlord Improvement -
71			X		Scheduled 2018
Remove and dispose of all fallen tree limbs, dead shrubs, etc.					
remove and dispose of an fancif free fillios, dead silitos, etc.	X			1	
Replace broken window glass as needed.				<u> </u>	
	X			1	
Remove any blockage of walk ways and keep fire exits clear.					
	X				
Remove any materials against wall that are an eye sore.					
	X			<u>                                       </u>	
Paths of exit					Landlord Improvement -
			X		Scheduled 2018
Doorways					
•	X				
Stairs and Hand Railing	X			1	
Under stairs	Λ			1	
Under stairs	X			1	
Outdoor Storage Containers	<del>                                     </del>				
	X				
Garbage and Debris Disposal	X				
G 1B	Λ			<del>                                     </del>	
Gutter and Drains	X			1	
Utilities Coming in and Out					
Curacs Coming in and Out	X			1	
Parking Surfaces					Landlord Improvement -
			X		Scheduled 2018
P ( 1 111/			Λ		
Exterior Lighting	X			1	
Signing and Directional Cues	- 11	<del>                                     </del>		+	
Signing and Directional Cues	X			[	
Exterior Walls	l				
	X				
Emergency Egress	X	_			
	Λ				

# **Current Building Structures INTERIOR Assessment 2018-2023**

CURRENT CONDTION 1718 YALE BLVD SE				REPLAC	
INTERIOR	GOOD	FAIR	POOR	E	NOTES
Check floors for broken tiles or torn carpet.			X		Landlord Improvement - Scheduled 2018
Lighting Fixtures are operations and appropriate foot candles throughout building.	X				
Replace broken tiles, carpets or other trip hazards.	X				
Clutter and debris in walkways, exits etc.	X				
Wall penetrations, marks, scuffs, painting and presentable.	X				
Door handles, keys and locks are operational	X				
Ventilation and Air Flow is appropriate	X				
Heating and Cooling systems are being maintained	X				
Caustic or hazardous materials are absent or controlled.	X				
Broken Ceiling tiles are being replaced.		X			On-Going
Broken outlet covers, Extension cords, frayed wires are addressed.	X				
Leaking sinks, toilets, water heaters and plumbing issues are addressed.	X				
Restrooms are accessible and functioning	X				
Desk surfaces, work areas and stations are sanitary	X				
Pest Control	X				
Storage is appropriate and not cluttered.	X				

# 542-002 (temporary) Floor Plan View 1255 Old Coors NW





# **Current Building Structures EXTERIOR Assessment 2018-2023**

CURRENT CONDTION 1255 Old Coors Rd				REPLAC	
EXTERIOR	GOOD	FAIR	POOR	E	NOTES
Check walkway surfaces, patch and repair.					
	X				New or Refurbished
Remove and dispose of all fallen tree limbs, dead shrubs, etc.					
	X				
Replace broken window glass as needed.					
	X				
Remove any blockage of walk ways and keep fire exits clear.					
, , , ,	X				
Remove any materials against wall that are an eye sore.					
, ,	X				
Paths of exit					
	X				
Doorways					
	X				
Stairs and Hand Railing					
C	X				
Under stairs					
	X				
Outdoor Storage Containers					
	X				
Garbage and Debris Disposal					
	X				
Gutter and Drains	1				
	X				
Utilities Coming in and Out	1				
č	X				
Parking Surfaces	1.				
-	X				
Exterior Lighting	11				
	X				
Signing and Directional Cues					
	X				
Exterior Walls	X				

**Current Building Structures INTERIOR Assessment 2018-2023** 

CURRENT CONDTION 1255 Old Coors Rd				REPLAC	
INTERRIOR	GOOD	FAIR	POOR	E	NOTES
Check floors for broken tiles or torn carpet.					
	X				New or Refurbished
Lighting Fixtures are operations and appropriate foot candles					
throughout building.	X				
Replace broken tiles, carpets or other trip hazards.					
	X				
Clutter and debris in walkways, exits etc.					
• •	X				
Wall penetrations, marks, scuffs, painting and presentable.					
F	X				
Door handles, keys and locks are operational	71				
2001 minutes, nego and 100ms are operational	X				
Ventilation and Air Flow is appropriate	Λ				
ventriation and Air Flow is appropriate	X				
Heating and Cooling systems are being maintained	Λ				
rieding and Cooling systems are being maintained	37				
Caustic or hazardous materials are absent or controlled.	X				
Caustic of nazardous materials are absent of controlled.					
	X				
Broken Ceiling tiles are being replaced.					
	X				
Broken outlet covers, Extension cords, frayed wires are addressed.					
	X				
Leaking sinks, toilets, water heaters and plumbing issues are addressed.					
	X				
Restrooms are accessible and functioning					
	X				
Desk surfaces, work areas and stations are sanitary					
	X				
Pest Control	v				
Channel in a second and all the second	X				
Storage is appropriate and not cluttered.	X				

Has PSFA evaluated the proposed facility for code and adequacy? If so, summarize PSFA/Code analysis of any existing facilities that are proposed for future use and include in this section.

The existing facility at 1718 Yale Blvd. SE has been reviewed for code and accuracy by PSFA, the proposed site is pending.

### **2.4 Utilization Analysis** (if applicable)

As expressed above, the first five years of operation for 1255 Old Coors includes approximately 40,000 square feet to include restroom, cafeteria, egress, recreational, and activity space. The space will eventually gravitate to 100,000 square feet during the next five year facility strategic planning plan. At current planning, MAS charter School sees a phased in approach to meeting the code requirements as specified in the New Mexico Administrative Code under the following phase in plan. Note that MAS Charter School plans to lease the space, and has already searched through

the Albuquerque Public Schools for available "like" space and has found no publically owned building available or suitable for this purpose. In addition, all lease information and contractual obligations reference and state a requirement of the lease agreement is compliance with Adequacy Standards as expressed NMAC 6.27.30. **Prioritization:** Mission Achievement and Success Charter School anticipates \$375.000.00 over the next 5 years to promulgate the Preventative Maintenance Plan as expressed in Attachment A.

The following priority shall be used as specified in the Preventative Maintenance Plan (1) Life					
Safety, (2) Environmental, (3) Operational Mission, (4) Equipment and Material Life Cycle, and					
(5) Program Growth and Expansion.					
ear 1 \$56,250.00					
Year 2	\$63,750,00				
Year 3 \$75,000.00					
Year 4 \$86,250.00					
Year 5 \$93,759.00					

# 2.4.1 Identify special factors (i.e. lower than state required PRTS, special programs) that influence facility use and Itemize how each room in the facility is used

There are no special factors to report in this section. Please note, and as stated above, MAS Charter School is in leased buildings and structures, because no publically owned property was found to be suitable to purpose, or was made available.

# **2.5 Facility Maintenance** (if applicable)

Attachment A.1

2.5.1 Identify maintenance projects in the facility that may turn into capital projects, the estimated time frame and anticipated financial resources available (Not Applicable).

# 3. PROPOSED FACILITY REQUIREMENTS (Ed Spec)

#### 3.1 Facility Goals and Concepts

#### 3.1.1 What are the goals to be met by your school facility?

1255 Old Coors Road is proposed to provide a safe and effective environment for all learners through a site that is welcoming and secure with adequate outdoor areas. In addition, to provide in an educational program using Best Practice Learning Skills which includes the following concepts: collaboration, active learning, enhanced communication, connection with one's surroundings and the innovated use of technology.

#### 3.1.2 Concepts

The health and safety of student at Mission Achievement and Success Charter School is one of the Board's highest priorities. This Plan is to provide a systematic approach in establishing the

infrastructure needs, and prioritizing those needs in the form of a five-year Building and Structures Facilities Plan. When completed, the plan will be an aid in preserving assets of the school, and will become a guide to the Board when determining where dollars should be spent, requests for updates or modifications to the landlord, as well as a tool to help educate the public about the needs of the school.

Safety and Security are a high priority for MAS. Each campus will be closed with a perimeter fence around the entire property and entrance gates. One main entrance will control visitor routing into the school. The facilities shall be augmented with electronic remote control, 360 degree camera coverage, keyless entry systems, and student controlled movement.

**4. CAPITAL PLAN** (if applicable - a short range plan which identifies maintenance, capital projects, broadband, systems, or equipment purchases and includes financing options)

Mission Achievement and Success Charter School's building and structures and other space utilization is funded through the recognized formulas as expressed by the New Mexico State Public Education Department. All funding for maintaining normal wear and tear, or expansion renovation or alteration of space are handled by the landlord through a mutually agreed upon lease statement. Any maintenance or repair not included in normal wear and tear is corrected through the operational budget under the appropriate line item.

Mission and Achievement and Success Charter School uses capital funding along with E-rate funding and other established revenue strings to meet its technology and communication needs.

Attachment A summarizes MAS Charter School's total anticipated preventative maintenance needs and supporting resources not included as part of the lease agreement.

## 5. Master Plan Support Materials

Please note that items 5.1 through 5.4 are addressed in the summary and site plans detailed in section 3.

### **5.4 Key Principles**

Mission Achievement and Success Charter School develops its space and room requirements through focusing on proposals that fall under the following key principles:

- 1. Focusing resources on transformative projects and processes stress the use and benefit of automated technology and projects leading to a long-term transition to technological use.
- 2. Energy savings or the use of equipment dedicated or easily converted into energy efficient use.
- 3. Align of infrastructure so that all investments in materials, technology and related resources are suited to work in a sustained, efficient and cooperative manner.
- 4. Leverage through using the first three principles in providing innovative technological, that is emergency efficient and cost efficient through compatibility.

#### 5.5 MASTER PLAN SUPPORT MATERIAL

Mission Achievement and Success Charter School 1.0

542-001

1718 Yale Blvd. SE

Albuquerque, New Mexico 87106

**Opened:** 2012-2013

**Renovations:** 2016-2017 Additional Classroom Space

**Renovations:** 2016-2017 Gymnasium and Classroom Space

**Property:** Leased **FCI:** 68

**Total Square Footage:** 75,000 **Per** 

Student: 86 sq. ft.

Classrooms: 50 Serving: K-12 Portable Classrooms: 0 Percentage of Portables: 0

**Total enrollment 40th day:** 876 (as of 2017-2018 school year, projected for the 2018-2019 school

year is 1040)

**Fixed Assets:** Controlled through a tagged identification, description and lifecycle system

Mission Achievement and Success Charter School 2.0

542-002

1255 Old Coors Rd. NW

Albuquerque, New Mexico 87121

**Opened:** 2018-2019

Renovations: N/A Property: Leased FCI: N/A

Total Square Footage: TBD (to be determined) Temporary -10,783 Per

**Student:** TBD (to be determined) Temporary 89 sq. ft.

**Classrooms:** 8 (Portable)

Serving: K-1 Portable Classrooms: 8 Percentage of Portables: 100 (temporary) Total

enrollment 40th day: TBD (to be determined)

**Fixed Assets:** Controlled through a tagged identification, description and lifecycle system

# MAS Preventive Maintenance Guidelines

#### **OVERVIEW**

#### **NEW MEXICO STATUTES**

## DEVELOPING A PREVENTIVE MAINTENANCE PROGRAM

Introduction

Identification of Facilities, Systems and Components

**Determining Present Conditions** 

Establishing Levels of Maintenance

Preparing the PM Work Items

## IMPLEMENTING A PREVENTIVE MAINTENANCE PROGRAM

Introduction

**Determining Necessary Resources** 

**Determining Organizational Structure** 

Scheduling and Assigning Work

#### **Overview**

The goal of preventive maintenance is as a component of a facilities maintenance system, is to maximize the useful life of all building systems. Just as maintenance is an aspect of facility management that impacts most other areas of the total facility operation, so to preventive maintenance, as a philosophy, has a broad influence on the total maintenance effort. At its heart, preventive maintenance one shall ask, what can I do to make this item— be it a building, or piece of equipment— remain as good as new for as long as practicable?

Many discussions of maintenance relegate preventive maintenance to a small role, for example:

Preventive maintenance (PM) is defined in the maintenance management audit as periodically scheduled work on selected equipment, usually dynamic, to provide for required inspection, lubrication and adjustment.

However, a broader application of the term 'preventive maintenance' should desirable to avoid fragmentation of the maintenance system into multiple subcomponents where routine, preventive, regular, scheduled, recurring and other variations of maintenance each have their own definition. For the purposes of meeting the requirements and intent of NM State Statutes, we at Mission

Achievement and Success School (MAS) encourages a vision of preventive maintenance as all activities that can be regularly scheduled to prevent premature failure or to maximize the useful life of our facility. Preventive maintenance applies to all building systems and components. Scheduled activities will include items such as roof inspections, repainting, and door hardware adjustments, as well as more traditional items such as bearing lubrication and belt replacements on HVAC equipment.

It is essential that MAS school board, building owner and school administrators and staff demonstrate a commitment to this vision— scheduled maintenance on the full range of building systems— when acting on their responsibility to manage facility assets. To meet the duties of school boards specified in state statute, preventive maintenance should be a key element of a school board's mission statement.

# **New Mexico Statutes**

TITLE 6 PRIMARY AND SECONDARY EDUCATION

CHAPTER 27 PUBLIC SCHOOL CAPITAL OUTLAY COUNCIL

PART 3 APPLICATION AND GRANT ASSISTANCE PROCEDURES AND REQUIREMENTS RELATING TO PREVENTIVE MAINTENANCE PLANS

#### **Developing a Preventive Maintenance Program**

#### **Program Introduction**

By law, school districts have two main responsibilities regarding preventive maintenance. The first of these responsibilities is to develop a preventive maintenance program; the second is to implement the program.

Preventive maintenance programs begin with the acceptance of a need and the development of a considered, planned program for addressing the individual and different needs of each specific unit or system in a project.

#### **Identification of Systems and Components**

The MAS has established a baseline for a comprehensive preventive maintenance program by identifying systems and components that should be included in such a program. A list of the components can be found in Appendix A. While through, the list is not intended to be an exhaustive list of every component. From the list, select those systems and components that apply to our MAS facility. MAS Board may add items if necessary to create a complete plan. Many buildings will have multiple system types within a category (roofing, package unit heaters, etc.) as well as multiple components of the same type (circulating pumps, water closets, toilet partitions, etc.). For each item, a specific preventive maintenance plan shall be developed. The greater the number of

differing systems and components, the greater effort will be necessary in both developing and implementing the preventive maintenance plan. Standardizing systems and components within MAS offers measurable benefits to our preventive maintenance plan. These benefits include reductions in inventory, reductions in preventive maintenance training and increases in productivity and quality of work.

#### **Determining Present Conditions**

Following the identification of systems and components in our facility, a detailed inventory is needed to quantify the building components and to establish their current condition. This step includes both an objective process of fact-gathering and a subjective assessment of the current condition. Information such as quantity, type, size, manufacturer, model, material specification, location, key parts, part numbers, and other item-specific data will be documented. A qualified person will need to make the assessment of current condition. The condition assessment is used to determine both the immediate and future levels of preventive maintenance for the system or component and its end-of-service-life replacement date.

### **Establishing Levels of Maintenance**

Preventive maintenance efforts range from visual inspections only to performance testing and analysis; from minor adjustment, cleaning and/or lubrication to complete overhauls; from reconditioning to components replacement.

In establishing levels of maintenance, two determinations are needed. The first is to establish a basic life-span for the system or component (asphalt, roofing - 20yrs, water heater (boiler), 15yrs, drive belt -3yrs, etc.). The second determination is, "What maintenance activities are needed to ensure that this particular system/component meets or exceeds its life expectancy?

Manufacturer's literature, experience, test results, and industry averages are some ways to determine both acceptable life-cycles and what preventive maintenance work would result in achieving those life expectancies in the most efficient manner (i.e. the lowest life-cycle cost).

#### Preparing the Work Items Plan

Once MAS levels of maintenance have been established, setting the tasks into a work plan is the next step.

# **Implementing MAS Preventive Maintenance Program**

First MAS Board responsibility is to develop a preventive maintenance program; the second responsibility is to implement a preventive maintenance program. This section offers guidance on carrying out the developed preventive maintenance work plan and establishes the importance of having management reports and a system of feedback from the field to implement an effective program

The basic task of preventive maintenance implementation is to match needs with resources. However, both needs, and resources are variables in the facility management effort. As a result, implementation efforts may occur once to initiate a preventive maintenance program but will also require continuous monitoring of needs and resources to accommodate changes in these variables. For example, the work items assessment of a circulating pump may have indicated an anticipated failure in three years. At the three-year point, a stress test of the pump may indicate no appreciable degradation has occurred. This information may necessitate a revision to the preventive maintenance plan initially implemented. Other examples include the impact of new technologies, improvements to building systems or new tools that reduce repair times. These examples of variables in needs and resources all support the conclusion that implementation requires both an initial and an on-going effort.

Moving from the planning and development phase to implementation and operation almost always involves funding, regardless of the endeavor. Preventive maintenance is no exception. As evidence of the importance of funding in this transition, MAS and building owner shall be devoted to implementation of a preventive maintenance program that is largely a discussion of funding.

## **Determining Organizational Structure**

The structure and organization of the preventive maintenance program must be in place before effective scheduling of work can occur. Some operations and maintenance organizations establish a cross-disciplined preventive maintenance work center whose main task is to inspect various systems and components (usually dynamic equipment) and write a maintenance work order. Following the inspection, more traditional work centers such as plumbing, fire alarm, fire sprinkler systems etc. are assigned the actual work tasks. Other organizations are oriented almost completely too preventive maintenance tasks with major crafts taking responsibility for components and systems within their respective areas. In this model, a small multi-disciplined work center handles routine maintenance and emergency repairs and, in some cases, minor improvement work

# **Scheduling and Assigning Work**

Preventive maintenance program is scheduling and assigning specific preventive maintenance tasks. This is almost always done on a work order system. This element of the preventive maintenance program takes the work items developed for each component and assigns them to the appropriate maintenance craftsperson or team according to the established structure and schedule.

Simple preventive maintenance programs can be executed using a manual system of scheduling and work tracking.

#### **Reporting Systems and Feedback**

Effective preventive maintenance programs depend on feedback from maintenance personnel and a reporting/tracking system of costs associated with the preventive maintenance effort. This information is used to maintain the proper balance between preventive maintenance and renewal and replacement efforts (i.e., determining when costs have increased to the extent that preventive maintenance on a system is no longer effective on life-cycle basis).

• Productivity - the portion of a worker's time that is directly productive.

- Performance how well the individual is working, is work being completed as planned?
- Work Quality are they producing a satisfactory work product?
- Priority effective allocation of available time to the most important tasks.

Maintenance management audits may look at symptoms of ineffective maintenance at the worker/task level (i.e. number of callbacks, work completed on schedule, etc.), a management audit focus, as the name implies, is on improvements through better management.

It is imperative that MAS School perform preventive maintenance on their facility. Inadequate preventive maintenance not only hastens the deterioration of MAS and the building owner's assets, it jeopardizes MAS School ability to qualify for state aid for school capital projects <u>Facility</u> <u>Physical Plant Duties</u>

# **Responsibilities Daily**

- 1. Sweep sidewalks and entryways. Pick up trash & cigarette butts.
- 2. Remove trash from lawn shrubs, bushes, sidewalks, stairway and parking lots.
- 3. Review custodial nightly reports and respond appropriately.
- 4. Review Work Orders.
- 5. Replace damaged and soiled ceiling tiles.
- 6. Replace electrical lamps, breakers, fuses and ballasts as needed.
- 7. Check boiler, mechanical, electrical and telephone rooms; listen for unusual noises; check for excessive heat and equipment vibrations.
- 8. Ensure doors, windows and roof accesses are secured.

#### Weekly

- 1. Inspect and re-lamp exterior building lighting.
- 2. Inspect and re-lamp parking lot and site lighting.
- 3. Building exterior to include: entrances, landscaping, outside storage area, parking lot, roof, sidewalk, and utility enclosures.
- 4. Building interior to include: classrooms, common areas, computer rooms, conference rooms, corridors/hallways, gymnasium, custodial closets, offices, and restrooms.

## **Periodic/Monthly**

- 1. Inspect and repair curbs, walks, and paving.
- 2. Inspect and restore signage.
- 3. Inspect roof conditions; remove debris.
- 4. Reset time clocks. (April and October), replace batteries.
- 5. Restore cracks and blemishes on building interior.
- 6. Verify that there is adequate supply of filters, lamps, etc.
- 7. Sweet parking lots.
- 8. Inspect and restore pavement markings.
- 9. Inspect all restroom, shower rooms, and water closets.

- 10. Supervise any outside fire safety or maintenance service.
- 11. Check all door operations and adjust hardware including overhead doors and operators.
- 12. Inspect and repair all finished surfaces.
- 13. Replace burned out and flickering lamps (light bulbs).
- 14. Check for tripped circuit breakers.
- 15. Inspect and test fire alarm system.
- 16. Perform monthly fire extinguisher inspect.
- 17. Supervise annual fire extinguisher testing.
- 18. Inspect and test smoke detectors.
- 19. Supervise annual fire protection test.
- 20. Supervise annual fire sprinkler system test.
- 21. Supervise annual backflow protection valve test.
- 22. Rotate fire line valves off and on.
- 23. Rotate all plumbing fixture shut off valves.
- 24. Rotate all water valves serving floor drains.
- 25. Rotate all bib valves.
- 26. Supervise heating, venting, and air conditions preventive maintenance service (April and October).
- 27. Inspect, test, and service all exit lights.
- 28. Inspect, test, and service all emergency lights.
- 29. Inspect and test all lighting fixtures.
- 30. Inspection and maintenance on all heating, venting, and air conditioning equipment.
- 31. Inspect site to include: fence, grounds, pavement, and storm drainage system.

#### Quarterly

- 1. Visual inspection of all fire sprinkler devices connected to the alarm. This includes water flow switches and valve tamper switches.
- 2. Test of fire pump monitored points (loss of phase, phase reversal, pump running etc...)

# Semi-annual

- 1. Test of sprinkler water flow switches (flow water or manually trip flapper)
- 2. Test of sprinkler valve tamper switches (operate valves)
- 3. Visual inspection lead-acid battery (swelling or loose connections) 4. Test batteries load voltage

#### **Annual**

- 1. Test & visual inspection of panel functionality, LED's, fuses, etc....
- 2. Test panel battery charger
- 3. Battery discharge test
- 4. Test and visual inspection of horns, strobes, chimes, & bells etc....
- 5. Test and visual inspection of smoke detectors

- 6. Test and visual inspection of heat detectors
- 7. Test and visual inspection of duct smoke detectors
- 8. Test and visual inspection of electromechanical releasing devices
- 9. Fire extinguisher annual inspection

# **School Facilities and Equipment**

MAS School has two campuses.

- MAS 1.0
- MAS 2.0

# Planned Major Maintenance and Repair Projects

The MAS School Facility Master Plan has identified the following major projects for accomplishment during the 2018-2019 school year and beyond:

2018 – Replace roof over main building

2019 - Fire alarm system upgrade

2020 – To be determined 2021- To be determined

2021 – To be determined

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# MISSION ACHIEVEMENT AND SUCCESS CHARTER SCHOOL 5 YEAR PLAN

# **BUILDING AND STRUCTURES**