Benefits of Early Planning & Facility Maintenance

Presented to:

New Mexico School Board Association

February 10, 2018

Presenters:

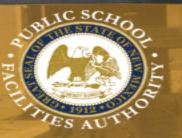
Martica Casias, Public School Facilities Authority - Planning & Design Manager

Larry Tillotson, Public School Facilities Authority – Facilities Maintenance & Operations Support Manager



Who is the Public School Facilities Authority?

- The New Mexico Public School Facilities Authority (PSFA) was established by the Legislature in 2002 as a result of the Zuni Lawsuit, in which three New Mexico school districts challenged the equity of state capital outlay distribution and won their case.
- The Public School Capital Outlay Council, pursuant to 22-24-6 NMSA 1978, manages the allocation of state funding to public school facilities in New Mexico's 89 school districts.
 - The PSCOC consists of nine council members from the Governor's Office, the Department of Finance & Administration, the Public Education Commission, the Legislative Education Study Committee, the Public Education Department, the New Mexico School Boards Association, the Construction Industries Division, the Legislative Finance Committee, and the Legislative Council Service.
- The PSCOC reports to the Public School Capital Outlay Oversight Task Force, (PSCOOTF) which is made up of legislators, senior leaders from school districts and charters, and members of the public.



What is Our Mission?

• Partnering with New Mexico's communities to provide quality, sustainable school facilities for our students and educators.



The Facility Master Plan: What is it and how it can help you?



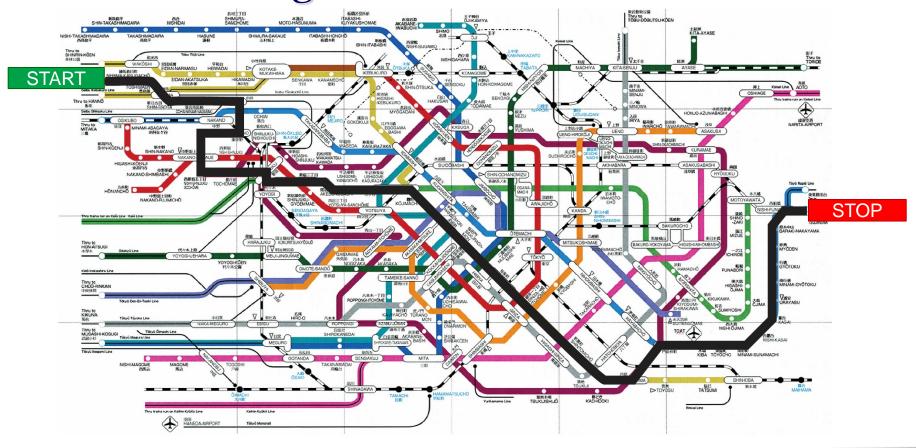


Putting Ideas

Into Action



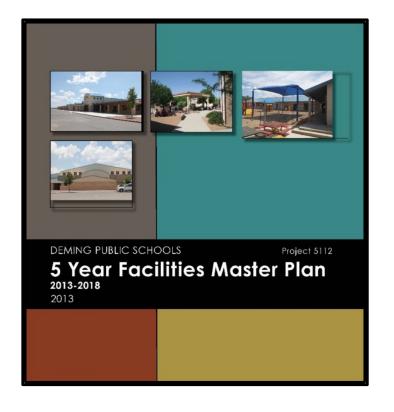
Where are we? Where do we want to go? How do we get there?

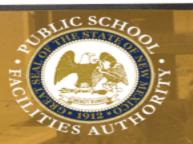




The Facility Master Plan is Authorized by State Statute

Section 22-24-5.B(11) NMSA 1978 States that a district seeking Public School Capital Outlay funding must submit a five year facilities plan





What is the Facilities Master Plan?

- Identifies short and long term district vision
- Roadmap that guides district decision making regarding facilities
 - What facilities only need general maintenance?
 - What facilities need renovation?
 - What facilities or systems need to be replaced?
 - Do we need a new facility/Do we need to close a facility?
- Identifies options, strategies, and resources to address facility issues



Components of a Facilities Master Plan (FMP)

- Facility Conditions
- Enrollment Trends and Demographic data
- Educational Program
- Preventive Maintenance
- Staff/Student/Community Input
 - Capital Priorities and Timeframe



Capital Priorities Planning

How School Districts use their Facility Master Plan:

- Identify capital priorities for each school and district facility
- Assign financial resources to each project
 - GO Bonds, SB-9/HB-33, Public School Capital Outlay (PSCOC funding must align with the Facilities Assessment Database for standards based awards)
- Integration of maintenance and capital planning
- A Facility Master Plan is a living document that district should manage and update annually



Long Range Capital Projects Planning

Value of a Facilities Master Plan

- Identifies the condition and needs of all the district's facilities
- Resources are limited maximizes the public dollar
- Builds upon district's strengths and addresses challenges
- Keeps the district focused in the event of leadership changes
- Rallies support for bond elections

"Better data = better decisions = better schools = students win"

-Quote from Alamogordo parent during its FMP process



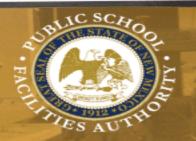
Facility Master Planning: Best Practices from the North

Central Consolidated Schools

• "Size Right" Schools initiative reducing gross square footage

Espanola Public Schools

• "Size Right" Schools equitability throughout the District



Facility Master Planning: Best Practices from the South

Lordsburg Municipal Schools

- Uses FMP to consolidate schools
 - Declining enrollment
 - Surplus Gross Square Footage
 - Re-built its high school at an appropriate scale and closed schools

Clovis Municipal Schools

- Uses FMP to address rapid growth
 - Overcrowded elementary schools
 - Moved 6th grade to middle schools to create space in elementary schools
 - Built a new middle school



Facility Master Planning: Resources

PSFA Website:

- Examples of FMPs for school districts/state chartered charter schools
- FMP Guidelines, Checklists, and Templates
- PSFA Geographical Information System

http://nmpsfa.org/project_development/masterplan.htm



Questions or Comments?

For more information, visit: www.nmpsfa.org

Or phone: 505-843-6272

THANK YOU!





Core Maintenance

PSFA Maintenance Division | FY2018

Presented by:

Larry P. Tillotson, Maintenance and Operations Support Manager

Hand-outs:

- Traditional and Charter School Maintenance
- Maintenance Dashboard's
- FMAR review Criteria FY2018
- 12 Tips for Tackling an Energy Management Program / Checklist
- Other

Objectives

- Performance Objective(s): This session will provide attendees with a fundamental understanding of the benefits of "Core Maintenance" from basic definitions to a detailed understanding of the Key Performance Indicators used to drive maintenance programs efficiencies in New Mexico.
- Participants will develop an understanding of why being proactive in regards to facility maintenance is so important. Information supporting this will be provided, with an emphasis on many of the 'Best Practice Solutions' our NM Public Schools have created and adopted as budgets have continued to decline.
- Real world solutions to the challenging and exciting topic of facility maintenance and operations will be presented.

PSFA Maintenance

FACILITY MAINTENANCE

- The PSFA Maintenance Group provides:
- Consultative services in an effort to assist school districts in establishing & optimizing their maintenance programs.
- Focus on preventive maintenance strategies to extend the life of facilities and their systems.
- The goal is assessing local facility management challenges and developing real world solutions for operational cost reductions while providing safe, healthy and reliable environments in support of the state's educational environments.

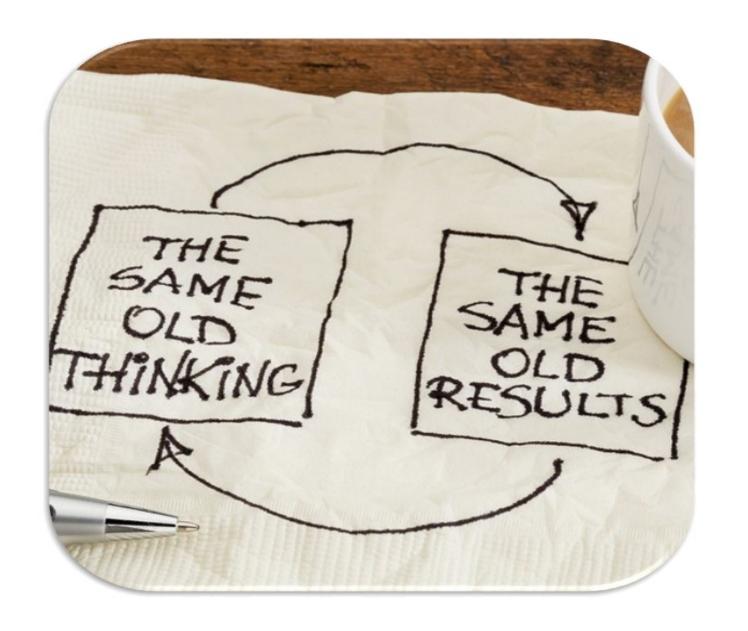
1978 NM Statute 22-5-4. Local school boards; powers; duties. (2005)

- D. acquire, lease and dispose of property;
- F. acquire property by eminent domain pursuant to the procedures provided in the Eminent Domain Code [42A-1-1 NMSA 1978];
- G. issue general obligation bonds of the school district;
- H. provide for the repair of and maintain all property belonging to the school district;
- J. except for expenditures for salaries, contract for the expenditure of money according to the provisions of the Procurement Code [13-1-28 NMSA 1978];

Maintenance Matters

- Maintenance is important for many reasons:
- We spend more than 90% of our time in the built environment
 - A building is a complex tool that should be treated as a business, with proper tools to ensure occupant comfort & safety, equipment reliability and cost effectiveness
 - General comfort, lighting & safety of the environment is important and supports the success of the occupants
 - Good Maintenance Reduced operating costs
- Physical conditions have a direct influence on teacher morale and student performance...
 - Facility improvements resulted in higher test scores...

Maintenance Matters



NM Scale

Scale of Public K-12 Education – Nationwide

- 100,000 Public Schools
 - 7.5 Billion Gross Sq. Ft. of estimated space
 - 2 Million Acres of estimated land
- 6.1 Million Teachers and support staff
- 50 Million Teachers and support staff

Scale of Public K-12 Education — NM Statewide

- 89 School districts / 2 Constitutional Schools / 103 Charters
- 61 Million Square Feet of Property valued replacement \$19.5 billion
- 900 + Buildings / Assets
- \$2.4 Billion has been put into the Infrastructure in the past 15 years
- 5Y baseline FMAR report indicates 76% of NM Schools are maintaining their facilities less than Satisfactory.

Collaboratively we have gained momentum... but still have a lot of work ahead of us.

Maintenance Matters

- With the PSCOC funding, the Facilities Condition Index (FCI) has come down from 71% to 32%, indicating improved statewide school facilities.
- In April 2015, the Facility Maintenance Assessment Report (FMAR), a measure of maintenance performance, found that only 22% of New Mexico's schools would achieve a satisfactory level of maintenance. PSFA estimated that 78% of schools would have a reduced expected life of major building systems due to deferred maintenance. (FMAR 5Y Baseline / FY15 PSFA Annual Report)
- Today, the FMAR indicates many school districts have made significant improvements to their maintenance programs and facility conditions through a new FMAR response process, training, maintenance planning and better use of the Facilities Information Management System (FIMS). (FMAR FY16) (F6)
- Improving maintenance performance to a higher level, focusing on preventive versus reactive, will greatly support NM K-12 educational environments, students and teacher success.

Maintenance Matters

- The cost of reactive "Run to Failure" maintenance is much greater than preventive maintenance at a 3 to 1 ratio.
- Preventive Maintenance
 - Keeps equipment in good condition to prevent large problems
 - More Cost effective
 - Extends operational lifespan | Increases equipment working reliability
 - Finds small problems before they become big ones
 - Is an excellent training tool for technicians
 - Keeps equipment safe
 - Parts stocking levels can be optimized
 - Decreases equipment downtime | Saves energy
- **Bottom Line**: Studies show that Preventive Maintenance can save as much as 12-18% over reactive maintenance methods.

Core Maintenance NM Traditional and Charter School Maintenance

- PM Planning (20%) Statute
- **FIMS**: Dude Solutions Software Statute
 - Maintenance Direct (MD)
 - Preventive Maintenance Direct (PMD)
 - Utility Direct (UD)
- Facility Maintenance Assessment Report (FMAR 80%)
- Maintenance Reports Data driven
 - FIMS Proficiency Quarterly
 - M-Cubed Monthly
- Maintenance Program Status Report (MPSR)

PM Planning

22-24-5.3.NMSA 1978, Preventive Maintenance Plans; Guidelines; Approval and 6.27.3.11 NMAC

- A statute driven (annually updated) written plan on how districts manage maintenance & operations.
 - NM State Statute (22-24-5.3.NMSA 1978, Preventive Maintenance Plans; Guidelines; Approval and 6.27.3.11 NMAC).
 - Good Business Practice
 - District Maintenance Mission Statement and Maintenance Goals
 - Maintenance Organization and Staffing Responsibilities
 - Maintenance Priorities & Procedures
 - Inspection & Maintenance Schedules associated with Scheduled Preventive Maintenance Tasks
 - Custodial Duties & Responsibilities
 - Planned (w/ dates) Capital Maintenance & Systems Renewal Projects
- Benefits reduced maintenance spending through non-reactive maintenance

 improved fiscal budget spending through effective planning well-maintained and safe school facilities & learning environments a reduction of risks for students, staff, & visitors, & providing assurance to local communities that the district is prudently managing facilities that the community has funded.

PM Planning Performance Metrics

• **CURRENT**: Districts have updated their plan within the last 12 months (30 day grace period). **Ratings**:

Poor – Marginal – Satisfactory - Good - Outstanding

 NOT UPDATED: Districts have not updated their PM Plan components – Poor rating.

40% of NM Schools are current

60% of NM Schools are not - current Facility Information Management System (FIMS): A Computerized Maintenance Management System/Dude Solutions

FIMS MD | PMD | UD

22-24-5.5. Preventive maintenance plans; participation in Facility Information Management System Maintenance Direct: documents & manages the entire maintenance work order process from request to completion, to include expenditures, and provides for data analysis and reports.

Preventive Maintenance Direct: assists in creating, scheduling, assigning, and managing recurring preventive maintenance (PM) tasks for all district facility equipment.

Utility Direct: tracks and analyzes utility consumption and costs to identify savings opportunities leading to the development of effective energy management programs.

Facility Maintenance Assessment Report (FMAR)

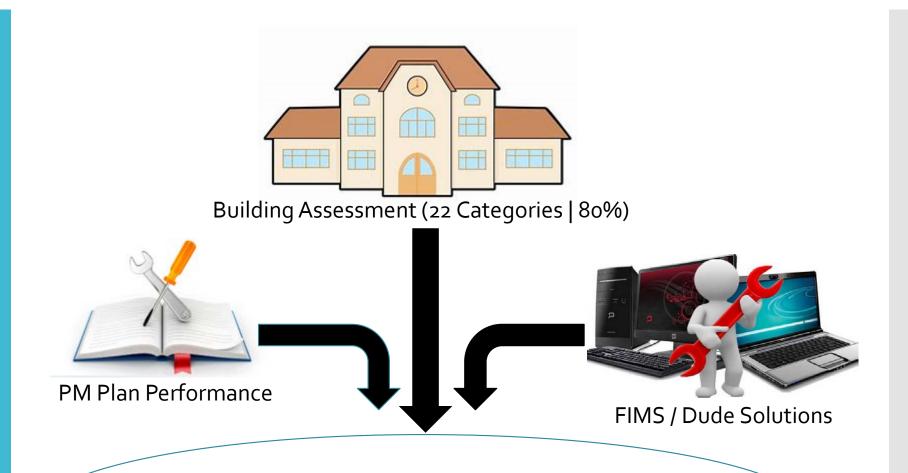
Facility Maintenance Assessment Report (FMAR 80%/20%)

Poor (0-59.9%) ----- Marginal (60.0-69.9%) ----- Satisfactory (70.0-79.9%) ----- Good (80.0-89.9%) ----- Outstanding (90.0-100%)

• A data driven tool used by the Public Schools Facility Authority (PSFA) to evaluate NM school facilities conditions / appearance (22 categories) and determine & verify the implementation of an effective maintenance management program. The results (feedback report) are used to establish a benchmark for the individual schools/districts maintenance programs towards continuous improvements and implementation of cost effective maintenance strategies. %



Facility
Maintenance
Assessment
Report (FMAR)



Poor (0-59.9%) ----- Marginal (60.0-69.9%) ----- Satisfactory (70.0-79.9%) ----- Good (80.0-89.9%) ----- Outstanding (90.0-100%)

Systems

Life/Fire Safety Systems (Fire alarms, sprinklers, hoods, extinguishers)
■Exits and Emergency Lighting Systems:
☐ Heating/Cooling and Ventilation Systems:
☐Egress Doors / Exterior Doors Systems:
□Playground Equipment/Athletic Fields:
■ Roof Systems (a portion of the building envelope & most litigious):
■Site Drainage Systems:
□Plumbing Systems:
☐Kitchen Equipment and Systems:
■Security Systems: pending
☐Site Utility Systems:
☐Grounds/Parking Systems:

NM Schools Performance

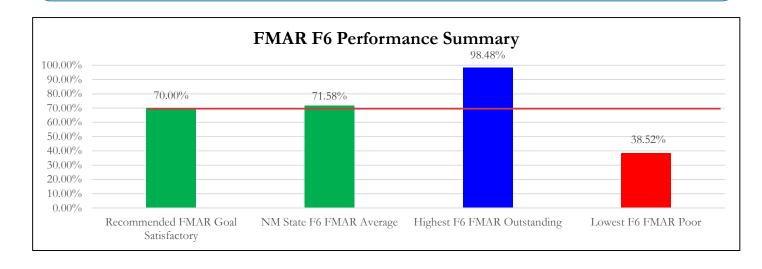
F6 Clean Slate Response Process

Facility Maintenance Assessment Report (FMAR F6) Summary May 1, 2017 to Dec. 31, 2017

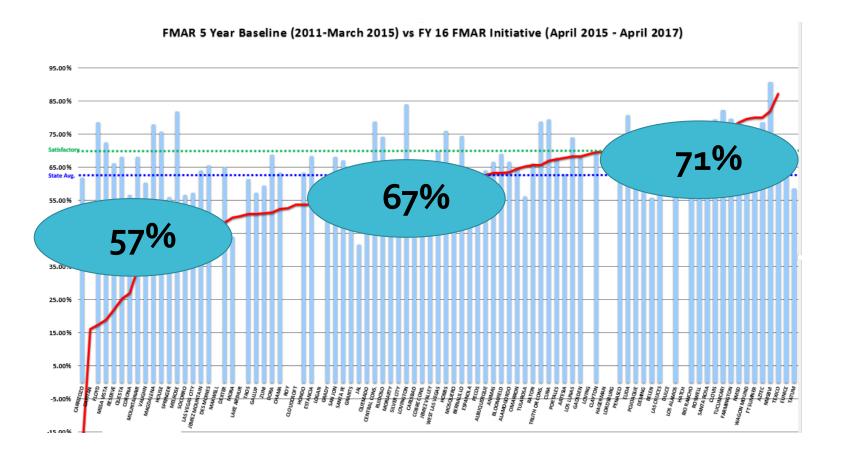
New Mexico School Districts with F6 FMARs conducted at school sites 121 FMARs | 46 Districts | 11 Charters

17 Poor | 34 Marginal | 41 Satisfactory | 23 Good | 6 Outstanding

New Mexico School Districts (sites) engaged in F6 FMAR response 2017: 12/21 Alamogordo(1) – Central(1) – Clovis(3) – Deming(1) – Dexter(1) – Gadsden(1), Las Vegas City(2) – Los Lunas(1) – Rio Rancho(2) – Roswell(3) – Santa Rosa(2) – Tucumcari(3)



A NM Success Story



Improving the Facility Maintenance Assessment Report (FMAR)

- How to Improve your Facility Maintenance Assessment Report
 - 2018 Districts can improve their FMAR scores by responding to the FMAR's Performance Level ratings below Satisfactory and/or Deficiency Factors using FIMS within 60 days of receiving their report(s). Work orders must be verified and closed in order for an adjustment to be considered.

Poor (0-59.9%) ----- Marginal (60.0-69.9%) ----- Satisfactory (70.0-79.9%) ----- Good (80.0-89.9%) ----- Outstanding (90.0-100%)

Maintenance Reports

• FIMS Proficiency: To assist schools in monitoring their district maintenance performance activities, the PSFA maintenance division reviews New Mexico School Districts Facility Information Management Systems (FIMS) accounts on a quarterly basis and provides a data driven FIMS Proficiency report on the Key Maintenance Performance Indicators (KPI) for each of the state provided FIMS modules.

Level 0 ----- Level 2.0 ----- Level 3.0
Implementation Stage (0-1.5 / non-use) Execution Stage (1.51 -2.0) Data Analysis Stage (2.1-3.0)

 Meaningful Maintenance Metrics (M³): a monthly maintenance report developed from data directly out of the districts FIMS / School Dude account used to communicate monthly activities through KPI's in the district's maintenance programs to school boards. Ben Lujan Maintenance Achievement Awards

Energy Management

- FACT: The annual energy bill for America's primary and secondary schools is \$6 Billion more than is spent on textbooks and computers combined, making it the second largest line item in the operations budget second only to salaries and benefits!
- What is Energy Management? Energy Management is a process in which school district's obtain an understanding of:
 - types of the energy systems installed; and
 - how utilities that are being utilized;
 - how that energy is being consumed; and,
 - the implementation of products, systems, services and education to reduce energy usage with the target to improve the overall energy efficiency of existing facilities and their systems.

Summary

- Reduced capital dollars make the efforts necessary to sustain school facilities conditions more critical than ever.
- \$2.4 Billion has been put into the Infrastructure in the past 15 years.
 - to ensure the delivery of necessary support to guard school's conditions and protect the \$19.5B school facilities asset.
 - to provide safe and functional learning environments.
- Tools and resources are available to support your Schools Infrastructure, maintenance & capital renewal programs.
- The Facility Assessment Database (FAD), Construction Information Management System (CIMS), and Facility Information Management System(FIMS), are available to districts for administrative support, guidance with Facility Master Planning (FMP), Project and Maintenance Management.

Maintenance Dashboard 101

District Maintenance Dashboard – What is Your Story

PSFA Maintenance Division 505-843-6272

Did you find this presentation useful?

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