

Anticipating Maintenance Needs, Directing the Crew and Increasing the Perceived Value of Maintenance & Operations

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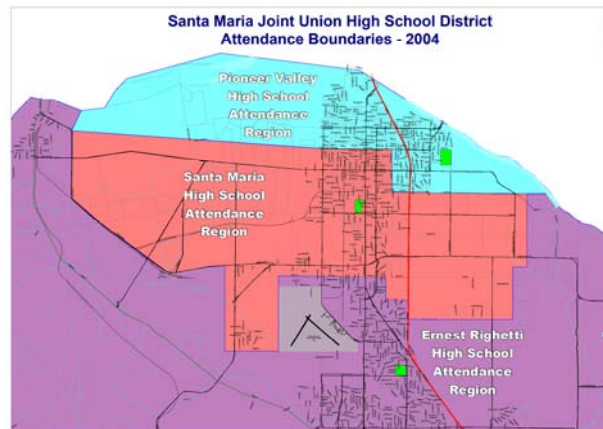
Santa Maria Joint Union High School District

And

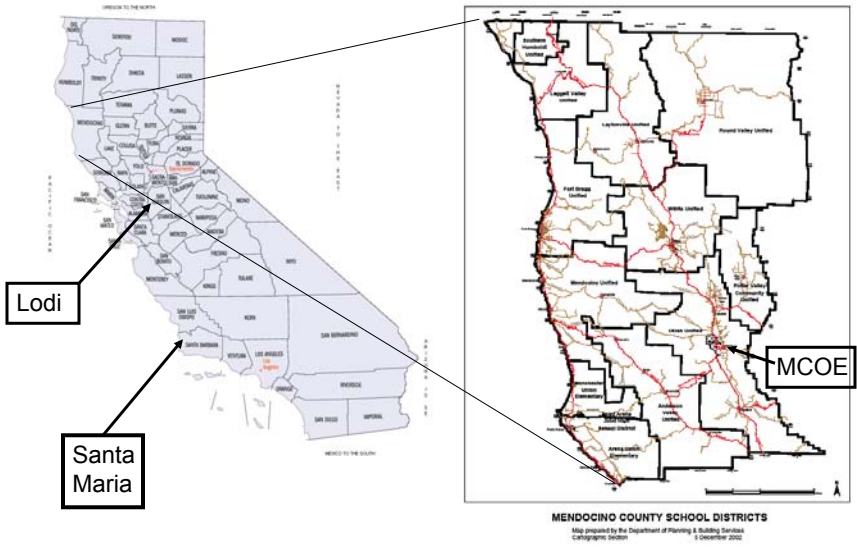
Steve Turner

Director Maintenance & Operations Mendocino County Office of
Education Formerly with Ukiah Unified School District

Map of SMJUHSD



Map



Sites

SMJUHSD & UUSD

High Schools (3)	Elementary Schools (8)
Continuation High School (1)	Middle Schools (2)
Administration (1)	High Schools (1) Continuation HS (1)
Total Sites (5) Enrollment ()	Total Sites (12)+DO/MOT Enrollment ()

Budgets (2009-2010)

SMJUHSD

UUSD

Maintenance	\$	\$
Operations	\$	\$
Deferred Maintenance (if we had it)	\$	\$
Transportation	\$	\$
Total MOT	\$	\$

Anticipating Maintenance Needs

- Required Regulatory Compliance (Mitch)
- Routine & Preventive
- Unplanned
- Deferred Maintenance Program (State)
- Deferred Maintenance Plan (District)

Routine Preventive Maintenance

- Facility Inspection System
- Manufacturer's recommendations
- Seasonal
- Observation and experience
- Site Conditions

Preventive Maintenance Facility Inspection System (FIS)

"Ensure that each school of the district or county office of education is maintained in good repair"

- Required since 2005/06
- Designed & adopted at the local level
(Except "Williams Schools")
- Prerequisite for Deferred Maintenance
- Good basis for long range plan

Preventive Maintenance

Roofing

- Pre-rainy season inspection & after severe storms
- Clear gutters, downspouts and drains
- Examine sheet metal on roof-to-wall and roof-to-gutter connections, penetrations
- Keep a file on each roof
- List in Deferred Maintenance Plan

Preventive Maintenance

HVAC

- Inspect at least 2X/yr-seasonal startup & run check. Check controller program
- Chillers & boilers seasonally-(professional)
- Cooling towers (fill, supports, sump, nozzles, valves, gear box, drive couplings, fans, bearings, wiring...)
- Pump lubrication/yr
- Air handler cleaning & filters 3-4x/yr

Preventive Maintenance

Plumbing

- Booster & circulation pump annual lube
- Seasonal freeze protection for pipes and fountains
- Inspect emergency gas shut-offs and replace missing wrenches

Preventive Maintenance

Lighting

- Consider group re-lamping schedule for interior and exterior. (Calc lamp life vs. usage)
- Adjust controllers for seasonal light changes if needed (smart control systems save energy and time)
- High efficiency lighting upgrades reduce bulb replacement & save energy

Routine Maintenance

Non-preventive but repetitive:

door closers and door repairs,
hand dryers, lockers, broken glass, pencil
sharpeners, replenishing playground
“fall-zone” cushioning material

Unplanned Work

To plan for the unplanned or not to plan,
that is the question.

- Emergencies
- Teacher support
- Accidents

Deferred Maintenance

What is it:

Infrequent,
major system repairs or replacement.

Anticipated and schedule like preventive maintenance

Much longer time frame: 2-20 years

Deferred Maintenance

Original State Program

- Nearly dollar for dollar matching funds for up to ½% of general fund amount
- Limited to use on 11 categories of work
- Required:
 - Facility Inspection Program
 - Five Year Plan
 - Public Hearing
- Details at:
http://www.documents.dgs.ca.gov/opsc/Publications/Handbooks/DMP_Hdbk.pdf

Deferred Maintenance Original State Program

- Money could be accumulated for large projects
- Extreme Hardship grants were available for projects costing more than your 1 year amount
- The 2009 State Budget Act significantly changed this program through 2012/13.
- These formerly restricted funds are now Tier 3 flexible funds that can be used for “any educational purpose”.
- For current rules and updates see:
<http://www.opsc.dgs.ca.gov/Programs/SABPrograms/DM+Updates.htm>

Deferred Maintenance *Your program!*

***You must proceed and protect our schools and
the investment we have made in them...***

Deferred Maintenance District Plan

You need a plan, so follow the DM format...

- List eligible systems (and any others of general services separately)
- Gather data: specifications, age & condition
- Project the year repair or replacement will be required
- Estimate costs for each project during it's year
- Accumulate projects by type for each year
- Update the plan each year

Deferred Maintenance District Plan Example

STATE OF CALIFORNIA
DEFERRED MAINTENANCE FIVE YEAR PLAN - DETAIL by PROJECT CATEGORY
DM #4 (REV. 8/02)

DEPARTMENT OF GENERAL SERVICES
STATE ALLOCATION BOARD

SCHOOL DISTRICT: Santa Maria Joint Union HSD COUNTY: Santa Barbara CURRENT FISCAL YEAR: 2007-2008 APPLICATION NUMBER: 49 88913

PROJECT CATEGORY	(1) SCHOOL NAME	(2) #	FISCAL YEAR DATA					(7) TOTAL ESTIMATED COST	REMARKS
			(3) CURRENT FY	(4) SECOND FY	(5) THIRD FY	(6) FOURTH FY	(8) FIFTH FY		
Roofing	Delta High	131	8,000					8,000	Plata Lab - Patched steel edges Summer 2005
Roofing	Emmet High	5	40,000					40,000	Administration (15) Replaced in Summer 2007. Best Roofing \$175,000
Roofing	Emmet High	42	10,000	10,000	10,000	10,000	10,000	40,000	Gutters & Downspouts
Roofing	Emmet High	84	4,000	4,000	4,000	4,000	4,000	16,000	Ag Science, 2 Buses 4 Pk Jet 204 200807 - Repair metal edge and workbank on Bike side. 8 square and replace rock Channel boards Roofing
Roofing	Emmet High	201	20,000	20,000	20,000	20,000	20,000	100,000	Portable Roof Replacement, 12 classrooms
Roofing	Santa Maria High	43	100,000	100,000	100,000	100,000	100,000	400,000	Elmer Park, JC Bldg
Roofing	Lights High	42	12,000	12,000	12,000	12,000	12,000	48,000	Library (Old Cafeteria)
Roofing	Santa Maria High	65	5,000	50,000	50,000	50,000	50,000	155,000	Library (Old Cafeteria)
Roofing	Santa Maria High	88	5,000	5,000	5,000	5,000	5,000	20,000	25th Arts & Crafts - Flat roof north side
Roofing	Santa Maria High	87	10,000	10,000	30,000	30,000	30,000	110,000	Administration - Flat roof, walkways, lean & East Wing
Roofing	Santa Maria High	100			80,000	80,000	80,000	240,000	2005 - Northwest wing roof replaced. TRESCO Synthetic Core Products Co. Product 9999 by CROSA Brand, partially by DM \$20,000
Roofing	Santa Maria High	104	10,000	10,000				20,000	Administration, 231 (60)
Roofing	Santa Maria High	111	10,000	10,000	10,000			40,000	Cafeteria Serving area, Southern flat roof
Roofing	Santa Maria High	176	5,000	5,000	5,000	5,000	5,000	20,000	Arts & Crafts (225) Patched roof General roofing repairs Assume \$5.00 per square foot

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Deferred Maintenance Plan

- May be vastly different than reported program
- SMJUHSD - \$600,000 provided vs. \$1,500,000 planned each year
- Schedule for developing work plan
 - Dec – Jan – Develop summer work plan
 - Feb – Apr – Prepare documents to bid work
 - Apr – May – Bid projects for summer work
 - Jun - Aug – Complete work

Establishing Program Direction

- Discovery
- Assessment
- Redirection Program

Discovery

- **Morning meetings with all crews (even if you have a supervisor that assigns work)**
- **Work planning boards, (daily, weekly, monthly)**
- **Look closely at equipment – tools, trucks, tool lockers and tool/equipment rooms, shops, custodian rooms**

Discovery (continued)

- **Tour school sites and observe employees working (MBWA)**
 - **Quality of work**
 - **Quantity of work**
 - **Tools used (tool belts?)**
 - **Trips for parts or tools**
 - **Visiting Time**
 - **Break time, lunch, and end of shift routines**

More Discovery

- **Purchasing Practices**
 - **How are job materials procured?**
 - » **Central warehouse**
 - » **Employee visit to parts house**
 - **Department / District Policy for materials procurement**
 - » **Open Purchase Orders**
 - » **Direct Account – employee signs for materials, no purchase order**
 - » **Pre-determined pricing - % over cost; line item pricing, annual bidding**
 - » **Project-specific materials lists prepared before starting a job**
 - » **Standardized equipment**
 - **Outside services and repairs – who contacts vendors?**

Final Word on Discovery

- Find out who is really directing your employees
- You might be surprised by where they get their marching orders

Assessment

- **Attendance records**
- **Personnel records**
- **Volume of work orders**
- **% of day accounted for**
- **% emergency vs. unplanned vs. planned**
- **Scheduling:**
 - Maintenance worker**
 - vs.**
 - school needs**
 - vs.**
 - supervision schedules**

Redirection Program

Plan ahead

- **Schedule Required Regulatory Compliance**
- **Schedule PM's and routines**
 - **Determine standards and estimate time required**
 - **Adjust time estimates with actual practice**
 - **Never lower your standards**
 - **Adjust level of maintenance to budget and time constraints**
- **Allow time for unscheduled and emergencies**
 - **Constantly review your unscheduled work to look for opportunities to schedule in advance**

Redirection Program (cont)

Assign the tasks

- **Written work orders**
- **Plan the day**
- **Follow up with job visits**
- **Assess employees' ability to plan their work and schedule accordingly**

Consider allocating time by school site

Redirection Program – Evaluation

Basics

- Are people getting to work?
- Are they on time?
- Are they leaving the shop and getting to a school in a reasonable time?
- Do employees have the tools they need?

Advanced

- Am I increasing % of day accountable?
- Am I reducing emergency calls?
- Am I getting employees to do the work I want them to do?
- Am I addressing legal requirements:
Preventive Maintenance needs & regular routine needs?

Increasing the Perceived Value of Maintenance & Operations

Your departments contribute to
the classroom

Marketing your programs

- Why would I need to market internally?
 - Increase the perceived value of services
 - Recognize your staff's accomplishments
 - Highlight projects completed at school sites
 - Educate certificated staff, administration and the board about your departments' contributions and challenges

Marketing (continued)

- Create a department(s) newsletter
 - Include lots of pictures and stories of staff doing it right
 - Delegate responsibility for stories to department leaders
 - Focuses you & staff on performance
- Presentations to Leadership & Board
- Find ways to get things done

Conclusion

- Anticipate required and predictable work
- Create a master schedule
- Monitor assignments and performance
- Cultivate good performance
- Publicly praise
- Make your department an asset

**Good morning and
good luck!**