

**ABC District California Planned Maintenance Implementation**

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**The Planned Maintenance Discussion:**

**Square Feet** 1,168,000 Remote PM implementation  
**Buildings** 12 Initial Web Meeting  
**# of Schedules** 185 Start of project (Google FORMs)  
**Students** 8,000 Schema Choice (Google FORMs)  
**Completion Goal** 7/1/25 PM Task Wording (Google FORMs)  
**PM Implementation** Interview: web meetings, Google FORMs  
**Step #1** Inventory of equipment (Google FORMs)  
**EQUIP. LIST** Macro to Micro, FORMs response  
 BAS, filter lists, old equip lists  
 Equipment edit web meetings



Web input on planned maintenance.

**How much money does preventative maintenance save?**  
 Preventive maintenance advantages are tangible; it can reduce costs by **12-18%** and generate a remarkable 400% return on investment. Setting aside maintenance resources before issues arise has short-term costs, but the long-term benefits are real.

**Why is preventive maintenance so important?**  
 Preventive maintenance is important because **it lays the foundation for successful facility management**. Preventive maintenance keeps equipment and assets running efficiently, maintains a high safety level for your employees, and helps you avoid large and costly repairs down the road.

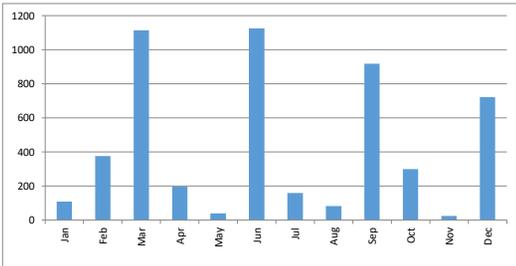
- Disadvantages of Preventive Maintenance**
- Upfront costs of preventive maintenance—keeping equipment regularly maintained requires a bit of an investment.
  - More labor-intensive, so you'll need enough staff on hand.
  - Potential for over-maintenance.

**Benchmark Estimates:** Backup at SP18

1 US versus CA	US
2 Students	8,000
3 Square Footage	1,168,000
4 # of Sites	12
5 \$ per Student	\$18,000
6 Annual Budget	\$144,000,000
7 O&M Budget	\$12,888,000
8 % O&M(Adjust)	0.0895
9 Maint. Budget	\$6,186,240
10 Utility Budget	\$2,845,670

**Step #2 IMPORT**

PM Design Hours per Month



- Series of web meetings
- Develop the PM Calendar
- Frequency of PMs (Google FORMs)
- Time estimates
- PM Assignment
- Group verses One
- PM task wording refinement

**Facility management proactive vesus reactive:**

Other uses for Planned Maintenance:	
Vehicle maintenance	Inspections
Grounds equipment	Structural & roof maintenance
Custodial equipment	Painting program
Project cleaning work orders	Grounds process tracking

**Step #3 DESIGN**

**Step #4 SCHEDULE**

**Step #5 ADJUST**

**Approximate project quotes:**

	Hours	Days Onsite
Remote Implementation:	\$23,646	203
Onsite Interviews:	\$29,336	252
Onsite full inventory:	\$47,075	405
Sites review:	\$3,066	26

11 Ave. Wage	\$22.00
12 Benefit %	38%
13 Loaded Hrly Wage	\$30.36
14 Loaded Ann Wage	\$63,149
15 SF/Mat.FTE	66,238
16 Maint. FTE	17.6
17 Supv./Mgers/Support	2.5
18 PM Level 1 2 3	Level 1
19* PM FTE	3.1
20* Schedules	185
21* Equipment #	2,701

**Step 4. PM Scheduling**

SMA is responsible to schedule your planned maintenance into your CMMS.

ID	1 PM Schedule Title	2 Classification	3 Type	4 Alternate Type	5 Unit	6 Building	7 A. Zone	8 Equip. Serial	9 Serial Number	10 Transport	11 Assignments	12 A. ID	13 Start Date	14 Sequence	15 Group
10	1000 F. CAP	HVAC	Air Compressor	Air Compressor	FRANCO	CE/Whome	Equip Group	10th Equip	1000	1000	2 Air Compressor	1000	8/1/18	1000	1000
11	1000 F. AXP2	HVAC	Air Compressor	Air Compressor	FRANCO	CE/Whome	Equip Group	10th Equip	1000	1000	2 Air Compressor	1000	8/1/18	1000	1000
12	1000 F. SC	HVAC	Air Compressor	Air Compressor	FRANCO	CE/Whome	Equip Group	10th Equip	1000	1000	2 Air Compressor	1000	8/1/18	1000	1000
13	1000 F. BLD A	HVAC	Air Compressor	Air Compressor	FRANCO	CE/Whome	Equip Group	10th Equip	1000	1000	2 Air Compressor	1000	8/1/18	1000	1000
14	1000 F. BLD B	HVAC	Air Compressor	Air Compressor	FRANCO	CE/Whome	Equip Group	10th Equip	1000	1000	2 Air Compressor	1000	8/1/18	1000	1000
15	1000 F. BLD C	HVAC	Air Compressor	Air Compressor	FRANCO	CE/Whome	Equip Group	10th Equip	1000	1000	2 Air Compressor	1000	8/1/18	1000	1000
16	1000 F. BLD D	HVAC	Air Compressor	Air Compressor	FRANCO	CE/Whome	Equip Group	10th Equip	1000	1000	2 Air Compressor	1000	8/1/18	1000	1000
17	1000 F. BLD E	HVAC	Air Compressor	Air Compressor	FRANCO	CE/Whome	Equip Group	10th Equip	1000	1000	2 Air Compressor	1000	8/1/18	1000	1000
18	1000 F. BLD F	HVAC	Air Compressor	Air Compressor	FRANCO	CE/Whome	Equip Group	10th Equip	1000	1000	2 Air Compressor	1000	8/1/18	1000	1000
19	1000 F. BLD G	HVAC	Air Compressor	Air Compressor	FRANCO	CE/Whome	Equip Group	10th Equip	1000	1000	2 Air Compressor	1000	8/1/18	1000	1000
20	1000 F. BLD H	HVAC	Air Compressor	Air Compressor	FRANCO	CE/Whome	Equip Group	10th Equip	1000	1000	2 Air Compressor	1000	8/1/18	1000	1000
21	1000 F. BLD I	HVAC	Air Compressor	Air Compressor	FRANCO	CE/Whome	Equip Group	10th Equip	1000	1000	2 Air Compressor	1000	8/1/18	1000	1000
22	1000 F. BLD J	HVAC	Air Compressor	Air Compressor	FRANCO	CE/Whome	Equip Group	10th Equip	1000	1000	2 Air Compressor	1000	8/1/18	1000	1000

\*PM monthly administration support: \$905.67 7.8 hrs/month

\*remote support starting after 6 months

\*PM file, Schedules & Equip. counts are PM calendar based estimates.