



# D-11 Facilities Department Self-Evaluation

- Strategic Assessment Model overview

See <http://www.appa.org/Research/SAM.cfm>

Also refer to handout

- D-11 preliminary self-evaluation



# D-11 Facilities Department Self Evaluation

## Evaluation Perspectives:

1. Financial
2. Department Processes
  - aka “Internal”
3. Work Environment (employee view)
  - aka “Innovation & Learning”
4. Customer Satisfaction

These four perspectives are taken from APPA’s Strategic Assessment Model (SAM)



# D-11 Facilities Department

## Financial Perspective

- **Maintenance Budget / Funding commitment**
  - Related to total district expenditures
  - Related to gross square footage
- **Staffing**
  - SF per Maintenance FTE
  - Pay related to Market Survey
- **Capital Renewal Budget / Funding commitment**
  - Related to current replacement value
  - Facilities Condition Index



# D-11 Facilities Department

## Financial Perspective

- Maintenance Budget
  - Related to Total District Expenditures
    - AS&U\* median: 7.5% of TDE
    - D-11 M&O\*: 6.25% of TDE (*17% below*)
  - Related to Gross Square Footage
    - AS&U median: \$1.24
    - D-11 Maint \$/SF: \$1.10 (*11% below*)

\*TDE = Total District Expenditure (total budget = \$275M)

\*M&O = Custodial, Utilities, Maint, Grounds & M&O Administration

\*AS&U = American School & University survey, Apr 2004



# D-11 Facilities Department

## Financial Perspective

- Staffing

- Square Feet per Maintenance FTE

- SchoolDude\*: 46,620
    - D-11 SF per Maint FTE: 91,492 (*96% high*)

- Acres per Grounds FTE

- SchoolDude\*: 17
    - D-11 Acres per Grounds FTE: 35 (*100% high*)

- \*Nationwide Survey by SchoolDude.com, July 2003 using 25<sup>th</sup> percentile as “target”. 50<sup>th</sup> percentiles were 74,291 SF/Maint FTE (*23% high*) and 36 acres/Grounds FTE (even).



# D-11 Facilities Department

## Financial Perspective

- Staffing
  - D-11 Crafts Pay vs. Market Survey
    - Survey\*:
    - D-11 pay: *(5-15% low)*

\*Lee & Burgess Market Survey conducted Fall, 2003

\*Note: a 3% avg adjustment was made in Jan 2004



# D-11 Facilities Department

## Financial Perspective

- Capital Renewal Budget

- Related to Current Replacement Value

- Industry Guideline: 2% of CRV
    - D-11 Budget\*: 0.24% of CRV (*12% of target*)

- Facilities Condition Index

- D-11 overall FCI\*: .076 (*Fair*)

(% by SF of total)	Good	Fair	Poor
Individual Sites	37%	32%	31%

\*D-11 Cap Renewal Budget available for Facilities Projects (\$1.2M/yr)

\*FCI = Capital Renewal Deficiencies / Current Replacement Value (>0.10 = “Poor”)



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# D-11 Facilities Department

## Department Processes

- **Maintenance**
  - Proactive (Scheduled) Maintenance
  - Reactive (Unscheduled) Maintenance
  - Non-Maintenance / Reimbursable Work
  - Work Order Management
- **Planning, Design, Construction**
  - Condition Assessment
  - Capital Plan
  - Project Management



# D-11 Facilities Department

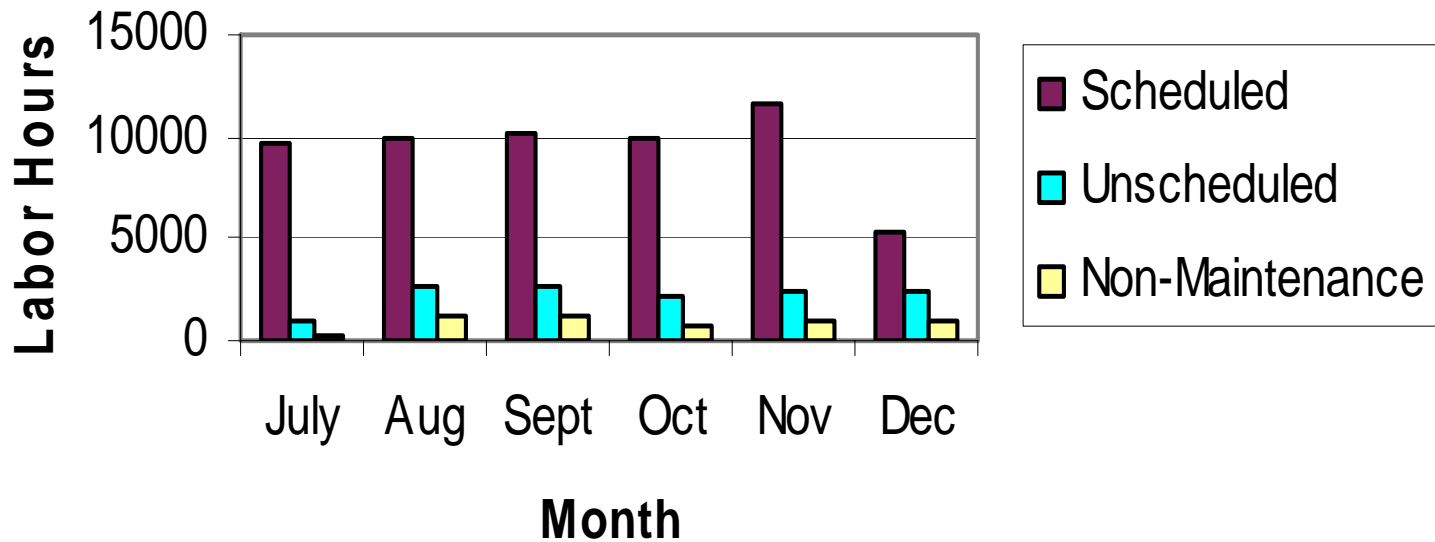
## Department Processes

- Proactive Maintenance
  - Scheduled vs. Unscheduled
    - 12 mo average: 61% Scheduled (target=75%)
    - Still improving data quality (definitions)
  - Preventive Maintenance Program
    - Comprehensive pgm in 2d year
    - Tasks are mostly well defined
    - Craftsmen / Techs are positive about pgm
  - Retro-Commissioning Program

# D-11 Facilities Department

## Department Processes

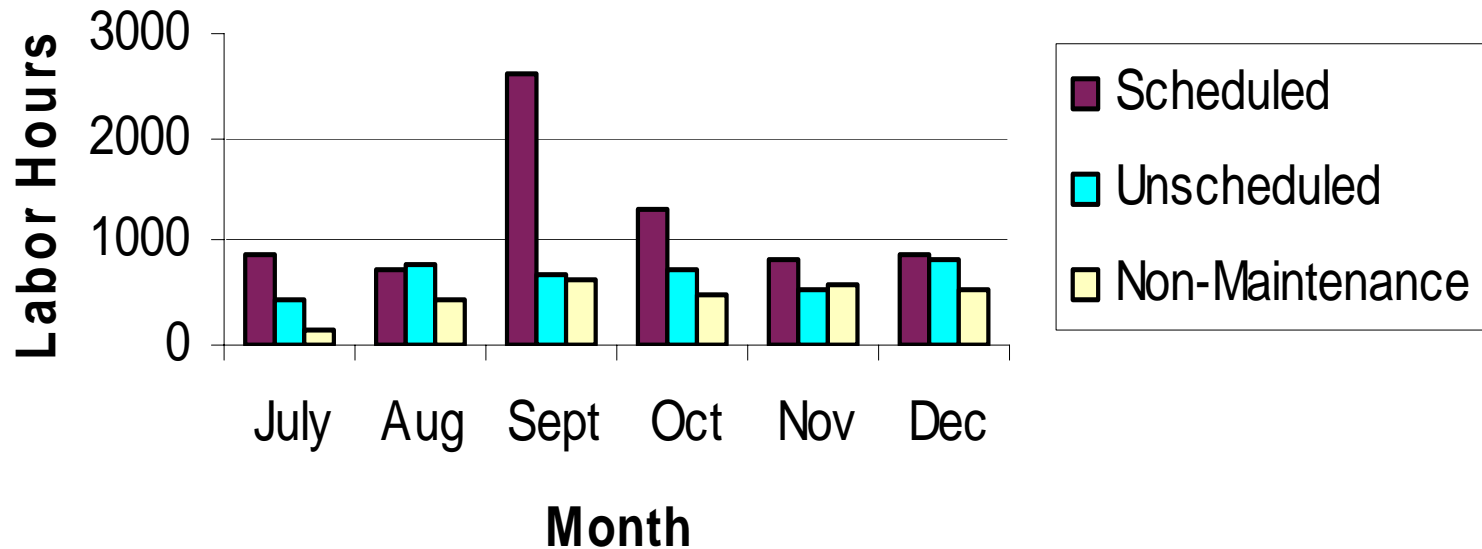
**FY 04-05 Facilities Department Labor Hours**



# D-11 Facilities Department

## Department Processes

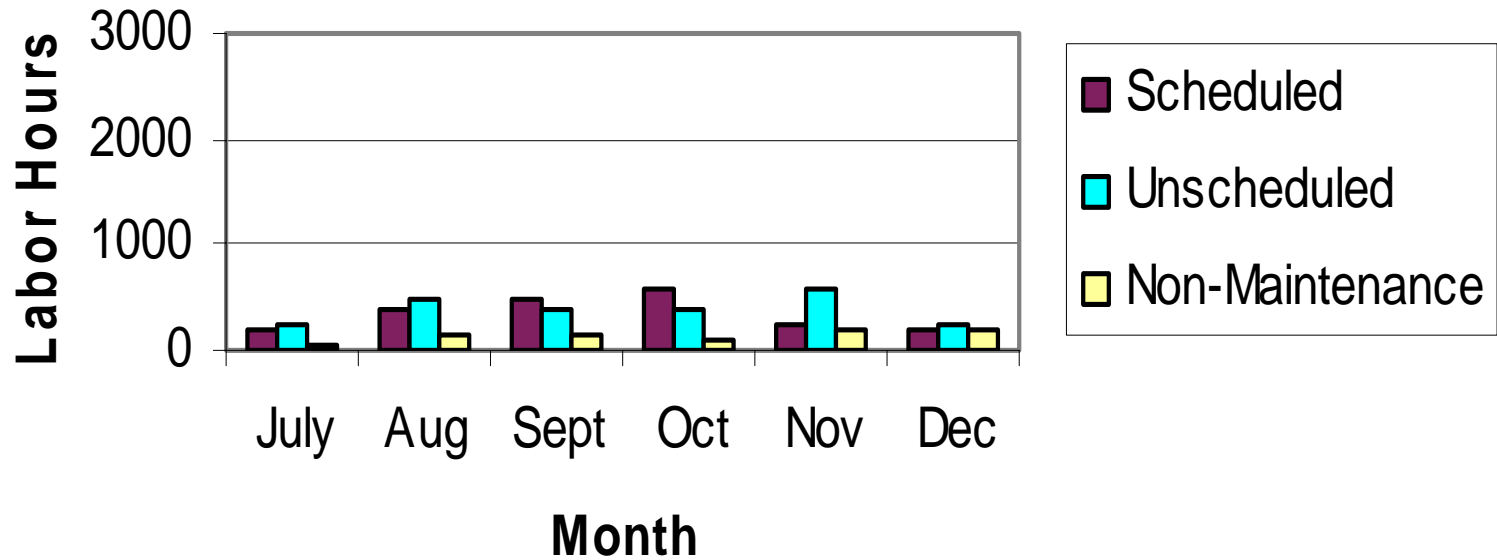
### FY 04-05 Construction Shop Labor Hours



# D-11 Facilities Department

## Department Processes

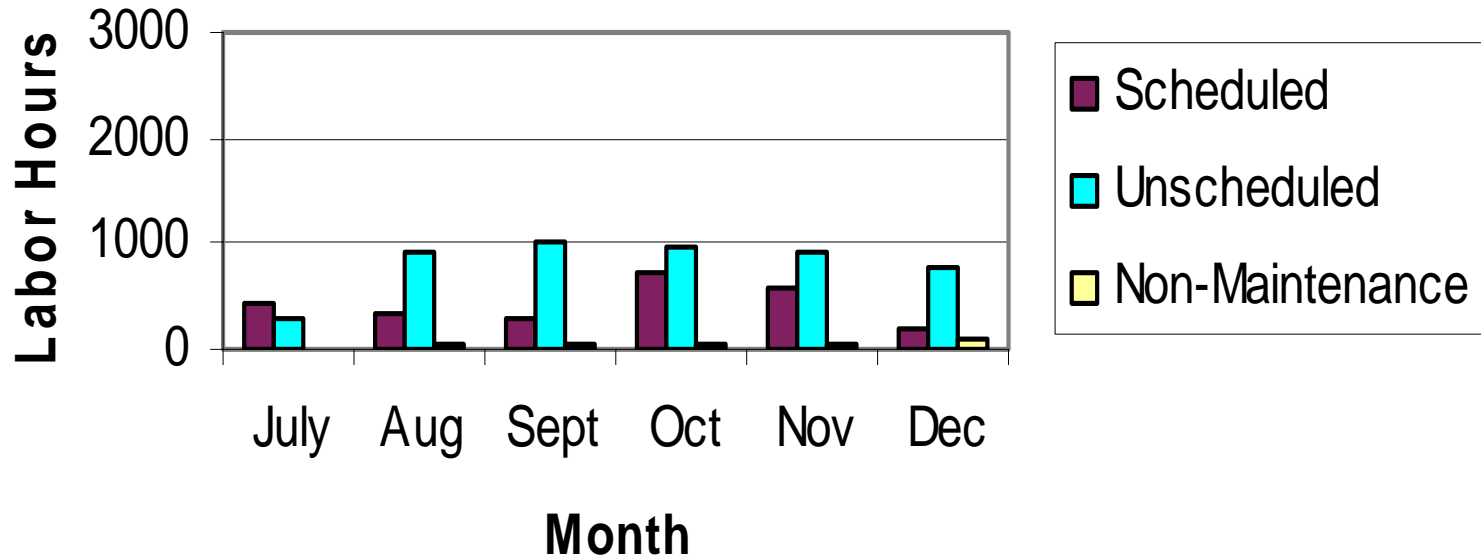
### FY 04-05 Electric Shop Labor Hours



# D-11 Facilities Department

## Department Processes

### FY 04-05 Mechanical Shop Labor Hours

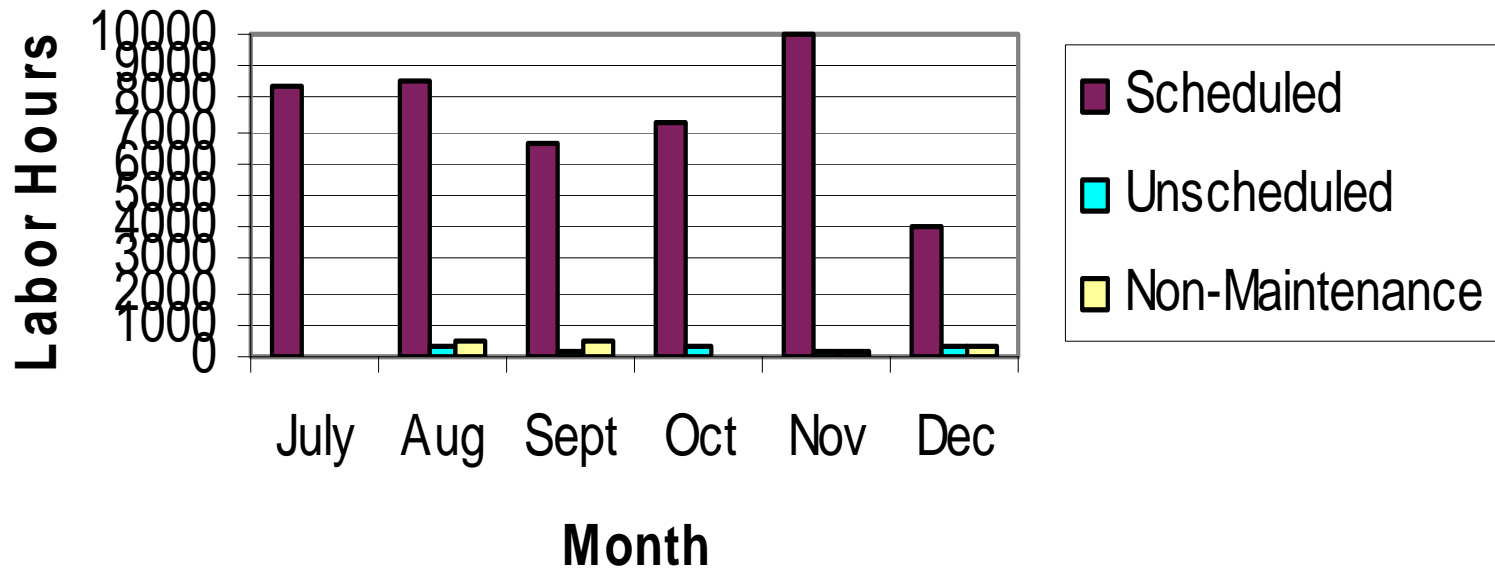




# D-11 Facilities Department

## Department Processes

### FY 04-05 Grounds Shop Labor Hours





# D-11 Facilities Department

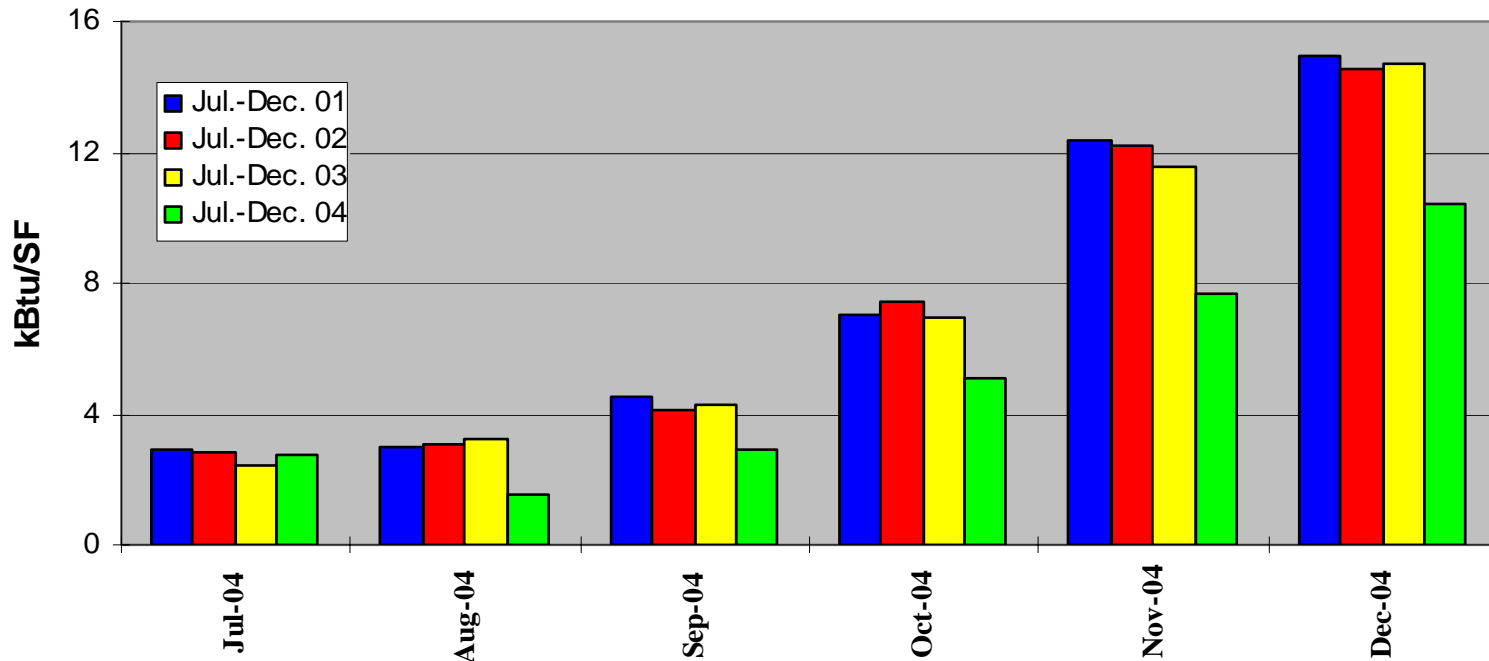
## Department Processes

- Retro-Commissioning Program
  - Pre-Functional Checks
  - Corrective Measures (repairs)
  - Install Data Loggers / Analyze Data
  - Additional Corrective Measures (Controls)
  - Reinstall Data Loggers / Functional Checks
  - Confirm Correct Operations

# D-11 Facilities Department

## Department Processes

**Grant ES - 1st Half FY Combined Gas and Electric kBtu/SF  
 Weather Corrected**





# D-11 Facilities Department

## Department Processes

- Issues to work
  - Mechanical & Electrical Shop **Scheduled** Hrs
  - “Work Date” accuracy
  - Overtime differentiation
  - Continue expanding PM program



# D-11 Facilities Department

## Department Processes

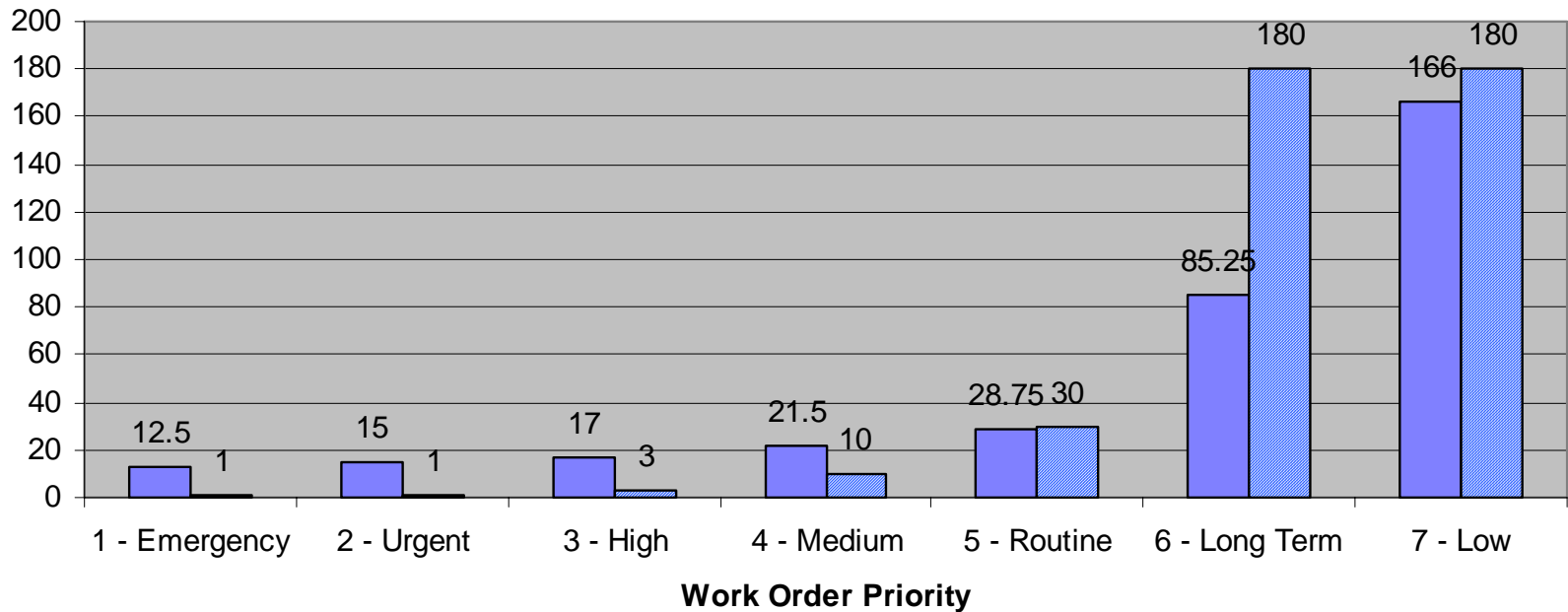
- Reactive Maintenance
  - # “Trouble Calls”
    - Steady decline – 23% drop over 12 months
  - For all “Unscheduled” W.O.s, track monthly:
    - Avg Age of completed W.O.s by priority (data?)
    - Avg Age of active W.O.s by priority (data?)



# D-11 Facilities Department

## Department Processes

**Avg Age of Completed Work Orders**  
1/1/03 - 3/28/05



■ Avg Age when Completed ■ Response Time Standard



# D-11 Facilities Department

## Department Processes

- Non-Maintenance
  - Better Reimbursable Work process
  - Hazardous Mtls program
  - Self-Help & Keys requests
  - Events (incl Snow Removal) support
  - Vandalism / Insurance work
  - Tracking “overhead”



# D-11 Facilities Department

## Department Processes

- Work Order Management
  - CMMS Software (Maintrix) improvements
  - Data quality improvements
  - Data analysis / Reporting sophistication
  - “System” improvements (receiving, prioritizing, tracking, completing, reporting)
  - Overall steady improvement!



# D-11 Facilities Department

## Department Processes

- Planning, Design, Construction
  - Condition Assessment
    - 100% Audit, fall 2003 (in-house)
    - Good data on system age, condition (planning data)
    - Annual updates tied to PM program
  - Capital Plan
    - Biannual published plan
    - Prioritized Capital Renewal & Improvement Needs
  - Project Management
    - Solid, proven procedures
    - Excellent procurement support



# D-11 Facilities Department

## Department Processes



### FY '05 CapRes Project List

## Capital Deficiencies by Site and Priority

Questions or  
Comments:  
Call Mike  
Maloney at  
477-6006

Site	System Description	Description of Deficiency	Pri	Svc Life	Age	Est Cost
FREMONT	MULTI-ZONE	Beyond Rated Life. System Starting to Fail	FY05	15	31	\$50,000
FREMONT	MULTI-ZONE	This multi-zone roof top unit is old and showing signs of failure.	FY05	15	31	\$50,000
FREMONT	MULTI-ZONE	Beyond Rated Life. System Starting to fail.	FY05	15	31	\$50,000
FREMONT	MULTI-ZONE	Beyond Rated Life. System Starting to Fail	FY05	15	31	\$50,000
<b>FREMONT Total:</b>						<b>\$200,000</b>
Site	System Description	Description of Deficiency	Pri	Svc Life	Age	Est Cost
HUNT	fire alarms	FIRE ALARM SYSTEM: Antiquated non-conforming type system needs to be replaced with an addressable type system.	FY05	15	19	\$90,000
HUNT	hvac	Repair or replace inefficient components in various pieces of HVAC equipment that are obsolete. Includes DDC and Commissioning.	FY05	25	41	\$100,000
HUNT	ROOFS	ROOFING: System Failure. Beyond Rated Life	FY05	20	37	\$6,000
HUNT	ROOFS	ROOFING: Materials starting to fail. Beyond rated life.	FY05	20	37	\$15,000
HUNT	ROOFS	System Failure. Beyond Rated Life	FY05	20	37	\$5,000
HUNT	ROOFS	This roof system is old and has failed!	FY05	20	37	\$138,000
<b>HUNT Total:</b>						<b>\$354,000</b>



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# D-11 Facilities Department

## Work Environment

- Employee Qualifications
- Morale / Satisfaction
  - Employee Survey
  - Turnover
- Teamwork / Effectiveness
- Workmen's Comp / Safety



# D-11 Facilities Department

## Work Environment

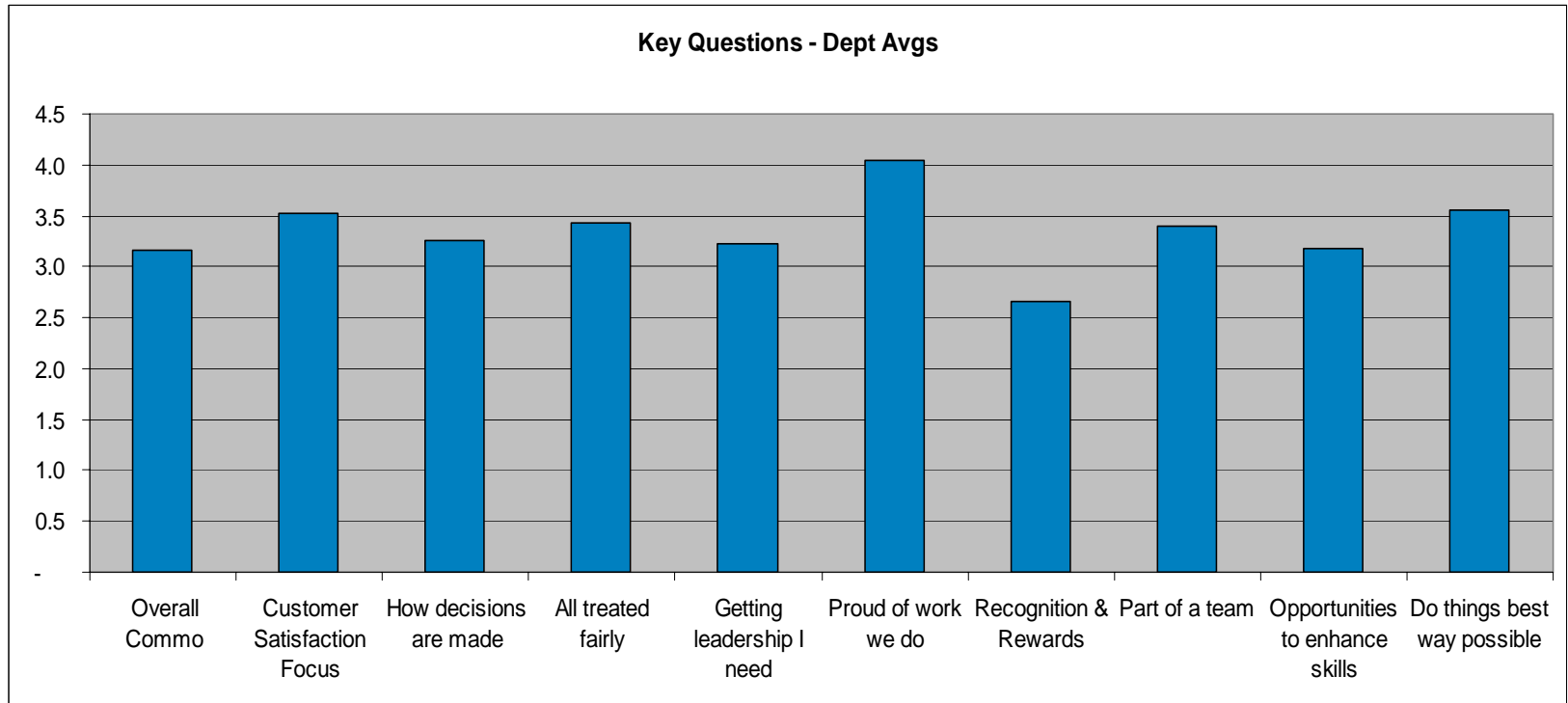
- **Employee Qualifications**
  - Highly qualified workforce (ie. Master Electricians, Plumber)
  - “Professionalism” feedback (> 96% very satisfied)
- **Morale / Satisfaction / Longevity**
  - Internal Survey results
  - Turnover (previous 12 Months) very low: 1 craftsman
  - Avg employee seniority is 10 years with the District



# D-11 Facilities Department

## Work Environment

**Employee Survey 3/10/05**





# D-11 Facilities Department

## Work Environment

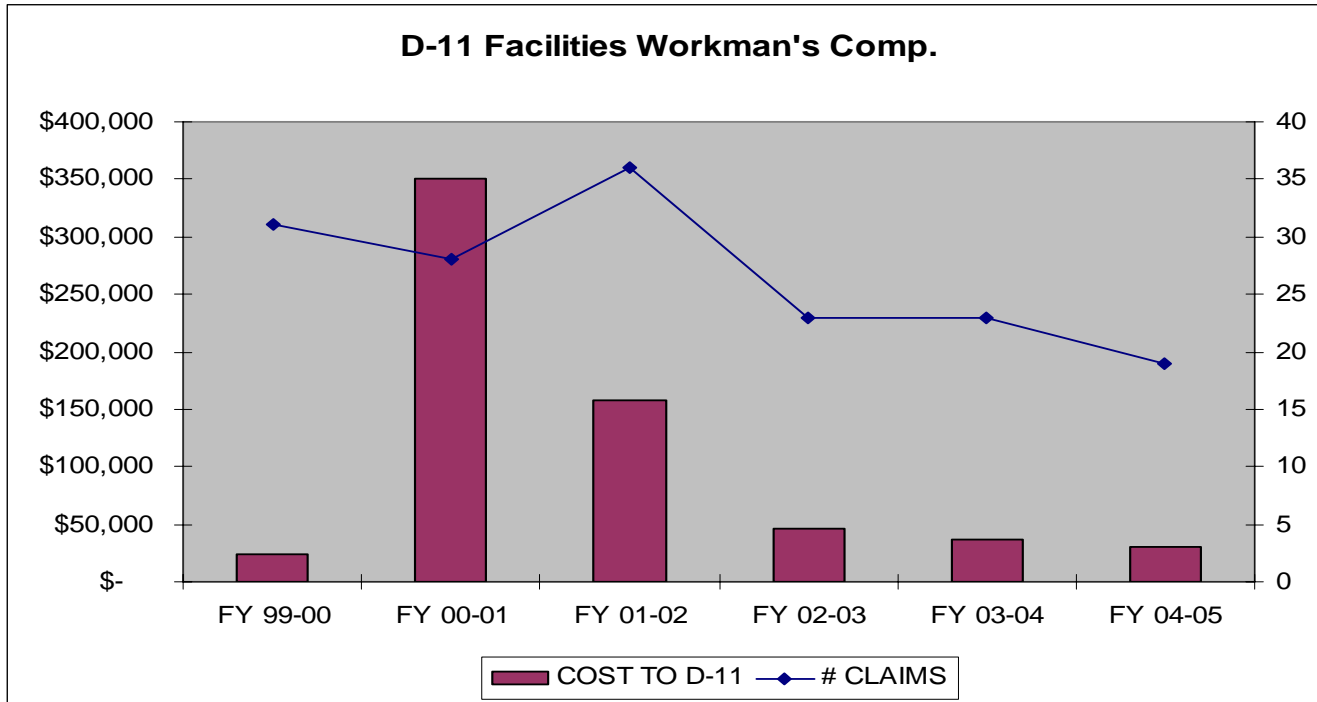
- Teamwork / Effectiveness
  - Multi-shop projects
  - Suggestions from craftsmen
  - CQI training



# D-11 Facilities Department

## Work Environment

- Workmen's Compensation / Safety



	FY 99-00	FY 00-01	FY 01-02	FY 02-03	FY 03-04	FY 04-05
COST TO D-11	\$ 24,049	\$ 350,897	\$ 158,306	\$ 46,494	\$ 36,179	\$ 30,110
# CLAIMS	31	28	36	23	23	19



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# D-11 Facilities Department

## Customer Satisfaction

- Work Order Feedback
- Principal Calls / Survey



# D-11 Facilities Department

## Customer Satisfaction

- Work Order Feedback\*

	Very Satisfied	Satisfied	Not Satisfied
Work Quality	96%	4%	0%
Worker Professionalism	96%	4%	0%
Timely Completion	96%	4%	0%

\* Based on 283 work order feedback cards received since initiating this procedure in Dec '04



# D-11 Facilities Department

## Customer Satisfaction

- Principal Calls / E-mails (Unsolicited)
  - 70% positive (approx)
  - 30% negative (approx)



# D-11 Facilities Department Self Evaluation Summary

Financial Perspective	<b>A- / D</b>
Department Processes	<b>B-</b>
Work Environment	<b>B</b>
Customer Satisfaction	<b>A-</b>
<b>OVERALL</b>	<b>B / C</b>



# D-11 Facilities Department Focus Areas

- Data quality / Use of Data
- Proactive Maintenance:
  - Goal: 75% Scheduled Maintenance MHrs
  - Continue emphasis on Preventive Maintenance
- Capital Renewal Funding:
  - Pay off COPs early (free up \$4M/yr in 2009)
  - Add'l Gen Fund contributions when possible