Centennial School District
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COMMITTEE/BOARD AGENDA ITEM

TO: Board of School Directors

DATE: January 11, 2019

RE: School Dude (work order system) data analysis 2018

I provide the following information:

Office/Department	Business & Finance
Item Attached	Information Item
Description:	Attached please a report provide comparisons of Centennial's corrective and preventive work orders for calendar year 2018 versus our peer group drawn from School Dude's 3,497 public K-12 clients.
Cost	N/A
Funds Allocated in Department Budget Account	N/A
Budget Transfer Required	☐ Yes ☒ No
Cabinet Discussion	☐ Yes ☒ No
Solicitor Review for Contract/Agreement	☐ Yes ☐ No ☒ N/A
Anticipated Approval Date	N/A
Other information:	We will be back to the Board with a scope of work shortly to update the preventive maintenance modules to make sure that all new equipment from Swan Way, Klinger, Log, and Transportation is accurately reflected in automatically generated PM work orders.

Please contact me with any questions or comments regarding this information.

Maintenance Executive Overview Briefing

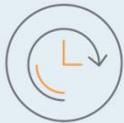**Centennial School District**

2018-12

Categories

What will these Key Performance Indicators (KPIs) allow me to do?

maintenance

Increase maintenance staff efficiency and overall productivity, streamline workflows, improve customer engagement and satisfaction, capture and show productivity gains, and track overall health of your maintenance program

preventive

Determine success of your preventive maintenance program, transition to being more proactive, reduce backlogged work, increase life expectancy of equipment, and decrease catastrophic failures

Time Frame

Key Performance Indicators (KPIs): Past 12 Months

Trends: Past 3 Years

Total Number of Work Orders
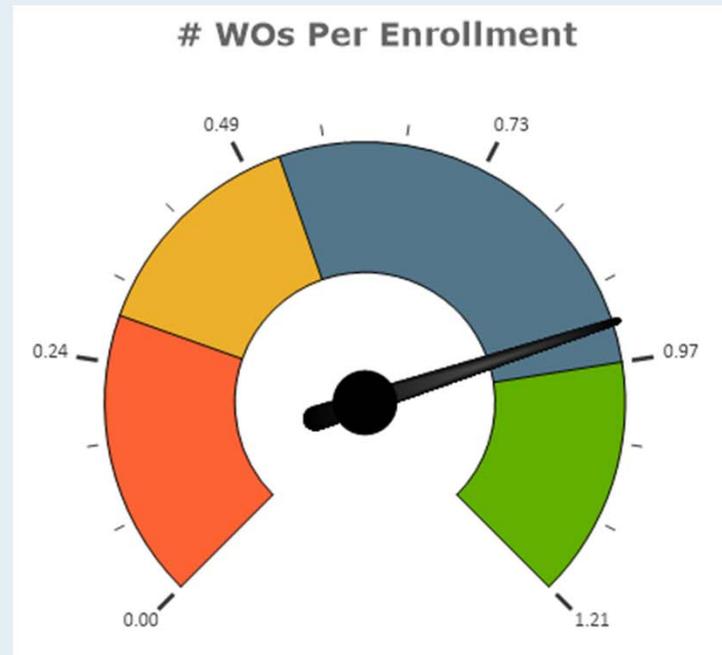
# of WOs

5,388

Total Corrective Maintenance (CM)	Total Planned Maintenance (PM)
1,248	4,140

This reflects how many repairs and jobs were captured in the 12 month rolling window. (includes all statuses)

WOs Per Enrollment Per Year


WOs Per Enrollment

Gauge showing 0.93 with scale markers: 0.00, 0.24, 0.49, 0.73, 0.97, 1.21

Enroll	# WOs	Your Value	Peer Category	# of Clients	Low 20%	Median	Top 20%
5800	5383	0.93	Public K-12	3,497	0.29	0.52	0.97

This metric is an indicator of how much work is being captured and also serves as a measurement of software utilization. Far below average can indicate you are not capturing all work being performed.   Far above the average may be a sign of trying to capture too much at the risk of becoming inefficient. This metric is important because the more work is captured, cases can be stronger for justifying resources. (rolling 12 Months, ignores rejected work)

WOs Per SQFT

WOs Per SQFT

Gauge showing value near 4.79, with scale markings at 0.00, 2.39, 4.79, 7.18, and 9.57.
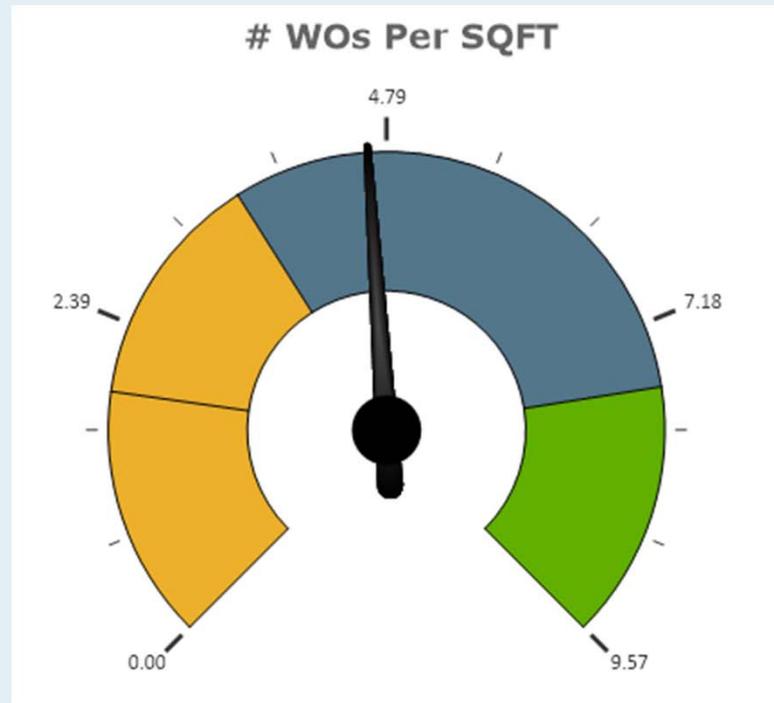
SQFT	# WOs	Your Value	Peer Category	# of Clients	Low 20%	Median	Top 20%
1,156,480	5,383	4.65	Public K-12	3,497	1.88	3.64	7.66

Total count of work orders for a 12 month rolling window *(this month – last 12 months, ignores rejected work)* divided by the total sum of square footage.
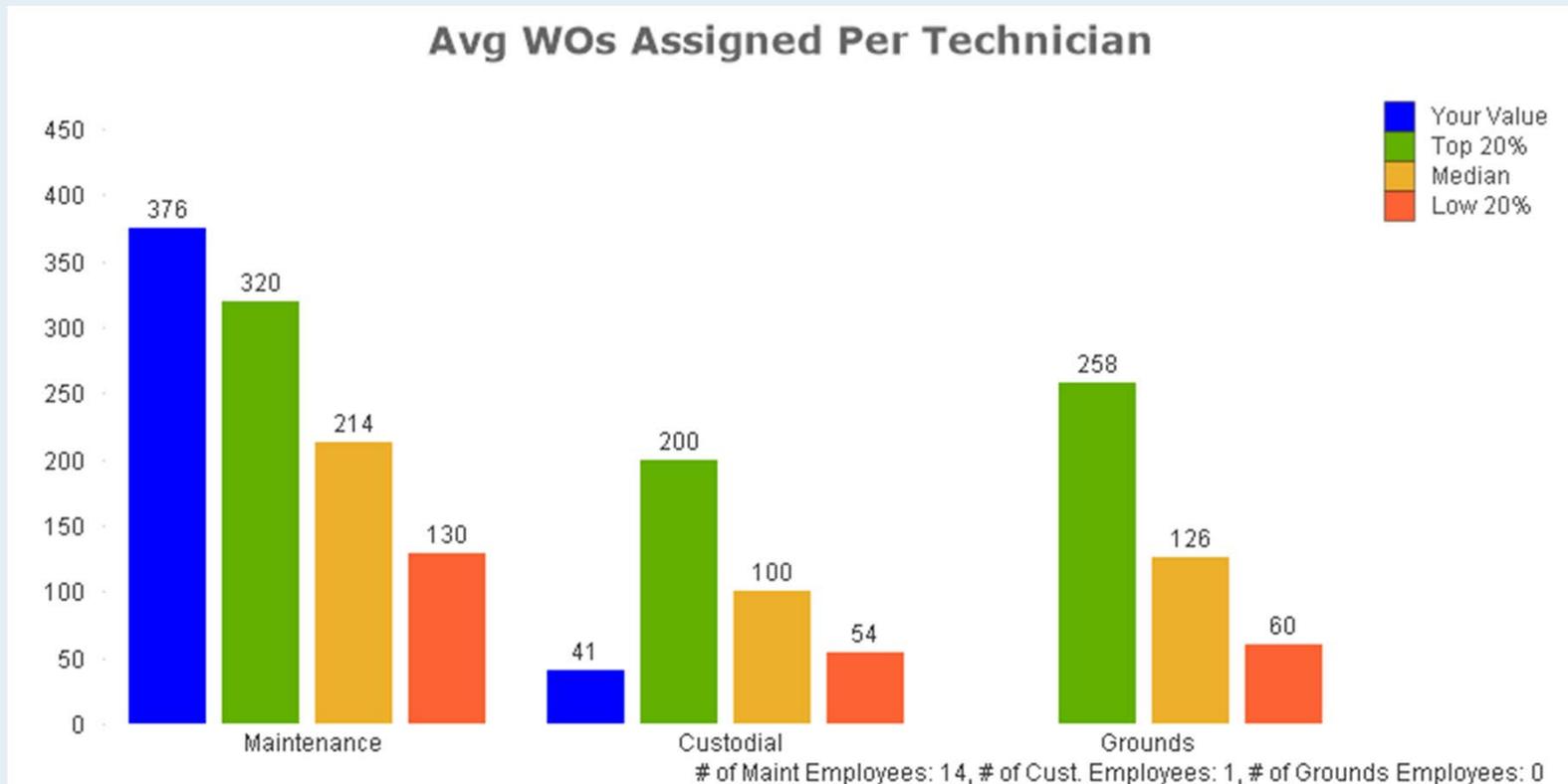
% of WOs Completed in Less than a Week

% of CM Completed 7 Days or Less
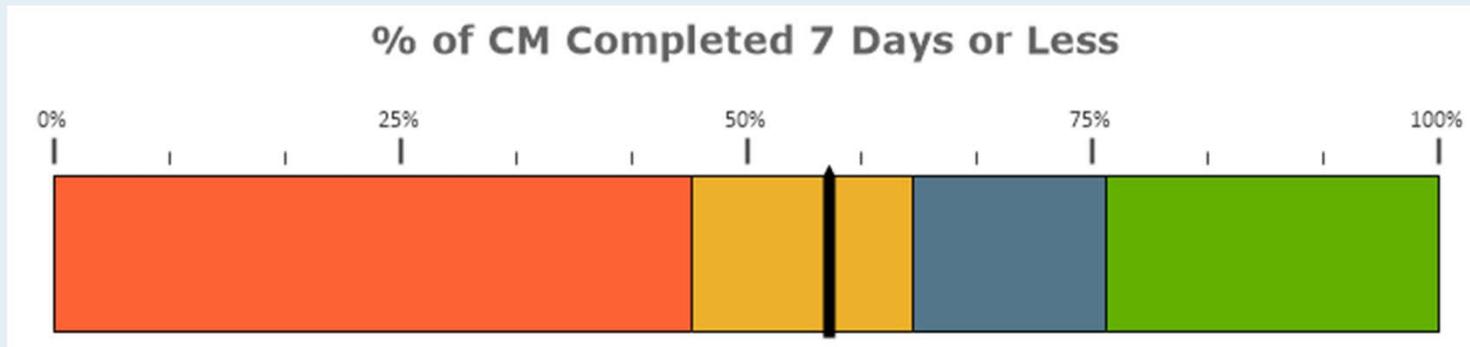
# WOs Comp	Your Value	Peer Category	# of Clients	Low 20%	Median	Top 20%
1,151	56%	Public K-12	3,497	46%	62%	76%

This KPI indicates how much work an institution is able to complete in 7 calendar days. Below the national average suggests potential process improvements for managing and completing work. Above the national average could be a sign you have embraced mobile, your staff completes their own work assignments online and/or have reduced (or eliminated) paper in your processes. This compares Completion Date – Start Date (uses Request Date if Start Date is not used) for WO's with a Priority of Low, Med or High & ignores PM's to see what % of PM WO's are completed in 7 Days or Less. (Rolling 12 Months)

Average Count of Work Orders Per Employee Per Year

Avg WOs Assigned Per Technician

Legend:
- Your Value (blue)
- Top 20% (green)
- Median (yellow)
- Low 20% (orange)

Maintenance: 376, 320, 214, 130
Custodial: 41, 200, 100, 54
Grounds: 258, 126, 60

# of Maint Employees: 14, # of Cust. Employees: 1, # of Grounds Employees: 0

This metric gives you a direct comparison of your staff's productivity compared to peer institutions. Employees are users who have been assigned more than 30 work orders, but less than 2,000 in a rolling 12 month window.
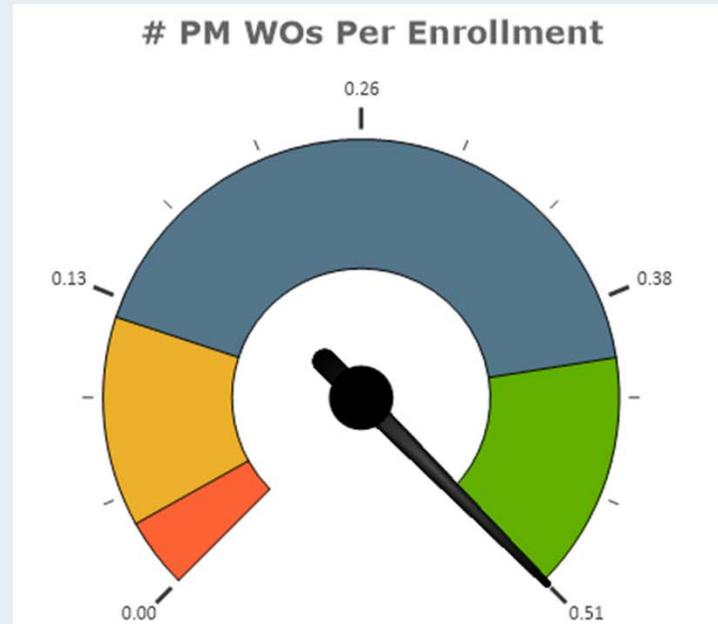
Total Number of PM Work Orders Generated over past 12 Months

 # PM WOs

**4,140**

Rolling 12 Months, includes all statuses

PM WOs Per Enrollment

PM WOs Per Enrollment

Enroll	# Comp PM WOs	Your Value	Peer Category	# of Clients	Low 20%	Median	Top 20%
5800	3651	0.63	Public K-12	2,897	0.03	0.12	0.41

This metric is used along with the PM/WO ratio to gauge the strength of your PM program. Implementing a strong PM program typically has an ROI within 1-2 years by reducing system failures and emergencies, extending equipment life and decreasing energy consumption. Increasing PM work can also help make workers' schedules more predictable as organizations performing more PM work see reductions in reactive work over time. (Rolling 12 Months, ignores rejected work)
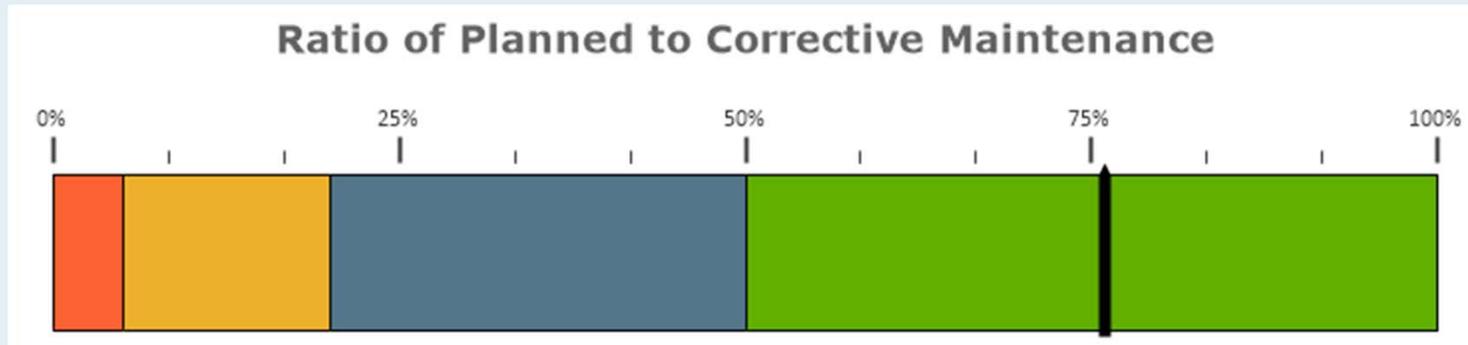
PM WOs Per SQFT
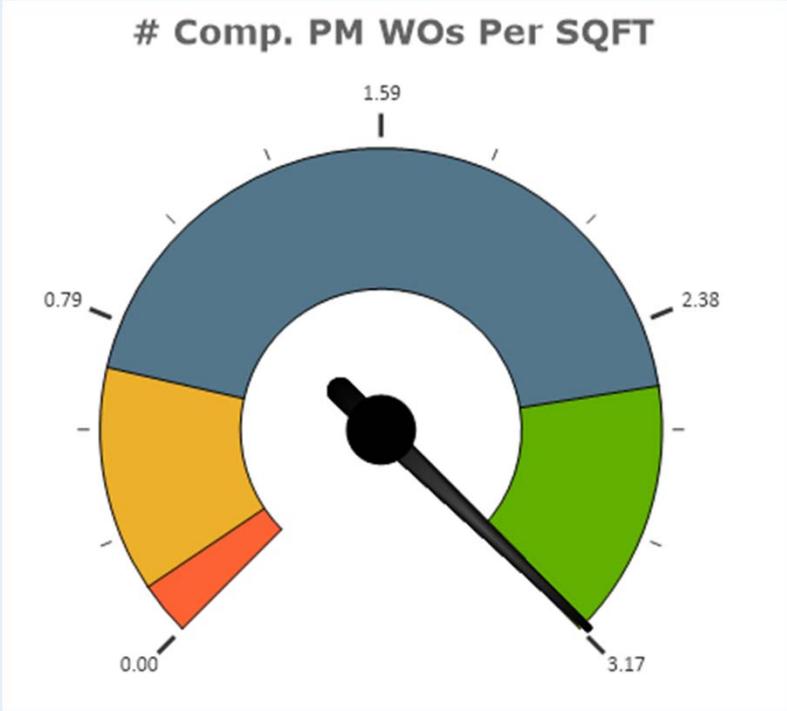
# Comp PM WOs	SQFT	Your Value	Peer Category	# of Clients	Low 20%	Median	Top 20%
3,651	1,156,480	3.16	Public K-12	2,897	0.13	0.68	2.54

KPI: Rolling 12 Months

Ratio of PM Work Orders to Work Orders

Ratio of Planned to Corrective Maintenance

| 0% | 25% | 50% | 75% | 100% |

# CM WOs Comp	# PM WOs Comp	Your Value	Peer Category	# of Clients	Low 20%	Median	Top 20%
1,151	3,651	76%	Public K-12	2,897	5%	20%	50%

This metric lets you evaluate how successful your institution has been at transitioning from a reactive to a proactive mindset and indicates how much of your M&O resources are dedicated to PM vs Reactive work. As more time is invested into PMs, you should see a decrease in reactive work, an increase in cycle times and an improved learning environment. (Rolling 12 Months)

Percentage of PM WOs Completed in a Month or Less

% of PM Completed 30 Days or Less

40%	55%	70%	85%	100%
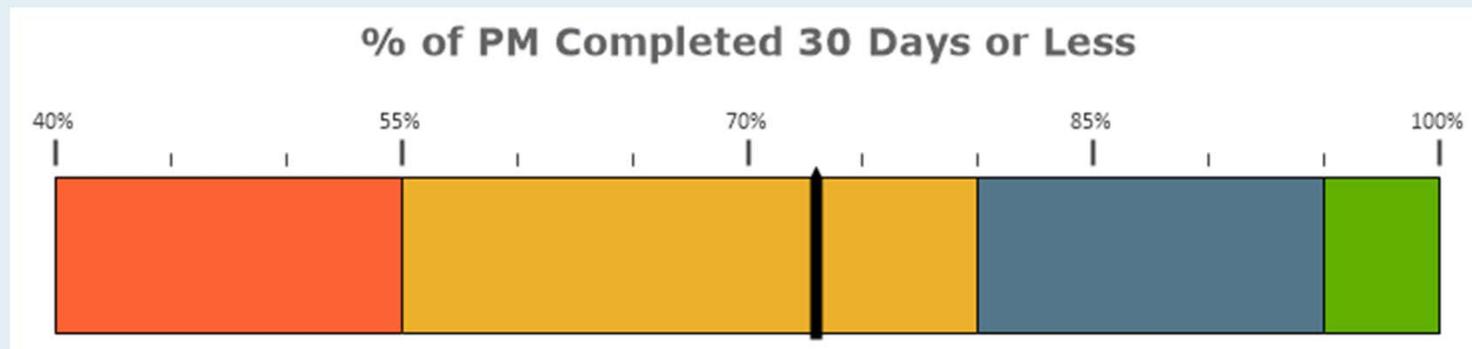
# PM WOs Comp	Your Value	Peer Category	# of Clients	Low 20%	Median	Top 20%
3,651	73%	Public K-12	2,897	55%	80%	95%

This metric is a measurement of the responsiveness of proactive work. An above average measurement here leads to higher productivity and a decrease in backlog. This compares Completion Date – Start Date (uses Request Date if Start Date is not used) to see what % of PM WO's are completed in 30 Days or Less. (Rolling 12 Months)

% of PM's with Equipment
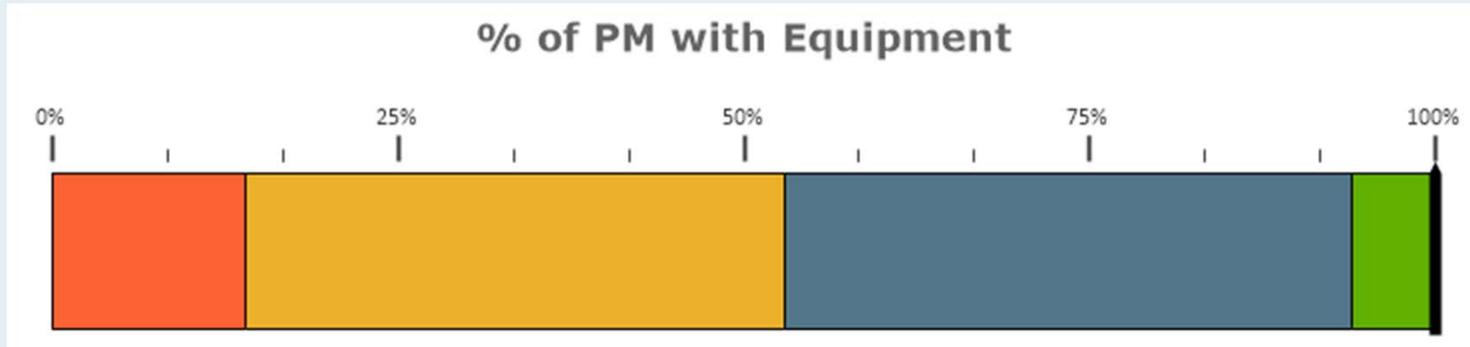
Peer Category	# of Equipment	# PM Schedules	Your Value	Low 20%	Median	Top 20%
Public K-12	1243	671	100%	14%	53%	94%