#### **PERCEPTION®**

# Measuring Work Order Performance



Shipyards that know their true costs are more likely to be profitable and are in a better position to challenge their competition.

They can focus their efforts and resources on those areas that can benefit the most from productive change.

A shipyard would never know this unless it had a means for measuring benefits and their relative impact upon profits.



World-class shipyards have a strong focus on maximizing the efficiency of their manufacturing and assembly processes. They strive to perform work at the most productive stages of construction, eliminate wasted time, and simplify shipyard production processes.

These shipyards execute effective production plans and work hard to successfully stay on budget and on schedule. They know where they are and where they are going.



While *PERCEPTION* measures performance at all defined WBS levels of a project, it is equally important to monitor performance at the work order level of detail.

PERCEPTION collects detailed information of work orders, their costs and schedules. The system provides an analysis of user-selected work orders to measure work order performance in terms of both cost (labor hours) and schedule.

This analysis can highlight the more significant problem areas, so that management can better focus their resources on resolving them early and with greater effectiveness.



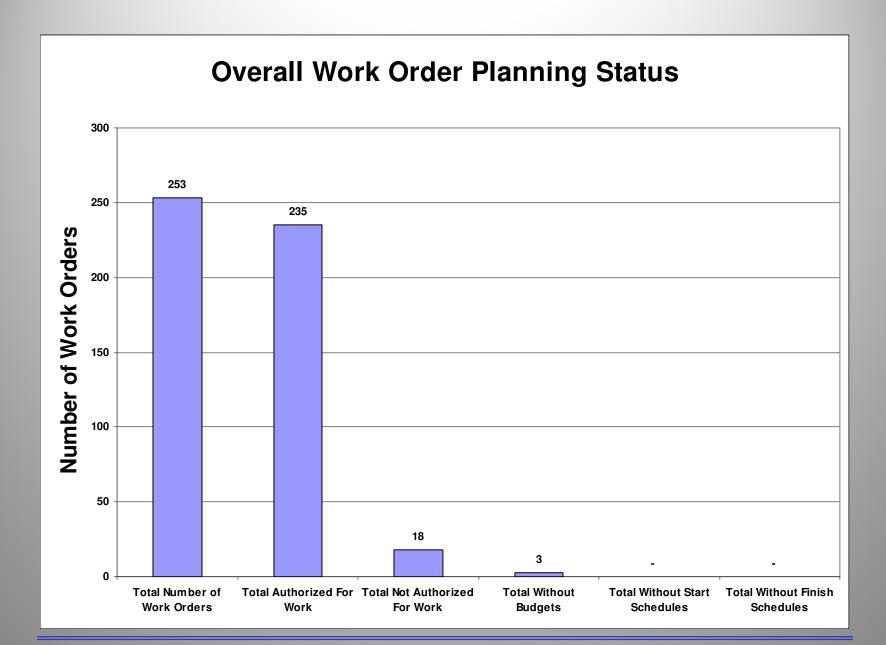
# What Additional Information Can PERCEPTION Work Order Data Provide?



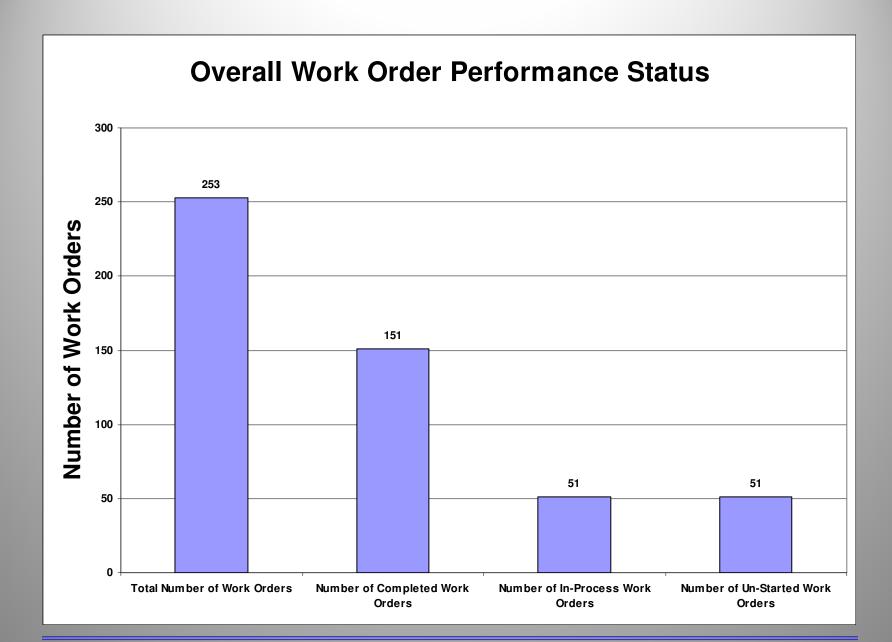
## Overall Work Order Performance

**PERCEPTION** summarizes overall work order planning status & performance as illustrated by the following set of graphics.



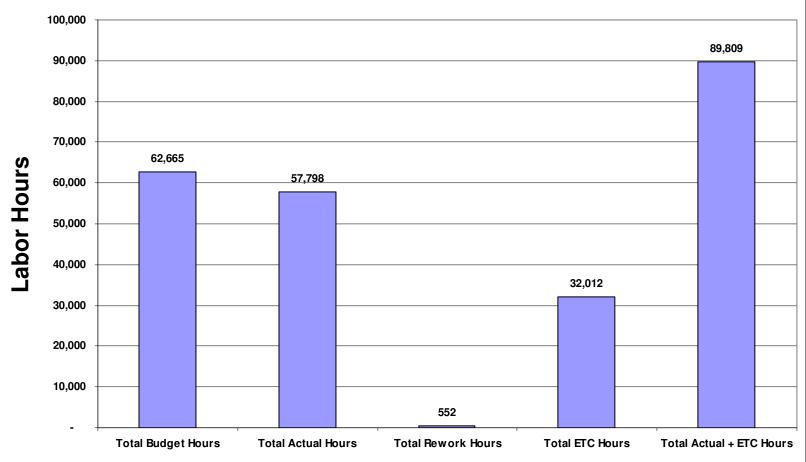








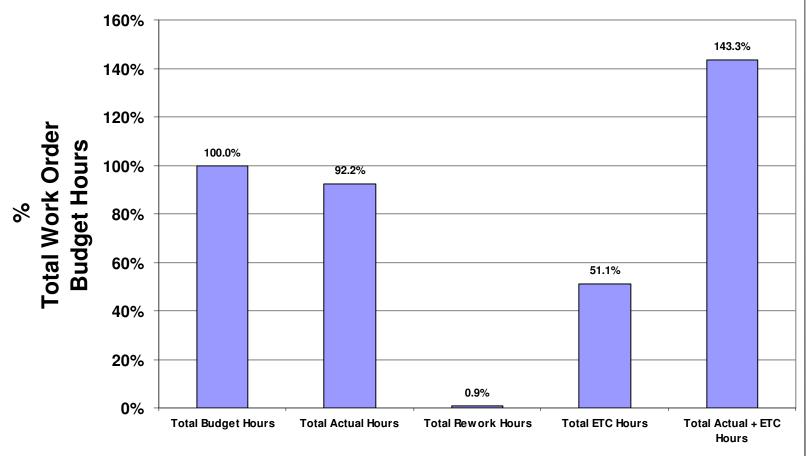
#### **Overall Work Order Performance Status**



Rework Included in Actual Hours ETC based on Manual Assessed Progress



#### **Overall Work Order Performance Status**



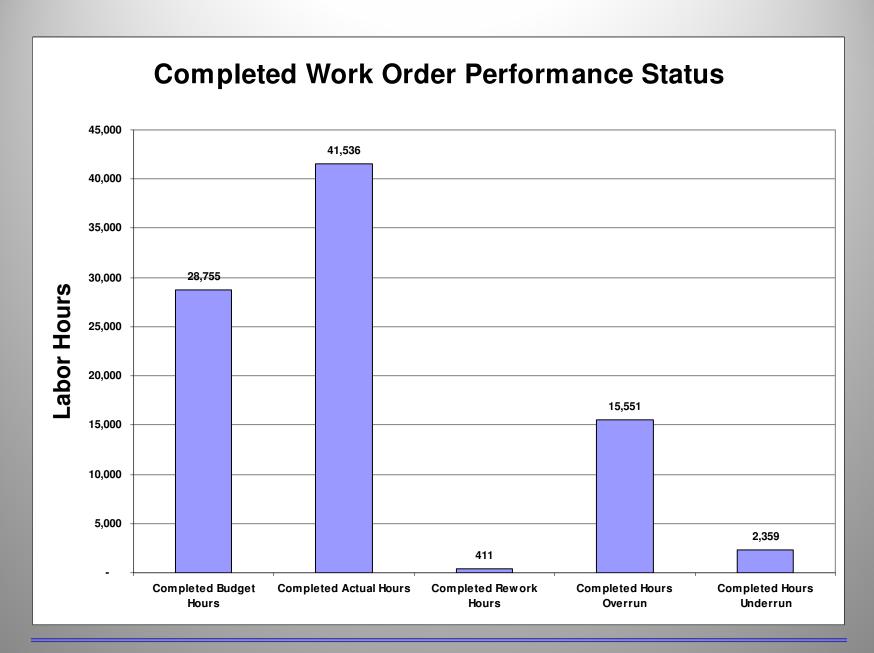
Rework Included in Actual Hours ETC based on Manual Assessed Progress



### Completed Work Order Performance

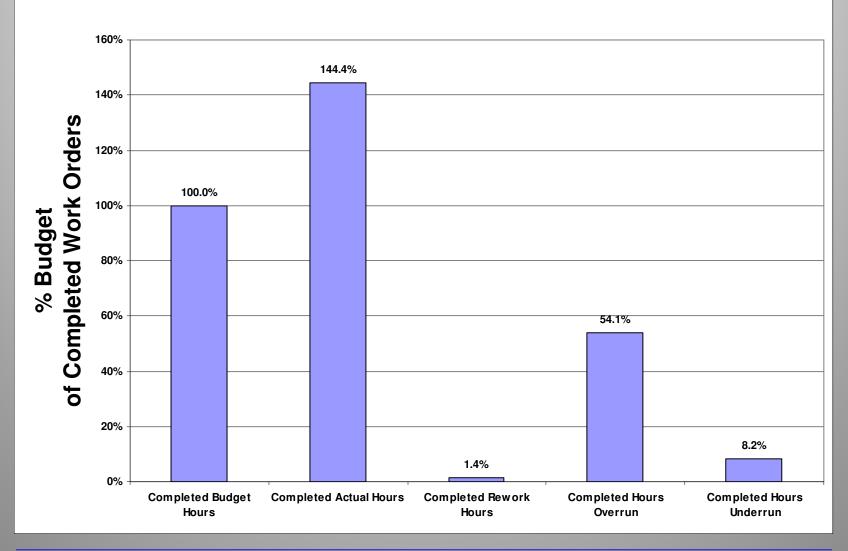
As a special subset of work orders, the following graphics summarize performance of completed (closed) work orders.



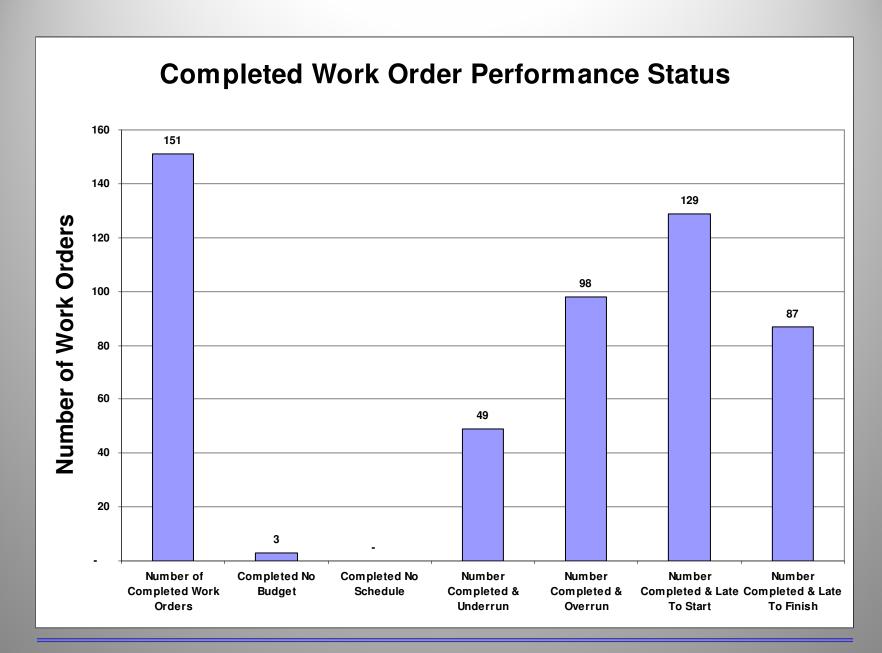




#### **Completed Work Order Performance Status**





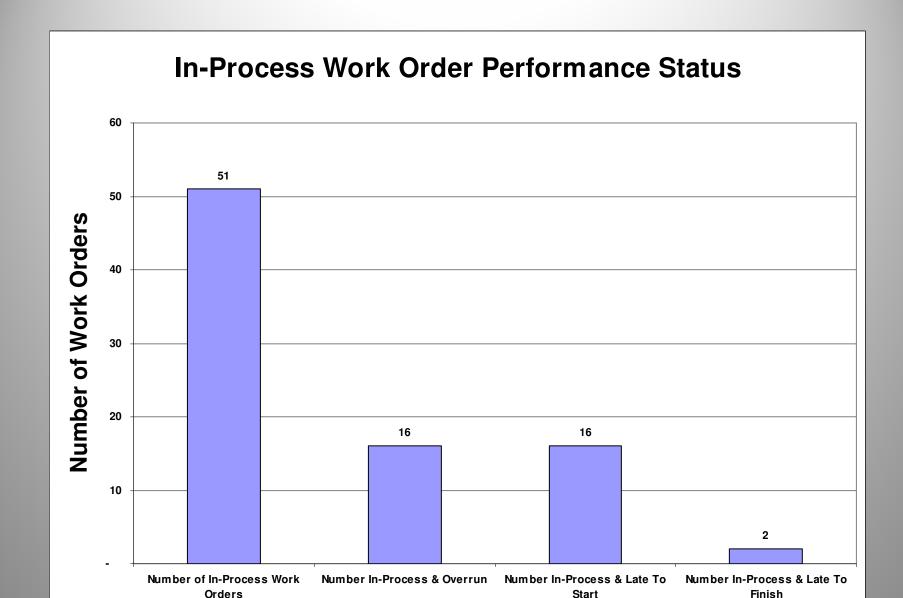




# In-Process Work Order Performance

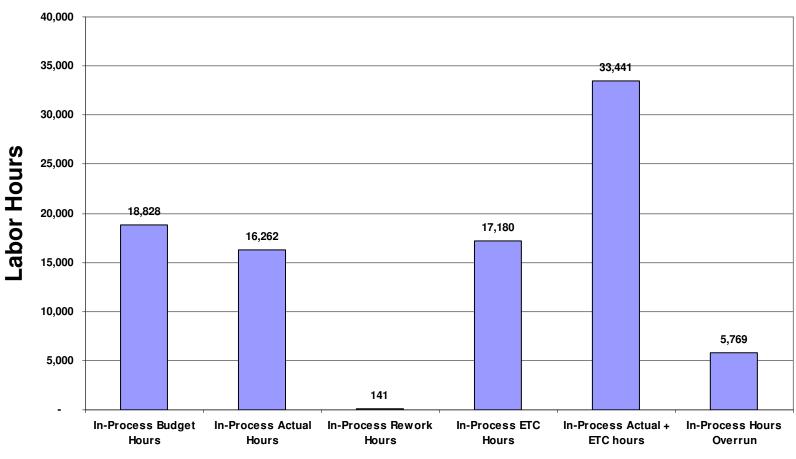
As a special subset of work orders, the following graphics summarize performance of in-process (started, not completed) work orders.







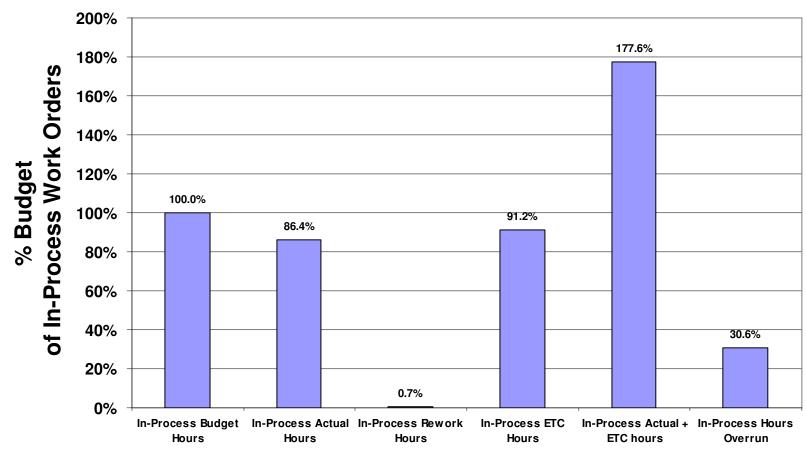
#### **In-Process Work Order Performance Status**



Rework Included in Actual Hours ETC based on Manual Assessed Progress



#### **In-Process Work Orders Performance Status**



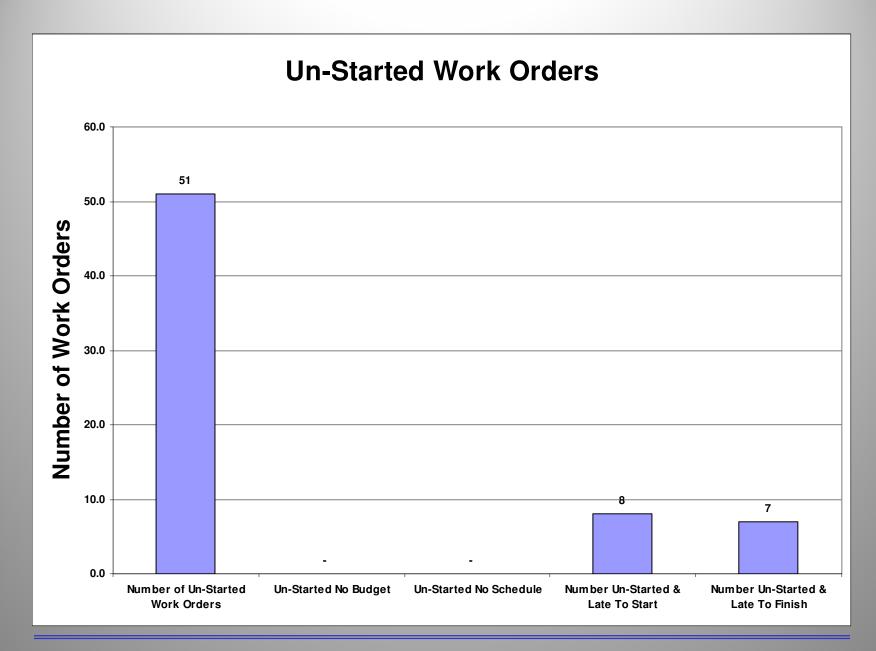
Rework included in actual Hours ETC based on manual assessed progress



## Un-Started Work Order Performance

As a special subset of work orders, the following graphics summarize the status of work orders not yet started.



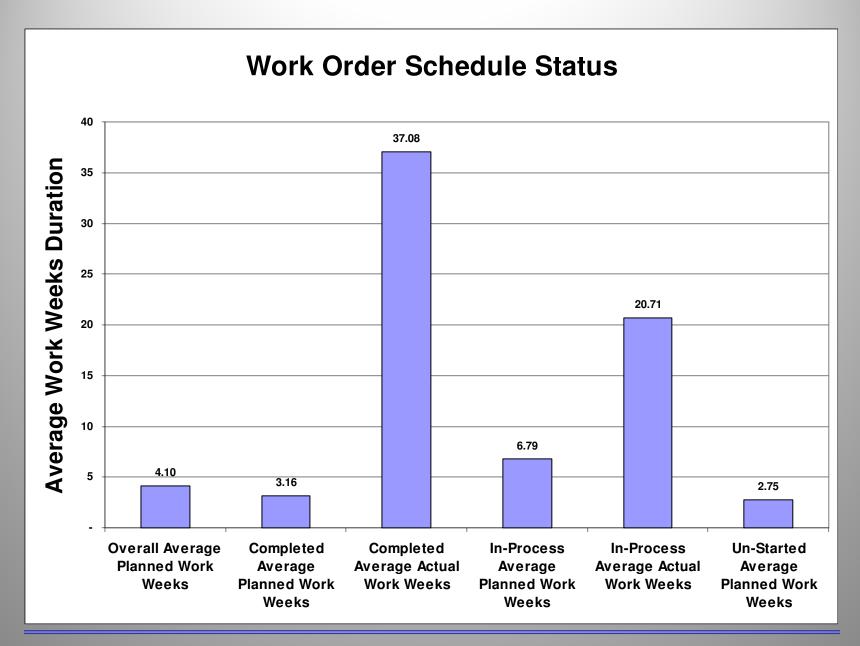




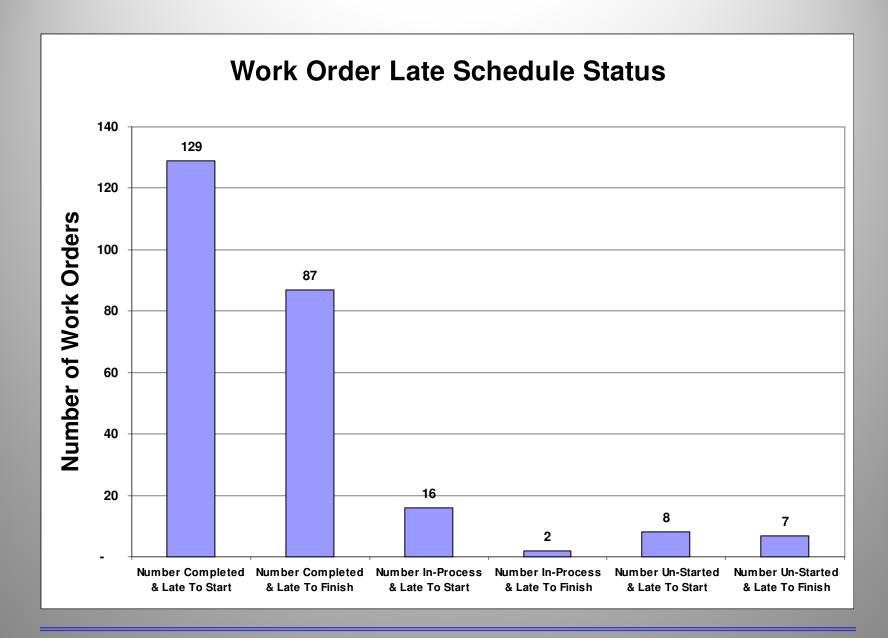
## Work Order Schedule Performance

An important part of the analysis is the schedule performance of the work orders.

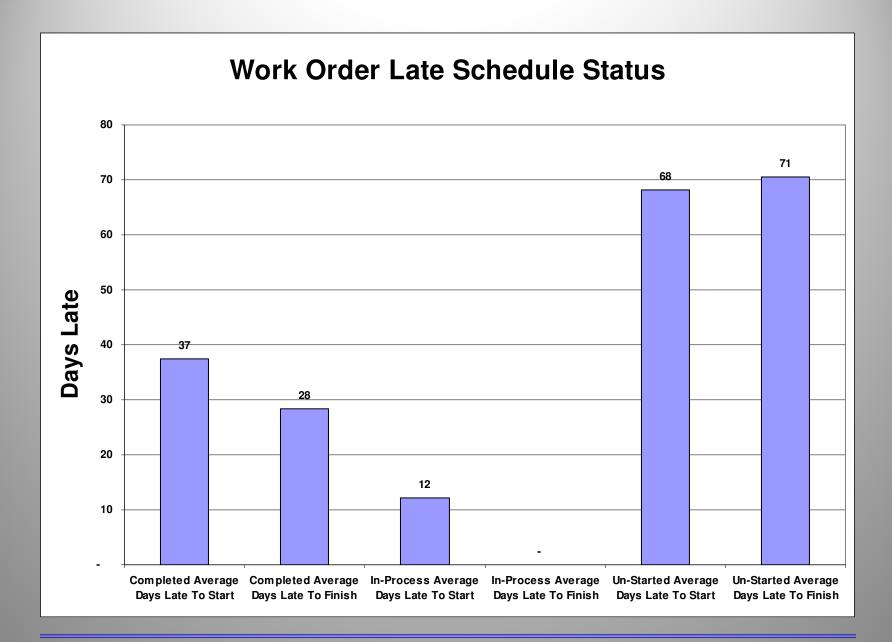




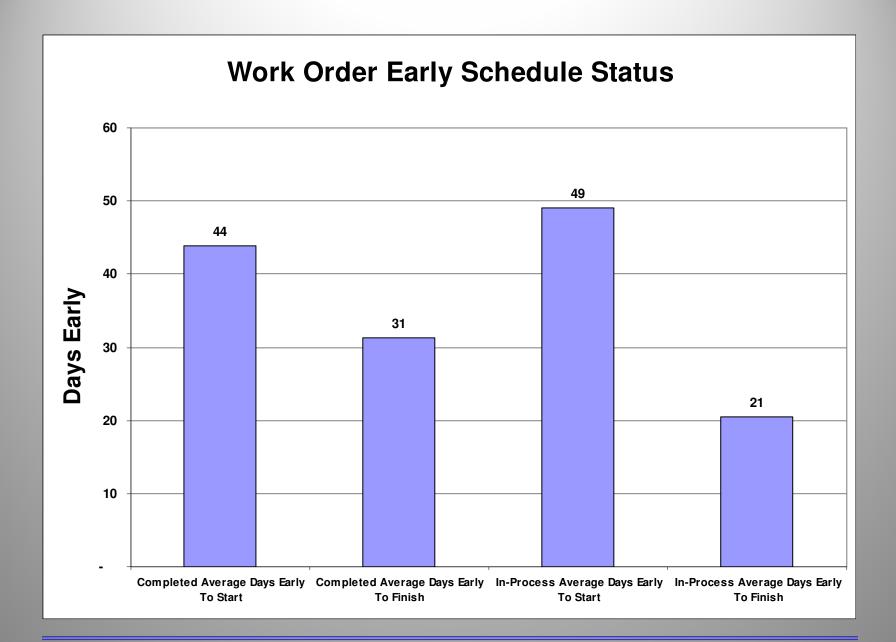




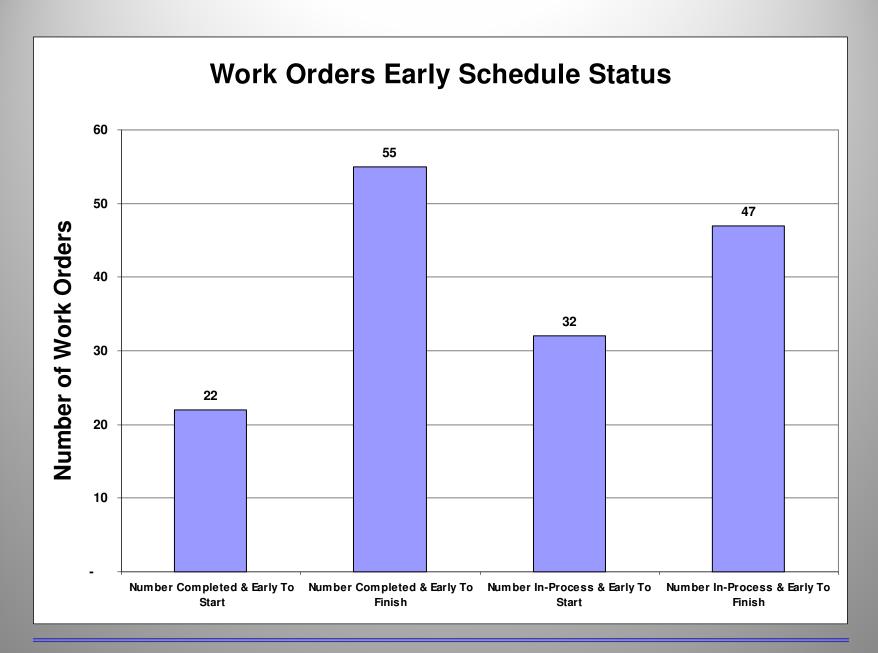














**PERCEPTION** summarizes performance at all levels of a project. The following presentations describe those that are critical to the management of any project.

- •<u>Tracking progress and estimates at completion</u>: these reports track budget, earned value (BCWP), actual costs (ACWP), budgeted cost of work scheduled (BCWS), and estimate at completion (EAC), as well as cost/schedule variances and trends.
- •<u>Measuring and summarizing work order performance</u> in terms of costs and schedules. The system can focus on any selection of work orders for in-depth analysis of detail performance.
- •<u>Measuring and summarizing work center performance</u> in terms of costs and schedules. The system can focus on any selection of work orders for in-depth analysis of production process performance.
- •<u>Measuring and summarizing cash flow requirements</u>. The system tracks cash flow requirements for labor, material & overhead. The system details commitments, receipts, and usage of direct purchase material, subcontract work, owner-furnished material and general stock.



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