

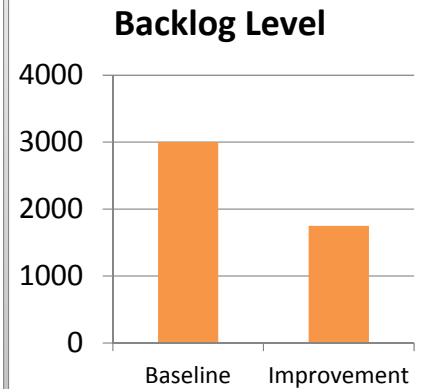
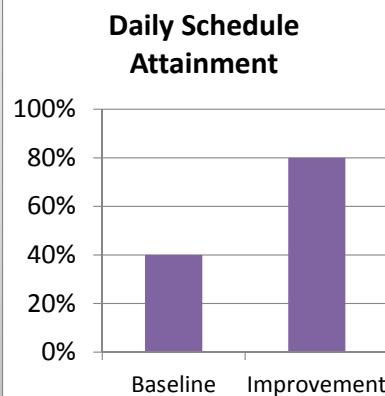
Western Refinery- Routine WM

Background and Situation

- Niche refinery with throughput capacity of 50,000 BPD
- Employs approximately 288 individuals plus contractors
- Poorly Defined and Documented Work Processes and Roles & Responsibilities
- Lack of Process Key Performance Indicators to Drive Continuous Improvement
- Lack of Predictable Results

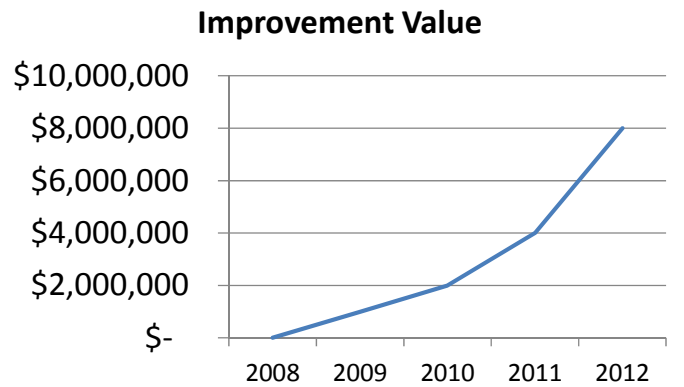
Process Results:

- Daily Schedule Attainment from less than 40% to 80% and improving
- Reduced Backlog of Maintenance Work Orders from +3000 to 1750
- Emergency (Priority 1) work reduced from over 35% of WO to less than 10% of WO



Bottom-Line Impacts:

- Improved work controls resulted in increased availability and production
- Improvements valued at \$8M over 4 years



RELIABILITY MANAGEMENT GROUP

Masters of Implementation