Service Provider’s Goals
As Seen by the Buyer

A) Pride
B) Employ people
C) Make the buyer happy
D) Maximize the difference between his receipts and his cost

Service Buyer’s Goals
As Seen by the Provider

A) Employ provider’s people
B) Build provider’s resume
C) Be a good citizen
D) Maximize the value he receives for each dollar spent
Expectancy Theory

• There is an expectancy or probability of success associated with each behavior

• There is an association of certain outcomes with every behavior

Motivation is Greatest When:

• The belief that performance at a particular level is possible

• The belief that performance will lead to certain positive outcomes

• The outcomes appear attractive
Contract Maintenance Incentives

Advantages

• Increase ownership and commitment by the Contractor
• Motivate generation of new ideas
• Encourage close cooperation between Owner and Contractor
• Influence key personnel assignments
• Create potential for greater management attention
• Stimulate a more disciplined approach in using information and control systems

Disadvantages

• Additional administrative cost
• Extra negotiations
• Priority changes require negotiations
• Increased number of disputes
• Difficulty in establishing fair and equitable targets for performance measurements
Project No. 1
Paper Mill
Mid-South

Safety Work Orders Completed
Award Minimum at 20%
Maximum Goal = 45%

Improvement = 11.4% per year
PM Work Orders Completed
Award Minimum at 88%
Maximum Goal = 98%

Percent of PM Work Orders Completed

Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2

Emergency Work Load
Award Minimum at 5%
Maximum Goal = 0%

Percent Emergency Man-hours to All Man-hours

Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2
Overtime Worked by Maintenance Core Group
Minimum = 20%
Maximum Goal = 10% or Less

Project #1

Percent Overtime

Improvement = -2.8% per year

Absenteeism
Minimum = 3%
Maximum Goal = 1% or Less

Project #1

Percent Lost Hours of Total Hours

Improvement = -0.04% per year
**Asset Downtime**
Award Minimum = 4.6% or Above  
Maximum Goal = 2% or Less

![Graph showing Asset Downtime](image1)

**Skills Inventory - Developing Multi Skilled Crafts**
Award Minimum at 0.25%  
Maximum Goal at 0.75%

![Graph showing Skills Inventory](image2)
Project No. 2
Chemical Plant
Houston, Texas

Reliability
Monthly Machine Failure Rate
Target = 1.25% or Less

Projects #2

Percent of Machines that Failed in Month
Improvement Trend
0.12% per year

0.0%  0.2%  0.4%  0.6%  0.8%  1.0%  1.2%  1.4%  1.6%  1.8%  2.0%  2.2%
1997 1998
**Productivity**

Man-hours per Completed Base Work Order

**Target = 29 hours or Less**

**Training**

Percent of Training Man-hours to Goal

**Target = 100% or Better**
Contractor’s Adherence to Man-hour Budget
Target = Zero Percent or Less

Contractor’s Overall Maintenance Budget
Target = Zero Percent or Less
Safety
Recordable Incident Rate
Target = 1.5 or Less

Project #2

Improvement Trend
-0.38 Incidents Per Year

Project No. 3
Chemical Plant
Houston, Texas
Reliability Index
Machines Requiring Rework
During “Warranty” Period

Project #3

Count of “Warranty” Callbacks

Improvement Trend
- 3.48% incidents per year

Maintenance Labor Cost Performance
Cumulative Labor Billing vs. Cumulative Target Labor Billing

Project #3

Cumulative Billing vs. Target Cost

1998
Percent Overtime Worked

Project #3

Improvement Trend
- 7.2% per year

Maintenance Effectiveness Ratio

Project #3

Improvement Trend
- 1.4% points per year
Plan Design Considerations

- Integrated approach to design and implementation
- Performance measures:
  - Obtainable
  - Within Contractor’s control
  - Comprehended
  - Valid
- Collaborative environment
- Communication of goals and status to employees
- Trust between Owner and Contractor
- Positive incentives versus negative incentives
- Two-way communication between Owner and Contractor
- Risk aversion increases with inability to absorb potential loss
- Incentive plans take time
- Incentive plan flexibility
- Effective incentive plans can respond to specific requirements and peculiarities of application