Using Leading Indicators to Measure OHS Program Performance and ROI

It takes more than technical skills and a passion for safety to run a successful OHS program in the corporate environment. You must also be able to advocate for your OHS program and hold your own against the other managers in their organization competing for corporate resources. Prevailing in this competition requires the ability to relate safety to profitability. More precisely, you must show the C-Suite executives that safety has a positive return on investment (ROI).

How to Measure ROI

ROI is a decision-making formula that business leaders use to judge the soundness of investment options. A positive ROI basically means that the benefits yielded by the investment are greater than the amount of the original investment. A negative ROI means just the opposite. Although there are lots of different variations, the basic, or "simple" ROI equation is this:

$$\textbf{ROI} = \frac{\textbf{Net Benefits}}{\textbf{Costs}} \times 100\%$$

Generally speaking, the higher the ROI, the more desirable the investment. Here's a closer look at the different parts of the

ROI equation:

Net Benefits: This is the difference between the benefits of the investment and the costs associated with the benefits. So, for example, if spending $100,000 on a new lockout system is expected to generate $150,000 per year in reduced claims, the net benefit would be $50,000 (that is, $150,000 – $100,000). As a technical matter, you can calculate net benefits either before or after taxes and depreciation.

Costs: The denominator in the ROI equation is the total costs needed to generate the benefits from the investment.

Time Period: There's also a timing element in the ROI equation. Companies generally want to measure recovery of the investment over a unit of time. In some cases, benefits are shown during the first year of investment—or even within the same fiscal year. In other words, companies want to know if they can recover the costs of the investment in the first year (or fiscal year). Other companies use an ROI formula that spreads out the benefits on a weighted average over the lifetime of the investment.

Why the ROI Formula Works to OHS Coordinators' Disadvantage

Because it looks to future performance, ROI works best with measures that are predictive rather than reactive in nature. Or, to use the business lingo, measuring success under ROI entails the use of leading rather than trailing indicators. This puts OHS coordinators at a disadvantage. "Historically," explains OHS consultant Wayne Pardy, "safety professionals have relied on measures such as lost time injuries, frequency and severity, incident costs, etc. to evaluate safety performance." These measures look at past performance. And at first blush, they also appear to provide a reliable indicator of future performance. After all, if injury rates have been

low in the past, it’s a sign that the OHS program is effective and will continue to work well in the future.

But this assumption isn’t necessarily true. The problem with after-the-fact incident and injury statistics is that an incident has to first occur to have any reliable indicator of performance, notes Pardy. “This is nothing more than bean counting. It tells you nothing about system improvement opportunities or prevention strategies.”

Although they’re no doubt important, incident and injury indicators (including frequency and severity rates) are measures of failure, Pardy continues. They focus on the negative. They can be used for comparison purposes, but that comparison is still based on failures recorded by your safety system, as compared with your performance, and that of others. It also requires you to wait until you have a statistically reliable number of these indicators tracked over a reliable time frame to give you an accurate picture of your performance. This methodology is ill-suited to the demands of ROI analysis.

A Better Safety ROI Metric

To measure success under ROI, you must turn your safety performance measurement and recognition system into an achievement-based system, rather than one based on injuries and other failures. “Safety professionals must develop measures to assess and reward positive behaviors, not just of workers but everybody in the organization, including management,” Pardy explains.

100 Performance Measures

To move to an achievement-based model or a performance-based system you must establish specific goals, performance targets, and standards that you can measure to determine if your OHS

system is working and whether adjustments are necessary. Which measures should you use? Much will depend on the size and characteristics of your company and the industry you're in. But to get you going, here are 100 performance measures that Pardy recommends considering.

1. Total workers' compensation costs.
2. Average cost per claim.
3. Costs per man-hour.
4. Injury logs.
5. Industry ranking.
6. Behaviour observation data.
7. Benchmarking other companies.
8. Employee perception surveys.
9. Frequency of all injuries/illnesses.
10. Severity of all injuries/illnesses.
11. Lost time incidents.
12. Investigations completed on time.
13. Investigation identifies causes.
14. Investigation identifies action plan.
15. Action plans implemented.
16. Safety meetings held as scheduled.
17. Agenda promoted in advance.
18. Safety records updated and posted.
19. Inspections conducted as scheduled.
20. Inspection findings brought to closure.
21. Management safety communications.
22. Management safety participation.
23. Near miss/near hit reports.
24. Discipline/violation reports.
25. Self-audits for regulatory compliance.
26. Contractor injury/illness statistics.
27. Total manufacturing process incidents.
28. Total transportation incidents.
29. Rate of employee suggestions/complaints.
30. Resolution of suggestions/complaints.
31. Vehicle incidents per mile driven.

32. Safety committee activities.
33. Management initiatives.
34. Respiratory protection audit.
35. Hearing conservation audit.
36. Spill control audit.
37. Emergency response audit.
38. Toxic exposure monitoring audit.
39. Ventilation audit.
40. Lab safety audit.
41. Health/medical services audit.
42. Hazard communication audit.
43. Ergonomics audit.
44. Bloodborne pathogens audit.
45. Housekeeping audit.
46. Job safety analyses.
47. Lockout/tagout audit.
48. Confined spaces audit.
49. Machine guarding audit.
50. Electrical safety audit.
51. Vehicle safety audit.
52. Fire protection audit.
53. Employee participation rates.
54. Employee housekeeping.
55. Employee safety awareness.
56. Employee at risk behaviour.
57. Supervisor/manager participation.
58. Supervisor/manager communication.
59. Supervisor/manager enforcement.
60. Supervisor/manager safety emphasis.
61. Supervisor/manager safety awareness.
62. Injury/illness cases reported on time.
63. Statistical reports issued on time.
64. Ratio of safety and health staff to work force.
65. Safety and health spending per employee.
66. Titles in safety and health library.
67. Technical assistance bulletins issued.
68. Policies and procedures updated on time.

69. Wellness program participation rates.
70. Security audits.
71. Emergency drills conducted as planned.
72. Percent employees trained in CPR/first aid.
73. Absenteeism rates.
74. Productivity per employee rates.
75. Production error rates.
76. Incidence of workplace violence and harassment.
77. Incidence of accidental releases.
78. Employee exit interviews.
79. Employee focus groups.
80. Community outreach/public safety initiatives.
81. Off-the-job safety initiatives.
82. Insurance/consultant reports.
83. Reports of peer support for safety.
84. Certifications of health and safety personnel.
85. Percent safety goals achieved.
86. Training conducted as scheduled.
87. Safety training test scores.
88. Statistical tracking of programs.
89. Statistical process control.
90. System safety analysis.
91. Contractor safety activities.
92. Positive reinforcement activities.
93. OSHA audit—no citations.
94. OSHA audit—citations, no fines.
95. Willful violations.
96. Serious or repeat violations.
97. Other-than-serious violations.
98. Total dollar amount of penalties.
99. Average time to abate reported hazard.
100. Average time to respond to complaint.

Takeaway

You can use the above achievement-based safety criteria to set performance objectives for everyone in your company, from your

most senior executive to your hourly workers. They can help structure your own achievement-based performance model to suit your unique corporate culture, safety goals, and objectives. You can also use the measures to complement one another, so that senior and middle management have to support the line in order to achieve their objectives, and workers can see a very definite relationship between their efforts and the corporate direction and philosophy of the business.