

STMA Conference attendance 1,375% return on investment (ROI): a case study

INTUITIVELY, we understand that continuing education and training provides benefits to employees and to employers. Rarely is it quantified to show the financial return and its impact to facilities' bottom lines.

In today's economy, education and training dollars are disappearing, and employers are challenged to make certain that they are receiving premium value from the dollars invested in continuing education.

To help an employer assess the financial benefits that their facility will receive by sending their sports turf manager to the STMA Annual Conference and Exhibition, a case study of a typical attendee's consumption of education during the 2009 Conference is provided. The case study includes quantifying the achieved benefits to determine the return on investment (ROI) of attending the STMA conference.

The 2010 STMA Conference and Exhibition will have equal or greater educational opportunities, and the 2009 conference is a good forecast for the ROI that will be achieved by attending the 2010 conference.

ROI analysis allows decision makers to determine the financial return from training by comparing net program benefits—benefits minus costs—to costs. ROI is calculated by taking the net benefits of training, dividing by training/education costs, and then multiplying the result by 100. ROI is always expressed as a percentage.

$$\text{Net Program Benefits} - \text{Costs} \times 100 = \text{ROI}$$

Program Costs

For any ROI calculations, the higher the percentage, the more desirable the program. For example, if the ROI percentage is 25, then for every \$1 in cost there will be a return of \$1 to cover the costs and an additional 25 cents over and above the costs of the program. This is said to have a 25 percent Return on Investment.

Case study

Note: This model assumes that the sports turf manager has purchased a full-conference registration. The sessions noted below were randomly selected; attendees have up to eight concurrent sessions from which to choose during each time period. The information presented should be used as a guide and should not replace professional advice or consultation.

These scenarios assume an average salary for the Sports Turf Manager of \$55,000 = \$26.44 per hour, unless otherwise indicated.

Wednesday, January 14.

Pre-conference education session: Practical Recordkeeping for the Sports Turf Manager

Time & Resource Savings

1. Better time management due to complete, accessible and accurate

recordkeeping (2 hrs. per month @ \$26.44 = Estimated Savings \$634.56)

2. Better planning and budgeting for equipment replacement by scheduling out for 10 yrs. and corresponding rolling stock equipment list costs (2 hrs. per year @ \$26.44 = Estimated Savings \$52.88)

3. Improved inventory control (1 hr. per month @ \$26.44 = Estimated Savings \$317.28)

Increased Productivity

1. Savings by having an accurate historical calendar of inputs, management practices, and exact product quantities (Save on average one bag of fertilizer @ \$20 (bulk), one bag of perennial ryegrass seed @ \$75 (bulk), one gallon of field paint. Bulk Price 5 gal. paint = \$44; 1 gal. @ \$8.80; one bag lime \$8; and one bag gypsum @ \$12 = Estimated Savings \$123.80)

2. Less downtime due to longer life of equipment by implementing scheduled preventive maintenance (2 hrs. per month @ 26.44 = Estimated Savings \$634.56)

Parks & Rec Networking Session. Two money and resource savings ideas were presented in San José:

Time & Resource Savings

1. The importance of conducting an irrigation audit, preventive maintenance scheduling and 'just-in-time' water management strategies. (Savings 20% of water budget annually; assume average water budget of \$10,000 = Estimated Savings \$200)

2. Borrow/share less-frequently-used equipment, such as aerators and dump trucks, among peers, i.e., local parks districts, municipalities, schools, etc. (Estimated Savings: \$5,000 for used walk-behind aerator.

Thursday, January 15.

Weather 101. By understanding weather patterns and forecasts, sports turf managers will save money on labor and inputs.

Time & Resource Savings

1. Labor – limit downtime associated with early morning dew, air temperatures, and frost delays

(Seasonal Worker Wage: \$10 / hour; March-April and September-November = Hours saved per season: 4 hours per week for 12 weeks = Savings Estimate \$480 / person x 3 people = \$1440)

2. Better timing and more efficient applications due to understanding rain patterns for Broadleaf and Grassy Weed Control: 10 acres @ 1 gallon/acre of Momentum Q herbicide – limited to 2 applications per year @ \$50 per gal. = Savings Estimate \$500

3. Reduced unnecessary repeat applications of post-emergence crabgrass

herbicide due to understanding rain and weather patterns that impact crabgrass herbicide control. Drive 75 @ 1 pound per acre; 10 acres @ \$65 per pound for Estimated Savings = \$650 per application

4. Timing of aerification: no delays due to accurate forecasting. Estimated Savings = \$900

5. Avoid drift damage to non target plants by correctly identifying conditions that indicate inversions or inappropriate wind speeds and direction that could result in replacement costs, additional labor expenses, and loss of credibility as a turf manager – Estimated savings = \$500 per occurrence

6. Reduced occurrences of disease and its resultant reduction in fungicide applications by adjusting management practices based on weather conditions, i.e. dew point, temperature, humidity. Estimated savings = \$500-1000

Nitrogen Fertilizers in Sports Turf

Time & Resource Savings

1. Applying urea (46-0-0) correctly to prevent ammonia volatilization (35% loss) – applying 1 lb. N per 1000 sq ft costs \$0.54 (based on \$500 per ton) – application on a 1.3 acre football field = \$10.00 per application x 5 applications per year. Estimated Savings: \$50

Logo painting demonstration

Time & Resource Savings

1. Resource savings with the use of an airless paint machine. Cuts bulk paint cost by 50-70%. Based off of 3 professional football fields with no logos being painted 34 weeks a year. Estimated savings: \$6000

2. Buying paint in bulk quantities (42+ buckets per purchase @ \$44 per bucket). \$10 per bucket x 42 = Estimated Savings \$420

3. Paint savings by mixing 1 part paint to 4 parts water versus 1 part paint to 3 parts water. If 42 buckets purchased each time @ \$44 per bucket – Estimated savings \$1,848

4. Paint savings by mixing 1 part paint to 4 parts water versus 1 part paint to 3 parts water per football game – Estimated savings: \$21 per game (for information purposes only)

5. Savings by using aerosols during inclement weather to prevent postponement or cancellation of a high school football game – aerosol cost is \$270 for 6 cases - \$6 per person for a total of 1000 people plus \$6 in concessions – Estimated savings: \$11,730 (paint costs only)

6. Savings by not cancelling or postponing a division one college football game – (labor, utilities, paint, tickets, concessions, etc.) \$3,260,000 (for information purposes only)

Future Technology in Turfgrass Management

Time & Resource Savings

Irrigation systems that cut water usage 30% and provide “green” rebates back to the owner. Estimated Savings (based on \$10,000 irrigation budget) \$3000

Friday, January 16 How to Conduct a Safety Audit

Time & Resource Savings

Insurance premium reductions due to implementing active sports field safety inspection process (Average risk management premium costs for fields for a parks district \$5,000 per year @ 10% savings = Estimated Savings \$500)

Budgeting to do it right the first time

Time & Resource Savings

Per a Midwest field builder, poorly constructed fields are often due to low bid situations whereby the bid is not inclusive of all of the specifications, or the specifications simply are not followed. Repairs can be from \$10,000 to \$1+ million dollars depending upon the severity of the problems and can take weeks-to-months to repair. Estimated Savings: \$50,000. (for informational purposes only)

Environmentally Compatible Sports Turf Management

Time & Resource Savings

1. Reducing mowing by 20% per field. Assume a budget of \$8,000 annually on material costs; plus labor costs of 412 annual hours. Fuel is estimated at 20% of budget (\$1600). Estimated fuel savings = \$320. Mowing labor is estimated at 75% of budget (75% of 412 hours = 309 hrs. X average \$10 per hour labor costs = \$3090. Estimated mowing labor savings = \$3090 X 20% = \$618.

COSTS to Attend the STMA Conference – San José 2009

Complete conference package \$375 (Includes meals and preconference workshops)

Shared ground transportation — Taxi - \$20 (\$10 ea. way/ shared with one other person)

Misc. Meals — \$50 (should only be Wednesday lunch and travel days)

Tips — \$20

Hotel 3 nights — Single room \$792

Air Transportation \$350

Lost Production time 4 days @ \$26.44 per hour = \$846

Total: \$2,453

$$\begin{aligned} & \$634.56 + \$52.88 + \$317.28 + \$123.80 + \$634.56 + \$200 + \$5,000 \\ & + \$1440 + \$500 + \$650 + \$900 + \$500 + \$750 + \$50 + \$6000 + \$420 \\ & + \$1,848 + \$11,730 + \$3000 + \$500 + \$320 + \$618 = \mathbf{\$36,189.08} \end{aligned}$$

$$(\$36,189.08 - \$2453) \div \$2453 = 13.75 \times 100 = 1,375\% \text{ ROI}$$

Attending the STMA annual conference yields a one thousand three hundred and seventy five percent return on investment for each facility that sends its sports turf manager. This high rate of return provides an amazing value back to the sports facility. Even if only half of the resource savings ideas learned at the conference are applied, the ROI is more than 687 percent, which is still a remarkable value.

Costs in Disney are lower than those experienced in San José. Hotel room rates are \$141 per night and airport transfers are complimentary on the Disney Magical Express shuttle. Go to the STMA website for more information, www.STMA.org.

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