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## STMA Conference Attendance 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 a facilities' bottom line.

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 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.

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

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.

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**Wed., Jan. 14**

## **Practical Recordkeeping for the Sports Turf Manager**

### *Time & Resource Savings*

- Better time management due to complete, accessible and accurate recordkeeping: 2 hrs. per month @ \$26.44 = **Estimated Savings \$634.56**
- 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**
- Improved inventory control: 1 hr. per month @ \$26.44 = **Estimated Savings \$317.28**

### *Increased Productivity*

- 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 @ \$8.80 per 1 gallon (\$44 per 5 gallon bucket – bulk price), one bag lime @ \$8, and one bag gypsum @ \$12 = **Estimated Savings \$123.80**
- Less downtime due to longer life of equipment by implementing scheduled preventive maintenance: 2 hrs. per month @ \$26.44 = **Estimated Savings \$634.56**

## **Parks & Recreation Networking Session**

### *Time & Resource Savings*

- The importance of conducting an irrigation audit, preventive maintenance scheduling and ‘just-in-time’ water management strategies: Save 20% of water budget annually (assume average water budget of \$10,000) = **Estimated Savings \$200**
- Borrow/share less-frequently-used equipment, such as aerators and dump trucks among peers, i.e., local parks districts, municipalities, schools, etc.: Savings for used walk-behind aerator = **Estimated Savings \$5,000**

**Thurs., Jan. 15**

## **Weather 101**

### *Time & Resource Savings*

- Limit labor downtime associated with early morning dew, air temperatures, and frost delays: Save on seasonal worker wage: \$10 / hour; 4 hours saved per week for 12 weeks during the months of March, April, September, October and November = **Estimated Savings \$480 / person x 3 people = \$1440**
- Understanding rain patterns for better timing and more efficient broadleaf and grassy weed herbicide applications: 10 acres @ 1 gallon/acre of Momentum Q herbicide – limited to 2 applications per year @ \$50 per gallon = **Estimated Savings \$500**
- Understanding weather patterns to reduce unnecessary repeat applications of post-emergence crabgrass herbicide: Drive 75 @ 1 pound per acre; 10 acres @ \$65 per pound = **Estimated Savings \$650 per application**
- Forecasting weather accurately for correct timing of aerification to prevent delays: **Estimated Savings \$900**
- Identifying inversions or inappropriate wind speed and direction to avoid drift damage to non target plants: Savings on replacement costs, additional labor expenses, and loss of credibility as a turf manager = **Estimated Savings \$500 per occurrence**
- Understanding weather conditions, i.e. dew point, temperature, humidity, and adjusting maintenance practices to reduce disease occurrence: Savings on fungicide applications = **Estimated Savings \$500-1000**

## **Nitrogen Fertilizers in Sports Turf**

### *Time & Resource Savings*

- Correctly applying urea (46-0-0) 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**

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## Logo Painting Demonstration

### *Time & Resource Savings*

- Use of airless paint machine reduces paint use by 50-70%. Based off of 3 professional football fields with no logos being painted 34 weeks a year, save on bulk paint purchase = **Estimated Savings: \$6000**
- Buying paint in bulk quantities (42+ buckets per purchase @ \$44 per bucket): Save \$10 per bucket x 42 = **Estimated Savings \$420**
- Mix 1 part paint to 4 parts water versus 1 part paint to 3 parts water: 42 buckets purchased each time @ \$44 per bucket = **Estimated Savings \$1,848**  
Per football game = **Estimated Savings \$21** (for information purposes only)
- Savings by using aerosols during inclement weather to prevent postponement or cancellation of a high school football game. Game costs \$6 per person, plus concessions at \$6 per person for a total of 1000 people. Aerosol cost is \$270 for 6 cases = **Estimated Savings \$11,730** (paint costs only)  
Savings by not cancelling or postponing a division one college football game (This includes labor, utilities, paint, tickets, concessions, etc.) = **Estimated Savings \$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: Based on \$10,000 irrigation budget = **Estimated Savings \$3000**

## Fri., Jan. 16

### How to Conduct a Safety Audit

#### *Time & Resource Savings*

- Implement active sports field safety inspection process to reduce insurance premiums: Average risk management premium costs 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. Repairs can take weeks-to-months. Save with correct field installation = **Estimated Savings \$50,000** (for informational purposes only)

### Environmentally Compatible Sports

#### Turf Management

#### *Time & Resource Savings*

- Reduce mowing by 20% per field. Assume a budget of \$8,000 annually: Fuel is estimated at 20% of budget (\$1600) = **Estimated Savings \$320**  
Mowing labor is estimated at 75% of budget (Total labor = 412 annual hours. Mowing labor = 309 hours. Worker wage = \$10 per hour. Total cost for mowing labor = \$3090.) **Estimated Savings \$618**

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## COSTS to Attend the STMA Conference – San José 2009

<b>Complete conference package</b>	<b>\$375</b>
Includes meals and preconference workshops	
<b>Shared ground transportation</b>	<b>\$20</b>
Taxi, \$10 ea. way, shared with one other person	
<b>Misc. Meals</b>	<b>\$50</b>
Wednesday lunch and travel days	
<b>Tips</b>	<b>\$20</b>
<b>Hotel 3 nights</b> , Single room	<b>\$792</b>
<b>Air Transportation</b>	<b>\$350</b>
<b>Lost Production Time</b> , 4 days @ \$26.44 per hour	<b>\$846</b>
<b>Total</b>	<b>\$2,453</b>

## Cost Savings

$\$634.56 + \$52.88 + \$317.28 + \$123.80 + 634.56 +$   
 $\$200.00 + \$5,000.00 + \$1440.00 + \$500.00 +$   
 $\$650.00 + \$900.00 + \$500.00 + \$750.00 + \$50.00 +$   
 $\$6000.00 + \$420.00 + \$1,848.00 + \$11,730.00 +$   
 $\$3000.00 + \$500.00 + \$320.00 + \$618.00 = \mathbf{\$36,189.08}$

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

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 and 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. Please visit the STMA website for more information, [www.STMA.org](http://www.STMA.org).

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