



ENVIRONMENT, HEALTH, & SAFETY

BUSINESS WITH BALANCE - IT'S OUR RESPONSIBILITY

MAKING THE BUSINESS CASE FOR EHS

Presented by:

*Trevor Reschny, CSP, CRSP, MS, MBA
4602 35th Street Suite 400. Orlando, FL 32811
800-768-7036
treschny@safetylinks.net*





COPYRIGHT NOTICE

This document may not, in whole or in part, be copied, photocopied, reproduced, translated or reduced to any electronic medium or machine readable form without prior consent, in writing, from Safety Links Inc.

SYNOPSIS

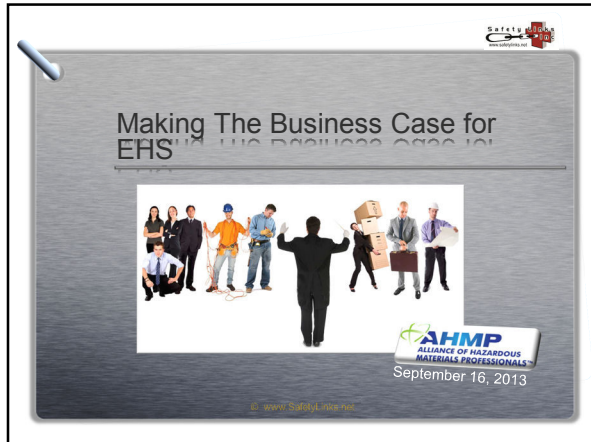
To unlock the secrets of EHS management more regulations, science and enforcement, is not needed. The results all rest on the quality of management. This session is designed to help bridge the gap between "traditional EHS programs" and cutting edge management techniques. This session will discuss how performance metrics and balanced score cards can be used to drive individual and organizational performance.

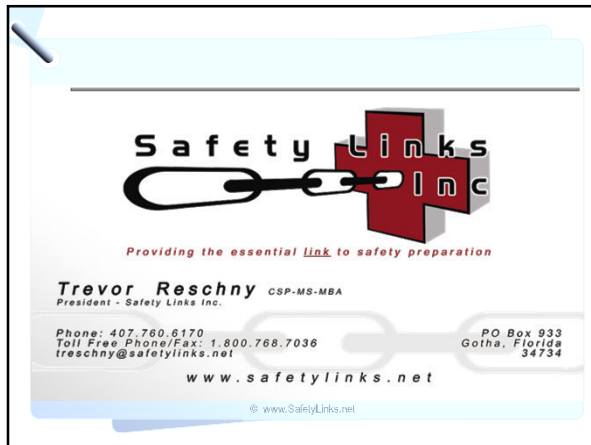
Using these simple tools participants of this session will be able to obtain unmatched performance and involvement from employees, supervisors and corporate leaders.

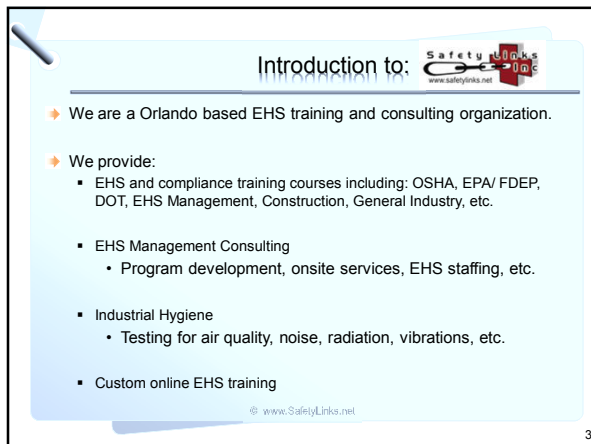
LEARNING OBJECTIVES

The learning objectives for this session include:

- Understand the limitations of traditional EHS management techniques
- Understand the limitations and negative consequences of measuring lagging indicators
- Understand how leading indicators are used to measure and drive performance
- Demonstrate how to set up a performance measurement system
- Demonstrate how to use a score card to measure performance







Session Outline

- ✓ 1. The limitations of traditional EHS management techniques
- ✓ 2. The limitations and negative consequences of measuring lagging indicators
- ✓ 3. How leading indicators are used to measure and drive performance
- ✓ 4. How to set up a performance measurement system


© www.SafetyLinks.net

SafetyLinks

Making The Business Case


Section 1: The limitations of traditional EHS management techniques

How many times do I have to tell you to wear your glasses?




EHS Cop


Pre-test: Which works better?





or



© www.SafetyLinks.net

 Pre-test: Which attracts more bees?


 **or** 

© www.SafetyLinks.net

Group Exercise

- List the items (tasks) you do to “manage” your EHS activities.

- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____



© www.SafetyLinks.net

Key Principle #1

An unsafe act, condition or incident are symptoms of something wrong in the management system.

© www.SafetyLinks.net

To achieve world class EHS performance then....


- Only spend money and time on what works!



© www.SafetyLinks.net

Effectiveness of EHS Strategies

Approach	# of Studies	Reduction %
Behavior Based	7	62.6%
Ergonomics	3	51.6%
Engineering Change	4	29.0%
Problem Solving	1	20.0%
Gov't Action	2	18.3%
Mgt. Audits	4	17.0%
Stress Management	2	15.0%
Poster Campaign	2	14.0%
Discipline	26	3.7%
Safety Awards	5	3.0%

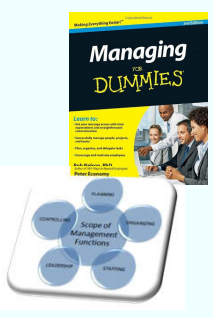


(Study by NSC 2006)

© www.SafetyLinks.net

Management Direction??

- Consider the differences in how your organization handles daily schedules, budgets, quality and so on...
- In most cases when management wants something done they tell someone to do it and they expect it to be done!




Plan, Organize, Lead, Control.

© www.SafetyLinks.net

Management Direction?? (Cont)

✦ In EHS, many organizations have chosen to use:

- Committees
- Posters
- Literature
- Contests
- Gimmicks (i.e. bingo)
- plus many more that we would not even consider to use in quality, etc...



© www.SafetyLinks.net



Quality bingo?

Show up on time bingo?

Key Principle #2


EHS should be managed like any other function.

Management should direct the EHS effort by setting achievable goals, by planning, organizing, leading and controlling until those goals are achieved.

© www.SafetyLinks.net

What doesn't drive performance


- ✦ Manuals and procedures do not drive performance.
- ✦ Any person soon learns what part of the manual their boss measures.



© www.SafetyLinks.net

What doesn't drive performance (cont)



- ✦ Rules and regulations also do not drive performance.
- ✦ Again, we learn quickly what rules must be followed and what rules must be broken.



© www.SafetyLinks.net

What doesn't drive performance (cont)

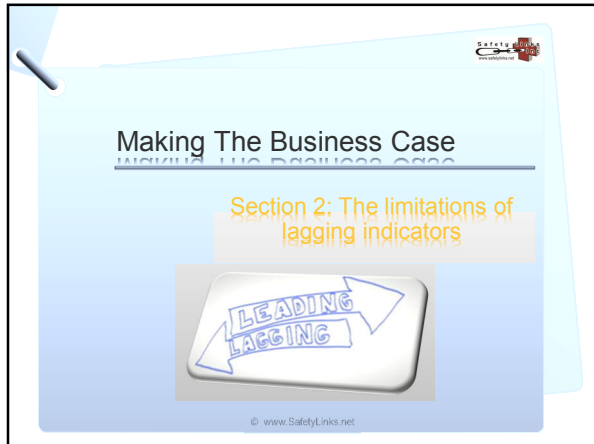
- ✦ Training and awareness does not drive performance.
- ✦ Most people know what is right and what is not.
- ✦ They choose to be unsafe for reasons other than lack of knowledge.




© www.SafetyLinks.net








Types of EHS Measurements

Results Measures	Performance Measures
<p style="background-color: #f08080; color: white; padding: 2px;">After the Incident (Lagging Indicators)</p> <ul style="list-style-type: none"> -Are there fewer incidents than before? -Fatalities, Recordable, First Aid, and so on.. - Is the severity of the incidents decreasing? -Less dollars lost? -Lower insurance costs? 	<p style="background-color: #90ee90; padding: 2px;">Before the Incident</p> <ul style="list-style-type: none"> -Are people working more safely than before? -Are physical conditions improving? <div style="text-align: center;">  </div>
	<ul style="list-style-type: none"> -Are supervisors inspecting more than before? - Are they finding and correcting more hazards? -Are more employees receiving training or orientations? -Etc...

© www.SafetyLinks.net

Lagging Indicators-Number of incidents

- Simply count the number of incidents:
 - Medical
 - First Aid
 - Recordable
 - Lost time
 - Fatality
 - And so on....



© www.SafetyLinks.net


Question: Which company is better?

<ul style="list-style-type: none"> • Company A <ul style="list-style-type: none"> ▪ 260 recordable cases ▪ 3 fatalities 	<ul style="list-style-type: none"> • Company B <ul style="list-style-type: none"> - 35 recordable cases - No fatalities
<ul style="list-style-type: none"> • 150, 000 employees world wide • 312 Million Hours Worked/ Year 	<ul style="list-style-type: none"> • 6 employees • 12 Thousand Hours Worked/ Year

© www.SafetyLinks.net

Lagging indicators -OSHA Incident Rate

- ◆ Most common methods of quantifying EHS performance
- ◆ They are ratios of unwanted events
- ◆ Generally a specific classification of injury and the exposure, stated as a function of time. (I.e hours worked).

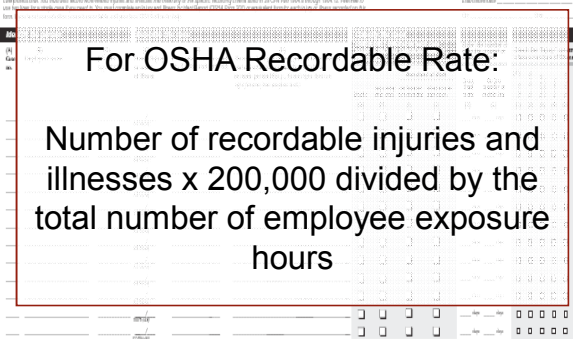


© www.SafetyLinks.net

OSHA's Form 300 (10/08/04)
Log of Work-Related Injuries and Illnesses

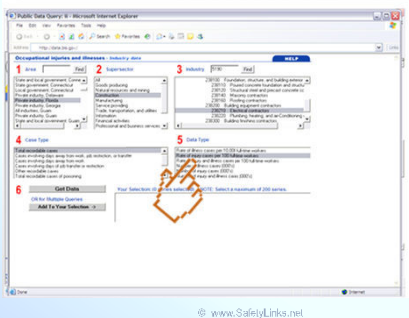
For OSHA Recordable Rate:

$$\frac{\text{Number of recordable injuries and illnesses} \times 200,000}{\text{total number of employee exposure hours}}$$





© www.SafetyLinks.net

BLS Comparison <http://data.bls.gov/>



© www.SafetyLinks.net


Question: Which company is better?

<ul style="list-style-type: none">Company A<ul style="list-style-type: none">260 recordable cases3 fatalities150,000 employees world wide312 Million Hours Worked/ Year <p>OSHA Recordable rate of 0.001</p> 	<ul style="list-style-type: none">Company B<ul style="list-style-type: none">35 recordable casesNo fatalities6 employees12 Thousand Hours Worked/ Year <p>OSHA Recordable rate of 583</p> 
---	--

© www.SafetyLinks.net

Experience Modification

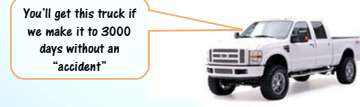

- Used to compute Workers Compensation premiums by comparing the loss experience of employers within the same industry.



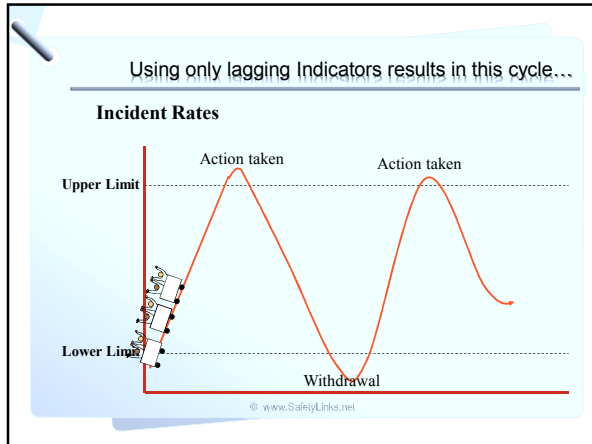
© www.SafetyLinks.net

Limitations of lagging indicators

- Measuring lagging indicators actually measures the failure of EHS not the success!
- Can result in under-reporting injuries, thereby making the data statistically biased



© www.SafetyLinks.net



Limitations of lagging indicators

- ◆ The data is old (that's why they're called lagging)
 - Over 3 years for Workers Comp Modifier
 - 1 year for OSHA recordable

- ◆ Measurement of your failure not your success!


© www.SafetyLinks.net

Making The Business Case

Section 3. Leading indicators can drive performance

© www.SafetyLinks.net


So how do we drive EHS performance???



© www.SafetyLinks.net

To measure is to motivate!

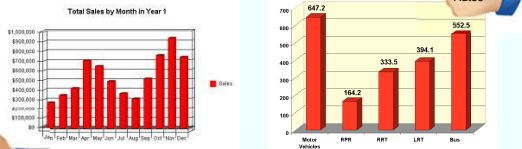
- People will perceive the task to be important only when the boss thinks it's important enough to measure.



© www.SafetyLinks.net

To measure is to motivate! (cont)

- The problem is what do we measure?
 - EHS is opposite of from other key business processes.
 - If we do everything right nothing happens!



© www.SafetyLinks.net

Measurement?


- Focus on leading indicators (i.e. what we are doing to manage EHS).
- EHS must be defined in everyone's roles.
- EHS must be measured like other key business topics.
- Good EHS performance must be recognized.
- Inadequate performance must be corrected.

© www.SafetyLinks.net

SafetyLinks

Making The Business Case

Section 4: How to set up a performance measurement system



© www.SafetyLinks.net

Establishing & Updating Performance Measures


“Each organization must create and communicate performance measures that reflect its unique strategy”

**Dr. Robert S. Kaplan
Harvard Business School**

© www.SafetyLinks.net

Step 1) Define your Goals With Respect to EHS


- Remember goals should be expressed in terms that are realistic, measurable and leading (not lagging).
- Use the SMART acronym.



© www.SafetyLinks.net

Example of Goals

- Goal A: Provide a safer work place
- Goal B: Have employees working safer
- Goal C: Reduce qty of hazardous waste
- Goal X: and so on....




Notice how reducing incident rates is not a goal? Why not?

© www.SafetyLinks.net

Step 2) Adapt and define performance indicators

- Based on the previously mentioned goals what indicator(s) are we going to measure?

And how do they fit into your organizations KPI's?



© www.SafetyLinks.net

Example for Goal A: Provision of safe place of work

Indicator

- Workplace inspection target for each frontline supervisor across whole site on a monthly basis each with specific area
- Workplace visibility tour by senior managers in their work area once per quarter.

© www.SafetyLinks.net

Step 3) Define the measurement/metric

- Develop metrics that are both appropriate to the particular circumstances and can be easily applied.

- Metrics used need to be clear and well documented so that indicators can be applied in a consistent manner over time.

© www.SafetyLinks.net


Example Goal A: Provision of safe place of work (cont)

Indicator	Measurement/Metric
• Work place <u>inspection</u> target for each <u>frontline supervisor</u> across whole site on a <u>monthly</u> basis each with specific area	• % Scheduled inspections complete by name and work area/dept.
• Workplace <u>visibility tour</u> by <u>senior managers</u> in their work area once per <u>quarter</u> .	• % Actions arising complete by name and work area/dept
	• % Visibility tours complete

© www.SafetyLinks.net

Example Goal B : Employees working safely (cont)

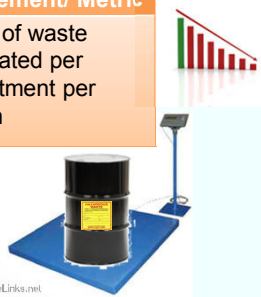
Indicator	Measurement/ Metric
<ul style="list-style-type: none"> Behavior based observation results 	<ul style="list-style-type: none"> % Employees working safely
<ul style="list-style-type: none"> EHS sampling results 	<ul style="list-style-type: none"> % safe/ok



© www.SafetyLinks.net

Example Goal C: Reduce qty of hazardous waste

Indicator	Measurement/ Metric
<ul style="list-style-type: none"> Quantity of hazardous waste generated 	<ul style="list-style-type: none"> % lbs of waste generated per department per month



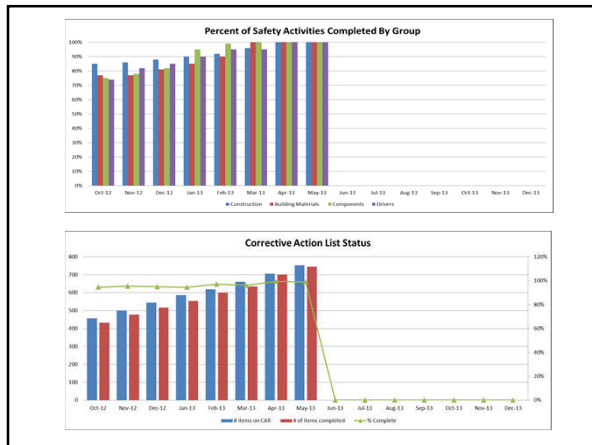
© www.SafetyLinks.net

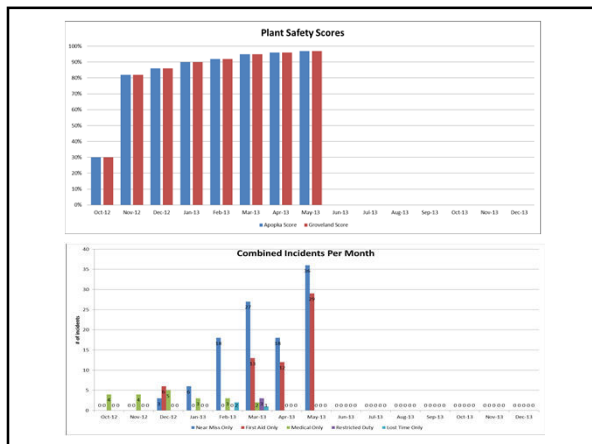
Monthly Safety Score Card
Westbrook
 Jan-12

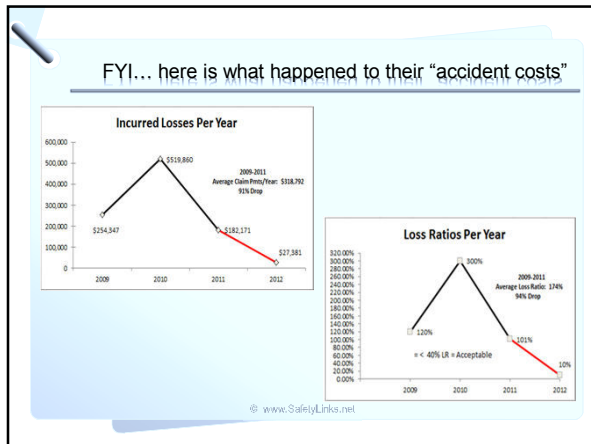
Safety Score Card Westbrook Jan-12		Total Safety Score 92%	
--	--	----------------------------------	--

© www.SafetyLinks.net

Number of Safety Activities Completed by Group (FY13 - FY14)		Month														
Activity	Count	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13
Construction	100	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Building Materials	100	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Components	100	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Others	100	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Total	400	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40







Balanced Score Card Software

- Lot's of systems available
 - <http://www.clearpointstrategy.com>
 - <http://www.spiderstrategies.com>


© www.SafetyLinks.net

Step 4) Follow-up and Evaluation

- This will help to ensure that the indicators are well-defined and continue to correspond with the organizational goals

© www.SafetyLinks.net

Remember the steps



1. Define your Goals/Objectives With Respect to EHS
2. Adapt and define performance indicators
3. Define the measurement/metric
4. Follow-up and Evaluation

© www.SafetyLinks.net



In the end performance measures can let you know:

- ◆ How well your organization is doing
- ◆ If your organization is meeting it's goals
- ◆ If your EHS processes are in statistical control
- ◆ If and where improvements are necessary

© www.SafetyLinks.net


My Personal Thoughts

- ◆ To unlock the secrets of EHS management more regulations, science and enforcement, is not needed.
- ◆ The results all rest on the quality of management.



© www.SafetyLinks.net

Any questions, comments, discussion?



© www.SafetyLinks.net

Please sign up for our blog and/ or monthly newsletter



© www.SafetyLinks.net

Contact Information



Providing the essential [link](#) to Safety preparation!

Ph/ Fax: (800) 768- 7036
 4602 35th Street Suite 400.
 Orlando FL 32811
 info@SafetyLinks.net
 www.SafetyLinks.net

© www.SafetyLinks.net



What else does Safety Links do?

Safety Coaching/ Consulting
Safety Coaching / Consulting / Auditing
Industrial Hygiene Labor (Lab fees and equipment rental not included)
Safety Staffing (Turnkey Onsite Safety Management)
Training
SAFETY MANAGEMENT COURSES
Behavior Based Safety Observer (2 hour)
Encouraging Desired Behavior (4 hour)
Ergonomics Awareness (6 hour)
Fundamentals of Incident Investigation (16 hour)
Hazard Assessment / Job Hazard Analysis (4 hour)
Introduction to 5-S (4 hour) (Special Group Rates Available)
Introduction to Industrial Hygiene (4 hour)
Occupational Health Management (8 hour)
OHST Preparation Course (24 hour)
OSHA Record Keeping (4 hour)
Safety Fundamentals - How to develop a Safety Program (8 hour)
Safety Inspections and Incident Investigations (4 hour)
Supervisor Development (8 hour)
Workers Compensation Management (8 hour)
Workplace Violence Prevention and Management (4 hour)
CONSTRUCTION SAFETY COURSES
Excavations / Trenching (4 hour)
Excavations / Trenching (Competent Person) (8 hour)
Fall Protection (Competent Person) (8 hour)
Fall Protection (Non-Residential) (4 hour)
Fall Protection (Non-Residential) (User level) (2 hour)
Residential Construction Fall Protection (4 hour)
Residential Construction Fall Protection (User level) (2 hour)
Safety Basics for Construction (4 hour)
Supported Scaffolding (2 hour)
Supported Scaffolding (4 hour)
Crane Signaler (NEW)
Crane Rigger (NEW)
OSHA OUTREACH COURSES AND MINE SAFETY AND HEALTH ADMINISTRATION (MSHA) COURSES
Mine Safety (24 hour new miner training)
Mine Safety (Surface mines only) (8-hour refresher)
OSHA 10-hour Certification for Construction (1 or 2 day sessions)
OSHA 10-hour Certification for General Industry (1 or 2 day sessions)
OSHA 30-hour (General Industry or construction) (Group rates available)
SAFETY COURSES FOR ALL INDUSTRIES
Air Purifying Respirators (2 hour)
Air Purifying Respirators (4 hour)
Asbestos Awareness (3 hour)
Back and Lifting Safety (1 hour)
Bloodborne Pathogens (1 - 2 hour)
Confined Space Entry (4 hour)
Confined Space Entry (6 hour - Hands on)



SAFETY COURSES FOR ALL INDUSTRIES (continued)			
CPR/ AED Only or CPR/ AED Recertification (1 hour)			
Fire Extinguisher Training (Hands On) (NEW)			
First Aid / Adult CPR/ AED (4 hour)			
First Responder Medical (40 hour)			
Hazard Communication GHS update (4 hour) (NEW)			
Hearing Conservation (2 hour)			
Lead Awareness (3 hour)			
Lock Out / Tag out (2 hour)			
NFPA 70E Arc Flash Safety Awareness (4 hour)			
Respirator Fit Tester Certification (4 hour)			
Respirator Fit Testing (Qualitative)			
Respirator Fit Testing (Quantitative test with Portacount)			
Respirator Medical Evaluation (Questionnaire) (NEW)			
Warehouse Safety Seminar (1 hour) (Group Rates Available)			
EQUIPMENT OPERATION COURSES			
Aerial Lift Operator (3 hour)			
Bucket Truck Operator (4 hour)			
Bucket Truck Operator (8 hour with hands on)			
Chain Saw Safety (1 hour) (Group Rates Available)			
Forklift Operator (4 hour)			
Heavy Equipment Operator Safety Awareness (4 hours for core course + 1 hour per optional machine specific module) (Dozers, Loaders, Graders, Excavators, Scrapers, Backhoes, Compactors/Rollers, Mixers, Dump Truck, Chain Saw, Telehandler + many more)			
Off road Forklift (Telehandler) (4 hour)			
Pallet Jack operator (1 hour)			
Skid Steer Loader Operator (4 hour)			
Basic Defensive Driving (3 - 4 hour) (Group Rates Available)			
DEPARTMENT OF TRANSPORTATION COURSES			
DOT HazMat Awareness (4 hour)			
DOT Substance Abuse Awareness (3 to 4 hour) (Group Rates Available)			
Flagger Training (MOT - Basic) (4 hour)			
Maintenance of Traffic (MOT) Intermediate (16 hour)			
Maintenance of Traffic (MOT) Intermediate Refresher (8 hour)			
Maintenance of Traffic (MOT) Restricted (8 hour)			
EPA / FDEP / ENVIRONMENTAL / STORM WATER COURSES			
FDEP / NPDES Storm water Class with a site visit (8 hour)			
FDEP / NPDES Storm water Overview Course (4 hour)			
Florida Stormwater, Erosion and Sedimentation Control Inspector Certification Course (16 Hour)			
Hazardous Waste (RCRA) Awareness (4 hour)			
Hazwoper (24 hour - with hands on)			
Hazwoper (40 hour - with hands on)			
Hazwoper / Refresher (8 hour)			
How's My Driving? (Bumper sticker / driver monitoring system)			
Fleet Size	Annual monitoring fee	Price per call after first 3**	One time cost per sticker
1-25 Vehicles	\$150	\$5.00	\$8.50
26-100 Vehicles	\$150	\$4.25	\$7.75
100+ Vehicles	\$150	\$3.75	\$7.00
**The first 3 calls per month are at no charge			