

AECOM

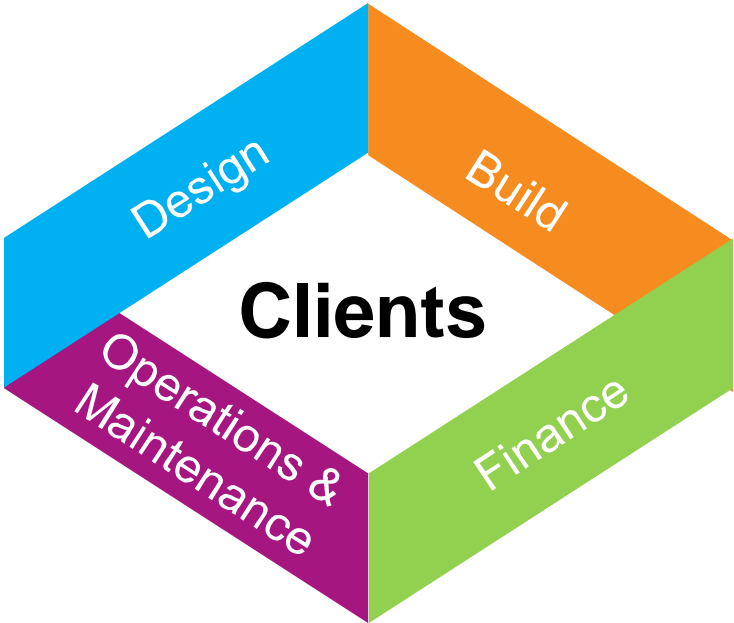
High Potential Incidents

Enhancements to our potential risk rating process

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Who is AECOM?

Our vision: Become the world's premier, fully integrated infrastructure firm



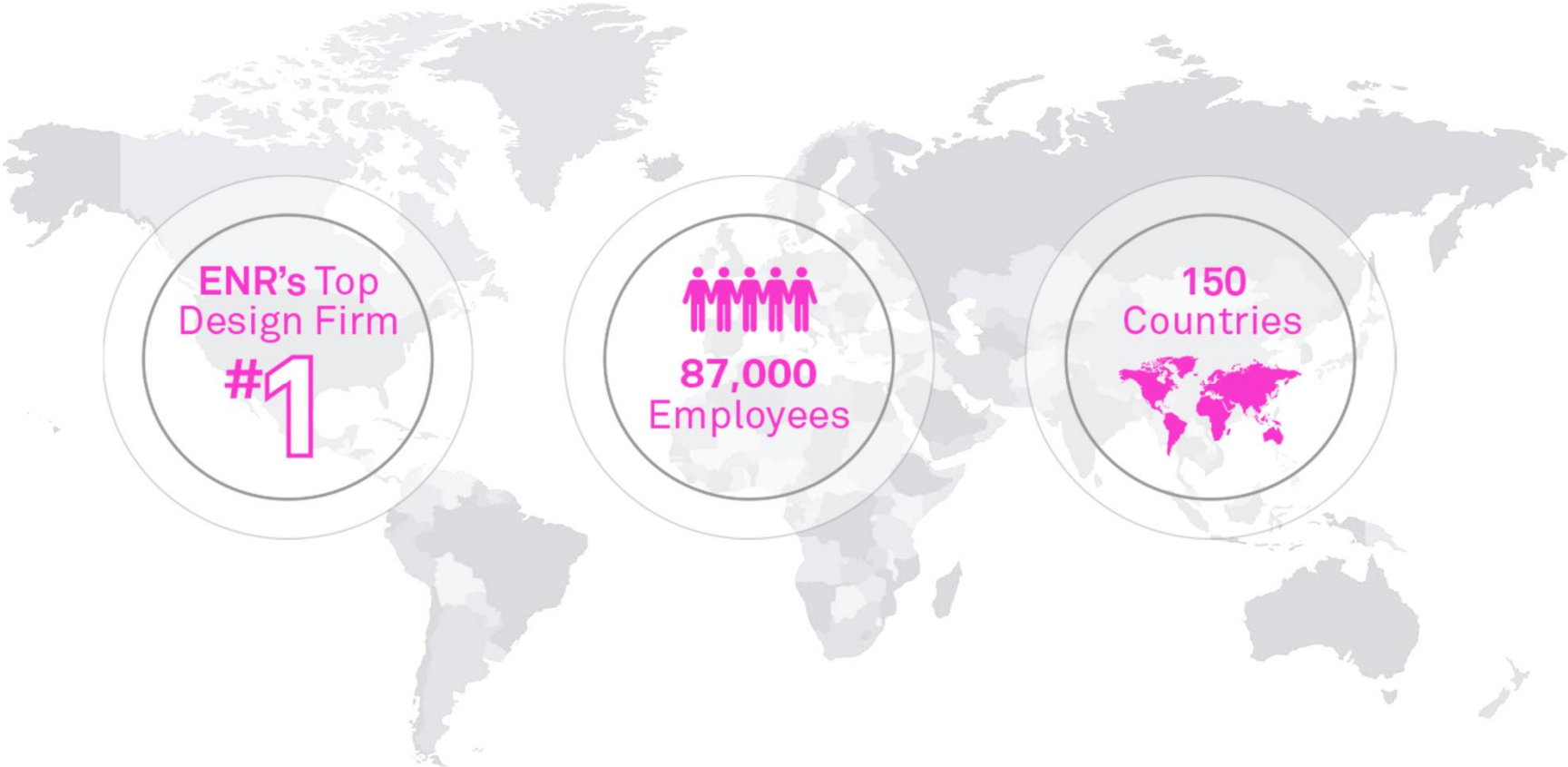
Integrated delivery differentiates our company.

AECOM's Vision and Purpose

Our purpose: We are driven by a common purpose — to positively impact lives, transform communities and make the world a better place.



AECOM by the Numbers



AECOM's Business and Operating Groups

How we're built to deliver a better world



**Management
Services**



Power & Energy



Construction

Design & Consulting Services



Environment



**Building, Design &
Planning**



Water



Transportation



Safety
for life

Continuously Improving

High Potential Incident?



High Potential Incident?



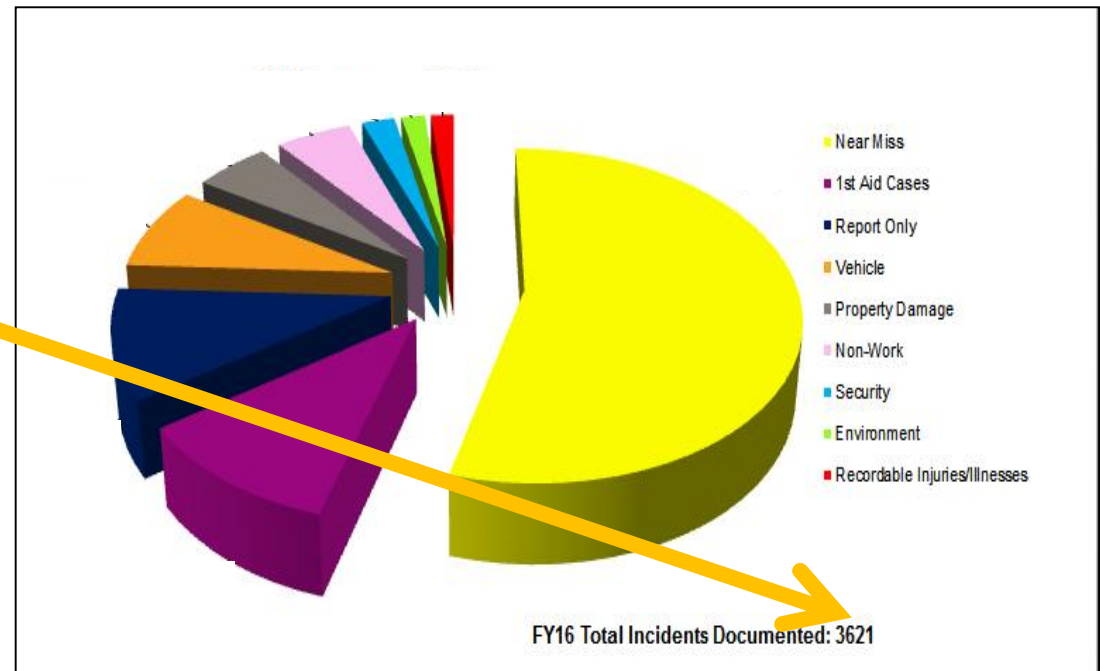
High Potential Incident?



Why Focus on High Potential Incidents?

We need to know how many of these could have resulted in more serious consequences,

so that we can investigate their causes, communicate learning and prevent a similar occurrence which may result in the more serious outcome.



Why Focus on High Potential Incidents?

- Incidents have actual consequences and potential consequences
- “High Potential” incidents are situations that could have been much worse than the actual outcome
 - *Example: vehicle drives through our work zone damaging a piece of equipment*
- Near misses have zero actual consequences- potential is the key to their value
- Increased attention on incidents with potential for serious consequences will provide a more thorough view of our risks and needs.

Probability	Severity				
	5 - Catastrophic	4 - Critical	3 - Major	2 - Moderate	1 - Minor
5 - Frequent	25	20	15	10	5
4 - Probable	20	16	12	8	4
3 - Occasional	15	12	9	6	3
2 - Remote	10	8	6	4	2
1 - Improbable	5	4	3	2	1

Risk Rating (Probability x Severity)	Risk Acceptance Authority
1 to 4 (Low)	Risk is tolerable, manage at local level
5 to 9 (Medium)	Risk requires approval by Operations Lead/Supervisor & Safety Manager
10 to 25 (High)	Risk requires the approval of the Operations Manager & Safety Director

How do we find the High Potential Incidents?

- Continue reporting all incidents and near misses
- Assign Potential Severity and Probability using Risk Rating categories (1-5)
- Perform a simple assessment of potential severity
 - *What is the worse case consequence that could reasonably have occurred?*
 - *The key is to be reasonable, not every situation could have been catastrophic*
- Assess the probability of higher potential outcomes based on precautions that succeeded or failed or were absent (not on frequency that hazard occurs)
 - *Based on the hazard controls in place at the time of the event, what is the likelihood that the outcome could have been worse?*
- Note: “Low potential” events still need to be addressed to maintain safeguard


Technical Systems Integration


The background is a solid blue color. On the right side, there are several thin white lines that intersect to form a series of overlapping triangles and quadrilaterals, creating a geometric pattern.

Summary:

- All incidents need evaluation of potential for more severe consequences (not just NMs)
- IndustrySafe's incident tab houses all incident categories (Injury, Non-Injury & Near Miss)
 - Note: Near Misses are incidents without consequences
- Severity and Probability drop boxes were adjusted to *Potential* Severity & Probability
- Mouse over guidance questions were added
- Pop up charts provide detailed information to select the risk rating category (1-5)

IndustrySafe Incident Form

Home Dashboard **Incidents** Claims Inspections Hazards Observations Corrective Actions Training Industrial Hygiene Lifesavers (JHA)  + ?

+ Reports & Analysis Regulatory Reports Employees AECOM 

Basic Information Top

Involved Employee Name

Involved Employee ID *

Involved Employee Title

NEW FEATURE 07/27/2016: Project field has been moved above the hierarchy structure fields.

WHY: Provide ability to find and select project which then forces other fields to 'auto-fill'.

WHAT TO DO: Begin to enter the project # or description in the 'Project' field. The system will find matches to what you enter in this field. Once you select the project from the drop down - the Business Group, SBU, and Area fields will auto fill.

Project *

Business Group *


Strategic Business Unit (SBU) *

Area *

End Market *

Business line *

Client *

Date of Incident *
 

Time of Incident *

Incident Type *

Was a Vehicle Involved? *

Was an employee or directly supervised contractor injured? *

Was a Non-Employee injured? *

Was Property Damage Involved? *

Was This Incident Work Related? *

Initial Incident Description *

Select Additional Incident Forms

- Incident Investigation (form to provide further details about the incident)
- Employee Form
- Security Form
- Environmental Form

(Cont.) IndustrySafe Incident Form

Mouse over the blue circle for guidance questions

The screenshot shows a portion of the IndustrySafe Incident Form. On the left, there are two dropdown menus. The top one lists severity levels: 1 - Minor, 2 - Moderate, 3 - Major, 4 - Critical, and 5 - Catastrophic. The bottom one lists probability levels: 1 - Improbable, 2 - Remote, 3 - Occasional, 4 - Probable, and 5 - Frequent. The form fields include: 'Worker Type *' (a dropdown menu), 'Potential Severity *' (a dropdown menu with a blue information icon), 'Potential Probability *' (a dropdown menu with a blue information icon), and 'Risk Assessment' (a greyed-out field with a blue information icon). Two callout boxes with blue borders point to the information icons. The first callout box, pointing to the 'Potential Severity' icon, contains the text: 'What is the worst case consequence that could reasonably have occurred?'. The second callout box, pointing to the 'Potential Probability' icon, contains the text: 'Based on your hazard controls, what is the likelihood that the outcome could be worse?'.

Same risk rating categories

(Cont.) IndustrySafe Incident Form

Click on the blue circle for these guidance tables

Worker Type *

Potential Severity *

Potential Probability *

Risk Assessment

Severity – Potential Consequences				
	People	Property Damage	Environmental Impact	Public Image/Reputation
Catastrophic	Fatality, Multiple Major Incidents	>\$1M USD, Structural collapse	Offsite impact requiring remediation	Government intervention
Critical	Permanent impairment, Long term injury/illness	>\$250K to \$1M USD	Onsite impact requiring remediation	Media intervention
Major	Lost/Restricted Work	> \$10K to \$250K USD	Release at/above reportable limit	Owner intervention
Moderate	Medical Treatment	> \$1K to \$10K USD	Release below reportable limit	Community or local attention
Minor	First Aid	</=\$1K USD	Small chemical release contained onsite	Individual complaint

Same severity table as the risk rating matrix

Probability- potential for higher consequences to occur based on the hazard controls in place during the event		
Frequent	9/10	Expected- No hazard controls were in place to prevent worst case consequences; just got lucky this time
Probable	1/10	Likely- Some hazard controls in place but ineffective or inconsistently applied; worst case consequences could easily occur
Occasional	1/100	Possible- Hazard controls in place may reduce the severity but not totally prevent higher consequences
Remote	1/1,000	Unlikely- Sufficient hazard controls in place and likely to prevent higher consequences
Improbable	1/10,000	Highly Unlikely- Thorough hazard controls in place, ALWAYS effective and ALWAYS applied; confident that higher consequences would not occur

Different way of thinking about probability after an incident occurs

(Cont.) IndustrySafe Incident Form

Worker Type *

Potential Severity *

Potential Probability *

Risk Assessment

- Risk Assessment = Severity x Probability (1-25)
- Full Investigation and Executive Incident Review for 10+
- Tiered approach TBD for 10 –
- Reinforces our pre-work Task Hazard Assessment process

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Questions/ Feedback?

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