



The INGAA Foundation, Inc.

Best-in-Class Contractor Management

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Collect. Verify. Connect.

Agenda

- ISN Introduction
- Contractor Management Background
- 10 Strategic Elements for Best-In-Class Contractor Management
- Benchmarking & Case Studies
- Questions/Comments



ISN Introduction



What is ISNetworld?



Web-based Contractor/Supplier Information Management for collection and review of QHSE, Procurement, Compliance and Training data.

500+

Hiring Clients Worldwide

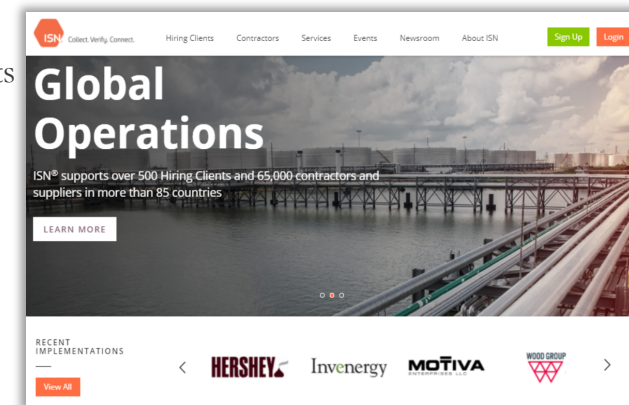
Industries

- Aerospace
- Agriculture
- Automotive
- Beverage
- Chemical
- Consumer Products
- Exploration & Production
- Facilities Management
- Fertilizer Products
- Food
- Manufacturing
- Midstream, Pipelines & Terminals

65,000+

Contractors/Suppliers

- Mining
- Paper, Packaging & Building Products
- Pharmaceutical & Healthcare
- Public Sector & Public Works
- Retail
- Refining
- Renewable Energy
- Steel & Metals
- Technology
- Transportation
- Utilities, Power Generation & Distribution



Contractor Management Background



Contractorization – Opportunity and Challenge

Global industry trends indicate continued growth of outsourcing non-core business activities to third party contractors.

- Allows for qualified, well equipped specialized organizations.
- Enables safe and sustainable operations.

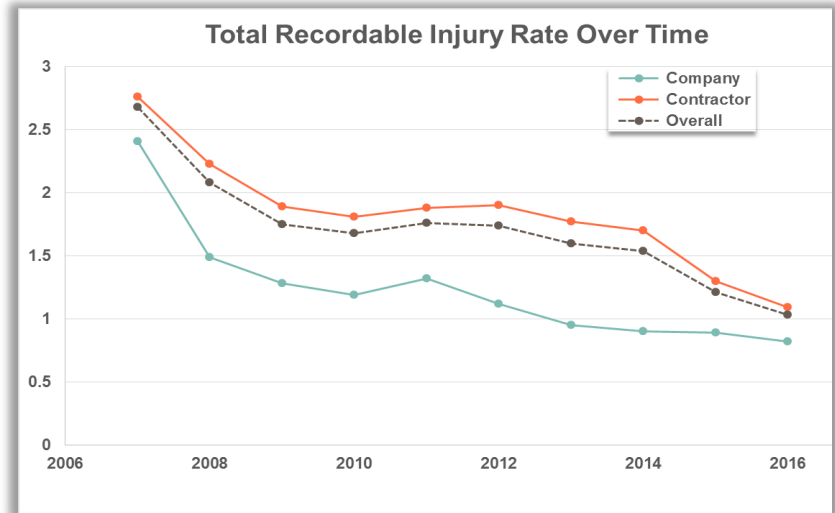
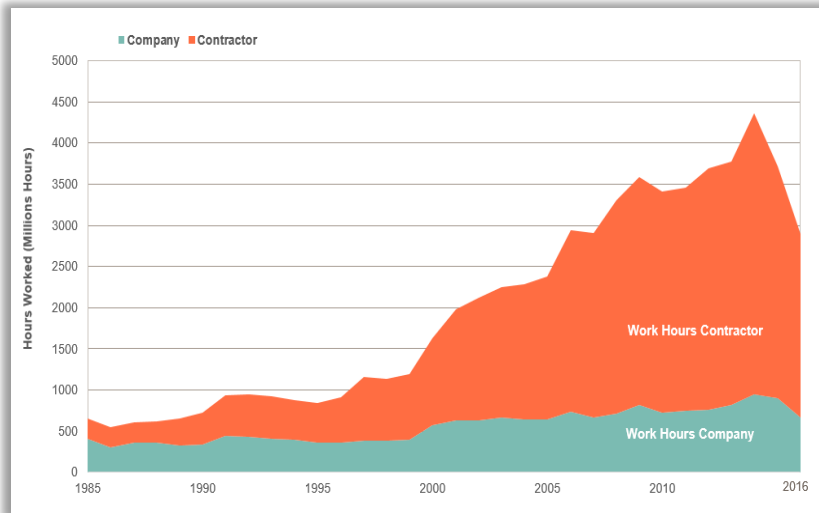


Prime duty for safe operations and environmental stewardship lies with the owner organization.

- Robust strategy needed.
- Better risk mitigation.
- Streamline operations to focus on core competencies.



Use of Contractors – A Global Trend



Contractors accounted for 77% of work hours in 2016

Contractors have 30% higher total recordable injury rate than Companies in 2016

Overall work hours decreased by 34% during 2014 – 2016



Serious Injury and Fatality Trends

Based on 49,227 US Contractors (Same Contractor Set Through All 3 Years) (99th Percentile Data Used)	2014	2015	2016
Total Exposure Hours	10,600,873,512	10,674,642,632	10,117,838,804
Total Recordable Cases	86,388	81,859	75,694
Total Number of Fatalities	215	216	173
TRIR	1.63	1.53	1.50
Number of Contractors with Fatal Injuries	192	192	162
Fatality Rate per 100,000 Employees	4.06	4.05	3.42
Example Client's Fatality Rate per 100,000 Employees	1.20	2.95	2.36
<i>BLS Fatality Rate per 100,000 Employees*</i>	<i>3.40</i>	<i>3.40</i>	<i>3.60</i>

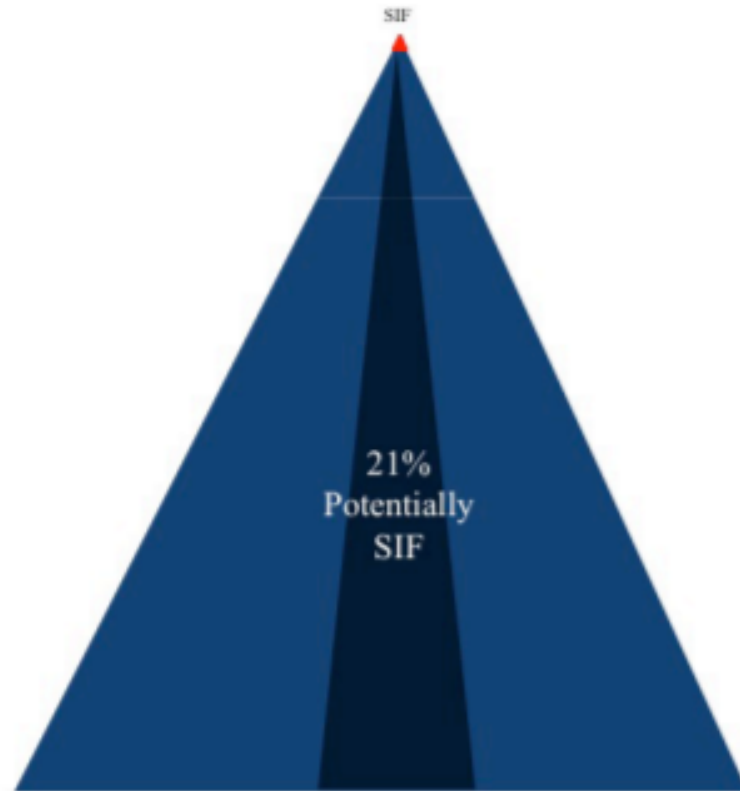
- Steady decline in TRIR over years, but fluctuating fatality rates
- Increasing focus on Serious Injury and Fatality (SIF) prevention

*BLS Fatality Rate: <https://www.bls.gov/iif/oshwc/cfoi/cfch0014.pdf>



Heinrich's Triangle Revisited

- Traditional causation models revised
- Should not be at the expense of all incident causation



10 Strategic Elements for Best-In-Class Contractor Management



10 Strategic Elements

- ① Establish a clear communication strategy
- ② Designed to measure performance
- ③ Incorporate a risk-ranking process
- ④ Follow a three-step due-diligence process
- ⑤ Maintain a qualified contractor list
- ⑥ Follow standardized and transparent guidelines
- ⑦ Establish consequences
- ⑧ Address subcontractor management
- ⑨ Integrate with internal business processes
- ⑩ Take Safety Culture to the Next Level



1. Establish a Clear Communication Strategy

What?	How?	Engagement
Zero Incident Goals	Timely and Consistent	One-on-One Meetings
Golden Rules	Traceable and Auditable	Workshops & Councils
Scorecard Status	Mailings & Emails	Community Meetings
Performance and Audit Gaps	Contractor Handbook	
	Electronic Platforms	



2. Designed to Measure Performance

Lagging Indicators

- Recordable Injuries
- Incident Rates
- Injury frequency and severity.
- Near misses (frequency, trend).
- Fatality or other accidents.
- Lost workday rate.
- Chemical releases.
- OSHA citations (number and type).
- Worker's Comp. claims and trends.
- Experience Mod. Rate (and changes).

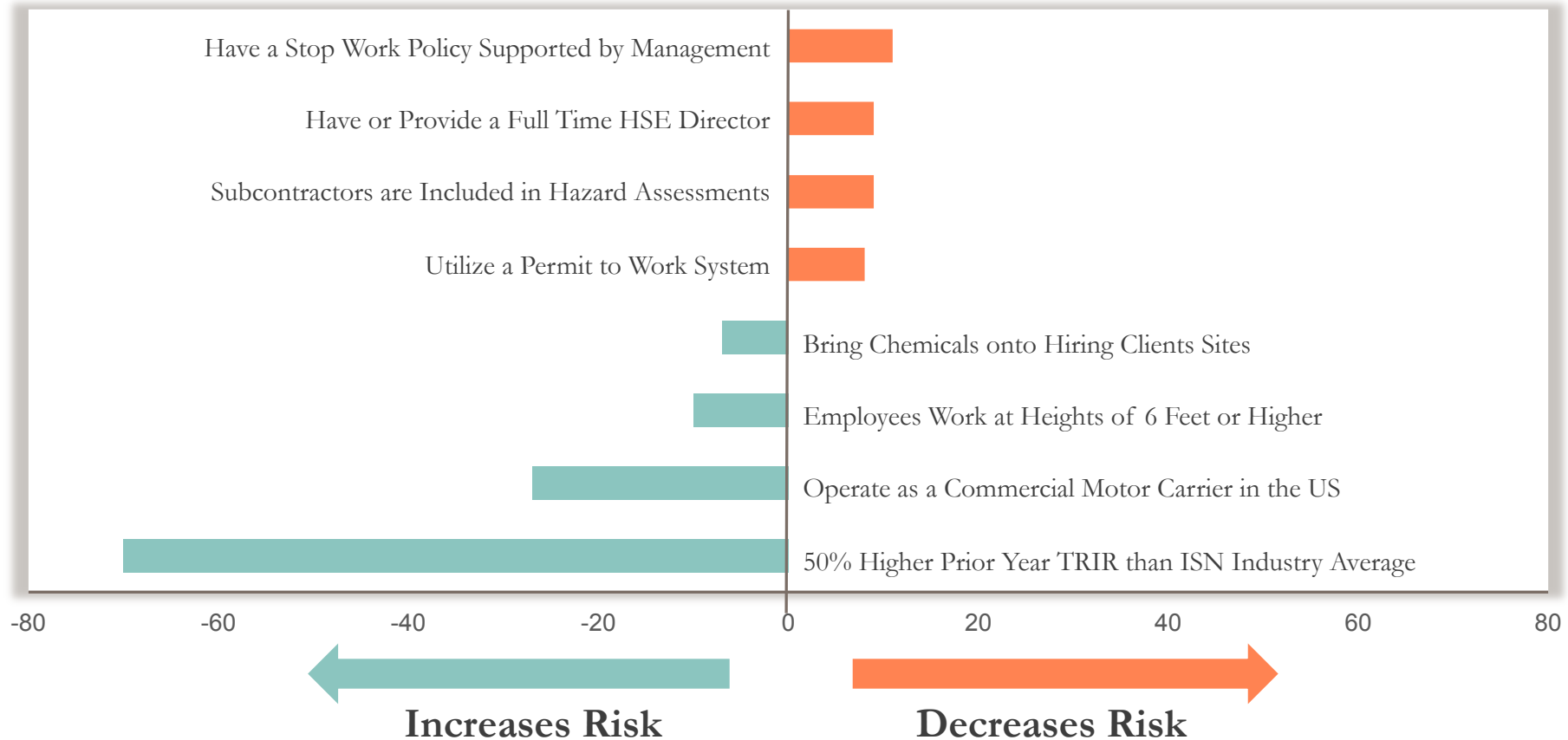


Leading Indicators

- Safety Performance
- Hazard Recognition
- Employee turnover rate.
- 3rd Party certifications achieved.
- Completed vs. expected trainings.
- Completed vs. scheduled inspections.
- New/enhanced safety controls implemented.
- Observations/investigation results.
- Risk assessments and job hazard analyses.
- Employee perception surveys.



2. Designed to Measure Performance



2. Designed to Measure Performance

Contractor Leading Indicator Case Study - Enable Midstream

Lower TRIR

Higher TRIR

NAICS 23 - Construction



-24%	Employees work in a Process Safety management (PSM) facility
-17%	Employees subject to drug and alcohol screening at return of duty
-16%	Employ a health care professional on large jobs
-15%	Has a written Short Service Employee program
-14%	Utilizes a permit to work system
-13%	Has a full time site HSE Supervisor
-12%	Written program requiring Job Safety Analysis before every task
-7%	Completes and documents two observations per employee per month
-7%	Has a fatigue management program
-5%	Years Subscribed with ISN

Employees work at heights of 6 feet or higher	28%
Brings chemicals on site	20%
Received any INSPECTIONS within the last three (3) years	19%
Operates Commercial Motor Vehicles	19%
Transports hazardous materials	18%
Received a CITATION within the last three (3) calendar years	15%



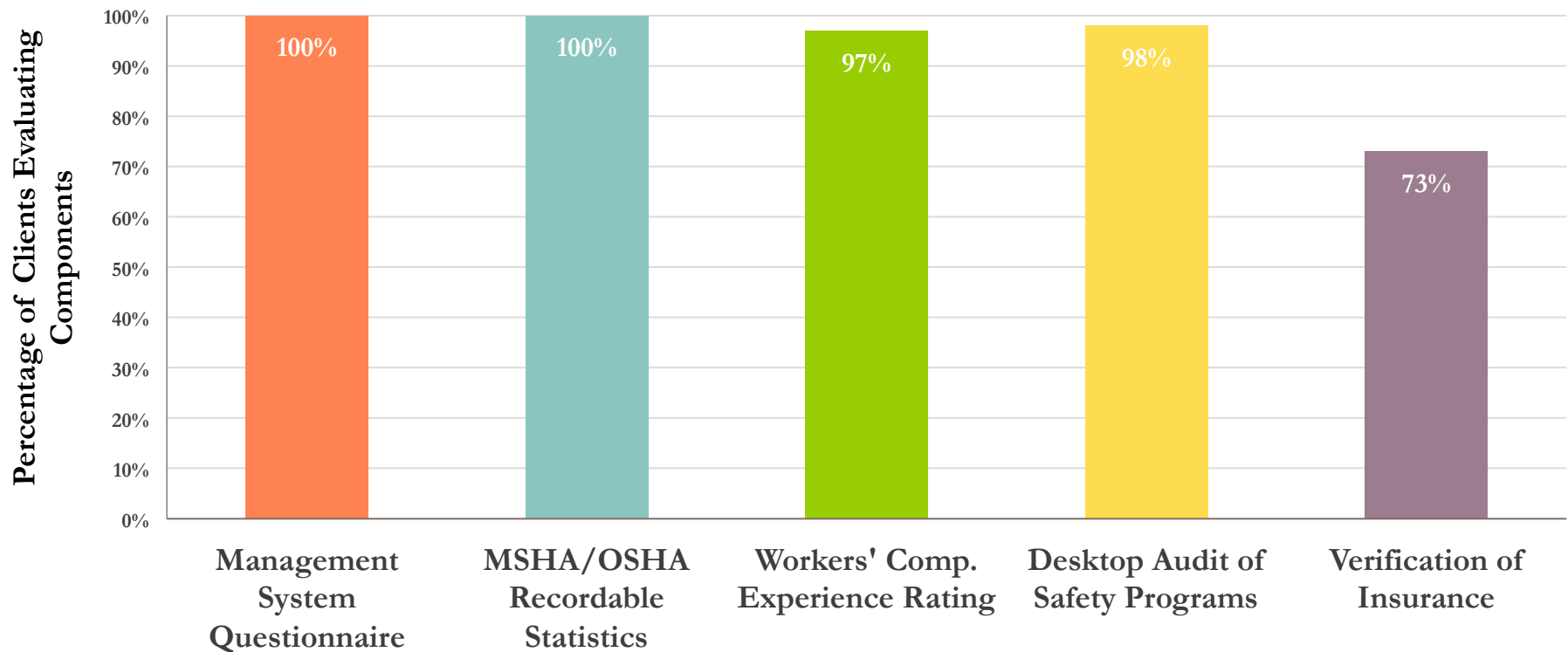
★ *Actionable*



2. Designed to Measure Performance

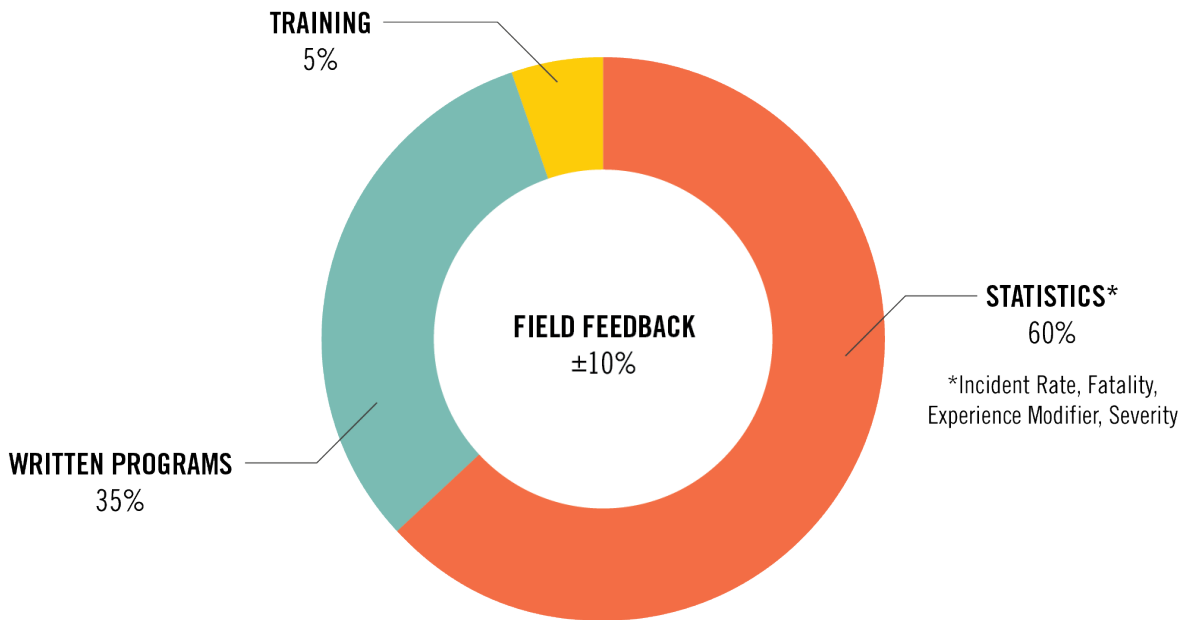
Common Evaluation Components

Based on 232 Owner/Operators and 564 Grading Configurations



2. Designed to Measure Performance

Case Study: Kinder Morgan



! SHOWSTOPPERS

- Insurance
- Contract Status
- Subcontractor Management Plan
- Drug & Alcohol Status
- Operator Qualifications Plan

± GRADING

Recommended, Accepted
(Approved with no restrictions)

At Risk
(Not approved to be used;
VP approval required)

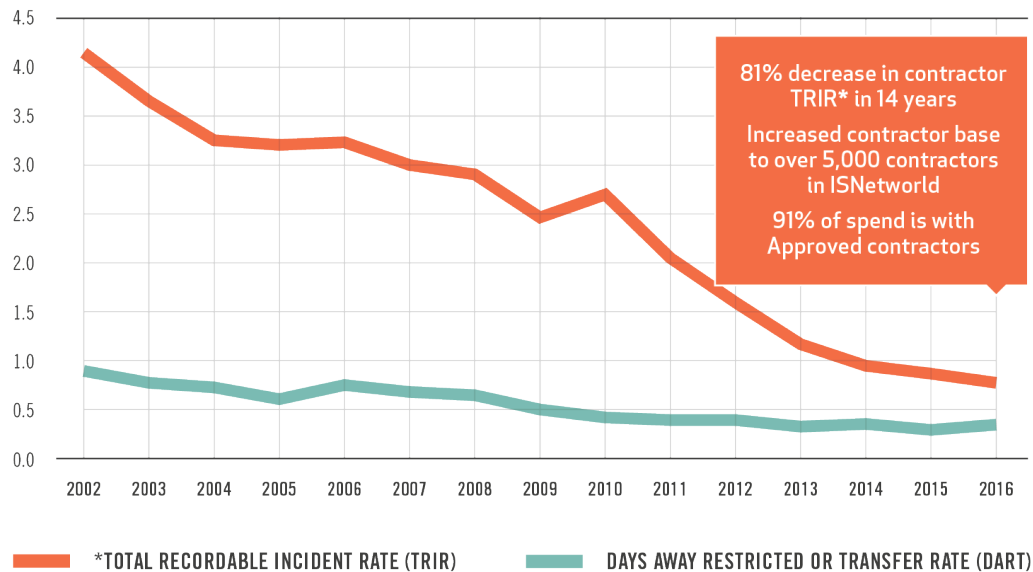
2. Designed to Measure Performance

Case Study: Kinder Morgan

Contractor Incident Rates by Year

TRIR and DART based on hours worked on-site for Kinder Morgan

(Based on standardized 200,000 hours)



“ISN has developed a great platform for our procurement and safety professionals to work together. We now have the ability to have a one-stop shop in order to gather and manage our safety statistics.”

Lisa Shorb
VP Human Resources and Administration

KINDER MORGAN



3. Incorporate a Risk-Ranking Process

Contractors come in various sizes, capabilities, risk profiles.

Classify risks according to pre-set criteria and matrix.

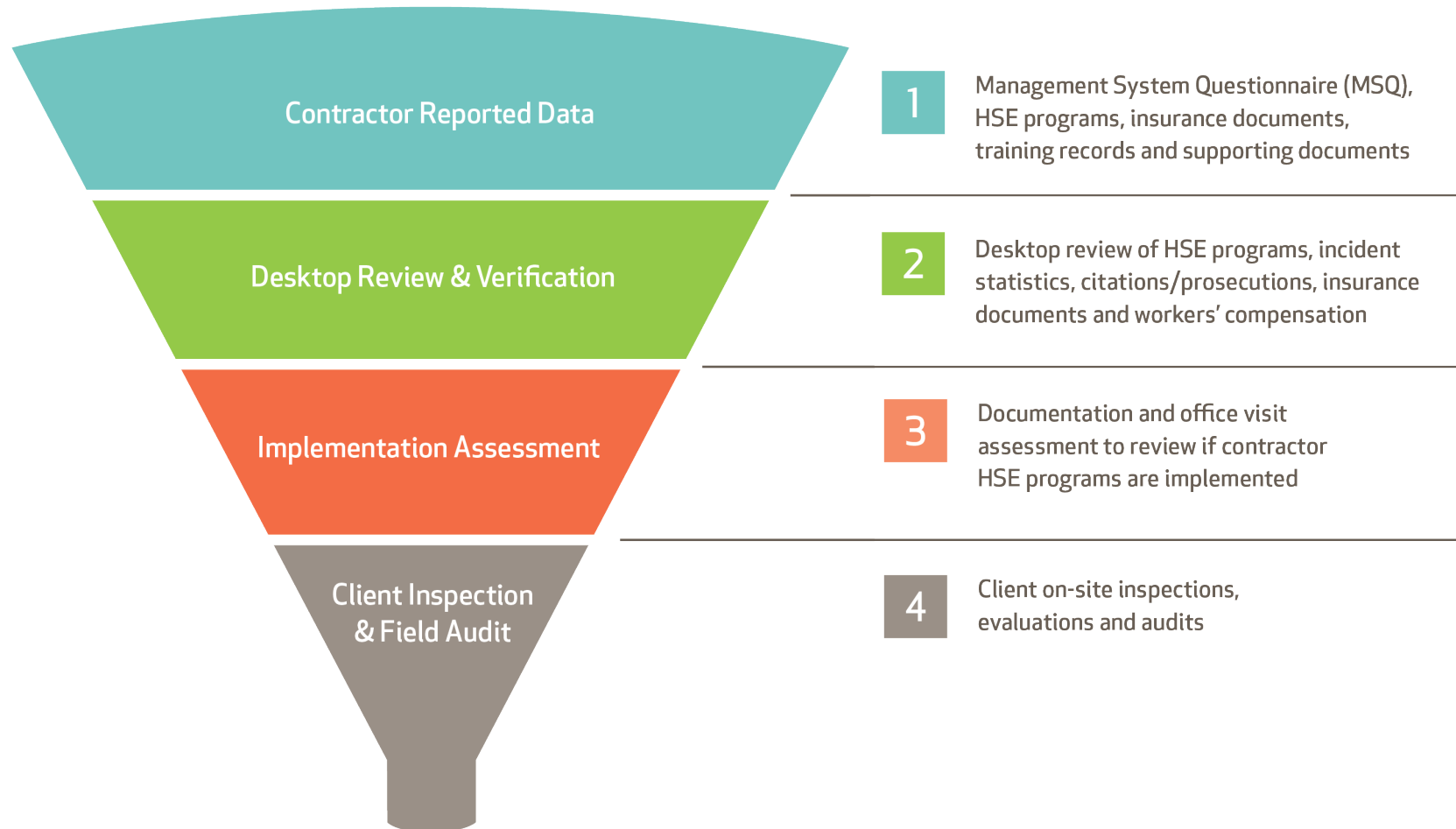
- Potential adverse consequences.
- Frequency, duration and / or scope of work.
- High, medium and low risk.

Re-evaluate / adjust contractor risk periodically.

Contractor Risk Screening Matrix				
Job Function	Green - Job function/work location criteria DO NOT fall into Contractor Management System (CMS) Orange - Job function/work location criteria DO fall into CMS			
Inspector, Consultant, etc.				
Manual Labor				
Technician/Supervisor				
Clerical/Administrative				
Office cleaning, delivery person, vending machine, etc.				
Work Location	Offsite, Contractor Shop	Office	Construction, Manufacturing, Storage	Drilling, Production, Plant, Compressor, Pipeline, Seismic



4. Utilize a Four-Step Due-Diligence Process



5. Maintain a Qualified Contractor List



“Quick, we need them now”



Proactive, structured process for finding, qualifying, onboarding, and monitoring contractors.



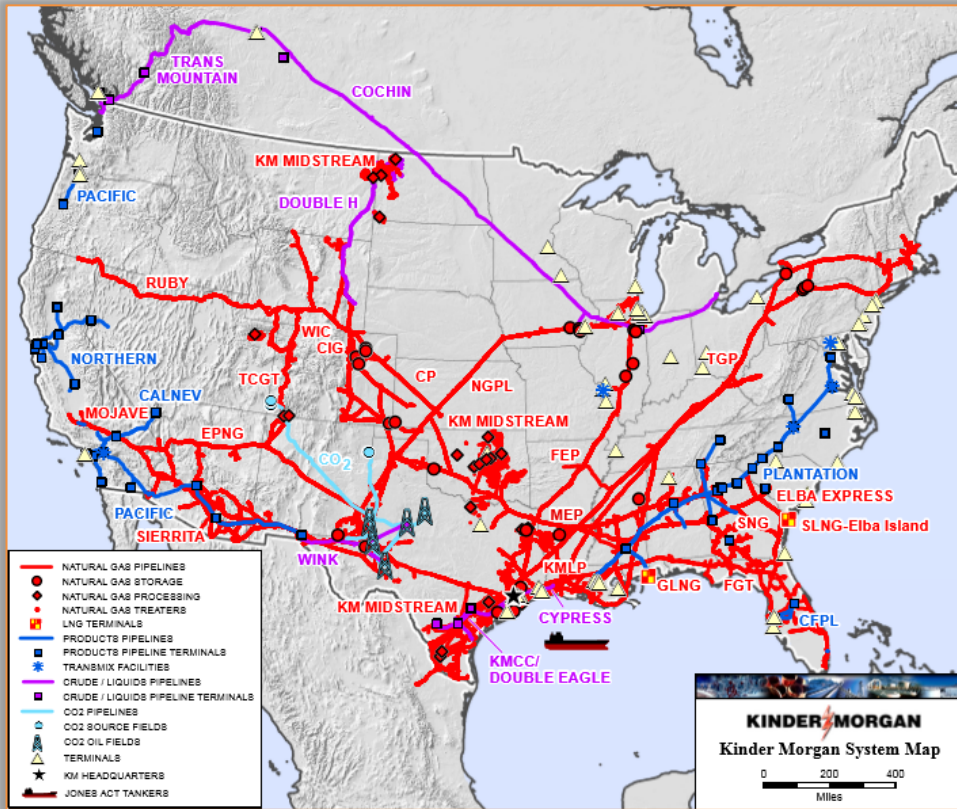
Enhances procurement integrity.



Builds stronger and lasting partnerships with contractors.



6. Follow Standardized & Transparent Guidelines



- Consistency and transparency is a common challenge.
- Utilize a single, well organized database.
- Improves procurement transparency.
- Minimize duplication and inefficiencies.

7. Establish Consequences

- Establish, communicate and enforce consequences for non-compliance.
- Develop contracts and agreements carefully.
- Eliminate time/effort required to manage challenging performers.
- Provides a base of fewer, safer service providers.



8. Address Subcontractor Management

Have you ever seen service providers with logos you don't recognize on your jobsite?

Subcontractors typically have a higher likelihood of incidents.

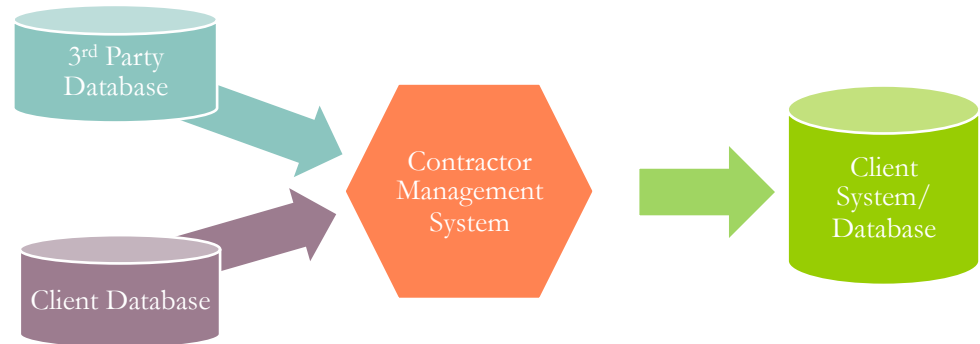
Best practices for subcontractor approaches:

- Ensure they are qualified/monitored to same level of standards as general contractor or,
- General contractor required to demonstrate the same level of rigor for qualifying subcontractors.



9. Integrated with Internal Business Processes

- Contractor management as an integral part of the complete business processes.
- Goal is to drive end-to-end risk management.
- Examples of Key Performance Indicator (KPI) integration:
 - Purchase orders issued only to qualified contractors.
 - Site entry ID badges tied to contractor approval status.



3 rd Party Imports	Client Imports	Client Exports
<ul style="list-style-type: none">• Training• Drug & Alcohol Tests• Background Checks• Company Registration Information	<ul style="list-style-type: none">• Audit Data• Contract Details• Post Job Evaluations• Competency Assessments	<ul style="list-style-type: none">• Contractor Grades• Insurance Statuses• Employee Training Details• Questionnaire Responses



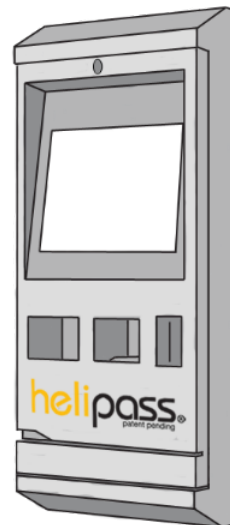
9. Integrated with Internal Business Processes

Case Study: Apache Helipass

Designed to check all required information prior to an employee/contractor heading offshore for Apache.

Can be used to track individual-level data in real time such as:

- Background Checks
- Company Grade
- Drug and Alcohol
- Online Training
- OQ & TQ



10. Take Safety Culture to the Next Level

- Veteran HSE Professionals point to multi-employer worksites as a significant health and safety concern within the industry
- Best-in-class organizations identify the safety attitude of their sites and modify as needed
- Periodic culture assessments and benchmarking maintain consistent focus for contractor workforces



10. Take Safety Culture to the Next Level



- **Best in Class Organizations:**
 - See contractors as partners to promote ownership in safety
 - Include contractor safety metrics in company-wide goals
 - Support site mentorship program with contractors
 - Conduct regular meetings with contractors to build site engagement and reinforce culture



Benchmarking & Case Studies



Best-in-Class Contractor Management



<https://www.isnetworld.com/Publications.aspx>



Contractor Benchmarking



Data-driven Insights

Health & Safety Performance Indicators



Contractor Performance Benchmarking by Hiring Client, U.S.
Oil & Gas, Utilities & Power Generation

2016 Data

An **ISN Analytics**™ Publication / Number 1711
ISN.com



Section 3B

Midstream Oil & Gas (Pipeline)

400 or More Connected Contractors

3B.1 Total Recordable Incident Rate (TRIR)	74	3B.6 Experience Modifier	79
3B.2 Days Away, Restricted or Job Transfer Rate (DART)	75	3B.7 TRIR vs. Experience Modifier	80
3B.3 Lost Time Case Rate (LTC)	76	3B.8 Incident Rates by Number of Contractors	81
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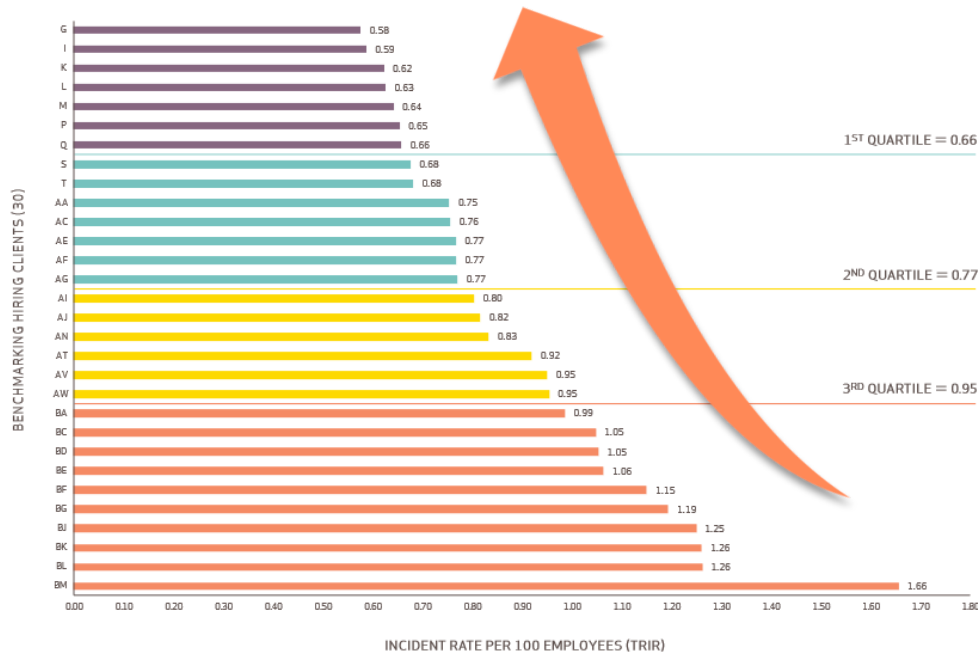
Contractor Performance Benchmarking by Hiring Client, U.S., 2016 Data // Midstream Oil & Gas (Pipeline) - 400 or More Connected Contractors 



Contractor Benchmarking

Section 3B.1: Midstream Oil & Gas (Pipeline) - 400 or More Connected Contractors

Total Recordable Incident Rate (TRIR)



- Know Where You Are
- Selection & Management Strategy
- Baseline & Targets



Summary

What gets measured gets done.

“Investing in the safety and health of workers is about growing a culture; not simply developing a safety management program and then hoping it works - you have to feed it and care for it so that it succeeds and continues to succeed.”

David Michaels, PhD, MPH

*Former Assistant Secretary of Labor, OSHA***

** https://www.osha.gov/pls/osbaweb/owadisp.show_document?p_table=SPEECHES&p_id=3256



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