Reports of the Best Practices Committees
Safety Committee

Vision and Objectives:
• Improve safety performance of the Construction sector

ISNet Safety Metric
• Develop safety benchmark to monitor trends on path towards 2020
• Identify tools to improve performance

Safety Committee
Strategies:
• Understand past performance and current trends towards “Twice as safe by 2020”
• Progress strategic initiatives to proactively address safety performance in the project development phase
• Developing best practices to assist the workers at the workforce to ensure nobody gets hurt
• Engage with the Government of Alberta and liaise with industry partners to ensure alignment on safety initiatives

Strategic Initiatives
• Broad implementation of ICCS
• Physical Demands Analysis standards for contractor’s workforce

Safety Best Practices
• Promote Risk Tolerance Reduction tools
• Visible Safety Leadership
• A&D Best Practices
• Leverage Oil Sands Industry Safety Task Force initiatives to avoid duplication
Safety Committee

- Develop an outline of a path that will improve safety performance through enhancing safety leadership
  - Monopolize existing tools and share with industry
    - Hurt Severity Tool – consistently assess actual and potential
    - Barrier Model – incident analysis
    - Hierarchy of Controls – focus on highest impact
Safety Committee

- Outline leadership behaviors to model
  - Identify ideal leadership behaviors
  - Identify pitfalls to avoid
  - Provide guidance on consistent assessment of hurt severity
  - Focus on the issues that could have been significant

**Today**
- Owner’s focus on lagging incident trends for contractor selection
- Owner’s have negative perspective on statistics such as minor hurts, near misses, and proactive Hazard Identifications (HIDs)
- Owner’s undermine the safety culture by over reacting to low severity incidents
- Safety incident reporting is driven underground

**Tomorrow**
- Owner’s genuinely evaluate the contractor’s safety management systems for:
  - Sustained effectiveness at work fronts
  - Maturity in consistently applying Leading Indicators
  - Proof of building and sustaining a positive safety culture
- Owner’s consistently view minor hurts, near miss reporting, and HID reporting as positive reflections of a healthy safety culture
- Owner’s to consistently apply severity assessment to actual and potential incidents
- Owners to positively recognize good reporting and communication, and “mine the diamond” for incidents that warrant deeper and meaningful learnings
- Lead by example in encouraging a culture of proactive safety incident reporting
Reports of the Best Practices Committees
Construction Performance Committee

- TEXT
Vision and Objectives:
• Improve safety performance of the Construction sector

Strategies:
• Understand past performance and current trends towards “Twice as safe by 2020”
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• Developing best practices to assist the workers at the workface to ensure nobody gets hurt
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Contracting Committee

- TEXT
Workforce Development Committee

Vision:
To ensure the Heavy industrial Sector (Construction and Maintenance) has the access to a workforce with:

   the right skills… at the right time…in the right numbers with Right Supervision

(Supply = Demand)
### Workforce Development Committee

**Objectives:**
- Attract workers to the Heavy Industrial sector
- Develop worker skillsets
- Develop high quality supervision
- Sustain the workforce
- Workforce forecasting

**Strategies:**
- Collaborate with industry partners to avoid duplication
- Advocate with industry and governments to provide recommendations on short term and long term plans

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**Attraction**

- Workforce forecasting
- Increasing enrollment to meet demand
  - Improving career counselling
  - Increasing entry level positions
- Understand barriers to entry into the trades
- Entry level / pre-employment training programs
- Target under represented populations (Aboriginal/First Nations, women… etc)

**Development and Sustainment**

- Trade skill development
  - Apprentices and Journeymen
- Leadership development
  - Mentorship, coaching, training
- Address retention issues and changing workforce demographics
  - Maintain enrollment
  - Fuel Your Career
  - Promoting ICCS
## Vision and Objectives

World-class productivity in heavy industrial Construction and industrial maintenance.

## Mandate

Develop next-generation tools for Advanced Work Packaging
Champion implementation of Work Face Planning and Rework Reduction
Develop database, tools and a culture for incorporating benchmarking into Alberta construction practices
Identify “big prize” opportunities in productivity improvement

### BENCHMARKING

**COMPLETED**
- Phase 1 - Report February 2009
- Phase 2 - Report October 2014
  - Both reports have been uploaded to COAA Website and have seen many downloads

**PHASE 3** Start May 2016
- Introduction of 10 – 10
- Sustainable
- Working with Go Productivity
- Ad Hoc Analysis for participating members

### WORK FACE PLANNING ADVANCED WORK PACKAGING

**OBJECTIVES**
- Remove barriers to implementation of AWP to improve project performance

**STRATEGIES**
- Communication of AWP Best Practices (CII/COAA)
- Support AWP Event in Alberta
- More case studies to validate ROI of AWP implementation
- Scalability of AWP for smaller projects (sustaining, turnarounds, maintenance)

### PROJECT PRODUCTIVITY

**Implementation Plan 2015/2016**
- Survey feedback, create data analysis tool, define BP Productivity template, develop themes, develop sub committees, start compiling data into the content template, Send to COAA for technical review, Publish and upload onto COAA website

### MODULARIZATION

**OBJECTIVE**
- Modularization Best Practice developed for Alberta Projects
- To be presented at this Best Practice Conference
- Utilize feedback from industry to improve what has been presented to date
Benchmarking
Phase 3

What gets measured, gets improved!

- Funding recently obtained through NSERC leveraging the COAA investment dollars
- Continued partnership with CII and University of Calgary
- Introducing streamlined 10-10 benchmarking – leading indicators
AWP / WFP COMMITTEE

Best Practice sessions

1) Presenting “scaled down” version of AWP/WFP for smaller projects:
   - Case studies PROVE that productivity improvements in the range of 25% are possible

2) Working on project to determine ROI with AWP/WFP implementation:
   - Opportunity to Participate
PRODUCTIVITY COMMITTEE

Continuing with development of a Best Practice. Some deliverables complete.

Workshop at BP Conference “Back to Fundamentals”

- Discussion will outline techniques that have proven successful to increase productivity.

Next step is to introduce training.
Modularization BP Presentation

- Outlines the principles which can be applied to each module assembly element

Expect feedback from industry at BP 2016
REWORK COMMITTEE

COAA Rework Cause Survey - 2001

1. Engineering and Reviews
   - A. Late Design
   - B. Poor Document Control
   - C. Scope Definition & Design Changes
   - D. Errors & Omissions

2. Construction Planning and Scheduling
   - A. Late Owner Input
   - B. Constructability Problems
   - C. Unrealistic Schedules
   - D. Insufficient Turnover & Plant Startup Resources

3. Leadership and Communications
   - A. Ineffective Management of Project Team
   - B. Lack of Operations (End User) Buy-in
   - C. Lack of Safety and QA/QC Commitment
   - D. Poor Communications between Inspectors

4. Material and Equipment Supply
   - A. Untimely Deliveries
   - B. Prefabrication and Construction not to Project Requirements
   - C. Non-compliance with Specification
   - D. Materials not in Right Place When Needed

5. Human Resource Capabilities
   - A. Unclear Worker Instructions
   - B. Inadequate Supervision and Job Planning
   - C. Excessive Overtime
   - D. Insufficient Skill Levels

Contribute to REWORK

PRRT (Project Rework Reduction Tool)
Contracting Committee

Vision and Objectives to Support 20/20 by 2020
To develop best practices & support tools that enhance efficiency & performance for all contracting parties on industrial projects in Alberta to achieve excellence in Contracting and Execution.

SCOPE OF WORK DEVELOPMENT BEST PRACTICE
Develop standard template for development & drafting of Scope(s) of Work for projects and operations.

CONTRACT STRATEGY BEST PRACTICE
Methodology to facilitate selection of appropriate contract strategy, to increase probability of successfully achieving project goals.

EDUCATION LIASON
Assist academia to develop course curricula supporting improved skill set, development & knowledge training of contracts personnel managing heavy industrial Contracts.

CONTRACT ADMINISTRATION TOOLKIT
Create a toolkit for use for Contract Administrators / Managers throughout the lifecycle of a heavy Industrial Contract.