# COAA WORKFACE PLANNING CONFERENCE 2011

### **INDUSTRY EXPERT PANEL [MINUTES]**

#### **SPEAKERS**

Andrew Hardy | Project Execution Leader, Imperial Oil Ltd.

Mark McCabe | Sr. Project Controls Specialist, Jacobs Industrial Services Ltd. Lloyd Rankin | President, Ascension Systems Inc.

#### *MODERATOR*

Dr. Jim Lozon | President, The Collaboration Group Inc.

#### PANEL DISCUSSION

# **QUESTION 1: What are two or three keys to successful WorkFace Planning Implementation?**

Andrew Hardy	Buy-in factor is number one on my list  How do you get people to embrace the methodology?  It's like safety - it is a priority; a better-planned job is a safer job. Focus on softer skills, not just rolling out a work process and say "do it". Getting enthusiasm and buy in once you get the "wins". Getting people to really want it is the way to go.  The second part of it is the leadership part – working with all stakeholders, providing leadership and setting the expectation.
Mark McCabe	Pretty much echoing what Andrew said. You need buy-in from top down, right from owner to the field. Alignment and integration between different silos; procurement to project controls; safety and quality. With buy-in you'll have a superior product. The final thing we need is enough lead-time before construction starts. Reduce wait time. Currently not enough time to do proper planning ahead of time.
Lloyd Rankin	This has to be an owner intiated and led program. It's the owner who can really influence the stakeholders. They have to understand what they really want and how to implement when they say they want WorkFace Planning. We have to make sure that everyone understands WorkFace Planning. Broad motherhood statements not enough; must be specific. Must also check — is everybody doing what they said they were going to do? Must also pre-qualify our vendors. When somebody says they do WFP show me! Do you have training records, policies, previous customers?

## **QUESTION 2: Where can and should WorkFace Planning be applied?**

Mark McCabe	Anywhere and everywhere! WFP is packaging and managing executable
	chunks of work; small pieces of the puzzle to big pieces of work. Everybody

	is immensely focused on safety; everything is focused on safety and quality and that extends to the workface there's no reason we can do WorkFace Planning in everything we do today.
Lloyd Rankin	We're seeing it can be applied from nuclear to airports, hospitals and resortsif it's big yeah it probably can be more effective; can be used in pre-commissioning, startup, commissioning, through the project. It's getting bigger and better and as it continues to get results, we'll continue to apply it to new projects.
Andrew Hardy	Everything will benefit from an efficiency and productivity point of view if it is well-planned. I had a victory recently about this with a supervisor who had been doing this but hadn't written it down, so transferring the knowledge is important.
QUESTION 3: Wh consider?	at is the one thing you would like to challenge the audience to
Lloyd Rankin	Think back to when safety was something that COAA did an initiative on. A decision was made to try and make the workface safer. People assumed that if we just though about it, things would get better, but actually it required a culture and behaviour change to make people safer. It took 15 years to get to a 70% improvement in safety. We're getting early gains in WFP but if it took 15 years for safety, it will probably take us a few more years to get WFP to that level, in spite of early gains.
Andrew Hardy	To some extent, this is not rocket science. A lot of elements have been done but pulling it all together to ensure it's constrained and disciplined and gets to the field is a culture change. We did a classroom on this and the group was building a model; as soon as the model-building started, the pre-planning talk when out the window and the group became instantly task-oriented. We had to work to tweak their culture to slow down, plan the work, talk about it, get the alignment, and that takes time even in leadership groups.
Jim Lozon	I often use a training exercise with lego bricks. We say "build a bridge". It's a speed and quality competition. We give the bricks to the groups and say "go". What do they do first thing? They build a bridge! But they don't know I have the specs in my back pocket. Knowing I'm the owner and it's my project, the groups don't get the bridge right. They say why? I say here are the specs. They find that lack of planning caused them to restart, rework and so-on. The best group to do this with is engineers, but it happens almost every time: You give someone something to work with, and something to do the work with, so they do the work.
Mark McCabe	Safety, quality and cost means nothing if someone is hurt or killed on the project. How do you execute a safe job? Planning. Realistic and solid planning. If you take the time to identify the hazards, you can mitigate or eliminate them as the project goes on, and I think as WorkFace Planning goes on, that's what it is about and that's our goal.

	lge and competence in WorkFace planning?
Andrew Hardy	As an owner representative, I do believe WFP is a competitive advantage for a contractors and it's something we're going to look for in the future. As a hands-on project manager in the field with the tradesmen, we are diligent on stewardship in terms of how the workface packages are coming along; where we're at throughout the job to make sure going forward we take our learnings and look for those work processes, interview potential planners and managers and getting a competitive advantage from a safety and quality point of view for a contractor.
Mark McCabe	Policies and procedures and how you follow them. Look at reports, audits, talk to staff You've said it, now prove it!
Lloyd Rankin	Where I've done vendor pre-qualifications, it gets details: have you trained your people, do you have descriptions? Can you show me who your planners are? Do these details match the COAA model? Do you have audit and assessments done? Do you have WFP experience? Can I talk to references? Evidence, evidence and more evidence.
A	AUDIENCE QUESTION-AND-ANSWER
Names	Question and answer
Ash Mohammed (AECON) (sp?)	Regarding WorkFace Planning implementation: What causes WFP to fail, and what does it cost?
Lloyd Rankin	I recently was supposed to audit and assess their WorkFace Planning system. I showed up, and asked the contractor when they found out they were supposed to do WorkFace Planning? They said "Friday". I asked if they had people, he said no. I asked if they had any procedures, he said no. I asked when they started construction, he said last week. I told the owner we needed a phased implementation plan based on where we wer right then, but to do an audit on where we're at, it would be a demoralizing waste of time. Without time on a project to do full implementation, partial implementation is recommended.
	Put mechanisms in place where you can see what the costs of WFP are an how they affect the budget. This is very difficult on in-progress non-WFP project. The cost of the people is 1-2%. Training those people is expensive For example, Andrew trained 50 people
Andrew Hardy	Yeah, in terms of actual numbers we're not that far yet but training was the big up-front cost. In terms of the work itself (putting the packages together, doing the plans), someone is doing that anyway, but we want to make sure it's being done four weeks before project starts. In terms of cost once you're in it, I have no doubt a functioning WorkFace Planning system will pay for itself many times over. I haven't seen it fail yet, but if you don't implement properly you can set the teams up for failure.

Names	Question and answer
Dan Slate (Jacobs) (sp?)	If a project is already going and hasn't been using WorkFace Planning, the question is when is it too late in the project lifecycle to go forward with it?
Mark McCabe	I think I've learned the big picture to see what's left. As Lloyd said you can do systems turnover packages, for example there are many things you can do not related to construction, so look at the big picture. If you start WFP late, you have to look at what you should do the old-fashioned way and where you can apply WFP going forward. Focus and zero in on the percentages of the CWPs or the other areas that aren't complete. No time would be too late, to be honest.
Andrew Hardy.	No, I agree. Depending on what makes sense, there's always areas to implement WorkFace Planning. Anytime you can do that there's going to be a benefit to the organizations involved.
Lloyd Rankin	As a warning: If you're producing packages so you can show the owner you can do it without planning on actually using it in the field, it is probably a waste of time. I've seen it on the job where the field isn't actually using some of the nicest work packages.
Names	Question and answer
Yogi Shavasto (sp?)	When to start WorkFace Planning
	How do you reconcile two types of packaging which merge toward construction
Mark McCabe	Code appropriately; start at the very beginning, when you're designing and detailing. Need to tag correctly, code appropriately. Project controls should talk six-months to a year out. Start planning at that time and as you transition to construction the planning force will grow. Hitting the field with an abundance of packages in place is good.
Andrew Hardy	There are big consequences to lack of planning early on in terms of constructability. Decisions early can make a big impact in the field so starting planning early is what you want to do.
Lloyd Rankin	Start your planning early for transition from area to systems. Often the owner and engineer talk about how the systems will be created; often the contractors aren't part of that discussion so they're walking lines in terms of deciding how those will be produced. The other thing to say is: the owner very early has to decide who is going to be the champion in our organization, and who is going to sponsor this?
Names	Question and answer
Gary Orton	Will there be plans for accreditation as a WorkFace Planning organization?
	If there is, in order for anything to be accredited, so it needs to be an honourable result, so will there be an organization for this?
Lloyd Rankin	We absolute believe in the WFP committee that there should be a certification process for WorkFace Planners. Now that projects are starting up again after 2008, we're fairly certain we'll be looking more closely as the accreditation process. We have a scorecard that can be used we

	need to start developing audit tools My company ASI is doing that as a business, but I do think that we will see some of that being developed through COAA as well. The members of the WFP committee are working on an incredible amount of things.
Names	Question and answer
Stewart Connell (Burns and McDonald)	Do we have any statistics in terms of how the WorkFace Planning system has improved safety?
	Where do you find the core model for the WorkFace Planner?
Lloyd Rankin	The most recent safety information comes from the Construction Industry Institute. They did see a significant improvement in safety and its been properly documented through the University of Austin in Texas.
	We have job descriptions on the COAA website and through our training programs we provide details on the skillsets and backgrounds required.
Andrew Hardy	An ideal WorkFace Planning candidate is someone from the trades – foreman, general foreman level is a pre-requisite. Finding good leadership on the construction site, one of the pushbacks we get is we're taking good experience out of the field. But we're getting their knowledge transferred and putting more knowledgable foremen out in the field.
Names	Question and answer
Frank Engli (Shell Canada)	What has been done to sustain WFP successes in future projects and what has been done to carry over into on-stream maintenance, routine maintenance and turnaround?
Lloyd Rankin	Imperial Oil approached ASI and SAIT to assist in putting together training in turnarounds and what we found was many of the principles that apply to new construction can easily be modified to work in a preturnaround/turnaround environment.
	How have we attempted to sustain? Most of the companies which have implemented WFP have developed policies and procedures around it and many have used their Lessons Learned going forward. Many companies have used it in Alberta and now routinely use it outside of Alberta where owners haven't necessarily requested it
Mark McCabe	COAA's model for WorkFace Planning is a bigger, better model than what your normal turnaround model would be. We continue to do our own model better and better in terms of safety and quality through improvements in policies and procedures, encompassing every department.
Andrew Hardy	In terms of applicability, it comes back to the question of where can you use WorkFace Planning: the answer is everywhere. Put together Work Packages any time you're doing work in the field.
Names	Question and answer
Jin Pang (U of A)	I am a strong supporter to promote GFs, superintendents or foremen to become WorkFace Planners, but usually these trade supervision staff are

	not trained for computer skills; packages require compute skills. Where
	this might be too much to ask to learn computer skills, would you consider
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	breaking a planning job into multiple tasks to mitigate this?
	Human factors play a big role in construction and in many cases there isn't
	one best way to slice the same work into different pieces. Where one
	superintendent approaches one way and another approaches it
	differently, how do you address this? What about handling turnover?
Andrew Hardy	In terms of computer skills, we're pushing that as NOT a barrier. Outside of things like primavera, the computer skills are minimal. The right person
	who understands the trade skills are far more important than the
	computer skills. I wouldn't separate the trade skills and computer skills.
	The WorkFace Planner talks to these folks up front, there is alignment,
	there are management of change procedures that project leadership
	manages. How much reinventing the wheel can you tolerate?
Mark McCabe	Turnover happens. We try to sit down in advance and talk about how to
	proceed and the superintendent and planner work together
Lloyd Rankin	Within the WorkFace Planning group, the varying skill sets complement
	one another; the differences in computer skills can be managed within the
	group. The bias has to be toward having really good construction
	knowledge and hands-on experience.

# **Final Comments**

Panel Member	Comments
Andrew Hardy	Key themes are: really think about the cultural change. How do you get buy-in? Let people see what's in it for them? And don't forget about the link to safety. A well-planned job is a safe job.
Mark McCabe	We all come from different areas but we all have the same message today: the buy-in is the key. Getting people to follow through and stick to it there will be pain before the gain.
Lloyd Rankin	We have to understand what the implications will be of making this cultural change. Overheads will increase with implementing WFP, but overall costs and safety will improve. There will be false starts and learning curves, but that needs to be managed through the implementation process.
Mark McCabe	Everybody pulling in this direction benefits everyone in the industry. Going back to the old ways isn't going to benefit Alberta in the long term.