Transforming Surveying in the Australian Coal Industry with Airborne LiDAR

April 26, 2012
Dratyon Mine — Hunter Valley, NSW Australia
Decay of Skills

- Critical shortage of technical staff
- Mining Engineering roles seen as most important
- Movement of best people from support roles (surveying, geology etc.) to Mining Engineering
- Resultant lowering of skill levels in all three areas
Historical Coal Prices

Description: Coal, Australian thermal coal, 12000- btu/pound, less than 1% sulfur, 14% ash, FOB Newcastle/Port Kembla, US Dollars per Metric Ton
Aerial Surveying Services - 2006

- Variable accuracy – some customers not satisfied
- Expensive
- Inflexible/Unreliable - highly reliant on weather conditions
- Slow turn-around
Key Deliverables

- Data Accuracy — must be comparable to current solution
- Turn-around time — max. survey date +3 days
- Flexibility/Reliability — fly below cloud
- Price — lower than current solution
The Atlass Business

- First survey - August 2007
- Guaranteed to get your data within 3 days after date of survey
- Data accuracy now well established in the industry – better than 150mm RMSE
- Reliable service
- Pricing allows mines to move to regular surveys
Take Home Messages

- Good results start with Good Planning
- Understand your customers needs
- Suppliers must continually adapt to changes
- Choose a good partner