

# CASE STUDY

**LOCATION:**

Alberta, Canada

**OBJECTIVE:**

Increase mine productivity through more effective use of the DISPATCH system.

**OUTCOME:**

A 2.26% increase in material moved per haul truck ready-hour

## Long-time DISPATCH Customer Realizes Training Benefits

*A DISPATCH customer for over 15 years sees 2.26% increases in material moved after training refresher*

### Challenge

The DISPATCH system has been maximizing productivity and efficiency for world-class mining operations across the globe for over three decades. However, sustaining productivity increases can be difficult without a recurring training program that ensures dispatcher competency. Despite having used the DISPATCH system since 1993, one experienced Modular customer was suffering from late truck arrivals, bad truck routing, and overall fleet inefficiencies at their oil sands operation. The customer was aware that this translated to unrealized capacity, so they contacted the Modular Value Add Services team for help.

### Solution

Each dispatcher received both classroom and in-seat training from a Modular specialist trainer. Conducted over a two month period, the training reintroduced DISPATCH operation best practices, effectively restoring operating efficiency and productivity. The program was so successful that it has justified annual refresher training to ensure ongoing production optimization.

## Methodology

From the historical databases in the DISPATCH system, individual haul truck tonnage and ready-hours were retrieved for each 12-hour shift over a 28-week period. After the training program was completed, the mine saw a 2.26% increase in tonnage even after factoring for equipment availability, haul distances, and weather-related travel speeds\*.

	Averages per Shift				
	Tonnes	Truck Ready-hours	Haulage Speed (Km/h)	Haulage Distance(Km)	Normalized Tonnes**
Pre-Training	490,593	1,018	28.08	11.78	1.466
Post-Training	567,582	1,057	31.92	11.63	1.500
Change (%)	15.7%	3.8%	13.7%	-1.3%	2.26%

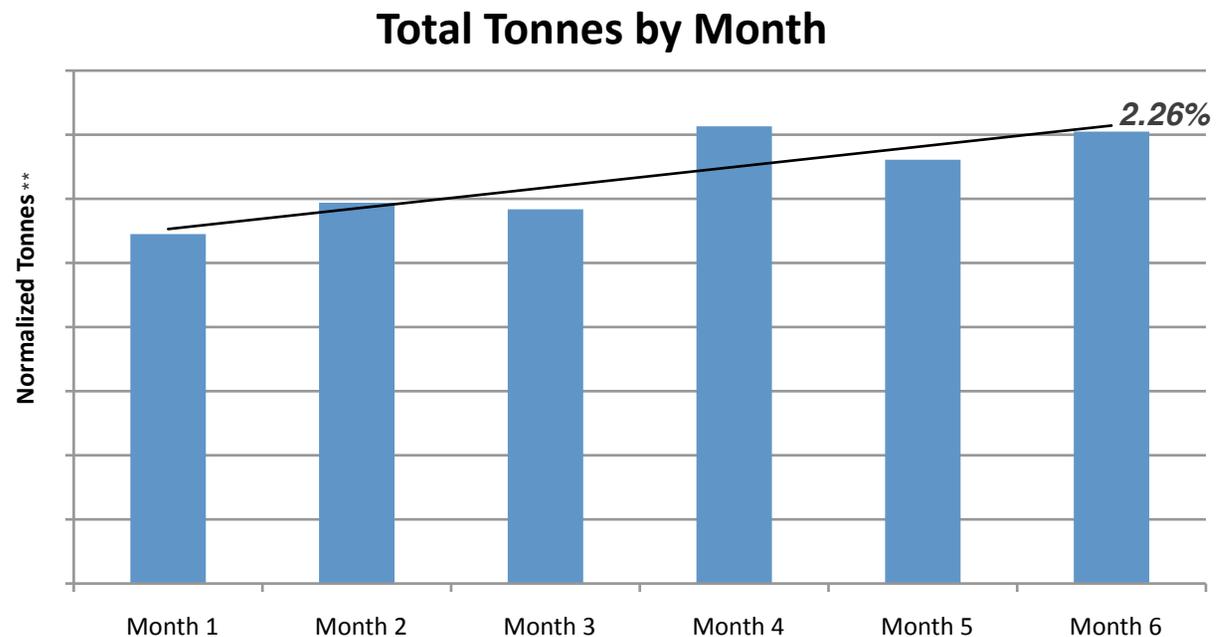


Figure 1: Customer realized 2.26% increase 6 months after dispatcher training

\* Travel speeds at this site increase when roads freeze in winter months.

\*\* Tonnes normalized to truck ready-hours, haulage speed and haulage distance on a per-shift basis

## Analysis

The training covered best practices for reducing truck queue times, improved routing, and focusing on the overall shift goals. Prior to training, dispatchers thought they could “beat the system” by using manual reassignments to maximize productivity. After training, they made limited manual reassignments, relying instead on the DISPATCH system’s proven haulage optimization algorithms.

In addition to boosting overall productivity, the courses provided by Modular trainers improved consistency across crews. Greater consistency not only demonstrates best practice standardization, but can simplify mine operations, maintenance scheduling, and production planning. Before training, the average loads per shift varied by 122 loads across crews. After training, this variability decreased to just 30 loads.

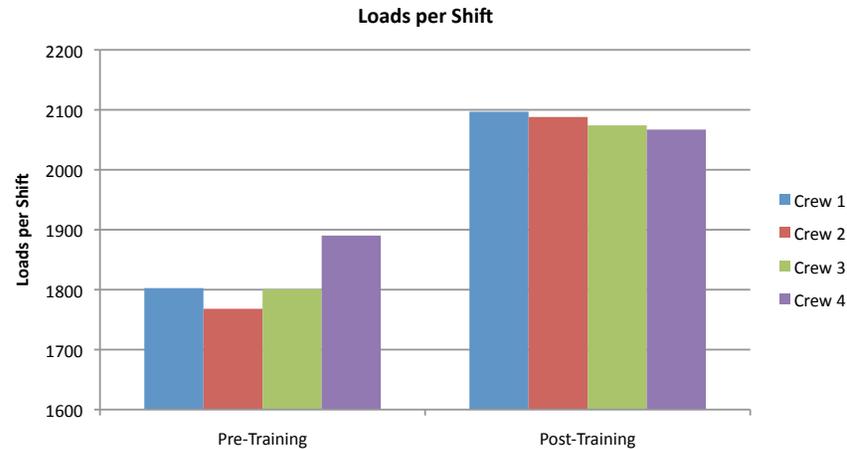


Figure 2: The training program delivered a 75% improvement in crew production variability

## Conclusion

This customer realized a haul truck productivity jump of 2.26% in just two months attributed directly to targeted dispatcher training. This translates to an increase of over 11,200 tonnes per shift.

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