

TRANSPORTATION MANAGEMENT IN THE OIL & GAS INDUSTRY

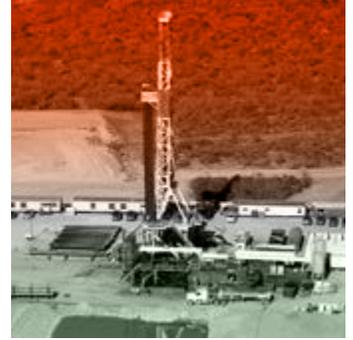
[5] Mistakes that Cripple Profitability and How to Correct Them



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Low oil prices, growing supply inventories and decreasing global demand have created new challenges in the oil and gas (O&G) industry. Historically, O&G companies' soaring profits masked the poor state of logistics operations within their supply chains. Now that profits are thin, oil and gas companies are rushing to save money wherever they can. O&G companies realize the savings potential in their disordered logistics processes, specifically in transportation management.

The oil and gas industry holds one of the most complex supply chains. Suppliers of pipe, chemicals, drilling equipment, sand and other materials must move products efficiently to and from drilling sites, upstream, locations and compressor locations. O&G transportation often involves servicing remote locations with no infrastructure, which slows down operations and contains substantial safety and financial risk. Any shipping disruption results in a significant loss for the companies involved.

Most O&G companies and suppliers are adapting to today's market challenges by organizing transportation operations to improve service, reduce risks and find cost savings. There are many steps you can take to reduce transportation spend and create efficient freight management practices.

The Role of Transportation in the Current Oil and Gas Environment

The falling price of oil is causing massive changes within the oil and gas supply chain. A current glut of oil supply, in combination with slowing demand, has led to rapidly declining production in the U.S., which has been particularly harmful for upstream drilling and exploration companies. There are many factors that have contributed to falling oil prices, and the entire supply chain is affected in one way or another, but very high supply and weak demand have been main factors in driving down the price of oil.

Weekly Supply Estimates



Source: U.S. Energy Information Administration



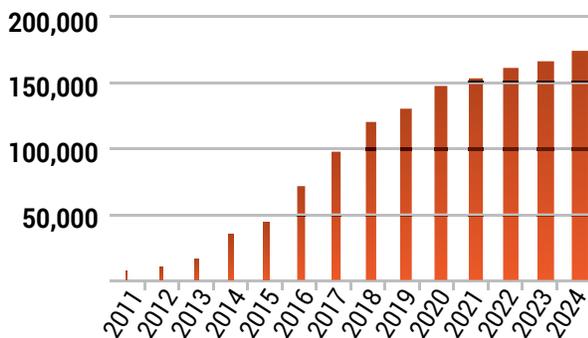
Low oil prices result in decreased revenues for O&G companies and this is the biggest obstacle facing the industry at the moment. O&G companies respond to low revenues by cutting costs wherever they can. There's been a spur of merger and acquisition (M&A) activity in the industry in an effort to cut costs through staff reductions and increase revenue through gained market share. An estimated 200,000 jobs have been lost due to low oil prices.

O&G companies desperately need to lower operating costs and many are turning to transportation management for cost savings. Historically, O&G companies have only been concerned with safety when it comes to transportation, but now cost-effective transportation is just as important. Generally, O&G companies lack the personnel and infrastructure to properly manage freight movement. This is a serious obstacle to saving money because the transportation industry, just like the O&G industry, is facing some serious issues of its own.

The over-the-road (OTR) transportation industry was short 48,000 drivers at the end of 2015, according to the American Trucking Association (ATA). This driver shortage creates tight truck capacity and increases shipping costs.

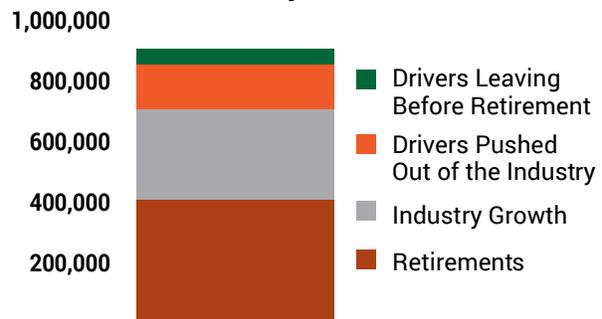
However, the driver shortage is currently masked by very sluggish industrial activity. In 2015, truck capacity was much looser than 2014, but this trend will not continue. With a continued decrease in industrial activity in the coming years, and the expected uptick in consumer activity unable to pick up the slack, the economy may slip into a recession. This will force some carriers into bankruptcy, and many drivers will leave the industry for more profitable work, as they did in 2008. The average age of a truck driver is 49, so thousands of drivers will be retiring in the coming years, far more than will enter the industry, all while the economy is sluggish and carriers are going out of business. Even if the economy doesn't fall into a recession and freight tonnage slightly increases, the ATA predicts the transportation industry could be short 74,000 drivers in 2016. If the driver shortage reaches this point, there will be severe supply chain disruptions in every industry, as well as higher shipping costs.

Truck Driver Shortage



Source: American Trucking Association

Total Drivers Needed from 2015 through 2024 by Reason



Now is the time to lock up capacity to avoid disruptions and manage transportation properly to mitigate current and future cost increases.



[5]

Common Transportation Mistakes and How to Correct Them

The driver shortage, while currently masked in terms of capacity, has driven up the cost of shipping and will continue to do so in the foreseeable future. O&G companies looking to drive down operating costs will have to find ways to manage transportation efficiently and cost-effectively.

Tight capacity and rising costs completely changes the way a company must manage transportation. Service levels, productivity and operating costs are all on the line when moving freight, and O&G companies must learn to make an investment in transportation to keep business profitable.



[MISTAKE #1]

Limited Use of Transportation Management Software

Properly using a transportation management system (TMS) in today's complicated logistics environment is not optional. A TMS can be used for more than just booking loads; it provides historical and real-time data for visibility into the supply chain, which is necessary before any profitable changes can be made.

When inbound and outbound shipments are not managed using a centralized TMS, aggregate data on costs, performance, safety and other critical issues do not exist. Local data may exist on someone's hard drive, within a file folder, or worse, in someone's head, but it is not available to the entire organization for analysis and decision support.

A TMS generates standard and custom reports that help identify key business challenges. Through analysis of the data created by the software, you can figure out future capacity requirements, historical and projected freight costs, and whether or not your carriers comply with DOT safety regulations.

Whether it's a steel pipe traveling on a flatbed or a hotshot delivery to a rig, a central TMS tracks freight moves, which is crucial for freight optimization. Not all businesses can afford implementing a TMS, let alone learning and operating the system, so outsourcing this function makes sense. After enlisting the help of a 3PL and automating manual processes, companies see reduced overhead and administrative costs due to personnel elimination or reassignment. Partnering with a 3PL gives you access to all the benefits of a TMS without the capital outlay and hassle.

EXAMPLE: *A large pipe distributor felt it was spending too much on transportation but didn't know how to reduce costs because it had no visibility into freight processes. The distributor recruited the help of a 3PL with a powerful TMS system. The 3PL implemented and centralized the TMS system, and was able to implement changes based on the data collected. A year later, the distributor saw a 20% reduction in freight costs and benefited from a fuel surcharge 40% lower than the market average.*

BENEFITS OF A TRANSPORTATION MANAGEMENT SYSTEM:

- **Optimized freight moves**
- **Automatic recommendations on freight consolidation, continuous moves and cost-saving opportunities**
- **Visibility into shipment status and overall logistics processes**
- **Reduced freight risk and improved safety during transport**



[MISTAKE #2]

Decentralized Transportation Management

Decentralized transportation management means that there is no central system used to manage freight. In O&G projects, buying freight services is typically left to non-logistics employees who don't have the time or expertise to arrange the best solution. For example, often times the person in charge of arranging transportation at a drill site is a rig supervisor, who is only focused on keeping a drilling site fully operational.

Making decentralized decisions in the field leads to overspending. Non-logistics employees aren't able to spend the time looking for a good rate, and typically just want the items to arrive as fast as possible. Unnecessary expedited shipments can be a major factor in transportation spend. The biggest enemy of any drilling project is downtime, so little thought is ever given to the cost of sourcing replacement parts.

Overspending is not the only disadvantage to decentralized transportation management. Without a central system, there is a lack of visibility and control. When freight is managed job-by-job or move-by-move, executives are powerless in establishing freight management policies. Also, there's no accumulated intelligence to aid in future transportation decisions.

One simple remedy is to partner with a non-asset based 3PL for some or all of your shipments. The right partner gives you access to industrial freight expertise, capacity, technology and can manage and optimize freight moves while you focus on core business competencies. When a 3PL helps centralize your transportation management, you gain the ability to leverage all freight spend for rate negotiations, as opposed to buying transportation separately at each location; this will lead to reduced contract rates and better service.

EXAMPLE: *An on-site engineer at a drilling company used local search to source a carrier for a hotshot move from West Virginia to central Pennsylvania. The PA-based carrier charged \$1,300 – a \$100/hour rate – for a round-trip to West Virginia and back. A similar delivery was arranged two weeks later by a freight broker, who contacted a driver already in West Virginia with another load and arranged to have him bring the needed load to Pennsylvania for only \$350.*

BENEFITS OF CENTRALIZED FREIGHT PURCHASING DECISIONS:

- **Instant visibility to shipment status and real-time notifications**
- **Strategic and enforced freight policy**
- **Reduction in freight costs**



[MISTAKE #3]

Focusing Only on Over-the-Road Carriers

Many O&G companies and suppliers rely exclusively on over-the-road (OTR) trucking companies to move freight; avoiding rail and barge because they may not understand these more complex, multi-modal moves or they lack established relationships with railroad, barge and trans-load companies.

O&G companies should consider whether shipments need expedited and if speed is a priority. Barge transport is often overlooked because it is slow, and many businesses don't have large enough shipments to fill a barge. But, shipping by barge is an extremely cost-effective transportation solution.

Using alternative modes or intermodal shipments instead of OTR carriers is a useful strategy for O&G companies. Although these types of shipments may be complicated, they can help produce freight savings, and a 3PL is always available to help with the complex shipping processes. With the help of a 3PL, O&G companies can consolidate barge shipments to save money on freight. Or, a 3PL can do the complicated work of planning a shipment over several different modes to find cost savings.

EXAMPLE: *A mid-sized steel company sent regular shipments of steel pipe via flatbed from Houston, Texas to Edmonton, Alberta. The company abandoned rail because its carrier and trans-load providers could not hit promised delivery deadlines. Consequently, the company paid three times per-ton to move the goods by truck. A 3PL with a strong industrial experience was brought in to shift the freight moves back to rail. By coordinating the activities of the steel company, carriers and trans-load companies, the 3PL was able to hit promised delivery dates while reducing the customer's annual cost for this lane by more than \$850,000.*

BENEFITS OF USING ALTERNATIVE FREIGHT MODES:

- **Potential 20 – 40% reduction in per-ton cost**
- **A wider array of available capacity**
- **Flexibility to switch modes based on overall costs**



[MISTAKE #4]

Relying on a Small Carrier Base

O&G companies tend to lean heavily on the same set of core carriers due to long-established relationships and a foundation of trust. This trust comes from a comfort of working with carriers that have proven the ability to move freight safely, and with specialized equipment.

Choosing only familiar carriers, and not shopping around for competitive pricing, can quickly drive up costs. As the industry expands to different geographic regions, the strategy of relying on carrier relationships might leave you without the capacity you need, forcing you to pay spot market or expedited rates.

Freight rates for O&G cargo are typically negotiated by sales, purchasing or other non-transportation staff who may not understand the availability of lanes, modes and other options like using a 3PL or negotiating fuel surcharges. It is easiest for O&G companies to rely on known carriers since it isn't familiar with the transportation industry, but this can lead to rates being overinflated up to 20%.

The simplest solution is to allow a 3PL to negotiate rates for you. Their carrier networks within the industrial sector allow them to leverage down costs through a competitive bidding process and they have the expertise to negotiate fuel surcharges lower than the industry average. 3PLs have their own wide-ranging network of carrier relationships to be added to your own. That way, there is a reliable source of capacity and the carriers are pre-approved to be safe and efficient.

EXAMPLE: *A large pipe distributor used a local Texas-based carrier to move pipe from Texas to Marcellus Shale rig sites in Ohio, Pennsylvania and West Virginia. Because this carrier could not arrange backhaul loads to Texas it charged a round-trip rate. After shifting the volume to an industrial transportation specialist with the lane volume to fill the backhaul, the distributor now pays one-third less, saving about \$300,000 per year to serve rig sites.*

BENEFITS OF SHOPPING FREIGHT RATES AND EXPANDING YOUR CARRIER BASE:

- **Capacity and specialized equipment when and where you need it**
- **Better backhaul pricing**
- **Fast, accurate freight quotes for new business proposals**
- **Lower operating costs and higher company profit**



[MISTAKE #5]

No Visibility or Control Over Inbound Freight

Transportation accounts for almost 50% of an average company's logistics costs. O&G companies can gain more control of these costs when they choose to make inbound freight management a supply chain priority.

Controlling inbound freight enables a company to track shipment status and create better inventory management. Typically, inbound shipments are in the vendor's hands, limiting visibility and control over costs. Vendors usually hide the cost of transportation in the price of its products and use freight movement as a source of revenue.

Without control of inbound freight, O&G companies have much less control over their construction schedule, which hurts operating efficiency and costs. For example, midstream companies often face unexpected crane and labor costs of up to \$6,000/day due to delays in transportation. Inbound freight for midstream O&G companies is extremely expensive, and vendors make nearly as much on shipping freight as they do by selling their products. Since midstream companies don't understand their actual transportation costs, they do not understand the true cost of building a plant or compressor station.

Optimization of inbound freight starts with gaining control, however, management of inbound materials can be a complicated process, as internal operational changes are often required. Working with a 3PL is the best solution to fix inefficient inbound freight processes. A 3PL will control inbound freight and vendor relationships and implement tracking and management software to begin making profitable changes.

EXAMPLE: *A large drilling company allowed their vendor to move loads of 80-foot pipes from Houston, Texas to a site in Arkansas for \$4600 per load. They decided to enlist the help of a large industrial transportation and logistics company. After working with the 3PL, the company was able to bring these costs down to \$3,900 per load, saving \$560,000 on one, high-volume project.*

BENEFITS OF GAINING CONTROL OVER INBOUND TRANSPORTATION:

- **Visibility into inefficiencies and hidden savings**
- **Reduce vendor markups by 15 – 50%**
- **Faster, safer cargo movement**



PLS Client Case Study

SITUATION

- A leading provider of midstream services in the natural gas industry.
- Engaged in gathering, processing and transportation of natural gas and crude oil.
- Had always relied on vendors to manage transportation of their supplies and capital equipment.
- Multiple locations operating key energy regions: Marcellus, Huron/Berea, Woodford, Granite Wash and Haynesville.

CHALLENGES

- Vendors had always arranged and paid for transportation.
- Vendors were marking up transportation between 15% and 50%.
- There was no transportation department.
- Had very little visibility.
- There were significant costs associated with delayed deliveries.
- No visibility to what they actually spent on transportation.

SOLUTIONS

- PLS set up a dedicated account management team.
- PLS procured highly qualified and cost effective carriers.
- PLS set up strategic and cost effective storage yards.
- PLS provides daily updates on all shipments, segmented by project.
- PLS G/L codes invoices to allow them to properly allocate and budget transportation costs.

RESULTS

- Realized 12% savings on LTL spend in first quarter of partnership.
- Gained control of transportation.
- Increased shipment visibility.
- Detailed cost visibility.
- Gained the ability to create an accurate budget on large capital expenditure project transportation costs.
- Client gets more bandwidth/resources while they save money.

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About PLS Logistics Services:

PLS Logistics Services is a leading provider of logistics management, brokerage and technology services for shippers across all industries. PLS handles millions of loads annually across all major freight modes: flatbed, van, LTL, rail and barge, air and ocean. The PLS carrier network consists of over 20,000 trucking companies along with Class-1 railroads and major barge companies.

To learn more, visit www.plslogistics.com or call (724) 814-5100.

