Managing transportation and logistics details in an increasingly complex world is no small task. So Inbound Logistics is here to show you HOW. Over the past five years, we have paired reader feedback and industry expertise to provide practical and instructive “how-to” guides that address tactical and strategic supply chain fundamentals. We are incrementally building a library of industry best practices to help readers turn interrogatives into imperatives.

The next seven installments appear on the following pages:

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You’ll also find these articles on our Web site: inboundlogistics.com/how and in digital format: inboundlogistics.com/digital

What specific “how-to” would you like us to cover? Let us know: editor@inboundlogistics.com.
How to Ship in Alaska

The “last frontier” can be a daunting place for shippers moving freight unless they select the right airfreight forwarders to work with. Alaska is twice the size of Texas and has 640 square miles of land for every mile of paved road.

When waterborne transport isn’t an option, freight moving in and out of Alaska goes by air. Shippers work closely with forwarders and carriers to book capacity and ensure seamless hand-offs between modes. Given the variety of cargoes that need to fly—ranging from time-sensitive medical supplies and over-dimensional oil field equipment to perishable seafood—companies need to identify specific shipment needs and align them with asset and service requirements.

Shippers selecting carriers in Alaska need to assess several criteria:

Experience. Because so many variables complicate transport in Alaska—notably weather and geography—a partner’s track record in the market is critical. Planning for supply chain exceptions is standard operating protocol, and airfreight intermediaries possessing years of experience and industry connections with marine lines, trucking companies, and loyal customers can make shipping to and from Alaska much easier.

Intermodal Connections. Most freight in Alaska moves via intermodal, so any hiccup in transport can create domino-like delays throughout the entire shipment cycle. Tracking product across modes and communicating status to shippers and consignees is important. Transportation flexibility is a necessary luxury, but shippers rely on forwarders to determine what freight should move where and how, assessing cost and service variables that may dictate one mode over another.

Timing. Alaska’s size, lack of road infrastructure, and extreme seasons place a premium on timing. Service frequencies change during the year and by mode, so shippers count on their airfreight partners to coordinate transportation moves accordingly. Different shipment types require diligent attention to scheduling. Fresh-caught salmon bound for restaurants in Seattle and just-in-time oil field equipment deliveries to the North Slope have unique transportation requirements. Forwarders can help match modes to expedite one shipment or slow another so that it arrives when it’s supposed to. Missing transportation windows—too late or too early—can be costly oversights.

Specialized Handling. Given the sometimes sensitive and unwieldy nature of cargo flying within Alaska, it is vital that forwarders and carriers have the right cool chain and bulk freight capabilities in terms of training, handling, and equipment. They also need the right facilities in place to store, stage, and inspect freight as it moves through the supply chain.
North to Alaska ... and beyond

For 80 years, Alaska Air Cargo has served the Last Frontier and beyond with a record of reliability and exceptional service. From Boston to Barrow or Austin to Adak, we offer nationwide service and unbeatable frequency to more of Alaska than any other major carrier.
While much has been said about the United States’ anemic manufacturing sector and the stress it places on sustainable economic growth, agriculture exports are booming. The United States remains a net exporter of food and delivers half the world’s grain supply. In 2010, China became the largest export market for U.S. agriculture with soybeans, cotton, wood, grains, and seafood dominating the trade. That growth is expected to continue.

Shifting global trade dynamics and emerging export markets with explosive growth potential present U.S. growers and other industries with new challenges—as well as opportunities to create more efficient solutions.

In strong Midwest agriculture markets such as North Dakota, shippers have few transportation options. Many are limited to bulk railcar service to the West Coast, where commodities are containerized and shipped via steamship line to customers in Asia.

Demand for containerized control at point of origin helps reduce touches and facilitates handling in the domestic supply chain. There has never been enough eastbound volume into rural areas such as North Dakota, however, to justify the time and cost necessary to reposition assets from a high-volume container destination such as Chicago.

When drilling companies began tapping North Dakota’s rich oil field reserves—which coincidentally lie below the state’s vast wheat fields—a few years ago, a new import demand was born.

Frac sand is used during oil and gas drilling operations to improve production flow from oil and gas wells. The manufactured frac sand is a ceramic proppant that is sourced and transported from Asia in containers. As demand for this commodity grew, a regional container network emerged that could support asset needs for both drilling and agriculture industries.

Working with the railroads and oil exploration companies, logistics intermediaries established services to deliver containerized frac sand eastbound from Asia, then reposition the containers to transport agricultural commodities back to Asia. This solution created balanced import and export customer demand to establish the appropriate level of container capacity in the market to support consistent, trainload quantities and service.

Multiple transportation options are available to transport frac sand into the North Dakota market, so logistics providers can pace inbound container volume to match forecasted export container demand. If, for example, more frac sand is coming in than grain moving out, some inbound containers from Asia can be transloaded into boxcars and hopper cars. North Dakota isn’t flooded with too much container capacity, and shippers avoid needless demurrage charges.

Taking Advantage of Shared Solutions

The North Dakota regional container network’s success, and accelerating demand for U.S. agriculture products, bodes well for other regions where complementary import and export container demand can coalesce into shared transportation solutions. Converting some railcar movements to container trains creates more flexible capacity for bulk freight commodities. These types of closed-loop networks also accelerate container turns, greatly improve asset utilization, and ultimately drive further economy.
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- truck
- transload
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- international
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How to Improve Maritime Cargo Security

When U.S. Customs and Border Protection (CBP) introduced the Customs Trade Partnership Against Terrorism (C-TPAT) initiative in the aftermath of Sept. 11, it gave government, shippers, carriers, port authorities, and other transportation and logistics intermediaries a platform to build better security protocol into the supply chain.

As a consequence, shippers today are taking cues from CBP and making concerted efforts to share and apply security best practices throughout their organizations and supply chains. In fact, some are making voluntary C-TPAT certification a compliance requirement among partners.

Apart from applying for C-TPAT membership, here are six steps companies can take to shore up their supply chains.

1. **Use Checklists.** C-TPAT requires companies to “conduct periodic spot-checks to ensure all procedures are being performed.” One way shippers can address this is by employing checklists. Steamship lines use this approach when sweeping a vessel for potential security breaches, examining internal/external compartments, and reviewing shipboard training programs. Shippers can engage a similar step-by-step process within their facilities to ensure a shipment’s chain of custody remains intact.

2. **Stay Alert.** Monitoring the work environment, especially on the waterfront, is critical to any maritime security program. Some steamship lines routinely and randomly inspect containers in transit to keep shippers, suppliers, and other intermediaries on their toes. If breaches arise, they can use this information to identify the problem’s root and develop solutions to prevent future compromises.

3. **Maintain Seals.** C-TPAT requires partners’ shipped containers to have high-security seals that meet ISO PAS 17712. Making sure delivered containers remained sealed is an important consideration in the supply chain. Containers with seal security issues should not be allowed to continue their movement until the discrepancy is researched and resolved. Stopping the container as close as possible to the point of discovery makes it easier to identify the nature of the problem. Proper action may involve applying a high-security seal, requiring a shipper to verify the contents and add a seal, or refusing to lade a container on its next means of conveyance.

4. **Ship Through a CSI Port.** Before there was C-TPAT, there was the Container Security Initiative (CSI). CSI is designed to push the security border beyond America’s shores to foreign ports. It consists of four key elements:
   - Using advanced intelligence to identify and target containers that may pose a threat.
   - Pre-screening suspicious containers while they are still overseas.

5. **Security Training and Awareness.** C-TPAT specifically requires that “a security awareness program should be established and maintained...to recognize and foster awareness of security vulnerabilities to vessel and maritime cargo.” Companies can enhance security knowledge and execution by implementing training programs—whether off-the-shelf online courses or homegrown exercises that are specific to job requirements.

6. **Read CBP’s Handbook.** U.S. CBP has a list of guidelines and best practices shippers can use to improve security within their own organizations.

Inclusive Company

Companies that may apply for U.S. C-TPAT certification include:

- U.S. importers of record
- Rail, sea, and air carriers
- U.S. marine port authority and terminal operators
- U.S. airfreight consolidators, ocean transportation intermediaries, and non-vessel-operating common carriers
- U.S./Canada highway carriers and U.S./Mexico highway carriers
- Mexican and Canadian manufacturers
- Select foreign manufacturers
- Licensed U.S. customs brokers
Across Oceans
Across Continents
Across Cultures

COSCO has Delivered Quality

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COSCO has delivered quality – Quality goods from loyal customers, with quality service provided by equally loyal and capable COSCO people. Onshore and offshore, COSCO is an organization fully committed to the safe, secure and on-time delivery of cargo. And as we look back over fifty years we also look forward, continuing our dedication to environmentally sound practices, the latest in logistics technology and a growing list of ports, ships, services and schedules ready to serve our customers anywhere on the globe.

On this anniversary we thank our customers and we thank our employees, for the fact that from our first sailing to our fiftieth year we can proudly say... Ship with Confidence, Ship with COSCO.
Emerging technology platforms are accelerating the maturation of transportation and logistics solutions, particularly those that enrich and empower the user community by integrating partners and aggregating data. The Software-as-a-Service (SaaS) transportation management system (TMS) is a prime example.

SaaS TMS is a single-instance, multi-tenant environment where customers and their partners access a shared solution via the Internet. Transportation feature functionality is comparable to other hosted or on-premise solutions. What makes SaaS unique, however, are the intangible benefits that exist by being part of a community as opposed to simply working siloed within the four walls of an organization.

Once a carrier is in the network, it is connected to all appropriate partners. With hosted or on-premise applications, the carrier has to integrate with each user separately. This intuitive connectivity creates competitive advantage in a number of ways:

**Cost Structure.** SaaS is sold as a service, not a product, which increases and accelerates a user’s return on investment as it moves from implementation to integration and finally optimization. There are no costly upgrades.

**Scalability.** In transportation management, scalability can be as simple as having immediate access to additional carriers already in the network. SaaS allows users to more easily flex to demand; onboard new customers, carriers, and suppliers; or add and upgrade services on demand.

**Accessibility.** With more partners integrated on a single platform and more data streaming across the network, individual users benefit by having access to more robust and accurate information. Reporting and benchmarking performance data provides business intelligence that can be shared among all users in the network to create additional value.

**Visibility.** Because partners are all in the same environment, visibility is that much greater. Real-time communication is enhanced. Every party knows what is happening, when, and why. And visibility extends to data that enables more accurate and robust performance metrics.

**Collaboration.** With greater visibility, businesses can share information faster and more efficiently. Vendors, carriers, and shippers can collaborate to work across each other’s networks, sharing transportation assets and creating economies of scale.

Shippers can leverage SaaS TMS to unleash rapid and significant change throughout the organization. For example, consider a retailer that is managing inbound transportation, but has problems with visibility and wants to reduce inventory and increase supply chain flow without expanding facilities.

By bringing carriers and vendors onboard a SaaS TMS platform, the retailer can track shipments in the supply chain. With greater visibility to demand and supply, it can reduce safety stock. Inventory reduction, in turn, increases supply chain velocity and throughput—all of which reduce warehousing and transportation costs. That’s the power of SaaS.

**SaaS Stands Out**

With so many different technology platforms and hybrid variations on the market, it is important for shippers to know what makes SaaS unique from other deployment models.

**SaaS:** The technology runs on a platform and the customer accesses it via the “cloud.” SaaS supports a multi-tenant network that allows multiple business partners to integrate on the same platform.

**HOSTED:** Technology is accessed on demand, much like SaaS, but does not have a multi-tenant architecture, therefore requiring separate implementations for each user, and integrations for each carrier.

**ON-PREMISE:** Technology is installed and runs on the customer’s hardware, requiring administrative resources and additional cost for databases and infrastructure.
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SaaS Technology  Supply Chain Services  LeanLogistics Transportation Network
August is usually the busiest time of year for global manufacturers, retailers, steamship lines, and transportation and logistics intermediaries as they begin ramping up inventories and capacity to manage the holiday freight surge. In 2011, however, a sluggish economy, continuing changes in consumer buying habits, and leaner ocean carrier fleets conspired to toss peak season tradition aside.

Economic uncertainty has tempered consumer spending, leaving manufacturers and retailers hesitant to trigger orders and stockpile inventory against fluctuating demand forecasts. The retail gift card phenomenon continues to push the holiday buying season into January as consumers redeem their credit.

Steamship lines are also making waves by arbitrarily taking capacity out of the market and idling vessels—a trend that began in 2009. In effect, they are reducing operational costs while artificially stimulating demand.

The sum effect? The 2011 peak season never materialized. Steamship lines introduced peak season surcharges and still ran below full capacity. They delayed, then discounted premium rates. Some waived surcharges altogether.

Now shippers are preparing for a new reality: peak season variability.

Dealing with Doubt

Many global ocean shippers have been conflicted about what to do. Some have decided they will no longer sign service contracts until the market evens out—especially after discovering the service contracts they signed during the previous cycle were 10 percent higher than the spot market.

When peak season surcharges first went into effect more than a decade ago, they followed a pattern. Large steamship lines set the rate in July and August, then smaller carriers discounted accordingly. When capacity dropped below a certain quota, the steamship lines reduced their surcharges and everyone else followed suit. It was a constant tug of war as the market fluctuated up and down. Eventually supply and demand balanced out.

Larger companies—the Walmarts of the world—have little to worry about. They carry so much volume that they are treated accordingly. Most receive capacity guarantees. If cost, capacity, or customer service becomes an issue, Tier I companies have no shortage of suitors.

Tier II importers, moving between 1,000 to 10,000 twenty-foot equivalent units (TEUs) each year, need to plan better. Keeping tabs on market dynamics through various media outlets is key. There are also online tools such as Zepol that allow shippers to find out how many containers competitors are bringing in and with whom. Market intelligence creates pricing leverage when shippers negotiate with carriers.

Tier II companies also leverage partnerships with non-vessel operators (NVOs) and third-party logistics providers to indirectly book freight with steamship lines. A shipper that is moving 7,000 TEUs a year may tender 5,000 TEUs to a steamship line, then split the remaining 2,000 TEUs between two NVOs to create additional flexibility.

Smaller Tier III shippers have to be even more creative. Many can’t work directly with ocean carriers, and have to rely on intermediaries to find space. They may work exclusively with one NVO, or specify forwarders that deal with one steamship line or with a specific commodity type.

Some will sign a smaller service contract with an ocean carrier, then give the lion’s share to an NVO. Others may split volume among multiple intermediaries—although this is not a preferred strategy. The purpose of an NVO, especially if a shipper isn’t locked into a service commitment, is to leverage volume for better pricing.

Tendering 90 percent of business to one intermediary and 10 percent to another provides flexibility while ensuring better economies of scale.
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Shippers, carriers, and even small intermediaries increasingly rely on third-party logistics (3PL) service providers to manage non-core logistics and supply functions, access capacity, and tap technology capabilities. 3PLs create value by pushing the envelope and helping customers reduce costs through tactical improvements, and enhance overall supply chain performance with strategic business process enhancements.

Making the decision to work with a 3PL is often predicated by a need—transportation capacity and costs, seasonal warehousing, or global complexity, among others. But as outsourcing partnerships mature, customers need to routinely assess performance and set new goals.

Many 3PLs proactively demonstrate return on investment. It’s in their best interest to expand the value proposition and grow the relationship. But it doesn’t hurt for customers to ask where functional outsourcing can take their business.

Getting to the C.O.R.E.

Here are four factors companies should consider when assessing 3PL performance:

1. **Control.** 3PLs generally control transportation and distribution capacity, directly or as a broker. They liaise on customers’ behalf when contracting with carriers, forwarders, and other intermediaries. But customers need to exert control, as well.

   One of the most common reasons 3PL partnerships fail is poorly defined expectations. Scope creep occurs when control is lax. Outsourcers need to assertively communicate objectives and concerns, and constantly benchmark key performance indicators (KPIs) that are most important to them—not their service provider.

   A 3PL may be providing world-class service, but unless a customer measures that data and compares it with contractual or industry standards, it will never know.

2. **Optimization.** One way 3PLs create value is by helping customers optimize existing transportation and logistics functions. They do so by collecting and distilling mass amounts of data to granular-level detail, analyzing it, and identifying anomalies and redundancies. They can then address specific process fixes—for example, steering customers toward establishing a core carrier group or enforcing inbound routing guide compliance among suppliers.

   Or they may uncover strategic systemwide improvements upstream and downstream in the supply chain that turn problems into new opportunities to drive greater efficiency and economy. With so much change and variability in the supply chain, optimization is a recurring process. When pre-determined goals are met, new objectives should be created.

3. **Reporting.** Reporting is the key to understanding and recognizing 3PL performance, good or bad. Knowing where goods are in real time is an important part of this process, and 3PLs should provide shipment visibility and process information.

   Customers need to dictate which status reports are most critical to their needs so they can view performance as it relates to their terms, not the service provider’s. Using the right metrics may help companies determine if they are striking the right balance between service and cost.

   3PLs will collect, archive, and analyze historical reports to identify improvement areas, alert customers to real-time or recurring problems, and explore opportunities where they may be able to gain further efficiencies and economies.

4. **Execution.** When it comes to execution, 3PLs should strive for continuous improvement—and customers should expect it. If a service provider is responsive to customer priorities—whether it’s controlling specific KPIs, optimizing functions, or reporting data—and executes according to plan, there should be obvious gains in terms of customer service, efficiency, cost savings, and innovation. Then the evaluation process begins anew.
No one makes it simpler to master complex logistics.

There are no short cuts to creating great work. Each effort requires vision, talent, originality and desire. At ProTrans, we approach each 3PL opportunity as a new challenge. No off-the-shelf applications here. Using our CORE discipline, we focus on control, visibility and reporting so that your logistics solution can fully benefit from our daily experience in the network resulting in better capacity optimization, timing and overall transportation management. Let us paint you a picture of unique opportunities. It just might turn out to be, well, a masterpiece. Give us a call at 888.776.8726 or see us online at www.protrans.com.
How to Ensure Successful Transportation of Your Project Cargo

When it comes to transporting over-dimensional or heavy-lift cargo—whether it’s equipment bound for Alberta oil fields or turbine components for an Iowa wind farm—transportation and logistics demands are infinitely greater because they are unique to each situation.

The complexity of moving unwieldy cargo as quickly and economically as possible requires collaborative partnership, attention to detail, and constant communication across the supply chain. From pre-planning through execution, shippers and their supply chain partners need to consider several factors to ensure project cargo moves without a hitch:

- **Customs and regulations.** Taxes and duties vary from country to country, as do inspection requirements and documentation. Conducting local market research determines the financial implications of procuring particular components in different countries.
- **Public relations.** Moving project cargo on shared roads often raises public safety and environmental concerns. Even the slightest perception that communities will be impacted deserves attention. An open dialog among all parties involved can help assuage potential PR problems before they flare up.
- **Cargo design.** Transportation can sometimes dictate how a product is manufactured—for example, whether it is delivered as one unit or produced in multiple parts and assembled on-site. Project cargo buyers can conduct transportation analysis and create routings before equipment is even sourced or manufactured.
- **Mode optimization.** Transit times and requirements vary widely for road, rail, air, ocean, or inland barge. Transportation specialists with in-country knowledge can advise on length, width, height, and weight restrictions that may necessitate using one mode of transportation over another.
- **Change orders and delivery timelines.** Any changes or delays in material sourcing plans or production and delivery can produce unintended consequences. Changing sourcing locations can increase lead times and transportation costs, for example. Shippers and service providers need to plan for potential problems and build flexibility into the project cargo move.

**4 Steps to Project Logistics Success**

1. **Seek out transportation advice.** Work with a team of transportation professionals, a consultant, or a transportation provider with a proven track record in large infrastructure projects to provide expert advice regarding risk and liability, in-country specialization, and knowledge of equipment and local haulers.

2. **Allow lead time to coordinate transportation details.** Successful project cargo moves require planning and due diligence. This can include determining whether to buy and ship a unit intact or produce it in pieces and assemble on-site; developing route surveys; and creating detailed bids, execution plans, documentation, and on-site project management details.

3. **Develop contingency plans.** When moving project cargo, variability is an expectation, not an exception. Shippers need to keep tabs on weather conditions, road construction schedules, and any other type of difficulty that could arise, and be ready to execute pre-determined back-up plans at a moment’s notice.

4. **Incorporate past experience.** Working with project logistics specialists allows shippers to gain valuable insight from previous endeavors, tap local knowledge, as well as benchmark performance and identify economies and efficiencies for future moves.

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