ALSO INCLUDES:

FORKLIFT
BUYER'S GUIDE

PORTS-TO-PLAINS
ECONOMIC DEVELOPMENT SUPPLEMENT

inbound logistics

www.inboundlogistics.com

THE MAGAZINE FOR DEMAND-DRIVEN LOGISTICS • AUGUST 2010

THE JOURNEY FROM SOURCE TO SHELF

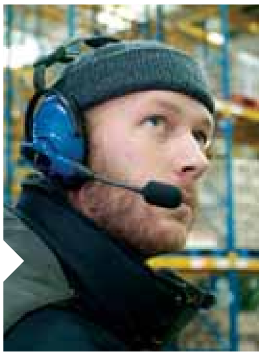
Routing Guides Roadmap

The Path to Lean Six Sigma

August 2010 • Vol. 30 • No. 8

INSIGHT

INPRACTICE



INDEPTH

LEAN
SIX SIGMA
page 46

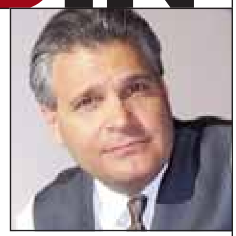
inbound logistics
THE MAGAZINE FOR DEMAND DRIVEN LOGISTICS

August 2010 • Vol. 30 • No. 8

INFOCUS

INFO

CHECKINGIN



by Keith Biondo | **Publisher**

Inbound 3.0 at Walmart

During the almost three decades that this publication has been preaching the benefits of matching demand more closely to supply, we've published scores of articles on Walmart's efforts to master inbound logistics. The first major milepost along that road was acknowledging the value of controlling inbound logistics, making it a company-wide mission, and developing the technology and team to put that mission into practice. It took some doing, but today Walmart has almost total inbound control of all DC-to-store shipments, an important second milestone.

Walmart recently announced an initiative that takes its inbound logistics management to the next level. The company will ask its tens of thousands of vendors, shipping to 4,227 Walmart stores in the United States, to take over–where possible and profitable–inbound shipments from those vendors to Walmart DCs.

According to Kelly Abney, Walmart's transport vice president who is heading up the initiative, the retailer is using the approach that "the vendor can concentrate on what it does best"–manufacturing or importing–and not have to worry about transport costs. Doesn't this sound a little like the same approach 3PLs use?

What was Walmart's motivation to tackle an inbound initiative now? One driver might be its announced logistics sustainability goal of doubling fleet efficiency by 2015 (2005 benchmark). In 2008, for example, Walmart delivered three percent more product while driving seven percent less, a savings of almost 90 million miles that year.

But it is more likely that the economy's impact on four quarters of sales has the retailer looking to extend inbound logistics excellence to find every efficiency that offsets costs.

Let's look at some risks and benefits this inbound initiative affords Walmart and its vendors. On the plus side, Walmart is convinced it can manage logistics more efficiently by taking over the vendor-to-DC leg, and use those savings to reduce prices. Considering that, Walmart is asking for allowances in the form of product discounts for any vendor that buys in. Walmart gets better inbound product control, and fills empty backhauls in its 6,800-truck

inbound logistics

Vol. 30, No. 8 August 2010

THE MAGAZINE FOR DEMAND-DRIVEN LOGISTICS

www.inboundlogistics.com

STAFF

PUBLISHER Keith G. Biondo
publisher@inboundlogistics.com

EDITOR Felecia J. Stratton
editor@inboundlogistics.com

SENIOR ASSOCIATE EDITOR Joseph O'Reilly
joseph@inboundlogistics.com

ASSOCIATE MANAGING EDITOR Catherine Harden
charden@inboundlogistics.com

ASSOCIATE EDITOR Perry A. Trunick
ptrunick@inboundlogistics.com

CONTRIBUTING EDITORS
Mike Breslin • Merrill Douglas
Amy Roach Partridge • Deborah Ruriani

CREATIVE DIRECTOR Michael Murphy
mmurphy@inboundlogistics.com

SENIOR DESIGNER Mary Brennan
mbrennan@inboundlogistics.com

PRINT/WEB PRODUCTION MANAGER Shawn Kelloway
production@inboundlogistics.com

PUBLICATION MANAGER Sonia Casiano
sonia@inboundlogistics.com

CIRCULATION DIRECTOR Carolyn Smolin

SALES OFFICES

PUBLISHER: **Keith Biondo**
(212) 629-1560 • FAX: (212) 629-1565
publisher@inboundlogistics.com

WEST/MIDWEST/SOUTHWEST: **Harold L. Leddy**
(847) 446-8764 • FAX: (847) 446-7985
haroldleddy@inboundlogistics.com

Marshall Leddy
(763) 416-1980 • FAX: (763) 201-4010
marshall@inboundlogistics.com

MIDWEST/ECONOMIC DEVELOPMENT: **Jim Armstrong**
(815) 334-9945 • FAX: (815) 334-1920
jim@inboundlogistics.com

SOUTHEAST: **Gordon H. Harper**
(404) 350-0057 • FAX: (404) 355-2036
south@inboundlogistics.com

MOBILE, AL: **Peter Muller**
(251) 343-9308 • FAX: (251) 343-9308
petermuller@inboundlogistics.com

NORTHEAST: **Rachael Sprinz**
(212) 629-1560 • FAX: (212) 629-1565
rachael@inboundlogistics.com

FREE SUBSCRIPTIONS

www.inboundlogistics.com/free

Please Recycle This Magazine
Remove Inserts or Samples Before Recycling

Inbound Logistics supports sustainable best practices. Our mission is rooted in helping companies match demand to supply, eliminating waste from the supply chain. This magazine is printed on paper sourced from fast growth renewable timber.

Inbound Logistics welcomes comments and submissions. Contact us at 5 Penn Plaza, NY, NY 10001, (212) 629-1560, Fax (212) 629-1565, e-mail: editorial@inboundlogistics.com. For advertising, reprint, or subscription information, call (212) 629-1560, or e-mail publisher@inboundlogistics.com. Inbound Logistics is distributed without cost to those qualified in North America. Interested readers must complete and return the qualification card published in this issue, or may subscribe online at www.inboundlogistics.com/free. Subscription price to others: in North America: $95 per year. Foreign subscriptions: $129. Single copy price: No. Amer. $10, foreign $12, back issues $15. Periodicals postage paid at New York, NY, and additional mailing offices.

Get your shipping biz humming along at higher speeds.

With fleet management tools, you can streamline regulatory compliance. Monitor mileage and fuel consumption. And pinpoint problem areas for peak performance. So your business can run more smoothly than ever. Welcome to the Now Network.™ 1-800-SPRINT-1 sprint.com/transportation

Sprint

The Now Network™

CONTINUED FROM PAGE 4

fleet, creating capacity for Walmart and for any shipper worried about capacity if/when the economy picks up.

One important benefit to the participating vendor is sidestepping rising transport costs tacked to increasing driver and/or fuel costs. If and when transport costs rise, it's Walmart's problem, right? Maybe. It's also a significant sustainability play, which Walmart and participating vendors deserve credit for.

The initiative moves Walmart one step closer to using its transport expertise as a profit center, in this case acting as a carrier. And, if it uses more outside resources in peak times, which it says it will, can Walmart as an asset-based 3PL be far behind? The company already has the Three T's: trucks, team, and technology.

On the down side, Walmart's buying power and negotiating energy will be amped up even more if it takes over a significant portion of a vendor's shipments. According to press reports, Chinese vendors say Walmart is a very tough negotiator, which is no faint praise coming from some excellent businessmen. The more reliant you are on one key vendor having those skill sets, the more influence you cede over your own bottom line. Also, having less work to do creates the potential for a reduction in the vendor's logistics management staff, which could be a positive or a negative, depending on where you stand.

When asking for a transportation allowance in the form of a rebate on products, could Walmart overestimate what those costs might be, asking for a five-percent allowance, for example, when transport costs for that product might be only three percent? There has been some talk on the street along those lines, but once the vendor shares the transport costs those issues are resolved, according to Walmart.

Another factor for vendors to consider when calculating their true transport costs is the fact that their costs for shipping to *other* customers will increase once Walmart's volume is backed out of the total transport spend.

Because Walmart is convinced it can manage the inbound leg more efficiently, is it likely it will share true costs with vendors and split the savings in a gain-sharing arrangement? Hmmm.

These and other questions need to be considered and worked out, but this initiative is an important event in American businesses' quest to better match demand to supply. ■

10TIPS

STEP-BY-STEP SOLUTIONS

by Deborah Catalano Ruriani

Enhancing Cross-docking Efficiency

Cross-docking operations increase throughput at critical distribution points by unloading shipments from an inbound trailer or railcar directly onto outbound transport. This practice eliminates the need to store freight.

To improve throughput, you must minimize travel, footsteps, material handling distance, and freight touches. Discover how to increase cross-docking efficiency with these tips from Nelson Bettencourt, senior vice president, domestic products, at Houston, Texas-based global logistics company CEVA Logistics.

1 **Handle each piece of freight only once.** Moving the shipment directly from the source to the outbound load area eliminates wasted effort and time. As an added benefit, reduced handling also minimizes opportunities for product damage.

2 **Make dock layout as compact as possible.** Even if extra room exists, you do not want to increase travel time by using space that is not absolutely necessary.

3 **Line up outbound loads effectively.** Outbound load staging areas should be organized with the heaviest outbound loads on either side of the inbound freight source location. The next heaviest points should be just outside of the heaviest, and so on to the lightest outbound loads.

4 **Consider timing.** Just because an inbound truck arrives does not mean that it must be processed immediately. Work backward, loading the earliest outbound trailers first. Determine which inbound shipments to process based on the outbound schedule.

5 **Keep freight visible.** Store freight that won't go out in the current load directly behind the staging area so dock workers can quickly and easily locate shipments.

6 **Always review the inbound product quantity.** Sometimes the heaviest load out from a particular vendor will be what is normally a light load out and you need to adjust an unload location for a short time. One of these adjustments can save 25 to 40 extended distance trips.

7 **Match staff to shipment volume.** Track direct labor productivity numbers along with pre-alerts of freight due to arrive. This can help create more efficient worker schedules.

8 **Configure TMS properly.** For transportation management systems, properly configuring shipping schedules, routing, and key performance indicator measurements creates benefits such as route and load optimization.

9 **Keep the dock floor clean and organized.** An orderly loading dock is imperative to maximize forklift speed without sacrificing safety. Minimizing the amount of freight on the dock provides forklift operators easy access to loading doors.

10 **Use materials handling tools to speed movement.** A section of gravity conveyor will allow cartons to travel directly from the unloading trailer to the loading trailer, eliminating travel time and extra handling. ■

Lead Logistics

Managed TMS®

Inbound Logistics

Single Source

COLLABORATIVE OUTSOURCING™

Rick Kapsner

Expert designer of outsource solutions for 20 years

COLLABORATIVE OUTSOURCING™ CUTS COSTS. WANT PROOF?

Forget what you know about outsourcing. Our new Collaborative Outsourcing™ model is revolutionizing supply chains and delivering game-changing results. Consider our Single Source solution. We've worked closely with shippers to add expertise, technology, and proven processes to some or all of their transportation networks—without a hefty price tag. Not only do they save money and boost efficiencies up front, they continually uncover long-term savings that grow steadily over time. Let us share our best practices and apply them to your supply chain.

Discover the Power of Collaborative Outsourcing™

Request a free copy of our white paper, *Collaborative Outsourcing: Powerful New Ideas for Freight Management,™* at www.chrobinson.com/outsourceit or call 800.323.7587 to connect with one of our outsourcing experts.

C.H. ROBINSON
WORLDWIDE, INC.

[INPERSPECTIVE]

BY PERRY A. TRUNICK
Associate Editor, Inbound Logistics
ptrunick@inboundlogistics.com

Give Me An F...Give Me An R...

Who says politicians can't spell "freight?" But, more importantly, can Senator Frank Lautenberg's (D-NJ) FREIGHT Act of 2010 deliver on its promise?

The stated target of the Focusing Resources Economic Investment and Guidance to Help Transportation (FREIGHT) Act of 2010 is "investment in freight transportation projects that strengthen the economic competitiveness of the United States." The act calls for the Department of Transportation (DOT) to develop a national freight policy to target these projects and other goals. That covers the Helping Transportation part, but does this bill have the power to get there?

One aspect of FREIGHT 2010 that has transportation groups excited is the establishment within the DOT of an Office of Freight Planning and Development, responsible for creating a national transportation policy. While it's encouraging to see this commitment in the legislation, the federal government has not yet been able to deliver a coherent, actionable national transport policy that adequately addresses commercial needs. Let's see if this provision makes it through to final law. Then let's see who is appointed undersecretary to spearhead the freight policy.

That policy is intended to guide spending and development of important initiatives–very few of which are spelled out in the bill. The undersecretary will have two years to identify and deliver the policy's specific goals. If Congress and the President act on this bill by the end of 2010, that makes even an optimistic estimate late 2012 or early 2013 before we will see that policy in place. Given the recent and continued economic volatility, that's like running this economic engine another 100,000 miles when it's already low on oil.

Let's cut to the chase–economic investment. Where's the money? It's in "coalitions, partnerships, and other collaborative financing efforts necessary to ensure stable, reliable funding," according to the bill. There is a federal share of grants for approved development, limited to 80 percent of the project's net capital cost.

The good news, however, is that the bill focuses on some of the right things. For one, it says that freight policy should align with trade policy to help facilitate trade. To do this, it promotes completion of freight corridors and gateways. It will fund port development or improvement projects, multimodal terminal facility projects, land port-of-entry projects, freight rail improvement or capacity expansion projects, and an intelligent transportation system project that reduces congestion or improves safety. And, it calls for "an outcome-oriented, performance-based approach to evaluate proposed freight-related and other transportation projects."

That accountability provision may minimize the more egregious attempts to add pork to the final bill. Further, provisions for safety and environmental improvements–such as a 10-percent reduction in freight-related fatalities by 2015 and a 40-percent cut in national freight transport-related carbon dioxide levels by 2030–are already in the bill.

On the surface, Senator Lautenberg's bill does appear to define freight transportation needs as distinct from general transportation issues. It keeps most specific decisions out of Congress and within the office of the Secretary of Transportation. It allows stakeholders to participate and to seek funding more directly.

But it's a long way from the President's pen. Here's your chance to help define a transport policy that supports our need for better ports, intermodal facilities, and more. It's time to start showing up–in letters, government office visits, and support for lobbyists. Don't let your transport future be decided without you. ■

by Merrill Douglas

Supermarket Superstar

When a water main serving the Boston area burst on Saturday, May 1, 2010, nearly two million people were suddenly living under a "boil water" order. What they didn't boil, they needed to buy, which led to a run on bottled water.

Enter Kevin Miles, manager of inbound logistics for Ahold USA, which owns the Stop & Shop supermarket chain in New England and the two Giant chains based in Landover, Md., and Carlisle, Pa. The Stop & Shop distribution center in Freetown, Mass., where Miles works, was besieged with frantic calls from retailers scrambling to meet customer demand for bottled water.

"I was on conference calls with carriers, brokers, vendors, and our internal procurement team figuring out how to get water from different ship points into the stores," Miles says.

It took close collaboration and constant communication to keep store shelves stocked until the boil water order was lifted on Tuesday.

Miles's job isn't always that stressful, but he swears by collaboration, even when he's

MILES AHEAD

NAME: **Kevin Miles**

TITLE: Manager, inbound logistics, since 2007

COMPANY: Ahold USA

PREVIOUS EXPERIENCE: Industrial engineer, UPS; senior process engineer, Ahold USA

EDUCATION: University of Connecticut, BS, manufacturing engineering, 2000; University of New Haven, MBA, management technology, 2003; APICS, Certified Supply Chain Professional, 2007

The Big Questions

What do you do when you're not at work?
I play golf and basketball, and I work out. I'm a member of the Council of Supply Chain Management Professionals and Nexus Alliance, a group that builds civic engagement in the Boston area. We mentor kids in schools, and try to improve the community overall.

Ideal dinner companion?
Barack Obama. I'd love to know how he handles pressure, and how he prioritizes all the tasks that come his way.

What's in your laptop bag?
A spiral notebook, Zune music player, calculator, manila folders, Southwest Airlines drink coupons, and my laptop.

Business motto?
"Persistence and consistence." It's a matter of sticking to your goals and initiatives, then being consistent with who you are and what you believe in.

If you didn't work in supply chain management, what would be your dream job?
Test-driving cars and writing reviews for *Car and Driver* or *Motor Trend*.

wrestling with more routine supply chain challenges. Trained as an engineer, Miles got a feel for logistics while fine-tuning pickup and delivery operations for UPS in its hubs, and while implementing driver standards for Ahold's Giant Landover chain.

That background equipped him to manage the flow of goods into Ahold USA's three DCs in Freetown, Carlisle, and Jessup, Md., as well as its American Sales Company warehouse in Lancaster, N.Y. The job is a blend of operational and support functions, and a lot of customer and supplier relations, with a little innovation and engineering thrown in.

Miles, who manages more than $100 million in transportation spend, is expanding Ahold's customer pickup program to gain more control over the movement of goods into the DCs. Using vendors' transportation allowances to purchase the necessary capacity isn't easy, and it has gotten harder since the recession forced some trucking companies out of business.

"Finding carriers that are willing to work with us and meet our requirements is a challenge," Miles says. "Finding rates that work is always tough." Fluctuations in fuel prices complicate the job.

To get the service Ahold needs, Miles and his team try to make sure that carriers also get what they need. "We look for backhaul opportunities and try to find lanes that work for our carriers, so we reduce empty miles as much as possible," he says.

Forging strong partnerships with solid, credible companies is key to riding out the ups and downs in the transportation market. Carriers need to know that their customer wants them to succeed, even in tough times.

"If carriers understand that we will be around for the long term, then they know we'll be there when the economy improves, too," Miles says. ■

NOTED

THE SUPPLY CHAIN IN BRIEF

SEALED DEALS

▲ **Jaguar Land Rover** has extended its contract with **CHEP**, the equipment-pooling provider, to keep up with consumer demand and manage production growth. The automotive manufacturer identified a number of specific benefits that CHEP offers, such as removing the need to use capital to purchase and maintain a supply of containers and limiting the environmental impact of its operations.

Shapewear designer **SPANX** has implemented **New Generation Computing's** product lifecycle management and global sourcing software to enhance control over its product line and increase speed to market. The roll-out is also helping the apparel company improve organization, collaboration, and communication among designers, factories, and employees.

American Marketing Enterprises (AME), an apparel company that designs, sources, and markets sleepwear to major U.S. retailers, has begun using **Regal Logistics'** Charleston, S.C., warehouse to import and distribute children's character-licensed sleepwear to Walmart distribution centers. The 3PL hired 20 local workers to support AME and other import/export business operating out of this facility.

Private brand beverage manufacturer **Clement Pappas** has selected **Transplace** as its third-party logistics provider to manage shipments throughout North America. The company is leveraging the 3PL's transportation management system to provide shipment lifecycle visibility and transportation stability, as well as improve overall supply chain operational efficiencies.

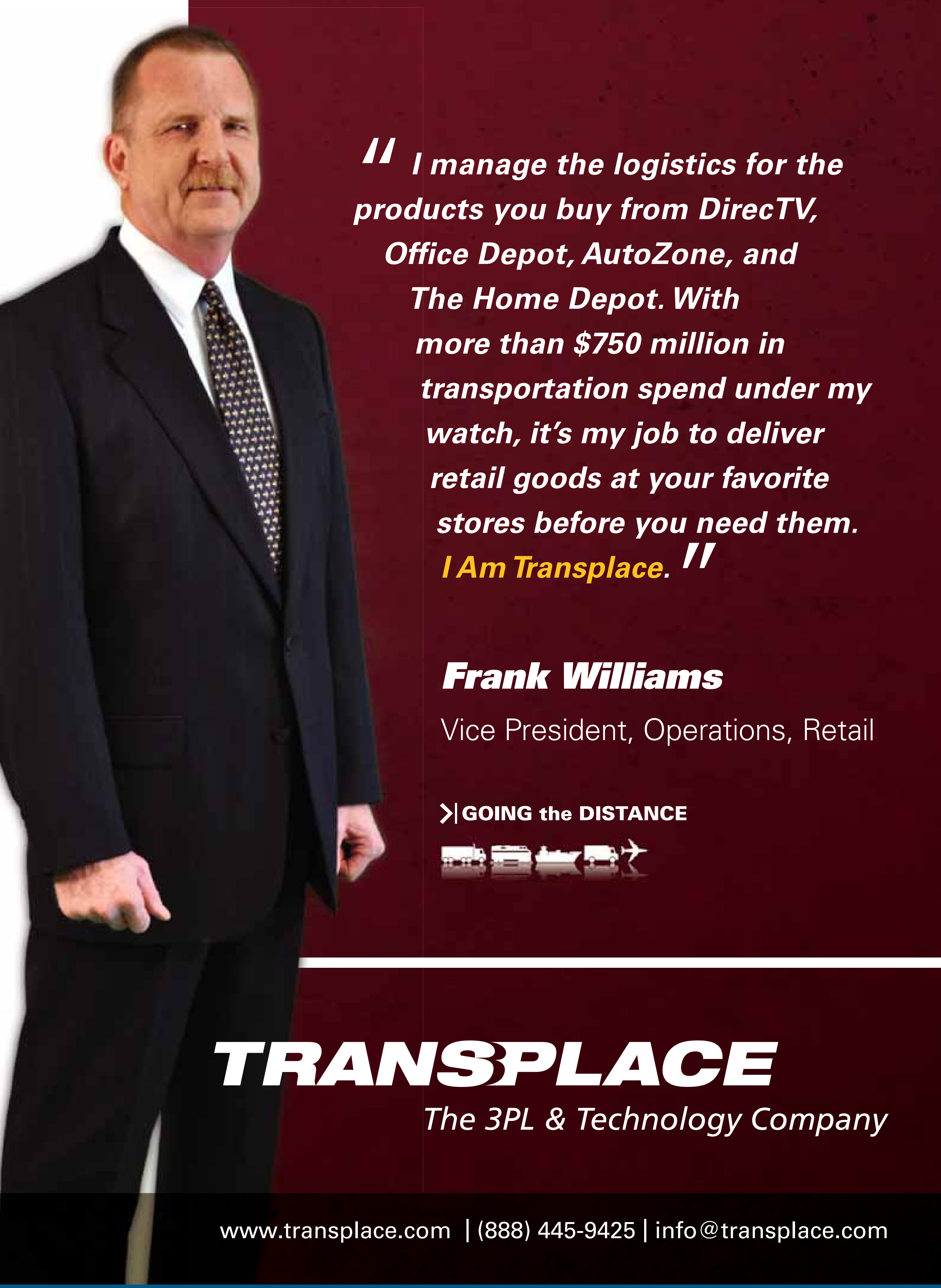
▼ **DSC Logistics** has been named lead logistics partner for **StarKist**, a producer, distributor, and marketer of shelf-stable seafood products in the United States. The 3PL will be responsible for managing the complete supply chain for StarKist's canned and pouched tuna products, providing transportation and logistics services from East and West Coast ports to five of its logistics centers, then delivery to customers.

Leather goods manufacturer **Buxton** has awarded **Weber Distribution** a two-year contract renewal to handle the storage, pick and pack, and distribution of its product line to retailers throughout the United States.

soundbyte

"I really worry about China. I am not sure that in the end it wants any of us to win, or any of us to be successful."

– General Electric CEO Jeffrey Immelt, discussing China's increasingly protectionist trade policies before an audience of Italian executives in Rome.



RECEIVE FREE NO OBLIGATION GUIDANCE AND ADVICE www.inboundlogistics.com/3pl

UP THE CHAIN

Swiss retailer **Dufry** has named **Manuel Lallana** director of logistics. Lallana takes responsibility for global supply chain policy, replenishment, warehousing, and transport. He joins Dufry from Ahold Spain, where he was director of national logistics.

Michaell Simmons has been promoted to director of supply chain management at **Big Dog Motorcycles**. Simmons came to the company with 10 years of purchasing experience in the aerospace industry. In his new role, he continues to manage the company's supplier base, negotiating contracts and overseeing production scheduling.

Seapoint Farms, a U.S. manufacturer of frozen edamame, appointed food industry executive **Philip Siegel** as chief operating officer. In his new capacity, Siegel oversees internal and external daily operations, including maintaining quality control over the company's supply chain from its Far East manufacturing facility to distribution channels in the United States.

Rite Aid has promoted **Ken Martindale**, formerly senior executive vice president of merchandising, marketing, and logistics, to chief operating officer. He assumes overall responsibility for store operations as well as supply chain, category management, marketing, and merchandising. A retail veteran of 35 years, Martindale previously served as co-president, chief merchandising and marketing officer for Pathmark Stores.

recognition

Red Arrow Logistics, led by **CEO Liz Lasater**, has been honored as one of **Women President's Organization's** 50 fastest-growing companies in North America. To be eligible for the ranking, businesses are required to be privately held, woman-owned or led, and have reached revenue of at least $500,000 by the first week of 2005 and $2 million in 2009.

Target Corporation has awarded **GSC Logistics** its 2009 Target Transportation Provider of the Year designation. This honor is part of Target's Commitment to Quality program, which identifies standards and measures the performance of transportation carriers/importers that service the company's 27 distribution centers and 1,750 stores nationwide.

Ryder Transportation has recognized **Bison Transport** as a top-performing carrier in the truckload category for 2009. This marks the second time Bison has received this award, which is based on excellence in a number of categories including on-time performance, claims handling, customer service, technology applications, economic value, and innovation.

Edward R. Hamberger, president and CEO of the Association of American Railroads, has been named a member of the **Mineta Transportation Institute's (MTI)** Board of Trustees. Established by Congress in 1991, the MTI is a national University Transportation Center and a Department of Transportation National Center of Excellence, specializing in policy studies related to multimodal surface transportation.

◄ **Paper Transport** was recently named **Georgia Pacific's** Dedicated Carrier of the Year for the ninth time. Georgia Pacific's carrier recognition program is driven by an evaluation system that covers every aspect of service including GPS-measured on-time pickup and delivery, accurate billing, EDI compliance, and innovation with new project initiatives.

m&a

Airclic and **AirVersent** have completed the successful merger of their respective operations. The combination of the two mobile supply chain and logistics software companies is anchored by a broad set of global customers across multiple industries, including courier/3PL, food and retail distribution, clinical laboratory services, medical supplies distribution, transportation, and facilities management.

BDP International has concluded its phased acquisition of Spanish logistics firm **Euromodal S.A.** The new company conducts business as Euromodal BDP International Spain, and leverages BDP's information technology, global network of subsidiaries, and joint ventures and strategic partnerships in more than 120 countries.

Bar-code pioneer **SATO** has signed a definitive agreement to purchase **NODOS S.A.**, a privately held integrator of automatic identification and data capture (AIDC) and point-of-sale solutions. The acquisition creates a collaborative platform, which can deploy end-to-end solutions that integrate with enterprise, warehouse, medical, and supply chain applications for AIDC technology users in the South American region.

Don't take unnecessary chances with your outsourcing decision.

Talk with a Supply Chain expert.

Choosing the right logistic provider for your needs impacts your ability to meet and exceed the demands of your customer. Total Logistic Control creates solutions with your customer and entire supply chain in mind.

- **Distribution**
- **Packaging**
- **Transportation**
- **Supply Chain Management**

Put over 100 years of experience to work for you. Save money, gain expertise and stay focused on your core business while we manage your supply chain. **Choose TLC.**

AN INBOUND LOGISTICS TOP 100 3PL PROVIDER

Find out more at
www.totallogistic.com/IBL04
or call 800-333-5599

TLC™

TOTAL LOGISTIC CONTROL

10717 Adams St, Suite 200, Holland, Michigan 49423

TRENDS

SHAPING THE FUTURE OF LOGISTICS

Container volume through the Port of New Orleans swelled 27 percent from May 2009 to May 2010, in spite of the recent oil spill in the Gulf of Mexico.

Shipping Maintains Traction Despite Gulf Slick

The considerable environmental impacts from British Petroleum's (BP) Deepwater Horizon disaster in the Gulf of Mexico have cast a pall over the region, endangering delicate ecosystems and tourism industries alike. But to date, the oil crisis has had little negative impact on shipping in the heavily trafficked corridor.

by Joseph O'Reilly

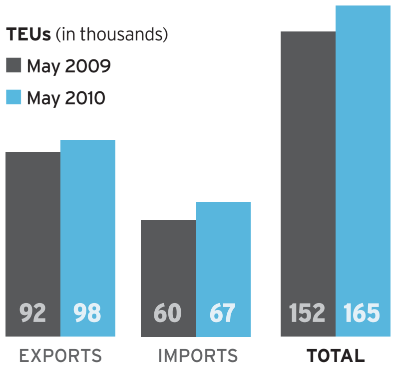
Gulf trade levels remain fairly constant, reports PIERS Global Intelligence Solutions, a provider of U.S. waterborne import-export statistics. With double-digit growth since January 2010, monthly TEU volumes among Gulf ports dropped by 4.1 percent in April, then resurfaced in May with an eight-percent gain over 2009 (*see chart, pg. 20*).

Even as the disaster moved beyond 100 days, inbound container shipments in the Gulf increased a modest two percent to 326,112 TEUs, while outbound shipments increased 13.1 percent or 497,927 TEUs year-to-date.

Of the three main ports closest to the spill's epicenter–New Orleans, Gulfport,

Gulf Coast Container Traffic

Despite BP's Deepwater Horizon oil spill, import and export volumes through Gulf Coast ports have grown.



Source: PIERS Global Intelligence Solutions

and Mobile–only the latter's traffic decreased in May 2010. TEU volumes at the Port of New Orleans and the Port of Gulfport swelled 27 percent and 31 percent respectively in May, year-over-year, while traffic at Mobile declined 27.6 percent during the same month.

"We haven't had any delays or vessel diversions because of the oil spill and we don't expect to," says Chris Bonura, spokesperson for the Port of New Orleans. "The ports and the maritime community on the lower Mississippi worked with the U.S. Coast Guard and other federal agencies to establish a series of cleaning stations near the mouth of the river and offshore."

Farther east along the Gulf Coast in Mobile, that sentiment is shared. Following the disaster, the port requested traffic skirt the spill area and worked with federal authorities to set up port entry protocols for ships and vessel decontamination plans to make sure seaports were not closed because of the growing oil slick.

"No cargo ships, other than those directly involved in the spill response efforts, arrived at anchorage with oil on their hull," says Judith Adams, vice president, marketing for the Alabama State Port Authority. "We prepared for all contingencies. Vessels came in clean, discharged, and went on their way." ■

SC Leaders Climb Corporate Ladder

Manufacturers and retailers are more likely to have executive-level supply chain leaders than five years ago, according to a recent Tompkins Supply Chain Consortium survey of leading companies.

The organizational level of the senior-most supply chain executive has gradually moved higher, according to the executive briefing based on the survey–*The Structure of Today's Supply Chain Organizations*. Today, nearly half of polled retail and manufacturing companies have a supply chain leader at or above the executive vice president level.

"With supply chains becoming more dynamic and agile, organizations need to be able to keep up with the pace," says Bruce Tompkins, executive director of the consortium and author of the briefing. "These companies are beginning to realize the significance of having a high-level supply chain executive influence their business strategies."

While supply chain leaders are moving up through the ranks and the title Chief Supply Chain Officer is growing in use, some areas within companies still lack collaboration between these executives and other areas of the organization. For example, some companies do not have any part of their supply chain organization responsible for setting inventory targets.

Likewise, more than 25 percent of surveyed retail companies and 14 percent of manufacturing companies have no formal process for aligning supply chain goals. Manufacturers tend to achieve goal alignment by reporting to a single executive, and retail companies generally have their common supply chain goals established by senior leadership.

"These gaps in goal alignment indicate significant opportunity for better communication and integration of supply chain functions," Tompkins adds. "However, companies are discovering these opportunities for improvement, and there is an increasing trend toward resource sharing across divisions and business units."

In the Green

As logistics and supply chain professions rise in stature, so does compensation. The Institute for Supply Management's annual survey of U.S. supply management professionals offers a sample of job titles and average salaries.

Chief Purchasing/ Supply Mgmt./ Sourcing	$240,408
Vice President, Purchasing/Supply Mgmt./Sourcing	$226,562
Director, Purchasing/Supply Mgmt./Sourcing	$132,398
Manager, Purchasing/Supply Mgmt./Sourcing	$94,384
Experienced Supply Mgmt. Professional	$71,348
Entry-level Supply Mgmt. Professional	$50,506

Source: Institute for Supply Management

Remote Lift Off

When the Massachusetts Institute of Technology (MIT), the military, Toyota Material Handling U.S.A., and artificial intelligence come together, something noteworthy is likely to happen–un-manned lift trucks remotely moving cargo, for example. Over two days at Fort Lee, Va., during the summer of 2010, the U.S. Army Logistics Innovation Agency hosted demonstrations of a robotic Toyota lift truck developed by MIT that is capable of locating, lifting, moving, and placing palletized supplies within an existing outdoor supply depot. The application is ideal for high-risk environments where human safety and security are in jeopardy.

The 3,000-pound capacity, internal combustion Toyota 8-Series lift truck was modified by researchers at MIT's Computer Science and Artificial Intelligence Laboratory to perform embodied speech and gesture understanding; shape estimation (from laser range scanner data); machine vision (from camera data); motion estimation (from GPS, inertial data, and wheel odometry encoders); and autonomous mobility and pallet manipulation. Simply, MIT scientists and Toyota engineers figured out how to maneuver the lift truck remotely.

"We chose the internal combustion Toyota lift truck because it can be operated outdoors on packed earth or gravel. With mini-lever control, some of its functionality can be controlled electronically rather than solely mechanically," says MIT Professor Seth Teller, who is leading the project.

"We are excited to work with the researchers at MIT on this promising application of lift trucks," adds Brett Wood, president of Toyota Material Handling U.S.A. "Robotic forklifts have the potential to protect both military and civilian personnel working in high-risk environments, such as hazardous material storage facilities."

MIT scientists, Toyota engineers, and the U.S. Army Logistics Innovation Agency are working colloboratively to develop and test a forklift prototype that can operate remotely, thus facilitating cargo movements in high-risk situations.


Every Shipment Belongs To Someone.
Nery
Paul
Josetta
David
Ron
Paje
Junior
Cammie
Ralph
Gloria
Kane
Brad
There's more than freight inside a container. It's your business. That's why we pay attention and work hard to ensure on time, cost-effective and trouble-free service. Because you've got your livelihood riding on every shipment. So trust us with your Hawaii, Guam or global ocean and air freight needs. When it comes to quality service, we put our good name behind yours.
DHX®
Dependable Hawaiian Express
Toll Free (800) 488-4888
www.dhx.com
Member — World Cargo Alliance
ISO 9001: 2008 Certified
DGX®
Dependable Global Express
Toll Free (888) 488-4888
www.dgxshipping.com
Member — World Cargo Alliance
ISO 9001: 2008 Certified
C-TPAT Validated
DAX®
Dependable AirCargo Express
Toll Free (800) 700-3858
ISO 9001: 2008 Certified
IATA Member & TSA Certified
The Supply Chain Partner You Can Depend On!™
DGX, DAX, & DHX – Dependable Hawaiian Express, Dependable Global Express & Dependable Air Cargo Express & the color combination of purple and magenta are the trademarks of DHX – Dependable Hawaiian Express or its affiliated companies.
Part of The Dependable Companies.™

GLOBAL

THE WORLD AT A GLANCE

by Joseph O'Reilly

CEVA's Triumph

Iconic British manufacturer Triumph Motorcycle—famous for giving Steve McQueen the wheels to leap reality in an equally iconic scene from *The Great Escape*—signed a three-year contract with CEVA Logistics to streamline, integrate, and optimize the global logistics flow of components, accessories, and finished goods.

Triumph, which produces 50,000 motorcycles a year, will work with the global 3PL to handle ocean shipments of motorcycles and components from suppliers in Asia and Europe throughout the company's global manufacturing network.

Key to the partnership is CEVA's Ocean Plus solution, which manages product movement from order placement to final delivery. The challenge for Triumph is twofold: seeking visibility to and control of more than 50,000 purchase orders from 380 suppliers annually; and managing component supply against key milestones to ensure production lines are fed while stock levels remain optimized.

Deploying Ocean Plus will facilitate Triumph's growth plans by providing a scalable solution across multiple geographies and transport modes. CEVA will combine this functionality with purchase order management, vendor compliance, and optimization programs.

Global Airlines Unite

The U.S. Department of Transportation (DOT) has given final approval for British Airways, American Airlines, and Iberia's plan to start joint cargo and passenger operations across the Atlantic in fall 2010. The DOT granted anti-trust immunity to the U.S. and U.K. carriers and to Iberia (Spain), their partner in the Oneworld alliance, to share revenues and profits and coordinate capacity, routes, fares, and sales on services between the United States, Canada, Mexico, the European Union, Norway, and Switzerland.

The decision marks a successful end to a decade-long attempt by American Airlines, the second-largest U.S. carrier, and British

Airways, Europe's number-three airline, to join forces across the Atlantic trade. The carriers are now free to operate jointly without fear of regulatory probes and to compete against the rival SkyTeam and Star alliances, which already have anti-trust immunity. In return, the carriers must cede four pairs of take-off and landing slots at London Heathrow Airport to rival airlines.

Daimler Wings It with DHL

DHL Global Forwarding has been entrusted with global distribution of the new AMG SLS Gullwing Mercedes-Benz sports car–forwarding them by air and ocean transport from Daimler's southern Germany production plant to 40 destinations worldwide. The manufacturer's decision to outsource the roll-out was partly predicated by DHL's network, which covers 220 countries and territories around the world, as well as its range of logistics services geared to the automotive industry.

DHL's Automotive Competence Team also developed a customized

Barloworld Pulls Sustainable Transport

South African-based supply chain management company Barloworld Logistics recently debuted a new initiative that brings together lean process thinking with a commitment to innovation and environmental sustainability. Transportation is responsible for approximately 13 percent of South Africa's total greenhouse gas emissions, so the 3PL's new Green Trailer is welcome news, given the considerable reductions in the amount of fuel it uses.

Developing the new equipment was an effort in collaboration: the primary research was led by South Africa's Council for Scientific and Industrial Research; the design by Barloworld Logistics; aerodynamic rig structures were built by Afrit, a South African trailer manufacturer; and Aerotruck, another local company, manufactured all the aerodynamic components.

Barloworld kicked the tires on its green trailer along the N3 and N2 between Johannesburg and Durban, with vehicles doing a round-trip loop covering 720 miles while maintaining more constant speeds than operating on secondary roads or in urban areas. Initial simulations demonstrated that once these changes were made, there was a 35-percent reduction in the total drag when vehicles traveled at speeds between 40 and 50 miles per hour.

Barloworld anticipates the Green Trailer project will reduce fuel consumption by up to eight percent over the next six months—confirming that significant savings and environmental benefits can be achieved by retro-fitting existing transport fleets.

transport strategy with a special packaging solution to ensure the collector-item vehicles were loaded safely and efficiently. The so-called "customized car safety box," a patented container for prototype and luxury cars, gives companies additional leverage transporting specialized cargo.

This innovative box for high-value vehicles boasts a number of technical details, such as a hot-dip galvanized steel platform, a suspensible aluminum hood, a special ramp for vehicles with low ground clearance, interior thermal insulation, additional doors, and an integrated, manually operated rope winch.

NYK Steers China Auto Boom

Chinese demand for automobiles is booming, and the country is now the largest car market in the world. The challenge is efficiently transporting vehicles from coastal ports to hinterland areas. Seeing and seizing an opportunity, NYK Logistics recently requisitioned 100 new car trailers for inland transportation, bringing its total pool of trailers to more than 700, and making it one of the leading foreign-capitalized companies providing finished car transport service in China.

The NYK Group has been transporting finished cars over land in China since 2003 and now provides transportation services throughout the country to Chinese, European, and Japanese auto manufacturers that produce cars domestically. Domestic sales of new cars in China has since surpassed 13 million units. The resulting demand for inland transportation has expanded considerably and is expected to continue to grow in tandem with imports and exports. By purchasing more car trailers, NYK will be in a better position to accommodate transportation demand through use of its vast Chinese network.

Dr. Carol Nappholz is director of educational programs,
Intermodal Transportation Institute at the University of Denver.
303-871-4146 • *cnapphol@du.edu*

by Dr. Carol Nappholz

Blended Learning: An Educational Hybrid

Statistics show earning a graduate degree increases the potential for higher earnings during your working life. Not surprisingly, an increasing number of applicants who already hold one or more graduate degrees are enrolling in executive and professional graduate degree programs.

"You can never stop learning if you want to succeed, and if you want to continue to succeed," noted the CEO of a major Australian transportation and logistics company, addressing students graduating from an executive masters program in intermodal transportation management (of which he, too, was a graduate). His remarks came from the heart, as he had attended several executive programs since completing his first graduate degree.

LIFETIME OF LEARNING

Whether you envision working for a single company for most of your life, moving among different companies within the same industry, or being open to different career paths if they arise, continuing your education should be fundamental among your goals.

For many logistics professionals, online learning presents an attractive option for further education. Yet despite the convenience of online education programs, many students miss face-to-face interaction with faculty and peers, which can create opportunities for networking and new friendships, and facilitate cohesion among students working on group projects.

Studies also suggest that lack of socialization and personal contact with instructors contributes to the fairly high dropout rate among online learners.

THE BEST OF BOTH

Many supply chain professionals, however, find long hours and travel obligations rule out programs that require classroom attendance. These conflicts cause them to miss important learning opportunities, which, in turn, can impact their potential for continued job success.

Fortunately, several universities offer programs, especially at the graduate level, that comprise a blend of classroom and online learning. For example, students may attend four or five intensive, week-long residencies on the university campus, where they interact with each other and course instructors.

Prior to each residency, students access course materials online, and complete reading assignments and projects. After each session, they engage each other and their instructors via chat rooms; participate in group projects via email and video-conference; and complete individual assignments.

These hybrid programs include many of the conveniences of online learning without the drawbacks. Students who travel can access course materials from anywhere in the world at any time. They can complete assignments while on the plane or at home. And they can participate in a group discussion by pushing a button on their mobile device.

Evidence suggests that an even stronger sense of community exists among students enrolled in hybrid programs than those enrolled in either traditional or fully online programs. This sense of community, combined with the flexibility of the online component, makes balancing work and study commitments much more manageable.

Working adults enrolled in hybrid programs are less likely to drop out; and companies providing tuition benefits for these employees are more likely to see a return on their investment. ■

Ike Ortiz-Luis is international project cargo manager,
DGX-Dependable Global Express.
888-488-4888 • *ike.ortiz@dhx.com*

3PLLINE

by Ike Ortiz-Luis

Oversized Shipments: Good to Grow

Although container shipping remains the dominant form of ocean transport, breakbulk shipping, in which heavyweight freight is transported without being packed in containers, has seen significant growth. Non-container cargo covers a variety of shipments, ranging from oversized tires for earth-moving equipment to complete electrical power plants.

One reason breakbulk shipping grew despite the economic downturn, which led to a drop in container shipping volumes, is that vessels with heavyweight capabilities often carry industrial products and commodities that are less subject to consumer whims than the goods typically transported in containers.

Many heavyweight shipments involve multi-million and even billion-dollar construction projects ordered both by private industry and government agencies, and these projects typically continue even when the global economy slows.

THE BIG DEAL

Transporting heavyweight cargo presents shippers with more complications than moving merchandise by container. Unlike container shipping, where standard rates often apply, breakbulk cargo is a complex and specialized business. Each breakbulk shipment must be handled individually.

Breakbulk cargo shippers must deal with many questions, such as:

- How far in advance of the actual shipping date do they have to make the booking?
- How will the oversized shipment be transported from inland points to dockside?
- Do they need special permits to move the shipment to port by rail or truck?
- How will the shipment be loaded aboard the vessel?

A breakbulk cargo specialist can help shippers address these issues. Unlike a general agent or forwarder, a specialist brings experience transporting different kinds of heavyweight cargo globally.

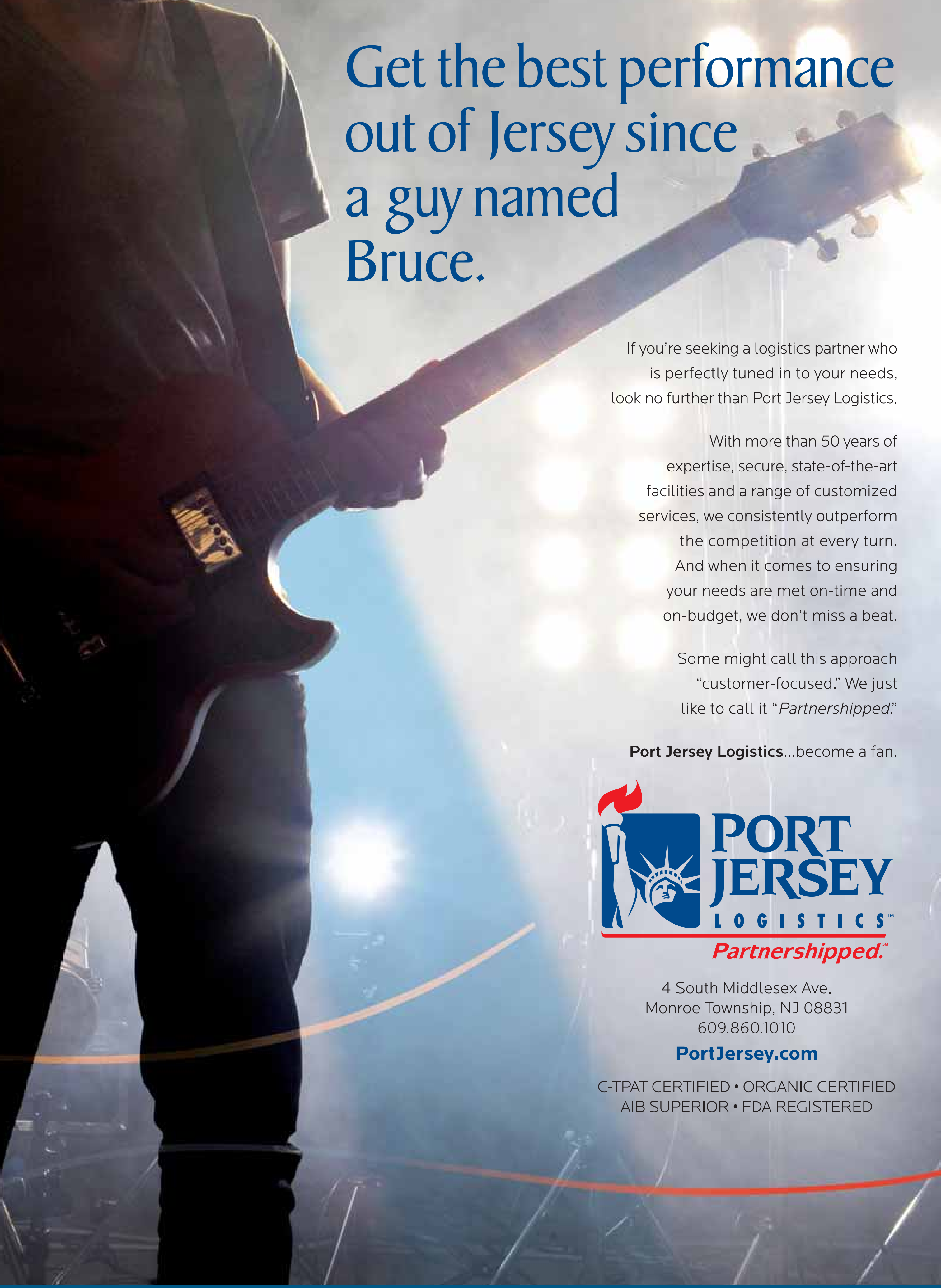
Shippers have many options to consider when transporting non-container cargo. Oversized freight can move via open containers, flat racks, open-top platforms, or roll on/roll off vessels.

Forwarders may advise shippers to book freight well in advance, even as long as one year before the actual shipment, if the consigned cargo consists of "big shoulder" items such as power plant, wind farm, processing plant, or oil refinery equipment. That's because only a small number of ships with very heavy lift capabilities are available.

GIVING CREDIT

Breakbulk cargo shipments often depend on credit market conditions. In addition to large corporations such as Exxon Mobil, General Electric, and Caterpillar, with their Triple A credit ratings, thousands of smaller companies regularly transport items via breakbulk shipping. These companies often require credit, which was in short supply during the past few years. Fortunately, credit markets have eased considerably. Shippers with solid balance sheets, whatever their size, should now have little difficulty in obtaining credit for their oversized shipments.

As alternative energy projects thrive, and countries around the world modernize and update their infrastructures, breakbulk shipping will continue to grow. It is a segment of the shipping business less well-known than container transport, but vital to building the sinews of a modern, industrial society. ■


Get the best performance out of Jersey since a guy named Bruce.
If you're seeking a logistics partner who is perfectly tuned in to your needs, look no further than Port Jersey Logistics.
With more than 50 years of expertise, secure, state-of-the-art facilities and a range of customized services, we consistently outperform the competition at every turn. And when it comes to ensuring your needs are met on-time and on-budget, we don't miss a beat.
Some might call this approach "customer-focused." We just like to call it "*Partnershipped*."
Port Jersey Logistics...become a fan.
PORT JERSEY LOGISTICS™
Partnershipped.℠
4 South Middlesex Ave.
Monroe Township, NJ 08831
609.860.1010
PortJersey.com
C-TPAT CERTIFIED • ORGANIC CERTIFIED
AIB SUPERIOR • FDA REGISTERED

Kyle Burns is president and CEO of Free Trade Alliance.
210-229-9036 • *kburns@freetradealliance.org*

ECODEV

ISSUES AFFECTING | ECONOMIC DEVELOPMENT

by Kyle Burns

It's Time to Implement Cross-Border Trucking

When the United States signed the North American Free Trade Agreement (NAFTA), which included a commitment to open our roads to Mexico's cargo trucks, we were paving the way for economic opportunity, job growth, and prosperous foreign investment. Unfortunately, the United States has never fully complied with NAFTA's cross-border trucking program, costing our country billions and presenting a serious roadblock to economic recovery and prosperity.

Implementing the trucking program will directly and immediately benefit U.S. exporters, business owners, workers, and consumers.

The history of NAFTA's trucking program is one of mixed messages and missed opportunities. Though the agreement entitles Mexican trucks to enter the United States to deliver cargo, we have only allowed access during a brief cross-border demonstration project. Installed after the United States was found to be in violation of NAFTA, the project allowed a select number of trucks to travel U.S. highways. While not technically fulfilling the agreement, it soothed tensions until last year, when Congress canceled the project and reinstated the ban.

Consequences came quickly. Mexico immediately imposed tariffs on 90 U.S. products. Tariffs now exceed $2.4 billion and have resulted in the loss of 25,000 U.S. jobs, as U.S. goods have become less competitive in the Mexican market.

Adherence to our current policy allows foreign competitors to take U.S. market share in Mexico, which we may never recover. Laborious cargo border transfers have also raised consumer prices. If the trucking program is reinstated, tariffs and transfer fees would be eliminated, spurring export activity and economic growth, creating new and higher-paying jobs, and reducing prices.

FACING THE CONSEQUENCES

As damaging as tariffs are, worse consequences may be in store. Violating our agreements creates distrust and jeopardizes trade opportunities, globally and with Mexico, our second-largest buyer of exports. U.S.-Mexico trade quadrupled under NAFTA, with trucks carrying 75 percent of goods. Maintaining strong, open relations is imperative – but unlikely without reinstating the cross-border trucking program.

To add insult to injury, we've imposed no Canadian counterpart to the cross-border ban, which many in Mexico could perceive as prejudice. While critics cite safety concerns, statistics and proven safety measures further expose these arguments as a red herring.

When it comes to safety, Mexico may have more cause for concern than the United States. As part of the demonstration project, the Federal Motor Carrier Safety Administration inspected 5,000 long-haul Mexican trucks. Only 9.2 percent were placed out of service, compared to a 22-percent out-of-service rate for U.S. trucks. Nonetheless, Mexico has continued to allow our trucks on its roads.

To date, no accidents in the United States involved Mexican carriers. Support of the cross-border trucking program, and a desire to keep America safe, are not at odds. Inspections and other measures continue to maintain the highest safety standards.

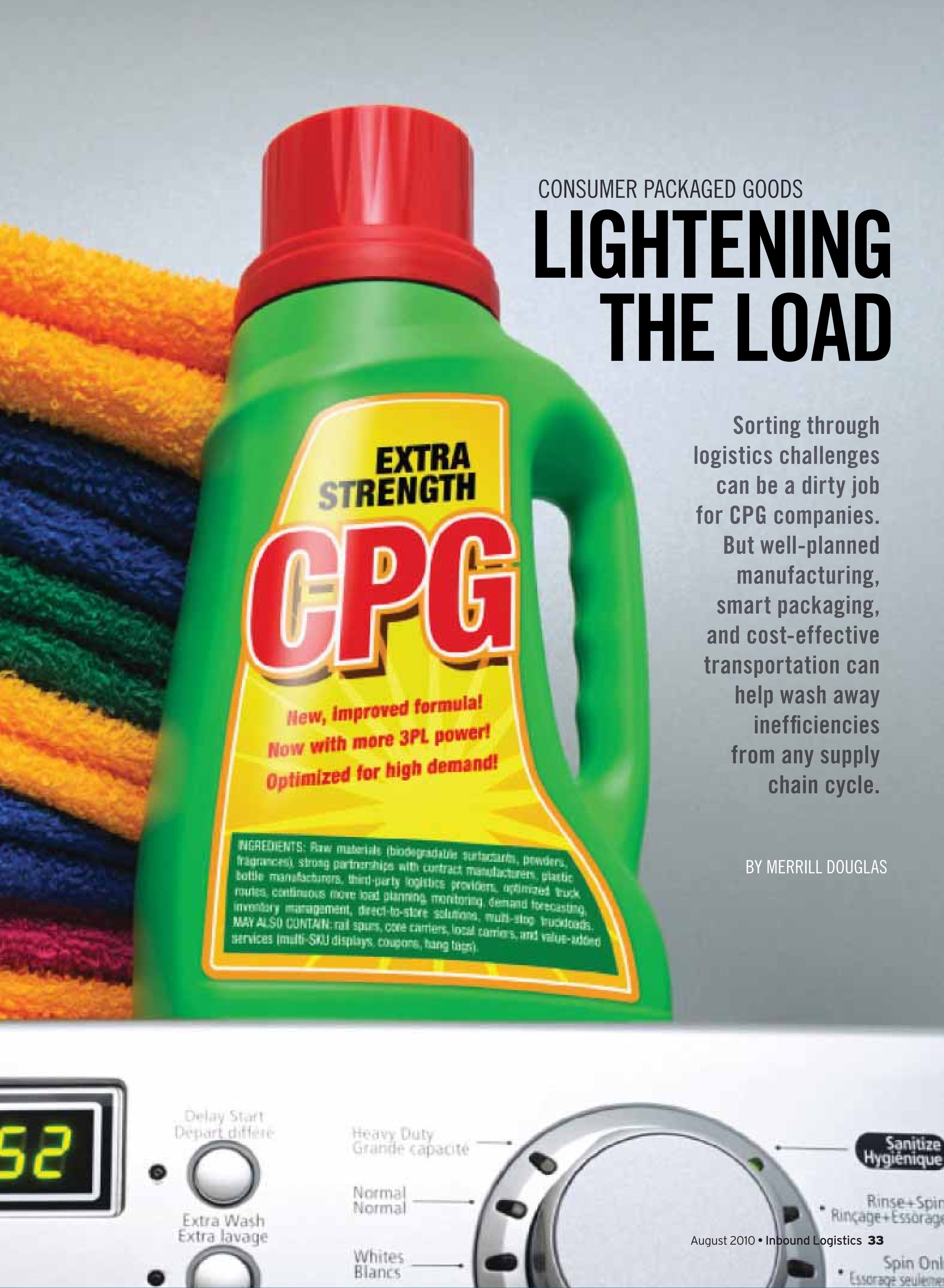
The Obama Administration is reportedly devising a plan to address the trucking dispute, and U.S. business advocates are working to ensure progress, but more voices are needed. Contact your Congressional representatives and ask them to reinstate a trucking plan that satisfies NAFTA and addresses safety. ■

CONSUMER PACKAGED GOODS

LIGHTENING THE LOAD

Sorting through logistics challenges can be a dirty job for CPG companies. But well-planned manufacturing, smart packaging, and cost-effective transportation can help wash away inefficiencies from any supply chain cycle.

BY MERRILL DOUGLAS



Companies that make and distribute consumer packaged goods (CPG) must be doing something right. In the midst of a global recession in 2009, and with freight costs up by 11 percent over 2008, CPG companies achieved higher levels of logistics performance than ever before, according to the Grocery Manufacturers Association 2010 Logistics Benchmark Report.

Consumer packaged goods represent a vast range of products, from frozen dinners to bubble bath, duct tape to ballpoint pens. Although supply chains vary depending on product, some major challenges apply to the entire sector.

Many of those challenges involve the ebb and flow of customer demand. A brilliant marketing campaign may boost demand for a particular item, or a trend may die out, causing a product to languish on shelves. A retail chain may display a product near the registers to encourage impulse buying–and increase the risk of stockout if the store isn't prepared for the sales spike.

Other common CPG challenges involve the logistics of manufacturing, packaging, and merchandising. What's the best way to unite a heavy product with its lightweight plastic bottle? Where should you perform kitting functions, add hang tags, or build consumer displays?

A determined CPG firm can find opportunities to improve performance all along the supply chain, from the sourcing of ingredients or materials to the delivery of the finished goods to retail shelves. The magic formula is different for every product. But one good example offers important lessons for the entire industry sector.

Here's the story of one consumer product, starting with its origin as a variety of inbound ingredients and following its progress from plant to warehouse to retail store.

Fab-ulous Time

Fab laundry detergent has long been a fixture in supermarket aisles–the Colgate-Palmolive Company introduced the product to consumers in 1947. In 2005, Colgate sold Fab, along with Ajax, Dynamo, and several other detergents, to Phoenix Brands of Stamford, Conn.

Phoenix Brands was formed in 2004 with the goal of breathing new life into products that were underperforming for their previous owners. Like the Phoenix of legend rising from the ashes, these products would be reborn. Phoenix acquires brands, improves their formulas, enhances their packaging and graphics, and strives to earn its products star positions on consumer shopping lists.

To stay flexible while pursuing that goal, Phoenix's founders designed the company from the ground up as a super-lean operation. "The idea behind our business model was to leverage partnerships across the board," says Brendan Holden, Phoenix's vice president of supply chain. Whenever it made sense to engage another company to take over a function, that's what Phoenix would do.

For Fab, Phoenix's major partners are contract manufacturer Marietta Corp., plastic bottle manufacturer Alpla, and third-party logistics provider (3PL) Menlo Worldwide Logistics.

Phoenix chose Marietta's facility in upstate New York to make Fab, Ajax, and Dynamo because it already had the technology required to produce liquid detergents. "Liquid" was a key word in the search for a co-packer.

"We deal with a tremendous amount of liquid–hundreds of millions of tons of product," Holden says. No other company he investigated offered the capacity to handle that kind of volume.

Together, Phoenix and Marietta converted an underutilized 300,000-square-foot warehouse at Marietta's Cortland, N.Y., site into a turnkey facility for making and bottling liquid detergent.

The main ingredients in Fab are biodegradable surfactants (the substances

CALIFORNIA INNOVATIONS

CPG Keeps Cool

Consumer packaged goods manufacturers seek improvement opportunities all along the supply chain. When one such company, California Innovations, moved the kitting operation for its HardBody cooler bags (*photo, right*) into its logistics partner's warehouse last year, the brand owner shortened the product's supply chain and saved some cold, hard cash.

Toronto-based California Innovations manufactures soft-sided cooler bags at about a dozen factories in China, shipping them in containers to the Ports of Los Angeles and Long Beach. A plastic injection molder in Chino, Calif., makes the rigid plastic liners that turn a soft bag into a HardBody cooler.

Before 2009, California Innovations trucked the bags and liners to a company in Garden Grove, Calif. That partner assembled the coolers, then shipped them to a warehouse in Fontana, Calif., owned by third-party logistics firm Weber Distribution. Weber stored the assembled bags, along with other California Innovations products, and shipped them as needed to major retailers across the United States.

In January 2009, the plastics manufacturer started shipping the liners directly to Weber's facility. Workers there assemble enough HardBody coolers to meet the demand indicated on California Innovations' monthly forecast, pack them in cartons, and use them to fill customer orders.

"It was more cost-effective to do the kitting from Weber's facility," says Carlos Garrido, director of operations at California Innovations. Cutting one facility out of the supply chain has reduced the lead time on the coolers and cut transportation costs.

The change also lets Weber store the coolers disassembled until it's almost time to ship them. Assembled coolers occupy two to three times as much space as the soft bags. "We don't want to tie up too much warehouse space with idle inventory," Garrido says. Delaying the kitting process reduces storage costs.

When the components converge at the warehouse, Weber starts an assembly line. "Every step in the process is set up, measured, and monitored for potential bottlenecks," says Bob Cesario, Weber's director of operations. "Based on the order volume and customer, most finished goods move directly to staging for outbound orders."

Weber ships full trailerloads of the coolers to distribution centers of large customers such as Walmart and Lowe's. Less-than-truckload shipments take coolers directly to stores. Weber also recently started shipping via parcel carrier to customers who buy the coolers through e-commerce sites such as Amazon.com or Walmart.com.

One big challenge in the HardBody supply chain is timing: getting the components delivered, building the coolers, and getting them ready for shipping to customers just when they're needed. "Careful planning and efficient execution are the cornerstones to ensuring that a CPG supply chain runs smoothly," says Cesario.

that lift stains from clothes), other surfactants, powders, and fragrances. Phoenix sources these from throughout the United States; many are petrochemical products from the Gulf Coast region. Ingredients move to Cortland by truck and rail in all manner of containers.

"Some are delivered as truckload shipments of 55-gallon drums, steel or plastic totes, or bags, in the case of powdered materials," says Holden. "Some also come in rail hopper cars and by commercial truck."

A Reason for Resin

Another material that flows into the plant is plastic resin, used by Austrian firm Alpla to mold detergent bottles. Phoenix decided to put a bottle blowing operation in the plant to save on transportation costs. "Moving empty bottles is a waste of money," says Holden. "These are big bottles; not many can fit on a truck, causing costs to go through the roof."

Alpla's blow-molding operation occupies a 70,000-square-foot section of the

Cortland site. "The bottles are made, labeled, spouted, then moved directly to the filling line," Holden says.

With one rail spur already available at the plant to bring in plastic resin, officials at Phoenix decided they wanted a second spur to accommodate other materials. Negotiations with New York State and the New York, Susquehanna, and Western Railway eventually yielded a deal to add the new tracks.

"We achieved dramatic savings by being able to transport resin directly by rail, instead of in hopper trucks," Holden says.

Phoenix also worked with local officials to devise routes for the trucks that carry materials and products in and out of the plant, which sits not in an industrial park, but in downtown Cortland. None of Marietta's past operations had prepared residents for the truck traffic that Phoenix would produce, and the manufacturer wanted to ensure its operation wouldn't disturb neighbors in the community.

"Today, when we on-board a carrier to provide transportation, we dictate approved routes and times into the plant," Holden says.

Along with manufacturing and bottling liquid detergent, the Cortland plant performs a range of value-added functions. "We create displays at the facility, along with regular case stock," Holden says. The plant also can add coupons, hang tags, and other decorations to bottles as required.

Transportation Strategies

Suppliers are responsible for delivering many of the materials needed to manufacture Fab. Menlo Worldwide Logistics handles the rest. Menlo also takes charge of moving all the finished product from the plant through the distribution network, and putting most of that product into the hands of Phoenix's customers.

When a supplier works with Menlo to move a partial truckload to the Cortland plant, it chooses a less-than-truckload (LTL) carrier from a list that the 3PL provides. If there's enough material to build a full truckload, the supplier e-mails details about that shipment to a Menlo load planner, who chooses a carrier.

"That starts the core carrier process," says Jeff Harris, a Nashville-based senior account manager at Menlo. As often as possible, Menlo builds continuous moves for the carriers that handle freight for Phoenix Brands. After drivers drop off a trailer full of materials in Cortland, they pick up a trailer loaded with finished product to haul to a distribution center (DC).

Menlo mainly uses truckload (TL) carriers to move Fab from plant to DC. "The carriers commit to weekly capacity and support regional delivery needs," says Steve Zeltzer, senior program manager at Menlo Worldwide Logistics in Monroe Township, N.J.

It's not easy to ensure that there are always enough trucks to load product at the Marietta plant, says Lori Sullivan, director of customer operations at Phoenix Brands' office in Indianapolis. It's important to get the numbers right, though, because the plant doesn't have a lot of storage space.

One key to balancing product with truck capacity is information sharing. "Phoenix Brands provides great visibility to its demand, so we see short- and long-term requirements and what the future will bring," Zeltzer says. "Then we work with the carrier base to ensure that they're connected to what future demand will look like."

A team in Menlo's central routing office monitors the loads moving out of the plant to make sure they're keeping to schedule. "We've developed a software solution that both the manufacturing plant and our planners have access to, and it creates visibility from the moment the load is ready," says Harris.

Distributing Product

Except for product bound to the West Coast, loads shipped out of the Marietta plant generally reach their destination the next day. Tracking the trailer once it's on the road isn't a major concern. "If we need after-hours status, we can view the shipment on the carrier's Web site," Harris says.

The 3PL sends truckloads of Fab, Ajax, and Dynamo to six of its own DCs, in Fontana, Calif.; Columbus, Ohio; Atlanta; Cranbury, N.J.; Edmonton, Alberta; and Mississauga, Ontario. Menlo also delivers to a warehouse in Dartmouth, Nova Scotia, operated by AMCA Sales, Phoenix's sales broker in that region.

AMCA Sales has developed strong relationships with retailers in Atlantic

Keeping store shelves stocked with Fab detergent requires coordination among several parties.

Canada. "Because of that expertise, they were a better fit to house product and deliver into that maritime area," Sullivan says.

Most product that arrives at the DCs is stored, rather than shipped right out to customers. "In order to be responsive, we try to keep about four to five weeks of inventory on hand," Sullivan says.

Flexible Footprint

Demand for any brand of detergent tends to be volatile, rising and falling as retailers run promotions. Because Menlo also serves other shippers in the six DCs that handle Fab, Phoenix Brands gains the flexibility it needs to accommodate that ebb and flow.

"Our footprint can flex into more or less space as needed," Sullivan says. That gives Phoenix the right amount of floor space, and the right number of dock doors and resident experts to handle any demand level.

Phoenix and Menlo also rely on Menlo's core carriers to help them navigate the peaks and valleys of demand created by patterns of store promotions.

Each week, Phoenix publishes a deployment schedule, which details how much volume it expects to send to each distribution center during the following week. Menlo shares the schedules with its core carriers and shows them how to make optimal use of the information.

"We have meetings at the main factory, where we view the entire process carriers go through from a manufacturing and planning perspective," Harris says. "We show them how to use reports to see when peaks will occur, so they can ramp up capacity to support a specific destination or larger peak of

outbound volume from that manufacturing plant."

The reports also help carriers adjust their resources to plan for upcoming periods of lower demand. "They are committed to supporting us through both peaks and valleys," Harris says.

At its DCs, Menlo plans, manages, and executes the transportation of Fab to customers. As Phoenix Brands receives purchase orders from retailers, it transmits the information to Menlo via electronic data interchange. Menlo's transportation management system analyzes and optimizes upcoming shipments.

Data about loads that will move via LTL carrier goes to the warehouse management system, so the warehouse team can make the necessary arrangements. Information on TL freight gets uploaded to an online tendering application so carriers can bid on it.

To help carriers negotiate fluctuating demand at the New Jersey and Ohio DCs, Menlo augments their equipment with its own pool of trailers. Those "flex trailers" provide extra capacity during demand peaks and relieve pressure on crews in the DCs.

"They can preload trailers to get product out the door," Harris says. Menlo sometimes also uses those trailers to move product from Cortland to the DCs when volume soars especially high.

On top of the value-added work that Marietta performs for Fab at its plant, staff at Menlo's DCs provide similar services to meet retailers' special needs. For example, they build multi-SKU displays for retail stores, add hang tags to bottles, and relabel products when necessary.

Peaks and Valleys

Most of the product moving out of the warehouses goes to customers' own DCs. But when some of Phoenix's customers run sales on Fab, they arrange to bring the product directly to their stores.

"Their volume with us is large enough that we can afford to do it that way," Sullivan says.

The direct-to-store program includes Saturday deliveries to ensure that customers always find the Fab they're looking for when sales are advertised in the Sunday papers.

As it maintains regional networks of carriers that commit to handling Phoenix's volume through all its peaks and valleys, Menlo also has developed a base of local carriers committed to making direct store deliveries in an environment of volatile demand.

On the East Coast, for example, four or five carriers handle store deliveries from the Cranbury, N.J., distribution center. Just as it assembles officials from its regional carriers in Cortland to familiarize them with Phoenix's deployment reports, Menlo brings key employees from its local niche carriers to Cranbury to prep them for the direct-to-store challenge.

"We review process requirements and expectations," Harris says. "We go through the loading process with the carriers to show them how it works."

To optimize the deliveries these niche carriers make, Menlo builds multi-stop truckloads. "The truckload carrier might have four specific loads for different customer sites and deliver them as 'stop off' loads," Zeltzer says.

Deliveries to inner city stores are especially tricky. A city might restrict the size of trailers that can enter its jurisdiction, or local government might prohibit deliveries at certain times of day because of noise concerns. "Those arrangements must be coordinated through Menlo and its carriers to ensure strong execution," Sullivan says.

Densely populated cities may also pose physical obstacles. Stores in New York's five boroughs are particularly unprepared to receive the 53-foot trailers that most carriers use today.

"Menlo has done an extensive job working with the niche carriers that can support special equipment requirements to get into difficult delivery points," Zeltzer says. Generally, Menlo's carriers take 48-foot trailers into New York.

Menlo's skill in delivering products such as Fab the final mile to customer locations has earned Phoenix praise from buyers and retailers alike.

From the customer's viewpoint, receiving loads of Fab might look as easy as dropping a load of laundry in the washer. But the chain of events that starts when suppliers ship orders of surfactants, plastic resin, and other materials, and ends when a stock clerk arranges newly delivered bottles of Fab on a store shelf, is anything but simple. For a CPG brand owner such as Phoenix Brands, it takes a fab-ulous degree of planning, coordination, and communication to deliver the goods. ■


Plug into
World Class Service
2001-2009
WE CARRY THE FUTURE℠
We're the **connection** you've been looking for. Around the clock and around the world, Hyundai Merchant Marine supports your need for shipment data, bookings and document transactions with our e-Business products. Depend on us for reliable multi-modal transportation to Asia, Middle East, and Europe.
Hyundai. Online. On Time.
HMM
www.hmm21.com

They surface after the sale—at the last minute—potentially costing a fortune. They're the biggest hidden challenge vendors face…

YOUR GUIDE TO ROUTING GUIDES

What is a Routing Guide? Retailers publish routing guides to establish a set of rules and requirements for manufacturers and wholesalers/distributors to follow when fulfilling orders and shipping product to the retailer's location or distribution system.

If suppliers don't follow the routing guide exactly, the retailer can deduct a percentage of the invoice, percentage of the purchase order, or a set amount from their remittance as a penalty.

SOURCES:

Tod Yazdi
Principal, Tagg Logistics

Harold B. Friedman
Sr. VP Global Corporate Development, Data2Logistics, LLC.

A little bit of history

Routing guides first surfaced when retail chains began to broaden their geographic reach through more locations, and simultaneously increased the variety of products they offered within their stores. This increase of stores and vendors created a logistical challenge as product needed to be efficiently routed to various locations but was shipped, labeled, and packed in an infinite variety of ways. Think Walmart.

Imagine how many different vendors they must coordinate with to stock the shelves of a single store. Then imagine adding hundreds, then thousands, of stores. It is easy to realize that product needs to be delivered to stores and distribution centers in a uniform manner–packaged, labeled, and shipped the same–no matter who the vendor is.

To achieve this uniformity, retailers created a document for vendors that details how they want product to arrive. And the routing guide was born.

Sounds reasonable, right? As a retailer receiving product from hundreds or thousands of different vendors, you want it all to arrive in a uniform fashion so you can easily distribute to your stores and stock your shelves.

The vendor's point of view

Say you just landed a sale to Walmart. You get the purchase order, spend time learning the routing guide, and have all your product packaged, labeled, and shipped exactly how Walmart's routing guide dictates. Things are good and your fulfillment is flawless.

Then you land a purchase order from Target. Then Lowe's. Then Walgreens. The sales are great, only they have routing guides, too. And their standards within those routing guides are different than Walmart's, and are all different from each other. Each of your retailers now needs product packaged and labeled differently, creating a fulfillment nightmare.

As you can imagine, it is a significant challenge for vendors/manufacturers to fulfill and distribute orders to multiple retailers while staying in compliance with detailed routing guides. Vendors often didn't have enough staff to learn all the specific requirements, and were undercapitalized to pay for the variety of packaging and labeling needs.

It got easy to skip corners and fulfill orders that didn't completely meet routing guide specifications. Retailers needed a solution to force compliance.

And that solution was: chargebacks. A retailer's purchase order often states that if a routing guide is not followed exactly, the retailer can deduct a percentage of the invoice, a percentage of the purchase order, or a set amount from their remittance as a penalty. This penalty can be assessed to each specific infraction and can add up to hundreds, even thousands, of dollars.

One solution to routing guides

If you need to fulfill and distribute orders to multiple retailers, your choice is simple: Either invest resources in personnel and systems to gain the capabilities to ship in accordance with routing guides, or outsource to a third-party logistics (3PL) firm familiar with routing guides to help you fulfill orders. 3PLs manage fulfillment and distribution for a variety of companies, and therefore learn the routing guide requirements for multiple retailers.

As a vendor, you can leverage this knowledge and use your 3PL's capabilities to more confidently sell to multiple retailers. Outsourced fulfillment and distribution should be approached as a partnership where both the vendor and 3PL work together to understand the routing guides and avoid chargebacks.

A strong 3PL should also be capable of repackaging, labeling, and managing information flow according to a retailer's routing guide and EDI standards.

In essence, by outsourcing your warehouse, you expand your fulfillment capabilities, allowing you to grow sales.

For those selling product through retailers, routing guides can be a necessary evil of doing business. For those same retailers, routing guides are essential to be able to operate multiple locations and provide product from a large variety of vendors. Supply chains can be complex and require retailers and vendors to work together to synchronize the flow of product. ■

READING BETWEEN THE LINES

While Home Depot's vendor routing guide *(right)* includes requirements specific to the retailer, general rules about complying with routing guides apply.

1. Read and understand your Supplier Buying Agreement. Non-compliance leads to added costs in the form of chargebacks, and could have an unfavorable impact on customer relations.
2. Bills of lading must be completed to provide the information your customer requires.
3. If premium freight needs to be used, obtaining authorization is essential to avoid chargebacks for expedited services.
4. Communication with your customer is essential if their required carrier cannot pick up freight or meet requested delivery times.
5. Plan manufacturing schedules to accommodate your customer's delivery windows related to inventory days, holidays, or other times when they will not accept freight.
6. Consolidating multiple shipments to the same location on the same day may be required to minimize freight costs.
7. You may be held liable for accessorial charges for sorting/segregating, inside delivery, etc., if incurred.
8. You can be liable for other charges, such as storage fees, if the routing guide is not strictly followed.

This routing guide and shipping guide has been developed for domestic, North American suppliers who ship to Home Depot, its subsidiaries and/or affiliates within the US, Canada, and/or Puerto Rico. All sections of this guide apply to all suppliers regardless of their FOB terms.

All transportation costs, storage fees or other expenses incurred by The Home Depot because of the supplier's noncompliance with the terms and conditions of the Supplier Buying Agreement shall be charged to the supplier. Additionally, any carrier detention charges will be charged back to the supplier.

Listed below are general instructions to follow when shipping merchandise to Home Depot.

- Do not split POs between shipments. All cartons associated with one PO must be on a single shipment.
- POs cannot be mixed in a carton or master carton/repack.
- All POs for all merchandising departments that are shipped on the same day to the same destination (THD store, DC or TF) must be on a single Bill of Lading.
  - Ship one Bill of Lading per store for shipments going to offshore stores (AK, HI, PR, USVI and Guam). Offshore shipments (except prepaid small package shipments) must go through the appropriate consolidation center and include all applicable paperwork.
- Expedited shipments: All priority shipment requests that require additional freight charges over and above normal service (such as air freight or expedited-ground) must be approved prior to shipping. Any expedited shipment coming from a vendor (inbound shipment to The Home Depot) will require buyer, merchant, or store manager approval.
  - If the request for expedited shipment originates from a store it will require the store manager's approval.
  - If the request for expedited shipment originates from a source other than a store (e.g. merchant, host order, etc) it will require buyer or merchant approval.
  - Any expedited shipment coming from a DC, TF, or other HD facility (outbound shipment from The Home Depot) will require approval from the manager of the facility.
- If your facilities are closed for extended times other than national holidays, please notify the appropriate product merchant 90 days before the closing to secure order placement and to guarantee delivery.
- Home Depot stores are closed on Thanksgiving and Christmas. Please plan your deliveries around these holidays. Keep in mind; receiving will be heavier than usual before and especially after the respective holiday.
- Do not deliver merchandise to the stores on store inventory days, contact the receiving manager or store manager for a store inventory schedule.
- LTL drivers are required to observe and validate unloading. TL drivers are required to tailgate the load.
- The trailer seal must be intact upon arrival at Home Depot and Home Depot must confirm it is intact.

All Suppliers regardless of freight terms (Prepaid or Collect) are required to ship from the location specified in the Supplier Buying Agreement (SBA). Suppliers with multiple ship origins must ship from the SBA stated ship origin which is closest/most cost optimal to the HD destination on the purchase order. Failure to comply with this will result in supplier charge backs.

Home Depot will not pay any accessorial charges on prepaid shipments. Any charges such as notification, storage, reconsignment, inside delivery, sorting/ segregating, etc., will be the sole financial responsibility of the vendor. The Vendor Routing Guide is meant to serve as a comprehensive tool establishing how to interface with your company. The information contained in this document reflects your commitment to reduce the cycle time in transporting your product through the supply chain. This requires a focus on controlling unnecessary freight and labor expenses. The instructions contained in this document should be clear and given careful consideration as to standard business practices used to transport materials today. Compliance to these policies and procedures will ensure a healthy and profitable relationship between you and The Home Depot.

Leaning

Lean Six Sigma enablers and practitioners are using continuous

By Joseph O'Reilly

Mere mention of Lean Six Sigma rouses a litany of names from manufacturing's hallowed past–Ford, Deming, Ohno, Bossidy, and Welch among the notables. Or, it summons any number of Scott Adams' more contemporary *Dilbert* cartoons.

Take, for example, Jan. 19, 2007: Pointy-haired boss approaches Carol, the snarky, MBA-toting office receptionist, and asks her to schedule a staff meeting.

"What's the topic?" she asks dryly.

"I plan to fuse Six Sigma with Lean methods to eliminate the gap between our strategies and our objectives," proudly gushes Pointy-haired boss.

Carol begins typing, pauses, then curtly replies: "I'll just say 'waste of time.'"

Lean Six Sigma is the corporate catchword that business strategists and satirists alike are buzzing about. It's popular to the point that it has become mainstream outside the enterprise, yet obscure enough to be easily lampooned by those not in the know.

Lean Six Sigma's odd coupling of Greek symbology and Japanese terminology, shadowy allusions to the martial arts, and abundance of fun acronyms–DMAIC, 4M+I, BIG Ys, CANDO, Tim Wood, SMART, and R&R–guarantee lay biases won't change any time soon. But the ways businesses embrace and defuse Lean and Six Sigma are changing, and to great degrees–beyond black belt certifications and supply chain MBAs.

Where there is waste there is need for lean process; and where there is dysfunction within logistics functions, Six Sigma probes deep to expose problems and prescribe solutions. More telling, businesses spanning all industries are turning to continuous improvement methodologies to streamline their supply chains, manage variation, eliminate costly defects, and optimize existing resources.

LEAN TO THE CORE

When LeanCor, a Florence, Ky.-based 3PL, began operations in 2005, its first customer was Maytag, the iconic commercial appliance company since swallowed by Whirlpool Corporation.

"Because the Lean movement began in repetitive manufacturing, that's where we saw our initial customer base," says Erika Roberts, director of corporate development for LeanCor. "Our customers recognized they needed to branch out into the extended value stream and begin working with suppliers and collaborating with customers in order to match product flow to the assembly line."

It was this repetitive manufacturing pedigree that gave LeanCor traction to grow. And it has. The 3PL offers customers a three-tiered

by Degrees

improvement methodologies to squeeze cost and inefficiency out of the supply chain.

approach to implementing Lean Six Sigma: training, consulting, and non-asset-based operational capabilities that include materials and facility management, logistics process engineering, and transportation management.

LeanCor's rapid rise over the past few years reflects Lean Six Sigma's growing acceptance. Companies are increasingly receptive to the merits of continuous improvement because they sense its potential.

"Many companies have issues with service or fill rates, yet their inventory levels remain high. Inherently, they know there is waste in the system. There's a platform to increase service, and reduce costs, inventories, and waste in order to stay competitive and profitable," offers Roger Pearce, director of Lean deployment, LeanCor.

The 3PL's services address these tentative progressions by coupling Lean theory with operational reality. "We are able to go beyond what the book says. We understand the fires that need to be fought every day and the issues that arise when relationships and emotions come into play," Roberts says.

Part of the value that LeanCor brings to the market is derivative of its broadening exposure to a wide variety of industries through training and consulting. Working with different customers brings more best practices and knowledge to the table. It's why Lean Six Sigma continues to expand beyond manufacturing.

Tim Noble, managing principal at Alpharetta, Ga.-based The Avery Point Group, knows this well as a Lean Six Sigma job recruiter. He sees new twists in how industries apply Lean and/or Six Sigma from their initial outreach for new talent.

"In the late 1990s, companies took Six Sigma out of the manufacturing function and put it into financial services and insurance," he says. "The same progression is now occurring with Lean in healthcare and retail. Companies that have legacy Six Sigma programs outside manufacturing are embracing Lean in the same way they took to Six Sigma five or six years ago."

CONTINUOUS IMPROVEMENT, COPY THAT

But Lean Six Sigma's pedigree is in manufacturing and that's where companies have made great strides investing resources in continuous improvement initiatives.

Xerox's first fling with Lean Six Sigma began in 2002. The Norwalk, Conn.-headquartered document management company was emerging from its own financial doldrums when then-CEO Anne Mulcahy began exploring ways to steer the enterprise through this turbulence.

"Our partner, GE Capital Services, which was handling a lot of our administrative processes, was heavy into Lean Six Sigma. Through this partnership, Mulcahy saw an opportunity," recalls Doug Burgess, senior vice president global customer integration and material productivity for Xerox. "She wanted to use this as a platform to exponentially improve our performance."

Xerox engaged the George Group, a Lean Six Sigma consultant and integrator (now part of Accenture) in September 2002 to investigate an enterprise-wide deployment. In November, Mulcahy and the senior leadership team went through three days of training. By 2003, Xerox had fully launched Lean Six Sigma across its entire enterprise.

With seven years under its corporate black belt, the company has now created an organizational structure underpinned by continuous improvement.

"Some companies only apply Lean Six Sigma in supply chain. Xerox elected to deploy it across finance, marketing, sales, engineering, manufacturing, and supply chain–all operational areas–to ensure we had a common language and approach to solve cross-value chain projects," Burgess explains. "Because we are functionally organized, we wanted to make sure everyone had the skills and capabilities to support this."

Xerox orchestrates its Lean Six Sigma strategy through a hub-and-spoke model. A small, centralized group at the corporate level is responsible for governance, strategy, training, and development.

"The decentralized pieces are the functional organizations that have deployment managers reporting to operational heads. They have green belts, black belts, and master black belts supporting projects within their areas," he adds.

SIX SIGMA X-CELLENCE: (left to right) Doug Burgess, SVP, global customer integration and material productivity, shares Xerox's iSixSigma and IQPC Six Sigma awards with CEO Ursula Burns and Jim Firestone, president, corporate operations.

Currently, Xerox has about 1,300 Six Sigma black belts and nearly 7,000 green belts–of which 4,000 are fully certified. The company trains employees in both Lean and Six Sigma skill sets. When Xerox first began investigating a continuous improvement platform, it conducted its own market research and entertained discussions with consultants to determine the best balance.

"Some were into Lean, others Six Sigma, many embraced both. But we didn't see Lean and Six Sigma as 1 + 1 = 2. It wasn't a matter of addition. We saw exponential opportunities to focus on process improvement," Burgess notes.

GRAVITATING TOWARD LEAN

How companies couple Lean and Six Sigma principles depends on countless internal and external factors. It's what makes continuous improvement programs liquid and adaptable. There are always allowances for process change, which is necessary as businesses seek to mitigate supply and demand variations.

The Avery Point Group conducts a yearly survey of the job market, taking a snapshot of corporate postings to find out where continuous improvement strategies are leaning from a hiring perspective.

"In 2005, when we began our annual study, Six Sigma job postings outstripped Lean by more than 50 percent," reports Noble. "Over the past several years, Lean has picked up steam. The tipping point happened in 2008 when it began reaching parity with Six Sigma."

In 2010, the recruiter's review of 3,500 job postings found that demand for Lean talent exceeded Six Sigma by almost 35 percent, significantly widening its lead over 2009 results, which showed an 11-percent edge for Lean.

The reasons for this shift are manifold. "From an economic standpoint, companies recognize Lean's focus on waste elimination, operational flexibility, business process flow, and throughput," explains Noble. "Lean is the foundation to build upon. Six Sigma is better targeted at more complex problems that focus on variation–problems that require heavy use of statistics. A lot of companies are coming around to this view."

Another consideration is that Six Sigma has been ingrained in the business culture since the mid 1990s. "That talent exists and is pervasive in the market. When you see job postings for one or the other it's because companies know they don't have that in their toolkit or in their talent stable. They're looking to augment what they already have," he says.

Emerging and growing supply chain management complexities also favor continuous improvement methodologies that eliminate clutter–excess inventory and redundant processes–then drill down and optimize specific logistics functions. Strategically, businesses are looking at how they can apply Lean and Six Sigma, to varying degrees and with greater or lesser emphasis, to meet their needs.

THE POWER OF 6...AND LEAN

"Companies deploy Lean and Six Sigma depending on the area they're targeting," says Burgess. "In some cases, a process or sub-process is buried in a functional organization. So they need subject matter experts and Lean Six Sigma resources to process map the situation and understand where waste and variation exist. It might depend on reducing one or the other, or both."

From Noble's perspective, businesses are prioritizing Lean, then applying Six Sigma. "We're seeing a shift where companies understand they need to lean out operations first, understand the value stream and where waste is, move toward that future state, and put in place work standards to stabilize the process," he says. "Once they've done that to a certain extent, and begin dealing with more variation issues, Six Sigma's powerful use of statistics presents real value."

Xerox's emphasis on Lean and Six Sigma depends on the project. "We use the DMAIC (Define Measure Analyze Improve Control) methodology, so we first define what the problem is," says Burgess. "When you get into the measurements, you look for a baseline through SIPOCs (Suppliers Inputs Process Outputs Customers) and other tools. As you work through these steps, it becomes clearer what you need to do to reach a project charter. That may require Lean principles or Six Sigma."

Many companies today realize they have a lot of basic waste in the supply chain that doesn't require the rigors of Six Sigma tools and problem-solving models with DMAIC motions.

"There was a time when Six Sigma was more prevalent and every company wanted to focus on it. Then philosophies began to merge and companies embraced both sides–which aren't too different. They are equally centered around continuous improvement," says Pearce.

"LeanCor encourages companies to embrace both–95 percent of supply chain problems can be solved with Lean tools and Lean thinking. But there's still five percent that requires Six Sigma and DMAIC methodology," he adds.

Noble agrees, specifically pointing to the fact that Lean and Six Sigma are complementary. "They aren't at odds," he says. "Part of the maturing process involves recognizing these tools can be applied where appropriate. That's an important point in any Lean and Six Sigma discussion."

EXPANDING VALUE

Lean Six Sigma's growing acceptance is a consequence of recessionary trends–pressures to reduce costs–and its strategic advantage. Companies across all industries are taking note.

"Many different verticals are recognizing that there is waste in any process. We have seen pick-up in the retail sector, which in the past wasn't focused on this type of solution. The principles apply outside manufacturing," says Pearce.

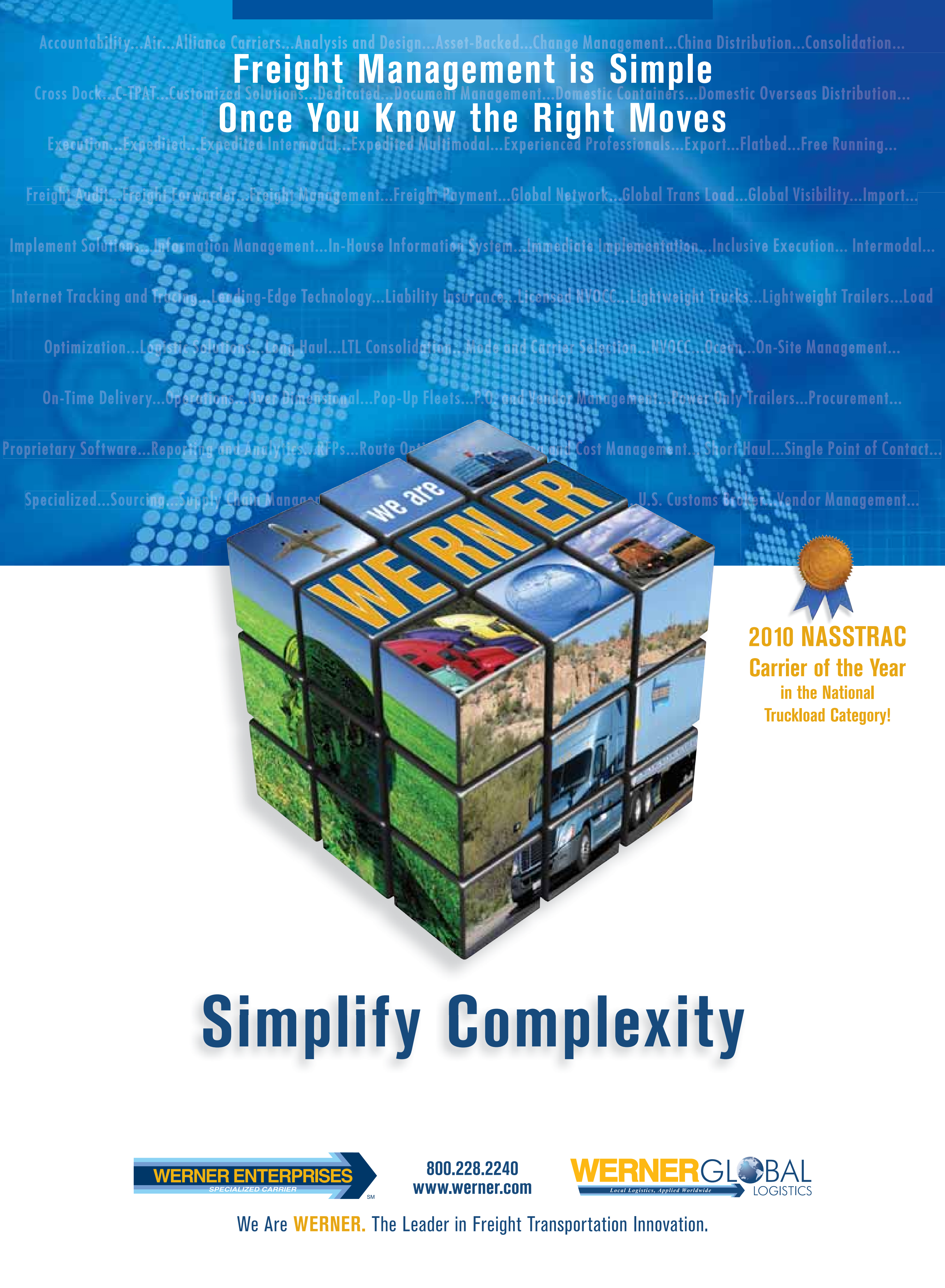
LeanCor's growing roster of both Fortune 500 and privately owned small business clients is testament to this unfolding net of captive practitioners. Continuous improvement initiatives have a ripple impact, gradually reaching farther upstream and downstream in the supply chain. Companies are demanding Lean best practices from their partners and, in turn, are looking for help training, teaching, and engaging suppliers as well as customers, creating an extended connection throughout the value stream.

"3PLs contact us because their customers demand Lean and they need to know what that means," Pearce adds. As more logistics service providers latch on to the idea, largely through their customers but also because they see the positive influence on their own businesses, the continuous improvement thread will weave its way through the supply chain.

As any black belt will attest, Lean Six Sigma's value proposition ultimately comes down to granular-level details. But its real impact is manifest in big numbers.

"Our return on investment with Lean Six Sigma over the past seven and a half years is more than 300 percent. Last year it was 433 percent," says Burgess. "This includes all the investments and resources that have been applied to our Lean Six Sigma program."

So maybe Pointy-haired boss was onto something in 2007, much to Carol's chagrin, and in defiance of mainstream bias. The gap between those pondering and executing Lean Six Sigma is shrinking–and for good reason. It isn't a "waste of time." Companies are eliminating waste and inefficiency in real time, and in no time. ■



FACING LOGISTICS CHALLENGES? USE IL'S 3PL EXPERTS AND

Energy Security for The Future

When selecting a site for a new warehouse or distribution center, there's a second infrastructure that demands attention—the power generation and delivery system.

When making site selection decisions, energy is either overlooked or viewed as a cost component, added to the spreadsheet analysis without much consideration.

But when you operate an automated warehouse or refrigerated facility, or you just want to be sure the lights come on and the computers boot up, the policy and infrastructure supporting energy distribution become important parts of risk assessment as well as cost analysis.

Energy utilities don't earn the respect of economic development managers, noted Allan Hooper, economic development manager for Consumers Energy, in a recent presentation to the Utility Economic Development Association. He urged better communication about the value utilities deliver to customers and companies considering locating in a region. Every business or prospect is, after all, a power customer, and that makes economic development–including retention–important to the utilities.

Utilities are enterprises with significant assets and infrastructure that require considerable annual capital investment; they are accountable to customers, shareholders, and regulators for the decisions and investments they make; they are businesses with profit-and-loss requirements like any other; and they are regulated enterprises overseen by public service or utility commissions that demand the utilities make prudent decisions, said Hooper.

"And while the utilities have similar fiscal responsibilities to shareholders, their regulated status dictates that they maintain pricing that's fair to all customers while they are allowed, at best, to earn a set maximum return to investors," he added.

New Business, New Customers

Talk to Ameren Corp.'s Michael Kearney, manager of economic development, and he'll reinforce many of these points. Kearney describes a warehouse/distribution center study that looks at the areas Ameren serves as a power distribution utility–Illinois and Missouri–and models product flows, examines transportation infrastructure,

Power Under the Microscope

John H. "Jack" Boyd, founder of site selection consulting firm The Boyd Company, adjusts the old real estate line to: energy, energy, energy. In all sectors, companies are looking more closely at energy, says Boyd. Whether they are locating a data center or distribution center, planners are interested in power costs and reliability. Drivers include national energy policy changes, the continued rise of environmental awareness, and even the Gulf of Mexico oil spill disaster.

The value of the energy discussion extends to more departments within companies planning an expansion or relocation. "There's public relations value in using more 'green' energy, and companies realize that," says Boyd. "They want to be in a position to use more alternative energy sources and to publicize that fact."

But beyond feeling good about taking an environmental stand, these same users also want reliability. As energy-generating utilities move to balance their portfolio of sources, this contributes to rate stability and reduces some of the risk associated with a single type of power generation.

Energy was the trump card when automaker BMW selected an unexpected place to build a new plant: Quincy, Wash. Already home to a multitude of data centers, Quincy's low energy costs and hydroelectric power reliability were a big plus in BMW's decision, Boyd says.

But the environmentally friendly energy source also fits with the direction in which automakers are moving–toward designing and building cars that use more composites and computer controls. Those changes are environmentally friendly, and make the process of designing and building cars more like that of the aircraft industry. "And what better place to locate an auto plant than in the backyard of Boeing Aircraft Company?" Boyd asks.

Energy costs can vary widely from location to location, and Boyd notes that electricity can jump from two or three cents per kilowatt hour to the high teens, based on where a facility is located and where it gets its energy.

▲ **Energy-efficient BMW plant**

This geo-thermal system is part of an energy savings initiative at an Anheuser-Busch DC in Ameren's service territory.

looks at costs, and even evaluates rail service, and highway and air capacity. The utility offers project management and property location services in addition to its capabilities as a full-fledged site selection consultant. Clearly, Ameren's view is that new businesses in the region represent new customers for the utility.

The power play has certainly led to growth through consolidation. Many power utilities are cooperatives owned by their collective members; others are multi-state corporations.

"The cooperative business model has worked well for 70 years and will continue to serve the energy consumer into the future," says Steve Smith, president and CEO of Hoosier Energy. "Resiliency is one of the keys, and it's what will be needed going forward."

The energy industry faces a number of challenges, including a need to grow capacity while facing increasing pressure on environmental issues, maintenance and expansion financing, and a mixed public attitude toward energy sources.

Hoosier Energy, based in Bloomington, Ind., is a generation and transmission cooperative providing electric power to 17 member electric distribution cooperatives in central and southern Indiana and one member cooperative in Illinois. During the past 10 years, Hoosier Energy has grown from

1,200 megawatts (MW) of baseload and coal-fired capacity to more than 2,100 MW of capacity that includes baseload, intermediate, and peaking units in 2010. More than one-third of that capacity comes from natural gas or renewable sources.

All of this comes at a cost. Hoosier spent $630 million during those 10 years for new plants and plant upgrades, and another $200 million for transmission and substation improvements. Much of that investment went to help reduce emissions by 40 percent.

The energy cooperative has also identified and implemented process improvements to reduce costs, including incorporating some supply chain management lessons. When Hoosier Energy began providing power for the Jackson County, Ind., cooperative, it made sure consistent and standard power delivery equipment was in place at substations and facilities to improve reliability and response time.

During that reconstruction, Hoosier Energy set up a pilot program that delivered parts and supplies from the vendor directly to the worksite instead of moving them to a warehouse or stores area in Bloomington or other work centers, then redistributing them to the worksite. Hoosier Energy will review the pilot program to determine whether it was successful in boosting efficiency and reducing costs.

From Waste to Energy

Further diversifying its energy production, Hoosier Energy began construction of an 11-MW plant to convert waste to energy. The $22.5-million facility will quadruple production of renewable energy for the cooperative. It will produce electricity from landfill methane created at the Woodland Meadows Landfill in Wayne, Mich. Hoosier Energy will use waste heat from the project to supplement hot water production for automotive supplier Visteon.

Hoosier Energy already operates a 3.5-MW landfill methane generation plant at the Clark Floyd Landfill in southern Indiana. Its renewable energy portfolio also includes 25 MW generated at an Iowa wind farm.

While Hoosier Energy has taken many positive steps to improve its generation and distribution capabilities, increase capacity, and balance its portfolio of generation sources to move away from total dependence on coal-fired plants, it has had to do so in an increasingly restrictive environment.

Ameren has always been aware of emissions, says Kearney, and part of the challenge of any power utility is complying with continuous new mandates. The economic downturn moderated power demand and while Ameren is not looking at increasing its baseload capacity, it does continue to invest in infrastructure, including upgrading technology, says Kearney.

Part of that investment includes balancing the power generation portfolio. That includes conventional coal-fired generation plants, but also nuclear, hydroelectric generation, and combustion turbines, says Kearney. Federal,

Show Me The Green

A buzz in Joplin, Mo., is resonating throughout the local business community. The city's access to U.S. and North American markets, proximity to major highway and rail connections, low operating costs, and skilled labor pool are surefire magnets for prospective businesses. But Joplin's buzz is quite literal. An abundance of renewable energy resources offer a complementary value proposition that is increasingly important for site selectors looking to reduce fuel and electricity expense while towing the sustainability line.

The Empire District Electric Company, an investor-owned, regulated utility based in Joplin, provides electricity, natural gas, and water to approximately 215,000 customers in Missouri, Kansas, Oklahoma, and Arkansas, supporting the energy needs of local businesses.

Beginning in 2004, the utility began exploring new and innovative means to invest in and harness renewable energy for customers. It began by inking a 20-year contract with PPM Energy (now Iberdrola Renewables) to receive all energy generated at the 150-megawatt Elk River Wind Farm, located in Butler County, Kansas. This success led Empire District to sign a second power agreement with Horizon Wind Energy, breaking ground on the 201-megawatt Meridian Way Wind Farm in April 2008.

Missouri regulators are currently exploring ways to implement a state law requiring electric utilities to use more renewable energy. So Joplin and Empire District's forward-thinking approach to wind energy development positions the area well ahead of the curve—and that bodes well for enterprising businesses looking for a similar edge.

Nebraska's largest power plant, Gerald Gentleman Station, consists of two coal-fired generating units, which together have the capability to produce 1,365 megawatts of power. NPPD built a second rail spur to the plant in 1994 so coal can be shipped directly from UP or BNSF railroad lines.

state, and regional initiatives also promote more use of solar, wind, methane, and biomass.

Companies are increasingly sensitive to energy efficiency, says Kearney, and the utility's customers are participating in programs or initiating their own energy efficiency projects.

One of the first projects companies tackle is usually lighting. Ameren and most utilities will act as a "trusted energy advisor to their customers," says Kearney. The power utility doesn't usually do the consulting or implementation, but will support a customer's effort and provide as much guidance and input as possible. Companies are also much more aware of Department of Energy grants and other programs.

Customer Incentives

Echoing that sentiment, Nebraska Public Power District (NPPD) cites its EnergyWise incentive program, which pays customers to upgrade various technologies such as lighting, HVAC, variable frequency drives, and motors.

"These incentives are structured to reduce the upgrade's capital outlay while saving the business energy and dollars," says Dennis Hall, economic development manager, NPPD.

In addition, incentives are available for reducing peak usage. For example, NPPD offers a net metering program that awards a rate benefit to customers who curtail usage during peak summer energy periods. In 2007, load management netted NPPD on-peak capacity savings of more than 760 MW.

Renewing for the Future

Comparisons and overall growth in usage are difficult to estimate in light of reduced demand for electricity during the economic downturn. Some utilities are not adding dramatically to their baseload capacity, but that doesn't mean they aren't building for the future. Some areas for expansion require careful attention. Renewables such as solar, wind, and waste-to-energy alternatives often require adjustments in infrastructure, including power distribution networks.

NPPD operates an asset management program that addresses refurbishments and replacements, as well as additions to its system, including a new 80-mile, 345 kV transmission line between Columbus and Lincoln, Neb. The $140-million project includes substation construction and expansion, filling a gap in the regional high-voltage transmission grid and strengthening the electric system, says Hall. During the last five years, NPPD has invested approximately $360 million in transmission system upgrades.

On the controversial side of new energy sources, the federal government is supporting nuclear power. The Nuclear Regulatory Commission (NRC) is focusing on standardized design and has combined construction and licensing procedures to streamline the process of bringing more nuclear capacity online.

One example is Nebraska Public Power District, which has made major improvements to its Cooper Nuclear Station. "If state or federal regulations force NPPD to use less coal to produce electricity in the future, Cooper Nuclear Station will become an even more important part of our generation mix," Hall says.

NPPD is making significant investments to ensure the 36-year-old plant can operate safely and reliably for the next 20 years. In the past four years, NPPD authorized $350 million for capital projects at the station.

Nebraska was an early user of nuclear power. Construction of what is now NPPD's Sheldon Station began in 1958. Initially, it was a combined nuclear and conventional energy facility that included the 75,000-kilowatt Hallam Nuclear Power Facility, built as an experimental plant for the former Atomic Energy Commission (AEC).

The AEC (now the Nuclear Regulatory Commission) gained the information it needed from the facility's operation and decommissioned the nuclear part of the plant. Along with the 30-year-old Gerald Gentleman Station, NPPD's capital projects from 2006 to 2010 have totaled $150 million.

At the end of 2009, 21 percent of NPPD customer energy was provided by nuclear generation. Hydroelectric and wind energy provided another five percent, and NPPD has a goal of generating 10 percent of its energy supply from renewable resources by 2020.

As a member of an International Economic Development Council public policy subcommittee on infrastructure, Ameren often assesses whether it is making wise infrastructure decisions. "Customers and prospective customers are looking at the blend of resources and infrastructure power companies employ," Kearney suggests.

Part of that is a view to future rate stability, but it is also about reliability. In an increasingly deregulated industry, many power companies are delivery service utilities–"the wires and the pipes," says Kearney.

That means end users may have alternatives available for the purchase of their electricity. "Alternatives spell risk reduction, whether it's with logistics services or power utilities," he adds.

"The challenge for the future is alignment and collaboration with our partners, because demands change, markets change, and players change," Kearney notes. "If utility companies do not look for new approaches to leverage our resources for the greater benefit of all players, then we've missed the message of this economic downturn." ■

ACF 2010 AMSTERDAM

25th International
Air Cargo Forum & Exposition

November 2-4, 2010
Amsterdam, Netherlands

The world of air cargo is coming to Amsterdam

Over 5,000 delegates and visitors, more than 200 exhibitors and a world of networking and new business opportunities – all in the space of three days at the 25th International Air Cargo Forum & Exposition in Amsterdam, November 2-4, 2010.

The one air cargo event in 2010 your business cannot afford to miss!

Supporting Organisations

- IATA
- FIATA
- EUROPEAN SHIPPERS' COUNCIL
- DUTCH SHIPPERS' COUNCIL

Speakers include

- SEABURY GROUP
- ROYAL PHILIPS ELECTRONICS
- EUROPEAN COMMISSION
- TSA
- TNT
- CEVA LOGISTICS
- BOEING
- RHENUS LOGISTICS
- PANALPINA
- WORLDWIDE FLIGHT SERVICES
- LUFTHANSA CARGO
- COOL CHAIN ASSOCIATION
- INCHEON AIRPORT CORP.
- ELIZABETH ARDEN

Breakout Sessions

- FORWARDERS' PERSPECTIVE
- AVIATION & CLIMATE CHANGE
- AIR CARGO SCREENING
- E-FREIGHT
- ROLE OF THE SHIPPER
- FUTURE OF CARGO HANDLING
- COOL CHAIN CHALLENGE
- ECONOMIC OUTLOOK

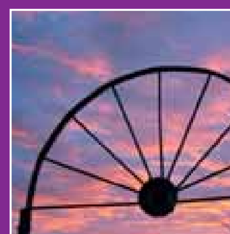
Air Logistics Network

- **Pre-Schedule Meetings in the Online Community**
  - Search for people interested in specific topics
  - create a contact list of people that you want to follow up with
  - More contacts with profile matching capability.

Info at www.tiaca.org or call +1 786 265 7011

Hosted by Amsterdam Airport Schiphol

Organized by TIACA



SPECIAL ADVERTISING SUPPLEMENT

Ports-to-Plains Alliance Corridor

North America's Energy and Agricultural Heartland

Spanning the U.S. heartland and reaching into Canada and Mexico, the Ports-to-Plains Alliance corridor links North America's vital agricultural and industrial communities.

Pulsing through the heart of rural North America, the Ports-to-Plains Alliance corridor represents an economic lifeline from the U.S.-Mexico border to the northern border with Canada.

Counties, cities, and towns located within the corridor – which comprises the states of Colorado, Kansas, Montana, Nebraska, New Mexico, Oklahoma, North Dakota, South Dakota, Texas, and Wyoming – depend on the region's transportation infrastructure for both access to and export of a vast array of goods and services.

"Connectivity is not a matter of convenience to us; it is an economic necessity," explains Michael Reeves, president of the Ports-to-Plains Alliance, a bipartisan nonprofit organization that promotes policy, trade, and investment priorities for the region. "The population has declined significantly throughout the Great Plains, and this region has not seen much job creation recently. If our economy is going to be successful, we need to grow and upgrade our infrastructure."

"As North America's energy and agricultural corridor, Ports-to-Plains highways are critical to growing opportunities in the energy and agricultural sectors," adds Joe Kiely, the Alliance's vice president. "Safely moving freight – including the oversize and large combination vehicles common to our industries here – alongside local and tourist traffic is critical to the economies of our member communities."

Bringing jobs and opportunities to the Ports-to-Plains region is another focus of the Alliance's mission. The group works closely with area economic development organizations, chambers of commerce, corporations, and expressway organizations to lobby for transportation, infrastructure, and economic development projects critical to the economic prospects of the Ports-to-Plains region.

"Individually, it is easy for the voices of our rural cities and communities to be lost. We have less representation in Congress and smaller, less-populated areas, but the Alliance is working to make sure that we're not forgotten when decisions affecting our region are made at state and federal levels," says Duffy Hinkle, Alliance vice president.

ACTING AS ADVOCATES

Currently, the Alliance is working to ensure specific policies are included in the next transportation reauthorization bill – the Safe, Accountable, Flexible, Efficient Transportation Equity Act (SAFETEA-LU), which authorizes federal surface transportation programs for highways, highway safety, and transit. The Alliance wants the new bill to include a focus on rural transportation

The Corridor's Reach

Covering more than 2,300 miles, the Ports-to-Plains Alliance corridor spans from Coahuila, Mexico, to Alberta, Canada, and includes 10 U.S. states, one Mexican state, and one Canadian province.

efficiency, rural connectivity, safety, and mobility; as well as border issues and infrastructure in border towns.

To date, the Alliance has worked with state departments of transportation and the federal government to make more than $1 billion in infrastructure improvements. Current construction projects totaling more than $192 million are underway in Texas, Oklahoma, New Mexico, Colorado, Nebraska, South Dakota, North Dakota, and Montana.

That advocacy effort is a large part of what draws members to the Ports-to-Plains Alliance. "Having the Alliance speak for the entire state or corridor is so much more powerful than a single county trying to do it individually," says Tricia Allen, vice president of Colorado's Adams County Economic Development, one of the Alliance's earliest supporters. Adams County supports the Ports-to-Plains Alliance transportation initiatives for a variety of reasons, including improved infrastructure for logistics activities and to ease current congestion.

ADAMS COUNTY ASSETS: The local economy in Adams County gets a boost from companies such as (*left to right*) the bioscience organizations located in the Fitzsimons Life Science District, communications leader Avaya, and General Motors.

"Interstates 25, 70, 76, and 85 run through Adams County, along with Highways 200 and 7, so transportation infrastructure is a key issue for us," Allen explains.

The County's solid highway network – along with its proximity to the Denver metro area; access to Front Range Airport, a general aviation airport; and rail service from both Union Pacific and BNSF – has helped make the region a hotbed of logistics and transportation activity. Adams County has identified logistics and transportation as a target cluster for economic development activities and has attracted a number of transportation businesses including Navajo, Voyager Express, and YRC Transportation. In addition, FedEx Freight and FedEx Ground both completed major expansion projects in Commerce City, Colo. The FedEx Freight facility is the company's second-largest distribution center in the western United States.

Adams County's assets also lured photovoltaic film manufacturer Ascent Solar to the region recently. The company is planning a major expansion in Thornton, Colo., expecting to double its current 250-employee workforce within the next two years. Rocky Mountain Natural Meats, which supplies bison to Whole Foods and the Ted's Montana Grill restaurant chain, is also located in the county.

In addition, Adams County boasts a strong warehousing district along the I-70 corridor, which includes facilities such as the Majestic Commerce Center – a 1,000-acre industrial complex that is home to warehousing facilities for L'Oreal and Atkins Neutraceuticals – and ProLogis Park 70, where General Motors and Furniture Row maintain distribution centers. "These companies look to Adams County because of our pro-business climate," Allen says.

Another Ports-to-Plains community that prides itself on supporting business is Levelland, Texas, which offers business grant incentives, tax abatements, and a local banking network to companies looking to locate or expand there.

"Our workforce pool of more than 200,000; access to a global transportation network via road and rail; low electric utility rates; inexpensive land; and aggressive pro-business environment make Levelland a great place to locate," says Dave Quinn, executive director of the Levelland Economic Development Corp.

Situated 30 minutes west of I-27 on U.S. Highway 385 in close proximity to State Highway 114 – a four-lane divided road – Levelland offers an ideal road transportation network to a variety of businesses in the oil and gas operations, agriculture, education, and medical services industries.

Levelland also boasts excellent rail access. The city is installing more than 21,000 track feet of rail infrastructure connected to both BNSF and Union Pacific via the West Texas and Lubbock Railroad. It is also home to the Levelland Industrial Rail Park (LIRP), a 240-acre rail-served industrial park. Tenants include Independent Electric, which is expanding into a new $700,000 office/training/warehouse facility, and Tex-Rail Commodities, which operates a new $3-million facility in LIRP.

Levelland's location in the Ports-to-Plains corridor puts the city in a very good position from a logistics standpoint, Quinn adds. Not surprisingly, several trucking companies serving the area's oil and gas and agricultural businesses are headquartered in Levelland, including Musslewhite Trucking, Pate Trucking, and Titan Trucking.

"Levelland also has large amounts of available land that can be used as lay down areas for wind farm and distribution line construction," says Quinn, noting that the city hopes to capitalize on wind power, biofuels, and other innovative industries driving America's economic recovery.

"Being part of an aggressive advocacy group like the Ports-to-Plains Alliance gives Levelland another partner in progress," Quinn says. "We can leverage our investments in infrastructure by partnering with other communities located along the corridor and create a brighter future for Levelland citizens."

QUICK DRAW: Metropolitan Amarillo, Texas, offers services and shopping that bring residents from neighboring states to town via the area's convenient highway access.

BRINGING COMMUNITIES TOGETHER

This shared mindset echoes across the Ports-to-Plains region, where similar challenges, industries, and opportunities bring the people and economies of the vast corridor together. "The Alliance is advocating for this transportation pipeline that reaches north and south to new and expanding domestic and international markets so that we can bring new opportunities to our communities," Kiely explains.

One of those member communities is Lubbock, Texas, the Ports-to-Plains Alliance's birthplace and headquarters. The continued success of the city's agriculture- and energy-based economy rests on the transportation initiatives that the Alliance is tackling, says Marc Farmer, director of business recruitment for the Lubbock Economic Development Alliance.

"Completing the Ports-to-Plains corridor will lower transportation costs for our agriculture and energy producers and all our businesses, making them more competitive," he explains. "Being located along a major trade corridor also makes Lubbock a more attractive location for businesses."

The city is already a draw for distribution and manufacturing firms, thanks to its central U.S. location and road access for serving both the East and West Coasts, as well as markets north and south of the city. "We're located on I-27, and Highways 114, 84, 87, 62, and 82 all come through Lubbock, so businesses here are well-positioned to get anywhere they need to go," Farmer says.

The Lubbock Economic Development Alliance has invested $20 million in infrastructure for its Lubbock Business Park and Lubbock Rail Port, two new industrial facilities located on I-27. Companies including O'Reilly Auto Parts, Verizon Wireless, Monsanto, WestTX Packaging, and Budweiser distributor Standard

Sales Company have all decided to locate there. Lubbock is also home to Texas Tech University, the United Supermarkets grocery chain, Covenant Health Systems, and AT&T – all of which are major employers.

The city is also a burgeoning spot for wind farm development, and the location for X-FAB, one of two wafer-chip foundries in the United States.

As the second-largest town west of I-35 – the area's 29-county regional population totals more than 600,000 – Lubbock is also a natural draw for retail, health care, and restaurant business. "Lubbock has always been known as the hub of the Plains – for distribution of goods, medical services, and education," Farmer explains. "Our spokes go out to all of West Texas, the Panhandle, and eastern New Mexico."

Making sure all the hubs and spokes in the Ports-to-Plains region are connected by reliable infrastructure is one of the Alliance's main goals. Because the region is a major commercial and industrial center – but one that is largely rural and, in some places, isolated and remote – the ability to distribute goods quickly and efficiently is crucial.

"We are producing goods that have to be moved out and exported to market," Reeves explains. "We need that transportation connection for our economies to operate."

CONNECTIVITY IS KEY

The main piece of the "transportation connection" puzzle is the Alliance's goal of upgrading numerous roadways in the region from two-lane thoroughfares to the four-lane divided highways that are needed to support major transportation and distribution efforts. A four-lane highway running the length of the corridor would improve the region's ability to attract business and commerce, and would help ease congestion on the roads that enable much of the region's current trade and transportation activity.

"The existing highways are inadequate to meet the region's – and nation's – current and future needs," explains Kiely. "To promote economic security and prosperity throughout America's energy and agricultural heartland, these high-priority corridors must be upgraded and modernized."

Buzz David, president and CEO of the Amarillo Economic Development Corporation in Amarillo, Texas, agrees. "Transportation access on the highway system is critical to our continued livelihood," David says. "We depend on big truck traffic, so the Ports-to-Plains corridor is an extremely important piece of infrastructure to our communities and to the region."

WINDY CITIES

Connectivity to points north, south, east, and west is crucial to Amarillo's position as a regional hub for transportation, distribution, and retail activity, as well as its role in the area's burgeoning alternative-energy industry. Amarillo's prowess as a retail center – the city boasts four Walmart Super Centers, two Lowe's, two Home Depots, and one Sam's Club store, and draws shoppers from as far away as New Mexico, Kansas, and Oklahoma – rests squarely on its highway infrastructure. The metro area is located on Interstate 40 at the intersection of Interstate 27, U.S. Highway 287, and U.S. Highway 87, making it a convenient access point from many cities and states.

Amarillo's prime location has also helped the city lure several manufacturers in the wind industry. "The wind industry is one of our major target areas," David says, noting two big wins recently: Zarges Tubesca, a German manufacturer of the ladders, lift systems, and platforms inside wind turbines and towers, is constructing an 80,000-square-foot plant in Amarillo's CenterPort Business Park, and turbine manufacturer Alstom Power Inc. is building a new turbine plant in Amarillo.

"Part of the reason they selected us was our connectivity and transportation access to the rest of the West and the wind corridor," David notes.

Improving transportation in the Ports-to-Plains corridor is crucial to Amarillo's continued growth in the wind industry, David says. Though the city has attracted wind components manufacturers, those components still need to be transported to the locations where they will be installed.

LOVING LUBBOCK: The big Texas sky stretches over downtown Lubbock, the second-largest town west of I-35.

"Sometimes the installation sites are within 100 miles, but sometimes components must be shipped into South or North Dakota or other locations along the Great Plains wind corridor," David explains. "Transportation access is key to this area's economic development."

Just north of Amarillo on U.S. Highway 287 sits Dumas, Texas, one of several other Ports-to-Plains communities finding success in the wind and renewable energy industry. The city is home to a new 50-megawatt Sunray wind farm, and Continental Carbon just completed a $24-million renewable energy project, bringing 17 new jobs to the city.

"We have only seen a hint of the opportunities the renewable energy industry brings to our region," says Mike Running, executive director of the Dumas Economic Development Corporation. "The Ports-to-Plains corridor will become a major player in the logistics and distribution of energy components and products, and even the energy itself. That means better opportunities and more jobs for rural communities like Dumas."

The new Wind and Renewable Energy Training Program at Amarillo College-Moore County Campus is one way Dumas is working to help create jobs and opportunities in the renewable energy business. The program helps train qualified wind technicians, and Dumas has partnered with the college to install a wind tower in its business park for training purposes.

"Additional plans include developing a Green Technology Center to bolster new ideas and provide hands-on training opportunities for students," Running explains.

In addition to renewable energy, Dumas boasts a strong number of companies in the oil and natural gas; distribution and trucking; aviation; and agricultural industries – including JBS Beef Processing, which recently completed a $209-million expansion and added 350 employees. These companies all benefit from Dumas' prime location just 40 miles north of I-40 and two hours east of I-25 and south of I-70. The city also provides quick and easy rail access through North West Rail and a 6,000-foot runway with available space at its aviation business park.

A new addition is the Dumas Business Success Center, a 16,000-square-foot, six-unit facility with dock-high loading. "The Center provides a great place for firms wanting to test the water in Dumas before making a major construction or purchase investment," Running explains.

TRADE BEYOND BORDERS

While the bulk of the Ports-to-Plains region lies in the United States, the corridor stretches through all three North American countries, making it vital for international trade. The region is home to a number of U.S. border towns and cross-border ports, including the 15th-busiest crossing, which links Sweetgrass, Mont., with the Province of Alberta, Canada, one of the Ports-to-Plains Alliance's newest members.

Like its neighbors on the U.S. side of the corridor, Alberta's economy is centered on oil, natural gas, alternative energy, manufacturing, and agriculture. Alberta's oil sands, in particular, provide a great economic opportunity for many counties in the Province, including Paintearth County. Paintearth's central location on Highway 36, which leads to the oil sands, makes the County well-situated for redistribution, logistics, and off-loading facilities, explains Larry Davidson, economic development officer for the Paintearth Economic Partnership Society (PEPS).

"Highway 36 is Alberta's 'high-load' highway, which means there are no height, weight, or width restrictions for truck transportation," Davidson says. "All the goods coming out of Texas going to the oil sands come right by our doorstep."

Capitalizing on that location is the Crowfoot Crossing Industrial Park, adjacent to the Town of Castor, which is perched at the junction of Highway 36 and Highway 12, an east-west route that runs from Red Deer to Saskatchewan. The park includes 77 acres available for both commercial and light industrial businesses.

Paintearth is also well-situated for other energy plays, including biofuel and coal opportunities. And the largest wind farm in Alberta is slated for installation between the Paintearth County towns of Halkirk and Castor. The first phase of the project, scheduled to begin in fall 2010, will include 83 1.8-megawatt wind turbines. When both phases are completed in fall 2011, the project will provide 300 megawatts of green energy. In addition, PEPS owns all of the county's formerly used rail lands and is using the space to "create new industrial and commercial opportunities," Davidson says.

When it comes to opportunities, being part of the global linkage the Ports-to-Plains corridor offers is a booster for both Paintearth and the Province of Alberta.

"As Canada's largest trading partner, the United States ensures opportunities for businesses in Canada to export their goods and services, and for investment from American companies looking to expand their own markets," Davidson explains. "It's a good partnership."

That two-way street also extends south to the U.S.-Mexico border, where cross-border trade and commerce flourish. The

FAVORITE HANGOUTS: M&B Hangers operates facilities in both the Mexican state of Coahuila and across the border in Maverick County, Texas.

THE PORTS-TO-PLAINS ALLIANCE CORRIDOR

By the Numbers

- Comprises 2,333 miles of highway, **14% of total U.S. GDP ($1.7 trillion)**, and 38.5 million citizens
- Generates **$166.7 billion in trade with Canada and Mexico**, nearly 20% of total U.S.-North America trade
- Includes **7 of the top 10 U.S. states for installed and wind energy potential**, generating more than 5,185 megawatts, nearly 45% of the U.S. total
- Includes **6 of the top 10 oil-producing states** and 5 of the top 6 natural-gas producing states
- Home to nearly **25% of U.S. ethanol refining capacity**, with 33 existing refineries
- Includes **6 of the top 10 farm states**, producing $44.3 billion of agricultural goods, 25% of the U.S. total

Source: Ports-to-Plains Alliance

growing number of companies shifting manufacturing from Asia to Mexico to take advantage of reduced transportation costs has increased Mexico's role in global trade. As a result, U.S. cities in close proximity to the maquiladora manufacturing plants are in a key position as the gateway to trade between the two countries.

ALL EYES ON MEXICO

The Ports-to-Plains Alliance has recently focused its energy on building partnerships in Mexico. Mexico's Querétaro State, near Mexico City, is interested in Ports-to-Plains activities, and the State of Coahuila, located along a 318-mile stretch of the border adjacent to Texas, joined the Alliance.

"The city of Torreon, Coahuila, is a major producer of textiles and blue jeans, and our corridor runs through America's cotton-producing region in Texas, creating a good synergy," Reeves explains.

"Also, the industries most prevalent in our corridor – agriculture and energy – involve big equipment such as wind towers and drilling equipment. A lot of that heavy equipment can be strategically located in Mexico, where labor rates are lower, and still moved easily throughout the corridor," Reeves adds. "Transportation routes through our border with Mexico are very important to the entire region."

One area well aware of Mexico's importance is Maverick County, whose county seat, the City of Eagle Pass, Texas, is located on the U.S. border with the Mexican city of Piedras Negras. The Eagle Pass-Piedras Negras Metropolitan Area is one of six binational metropolitan areas along the U.S.-Mexico border.

"The Eagle Pass Port of Entry is the most important entry port for U.S. trade with the State of Coahuila," says Raul Perez, executive director of the Maverick County Development Corporation. "This is the starting point for most of the commercial, industrial, and retail goods bound for Coahuila."

Directly across the border from Maverick County, Piedras Negras boasts six industrial parks and 28 maquiladoras

PICTURE PAINTEARTH: **In addition to proximity to Alberta's oil sands, Paintearth County offers alternative energy resources such as wind power.**

conducting manufacturing for industries such as automotive and electronics. Many companies using the plants are Fortune 500 firms, and most have situated their logistics and distribution activities in Maverick County.

"Companies including Takata, M&B Hangers, Littelfuse, and Neese Industries – a raincoat manufacturer based in Louisiana – use Eagle Pass to handle warehousing and distribution for their plants in Mexico," says Perez.

"And, we're going to be the gateway to one of the largest brewery plants in Central and South America," says Perez of the $500-million plant that Groupo Modelo, makers of Corona beer, completed in May 2010. The plant is located in Nava, Coahuila, about 20 miles from the border cities.

Thanks to its infrastructure, Maverick County is well appointed to support the logistics and distribution of goods manufactured in Mexico. It is home to two international bridges – one of which is the key commercial route with minimum crossing time into Mexico. The state of Texas is currently investing in infrastructure upgrades to connect this bridge, via Outer Loop 480, to U.S. Highway 277, which will help alleviate congestion.

The county also sits on Texas Highway 57, which offers convenient access all the way to Mexico City in the south, and from Maverick County north to San Antonio, Austin, and Dallas.

"We also have the largest rail crossing in Texas going through our Eagle Pass Port of Entry to Piedras Negras," says Perez. "For the past three months, we have surpassed the Laredo crossing, and we are very proud." Rail service is provided by Union Pacific and FerroMex in Mexico.

WHERE TECHNOLOGY MEETS TRADE

While the U.S.-Mexico border crossings are important centers of global trade and commerce, they sometimes fall prey to congestion and delays, particularly as supply chain security measures have increased. Not so at the Del Rio Port of Entry, which links the city of Del Rio, Texas, with Ciudad Acuña, its sister city in Mexico.

"Our new, $29-million state-of-the-art Port of Entry provides technology-based support to expedite customs processing and cut crossing times for commercial and vehicular traffic to between 30 and 45 minutes," explains Fabio E. Angell, economic development director for the City of Del Rio. "That is opposed to the 10 to 15 hours it takes elsewhere for commercial traffic to cross."

In addition to speedy border crossings, Del Rio boosts the manufacturing industry in Ciudad Acuña with logistics support and a highly skilled workforce in the automotive, small manufacturing, plastics, and packaging industries. Also, the presence in Del Rio of the Laughlin Air Force Base and a number of federal agencies, including the FBI, Drug Enforcement Administration, and U.S. Customs and Border Protection, means Del Rio also boasts nearly 5,000 well-trained professionals in specialties such as communications, planning, engineering, operations, aeronautics, maintenance, and data processing.

"These civilian workers, upon retirement or discharge, represent an asset to Del Rio in expanding local industry and recruiting new companies," Angell notes.

But the greatest benefit Del Rio offers to companies and communities located along the Ports-to-Plains corridor is its example as an International Metropolitan Area (IMA). Del Rio and Ciudad Acuña operate as an international dual-city economy, exchanging products and services across the Rio Grande/Rio Bravo.

"We are glued together by a bicultural, bilingual class of business professionals, merchants, and specialized workers who travel back and forth every day as if within a single city," Angell explains.

"We serve as a key link between the English-speaking North and Spanish-speaking South within NAFTA and beyond," Angell adds. "Expanding the Ports-to-Plains corridor into Coahuila is a significant step and our IMA was instrumental in bringing this to fruition."

Serving as a key link between different companies, communities, and currencies is also the goal of the Ports-to-Plains Alliance as a whole. With transportation and infrastructure as its platform, the Alliance seeks to help the entire Ports-to-Plains region in the United States and beyond, improving its prospects for economic prosperity.

"Strengthening the transportation network in the Ports-to-Plains corridor is beneficial for developing manufacturing, logistics, and distribution opportunities, and expanding into markets in Canada and Mexico," says Joe Kiely. "The ability to do that will add key value for the communities and businesses of the Ports-to-Plains region."

For information on featuring your region in an Economic Development Supplement, contact James O. Armstrong at 815-334-9945 or jim@inboundlogistics.com.

FORKLIFT
2010 BUYER'S GUIDE
INBOUND LOGISTICS

Add some muscle to your warehouse and distribution operations with the leanest, meanest lift trucks on the market. You'll find them all here, in *Inbound Logistics'* annual Forklift Buyer's Guide. The manufacturers featured in this special supplement offer the safest, best engineered, most ergonomic, efficient, and reliable forklifts available.

To request more information from the companies profiled, pick up the phone or navigate to their Web sites. Or, let *Inbound Logistics* do the work for you with our free RFP service. Log on to www.inboundlogistics.com/forklift to get answers to your lift truck questions.

Landoll
800-428-5655
www.landoll.com/mhp

▲ Bendi B45AC-HL

CAPACITY: 2,250 lbs. to 36′; 4,000 lbs. to 20′

POWER SOURCE: Electric

MAXIMUM LIFT HEIGHT: 39′

TRAVEL SPEED: 6.5 mph loaded; 7 mph unloaded

APPLICATION: Can work in aisles as narrow as 6.5 feet.

This four-wheel articulating forklift maximizes cube utilization, productivity, operator comfort, and safety. It features heavy-duty dual rear-wheel planetary drives, powerful drive and hydraulic motors, forward and rearward mast tilt, and hydraulic power steering. With 100-percent AC power, it is energy efficient and economical to maintain.

Drexel SLT30 and SLT35AC

CAPACITY: 3,000 to 3,500 lbs.

POWER SOURCE: Electric

MAXIMUM LIFT HEIGHT: 26′

TRAVEL SPEED: 6 mph loaded; 7 mph unloaded

APPLICATION: For use in a range of settings, including loading docks, inside trailers and warehouses, and especially suited to navigating very narrow aisles.

When it comes to maximizing your storage space, nothing else measures up to the Landoll Drexel SwingMast lift trucks. Their unique design enables drivers to turn only the mast assembly, not the entire truck. They operate in aisles as narrow as 4.5 feet, allowing you to store more than ever. The versatile Drexel SwingMast gives you four trucks in one, performing like a conventional counterbalanced truck, a reach truck, a sideloader, and a turret truck.

Bendi B3/30AC

CAPACITY: 3,000 lbs.

POWER SOURCE: Electric

MAXIMUM LIFT HEIGHT: 30′

TRAVEL SPEED: 5.5 mph loaded; 6 mph unloaded

APPLICATION: Designed with a slim mast and compact front end for easy stacking in narrow aisles. Suitable for use on indoor and outdoor paved surfaces.

Faster performance, improved control, and greater power efficiency are the main features of this new three-wheel model. All the maintenance benefits of Landoll's existing four-wheel AC models are now available on this unit. The Bendi B3/30AC can stack in 5.5-foot aisles, and offers 200-degree front-end articulation for easy load insertion and retrieval.

Raymond Corp.

607-656-2311
www.raymondcorp.com

iBattery Module

The iWarehouse fleet optimization system from Raymond now features the iBattery module to help maintain lift truck battery fleets. The module enables data-driven battery management by automatically notifying warehouse managers of key battery statistics, such as charge/discharge cycles, high and low temperatures, and low battery water levels–prolonging the life of the battery to its full lifecycle, resulting in increased uptime and reduced cost.

PowerSteer Option

APPLICATIONS: Provides consistent, responsive steering in dock, horizontal transport, and low-level order-picking applications.

Raymond offers a PowerSteer option on its Model 8400 end rider pallet truck to significantly reduce the effort required to maneuver a pallet truck, resulting in increased operator comfort over the course of a shift. Speed-sensitive steering gives operators steer assistance where they need it most–at slow speeds.

◀ Model 4250

CAPACITY: 3,000 to 5,000 lbs.

POWER SOURCE: Battery

TRAVEL SPEED: 8 mph

APPLICATIONS: Suitable for loading and unloading trailers and railcars; transporting materials from dock to storage; operating in refrigerated and cold storage; and placing loads in multi-racking methods, including push-back, flow, and drive-in.

The Model 4250 stand-up counterbalanced lift trucks offer greater visibility for the operator; increased maneuverability provided by agile steering, a shorter head length, and dual steer tires; and the ComfortStance suspension for operator comfort. Available in load capacities from 3,000 pounds to 5,000 pounds, the Model 4250 provides a smooth ride from dock to stock.

Yale
800-233-YALE
www.yale.com

▲ ERP030-040VF

CAPACITY: 3,000 to 4,000 lbs.

WIDTH: 48"

POWER SOURCE: Electric

TIRE TYPE: Pneumatic shaped solid

TRAVEL SPEED: 12 mph

POWER STEERING: Standard

APPLICATIONS: A multi-purpose truck for loading and unloading, dock operations, and high-speed transport.

The ERP030-040VF features independent, front-wheel motors that rotate drive tires in opposite directions, balancing the turn center over them. This electric rider lift truck is ideal for warehouse applications and has exceptional maneuverability due to zero turn radius steer axles and dual AC drive motors.

◀ ERP030-040VT

CAPACITY: 3,000 to 4,000 lbs.

WIDTH: 48"

POWER SOURCE: Electric

TIRE TYPE: Pneumatic shaped solid

TRAVEL SPEED: 12 mph

POWER STEERING: Standard

APPLICATIONS: Designed for close-quarters load handling in warehouses and trailers.

The sit-down three-wheel ERP030-040VT electric rider lift truck is ideal for warehouse applications. Its maneuverability is due to zero-turn radius steer axles and dual AC drive motors. Brushless AC technology motors provide powerful acceleration and faster travel speeds while supporting quick lift and lower speed handling.

▼ ERC045-070VG

CAPACITY: 4,500 to 7,000 lbs.

WIDTH: 48"

POWER SOURCE: Electric

TIRE TYPE: Cushion

TRAVEL SPEED: 12 mph

POWER STEERING: Standard

APPLICATIONS: Suitable for use indoors and outdoors, in a wide variety of warehousing, dock, and manufacturing environments.

This sit-down four-wheel electric rider truck is designed with a focus on human engineering to minimize operator fatigue. Its ergonomic advantages include 20 percent greater floor space, available seat side hydraulic controls with thumb-actuated direction selection, and a tilt/telescoping steer column.


Yale
Internal combustion
truck performance.
No emissions.
10YLE2565

DC Solutions

by Mike Breslin

Brrr! It's Cold in There!

When picking orders of ice cream and frozen desserts stored at 20 degrees below zero, Dreyer's Edy's Grand Ice Cream warehouse workers did not want to take off their gloves, mess with paper and pencil, or tie up one hand holding a scanner.

Get the scoop on a voice-enabled picking system that keeps Dreyer's Edy's workers productive and equipment functioning in sub-zero environments.

That's just one reason why the ice cream company installed a voice-enabled picking system in its warehouse 10 years ago. But that was just the beginning of a success story that led to distribution center productivity increases ranging from 15 percent to 25 percent, and mispick rates so low they are barely worth mentioning.

FLAVOR-FILLED LEGACY

William Dreyer began his love affair with ice cream in 1906, when, as a galley boy, he was assigned the job of making a frozen dessert to help his German shipmates celebrate their arrival in America. After a brief career making ice cream in New York City, he relocated to California.

In 1928, Dreyer found the ideal partner in Joseph Edy, a renowned candy maker. They combined their talents and opened a business on Grand Avenue in Oakland, Calif.–an address honored in the current-day company's brand names. Their ice cream and frozen desserts have delighted generations ever since, and are now among the best-selling brands in the country.

The company merged with Nestle Ice Cream Company in 2003 to form Dreyer's Grand Ice Cream Holdings Inc., and in 2006, Dreyer's became a wholly owned subsidiary of Nestle. Brands currently manufactured or distributed in the United States include Grand, Slow Churned, Dibs, Haagen-Daz, Drumstick, Toll House, Nestle Carnation, Nestle Push-Up, Frosty Paws, Eskimo Pie, and The Skinny Cow. Dreyer's is marketed primarily in the West and Edy's in the East.

After the merger, national distribution grew more complex–involving many brands, flavors, sizes, and some exports–so Dreyer's Edy's began shopping for a warehouse management system (WMS) with the speed and responsiveness to meet the needs

CONTINUED FROM PAGE 81

of demanding customers, from mom-and-pop stores to giant food chains.

When Dreyer's Edy's was reporting approximately $1 billion in annual sales, it installed a voice-picking system from Pittsburgh, Pa.-based Vocollect – which specializes in voice solutions for mobile workers in warehouse and distribution center operations – in two facilities. The technology expanded with the company, and has since been installed in 12 facilities, helping Dreyer's Edy's reach $2 billion in sales and become a Nestle subsidiary. Recently, the company acquired Kraft Pizza, which doubled its size and volume.

"We will be adding the Vocollect system to all locations that do not have voice systems already in place," says Eric Stephens, Dreyer's Edy's senior national warehouse manager.

Vocollect's Talkman wireless computers (*below*) attach to a worker's belt and plug into headsets (*above*), which allow Dreyer's Edy's workers to hear automated work instructions in the refrigerated warehouse.

VOICE-DIRECTED WORKFLOW

Voice-enabled warehouse operations are powerful, but the process is simple. Via a wireless network, order assignments are transmitted from the WMS to a worker's small, belt-mounted computer connected either by a wire or wirelessly to a headset.

Digital work orders are converted into a series of clear, simple voice commands usually limited to a vocabulary of 50 words. Workers hear commands directing them to an aisle, section, and slot location. Once there, workers confirm arrival at the location. After completing a task, such as a pick, workers speak a confirmation that is translated into data back to the WMS. The WMS issues the next assignment and the process continues.

Benefits are significant to both management and order selectors. Managers can organize orders to create more efficient workflows, and easily reorganize them to meet change requests or pressing schedules. Workers become more productive because they have both hands free to work and they interact in the most natural, direct way: through voice. They can focus more intently on their tasks, and are not distracted by carrying a clipboard or scanner, which forces them to continually look up and back down to the device.

Less distraction improves productivity and situational awareness. It also improves safety. Even though they are wearing a headset, workers can hear the ambient sounds of moving machinery and conduct normal conversations. While one ear is covered with an earphone, the other is always open and the headset allows workers to hear all sounds with both ears. The microphone also cancels out ambient sound when workers are speaking, and only records their voices.

"The worker computer has just four buttons: on and off, and plus or minus volume," explains Tony Nicolazzo, Vocollect's product line manager. "Workers don't use the buttons when they are picking orders, only when they turn the device on or off. There's nothing complex about it – delivered…confirmed…next order."

Work assignments for selection, replenishment, or putaway are generated by a host computer such as a WMS or enterprise resource planning (ERP) system and transmitted to worker devices via a wireless network.

"We use an AS400 system to handle our entire inventory," Stephens notes. "Sales are entered into the system and Vocollect sends the orders out to pick in a certain order. The system requires minimum training."

SUB-ZERO SOLUTION

Making and handling ice cream presents a severe production challenge to both man and machine. To maintain optimum flavor, 40 degrees below zero is required for the hardening process and 20 below zero for storage. Keeping workers productive while in these harsh environments, and limiting the time they are exposed, are key priorities. So is keeping electronic equipment from malfunctioning at sub-zero temperatures.

"The devices are tough," says Nicolazzo. "They can be dropped, sat on, or run over by a truck and they still work." The devices tolerate 40 degrees below zero as well as high heat, wet, humid, and heavy particulate air conditions.

"The problem with wearing gloves in a freezer is workers have to pull back the heavy insulated flap portion to use a scanner or write," says Stephens. "With voice, we can pick products faster and more efficiently. The system will not let workers move on unless they've picked the correct item."

VOICE OF EFFICIENCY

More than 100 Dreyer's Edy's workers currently use the Vocollect system, with wireless nodes installed throughout the facilities.

Each mobile device is equipped with an exclusive identification chip. Workers personalize their own speech recognition characteristics to accommodate speech patterns or accents. Initial voice conditioning takes about 20 to 30 minutes; however, the system automatically and continually refines and updates a worker's voice profile with "adaptive recognition," to reflect changing voice sounds such as a sore throat or cold.

Vocollect currently supports about 60 different speech solutions for more than 30 languages. Workers can speak in virtually any language or dialect.

"Training takes less than one day," says Stephens. "The trainee follows in the footsteps of a picker, using a system that lets them hear what's being said, or read a text display. After a few rounds, they are ready to go."

Dreyer's Edy's also uses a *VoiceConsole* application that allows speech or text monitoring from a remote management location.

DC SOFTWARE

While reliable equipment and wireless connections are important, the Vocollect *VoiceLink* integrated software drives Dreyer's Edy's distribution center operations. This platform allows voice applications to blend comfortably into the company's overall IT system. It is the software bridge between the AS400 system and the workforce.

VoiceLink hosts comprehensive data regarding virtually every aspect of distribution operations, such as inventory, financials, locations, selections, putaways, and work assignments. The system coordinates work assignments and exceptions, converts data into speech, and sends picking order information to a worker. As tasks are confirmed, the software provides progress and exception reports, and updates the host files.

Because *VoiceLink* offers thousands of selectable configurations and template options, installation is quick and avoids heavy customization. A partnering agreement provides for ongoing updates and consultation. According to Dreyer's Edy's management, the system has been easily scalable as the company expanded distribution operations.

"While *VoiceLink* is the software we put between Dreyer's Edy's supply chain system and the worker, another product called *VoiceDirect* goes straight from the WMS to the worker," says Nicolazzo. "*VoiceLink* is the middleware solution; *VoiceDirect* the direct solution."

CONTINUED FROM PAGE 83

While *VoiceLink* can reside either in a warehouse or centrally, and works with a company-developed or off-the-shelf host system, *Voice Direct* is compatible with the top 20 providers of warehouse management systems and new systems being developed by Microsoft and Oracle. *VoiceDirect* leverages leading open source technology and multi-tier architecture to increase flexibility and increase transmission speed to near-real time so system updates are virtually simultaneous.

MEASURED RESULTS

Either way, cumulative results of millisecond improvements in communications provide significant throughput improvements that can be objectively measured and reported.

"Voice picking systems are very popular in companies that offer incentive programs for job performance," notes Nicolazzo. "Unions like them because they enable incentives to be awarded in a fair and accurate way based on individual productivity."

VOICE OF THE FUTURE

What does the future hold for voice picking systems? "To date, voice has concentrated on picking and selection, but it is starting to expand to all the functions in the warehouse," says Nicolazzo. "Vocollect is expanding within the four walls of the warehouse and going outside–to other countries, languages, and emerging WMS vendors. An increasing number of companies are putting DCs in multiple countries with different workflows, requiring more multilingual sites."

Eric Stephens predicts a bright future for voice picking systems at Dreyer's Edy's. "Voice can do multiple activities as we move farther away from the scanner approach," he says. "For example, we are close to being voice-activated for picking at all our dry and frozen warehouse operations.

"In addition, we are looking at other Vocollect enhancements for various warehouse tasks, such as replenishment and cycle count, as well as for our pre-pick go-to-market strategy where we pick for multiple stores," Stephens adds. "And, we have a blueprint on using Vocollect for load-out. We should be up and rolling within the next nine months.

"At my former company, workers did not even know the name of the voice pick company or software we used," Stephens notes. "Here, our workers call it Vocollect."

Not only does Dreyer's Edy's Grand Ice Cream's voice picking system boost efficiency and reduce mispicks, it also keeps workers happy and productive.

That's the cherry on top. ■

INBRIEF | NEW SERVICES & SOLUTIONS

▲ **TRUCKING: Con-way Truckload**

Con-way Truckload converted 100 of its standard 53-foot truckload trailers to the DoubleStack system, an advanced cargo-loading and capacity management system. The racking system allows cargo loading on two separate, adjustable levels throughout the length of the trailer, accommodating shipments of different dimensions while more fully utilizing the trailer. In addition, custom-designed strapping mechanisms unique to the DoubleStack system enable shipments to be securely tied down to prevent movement during transit and provide added protection against damage.

www.con-way.com/doublestack 800-641-4747

AIR

Brussels Airlines Cargo

Brussels Airlines Cargo launched operations to four new destinations in West Africa. Four flights a week travel from Accra, Ghana, via Monrovia, Liberia, and two weekly flights serve Ouagadougou, Burkina Faso; Abidjan, Ivory Coast; Cotonou, Benin; and Lome, Togo. The new routes were made possible by the addition of a fifth Airbus A330-300 into the Brussels Airlines' fleet. The aircraft offers 10 tons of belly-hold cargo capacity.

company.brusselsairlines.com 516-740-5200

PARTNERSHIPS

UPS and JNE

UPS, through its Indonesian joint venture, entered an expanded alliance with local domestic courier PT Tiki Jalur Nugraha Eka Kurir (JNE) to extend pick-up and delivery service for international express packages throughout Indonesia. The alliance significantly expands Indonesian shippers' access to UPS's international express delivery service through JNE's more than 500 centers nationwide, helping Indonesian businesses outside Jakarta and Bali connect to the global UPS network.

www.ups.com 800-PICK-UPS

PeopleNet and ITS Compliance

A new partnership merges PeopleNet's GPS tracking and fuel purchase information with ITS's Paperless Fuel Tax Reporting System to automatically compute state fuel/mileage and highway-use taxes. The resulting data helps PeopleNet users meet regulatory compliance and recordkeeping requirements. In addition, the turnkey service provides comprehensive fleet tax analysis reporting, tax return preparation/submittal, data retention, and audit management.

www.peoplenetonline.com 888-346-3486

www.itscompliance.com 800-747-2556

FREIGHT FORWARDING

Phoenix International Freight Services

A new office in Papeete, Tahiti, offers regular air and ocean freight forwarding services to Tahitian importers from France, the United States, and China. A second new office, in Milan, Italy, serves Phoenix's expanding global network.

www.phoenixintl.com 800-959-9590

FedEx Trade Networks

FedEx Trade Networks opened new offices in Rotterdam, Netherlands, and Hamburg and Frankfurt, Germany, to provide international ocean and airfreight forwarding services.

www.ftn.fedex.com 800-GO-FEDEX

3PLs

Agility

Agility launched domestic marine shipping service between Melbourne and Tasmania. Three times a week, vessels transport containers across the Bass Strait to Tasmania's Bell Bay. Additionally, Agility and Tas Rail reached an agreement to launch an intermodal service from Bell Bay to Hobart, Tasmania's capital city, in the last quarter of 2010.

www.agilitylogistics.com 713-452-3500

Pilot Freight Services

A new station in Harlingen, Texas, near the U.S.-Mexico border, offers a range of services, including expedited shipping options and international import/export, via both air and ocean. The Harlingen station focuses primarily on the automotive, telecommunication, electronics, healthcare, and aerospace industries. To facilitate cross-border shipments through Harlingen and its four other Texas locations, Pilot placed staff in Monterrey, Mexico, and plans to add personnel in other Mexican cities.

www.pilotdelivers.com 800-HI-PILOT

TransGroup Worldwide Logistics

TransGroup-AUS, a new station in Austin, Texas, operates as a full-service freight forwarder and logistics provider. TransGroup offers extensive experience serving the film and entertainment sector.

www.transgroup.com 512-873-8060

Geodis Wilson

A new 84,000-square-foot facility in Atlanta, Ga., provides air freight, ocean freight, customs brokerage, domestic forwarding, warehousing and distribution, and other freight management solutions. The operation, a primary U.S. airfreight gateway to Europe, is a Certified Cargo

▲ DIMENSIONING EQUIPMENT: Quantronix

The CubiScan 150 automates parcel dimensioning and weighing in manifesting and shipping applications to help reduce chargebacks. Each unit has a USB port, two active serial communication ports, one serial printer port, and an Ethernet port, allowing for network connection and data transfer. The CubiScan 150 works with *Qbit* data-interface software, allowing it to integrate with shipping and warehouse management system software.

www.cubiscan.com 800-488-CUBE

CONTINUED FROM PAGE 87

Screening Facility possessing the equipment, security enhancements, and trained staff to provide shippers an option for screening freight in compliance with the Transportation Security Administration's 100-percent cargo screening mandate for all passenger aircraft.

www.geodiswilson.com	732-362-0600

TRUCKING EQUIPMENT: Demountable Concepts Inc.
The new ISO Container Adaptor Frame allows a standard 20-foot ISO container to be quickly secured and transported by straight-truck on a demountable flatbed truck body. Once the container is unloaded, the flatbed can be loaded with freight for the return trip.

www.demount.com	800-254-3643

SOFTWARE

Voxware

Enhancements to *Voxware 3* enable users to deploy and manage voice-picking applications from a single instance of software in a central data center, across many warehouses, even when warehouse layouts vary and voice workflows differ in each facility. The new version also includes functional enhancements to order-picking, replenishment, and putaway applications.

www.voxware.com	609-514-4100

LeanLogistics

The new version of *On-Demand TMS* includes enhancements to promote greater flexibility in reporting; improved language translation and globalization; updated LTL load rate uploads; and tools that allow shippers to create and print straight and master bills of lading.

www.leanlogistics.com	616-738-6400

Logility

Updates to *Logility Voyager Solutions* supply chain management software deliver improved visibility, enhanced optimization tools, new capabilities that enable buyers to develop ROI-based purchase plans, and a vendor portal that provides access to bill of lading and shipment inquiries.

www.logility.com	800-762-5207

TRUCKING

Zenith Freight Lines

Zenith Freight Lines expanded its fleet with the addition of 15 Freightliner Cascadia 72-inch raised-roof sleeper cabs. The extra capacity helps Zenith meet growing shipper demand for expedited service from California to ports and hubs throughout the United States.

www.zenithfreight.com	800-937-3876

Old Dominion Freight Line

A new security divider service provides guaranteed, locked-in security for special or uncrated freight loaded into the nose of a trailer. Freight is locked securely into place on the trailer at its origin and remains locked until it reaches its final destination. Upon delivery, an Old Dominion employee removes the lock in the presence of the consignee.

www.odfl.com	800-432-6335

EQUIPMENT POOLING

Container and Pooling Solutions

A new reusable shipping container service center in Norco, Calif., focuses on bulk liquid storage container rental, cleaning, and repair. The facility meets stringent food grade manufacturing standards to ensure shippers remain in compliance with all food and beverage industry guidelines.

www.usecaps.com	888-873-2277

Intelligent Global Pooling Systems (iGPS)

Pallet rental service iGPS created a new Global Customer Support and Logistics Center in Orlando, Fla., to consolidate its customer service and logistics personnel.

www.igps.net	800-884-0225

▲ **MATERIALS HANDLING: Dematic**

A new technology center located near Frankfurt, Germany, serves as a demonstration center for multiple integrated materials handling solutions designed to optimize logistics processes, increase productivity, and reduce operational costs. The featured solutions include: goods-to-person order selection, mixed case palletizing, automated storage buffers, and load sequencing.

www.dematic.us	877-725-7500

White Paper Digest

Industry experts amass supply chain management best practices and skill sets, and invest in new research and evaluation tools. Now you can benefit. *Inbound Logistics* has selected this collection of whitepapers that will give you a jump on important supply chain issues. For more information on any of these whitepapers, visit the Web sites listed below.

Saddle Creek Corporation

TITLE: ***2010 Distribution Network Trends Report***
LENGTH: *12 pages*
DOWNLOAD: *www.saddlecrk.com/distribution*
SUMMARY: Manufacturers, distributors, and retailers are making significant changes to their supply chain distribution networks as a result of recent economic challenges. According to an industry survey sponsored by Saddle Creek Corporation, the top three areas of change include transportation, warehouse size and/or configuration, and shipment consolidation. Learn more about these, and other emerging trends in the design and management of distribution networks, in the *2010 Distribution Network Trends Report*.

Management Dynamics

TITLE: ***Best Practices to Reduce International Freight Costs***
LENGTH: *7 pages*
DOWNLOAD: *http://tinyurl.com/mgmtdynamics*
SUMMARY: Struggling with out-of-control freight costs? You've got a TMS solution in place—but let's face it, those solutions are oriented to managing domestic transportation, and just aren't set up to handle the complexities of global containerized transportation and airfreight. Download Management Dynamics' whitepaper, *Best Practices to Reduce International Freight Costs*, to learn how you can benefit from contract automation to meet—even exceed—your aggressive budget commitments.

3PL Central

TITLE: ***7 "Must-Have" WMS Features for Today's 3PL***
LENGTH: *5 pages*
DOWNLOAD: *www.3plcentral.com/7musthave*
SUMMARY: Running a 3PL warehouse has very unique requirements—and ensuring your Warehouse Manager System (WMS) supports this demanding multi-customer, multi-user environment is crucial. *7 "Must-Have" WMS Features for Today's 3PL* details the key elements of a 3PL-focused WMS. Learn about the special features that will help you run your operation more efficiently and profitably.

WhitePaperDigest

Arigo

TITLE: ***Global Sourcing Made Easy at Staples Brands Group***
LENGTH: *5 pages*
DOWNLOAD: *www.arigo.com/register/reg_staples.php*
SUMMARY: Staples brand products are an important part of the company's commitment to offer quality products at a great value. Staples Brands Group operates a $3-billion private label business representing more than 23 percent of total sales. Learn how Staples Brands Group uses Strategic Global Sourcing to drive the lowest possible product costs with 99-percent on-time deliveries across global suppliers and customers. Download this whitepaper to learn how global sourcing is easy for Staples Brands Group.

Ryder

TITLE: ***ERP Implementations Streamlining Through Supply Chain Outsourcing***
LENGTH: *10 pages*
DOWNLOAD: *www.ryder.com/lms_erp.shtml*
SUMMARY: Outsourcing non-core activities, like logistics and warehouse management, reduces the complexity, risks, costs, and time to go-live of ERP systems. It's common for companies implementing all-encompassing ERP systems to have at least some problems, delays, and cost overruns. For The Hershey Company, Levi Strauss and Company, and Whirlpool, those problems had a dramatic effect on the companies' bottom lines. Outsourcing is a proven method to achieve world-class logistics and warehousing operations in a fraction of the time—and risk—of implementing an ERP system.

Infor

TITLE: ***Aberdeen Group Report: Third-Party Warehousing***
LENGTH: *10 pages*
DOWNLOAD: *http://go.infor.com/scm3pls/*
SUMMARY: How are third-party providers of warehousing services coping with current economic conditions? What capabilities do they have? What technologies do they rely on to ensure efficient operations and provide value to their clients? Download this free Aberdeen report to find out how top 3PLs are beating the biggest challenges in the industry.

HighJump Software

TITLE: ***9 Telltale Signs You Should Replace Your Current WMS***
LENGTH: *8 pages*
DOWNLOAD: *www.inboundlogistics.com/hj*
SUMMARY: Businesses decide to replace their existing WMS for a variety of reasons. But at the most elemental level, the question is whether your current system strengthens or hinders your ability to execute business strategies that will help you build competitive advantage, respond to constant change, and grow your business. This report identifies nine telltale signs you should consider replacing your WMS. As a result, you will be better able to analyze the operational factors influenced by your own WMS and gauge how an inflexible or legacy system could be constraining your company's growth and global reach.

CSCMPCONFERENCE.ORG

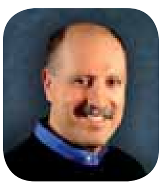
LEARN LEAD SUCCEED

ANNUAL GLOBAL CONFERENCE 2010

CSCMP | SAN DIEGO SEPTEMBER 26-29

Don't miss Keynote Speaker...

The Honorable Carlos M. Gutierrez, former Secretary of the US Department of Commerce
Former CEO and Chairman of the Board of Kellogg Company



...Tuesday Session Speakers...

Dr. Yossi Sheffi
Professor, Massachusetts Institute of Technology (MIT) (top)

Alberto Aleman Zubieta
Chief Executive Officer, Panama Canal Authority (bottom)

...and Closing Session Speaker

Jack Bacon, PhD, P.Eng.
NASA Scientist and Distinguished Futurist

YOU NEED TO BE HERE.

CSCMP's Annual Global Conference
September 26-29, 2010
San Diego, California USA

When you participate in CSCMP's Annual Global Conference, you become part of a global supply chain experience you won't have anywhere else.

Real issues. Real solutions. Real people. Real time.

You need to be here to advance your professional education, to get a front-row seat to the most current research and technological innovations, to make business connections, and to build your professional network.

New and only at CSCMP 2010! Explore 100,000 square feet of the most innovative exhibit showcasing the future of supply chain innovation—the Supply Chain of the Future. This is the world's largest exhibit where you can experience the technologies, processes, and solutions provided by high-performing supply chains.

The Supply Chain of the Future is a collaborative effort between the Council of Supply Chain Management Professionals (CSCMP), Distribution Business Management Association (DBMA), and Supply Chain Leaders in Action (SCLA).

You can't afford to miss CSCMP's Annual Global Conference 2010. Register by August 31 to SAVE $150 on regular registration rates. For more information or to register, visit cscmpconference.org.

CSCMP Council of Supply Chain Management Professionals

The World's Leading Source for the Supply Chain Profession.™

CSCMP.ORG

3PLs

Distribution Technology Inc. • www.distributiontechnology.com

For more than 30 years, Distribution Technology has built a tradition of logistics service excellence and reliability that meets and exceeds the needs of our customers. Through a combination of contract and public warehousing services, flexible freight management, sophisticated software technology, reverse logistics expertise, value-added packaging, and a dedicated organization, we provide you with a winning logistics supply chain partner. Consider us for your local, East Coast, or national coverage.

Saddle Creek Corporation
www.saddlecrk.com/distribution

Manufacturers, distributors and retailers are making significant changes to their supply chain distribution networks as a result of recent economic challenges. Learn more about emerging trends in the design and management of distribution networks in Saddle Creek's latest study, the *2010 Distribution Network Trends Report*.

Vantix Logistics • www.vantixlogistics.com

Vantix Logistics is a leading provider of supply chain logistics solutions. Its combination of comprehensive supply chain expertise; advanced, customizable technology, and superior carrier relationships enable Vantix to deliver smarter logistics solutions for virtually any industry.

Wagner Industries • www.wagnerindustries.com

Wagner Industries is not just a trucking company, warehousing company, or any other narrowly defined organization. We're a third-party logistical services company with multiple competencies to provide diverse services for our many customers across the United States. We provide contract trucking and transportation management, distribution centers, warehousing centers, packaging and assembly operations, and fulfillment. Plus, all services are provided with the highest standards of quality and the most technologically advanced information management systems. With our many areas of expertise, we can tailor a supply chain solution for your company to provide you with superb service while lowering your net cost.

IN THIS SECTION:
Economic Development–Forklifts

ECONOMIC DEVELOPMENT

Ameren Corporation • www.ameren.com

St. Louis-based Ameren Corporation is a Fortune 500 company dedicated to generating electricity, delivering electricity, and distributing natural gas to 3.2 million customers throughout Illinois, mid-Missouri, and the St. Louis Metropolitan Area. Ameren's professional development team serves as a complete source for business assistance services. For more information, visit Ameren's Web site: www.ameren.com

State of New Jersey • www.newjerseybusiness.gov

Whether you are a new business start-up, a growing company considering expanding in the state, a large corporation about to move or expand, or an international exporter seeking to increase distribution, New Jersey has key advantages to help your business grow: talented people, strategic location, quality of life, innovative businesses, and more. Situated at the epicenter of the nation's largest business corridor, New Jersey is where the world comes to do business. Find out more by visiting the Web site.

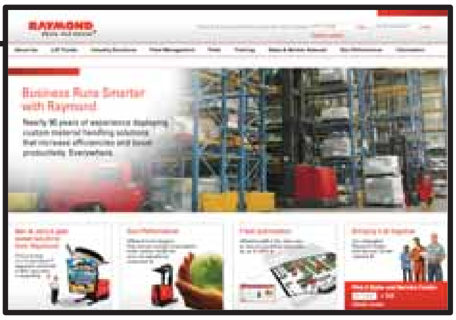
FORKLIFTS

Landoll Corporation • www.landoll.com

Landoll's Bendi and SwingMast lift trucks can solve your materials handling challenges through increased productivity and flexibility. The Bendi lift trucks provide the world's first 180-degree front-wheel-steered design, giving you unmatched maneuverability in narrow-aisle storage. The SwingMast design offers a 90-degree rotating mast front or side loader that can stack loads in 56-inch aisles. To see how these two narrow aisle lift trucks can make your operation more productive, view the specification sheets on the Web site.

The Raymond Corporation • www.raymondcorp.com

The Raymond Corporation is the North American leader in the design and manufacture of the best-built, best-performing, and most reliable electric lift trucks. Behind all Raymond products is its wealth of expertise and deep commitment to electric lift truck research and development. Raymond continuously focuses on improving customer operations and is dedicated to understanding your requirements. What features are important to your operation? How can we make your job easier? How can we make you more productive and efficient? This philosophy positions Raymond at the forefront of the lift truck industry, pioneering leading-edge concepts.



Forklifts–Supply Chain Management

Yale Materials Handling Corp. • http://northamerica.yale.com

For more than 80 years, Yale Materials Handling Corporation has marketed a full line of materials handling lift truck products and services, including electric, gas, LP-gas and diesel powered lift trucks; narrow aisle, very narrow aisle, and motorized hand trucks ranging in capacity from 2,000 to 36,000 pounds.

PORTS-TO-PLAINS ALLIANCE CORRIDOR

Levelland Economic Development Corp. • www.golevelland.com

The Levelland EDC's goal is to strengthen its local economy through creative and cooperative economic development initiatives. The Levelland EDC assists primary businesses–companies that primarily sell their products or services outside the local area, and do not compete directly with existing local businesses. In addition to offering aggressive business incentive programs for job creation–including cash grants, free land, interest-free loans, and a variety of others–the Levelland EDC works to build a positive brand for Levelland through innovative marketing, public relations, and partnership-building activities.

Ports-to-Plains Alliance • www.portstoplains.com

The Ports-to-Plains Alliance is a planned, multi-modal transportation corridor including a multi-lane divided highway that facilitates the efficient transportation of goods and services from Mexico, through West Texas, New Mexico, Colorado, and Oklahoma, and ultimately on into Canada and the Pacific Northwest. The Ports-to-Plains Alliance provides a vast number of benefits for communities along the corridor and allows for the development of less-congested ports of entry along the Texas/Mexico border. In addition, it offers alternatives to other congested corridors that run through major metropolitan areas.

SUPPLY CHAIN MGMT./OPTIMIZATION

Infor Supply Chain Solutions • www.infor.com

Infor Supply Chain Management solutions take into account the different supply chain perspectives and unique business challenges of manufacturers, retailers, and transportation and logistics service providers. This comprehensive solution set delivered by a single vendor, with industry best practices and low total cost of ownership built in, can help you manage S&OP processes; plan and schedule production; or automate WMS or TMS operations, resulting in reduced operational costs, improved customer service, and effective growth and expansion management.

IN THIS SECTION:

TMS–Warehousing

TMS

Smart Freight Solutions • www.smartfreightsolutions.com

Smart Freight Solutions was started by veterans of the transportation and third-party logistics industry. The principals have extensive experience in carrier rates, tariffs, contracts, negotiating tactics, transportation consulting, and developing systems to maneuver the complexities of carrier rates. Smart Freight Solutions offers consulting services, carrier negotiation services, freight bill audit, and full transportation management systems as part of its services.

TRANSPORTATION MANAGEMENT

Total Logistic Control • www.tlctmone.com/the-system

The TMONE system by TLC operates on a state-of-the-art, Web-based, on-demand TMS platform. This platform has a unique operating system that combines function-specific expertise with focused account management. You can use our solution for any or all services such as planning, scheduling, transport, track and trace, carrier administration, audit and pay, claims administration and account management.

WAREHOUSING

Ferber Warehousing • www.ferberwarehousing.com

Ferber Warehousing is a full-service storage, cross-docking, distribution, and fulfillment facility for the automotive, e-commerce, commercial, retail, electronic and industrial product markets. We have 500,000 square feet of floor space required for bulk container processing and palletizing; inspecting, testing and processing returns, shipment consolidations, repackaging and kitting multiple item shipments. Inspected and approved by the State of Michigan's Liquor Control Commission, GSA, and General Motors Corporation.

Sunrise Logistics Inc. • www.sunriselogisticsinc.com

At Sunrise Logistics, we specialize in delivering supply chain solutions customized to fit your needs. Let our team of experts help you plan for long-term success, while responding to the daily challenges of business. Services include: temperature-controlled freight; competitive just-in-time deliveries; third-party storage and forward logistics; intermodal and backhaul opportunities; state-of-the-art storage facilities; value-added logistics services; and leading communication technologies. Check out our Web site or call us today at 888-518-8502.

CALENDAR

YOUR LOGISTICS DATEBOOK

September 13-17, 2010, Achieving Supply Chain Transformation, State College, Pa. Participants in this program at Penn State's Smeal College of Business learn how best-in-class companies adapt their supply chains to improve their competitive position. Discover how to optimize three critical metrics–profit margin, cash-to-cash cycle time, and customer response time–while identifying supply chain capabilities to take advantage of.

814-865-3435
www.smeal.psu.edu

September 26-29, 2010, CSCMP Annual Global Conference, San Diego, Calif. At the Council of Supply Chain Management Professional's conference, learn ways to cut supply chain costs, boost efficiency, and improve your bottom line; network with colleagues from all over the world; and discover new and innovative ideas that will keep you and your supply chain competitive.

630-574-0985
www.cscmpconference.org

October 13-15, 2010, Supply Chain Council Executive Summit, Houston, Texas. Topics covered at this event include lessons learned from the recent economic downturn, flu pandemic, and natural disasters; new strategies for improving efficiency and responsiveness; methods for keeping up with rapidly evolving technology; and the impact of sustainability on the supply chain.

202-962-0440
www.scc-execsummit.org

October 26-28, 2010, Vested Outsourcing, Knoxville, Tenn. This class, at the University of Tennessee's Center for Executive Education, explores the differences between traditional outsourcing and performance-based approaches; explains how companies have adopted performance-based outsourcing to get better results from suppliers; and provides experience linking desired outcomes to performance work statements.

865-974-5001
http://vo.utk.edu

November 2-4, 2010, International Air Cargo Forum and Exposition, Amsterdam, The Netherlands. Top international air cargo and logistics decision-makers meet to discuss industry challenges and opportunities at this event, sponsored by the International Air Cargo Association.

786-265-7011
www.tiaca.org

myEZClaim.net™
Web-based Freight Claim Solution

- Easy to Implement and Use
- Powerful Work Management
- Intuitive Visual Reporting
- SOX Compliant
- Easy Data Integration with Web Services Architecture

FREE DEMO

Get a free demo now! Call us at **480-473-2453** or go to www.myezclaim.net

Freight Claim Management on the Internet Anytime, Anywhere

myEZClaim.net™

TranSolutions, Inc.
22015 N. Calle Royale
Scottsdale, AZ 85255
sales@myezclaim.com
www.transolutionsinc.com

Programming and IT Development Services Available

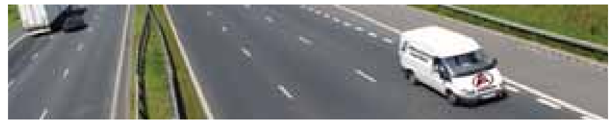
UPGRADE and IMPROVE your logistics SKILLS

Prepare for the future. Request FREE information from logistics education experts online at
www.inboundlogistics.com/rfp

inbound logistics

Since 1981...the first SCM magazine and still the best

AMERICAN EXPEDITING COMPANY
We built this company one delivery at a time.



American Expediting Company, the local ground courier for industry partners.

- Industry's Nationwide Last Mile Provider
- TSA Certified IAC
- Wholesale Pricing to Industry Partners
- Airport Coverage throughout U.S.
- 24/7/365 Operations
- Dedicated TSA Coordinator on Staff
- STAT and On-demand Deliveries
- ***A Partner You Can Trust***

Cars ⋆ Vans ⋆ Trucks
Warehousing ⋆ Fulfillment

Call to set up an account ***Today!***

TOLL FREE: **800-525-3278**
info@amexpediting.com
www.amexpediting.com

Whitman *is* Supply Chain

The Whitman School of Management at Syracuse University is home to the oldest supply chain management program in the nation, endowed in1920 by H.H. Franklin.

- Comprehensive BS, MS, MBA, PhD, and executive programs
- Six Sigma training
- Membership in the SAP University Alliance, using commercial ERP solutions
- Since 1949, annually awards the prestigious Salzberg Medallion, recognizing leaders in logistics and supply chain
- Innovative faculty advancing the knowledge and practice of supply chain management

Whitman School of Management

For more information email stwebste@syr.edu
whitman.syr.edu/scm

In Transportation and Logistics What Separates You From the Pack?

Certify with AST&L
Because Your Career is Worth It

- Industry Knowledge
- Speaking the Language of Your Customer
- Valuable Contacts
- Top-Notch Credentials
- Relevant Experience
- Professional Certification from AST&L

For More Information Contact
American Society of Transportation & Logistics

AST&L®

(202) 580-7270
www.astl.org
info@astl.org

RECEIVE FREE NO OBLIGATION GUIDANCE AND ADVICE www.inboundlogistics.com/3pl

RESOURCE CENTER 08.10

INBOUND LOGISTICS WORKS FOR YOU!

For a specific response, contact these advertisers directly. Please tell them you saw their ad in *Inbound Logistics*.

For general questions about particular industry segments, use the form on page 103.

For faster service, go online: inboundlogistics.com/rfp

3PLs

- **Big Dog Logistics** pg. 40
  Let Big Dog Logistics' fully integrated global logistics services be the watchdog for your bottom line.
  www.bigdoglogistics.com 866-745-5534
- **BNSF Logistics** pg. 32
  The BNSF team can build a program to solve your toughest transportation challenges.
  www.bnsflogistics.com 877-853-4756
- **C.H. Robinson Worldwide** pg. 9
  C.H. Robinson gives you the power of custom supply chain solutions, right when you need them.
  www.chrobinson.com/outsourceit 800-323-7587
- **Crowley** pg. 31
  For large-scale supply chain management solutions, Crowley can keep your business moving.
  www.crowley.com 904-727-2438
- **CRST International** Cover 3
  CRST carries zero debt load, so it can make faster decisions and offer more competitive pricing.
  www.crst.com 800-736-2778
- **Dependable Distribution Centers** pg. 22
  Count on Dependable Distribution Centers for complete logistics solutions.
  www.godependable.com 800-548-8608
- **Jacobson Companies** pg. 7
  Jacobson has your warehousing, transportation, and freight management services needs covered.
  www.jacobsonco.com 800-636-6171
- **Kane is Able** pg. 25
  Five million square feet of warehouse space, 1,000 employees, and 200 trucks wait to serve your needs.
  www.kaneisable.com 888-356-KANE
- **Keystone Dedicated Logistics** pg. 80
  Keystone Dedicated Logistics delivers intelligent, customized solutions for your supply chain.
  www.kdlog.com 877-535-7717
- **LeSaint Logistics** pg. 34
  Turn to LeSaint Logistics for a logistics provider that knows how to manage your supply chain.
  www.lesaint.com 877-KNOW-3PL
- **Lynden** pg. 3
  A full-service freight forwarder, Lynden connects you with hard-to-reach locations.
  www.lynden.com 888-596-3361
- **NFI** pg. 38
  NFI's transportation, fulfillment, and technology solutions make it a fully integrated supply chain company.
  www.nfiindustries.com 800-766-0919
- **Port Jersey Logistics** pg. 29
  Port Jersey Logistics' total supply chain management services make sure you don't miss a beat.
  www.portjersey.com 609-860-1010
- **Ruan** pg. 11
  Ruan continues to think of new ways to help shippers maximize the bottom line.
  www.ruan.com 866-782-6669
- **Ryder** Cover 2
  Unmatched experience, flexibility, and expertise make Ryder the one to turn to all over the globe.
  www.ryder.com 888-88-RYDER
- **Saddle Creek Corporation** pg. 27
  Download Saddle Creek's 2010 *Distribution Network Trends Report* for the latest logistics insights.
  www.saddlecrk.com/distrib4 888-878-1177
- **TMSi Logistics** pg. 21
  TMSi is your single source for distribution, engineering, and warehouse support services.
  www.tmsilog.com 603-792-2205
- **Total Logistic Control (TLC)** pg. 18
  Save money, gain expertise, and stay focused on your core business while TLC manages your supply chain.
  www.totallogistic.com/ibl04 800-333-5599
- **Transplace** pg. 15
  With Transplace, you get more – more speed, more technology, more connectivity, and more smarts.
  www.transplace.com 888-445-9425
- **Werner Enterprises** pg. 50
  Simplify complexity with Werner, the leader in freight transportation innovation.
  www.werner.com 800-228-2240

Associations

- **Council on Safe Transportation of Hazardous Articles (COSTHA)** pg. 89
  Join COSTHA, a cost-effective way to meet your hazardous materials transport compliance needs.
  www.costha.com 703-451-4031

Career Development/Education

- **Lion Technology** pg. 49
  For more than 25 years, Lion Technology has been the leader in regulatory compliance training.
  www.lion.com/hazmat 888-546-6511

Events

- **Air Cargo Forum and Exposition** pg. 58
  Attend this event Nov. 2-4, 2010, in Amsterdam for airfreight networking and business opportunities.
  www.tiaca.org 786-265-7011

- **Parcel Forum 10** pg. 98
  Attending Parcel Forum 10, Oct. 4-6, 2010, in Chicago, Ill., helps build a best-in-class supply chain.
  www.parcelforum.com 866-378-4991

Freight Payment Services

- **CT Logistics** pg. 72
  CT Logistics' philosophy of continual improvement has made the company a leader in freight payment.
  www.ctlogistics.com 216-267-2000

Intermodal

- **Alliance Shippers, Inc.** pg. 13
  When it comes to making transportation and logistics work, Alliance Shippers, Inc. is on the job. From on-time performance to customer service, Alliance Shippers strives to be the best, day in and day out.
  www.alliance.com 708-802-7517

Lift Trucks

- **Landoll Corporation** pg. 75
  Landoll Corporation specializes in lift truck solutions for narrow aisles to maximize available storage.
  www.landoll.com/mhp 800-428-5655
- **Raymond** pg. 77
  Thousands of users get more uptime and lower costs with high-performing Raymond lift trucks.
  www.raymondcorp.com 800-235-7200
- **Yale** pg. 79
  Yale's ERC-VG rider trucks are designed with critical components to maximize uptime and save money.
  www.yale.com 800-233-YALE

Logistics IT

- **Magaya Logistics Software Solutions** Cover 4
  Magaya's Supply Chain Solution software covers the process of merchandise delivery from seller to buyer.
  www.magaya.com 786-845-9150

Mobile Communications

- **Sprint** pg. 5
  Get your shipping business humming along at higher speeds with Sprint's fleet management tools.
  www.sprint.com/transportation 800-SPRINT-1

Ocean

- **Hyundai Merchant Marine (HMM)** pg. 42
  HMM understands the importance of ocean transportation to your supply chain.
  www.hmm21.com 877-7-HYUNDAI
- **Maersk Line** pg. 17
  Maersk Line leads the world's liner shipping companies, serving customers all over the globe.
  www.maerskline.com 800-854-6553

Pallets

- **CHEP Equipment Pooling Systems** pgs. 35, 37, 39, 41
  CHEP's pooling system combines green benefits with increased supply chain efficiencies.
  www.chep.com 888-CHEP-111

Ports-to-Plains Alliance Corridor

- **Adams County Economic Development** pg. 68
  Adams County offers affordable land and accessible transportation infrastructure in the Denver area.
  www.adamslovesbiz.com 303-450-5106
- **Amarillo Economic Development Corp.** pg. 62
  Amarillo, Texas, offers aggressive incentives to help you locate or expand your business.
  www.amarilloedc.com 806-379-6411
- **Del Rio, Texas** pg. 66
  Del Rio has the infrastructure and transportation network necessary for successful business development.
  www.cityofdelrio.com 830-703-5395
- **Dumas Economic Development Corp.** pg. 67
  Excellent transportation and a growing economy make Dumas, Texas, a great place to work and live.
  www.dumasedc.org 806-934-3332
- **Levelland, Texas Economic Dev. Corp.** pg. 63
  Levelland provides logistical advantages to companies building infrastructure to support green energy.
  www.golevelland.com/progress 806-894-0113
- **Lubbock Economic Development Alliance** pg. 65
  Lubbock offers the resources to expedite your site development.
  www.lubbockeda.org 800-687-5330
- **Maverick County Development Corp.** pg. 69
  Maverick County offers an enthusiastic labor pool and well-maintained transportation infrastructure.
  www.eaglepassmcdc.com 830-970-MCDC
- **Paintearth Economic Partnership Society** pg. 70
  Paintearth has easy access to highways, close proximity to Calgary and Edmonton, and affordable land.
  www.paintearth.ab.ca 888-882-3156
- **Ports-to-Plains Alliance Corridor** pg. 61
  The Ports-to-Plains Alliance Corridor brings new opportunities to communities in the region.
  www.portstoplains.com 806-775-3373

Rail

- **CN** pg. 6
  CN has the expertise to move your goods anywhere – quickly, safely, and for a great price.
  www.cn.ca 888-426-9962

For a specific response, contact these advertisers directly. Please tell them you saw their ad in *Inbound Logistics*.

For general questions about particular industry segments, use the form on page 103.

For faster service, go online: inboundlogistics.com/rfp

RESOURCE CENTER 08.10

INBOUND LOGISTICS WORKS FOR YOU!

Real Estate Logistics/Site Selection

- **New Jersey** pg. 71
  New Jersey provides an extensive transportation infrastructure of ports, roads, air, and rail systems.
  www.newjerseybusiness.gov 866-534-7789
- **Virginia Economic Dev. Partnership** pg. 83
  Extensive transportation infrastructure makes Virginia ideal for global logistics operations.
  www.yesvirginia.org 804-545-5724

Utilities

- **Ameren** pg. 53
  Ameren's economic development team can connect you with business advantages in the Midwest.
  www.ameren.com/ecdev 800-981-9409
- **Hoosier Energy** pg. 57
  Hoosier Energy means business, with a workforce possessing skills transferable across industries.
  www.hoosiersites.com 812-876-0294
- **Joplin Area Chamber of Commerce** pg. 54
  In Joplin, Mo., you'll find great transport access, plus a business community eager to help you succeed.
  www.joplincc.com 417-624-4150
- **Nebraska Public Power District** pg. 55
  Nebraska offers global market access, an excellent labor force, and low energy costs.
  www.sites.nppd.com 800-282-6773

For a specific response, contact these advertisers directly. Please tell them you saw their ad in *Inbound Logistics*.

For general questions about particular industry segments, use the form on page 103.

For faster service, go online: inboundlogistics.com/rfp

INDEX

Inbound Logistics (ISSN 0888-8493, USPS 703990) is published monthly for approximately 60,000 business professionals who buy, specify, or recommend logistics technology, transportation, and related services, by Thomas Publishing Company LLC, 5 Penn Plaza, NY, NY 10001. José E. Andrade, chairman; Carl T. Holst-Knudsen, president. Periodicals postage paid at New York, NY, and additional mailing offices.

POSTMASTER SEND ADDRESS CHANGES TO: Inbound Logistics, 5 Penn Plaza, New York, NY 10001

Fax back to: 212-629-1565. For fastest service, subscribe online at www.inboundlogistics.com/free

inbound logistics

DON'T MISS AN ISSUE! RENEW OR START YOUR

FREE SUBSCRIPTION

THIS PAGE IS YOUR PASSPORT TO PRODUCTIVITY

GET FREE INDUSTRY INFORMATION – FAST!

Check the solutions below that interest you. Your request for info will be sent to all advertisers in that segment.

(OPTIONAL)

◯ 3PLs–Logistics Service Providers	801
◯ Air Freight Services	802
◯ Barcode Printers/Systems	833
◯ Bulk	803
◯ Compliance/Customs	837
◯ Consolidation/Deconsolidation	836
◯ Consultants – Career	805
◯ Consultants – Logistics	804
◯ Critical Parts	838
◯ DCC	806
◯ Economic Development/Sites	807
◯ Education – Training	808
◯ Emergency Ground/Air	809
◯ Expedited	810
◯ Food Logistics	840
◯ Forklifts	839
◯ Freight Forwarders	811
◯ Freight Matching	812
◯ Freight Payment Services	813
◯ Insurance	842
◯ Intermodal	814
◯ Logistics IT – SCE, ERP, CRM	816
◯ Logistics IT – WMS, TMS	815
◯ LTL	817
◯ Materials Handling Equipment	818
◯ Materials Handling Systems	819
◯ Mexico	841
◯ Ocean Shipping	820
◯ Organizations – Logistics	821
◯ Ports	822
◯ Rail	823
◯ Real Estate Logistics/Construction	824
◯ Reverse Logistics/Returns	825
◯ RFID	834
◯ Security Equipment/Systems	826
◯ Temp-Controlled Services	827
◯ Trucking Equipment–Tractors	830
◯ Truckload	829
◯ Trucks – Lease/Fleet	828
◯ Warehousing/DCs	831
◯ Wireless Communication	832
◯ Yard Management	835

PLEASE ANSWER ALL QUESTIONS, SIGN, AND FAX TO 212-629-1565.

1 ☐ **YES! I want to start/renew a subscription to *INBOUND LOGISTICS*.**

☐ No, thanks.

2 Services or products you evaluate, specify, approve, budget, recommend, buy or manage.
(CHECK ALL THAT APPLY)

- A ◯ Air Freight Services
- B ◯ Motor Freight Services (TL/LTL)
- C ◯ Ocean, Ocean Intermodal
- D ◯ Rail, Rail Intermodal
- E ◯ Small Package Delivery, Expedited Freight, Express Services
- F ◯ Third Party Services (3PL), Contract Logistics
- G ◯ Supply Chain Technology, Software/ Systems
- H ◯ Transportation Equipment
- J ◯ Warehousing & DC Services
- K ◯ Materials Handling Systems, Equipment, Forklifts
- L ◯ Packaging/Labeling Systems
- N ◯ Intl. Shipping Services, Freight Forwarding
- P ◯ Fleet Operations, Dedicated Contract Carriers
- R ◯ Site, Port, or Facility Selection
- X ◯ Other: ______________________
- Z ◯ None of the above

3 Number of people at your location.
(YOURSELF PLUS OTHERS)

- M ◯ 1000+
- L ◯ 500-999
- K ◯ 250-499
- J ◯ 100-249
- E ◯ 1-99

4 Business category.
(CHECK THE BEST ONE)

- 1 ◯ Manufacturer/Producer (any product)
- 2 ◯ Retailer, Wholesaler, Distributor
- 6 ◯ Services: (Medical/Health, Financial, Insurance, Legal, Gov't., Consulting, etc.)
- 3 ◯ Agri., Construction, Engineering, Mining
- 4 ◯ Utilities (Water, Power, Electric, Gas), Telecommunications
- 5 ◯ Transportation, Logistics & Supply Chain Services (Carrier, Broker, Freight Forwarder, Transportation Intermediary, 3PL, Warehouse/DC)
- 9 ◯ Other: ______________________

5 Your job classification.
(CHECK THE BEST ONE)

- N ◯ Corporate Management
- Q ◯ Logistics, Transportation, Traffic Mgmt.
- P ◯ Supply Chain Management, Purchasing, Procurement
- R ◯ Warehousing, Distribution, Inventory, Materials Management
- S ◯ Operations, Production, Quality Mgmt.
- T ◯ Customer Service, Marketing, Sales Mgmt.
- Z ◯ Other: ______________________

*PASS THIS **FREE SUBSCRIPTION** OFFER ALONG TO OTHERS ON YOUR STAFF.*

PLEASE SIGN AND ANSWER ALL QUESTIONS TO VALIDATE FORM.

▲ NAME ▲ TITLE

▲ COMPANY

▲ ADDRESS

▲ CITY ▲ STATE ▲ ZIP

▲ PHONE ▲ FAX

▲ E-MAIL

SIGNATURE (required) **DATE**

RECEIVE **FREE** NO OBLIGATION GUIDANCE AND ADVICE www.inboundlogistics.com/3pl

THE LAST MILE

syn·er·gy [sin-er-jee] (from Greek sunergia, cooperation; from sunergos, working together): The interaction of two or more agents or forces so that their combined effect is greater than the sum of their individual effects

cre·on [kree-on] (Latin form of the ancient Greek first name Kreon): Sovereign or ruler

What's In a Logistics Name?

When Detroit and Dublin converge, you know you're in for something special–like **syncreon**. The case-challenged third-party logistics provider emerged in 2007 following Ireland-based Walsh Western International's merger with TDS Logistics, an automotive specialist based in Auburn Hills, Mich. Together they became syncreon–"the unified effort of two leaders."

Some logistics company names we take for granted. Others are striking at first glance. They come from everywhere: history, geography, grammatical contractions, abbreviations, and your occasional Latin and Greek aberrations. *Inbound Logistics* dug up more dirt on some familiar, if peculiar names, delivering the goods.

Serec is a City of Industry, Calif.-based 3PL that serves a variety of U.S. retailers. But when the company first started out in the 1950s it hauled records and jukeboxes for Sears Records. Thus its name–Serec.

Switzerland-based **Panalpina** is one of the largest airfreight forwarders in the world and its name is synonymous with scaling new heights. Naturally, when the company became independent in 1954 it embraced a new identity: "Pan" and "alpina" came together to represent the company's conquest of the Alps by linking northern and southern Europe with its haulage services.

Reddwerks is an Austin, Texas, logistics technology company that bridges the gap between traditional WMS and WCS systems with its warehouse performance management suite. That's a mouthful, but its name is well-grounded–in medieval lore. The word "redd"–which means to put right, to clear a path–dates back to 15th-century Europe. Reddwerks believes it's the center of a new renaissance in logistics technology.

Calgary, Alberta-bound **Trimac Transportation** is a leading North American bulk transportation provider. The company kicked its tires in 1945 when J.W. McCaig and his partner Al Cameron established Macccam Transport in Moose Jaw, Saskatchewan. In 1960, McCaig's sons went one step further in their contractions, creating a new holding company, Trimac–named after the three "Mc" brothers.

It just goes to show that in transportation and logistics, company names are as varied as the freight they move–and often miles more convoluted.


success \sək-ˈses\
noun
Latin successus, from succedere
1537: favorable or desired outcome;
attainment of wealth, favor, or eminence