

Jerry Imbrenda, Secaucus  
fulfillment center  
manager, Staples

Warehouse/DC Technology and Innovation

**STAPLES:**

Smart packaging, happy  
customers, healthy planet

Page 22

**SPECIAL REPORT:**

Quarterly Transportation Market Update

**Truckload's volatile nature 47S**

**SPECIAL REPORT: Top 50 3PLs**

**Seeing into the future 56S**

# Benchmark Your Costs and FORECAST CARRIER RATES with Real-Time Data.

**Benchmark Your Rates**  
against the market rate and identify  
potential cost savings

**Real-Time Data  
Impacting Capacity**  
and the rate you'll need to  
pay to get trucks

**Use Accurate  
Market Rate  
Information**  
for contract  
negotiations and  
budget planning

## DAT® RateView™

- Forecasting Tools
- Bulk Downloads for RFPs
- Rate Drill Downs
- Single Lane Lookups

DAT RateView lets you see the going rate for any lane in your rate guide. Map the rates you're paying against the current market rate, and see 13-month lane rate histories.

You can also observe real-time supply and demand data from the spot market that can affect your carriers' capacity and impact rate negotiations. DAT RateView is like having a real-time market feed at your fingertips.

**See for yourself with a FREE LANE LOOK-UP!**  
Call 800.678.7065 now.

[www.DAT.com/rates](http://www.DAT.com/rates)

Today's Data for Transportation Decision-Makers

# **LM** management UPDATE

AN EXECUTIVE SUMMARY OF INDUSTRY NEWS

◆ **Pending HOS rule poised to crimp market conditions.**

If things seem to be improving for shippers lately, there's a good chance that it won't last too long according to the most recent edition of the Shipper Conditions Index (SCI) from freight transportation consultancy FTR Associates. FTR officials said that trucking capacity and supply remain in "precarious balance...with very limited demand growth keeping shipping costs in check." However, the firm cautioned that shipping conditions are expected to deteriorate due to seasonal freight gains, and the pending July 1 hours-of-service (HOS) changes that are expected to limit driver productivity and cut available trucking capacity by 3 percent or more, according to industry estimates.

◆ **Financial issues persist for USPS.**

The United States Postal Service (USPS) said last month that it incurred a fiscal second quarter net loss of \$1.9 billion, following a \$1.3 billion loss in its first quarter. These losses follow a fiscal year 2012 loss of \$15.9 billion. In the fiscal first quarter, USPS said that total mail volume of 38.8 billion pieces was down 1.5 percent annually, with First Class volume down 4.1 percent and revenue down 2.7 percent and Standard Mail volume up 1.0 percent and revenue up 2.4 percent. However, a bright spot for the USPS remains its Shipping and Package group, which saw revenue and volume up 9.3 percent and 16.2 percent, respectively. For the six-month period ending March 31, revenue for this segment is up a cumulative 6.9 percent.

◆ **CEVA gets financial footing.**

Global third-party logistics (3PL) services provider CEVA Logistics reached an agreement with its major note holders to recapitalize its balance sheet and raise new capital. CEVA said that through these efforts it will reduce its consolidated net debt by more than \$1.7 billion and its annual cash interest expense by more than \$170 million. CEVA also reported that it would receive a capital infusion of a minimum of \$301 million for investment in its business plan. CEO Marv Schlanger said that these efforts will make for a stronger balance sheet for CEVA, enabling the company to grow faster and better compete in the logistics and supply chain marketplace, as well as give CEVA the flexibility of making additional capex investments.

◆ **Port Tracker points to summer slowdown.**

The most recent edition of the Port Tracker report by the National Retail Federation and Hackett Associates noted that import growth at major U.S.-based retail container ports was expected to increase 3.3 percent annually in May, but it cautioned that growth could slow down considerably by the end of the summer. The report is calling for the first six months of 2013 to reach 7.8 million TEU, which would be a 2 percent annual improvement. Hackett Associates' Ben Hackett said in the report that despite the Federal government pumping liquidity into the market, consumer confidence has still not fully turned the corner despite significant growth from its recent low points in 2009 and 2011. "We need to see the economy strengthen in the coming quarters before we can begin to see the threat of a further economic downturn dissipating," wrote Hackett. "Trade will remain at low growth levels until we reach this stage."

◆ **Cautious investment ahead?** Shippers may have been cheered by last month's manufacturing report issued from the Institute for Supply Management (ISM), but other key indicators suggest caution. While ISM noted that economic activity in the sector had expanded for 34 straight months prior to contraction in June 2012, IHS Global Insight economists are more circumspect. Productivity has been subdued recently after surging in the wake of the Great Recession, when firms slashed payrolls and squeezed more from their existing workforces. IHS U.S. economist Erik Johnson said that he does not expect logistics professionals to invest "sharply" in new technologies either. "Don't count on gains in this area," said Johnson. "But at the same time, we don't see managers slashing payrolls." Spikes in productivity are expected following recessions, said IHS, but they aren't typically followed by extended periods of muted productivity growth.

◆ **Close call in LA.** As the Port of Los Angeles hosted the 28th World Ports Conference of the International Association of Ports and Harbors (IAPH) last month, a crucial vote was being cast to determine its future. By every measure, the IAPH conference was a rousing success, attracting more than 500 decision-makers from 55

*Continued, page 2*

# LM management UPDATE

AN EXECUTIVE SUMMARY OF INDUSTRY NEWS

nations and more than 100 global ocean cargo gateways. But Port of LA leaders were also participating in a critical meeting with the Los Angeles City Council to gain approval of BNSF's Southern California International Gateway project. Shippers and port authorities alike were relieved to discover that the \$500 million project received the green light, thereby making LA an even greener place to do business. While some local residents were opposed to the new construction, the Council recognized that the on-dock intermodal facility is projected to cut emissions by 90 percent and further reduce the dependence of motor carriers in this vital transport artery.

#### ◆ **Truck size and weight legislation returns.**

The case against longer and heavier trucks returned to Capitol Hill last month, when Senator Frank Lautenberg (D-NJ) reintroduced legislation entitled the Safe Highways and Preservation Act of 2013 (SHIPA). The legislation is geared to keep bigger and heavier trucks off the road and apply existing federal truck size and weight limits to the entire National Highway System—rather than interstate highways which is the case today. The specifics of the SHIPA Act call for: applying the current limits of 80,000 pounds and the maximum length of 53 feet for tractor-trailer trucks to the entire National Highway System (NHS), with certain exemptions allowed; extending certain restrictions to the 222,000 miles of NHS roads; expanding the current freeze on triple-tractor trailer operations on interstates to apply to the NHS; and closing loopholes that allow the operation of overweight trucks and establish an enforcement program to ensure accountability.

◆ **Reshoring “likely” to increase.** A significant percentage of logistics leaders surveyed during the Institute for Supply Management's (ISM) 98th Annual International Supply Management Conference in Dallas last month say that their firms embrace reshoring, due indeed face cyber attacks, and view tax policy and European stability as “corporate threats.” More than 2,000 professionals attended the conference, and several instant digital polls were held throughout the three-day period. A

total of 575 attendees responded to the question: Over the next year do you expect to re-shore any of your sourcing? Nearly 30 percent of respondents indicated they were “likely” or “very likely” to reshore. Just over 37 percent responded that they were “not likely” or “not at all likely.” The number of “likely” or “very likely” responses is significant, said ISM CEO Thomas Derry, because there seems to be a trend of attendees seeing more advantages to keeping work within their own country.

◆ **Classy chassis.** Members of the International Association of Ports and Harbors were given an overview of the innovative new developments in shared container chassis last month at the association's conference in Los Angeles. For port authorities worldwide, drayage is an ever-present challenge and cost center. According to J. Christopher Lytle, executive director of the Port of Long Beach, “The question we have in Southern California, and in many other US. Ports is ‘what's the best most-efficient model for chassis management?’ Chassis are all alike, but the current ownership system restricts sharing. We'd like to see that changed.” Lytle noted that Sea-Land, formerly a trucking company, was the first ocean carrier to own chassis. Other players followed, until each carrier had its own fleet.

◆ **Continued air cargo blues.** The Stifel Logistics Confidence Index continued its downward trend in May as it fell for the second consecutive month. Compiled by Transport Intelligence (Ti), the overall index, which combines the current situation with future expectations, was down 0.8 points from April to 50.7 in May and was 1.3 points lower compared with the same month in 2012. Yet, even with deteriorating confidence, the index registered above the 50 threshold, indicating growth for the fourth consecutive month. Lucy Palmer, Economist at Ti, observed: “Air forwarders have continued to express less optimism compared with sea forwarders since the index began in March 2012, an indication of the modal shift from air to sea freight as shippers seek to lower transport costs.” However, for the present environment, both sea and air forwarders indicated a minor weakening compared with April. □

# THE SHORTEST DISTANCE BETWEEN TWO POINTS IS ME.



Whether it's across town or halfway around the world, with every shipment and every project, our customers place their trust in our hands. My hands. Because at some point, every piece of business I touch becomes a personal responsibility. It's up to me to keep costs down, performance on schedule, and quality at a premium. Someone's business is riding on it. And I won't let them down. I am *Piloting Business*™



[pilotdelivers.com](http://pilotdelivers.com) / 1-800-HI-PILOT

**PILOT**  
FREIGHT SERVICES



# BEYOND LOGISTICS

The world's leading companies rely on ModusLink for global supply chain management. We integrate seamlessly with clients' existing manufacturing and business systems to increase efficiency and reduce costs. Learn how we go beyond logistics to improve operations and drive growth.

---

**Warehousing, Fulfillment, Postponement, Configuration**

---

**Returns, Repair, Recovery**

---

**E-Commerce, Customer Care, Entitlement Management**

---

Australia • China • Czech Republic • France • Hungary • India • Ireland • Japan • Korea  
Malaysia • Mexico • Netherlands • Singapore • Taiwan • United States

  
**ModusLink**  
GLOBAL SOLUTIONS

website [www.moduslink.com](http://www.moduslink.com)  
blog [www.valueunchained.com](http://www.valueunchained.com)  
contact [info@moduslink.com](mailto:info@moduslink.com)

## WAREHOUSE/DC TECHNOLOGY & INNOVATION

### Staples: Smart packaging, happy customers, healthy planet

**22** We go inside the second largest internet retailer's Secaucus, N.J., fulfillment center to explore its network-wide transformation from a few standard box options to an almost limitless number of custom, right-sized boxes.



Chris Lane/Getty Images

## WAREHOUSE/ DC TECHNOLOGY AND INNOVATION ROUNDUP

### What's new and what's hot in warehouse and DC technology products

26

## TRANSPORTATION AND BEST PRACTICES

### 2013 Rail/Intermodal Roundtable: Staying ahead of the pack

30

Rail and intermodal continue to improve service and create value for shippers despite an uneven economy engulfed in an atmosphere of political uncertainty. Our panel of top analysts maintains that the railroads are only looking at extending their lead.



2013 Rail/Intermodal Roundtable 30

## SUPPLY CHAIN & LOGISTICS TECHNOLOGY

### 11th Annual Software Users Survey: Caution remains

36

Logistics professionals appear to be enthused by the gradual economic recovery and see the need for improved visibility to better meet new supply chain demands, but they're still not ready to make the big investments necessary to fully realize those goals.



Software Users Survey 36

## WAREHOUSE/DC MANAGEMENT: WMS UPDATE

### Omni-channel distribution: Moving at the speed of "now"

42

The pressure is on retailers to deliver anything, anytime, from anywhere. Three experts answer four key questions that will help traditional brick-and-mortar retailers revolutionize their use of WMS and their shipping processes on the way to a multi-channel transformation.



Omni-channel distribution 42



**TORQUE**  
by KYOCERA

# OFFICIAL SMARTPHONE OF THE APOCALYPSE

Learn how tough phones can be at 855-878-4BIZ and see it in action at [sprint.com/directconnect](http://sprint.com/directconnect)

\$99 <sup>99</sup>	BUY ONE FOR \$99.99 GET FOUR FREE FOR YOUR BUSINESS
--------------------	---

**SMART SONIC RECEIVER**  
Groundbreaking tissue conduction technology for clearer sound in loud environments

**BRAVE THE ELEMENTS**  
Stand up against dust, shock, rain, humidity, submersion and extreme temperatures

**GET IT DONE**  
Only on Sprint Direct Connect<sup>®</sup> with 3X the coverage than Nextel

**INSTANT PUSH-TO-TALK**  
Instant connection at the push of a button

**ULTRA-RUGGED**  
Tough and durable military spec

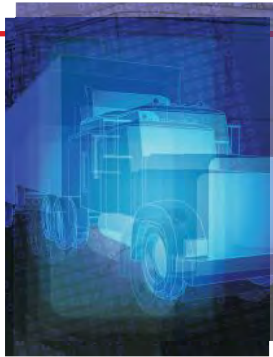
**4G LTE**  
4G LTE where available with Truly Unlimited<sup>SM</sup> data while on the Sprint network

**ANDROID APPS**  
Android productivity apps streamline the job

Offers avail. for corp-liable customers only. **Activ. Fee:** \$36/line. Credit approval req. **Early Termination Fee (sprint.com/etf):** After 14 days, up to \$350/line. **Phone Offer:** Offer ends 7/11/13. While supplies last. Taxes and svc charges excluded. No cash back. Req. activation of all phones on same account in one sales transaction. **Data:** Add'l charges apply for premium content/downloads. Includes select e-mail. **Usage Limitations:** Sprint may terminate service if off-network roaming usage in a month exceeds: (1) 800 min. or a majority of min.; or (2) 300 MB or a majority of KB. Prohibited network use rules apply. Engaging in such uses will not result in throttling but could result in adverse action. See [sprint.com/termsandconditions](http://sprint.com/termsandconditions). **Other Terms:** Offers and coverage not available everywhere or for all phones/networks. Restrictions apply. See store or [sprint.com](http://sprint.com) for details. Sprint 4G LTE available in limited markets, on select devices. Visit [www.sprint.com/4GLTE](http://www.sprint.com/4GLTE) for info. Unless noted, Sprint 4G LTE devices do not operate on the Sprint 4G (WiMAX) network. ©2013 Sprint. All rights reserved. Sprint and the logo are trademarks of Sprint. Other marks are the property of their respective owners.



- 1 Management update
- 9 Viewpoint
- 10 Price trends
- 13 News & analysis
- 18 Newsroom notes
- 19 Moore on pricing
- 20 Pearson on excellence
- 88 Pacific Rim report



QUARTERLY TRANSPORTATION MARKET UPDATE

### TRUCKLOAD: Volatile by nature

While top carrier executives are doing their best to manage the elements currently battering their returns, we set our sites on three areas that carriers say will make the biggest impact on their ongoing relations with shippers—capacity, regulations, and fuel. **47S**

SPECIAL REPORT

### Top 50 3PLs Seeing into the future

Finding the right 3PL in today's global marketplace involves looking beyond the provider's "vision" statement, say industry experts. Yet, they also acknowledge that there's still an element of prognostication involved once a short list of the Top 50 has been whittled down. **56S**



WEB EXCLUSIVE

### State of Cargo Security: Higher stakes in the risk vs. reward scenario

Global logistics professionals are increasingly encouraged to undergo a systematic analysis of their exposure to risk and total landed cost related to a variety of procurement strategies. Often overlooked, however, is the financial health of their sub-tier suppliers. [www.logisticsmgmt.com](http://www.logisticsmgmt.com)



## Logistics Management: On Demand

### 2013 annual salary survey webcast

Go to: [logisticsmgmt.com/2013salary](http://logisticsmgmt.com/2013salary)



### Experience pays!

Our 2013 survey finds that the highest salaries in logistics and supply chain management will be earned by those sticking to time-honored values: education, hard work, and company loyalty. Join *Logistics Management* Executive Editor Patrick Burnson and a panel of prominent supply chain career management experts as they put context around the results of our *29th Annual Salary Survey* and offer their insight into how logistics professionals can take that next, critical step in building their careers.

## SupplyChain24/7

Everything you need,  
every way you need it.

Supply Chain 24/7 is the ultimate online business resource for transportation, distribution, logistics, and supply chain professionals. Find everything you need when researching companies, trends, and industries.

Visit [supplychain247.com](http://supplychain247.com).  
Begin your experience today.

# YOU NEED TRUCKS THAT ARE JUST LIKE YOUR BEST OPERATORS: HARDWORKING, DEPENDABLE AND RELIABLE.



**MEET OUR COMPLETE LINE OF  
WAREHOUSE OVERACHIEVERS.**

**PROBLEM SOLVED.**

In the warehouse industry, productivity is paramount. That's why our complete line of lift trucks is engineered to keep product moving quickly and efficiently, while keeping operators comfortable and productive. Every one of our trucks is designed with the needs of your operation in mind. It's no wonder that research shows a majority of Yale owners are so satisfied with their trucks, they wouldn't change brands.

**Find out more at [Yale.com](http://Yale.com).**

Yale is a Registered Trademark and  is a Registered Copyright in the United States and other countries.  
©Yale Materials Handling Corporation 2012. All Rights Reserved.

**Yale** 



#### EDITORIAL STAFF

**Michael A. Levans**  
Group Editorial Director

**Francis J. Quinn**  
Editorial Advisor

**Patrick Burnson**  
Executive Editor

**Sarah E. Petrie**  
Managing Editor

**Jeff Berman**  
Group News Editor

**John Kerr**  
Contributing Editor, Global Logistics

**Bridget McCrea**  
Contributing Editor, Technology

**Maida Napolitano**  
Contributing Editor, Warehousing & DC

**John D. Schulz**  
Contributing Editor, Transportation

**Mike Roach**  
Creative Director

**Wendy DelCampo**  
Art Director

#### COLUMNISTS

**Derik Andreoli**  
Oil + Fuel

**Elizabeth Baatz**  
Price Trends

**Mark Pearson**  
Excellence

**Peter Moore**  
Pricing

#### PEERLESS MEDIA, LLC

**Brian Ceraolo**  
Publisher and Executive  
Vice President

**Kenneth Moyes**  
President and CEO  
EH Publishing, Inc.

#### EDITORIAL OFFICE

111 Speen Street, Suite 200  
Framingham, MA 01701-2000  
Phone: 1-800-375-8015

#### MAGAZINE SUBSCRIPTIONS

Start, renew or update your magazine subscription at [www.logisticsmgmt.com/subscribe](http://www.logisticsmgmt.com/subscribe).

Contact customer service at:

**Web:** [www.logisticsmgmt.com/subscribe](http://www.logisticsmgmt.com/subscribe)

**Email:** [lmsubs@ehpub.com](mailto:lmsubs@ehpub.com)

**Phone:** 1-800-598-6067

**Mail:** Peerless Media  
P.O. Box 1496  
Framingham, MA 01701

#### NEWSLETTER SUBSCRIPTIONS

Sign up or manage your **FREE** eNewsletter subscriptions at [www.logisticsmgmt.com/enewsletters](http://www.logisticsmgmt.com/enewsletters).

#### REPRINTS

For reprints and permissions, contact The YGS Group at 800-501-9571 x100 or [logisticsmanagement@theygsgroup.com](mailto:logisticsmanagement@theygsgroup.com).

## Anything, anytime, from anywhere

THERE'S A VERY GOOD REASON that *Logistics Management (LM)* devotes an article every month to the growing importance warehouse and distribution center (DC) operations are playing in transportation and overall logistics management—especially when you consider the revolution that's going on inside the four walls of facilities operated by U.S. retailers.

In the new world of e-commerce—now super-charged by the proliferation of smart phones and wireless networks—retailers are pressured to fulfill anything, anytime, from anywhere. But the sense of “urgency” that fickle U.S. consumers experience when ordering online now needs to be realized on the delivery side as well.

We don't want it next day, we want it *today*—and in some cases we want it delivered where we are at that very moment, be it at your office or the Starbucks. In fact, same-day-to-person delivery was a subject discussed at a recent roundtable I took part in. Most on the panel, consisting of material handling equipment vendors and software providers, believe, as do I, that we have the capability to make this happen.

The panel asserted that to get there we must optimize and squeeze every ounce of functionality we can out of the technology and resources we already have—something few, if any, companies are doing.

It's quite clear that the multi-channel (or omni-channel) order fulfillment challenge has amped up the importance of piece picking. In fact, it's had a game-changing effect on how quickly retailers are turning to software and related automation equipment to do more with less—in many cases picking and shipping right from the brick-and-mortar retail store to accommodate next-day shipping.

By adding and optimizing automation, retailers are able to fill the variety of complicated orders more accurately and collaborate with transportation management systems to solve new freight challenges that come with anything, anytime, from

anywhere. But to do it better, faster, and same day, we need constant innovation.

*LM* offers two articles this month, both authored by Contributing Editor Maida Napolitano, to help retail logistics professionals fine tune their operations to eventually conquer the full spectrum of multi-channel challenges. On page 42, Napolitano has gathered three front-line warehouse and DC thought-leaders to answer four questions that brick-and-mortar retailers will face as they go through their “same-day” transformation.

“A while ago everyone was talking about the death of the brick-and-mortar store,” says Napolitano. “But now these operations are transforming into mini-fulfillment centers and are able to support next-day and eventually same-day shipping.”

Then, Napolitano takes us inside Staples' Secaucus, N.J., facility for an exclusive look at how the #2 online retailer has addressed its excessive packaging.

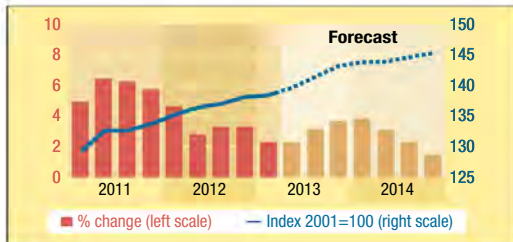
“Staples' sophisticated network of fulfillment centers can deliver next-day to 98 percent of the population, but the issue of oversized boxes was perplexing,” says Napolitano. The solution they found is nothing short of revolutionary—an on-demand packaging system that creates an almost limitless number of custom, right-sized boxes.

“This is a case where e-commerce has forced a retailer to change its operations and push away any fears of technology adoption,” adds Napolitano. “Now they have set a goal to reduce packaging by 20 percent by 2020, and they have innovation to thank for it.”

**Michael A. Levans**, Group Editorial Director  
*Comments?* E-mail me at [mlevans@peerlessmedia.com](mailto:mlevans@peerlessmedia.com)

# priceTRENDS

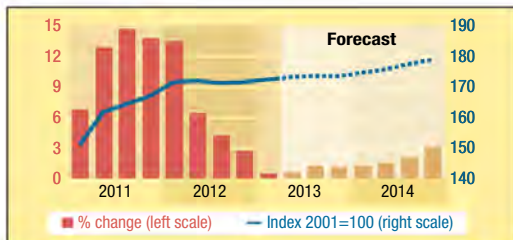
## Pricing across the transportation modes



% CHANGE VS.:	1 month ago	6 mos. ago	1 yr. ago
General freight - local	0.0	3.2	2.9
TL	-0.8	-0.2	-0.2
LTL	-0.4	0.0	3.0
Tanker & other specialized freight	-0.4	-0.4	0.4

### TRUCKING

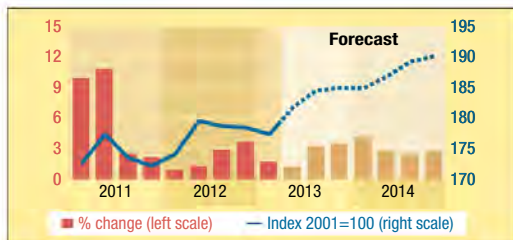
**U.S. trucking prices fell** an average 0.45% from month-ago, but managed to end up 2.7% from April 2012 levels. Paving the deflationary path, truckload led the way with transaction prices down 0.8% from month-ago and down 0.2% from year-ago. While truckers may gripe about price cuts, underlying costs in the trucking industry also are falling. In March, labor costs dipped down 0.25% and fuel costs dropped 7.8% from same-month-year-ago. Economists at Alertdata.com estimate the trucking industry's pre-tax gross operating surplus reached \$20.38 per \$100 worth of services sold. The forecast for trucking prices remains: up 2.9% in 2013 and up 2.7% in 2014.



% CHANGE VS.:	1 month ago	6 mos. ago	1 yr. ago
Air freight on scheduled flights	-0.3	0.3	-0.1
Air freight on chartered flights	6.3	-0.9	0.1
Domestic air courier	0.7	4.4	4.4
International air courier	0.7	3.0	2.7

### AIR

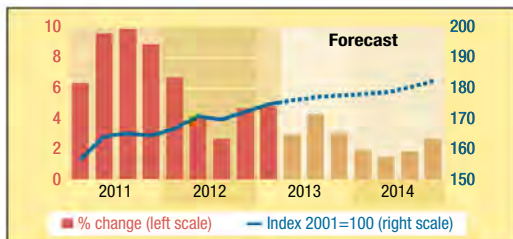
**U.S. airlines say demand for flying freight** declined from the end of 2012 to the first quarter of 2013. Nonetheless, some carriers are managing to hike their transaction prices. Preliminary data for airfreight on chartered flights show prices up 6.3% in April. The last time we saw such a large monthly price increase was July 2010 when prices surged 8.4%. Average prices for flying freight via scheduled U.S. flights, meanwhile fell 0.3%. The price cut, however, followed three months of pricing strength. In the first four months of 2013, airfreight prices on scheduled flights increased 0.35% from year-ago. That airfreight pricing trend has not altered much, so the forecast is unchanged: up 0.9% in 2013 and up 2% in 2014.



% CHANGE VS.:	1 month ago	6 mos. ago	1 yr. ago
Deep sea freight	1.5	1.1	-0.8
Coastal & intercoastal freight	-0.2	-1.2	-2.3
Great Lakes - St. Lawrence Seaway	4.0	7.1	6.5
Inland water freight	-1.5	-3.6	-1.8

### WATER

**Average prices for moving cargo over water** (using U.S.-owned vessels) increased 0.4% from month-ago, but fell 0.9% from April 2102. Looking inside at the categories, we see prices for deep sea and inland waterways services down 0.8% and 1.8%, respectively, from same month year ago. Charting a different course, Great Lakes/St. Lawrence Seaway freight transportation prices increased 6.5%. With fuel costs down and labor costs under control, we estimate the industry's pre-tax gross operating surplus reached \$21.15 per \$100 worth of services sold. The annual price escalation forecast for water transportation has been revised to 2.5% in 2013 and remains 3.1% in 2014.



% CHANGE VS.:	1 month ago	6 mos. ago	1 yr. ago
Rail	0.8	2.7	4.5
Intermodal	-0.3	1.4	1.8
Carload	1.0	2.9	5.0

### RAIL

**The latest monthly reports** show prices from intermodal rail operators down 0.3% and from carload rail up 1%. Looking at price trends in the first four months of 2013 compared to the same period of 2012, we see intermodal prices have increased 3.2% and carload tags have escalated 5%. Meanwhile, when examining underlying cost drivers for the entire year ending March 2013, we see worker wages were down 0.03% and fuel costs fell 3.4%. Over the same 12-month period, rail industry prices increased 4.1%. Our forecast for rail industry transaction prices remains unchanged from last month: up 3.8% in 2013 and up 2% in 2014.

WHAT HAPPENS WHEN

# CRUNCH TIME

meets **on time**



**Business gets a green light in Michigan.**

Whether goods are being moved throughout the region or around the world, more companies are taking advantage of all Michigan has to offer. Featuring talent from Michigan State University's top-ranked Supply Chain Management program, Michigan also provides direct access to Asia through the air. That's in addition to having the most utilized commercial border crossing in North America. When it comes to finding a higher gear, nothing moves business like Pure Michigan.

1.888.565.0052  
[michiganadvantage.org/LM](http://michiganadvantage.org/LM)

PURE *M*ICHIGAN®



**Only pay for the speed you need...**

**Dynamic Routing!<sup>SM</sup>**



With shipping costs on the rise it only makes sense to match your time requirements to the mode. Lynden's exclusive Dynamic Routing<sup>SM</sup> makes it easy to change routing between modes to meet your delivery requirements. If your vendor is behind schedule we can make up time and keep your business running smoothly. If your vendor is early we can save you money and hassle by slowing down the delivery to arrive just as it is needed. Call a Lynden professional and let us design a Dynamic Routing<sup>SM</sup> plan to meet your supply chain needs.

[www.lynden.com](http://www.lynden.com)

1-888-596-3361

The Lynden Family of Companies



Innovative Transportation Solutions

Also:

- With new labor deal in place, ABF ponders next moves Page 14
- Senate signs off on Water Resources Development Act, Page 15
- IANA reports a 4.5 percent gain in total Q1 intermodal volumes, Page 17

## HOS pushing trucking rate increases, carriers say

*Pending changes in truck drivers' hours on the road creates more questions than answers.*

By John D. Shulz, Contributing Editor

WASHINGTON, D.C.—The pending changes in truck driver hours-of-service (HOS) regulations will help push trucking rates up between 4 percent and 10 percent in the coming year, analysts and trucking executives predict.

John Larkin, the long-time respected transportation analyst for Stifel Nicolaus, says that the truckload sector “appears to be right on the cusp of a capacity shortfall,” thanks in part to HOS changes coming on July 1.

Those changes, the fifth such tweak to HOS regulations since 2003, will require drivers to take at least a 30-minute break within eight hours of coming on duty. It also limits the “34-hour restart” provision, unless that time off includes two such breaks between 1 a.m. and 5 a.m.

It may not sound like much, and Washington bureaucrats within the Federal Motor Carrier Safety Administration (FMCSA) say that the change is both necessary and slight, but truckers and operations personnel working the day-to-day matrix of building full truckloads with sufficient numbers of drivers say the change is meaningful—and costly.

Todd Spencer, executive director of the Owner-Operator Independent Driver Association (OOIDA) said recently that HOS changes could cost the industry between 5 percent and 10 percent in lost productivity. Schneider National, the nation's second-largest TL carrier, is privately forecasting HOS will cost the company between 2 percent and 4 percent in productivity.

Truth is, nobody knows for certain until the impact of the July 1 HOS changes are fully digested by the carriers and shipper community.

The changes are coming despite a united front of opposition to the new regulations. In a rare show of trucking unity, OOIDA joined forces with the likes of American Trucking Associations (ATA), NASSTRAC, and the National Industrial Transportation League, among others, in opposing the rules.

The ATA recently lost a legal challenge as it sought to delay implementation of the new rules, which it estimated would cost the industry in excess of

\$350 million just in preparation compliance costs, such as reprogramming computers and load matching software in the industry.

“It's a big deal, and it changes our work configurations,” said Mark Rourke, president of transportation services for Schneider National. “Depending on city pairs and destination, some freight will have no impact. There are a lot of different numbers, but I would put this at between 2 percent and 4 percent in terms of rate increases.”

Long-haul carriers with lengths of haul in excess of 1,000 miles will see more impact from the HOS changes



than carriers with more regional freight in their accounts. Dedicated freight operations might suffer slightly more because they were designed with the idea of maximizing a driver's 11 hours of driving within a 15-hour work day. Effective July 1, that work day becomes effectively 14 and a-half hours—or less.

Some truckload executives say privately that the loss of productivity will mean more than a half hour lost in on-duty time. The 30-minute breaks are a mandated minimum, and it's entirely possible that some drivers may take longer breaks—costing carriers and shippers even more lost productivity.

Richard Mikes, managing general partner of Transport Capital Partners and former executive for Ruan Transport, a leading Iowa-based TL carrier, said recently that there is no question “rate increases will accelerate,” at least partially because of the HOS changes.

“I look for a bump in rates,” said Mikes. “And if there's going to be a pop in rates, it will come sooner rather than later.”

Mikes said that other new regulations coming out of Washington, including FMCSA's Compliance, Safety, Accountability initiative, are causing carriers to pay more for drivers—if they can find them. “Drivers are scarce—independent contractors are more scarce,” Mikes said. “There's no two ways around that.”

But Mikes adds that it's more than a driver shortage. The trucking industry, he said, is short of mechanics, operations, and front office people. HOS is just exacerbating the driver shortage.

When the rate increases start is anyone's guess. Carriers had trouble with costs outstripping pricing last year, while analysts say if HOS affects the industry, as they believe it will, costs will sharply rise for the second half of 2013.

FMCSA rule impacts are already noticeable with respect to the shrinking pool of acceptable, compliant drivers. The HOS rule changes may not have “teeth” until electronic onboard recorders (EOBRs) are mandated next year, and that will make enforcement of HOS that much easier—and tough to cheat.

That in turn will affect capacity, which already is basically at full. “On any given day, it's pretty close to equilibrium,” Scheider's Rourke says.

## LESS-THAN-TRUCKLOAD

### With new labor deal in place, ABF ponders next moves

FORT SMITH, Ark.—ABF Freight System, the nation's sixth-largest LTL carrier, has a framework for a new five-year labor agreement with the Teamsters union. Neither side is discussing details of the deal, which still must be ratified by between 6,000 and 7,500 ABF workers.

It's believed that the pact will contain wage reductions in the 5 percent range and perhaps a slight reduction in fringe benefits. ABF had sued the Teamsters in order to obtain concessions similar to those won by its chief unionized rival YRC Worldwide, which is operating with a 15 percent wage concession through 2015.

Wall Street cheered the news of the pending labor peace for both companies. YRC stock zoomed from \$7 per share to \$15 per share. At press time, it was pushing \$20 per share for a market capitalization of about \$165 million.

Arkansas Best Corp., ABF's parent, went from \$10 per share to \$15 per share in the days immediately following the bare-bones announcement. At press time, it was at \$17 per share, increasing its market capitalization to about \$440 million.

ABF certainly could use a boost. Parent Arkansas Best lost \$13.4 million on \$520.7 million in the first quarter, narrowing its \$18.2 million loss on \$440 million revenue in the year-ago quarter. The additional revenue was mainly due to an \$80 million boost from recently acquired

non-union Panther Expedited Services, which ABF bought for \$180 million—\$80 million cash and \$100 million in loans.

Another cloud on the horizon is an apparent overture by YRC to eliminate its chief rival by buying ABF. This despite the fact that YRC has lost in excess of \$2.6 billion over the past six years chiefly due to debt incurred by a pair of billion-dollar acquisitions of then-chief rival Roadway Express (for \$1.1 billion in 2003) and USF Corp. (for \$1.5 billion in 2005).

Newly installed YRC CEO James Welch has called those acquisitions—just in time for the economic downturn—“ill-timed and ill-conceived.” But he claims YRC is “much stronger” financially now, and has indicated his offer to buy ABF is still on the table.

In a statement, Welch says “our board and management believed then and believes now that the combination of Arkansas Best and YRCW would be in the best interests of all employees, customers, and shareholders of both companies.”

You can count Teamsters union president James P. “Jim” Hoffa among those who don't believe that it's in the best interest to combine YRC and Arkansas Best. Large trucking mergers are complicated and often lead to financial instability—as well as fewer unionized jobs and choices for shippers.

“It's unconscionable that in the middle





of the IBT's sensitive negotiations for a new contract for 6,000 ABF Teamsters, and in the context of years of continuing sacrifice by our members at YRC, that YRC would advance a secret effort to acquire ABF's freight division," Hoffa said. He called YRC's offer "interference" in the collective bargaining process and an "affront" to workers at both companies.

"Before YRC begins looking for acquisition targets they should first restore our members' wages and pension contributions," Hoffa said. "We have seen this kind of arrogance from YRC before. We thought they had finally learned the lessons of past management catastrophes. Unfortunately it appears they have not."

If Hoffa is surprised, some union members say that he shouldn't be. As part of the last concession with YRC, the Teamsters won two seats on the YRC board.

In the "work preservation" clause of the memo of understanding the Teamsters signed with YRC, it states: "The Employers agree not to establish or buy any new non-union regular route common carrier entity without the prior approval of the Union."

Meanwhile, ABF says that its pending labor agreement helps it "maintain the best-paying jobs in the freight industry," remain in current multiemployer pension funds, ensures its employees have "great benefits," but also adapts to the changing needs of shippers and puts the parent company on a "path to profitability."

—John D. Schulz, Contributing Editor

## LEGISLATION

### Senate signs off on Water Resources Development Act

WASHINGTON, D.C.—The United States Senate last month approved S. 601, the Water Resources Development Act (WRDA) of 2013 by an 83-14 margin. This legislation provides critical flood protection for communities across the country, maintains the flow of commerce, and will create up to 500,000 new jobs, according to the Senate's Environment and Public Works (EPW) Committee.

"I am gratified by the overwhelming

vote on final passage of our WRDA bill," said Senator Barbara Boxer (D-CA), chairman of the EPW Committee. "Getting 83 votes in favor when bipartisanship is missing in the Senate is very important. Now is the time for the House to act so we can ensure

that the benefits of the bill are realized."

The WRDA contains various provisions that stand to have a direct impact on shippers, including:

- Project authorization for 18 projects that address all major mission areas of the

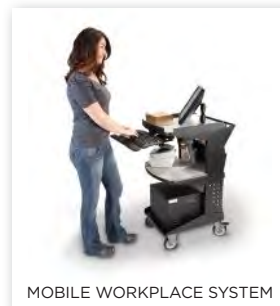
**NEWCASTLE SYSTEMS**  
The Power to Move Your Workplace

**TURN YOUR WAREHOUSE INTO A POWERHOUSE, WITHOUT SOFTWARE OR INFRASTRUCTURE CHANGES.**

Converting a stationary workplace to a mobile one is the easiest, most economical way to increase productivity of your current workers and infrastructure. Make your employees' workplace mobile and free from stationary power sources and data cabling with a **Mobile Workplace System** by Newcastle Systems.

#### Mobile Workplace Systems Enable You To:

- Quickly obtain measurable productivity gains without months of planning and implementation
- Integrate with your current equipment
- Instantly scale your employees' current operations to handle increased throughput
- Streamline processes in shipping/receiving, inventory management and more



Learn more at [www.newcastlesys.com/powerhouse](http://www.newcastlesys.com/powerhouse)

"We've been using our mobile workplace system for over a year and I can't even explain the difference it made in speed and accuracy when scanning/labeling goods coming in and out of the warehouse. You guys are life savers!" - Newcastle Systems Customer

15B Sylvan St. • Middleton, MA • 01949 • USA • 781.935.3450

[www.newcastlesys.com](http://www.newcastlesys.com)

Corps of Engineers, including flood risk management, navigation, hurricane and storm damage risk reduction, with an annual benefit topping \$690.3 million.

- Project delivery reforms that establish a new program to promote levee safety and improve inland waterways project delivery, among other efforts.

- Addressing the surplus of the Harbor Maintenance Trust Fund (HMTF) by ensuring all revenues will be spent for port maintenance and not impact other important Corps of Engineers projects

Capital for the HMT fund is collected annually from importers and domestic shippers for deep-draft navigation maintenance dredging.

The key objectives of the Harbor Maintenance Act of 2013 as outlined in the WRDA bill include: ensuring that revenues collected into the Harbor Maintenance Trust Fund are used for the intended purpose of those revenues;



increasing investment in the operation and maintenance of U.S. ports; promoting equity among ports nationwide; and ensuring that U.S. ports are prepared to meet modern shipping needs, including the capability to receive large ships that require deeper drafts.

Since the Harbor Maintenance Tax's inception in 1986, the American Association of Port Authorities (AAPA) has advocated for full use of its collections for their

intended purpose of dredging America's deep-draft navigation channels to their authorized and required depths and widths. And importers and domestic shippers pay approximately double the annual amount that is drawn from the HMTF for maintenance dredging, leaving a surplus that exceeds \$7 billion today.

"We're excited to see such strong bipartisan support for this critical legislation," AAPA Director of Navigation Policy and Legislation Jim Walker told *Logistics Management*.

According to Walker, this is a large and complex bill that will take some time to fully analyze. "It contains key points that will increase Harbor Maintenance Tax funding," he said. "It streamlines the Corps of Engineers planning study and project delivery processes; it establishes Harbor Maintenance Tax equity for donor ports; and authorizes shipping channel improvements without earmarks."

—Jeff Berman, Group News Editor

**Clients come to us....**

for their contract logistics and transportation needs.

**We deliver to them...**

*world class services and value added solutions...*

**with the people, processes and technology...**

to make it all happen.



## INTERMODAL

### IANA reports a 4.5 percent gain in total Q1 intermodal volumes

CALVERTON, Md.—In the first quarter edition of its *Intermodal Market Trends & Statistics Report*, the Intermodal Association of North America (IANA) said that the total first quarter intermodal container and trailer movements—at 3,682,049 trailers and containers—were up 4.5 percent annually.

As has been the case for six straight quarters, domestic containers outpaced all intermodal categories for a 10.2 percent annual gain. This was slightly below the fourth quarter's 2012 10.5 percent annual increase.

IANA noted in its report that that last time domestic volumes declined on a quarter-to-quarter basis was in the second quarter of 2009, adding that, on a seasonally-adjusted basis, domestic intermodal was up 3 percent compared to the fourth quarter, marking its strongest growth rate since the second quarter of 2010.

And while the growth rates are impressive, industry experts maintain that these strong domestic container intermodal volumes are due in large part to freight coming out of intermodal trailers and going into trailers—or from one box to another—coupled with the fact that the gross number of intermodal loadings—both domestic and container—were higher in 2006 than in 2012.

What's more, during that same period, the number of truckloads moved and truck tonnage volume is larger than intermodal.

IANA President and CEO Joni Casey told *Logistics Management* that the growth in domestic containers is a combination of transloading, both from small 40-foot international containers into larger 53-foot domestic boxes, and also a result of additional market share due to actual modal shifts.

First quarter international containers

were up 3.0 percent annually, and trailers decreased 6.3 percent. Even though trailers were down, IANA pointed out that the rate of decline was not as high as the 10 percent or higher levels seen in the previous two quarters.

The IANA report explained that the gains on the international side were surprising, considering the current economic climate in terms of the across the board U.S. tax increase as well as the federal budget sequester serving as headwinds. But even with those obstacles, IANA observed that West Coast port import numbers were strong in the first quarter, adding that rail intermodal has a higher share on the West Coast.

"Our original estimates of 2 percent growth in international volumes were exceeded based on stronger than expected consumer spending, resolution of some lingering labor uncertainty, and higher than anticipated inventory restocking," Casey said.

—Jeff Berman, Group News Editor

Exceeding their expectations...

time and time again.

Because what's important to them...

Is important to us.



## Not a weak link in the chain

Meet some of the thousands of contract logistics and distribution professionals at UTi who can integrate our value-added warehousing and distribution solutions to your business. Our single-source solutions enable you to deliver to your customers while we deliver savings to your bottom line.

To find out more about which UTi CL&D solution best suits your needs and view our team videos, visit [go2uti.com/videos](http://go2uti.com/videos).



# Newsroom Notes

by Jeff Berman

Jeff Berman is Group News Editor for the Supply Chain Group publications. If you want to contact Jeff with a news tip or idea, please send an e-mail to [jberman@peerlessmedia.com](mailto:jberman@peerlessmedia.com).



## Teamwork, character, trust go a long way

IN THE FAST-PACED WORLD of freight transportation and logistics, it's incredibly easy to take a myopic approach to whatever task you're currently doing. That isn't a bad thing, of course, considering we're all getting paid to get a job done.

But at the same time, not everything can be done alone, or at least without some help from your team members or outside partners. In the logistics or supply chain realm, that may be shippers leaning on carriers or third party logistics providers (3PLs).

Having trust in your colleagues is crucial and makes for a stronger product, service, or brand. That was a key message from Lee Corso, ESPN College Football Game Day host and past head football coach at the University of Louisville, Indiana University, and Northern Illinois University, at the recent National Shippers Strategic Council (NASSTRAC) Annual Conference in Orlando.

In describing the best ways to be productive and efficient, Corso, who in the offseason serves as director of business development for pencil manufacturer Dixon Ticonderoga, said that personal relationships are still vital to success, which could be viewed as "old school," as opposed to the "new school" approach offered by the Internet. He stressed that related social media technologies may provide a type of presence for people, but fail to properly substitute for real-time relationships—whether

it's an in-person meeting or a detailed phone call.

And along with having and developing strong relationships, Corso stressed that there's no room for greed in business, especially if you want to foster and maintain a strong relationship. "Always leave something on the table and don't take everyone's cookies or let someone take all of yours," he noted. "The essence of business is good relationships, surrounding yourself with good people, and winning with character, not characters."

Taking that a step further, Corso explained that business leaders need to analyze their team's productivity; and, more importantly, character. If you have bad people on your team, he said, it can cost you your job. "Never ever get rid of a hard worker with strong character, even if that person is not the best on your team," said Corso.

Looking back on his coaching days, Corso recalled how at Indiana he had six star football recruits come for

**The essence of business is good relationships, surrounding yourself with good people, and winning with character, not characters.**

a visit before their freshman year. He took them to an Indiana basketball game, and three of the recruits took off their hats during the national anthem. As it turns out, the three recruits that kept their hats on were the top players of that batch, but that did not deter Corso from telling them that they wouldn't be playing for him the next fall.

This, said Corso, speaks to the concept of integrity. "You cannot [compromise] your integrity, whether it's to win football games or to get a job or keep one. Never do something shady to get or keep a job."

While this may not have been a traditional speech at a logistics and transportation conference, consider this: With truck driver hours-of-service (HOS) changes kicking in this July, industry estimates are noting that this confrontational regulation has the potential to reduce over-the-road capacity by 3 percent or more.

HOS is likely to create confusion for shippers and carriers alike, and those that are likely to rise above the anticipated havoc are the ones that demonstrate how to be team players by collaborating, trusting in one another, and acting with integrity—all of which are the Xs and Os in Coach Corso's game plan for success. □



Peter Moore is a Program Faculty Member at the University of Tennessee Center for Executive Education, Adjunct Professor at The University of South Carolina Beaufort, and Partner in Supply Chain Visions, a consultancy. Peter can be reached at [pete@scvisions.com](mailto:pete@scvisions.com).



## Intermodal pricing signals mixed

SHIPPERS AND THIRD PARTY LOGISTICS PROVIDERS (3PLs) need to pay attention to domestic and major trade lane transportation prices now as the U.S. economy tries to find a higher gear. As was recently reported, there were 3 percent increases—or more—in some key trade lanes (lanes to and from ports) last month amid a softening market. I suggest we look at the long-term and short-term capacity and infrastructure trends that will undoubtedly be affecting prices.

First, the long term trends. IDS Transportation estimates that many lanes of 750 miles or more are now competitive between rail and highway, increasing a shift to intermodal equipment usage. Therefore, the state of the rail and drayage markets will have an impact on a broad swath of shippers in capacity availability, pricing, and service.

While domestic over-the-road trucking (trailers) is largely a closed market with some NAFTA impacts, the domestic intermodal market (containers) is still subject to rapid change as international freight markets swing from weak to strong and back again. U.S. domestic consumption continues to climb as unemployment falls, and worldwide suppliers are looking to the U.S. to be a market for their goods while Japan and Europe are stuck in low gear. Thus, there will be spikes in trade lanes serving ports when capacity gets tight—driving continued investment in capacity in key trade lanes where margins are higher.

On the infrastructure front, we had an announcement by the City of Los Angeles that BNSF can expand their rail capacity at the Port of Los Angeles to support larger vessels. And as the mega-ships arrive, we'll see thousand of containers added to the rails. Offsetting this West-East rail surge will be larger vessels transiting the Panama Canal directly to Eastern ports. Keep in mind that more capacity in rail and water is good for buyers across the country.

This is a time of re-engineering for service providers, and I think I can safely predict more consolidation and market share shifts. With this, shippers need to step up participation in industry forums and discussions

with industry thought leaders on what's coming their way. For 3PLs, this is an opportunity to demonstrate deep industry knowledge and to offer to brief shipper's C-level executives about things that will affect both of your businesses. It's clearly time to bring out the folks who can talk strategy.

On the short-term, the increases in capacity are running into a very short-term stabilization of domestic truckload capacity ahead of the new driver hours-of-service regulations in the U.S. Lower fuel costs are masking the upward trend in labor and equipment costs, while railroads and their partners—many of them also truckers—are pushing to keep market share against

**While shippers in a few trade lanes are seeing aggressive price changes, we are still in a buyer's market that will not last long. Now is the time to be building stronger relationships to ensure service and competitive pricing in a strengthening economy.**

motor carriers seeking to keep drivers and equipment utilized. Meanwhile, diesel appears to be going sideways in price in the short run, providing relief to carriers who are using this margin to buy market share.

While shippers in a few trade lanes are seeing aggressive price changes, we are still in a buyer's market that will not last long. Now is the time to be building stronger relationships to ensure service and competitive pricing in a strengthening economy—one that will bring shortages of skilled operators, higher security costs, and rapid shifts in capacity positioning.

Shippers need to understand what their service provider will be doing to meet these challenges, and what changes they need to make internally in inventories, purchasing, and contracting to accommodate these changes. Flat pricing now is not an indicator for the future. My father was one of the pioneers of intermodal, and he used to repeatedly say: "Pay attention to the game." Those words were never more on point than they are right now. □

**Mark Pearson** is the managing director of the Accenture's Supply Chain Management practice. He has worked in supply chain for more than 20 years and has extensive international experience, particularly in Europe, Asia, and Russia. Based in Munich, Mark can be reached at [mark.h.pearson@accenture.com](mailto:mark.h.pearson@accenture.com)



## The business value of supply chain sustainability

SUPPLY CHAIN DECISION MAKERS are well-positioned to help the world become a more habitable place, and to benefit financially from their efforts. This was the conclusion drawn from a joint research project spearheaded by Accenture and the Carbon Disclosure Project (CDP)—a not-for-profit organization that has developed a global system for helping companies and cities measure, manage, and share environmental information.

The report's finding that going green can move you further into the black—is not revelatory. However, the

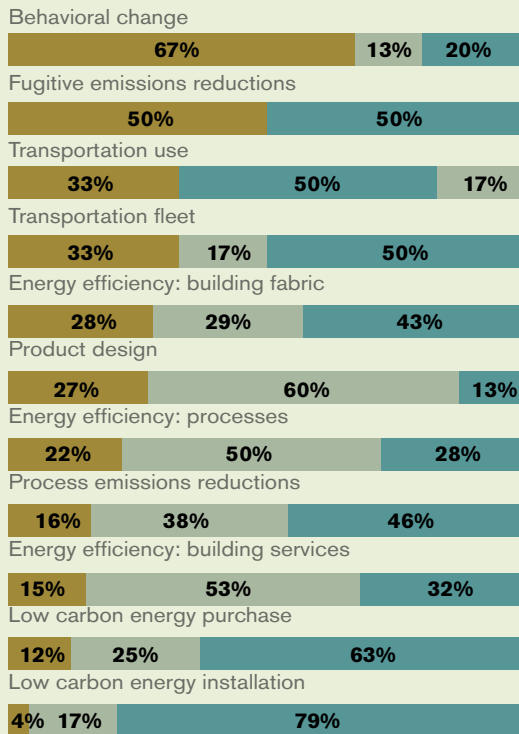
report does break new ground by demonstrating how seriously the survey's 2,415 respondents are about climate change, and how convinced they are of sustainability programs' ability to drive environmental and business benefit.

### What's good for the environment . . .

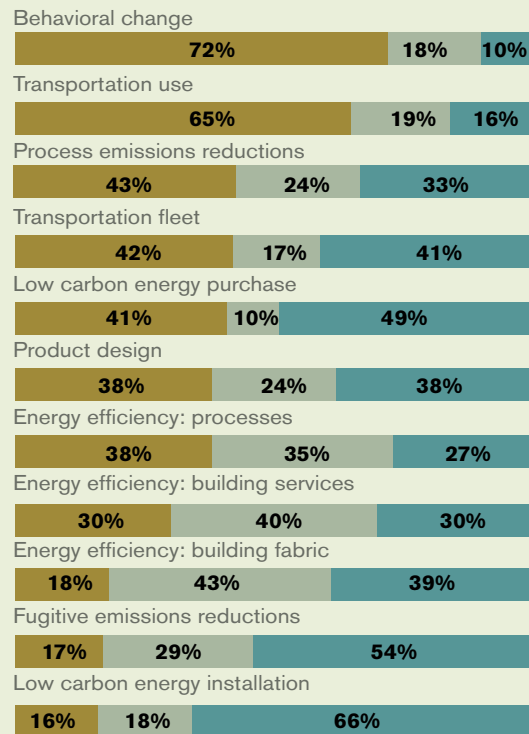
Nobody should be shocked that supply chain sustainability initiatives can also be good for business. At most manufacturing companies, after all, supply chains

### Payback period for sustainability related investments reported by CDP members and suppliers

#### CDP members 2012



#### Suppliers 2012



■ < 1 year ■ 1-3 years ■ >3 years

Source: Accenture and the Carbon Disclosure Project (CDP)

account for between 50 percent and 70 percent of total expenses.

So it makes sense that things such as greener facilities, better fuel consumption, and more efficient manufacturing processes are potential money makers. But what may be surprising to logistics and supply chain professionals is the rapid payback periods perceived by the research respondents.

The report also goes beyond the benefits associated with reductions in energy usage—and even here the business benefits and case studies are plentiful. Here are five examples.

**It makes sense that things such as greener facilities, better fuel consumption, and more efficient manufacturing processes are potential money makers. But what may be surprising to logistics and supply chain professionals is the rapid payback periods perceived by the research respondents.**

#### 1. Risk reductions

Seventy percent of the survey respondents identified a current or future climate change event that could significantly impair their business. The report also profiled companies working to mitigate climate related risks. One such organization is Johnson & Johnson (J&J), which has analyzed its current and future “water scarcity risk” using applications such as the “global water tool” from the World Business Council on Sustainable Development. After identifying regions that may experience these risks, J&J works to decrease water consumption and implement focused risk management programs.

#### 2. Product innovations

Many survey respondents believe that new low carbon products can be a large contributor to corporate growth. In fact, 10 percent of participating CDP supply chain members said that their companies already are deriving more than 50 percent of their revenues from low carbon products. Dutch electronics manufacturer Philips believes that its green products will constitute 50 percent of total sales by 2015. In the near future, Dow Chemical expects to increase its annual sales of clean energy enabling products from \$5 billion to \$15 billion.

#### 3. Service innovations

Many survey respondents noted the profit potential associated with using their company’s internal sup-

ply chain capabilities to create sustainability related service offerings. BASF offers customers a variety of sustainability services through its “Success—Added Value through Sustainability” initiative, whose solutions include energy management consulting and the assessment of products and value chains using eco-efficiency and lifecycle analyses.

#### 4. Premium pricing opportunities

Many companies find they can charge premium prices for products or services with sustainability related benefits to the customer. Brazilian chemical company Braskem responded to its customers’ interests in low carbon raw materials, and leveraged its experience in ethanol manufacturing, by developing a product called Green Polyethylene. This is a relatively inexpensive biopolymer, but it commands a high price compared to conventional polyethylene-based fossil fuels.

#### 5. Enhanced corporate reputations

Survey respondents were particularly enthusiastic about the potential of their supply chain sustainability efforts to improve reputations and brand images. The report cites one recent study showing that Honda’s brand value increased 28 percent and General Electric’s 17 percent due to their work to improve supply chain and product sustainability.

Another example is Daimler, which expects its role as a major player in fuel cell technology to boost car sales. A company’s reputation for sustainability can also help it attract and retain skilled workers. The report cited a recent Hill+Knowlton report in which 75 percent of top MBA students claim that corporate reputation will play a critical role in their decision about where to work.

#### Into the green, into the black

More and more companies are concerned about risks associated with climate change, weather events, and water shortages; and a growing number are looking to supply chain management for answers.

At the same time, organizations are also more aware of supply chain management’s potential to drive innovations such as low carbon products, sustainability related services, green packaging designs, and other solutions that could save money and increase revenues. It’s this combination—solutions to existing problems and the growing prevalence of bottom line opportunities—that make sustainability and supply chain management a powerful tandem. □

## Warehouse/DC Technology and Innovation

# STAPLES: Smart packaging, happy customers, healthy planet

**We go inside the second largest internet retailer's Secaucus, N.J., fulfillment center to explore its network-wide transformation from a few standard box options to an almost limitless number of custom, right-sized boxes.**

BY MAIDA NAPOLITANO, CONTRIBUTING EDITOR

**A**s the world's largest office supply company, Staples is committed to providing all types of businesses with every office product they need to succeed. It also strives to ensure that the entire process of ordering and acquiring these products be as quick, effortless, and hassle-free as possible. It's even their company tagline: "That was easy."

With \$24 billion in sales, this customer-centric strategy is clearly working. Staples is the second largest retailer on the Internet, shipping millions of cartons annually to consumers and businesses throughout North America. It accomplishes this by leveraging a highly responsive supply chain and distribution system that guarantees that any order placed before 5 p.m. will be delivered the next day to 98 percent of the population from its network of state-of-the-art fulfillment centers (FC).

But even the most sophisticated and automated FC could not address one of the key prevailing customer concerns: excessive packaging. The company had long been searching for solutions that curtailed the use of oversized corrugated and excessive filling material for its shipments—it's even self-imposed a goal of a 20 percent reduction in

packaging by 2020.

In January 2012, this Boston-based retailer made tremendous strides towards achieving this goal when it launched its "Smart-size Packaging Program," deploying a system-wide rollout of a transformational new technology known as "on-demand packaging" from Salt Lake City-based Packsize International.

This solution allows the leading-edge retailer to automatically create a custom-sized carton specific for every less-than-full-case order it ships. These orders—also known as break-pack orders—account for approximately 40 percent of Staples' order volume.

These optimized box configurations that fit "just right" do not only address customers' concerns on unnecessary packaging and thus help improve customer satisfaction, but they also align with in-house sustainability goals, allowing Staples to accrue a savings in its annual carbon footprint equivalent to about 100,000 trees—the size of a small forest. And it saves money, reducing corrugated inventory requirements, increasing efficiencies in handling and transportation, and minimizing wasted space and dunnage material within the shipped order.





**Jerry Imbrenda, fulfillment center manager at the Secaucus facility, with some of the custom-sized boxes from the company's Smart-size Packaging Program.**

in and around the tri-state area of New York, New Jersey, and Connecticut. We'll look at how this technology is set to make an impact on not only this facility and the rest of Staples' fulfillment network, but also the planet. If you're a retailer shipping thousands of break-pack orders daily, you might want to take notes.

### **The problem with excessive packaging**

Shipping to customers exactly what they ordered, next-day delivered, has been part of the Staples "perfect order" strategy for a number of years. As part of this initiative to fine-tune that perfect order, supply chain team leaders have been listening intently to customer feedback.

One of the most pressing complaints that the company had been facing was the issue of excessive packaging. "Before smart-size packaging, we had to fit an order into one of five box sizes, which wasn't the most user-friendly when all you ordered was a box of pens," says Jerry Imbrenda, manager of the Secaucus fulfillment center. "In order for a customer to get it undamaged, we would put it in a corrugated carton with a number of air pillows."

He adds that if the order didn't fit within one of the smaller-sized boxes, it would go to the next larger size, which most often was significantly more volume than what was needed—requiring a high amount of dunnage to fill the empty space in the carton.

In this era of heightened sustainability awareness, customers were not pleased with how this also negatively affected the environment. The supply chain leadership at Staples knew something had to be done.

Over the next few pages, we'll take you inside the retailer's Secaucus, N.J., fulfillment center, its first business-to-business facility to deploy this packaging technology, and detail how the retailer made this network-wide

transition from just a few standard box options to an almost unlimited number of custom right-sized boxes.

The Secaucus FC primarily serves Fortune 500 companies in nearby downtown Manhattan plus larger businesses

### New packaging solution

In December 2009, a Staples' board member had come across a new on-demand packaging technology developed in Sweden and brought to America by Packsize International. The Staples team, headed by Rod Galloway, vice president of logistics strategy, global design and engineering for the retailer, started evaluating the technology and its applicability to its business.

"In May 2010, we visited one of Packsize's existing customers," recalls Galloway. "We evaluated its ability to support our business needs and service level requirements, then performed a detailed business case validation."

Pleased with the results, Galloway and his team proceeded with a pilot program in September 2010 at the company's Orlando facility. Phase 1 had the packaging machines making existing carton sizes without any system interface, so the team could study their reliability and determine their

throughput capabilities.

In May 2011, the team implemented phase 2 where a system interface was developed between Staples' warehouse management system (WMS) and the packaging machines. The pilot performed through a couple of peak seasons, delivering key metrics to the team. "The objective here was to study customer satisfaction impact, sustainability impact, and capital and expense impact so that we could develop the network-wide business case," explains Galloway.

After verifying the economics and success of the pilot project, the team then made the decision to begin immediately deploying the technology to all of its FCs by early 2012.

"For the last 13 months, we have been rolling out one new building every two weeks," says Packsize's CEO Hanko Kiessner. "It's like clockwork. We ship our machines and our corrugated on a Friday. It's delivered to a

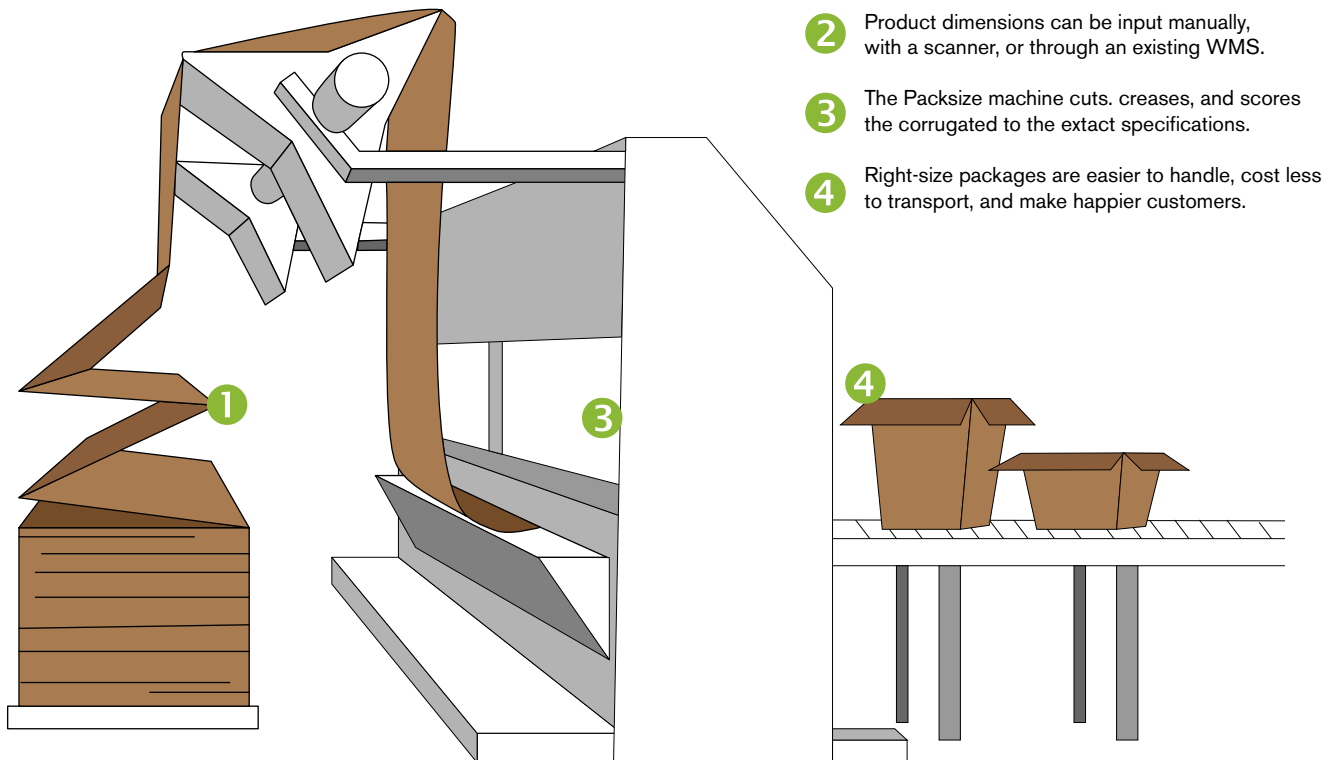
Staples fulfillment center by the following Monday. We install on Tuesday, train on Wednesday and Thursday. By Friday, the building goes live."

Kiessner adds that not many businesses could have pulled off such a tight rollout schedule, but Staples kept itself on top of its game, with seamless collaboration between both Staples' and Packsize's engineering and integration teams. As of May 2013, Staples has implemented "smart-size packaging" in 15 other e-commerce FCs and plans to complete installation of the packaging solution in all of its centers by year's end.

### On-demand packaging in Secaucus

The Secaucus facility processes both full-case and break-pack orders in its business-to-business FC. Of the 20,000 to 40,000 total orders shipped daily, about 30 percent are break-pack orders, requiring Packsize's four EM7-25 "package converting machines" to generate

## How on-demand packaging works



- 1 Packsize corrugated z-Fold is fed into an on demand packaging machine.
- 2 Product dimensions can be input manually, with a scanner, or through an existing WMS.
- 3 The Packsize machine cuts, creases, and scores the corrugated to the exact specifications.
- 4 Right-size packages are easier to handle, cost less to transport, and make happier customers.

about 6,000 to 8,000 custom-sized boxes daily. A fifth machine is on standby. “We went from five box sizes to nearly 100, and we measure virtually every SKU, so the system knows its cube,” says Imbrenda.

Integrating with the WMS, order information is sent to the proper machine and that machine’s corrugated track. The machine’s software manager, PackNet, adds up the cube of the units of that order and performs sophisticated algorithms to determine the right-sized carton to generate.

In the meantime, bales of corrugated are fed into individual tracks of the machine which then cuts, creases, and scores the corrugated to the exact specifications, creating un-erected boxes at speeds of up to 1.7 sec/box. At an adjacent station, a bar coded parcel shipping label is simultaneously generated and applied to the correct box.

Another worker erects the empty carton then feeds it to a bottom taping machine before it is inducted into

the facility’s network of picking conveyors. Shipping boxes are then diverted to different pick zones where workers scan the box label for the order and pick units of that order directly into the box. Completed picks travel to another level of the facility, where the order is checked, taped, and manifested for outbound shipment.

### Reaping the benefits

The switch to smart-size packaging has generated immediate savings to Staples. “There was no large upfront capital, as Staples never bought any of our machines,” says Packsizes Kiessner. “With our cost model, 97 percent of our customers save money on day one because the machines are provided as part of the corrugated supply.”

For Staples, there were some capital expenses to accommodate the machines in their facilities, such as electric power and air installation, WMS modifications, and the retrofitting of conveyors. However, average corrugated usage has dropped over 15 percent, air pillow usage has been reduced by about 60 percent, and break-pack order cube has been reduced by approximately 20 percent allowing more orders to be accommodated in one truck delivery.

Before the packaging machines were installed, Staples had to carry at least half to a full truckload of corrugated inventory for each carton size. Now, the inventory is about two truckloads of corrugated bales, in total. On average, Staples now needs at least 50 percent less storage space for corrugated.

A conservative estimate of the carbon footprint reduction based solely on corrugated reduction shows that for the



**More right-sized boxes fit on a pallet ready for loading at the Staples’ fulfillment center.**

15 facilities already converted, a savings of more than 8,300 metric tons, equivalent to almost 31,000 trees, has been realized. When fully implemented, the program is expected to save over 25,000 metric tons.

Packsizes’s Kiessner urges possible early adopters to first do a pilot program, then measure the success of the pilot before making a decision. “When the boxes that you get from box manufacturers are 40 percent too large, then you are really paying for all those inefficiencies, taking up 40 percent too much space on the truck,” he says.

According to Staples’ Imbrenda, “It helps us reduce our cost here internally while giving our customers what they want. They want their orders in smaller packages and they want less waste—and it helps the environment. It’s a win all over.”

—Maida Napolitano is a Contributing Editor for Logistics Management



**Packsizes EM7-25 machine creating right-sized boxes for induction to the picking zones.**

# What's **NEW** & what's **HOT** in warehouse and DC technology products

## Modular headset for voice-directed picking

Incorporating modular construction that enables shared use of electronics across multiple shifts, the SRX2 wireless headset enhances the operator efficiency with advanced voice recognition technology. Its SoundSense system continuously listens to and blocks environmental sounds to reduce ambient noise by 50% for better recognition, higher accuracy, fewer errors, and improved productivity. Ruggedized and compact, the headset is ideal for use in coolers, high noise areas and fast-moving piece-picking environments. It also functions in freezers with temperatures as low as -22°F. The headset batteries last two shifts in dry environments and one full shift in freezer environments, while intelligent battery management predicts battery life months in advance. **Vocollect, 412-349-2515, [www.vocollect.com](http://www.vocollect.com).**



## Dual technologies improve read rates

For fixed 1D bar code reading in high-speed tote scanning and print-and-apply verification, and carton code applications, the DataMan 300 uses the 1DMax+ algorithm paired with Hotbars technology. Hotbars uses texture to locate bar codes at any orientation, and then extracts high-resolution 1D signals for decoding. Together, the technologies dramatically increase the decoding speed of damaged or poorly presented bar codes. Camera-based, the readers produce higher read rates that reduce costs while increasing throughput, and lower equipment costs because the imagers have no moving parts. For continuous process improvement, the reader provides visualization to access data. **Cognex, 508-650-3000, [www.cognex.com](http://www.cognex.com).**



## Fleet management control and optimization

Combining lift truck fleet efficiency with warehouse optimization and professional services are the iWarehouse Essential and iWarehouse Enterprise systems. Essential provides access control and compliance while monitoring and collecting both lift truck and operator data in real time, increasing asset and labor visibility. To control lift truck and fleet usage, it automates vehicle access and provides an electronic operator checklist that is recorded and stored for OSHA compliance. Enterprise turns collected asset and labor information into actionable data to identify opportunities for fleet and warehouse optimization. To increase productivity and reduce operating costs, it can be integrated with select labor management systems. **The Raymond Corp., 800-235-7200, [www.raymondcorp.com](http://www.raymondcorp.com).**



## Complete supply chain software suite

To help wholesalers increase margins through integration of inventory replenishment, labor management, warehouse management, and transportation processes, the SCOPE supply chain process platform from Manhattan Associates provides a single, shared foundation for all software in the suite.

The system enables shared data and workflows to optimally balance supply and demand across multiple channels.

The entire system manages make-to-order and make-to-stock processes while responding quickly to changing order volume and delivery schedules. **Manhattan Associates, 800-661-4972, [www.manh.com](http://www.manh.com).**



### High-speed, low-maintenance sortation and conveyor

Ideal for high-capacity operations with gentle product handling needs, a line of sortation and conveyor equipment maximizes throughput while minimizing maintenance. Sortation equipment offerings provide high throughput rates and include tilt-tray, cross-belt, and high-speed sliding shoe sorters. Generating quiet, positive transportation, and zero-pressure accumulation, the conveyor line handles products rapidly without damage. Sliding shoe sortation systems feature patented soft-touch diverting technology for gentle product handling. All systems are customized to meet specific requirements. **Intelligrated**, 866-936-7300, [www.intelligrated.com](http://www.intelligrated.com).

### Compact, mobile workstation cart

Compact NB series mobile powered workstations save labor and improve productivity. Patented and ergonomic, the carts carry computers (desktops, towers, or laptops), printers, scales, bar code scanners, and other small electronic equipment to wherever needed. An on-board battery powers up to four devices simultaneously during 8 to 10 hours of normal use. The cart includes adjustable shelves that hold up to 75 pounds each. Every model has a slotted mast that allows the user to adjust the height of each shelf. **Newcastle Systems**, 781-935-3450, [www.newcastlesys.com](http://www.newcastlesys.com).



### Expand storage capacity with mezzanine work platforms

A line of industrial steel, bolt-together mezzanine platforms is offered as standard or custom-engineered structures to expand facility capacity and provide additional space for manufacturers, DCs, and warehouses. The platforms come in five different framing options and decking configurations. Included are a beam and bar joist structure ideal for medium-to-large mezzanines requiring wide spans and higher load capacities up to 300 pounds per square foot; a bolted C-section structure for smaller bay areas measuring 11 x 16 feet with load capacities up to 200 pounds per square foot; and a rugged beam and beam structure for higher mezzanine load and span requirements. **Wildeck**, 262-549-4000, [www.wildeck.com](http://www.wildeck.com).

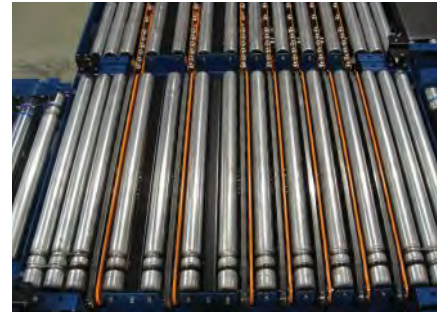


### Track labor, productivity with new applications for WMS

A cloud-based warehouse management system has been enhanced with two new applications: a labor productivity tracking system and a supply chain analytics dashboard. To reduce labor inefficiencies while improving accuracy and performance, the productivity tracking system can be integrated into the supplier's WMS or any third-party application. It features an easy-to-use, Web-based interface and radio frequency functionality, and can be used to create goals for teams or individual employees, to clock-in/clock-out and for incentive pay analysis. The dashboard reporting tool provides real-time visibility into overall supply chain performance with easy integration and data extraction from other systems. Alerting is offered to monitor inventory thresholds, failed replenishment, and inventory shorts. **LogFire**, 678-261-9000, [www.logfire.com](http://www.logfire.com)

### Conveyor zones independently powered by motorized rollers

The IntelliROL system employs a motorized roller to power each zone or segment of the conveyor. Modular and customizable, the conveyor can be easily reconfigured to address future needs. Features include a low-mount roller frame that completely protects all of the pre-mounted, pre-wired electronic components. Start-up time is minimized by plug-in installation with pre-wired beds and pre-tested controls. To conserve energy, each motorized zone can be turned on only when needed, reducing noise levels and increasing component life. Additional components, including pre-wired smart driver cards and photo-electric sensors, can be configured for transportation, accumulation, and work-in-process operations without additional controls processors. **TGW Systems**, 231-798-4547, [www.tgw-group.com](http://www.tgw-group.com).





### Very narrow aisle pallet handling, case picking

The NTA series is ideal for pallet handling and case picking in very narrow aisle applications for high-density warehousing. Offered with an AC power engine in either 48 or 72 volts, the vehicle delivers fast speeds, powerful acceleration, and precision handling to increase the number of loads moved per

shift. Constructed with a priority on operator ergonomics and comfort, the vehicle features infinitely variable armrests, a high backrest, and recessed swivel seat to reduce fatigue and improve productivity. **Yale Materials Handling, 800-233-9253, [www.yale.com](http://www.yale.com).**

### Operate voice-directed picking system on standard mobile computers

Capable of running on standard industrial mobile computers, Jennifer VoicePlus voice-directed picking system improves efficiency, productivity, and fulfillment accuracy by combin-



ing voice recognition and scanning into a single multi-modal application. The system creates a two-way conversation with pickers wearing a headset connected to a mobile computer. A recorded

human voice tells the wearer where to go and what to do, and he or she speaks back through a microphone to confirm task completion. The newly released version includes next-generation speech recognition for minimal user training and improved recognition accuracy in all languages. To help supervisors control and adapt warehouse operations, the system's management services console provides dashboards, reports, and on-site configuration tools. **Lucas Systems, 724-940-7144, [www.lucasware.com](http://www.lucasware.com).**

### Uniquely shaped protective eyewear fits multiple facial profiles comfortably

Featuring the North-brand signature fit profile that ensures a comfortable fit for 85% of wearers without adjustment are Conspire and Relentless protective eyewear. Lightweight, the safety glasses' construction was based on extensive anthropomorphic research in facial dimensions. Their uniquely shaped and padded nosepieces and flexible temples provide a comfortable fit across a range of facial profiles for grab-and-go convenience. Both styles include multiple lens tint options, including an anti-fog coating. **Honeywell Safety Products, 800-430-5490, [www.honeywell-safety.com](http://www.honeywell-safety.com).**



### 4Sight yard and dock management system

The 4Sight yard and dock management system allows facilities to monitor, schedule, and communicate trailer movements, load assignments, and loading dock status with a simple, easy-to-use interface.

By combining RFID, GPS and sensor technologies, the software provides real-time yard and loading dock visibility, full automation and optimization from the time a vehicle approaches the inbound gate to the time it exits the outbound gate. Event-management capabilities and alert notifications improve trailer coordination and turn time.

The system also allows facilities to schedule maintenance based on actual usage by automatically sending e-mail alerts to service providers and facility managers when equipment reaches a pre-set usage threshold. **4Front Engineered Solutions, Inc. 972-466-0707, [www.4frontes.com](http://www.4frontes.com).**

### Sort picked items into hanging pocket system

Originally engineered for the fashion industry, the pocket sorter order fulfillment technology is ideal for any picking application requiring flexibility and accuracy. The sorter is connected



to a track system with roller adapters and efficiently transports a variety of different sized articles—from flat-folded fashion goods and accessories to odd-sized non-conveyables such as small parts or loose books—to simultaneously increase throughput and provide dynamic access to products. Each pocket contains an RFID tag, enabling each item to be uniquely identified and tracked at all times. Individual articles for the same order can be placed in different pockets and then sent to a buffer zone to wait for sequenced delivery to the pack station shipment. Because of its compact size and stackability of the track system, the sorter saves facility space. It can also be integrated with induction stations, goods-to-person pick stations, and pack stations. **KNAPP Logistics Automation, 678-388-2880, [www.KNAPP.com/us](http://www.KNAPP.com/us).**

### Hygienic plastic pallets

A line of plastic pallets are lighter than wood, making them easier to handle and less expensive to ship. Completely recyclable at the end of their usable life, the hygienic pallets are immune to insect contamination, as pests cannot penetrate the plastic. They do not absorb pathogens or bacteria, and do not require fumigation or heat treatment. For traceability and security, the pallets feature embedded RFID tags for immediate



identification contaminated shipments and to facilitate product safety recalls. The pallets have been certified as usable in food processing by NSF International. **Intelligent Global Pooling Systems (iGPS), 800-884-0225, [www.igps.net](http://www.igps.net).**

# Your **BEST** Source for New Products in Materials Handling!

The screenshot shows the MHPN.com website interface. At the top, there's a banner for Cannoncarts with the text 'CANNONCARTS ARE ALWAYS READY TO ROLL'. Below this is a navigation bar with 'Modern Materials Handling', 'Logistics Management', and 'Supply Chain Management Review'. The main content area is titled 'MATERIAL HANDLING PRODUCT NEWS' and is dated 'Wednesday, April 11, 2012'. It features several sections: 'Featured Product' with a Zebra P4T thermal transfer printer, 'Browse Products by Type' listing categories like AGVs, Conveyors & Sortation, etc., 'Latest Products' including Lista International's Open Shelves and Penco's Seismic Rack System, and 'Latest Materials Handling News' with articles on power source protection, green equipment, and university programs.

## Introducing **MHPN.com** Your daily source for new products

Covering:

- Mobile & Wireless
- Lift Trucks & Accessories
- Automation
- Conveyors & Sortation
- Containers & Totes
- Packaging & Pallets
- Dock Equipment
- And much more!

**MHPN.com**, *Material Handling Product News'* new website, offers the most comprehensive listing of new products in the materials handling industry. Whether you're looking for the newest innovations in dock equipment or the latest software to control your material flow in the warehouse, MHPN.com is your first stop.

**Check out MHPN.com today!**

# **MATERIAL HANDLING PRODUCT NEWS®**

**www.mhpn.com**

**Peerless®**  
MEDIA, LLC

## 2013 Rail/Intermodal Roundtable:

# Staying ahead of the pack

**Rail and intermodal continue to improve service and create value for shippers despite an uneven economy engulfed in an atmosphere of political uncertainty. Our panel of top analysts maintains that the railroads are only looking at extending their lead.**

BY JEFF BERMAN, GROUP NEWS EDITOR

**E**ven though rail carload and intermodal volumes have still not caught up to 2006 levels, they're certainly heading in the right direction. What's more, those volume levels are on solid footing, with North American Class I railroads upping the ante annually on their respective capital investment plans, setting their sites on building out networks and acquiring new equipment.

While the commodity mix on the carload side has changed in recent years, railroads have shown their versatility in creating high-value services in new and emerging markets, while intermodal—especially on the domestic side—continues to chug along at a healthy clip. Making this all the more impressive is that rail and intermodal are performing well in an uneven

economy engulfed in an atmosphere of political uncertainty.

Despite these headwinds, business on the tracks continues to head in a positive direction, and shippers continue to see the benefits of rail, too. But all is not rosy, with some shippers citing an inability to get what they consider to be decent pricing, while others are not always pleased with the service. On top of that looms the constant specter of railroad re-regulation, which has quelled in recent years.

*Logistics Management* is fortunate to have a trio of the best minds in the railroad and intermodal business explain the real story on the rails and put current market trends and business conditions into perspective for shippers in our 2013 *Rail/Intermodal Roundtable*. Our panelists include: Brooks Bentz,

partner in Accenture's Supply Chain Practice; Tony Hatch, principal of ABH Consulting; and Bill Rennie, director of Oliver Wyman, a Boston-based management consultancy.

**Logistics Management (LM):**  
**What is your take on the current state of the railroad and intermodal markets?**

**Bill Rennie:** Both markets are on firm footing and demonstrate a solid growth trajectory. While there's some repositioning of the commodity mix (less coal and more oil), the traffic base has been quite resilient. Intermodal has been very strong in domestic markets, offsetting any soft import volumes.

**Brooks Bentz:** I would call it "recovering" because growth is there,





PHIL FOSTER

but it's not a rocket. I think it's still to be determined as to whether this will be sustained growth or we'll have a bit more of a roller coaster ride. As a good friend pointed out once, forecasts are either lucky or lousy, so precision in this regard is always suspect.

**Tony Hatch:** Overall the rails are in a transition or "bridge" year as their utility coal levels stabilize and we, hopefully, get higher grain levels in the second half. It has been the declines in bulk commodities, for non-cyclical reasons, that held back rail traffic in 2012. And so far in the first quarter of 2013, without steep gains in grain and coal, rail traffic still increased almost 5 percent in the first quarter.

By 2014, and especially 2015, I expect that CBR [crude-by-rail], frac sand, autos, housing goods, grain, and

especially chemicals, steel, and intermodal will all be reaping the benefits of massive capex spending by the rails and by shippers. Intermodal is doing just fine at present as well—that's surprising on the international front, but it's still humming on the developing domestic side as well.

**LM:** *While carload volumes are still below pre-recession levels, we do see them beginning to rise. Do you feel things are going in the right direction in carload?*

**Bentz:** The carload business will—as a general rule—continue to thrive. Coal will likely continue to clank along at depressed levels, but the upsurge in alternative fuels is proving a big boost with the related products, like pipe and fracking sand. The main theme,

apart from all this, is that rail carload, coupled with intermodal, is a powerful alternative to over-the-road trucking, given the issues of congestion, infrastructure condition, capacity, as well as the cost of fuel.

**Hatch:** Carload is the tale of two economies: the cyclical merchandise, manufacturing, and housing markets, which are doing better based in rail car loadings than the business press might lead you to believe; and the bulks, which are still running as poorly as last year.

**Rennicke:** Brooks and Tony are right. The loss of coal volumes is a bit of a cloud over the carload segment, along with poor crop shipments in some regions. Overall, the carload sector is strong and has been able to quickly create high-value services in

new and emerging markets, like oil field exploration related commodities. This kind of market response would have been unthinkable 10 years ago. Furthermore, the carload market will increasingly be viewed in terms of revenue generated versus carloads tendered. This is driven by the fact that the loss of low revenue coal loadings is being partially offset by higher revenue energy-based loadings.

tional segment, recent announcements suggest that even an enlarged Panama Canal may not necessarily cut down transcontinental container flows, suggesting further strength.

**Bentz:** Functionally “unlimited.” That’s a big term, and there are some caveats: Railroads must continue investing in line-haul and terminal capacity to accommodate growth—that’s probably the biggest obstacle to growth over the

‘gateway drug’ of intermodalism. Once truckload carriers like that level they love the productivity of double-stack container on flatcar [COFC]. COFC requires capital investment on someone’s part, and is therefore ‘sticky’ but the benefits are huge and the service is good. Right now it’s at best-ever levels.

**Rennicke:** I’ll add that it’s clear that domestic containers are replacing trailers for domestic movement, and that trend should continue.

**“Over the past 20 years, the North American rail carload and intermodal network has been streamlined, and in some cases simplified, to consistently produce more reliable service.”**

—Bill Rennicke, director, Oliver Wyman

**LM: Where do railroad and intermodal service levels currently stand in light of current market conditions and what can shippers expect in terms of service over the next year?**

**Rennicke:** Over the past 20 years, the North American rail carload and intermodal network has been streamlined, and in some cases simplified, to consistently produce more reliable service. The intermodal network has been consolidated down to high volume hubs that support point-to-point cycles and are served by high frequency train starts to multiple destinations. All of this operating and structural change has greatly improved service. Absent regulatory intrusions like what has been proposed in Ex Parte 711 at the Surface Transportation Board, service should continue to improve.

**Hatch:** It’s at best-ever levels, and I would anticipate that it will get better as the big capex programs by the rails yield expected benefits in terms of capacity and velocity. Meanwhile, with government “broke” or at least poor, road congestion and infrastructure decline will only be getting worse.

**Bentz:** I agree with Tony and Bill. Service is probably as good as it has ever been, and networks are still fluid. So I think shippers and their customers can expect that to continue for a while. The industry is continuing to invest significantly.

**LM: In what ways are market conditions affecting capacity and rates for rail and intermodal?**

**Hatch:** The slow economy is holding back bi-modal partners’ rate increases, but soon capacity will tighten. The coming hours-of-service



**LM: Intermodal volumes, particularly domestic containers, continue to outperform carload volumes and have been for a while. That said, how much staying power does intermodal have?**

**Hatch:** Intermodal is in the early-middle innings of a secular shift from truck to rail, as evidenced by domestic containers’ growth performance from the Great Recession through today. And still the rail/intermodal market share is tiny, especially in shorter haul markets (550 miles to 1,000 miles), but not yet at saturation even in super-long-haul markets (2,000+ miles).

**Rennicke:** Intermodal will continue to play an important growth role. Structural issues in the trucking industry like hours-of-service, driver shortages, and the weakness of some carriers will continue to shift traffic. The aggressive intermodal corridor and terminal expansion by the eastern carriers will continue to see growth in underserved markets. In the interna-

long term. The conversion of highway traffic to rail has a huge upside, not only for shippers, but also for truck lines seeking to reduce operating expenses.

In the past, labor was the major concern, and it’s still up there, but the fuel cost and consequent savings intermodal affords is hard to ignore. When you look at intermodal volume as a percentage of intercity ton-miles, it’s still pretty small, which means that the upside is gigantic, particularly as the railroads figure out better ways to attack the shorter-haul market (500 miles–1,000 miles) where a big share of the volume remains.

**LM: Is any part of the intermodal growth story related to an increase in container growth as intermodal trailer numbers continue to decline?**

**Bentz:** I’d lay most of this on stack train economics. It just doesn’t make good sense to haul wheel on wheels when you can stack two-high with containers. The high-productivity with the current crop of cranes makes the time to load/unload in terminals variance negligible. On top of that, the aerodynamics of trailers is not a plus either. Lastly, pilferage is much less likely when a container is either in the well position, or popped up on top. So, mainly, this is a technology shift, not a commercial one.

**Hatch:** Trailers on rail cars is the



**OUR BUSINESS  
ONLY GOES AS  
FAR AS OUR  
CUSTOMERS'.**

**OVER THE LAST 42 YEARS**, we've helped customers' products go anywhere in North America. Yet, somehow they've taken us even further. We've grown from a single room office to a three billion dollar company while continuing to invest in infrastructure, technology and sophisticated reporting—because our business only goes as far as yours.

**LEARN HOW OUR STABILITY ALLOWS YOU TO DO MORE AT [HUBGROUP.COM](http://HUBGROUP.COM)**



**Hub  
Group**

changes, long fought over, but coming on line in July, will take out something like 3 percent to 5 percent of driver capacity, which is already stretched. Driver turnover was over 100 percent in the second half of 2012, when unemployment was still high and the housing markets were only just beginning their recovery. It's a problem that isn't going away.

**Rennicke:** One consequence of growth is higher service frequency that leads to more attractive cut off times. As volume grows on existing lanes and new lanes are supported by market growth, service will continue to improve. This is resulting in a much more complete service matrix on core domestic shipping lanes. Further, volumes have reached levels that have allowed regional and short-line railways to participate in the market, expanding the number of hubs.

**Bentz:** I think we're on the cusp of a sea change. I believe broader global supply chain issues are at work that will have a long-term effect on transportation in general. These are being driven by larger economic issues in the global economy, as well as the difficulty, challenges, and cost of managing complex global networks. I think this will shift volumes around over time and what was the norm will change. All of that said, I think rates for both carload and intermodal will rise, but not sensationally, as the need remains to continue feeding the furnace of capacity investment that's needed to keep up with growth.

**LM: Is pricing where it needs to be, given that rails are on the hook for the lionshare of their capex, which is at record levels?**

**Bentz:** I'm not sure pricing is ever really where it needs to be. The buyers want to pay less and the sellers want to charge more. Overall, as a gross generalization, rail rates are not out of line with other modes. If they were, growth would stall and the other modes would benefit at the expense of rail, except for certain specific instances where that's very difficult. That's not happening in any meaningful way. I do expect rates will continue rising, but not excessively or rapidly.

**Rennicke:** Railroads are still not "revenue adequate." With federal and state budgets strained, the privately financed freight rail network will provide a strong national infrastructure component for decades to come. If the railroads are to finance in the private capital markets, rates must be high enough to support investments at attractive market rates. Higher rail prices and stable margins are essential to maintaining the confidence of the private capital markets.

**LM: What is your take on legislative issues related to the industry, such as NITL's competitive switching proposal and the reappearance of legislation aiming to end the railroad antitrust exemption?**

**Rennicke:** The turnaround of the rail industry since the Staggers Act, and the fact that the U.S. has the lowest freight rates in the world, are solid proof that the regulatory structure as now configured is working well. Railroads use differential and mar-

**"Overall, as a gross generalization, rail rates are not out of line with other modes. If they were, growth would stall and the other modes would benefit at the expense of rail."**

—Brooks Bentz, partner, Accenture's Supply Chain Practice

ket-based pricing. In any differential pricing model, some customers pay less and some more. The NITL competitive switching proposal is aimed at reducing rail industry revenue from those customers who are paying "more" under current differential pricing practices. The price paid for reducing the rates of a few most likely will be a continuous deterioration of service across the rail industry. The added level of interchange will set the railroads' streamlining of traffic flows back at least 10 years.

**Hatch:** Having lost in Congress, the re-regulation folks, backed by some members of the Senate Commerce Committee, have turned their attention to the STB. The switching issue is one that won't go away. Related to this are two things: the fuel surcharge antitrust case continues out there; and the chemi-

cal industry is setting the stages for a coming fight for the really big prize—the benefits of an cheap-energy led reindustrialization. This is like Groundhog Day. There is constant attack on an industry that is raising its cash flow and profits but also its capex and capacity.

**LM: How will the rail and intermodal markets look five years from now?**

**Bentz:** Five years is the blink of an eye in this business, so I don't expect much substantive change. The market will be larger, of course, but not radically so—unless fuel gets up to \$8 a gallon.

**Hatch:** It will be bigger and more important. They will be mature, not in the investment sense, but in the shipper acceptance sense. Coal will have settled down to about a third of utility fuel burn, but CBR, frac, pipe, and new chemical business will more than make up for that. Meanwhile, grain, intermodal, and other cyclicals will be much stronger and bigger. The ben-



efits of a privately financed and fluid transportation network will only be more important.

**Rennicke:** We will see modest growth in carload with some redistribution of share by commodity from coal to other. Intermodal will be a growth engine with additional train starts, frequencies, and new corridors driving a much more robust network.

—Jeff Berman is Group News Editor

# Everything you need, every way you need it.

Supply Chain 24/7 is the ultimate online business resource for transportation, distribution, logistics and supply chain professionals. Find everything you need when researching companies, trends, and industries.

Your *best* business resource for:

- News
- Best practices
- Trends
- Case studies
- White papers
- Webcasts
- Research
- Special reports
- Blogs

and *much much more!*

**Featured companies** that are relevant to the specific topic

**Search engine** can search across content elements and by specific companies

**Trending news** and features



Visit [supplychain247.com](http://supplychain247.com).  
Begin your experience today.

## 11<sup>th</sup> Annual Software Users Survey:

# Caution remains

**Logistics professionals appear to be enthused by the gradual economic recovery and see the need for improved visibility to better meet new supply chain demands, but they're still not ready to make the big investments necessary to fully realize those goals.**

BY BRIDGET MCCREA, CONTRIBUTING EDITOR

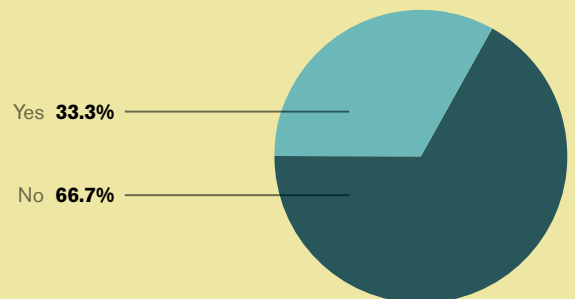
**L**ogistics Management's (LM) 10th Annual Software Usage Study reveals that shippers are taking a "cautiously optimistic" approach to their supply chain software purchases and upgrades. The survey's findings neatly align with the overall business environment, where companies appear to be enthused by the gradual economic recovery, but are not quite ready to make any huge investments in people, equipment, or information technology.

Over the next few pages, we'll delve into the results of our 2013 study to see where software budgets are being allocated and learn what challenges shippers—of all sizes and across all industries—plan to meet through the continued application of supply chain management software.

### Putting it all on the table

This year's numbers are more optimistic than those tallied in 2012 and 2011. When asked how the current economic climate changed their companies' approach to supply chain

**Is your company planning to buy supply chain software for your operation in the next 12 months?**



Source: Peerless Research Group (PRG)



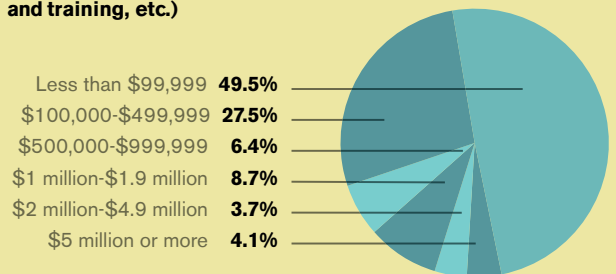
management software spending, 31 percent of respondents said that they were scrutinizing their software purchases in 2012, down from 33 percent in 2011. Twenty-one percent said they were freezing investments (up from 18 percent in 2011), while 21 percent said that they would be making investments in new software over the following 12 months. Another 21 percent planned to upgrade existing systems, compared to 22 percent in 2011.

When asked how the current economic climate is affecting their company's approach to supply chain management software spending, 19 percent of respondents say that they plan to freeze software investment this year, while 20 percent plan to move forward with new purchases. About 38 percent say they're "more carefully scrutinizing" software investments, and 13 percent plan to upgrade existing software in lieu of buying new software packages.

In our annual general snapshot of the different types of software that companies are currently using, half of shippers

### In total, about how much will your company spend on all supply chain software for your operation during the next 12 months?

(including license, integration, and training, etc.)



Source: Peerless Research Group (PRG)

say warehouse management systems (WMS); only 34 percent are using transportation management systems (TMS); while 48 percent are leveraging enterprise resource planning (ERP) platforms. Also in use are supply chain planning (25 percent); inventory optimization (29 percent); demand planning (24 percent); and labor management systems (LMS) at 20 percent.

As we roll through 2013, 43 percent of companies tell us that their use of supply chain software has changed in the past two years. Only 5 percent say their usage has decreased, while a fairly healthy 23 percent tell us that they're currently using more software packages than they were two years ago. Only 8 percent report using fewer packages, while 70 percent say the number of packages they're using has remained constant.

Dwight Klappich, research vice president for Gartner, points out that roughly 75 percent of this year's respondents represent companies with under \$500 million in annual revenues. "This influences the data and should be recognized," says Klappich, who adds that the study's 28 percent ERP usage is actually "very low," and that most medium- to large-sized shippers have selected and are using at least one ERP platform.

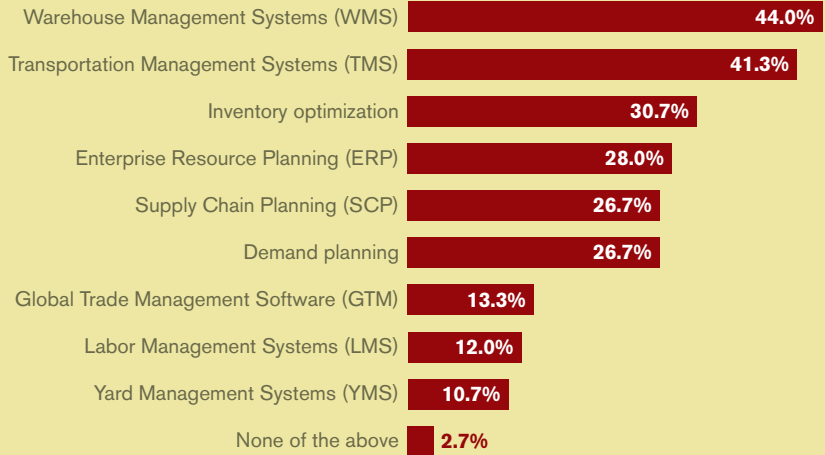
Klappich says that our study certainly confirms Gartner's broader findings that there is currently a mild optimism for investing in SCM technologies. "We found over 80 percent saying that they plan to invest, albeit cautiously, and only 20 said that would freeze spending," says Klappich, adding that the large number of small firms that responded have skewed the numbers somewhat, both on the ERP and the supply chain planning results.

However, he says the survey's TMS and optimization results are actually higher than what Gartner has found over the past year. "The TMS number is explainable when you look at the details, because this is spread across a variety of different types of solutions from routing and scheduling to audit and payment," Klappich adds.

**Pinpointing buying habits**

When it comes to shippers' software buying habits, this year's survey turned

**Which of the following types of software does your company plan to purchase or upgrade in the next 12 months?**



Source: Peerless Research Group (PRG)

up somewhat of a mixed bag. According to our findings, 33 percent of logistics professionals say they plan to buy supply chain software in the next 12 months, while 68 percent are not.

Primary packages that those buyers are looking to acquire include WMS (44 percent), TMS (41 percent), ERP (28 percent), inventory optimization (31 percent), and supply chain planning (27 percent). About 79 percent of respondents say that their ERPs will include a WMS module, and 35 percent say their ERPs will include a TMS module. Fifty-six percent of shippers say they're using the same number of software vendors that they were using two years ago, 27 percent say they're using more, and 17 percent are using fewer.

Belinda Griffin-Cryan, global supply chain executive program manager at Capgemini Consulting, says that her firm's research shows that supply chain visibility remains a top priority for all companies—particularly with those that are investing in new or upgraded WMS and TMS.

On the other hand, Griffin-Cryan says that she was surprised to see that a large percentage of companies are using more software packages than they did just two years ago. "It's somewhat counterintuitive given all of the vendor consolidation that we've seen over the last 10 years," she explains. "It's interesting to see that shippers continue to reflect

that they are getting more applications from more vendors when that consolidation is taking place."

Griffin-Cryan adds that in certain cases, the move to incorporate more software packages could be a result of smaller firms shifting from manual to automated systems. "It may be that some companies are saying: 'We just can't operate off spreadsheets anymore,'" she adds, noting that for the most part, larger organizations tend to work with fewer software vendors, on average.

**Reasons for adoption**

Shippers are embracing supply chain software for a wide range of reasons. According to the *LM* study, for example, the key reasons for purchasing a WMS include label printing, freight/package rating, and slotting features.

Key TMS purchase drivers include routing and scheduling, carrier selection and load tendering, as well as routing and rating. The largest percentage of shippers (50 percent) say they plan to spend less than \$99,999 on all supply chain software over the next 12 months. Twenty-eight percent say they plan to spend \$100,000 to \$499,999, while 8.7 percent will spend between \$1 million and \$1.9 million.

Klappich says that Gartner's research also shows that 50 percent of companies have kept their investments about the same. "This is largely due to





---

**THERE'S A LOT RIDING ON  
THE SHOULDERS OF MANUFACTURING. WE CAN  
*HELP CARRY THE LOAD.***

---

{POWERFUL ANSWERS}



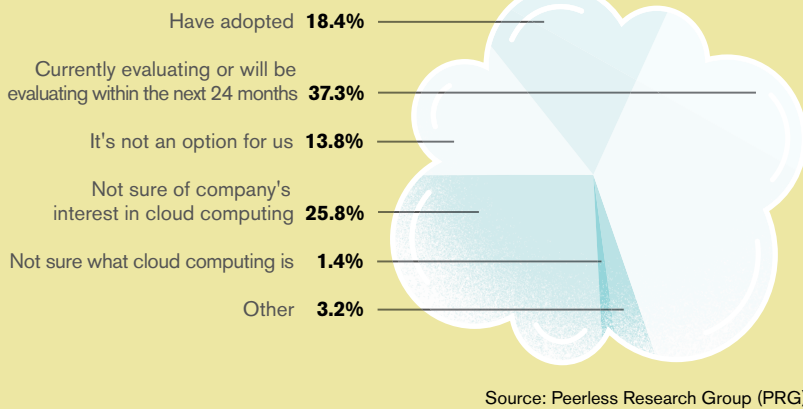
**Technology that keeps the engine of commerce running strong.** Businesses need a way to ensure products arrive safely at their destinations. The innovative minds at Verizon have teamed up with some of the smartest companies around to create solutions that help businesses monitor cargo. It starts with our Logistics Automation solution. Advanced sensors send real-time alerts to businesses on the status, location and condition of their cargo over the Verizon 4G LTE network.

The result is a decrease in damaged or stolen goods, which is always good for commerce.

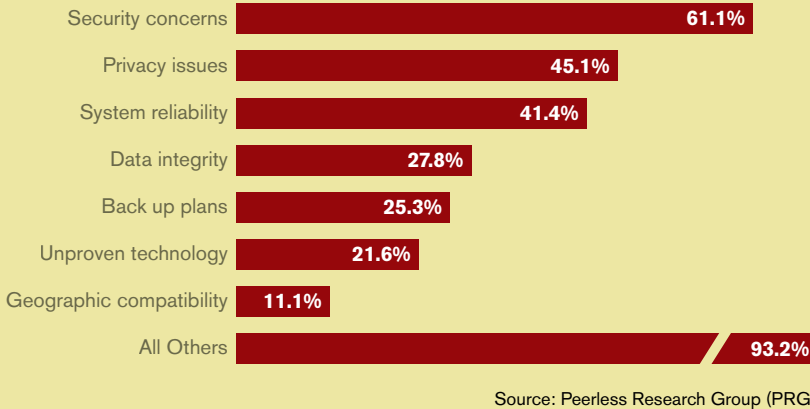
**Because the world's biggest challenges deserve even bigger solutions.**

**Solutions for Manufacturing:** [verizon.com/manufacturing](http://verizon.com/manufacturing)

**Which best describes your company's status regarding the adoption of cloud computing?**



**And, what do you see as the main concerns or fears surrounding the use of a cloud computing strategy?**



the economic climate and the fact that many companies have remained in a very cautionary investment mindset," he says. "However, the fact that over 40 percent state it has increased is a positive sign."

Regrettably, says Klappich, the fact that only 33 percent of respondents say they plan to buy software in the near future is proof that cautious attitudes prevail among logistics professionals. "This highlights that over four years into the recession companies are still extremely cautious and are not making wholesale changes in the IT landscape."

**Cloudier skies ahead?**

In the interest of conserving money, time, and precious IT resources, shippers are slowly moving into the cloud

computing space in search of software options. Eighteen percent of firms say that they've already adopted such solutions, 37 percent are evaluating them, 13 percent don't see cloud-based solutions as an option, and another 26 percent say they're not sure of their company's interest in cloud computing.

Key concerns that shippers cite in relation to cloud computing include security, system reliability, privacy, and backup plans. Those companies that are considering cloud solutions say that the ability to access from anywhere, bandwidth and capacity, and the fact that current suppliers are moving in that direction are driving their decisions.

Klappich says that the fact that 55 percent of respondents are either using or considering cloud solutions is

meaningful. "This is a bit higher than what our research has found, but again I think this speaks volumes to the sample," he says. "Small- to medium-sized businesses have a propensity to consider [cloud] at a higher rate than Tier 1 companies." Smaller firms also tend to worry more about security, privacy, and reliability, says Klappich, whereas larger entities focus on issues such as performance and scalability.

An area that Klappich says stood out to him is the fact that when asked if they were considering cloud solutions, only 35 percent of the respondents said "yes" and 65 percent said "no." "This is a sign that while many view cloud as an option, they're not yet convinced it's the right thing to do," Klappich explains. "For the foreseeable future they will continue to do what they have traditionally done, which is to buy on-premise applications."

**Show me the results**

According to this year's study, ROI expectations from their supply chain software vary significantly. About 30 percent of firms expect payback for supply chain software purchases within 6 months to 12 months, 43 percent within 12 months to 18 months, and 19 percent in more than 18 months.

Klappich says that the more than 60 percent of shippers that expect payback of greater than a year may be overly conservative. "In the Tier 1 market we've seen significant pressure to invest in solutions with paybacks of 12 months or less," he adds.

However, as logistics professionals continue to shake off the effects of the national recession and return to more typical IT spending patterns, the supply chain software sector will be well-braced to claim its share of the investment that's doled out. Offering up new solutions that provide improved visibility, WMS, TMS, and GTM, will continue to play a critical role as logistics and supply chain operations become ever more complex and essential to U.S. business growth.

*Bridget McCrea is a Contributing Editor to Logistics Management*

# The most thought-provoking supply chain experience of your career awaits you.

CSCMP's  
**ANNUAL GLOBAL  
CONFERENCE 2013**  
OCTOBER 20-23 **DENVER**

## One conference—hundreds of opportunities.

October 20-23, 2013, Denver, Colorado, USA

CSCMP's Annual Global Conference—*designed exclusively for you*—will empower you with 21<sup>st</sup> century know-how and unconventional perspectives. Discover new ways of looking at the issues of the day; rediscover what you love to do. And the people you'll meet will transform your business and your career.

### All New Program!

- Top-notch general session speakers
- Redesigned Supply Chain Exchange
- Exclusive supply chain insights
- Breakthrough educational sessions
- Global networking experiences



**Keynote Speaker, Felipe Calderón**, former president of Mexico, presents *Expansion, Innovation, and Transformation: What It Takes to Lead*, offering key insights into strategic policymaking and implementing long-term solutions in our interdependent world.



**Closing Session Speaker, Mike Rayburn**, entertainer, business owner, comedian, author, guitarist, and philanthropist entertains us with his hilarious, musically amazing, motivational session, *What If and Why Not?*

Register at [cscmpconference.org](http://cscmpconference.org) by June 30, 2013  
and save \$300 US on regular registration rates!



BY MAIDA NAPOLITANO,  
CONTRIBUTING EDITOR

**Y**ou walk in to your favorite retail store and spot an item you'd like to purchase. A new app on your smart phone lets you "scan" the UPC barcode, which automatically opens up a search engine that finds the same item for less. A few finger slides and clicks on your phone and the wheels are set in motion for you to receive that item the very next day—and you didn't even have to wait in line at the register.

Welcome to the new world of retail where mobile technology, wireless networks, and e-commerce have added a whole new dimension to the consumer's shopping experience—and a slew of challenges for the supply chains of traditional brick and mortar stores. It's a trend that our experts see gaining momentum, as store sales remain flat and e-commerce business with next-day service levels continue to grow.



# Omni-channel distribution: Moving at the speed of “now”

**The pressure is on retailers to deliver anything, anytime, from anywhere. Three experts answer four key questions that will help traditional brick-and-mortar retailers revolutionize their use of WMS and their shipping processes on the way to a multi-channel transformation.**

It's all about keeping up with today's tech savvy consumer. “Consumers want the ability to order anything, anytime, from anywhere,” says Albert Avalos, global vice president for system integrator, Fortna. “Through social networks, significant backlash is instantly relayed if the experience is not exceptional.”

Thus the pressure is on for supply chains to deliver—literally. “As e-commerce becomes a larger percentage of the shipping volume, it's taking less of a back seat in terms of the design of the operation,” notes Bob Silverman, senior vice president of supply chain and logistics solutions for commercial real estate firm Jones Lang LaSalle. “More facilities will be set up handling multiple channels with separate picking operations, replenished from a common inventory.”

Kevin Hume, principal with supply chain consulting firm Tompkins International, is experiencing the retail transformation firsthand. “For awhile, everyone was talking about the death

of the brick and mortar store,” says Hume. “But we now have the technology for even the stores to be able to ship e-commerce orders.” By functioning as mini-fulfillment centers (FCs) all over the country, stores are able to support next-day shipping more cost-effectively.

Over the next few pages, our three experts shed light on how traditional brick and mortar retailers are making room for e-commerce and multiple distribution channels in their organizations. They respond to key questions and offer their thoughts on how best to go about this transformation. Finally, they zoom in on how warehouse management systems (WMS) and other software solution providers are responding—from offering real-time visibility to available inventory to executing the most cost-effective method of fulfillment to service the most demanding consumer. In an increasingly competitive global retail environment, retailers may have no choice but to go with the flow.

## **Should you insource or outsource?**

For traditional DCs servicing their own stores, adding e-commerce to the fold can be a daunting undertaking. Some may need outside help.

The decision to outsource will depend on e-tail's volumes, according to Silverman. “When volume is low, it makes sense to keep it in-house—one inventory, lower costs.” As volume increases, however, he believes that outsourcing to a third-party logistics provider (3PL) becomes more attractive.

“E-commerce picks are very different and can suffer in a system designed to support larger brick-and-mortar picks,” says Silverman. “Specialized 3PLs focused on e-commerce often have the material handling equipment, systems, experience, and expertise to more efficiently process e-commerce orders than many of their own clients can do in-house.”

As larger throughput volumes eventually magnify the costs associated with splitting the inventory with a 3PL,

it may justify consolidating and designing an operation with multiple picking options, to optimize both the bricks' and the clicks' picks. At some point, even larger volumes result in a facility getting too big. "Separate facilities may be required, and they can each be optimally located based on the different logistics considerations of the channels," adds Silverman.

### How do we pick?

For most multi-channel DCs, one of the primary challenges revolves around picking. Many traditional operations are not set up to efficiently accommodate a large range of orders with varying units and lines per order characteristics. "Picking labor is often the single biggest cost within the four walls, and inefficient picking systems can have a huge impact on a DC operation's costs," cautions Silverman.

Retail replenishment to stores is typically "pulled" based on point-of-sale (POS) information. "This is usually a pick-to-cart or pick-to-voice/light into totes process, then the totes are consolidated and packed into store shipments," explains Fortna's Avalos. In contrast, retail distribution in response to new store openings, specific ads, and promotions are typically "pushed" and achieved using a put-to-store strategy or pack-and-hold operation.

E-commerce orders have a different profile from store orders. "That order profile is typically 1.2 lines per order, with about 30 percent to 60 percent online orders," states Tompkins' Hume. These orders are typically processed via cart zone picking or zone batch picking. For increased

productivity, the single-line or single-unit orders are typically processed differently in a batched, high-speed packing operation in a separate area of the facility.

### How do we ship from stores?

The ability to ship e-commerce orders

from brick-and-mortar stores may be the strategy that most are anticipating. Why? Because processing and shipping from the store that's closest to the person that wants it is the most cost-effective way to support a next-day shipment.

## OMNI-CHANNEL CASE STUDY

### Bare Escentuals' multichannel, multi-company DC

**W**ithin 10 minutes on her first guest stint on the QVC network back in 1994, Bare Escentuals (BE) creator and executive chairman Leslie Blodgett sold out her entire inventory of mineral-based cosmetics—literally conquering television as her first direct-to-consumer retail channel.

Since then, the California-based cosmetics company has never looked back. It now services wholesale customers such as Macys, Sephora, Ulta, over a thousand spas salons, over 230 company-owned boutiques, and consumers directly through its website, infomercials, and catalogue operations.

Marketing three brands—bareMinerals, BUXOM (exclusive to Sephora) and md formulations (mostly in spas)—this retailer stands in an elite club because it services a multitude of channels from just a single 400,000-square-foot distribution center (DC) in Columbus, Ohio.

But it wasn't always that way. In 2006, BE operated a 100,000-square-foot West Coast DC that handled a rapidly growing wholesale and spa salon business, while simultaneously supporting a small retail network of 50 boutiques. A 3PL-run DC in Plymouth, Mich., handled its direct-to-consumer business from the infomercial and the catalogue.

"As we grew, it became that much more expensive to operate a smaller facility from which we were bursting at the seams," recalls Michael Thompson, BE's vice president of operations, Americas. "The cost of the 3PL side grew as well. With basically the same product assortment for all channels, we had to split our inventory across multiple places, and since we were growing so fast, we were at a point where we couldn't meet the demand."

With a website launch pending in 2007, the company's logistics team knew that bringing the fulfillment for all the channels into one facility would enable the retailer to make sure that they got the right product to the right people at the right time.

Partnering with supply chain consulting

firm Tompkins International, Bare Escentuals planned, designed, and launched its new consolidated facility in 2007. In the operation, full-case, wholesale orders are picked by workers on lift trucks using handheld RF devices while direct-to-consumer orders are batch picked 20 orders at a time directly to shipping cartons by voice-directed pickers with carts. Retail store replenishment and spa salon orders are picked using pick-to-light technology.

Since then, the DC team has been hard at work in search of a tool that could support these two companies in a multi-channel, multi-company distribution model. In early 2012, they selected RedPrairie's warehouse management system (WMS), going live last July. "We're less than a year in with the WMS, but we're already learning the power of having all that information. When you walk through this DC, you see a lot of subsystems in operation," says Tompkins' principal Kevin Hume. "Many of these pick-pack operations are channel-specific, leveraging operational processes and equipment designed to reflect the order profile." In 2010, the team faced even more challenges when Bare Escentuals was acquired by the Shiseido Group in the largest cosmetics related transaction ever. "Shiseido was bursting out of its current Americas facility, so with the acquisition they decided to take advantage of the infrastructure that BE has already built, thus essentially creating a shared services model for all of the Shiseido Group brands," says Thompson.

For BE, this consolidated model has been an excellent fit. "There's more flexibility to meet the needs of the business," says Thompson. He cites how during cyber Monday when the e-commerce business was processing three times the amount of orders, he was able to quickly leverage workers from the other channels. "E-commerce customers want their orders immediately. With consolidated multi-channel facility, we can support demand peaks quickly and internally, achieving that critical speed to customer."

—Maida Napolitano, Contributing Editor

“Most of the major retailers we’re currently working with will be shipping from their stores this peak season,” says Hume. But the best way to accomplish this will vary by retailer.

According to Hume, some will select key stores that have the largest inventory—and those key stores may be defined by particular mixes of SKUs that they’ve identified as the highest volume of e-commerce items.

“They’re going to stockpile those SKUs at specific stores and make those stores forward-shipping systems, deploying full warehouse management capabilities,” explains Hume. “They may even leverage parcel manifesting technology, pushing the order down to the store where store employees can go out with a paper ticket to pick items off the store shelves and immediately prepare them for shipment.” He adds that store fulfillment can vary by store type. Low end stores may process 10 to 15 orders a day with minimal technology support and, at the other end, larger stores could have the capacity to ship hundreds of orders and require a mini-fulfillment center in the store’s backroom.

Avalos cautions that shipping from stores presents some challenges. “There might be licensing issues with putting warehouse management systems and transportation management systems [TMS] inside the stores. Plus contracts with parcel carriers may need to be modified to handle this strategy.” He also points out how some stores may not even have the space or the labor to pull it off. There also consistently needs to be real-time visibility to available store inventory.

**What systems to use where?**

One of the most critical requirements for an omni-channel retailer’s success lays in the planning and executing capabilities of its WMS and other information management systems.

First and foremost, an inventory management system that spans the entire supply chain gives managers a leg up in achieving real-time visibility—and in some cases might actually save the sale. Rather than having

**“DOM allows you to find all the rule sets and criteria of how you want to cost-effectively support that next-day shipment.”**

—Kevin Hume, principal, Tompkins International

a customer walk away because she can’t find an item, today’s sales associate may be equipped with a handheld mobile device to help her find it in any of the other stores. Some stores have even set up kiosks for customers themselves to check inventory, purchase the items, and have it shipped directly to their homes.

Another critical component to making omni-channel’s “buy from anywhere, ship from anywhere” philosophy possible is a distributed order management (DOM) system. “DOM allows you to find all the rule sets and crite-

ria of how you want to cost-effectively support that next-day shipment,” says Hume. “It has the visibility of inventory at all the different stores.”

DOM understands the delivery time frame and instantaneously makes a decision where to most cost-effectively drop that order and still provide the service level promised. “It can drop it into the DC, an e-commerce fulfillment center, or to an individual store.”



**Omni-channel advice from our experts:**

**Kevin J. Hume, principal with Tompkins International**

“Perform advance planning to determine order profiles and volumes. Once you establish your planning criteria, try to leverage existing investments and the best practices you have today to start the design process.”

“Identify what the orders look like now, but also consider how changes to SKU mix, order profile, or volume could affect your design. You’re never going to project with certainty, so you should perform a sensitivity analysis with low-end and high-end ranges. Evaluate the design to see what configuration can support the widest range of swings.”

“Understand service-levels. You’re not necessarily going to need to ship every item nextday. Understand when some items really have to have that highest service level that helps to define the picking capacity and the throughput capacity that you need on a daily basis.”

**Albert Avalos, global vice president for Fortna**

“Ensure you have good visibility to total demand and total inventory.”

“Keep your rules simple. Determine what your priorities are (and make this very clear), because this drives overall DC design, slotting, available to promise and the choice of shipping DC.”

“Determine your service level promise: Will you fulfill an order from anywhere (DC, store, etc.)? Are you willing to hold demand to improve fill rate? Will you allow splitting of orders across DCs to get fill rate with multiple DC shipments?”

**Robert Silverman, senior vice president, supply chain & logistics solutions for Jones Lang LaSalle**

“Analyze the order characteristics for each channel, and design a system to efficiently pick the orders.”

“Break the orders into order profile categories, and determine the volume of each: for example: (1) large store orders; (2) small store orders (frequently these are replenishment orders); (3) single line, single piece e-commerce orders; (4) multi-line e-commerce orders. Often using different approaches for each order type is the key to greatly increasing picking and packing productivity.”

## Warehouse/DC Management: WMS Update

However when inventory is scarce and the “bricks and clicks” are sharing inventory with multiple DCs, setting up your DOM becomes especially challenging, says Avalos. “Who gets priority? How do you reserve inventory for each channel? Do you send that order to the store or send it to the DC or split it across multiple DCs?”

Within the WMS, the requirements may be simpler, but just as critical. Consideration must be given to the picking and waving logic that can handle retail order profiles (larger orders) and the smaller e-commerce orders.

“It’s not just the regular pick/pack/ship logic anymore,” says Avalos. “There are more permutations: zone batch picking, multi-order picking, pick and pass, priority processing, multi-carton processing, etc.”

Good cartonization logic coupled with up-to-date weights and measures can streamline packing and manifesting while saving freight by packing orders into the least number

of cartons. The TMS must be able to handle service/cost tradeoffs and to track information, not just simply ship to residences and businesses. Real time information exchanges between the WMS and the web site to mobile devices is expected—it’s not an option. “In multi-channel systems, it’s critical to push out the status information in real time,” says Avalos.

In a consolidated multi-channel facility, the warehouse control systems (WCS) may now need to control a wider assortment of material handling systems. “WMS/WCS integration becomes more critical,” says JLL’s Silverman. “The need to know exactly where in the system an order is—specifically where on the conveyor it’s sitting—is greater with short windows between dropping orders and shipment cut-off.”

“When the WMS does not have the sophistication needed, many times the WCS makes up the gap,” adds Avalos. He cites how in some DCs the WMS

may be controlling the processing of store orders, while WCS controls e-commerce fulfillment where specialized picking and processes are needed. “This is not always the best option, but is usually a ‘right now’ option.”

### Last words

Today we’re talking about next-day shipments for e-commerce, but the industry is buzzing with rumors of big retailers moving into same-day shipments.

“To be able to do same-day shipment you’re going to have to be as geographically close to the customer as possible,” says Hume. “In addition, you will need robust systems that look at all the different points of distribution—including one that ships from a store—and orchestrates the most cost-effective place to meet that service level.”

—Maida Napolitano is a Contributing Editor to Logistics Management

“The Business of America is Business.” — Calvin Coolidge

The Business of Alliance Shippers Inc. is... “To Manage Our Customers’ Business.”®

# The Perfect Shipment® Our Commitment To You.

## Perfect Shipment® Performance<sup>1</sup>

On-Time Pick-Up = **99.1%**

On-Time Delivery = **98.7%**

YTD On-Time Delivery = **98.3%**

## Damage-Free Performance<sup>2</sup>

Refrigerated Services = **99.49%**

Dry Van Intermodal and Highway Services = **99.65%**



For more information about all of our services, visit us at:  
[www.alliance.com](http://www.alliance.com)



<sup>1</sup>Data as of 4/30/13 <sup>2</sup>Fiscal Year 2011 – 2012

® denotes a registered trademark of Alliance Shippers Inc.



A SPECIAL SUPPLEMENT TO:

**Logistics**  
MANAGEMENT.

# Truckload:

90%

50%

30%

10%

# Volatile by nature

By John D. Schulz, Contributing Editor

**While top carrier executives are doing their best to manage the elements currently battering their returns, we set our sites on three areas that carriers say will make the biggest impact on their ongoing relations with shippers—capacity, regulations, and fuel.**

**T**he truckload (TL) business is volatile by nature. Freight demand levels spike and fall with customer demand as well as the normal cyclicity and seasonality of business—and carriers have certainly come to understand these natural occurrences.

However, the past three years have been more volatile than normal. Coming out of the 2008-2009 recession in which many TL carriers idled thousands of trucks, the sector has slowly rebuilt its capacity to basically where it was six years ago. But where it goes from here is almost

anyone's guess. Price increases in the truckload market were relatively subdued during 2012. In 2013 there is a wide range of theories on where pricing is headed—from nearly flat to double-digit gains.

Richard Mikes, managing partner for Transport Capital Partners (TCP), a firm that closely tracks trends in the TL market, says that 2013 has been “a very unusual year” with many false starts to a full economic recovery. “Truck tonnage has been up and down,” he says. “March was up 9 percent year over year. But first-quarter tonnage is only up 3.9 percent year over year.”

TCP's survey of TL carriers showed that rates continue to be stuck in neutral. Seventy-seven percent of carriers report that freight rates have remained the same over the last three months. However, larger carriers (those over \$25 million revenue) seem to be faring better than smaller carriers. Some of those under \$25 million-a-year carriers are actually reporting slightly falling year-over-year rates on some lanes. “The numbers show that the pressure is clearly on the smaller carriers,” Mikes adds.

Large carrier executives agree. Mark

Rourke, president of transportation services for Schneider National, the nation's second-largest TL company, says “caution” is the byword of the times. “The shipper and carrier communities are fairly cautious and conservative—nobody is planning on this year being much different than what we saw in 2012,” says Rourke. “There are still concerns over the economy, and the carriers coming out of the 2009 recession are more cautious in using the assets they have. There is now a focus on margins rather than growth.”

Rourke then ticked off some areas where TL carriers' costs are rising—health care, regulatory impacts, equipment, emissions controls. “That's a heck of a lot of costs,” he says. “You have to think about returns before you think about growth.”

And while carriers are focusing on those elements affecting their returns, let's focus on three areas that TL carriers say will make an impact on their ongoing relations with shippers—capacity, regulations, and fuel.

### Capacity at equilibrium, costs are not

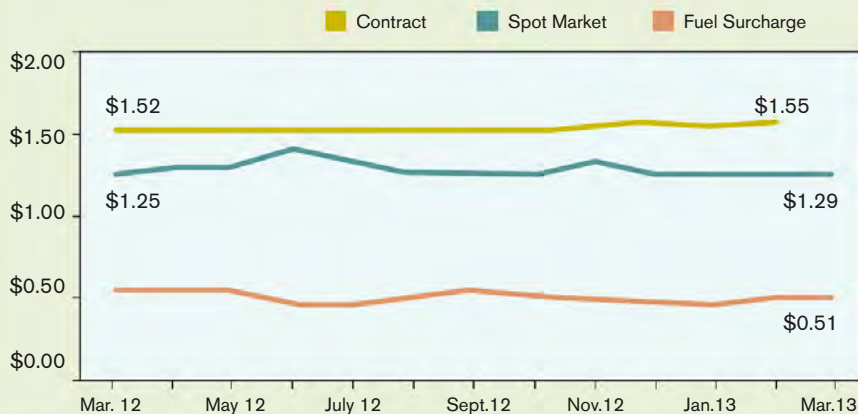
When you speak to TL executives, the word you hear to describe the current supply-demand situation is “equilibrium”—meaning there are just about as many trucks right now for the volume of TL freight tendered.

“It's still unpredictable,” says Saul Gonzalez, president of Con-way Truckload, a \$559 million unit of Con-way Inc. Gonzalez noted the first quarter was solid although was impacted to some extent by the weather. The traditional surge in spring shipments was delayed because of the cold weather and extended rains that hit most of the Midwest and East.

“We're starting to see a more normal seasonal uptick as retailers begin to stock spring goods, but it's late and there's still a lot of unpredictability,” Gonzalez says. “Custom-

### Van and flatbed rates remain the same over year

Van and flatbed rates and surcharges, 2012-2013



Source: 2013 Transcore DAT

ers are cautiously optimistic.”

Except for a few 50-truck to 100-truck operators, few fleets are actually adding much over-the-road equipment. Class 8 truck sales, while robust and projected to hit roughly 260,000 units this year, are nearly entirely being bought for replacement vehicles as carriers are eager to modernize their fleets—but not expand them.

“With perhaps one or two exceptions, and maybe a regional player adding trucks, carriers are being cautious and conservative,” says Rourke. “On any given day, supply-demand is pretty close to equilibrium—it’s choppy, but overall it’s close to balanced.”

John White, executive vice president of sales and marketing for U.S. Xpress, the nation’s fifth-largest TL carrier, says that there has been a somewhat prolonged period of equilibrium for the TL sector. “The overall tonnage continues to grow, but at a fairly muted rate, up 3.9 percent for the first three months year-over-year, according to American Trucking Associations’ figures. But on the global economic side, we’re just bumping along. There’s not a ton of robust news that says we’re getting into a capacity crunch.”

While that may be good news for shippers, that’s offset by sharply rising carrier costs for everything from equipment, drivers, fuel, insurance, and borrowing costs. “Some lesser financially stable carriers are finding that the financing costs are significantly more to buy a truck than in the past,” says White. “Some carriers have had to trade in two to buy one.”

That might indicate capacity constraints are coming back; but on the other hand, there’s not a ton of capacity exiting the market place. With that in mind, truck fleet size appears adequate heading into the peak-shipping season.

“Capacity has basically been at equilibrium for the past 12 to 18 months,” says John Steele,

executive vice president and CFO of Werner Enterprises.

But Steele says this overall balance contains inherent challenges. Seasonal volume spikes, product surges, and unplanned product demand continue to challenge shippers to find the necessary capacity when it’s needed.

“So while overall supply and demand remain somewhat in check, imbalances occur frequently,” Steele explains.

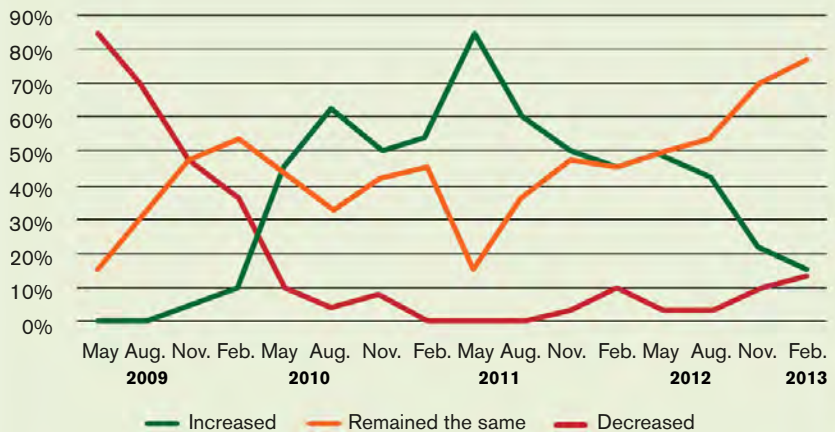
However, that doesn’t mean there aren’t challenges out there. “We could see tightening the second half of the year,” White warns. “But right now we don’t see it or feel it. We don’t see any markets where capacity is constrained. Usually, we see a spring surge and more demand—we’re seeing a little bit, but it’s muted compared to what we saw the last two or three years.”

### HOS conundrum

The government is poised to reduce a driver’s effective on-duty time by at least a half-hour on July 1, thanks to another revision in truck driver hours-of-service (HOS) regulations. That’s because it’s requiring drivers to take a pair of

### Percent of carriers surveyed that say rates “remaining same” trend up since May 2011

*How have your average freight rates moved in the last three months?*



Source: Transport Capital Partners, LLC

15-minute breaks.

That 30 minutes of lost productivity must come within eight hours of when a driver comes on duty. The new rules also limits a driver's ability to "restart" his or her workweek after 34 hours off duty unless those new two 15-minute breaks include two periods from 1 a.m. to 5 a.m. This is at least the fifth change to HOS regulations in the past 10 years.

Such a small tweak may not sound like much, but Schneider is forecasting the new rule will cost the carrier between 2 percent and 4 percent more in terms of productivity—meaning they'll need more trucks and more drivers to handle the same amount of freight.

TL carriers have already spent considerable sums in re-optimizing software and making other changes to their internal operations on the assumption that the July 1 changes are going into effect. "We're all assuming now that it's going

into effect," says Schneider's Rourke. "We're spending the money, and we're acting as if the future is now."

These changes come on top of last year when analysts estimated that TL driver costs grew 3.5 percent—somewhat of a surprise given the relatively tight market. According to TL analysts, tight capacity management and the weak employment markets likely aided fleets last year. And it only figures to worsen next year when electronic on-board recorders are mandated to add "teeth" to enforcement of the new HOS regulations—the recorders will make it much harder for drivers to cheat on their legal hours.

The government's HOS rules are already noticeable because they've resulted in a shrinking of the pool of qualified, compliant drivers. Unless a federal appeals court issues an emergency stay on the latest changes, expect them to go into effect on July 1.

## Schneider offering new tanker intermodal option

**T**hose shippers of bulk commodities in tankers now have the option of moving those loads over the rail, thanks to an innovative option being offered by Schneider National Bulk Carriers, a unit of Schneider National, the nation's second-largest truckload carrier.

Schneider says that it's "revolutionizing" the business of shipping liquid chemicals domestically. The carrier is now offering innovative bulk intermodal transportation service utilizing a new state-of-the-art 40-foot tank container that can be used on the rail and over the road to haul liquid bulk chemicals across the country. Schneider says it will soon expand the service into Canada and Mexico.

The carrier currently operates nearly 100 of these unique containers and expects that number to double by the end of 2013. When loaded onto a chassis, which is then pulled by a light-weight day cab to the final destination, the unit stands 11 feet 5 inches high and can haul close to 48,000 pounds. This allows customers to load 5 percent to 6 percent more product than in a traditional over-the-road truckload move.

"Shifting certain West Coast lanes from long-haul to intermodal allows us to consistently use a small group of local drivers for repeat customer deliveries, which improves our delivery service," says William Malak, vice president of

North American Logistics at Nalco, an Ecolab company. "This service improves our efficiency and effectiveness to meet our industry delivery demands."

SNF, one of the world's largest producers of water-soluble polymers, has been using Schneider's bulk intermodal service since early last fall as part of its continuing quest to secure more capacity. "We've had issues in the past with securing enough bulk capacity, so options that help us ensure we have transportation solutions available when we need them are of great interest," says Dave Hancock, senior logistics manager at SNF.

Hancock adds that he's already seeing results including solid service levels to reduced greenhouse gas emissions to opportunities for cutting costs.

Schneider officials say that the new service should improve reliability because it uses its own drayage drivers to move customer product to and from the rail ramps. The drivers develop relationships and deep expertise with their customers through familiarity with operations. The carrier adds that because of improved rail service, most chemical customers can expect their shipments to typically arrive within 24 hours of the time it would take for the load to move solely by truck.

—by John D. Schulz, Contributing Editor

# Shift your thinking.

In the past, moving freight to the far reaches of the continent meant thinking beyond a trusted relationship with a local carrier.

Not any more.

Now you can rely on trusted regional carriers to handle freight moving anywhere in the US, Canada and Mexico. But only if they're a member of *The Reliance Network*— a *seamlessly integrated network of people, assets, and information systems that provides complete North American coverage through a single, accountable source.*\*

***It's a solution built on trust and the power of local relationships.***

Contact your local member carrier or visit [TheRelianceNetwork.com](http://TheRelianceNetwork.com) and find out how *The Reliance Network* can reach farther for you.



*\* Handling 10.8 million shipments annually throughout all of North America.*

**TRNET**<sup>SM</sup>  
**THE RELIANCE NETWORK**  
Reaching farther for you.

[TheRelianceNetwork.com](http://TheRelianceNetwork.com)

Rourke says that there is “no easy answer” to the HOS changes, but adds that Schneider is already examining every account to decide which freight is causing drivers to waste time. If those shippers don’t change, he warns, carriers will be shedding those accounts. “It’s kind of crazy when you consider the state of the economy, but there is a lot of churn activity,” he says. “That’s because wasteful freight will become so much more pronounced under the new regulations.”

Shippers most affected by the new regulations will be those with crowded loading docks or those who ship multi-stop freight. All that requires extra time and will translate into higher freight rates, carrier executives say.

### Fueling up

TL carrier executives will be quick to tell you that they’re focusing on their variable costs in this new regulatory environment. One executive even called it a “full frontal attack” by carriers to drive out variable costs, such as fuel, labor, and other expenses. Chief among the costs that need to be driven out is fuel, carrier officials say

For an industry expected to pay upwards of \$165 billion in fuel costs over the course of 2013, carriers are examining everything that will help them reduce that fuel tab. Fuel costs rose less than 5 percent this year, an improvement over the 30 percent to 40 percent annual swings the past two years, but it’s still a major expense to any TL carrier.

Truck engines changed for the 2010 model year because of new environmental regulations; however, a TCP survey of TL carriers showed mixed results for fuel economy. Some 52 percent of carriers reported miles per gallon have increased using EPA 2010 engines, with an average increase of 8.7 percent. Just over 8 percent of carriers report a decrease, with an average decrease of 5 percent.

There is a push by natural gas magnate T. Boone Pickens to introduce either compressed natural gas (CNG) or liquefied natural gas (LNG) into the trucking industry. It costs about one-third less than diesel, achieves similar or better gas mileage, and is domestically produced.

But there are concerns by TL industry executives. First, current heavy-duty engines cannot

run on CNG, which is currently in use mostly for trash and utility vehicles. The fueling infrastructure is simply not there yet. And, perhaps most prohibitively, natural gas-run trucks cost between 25 percent and 40 percent more than current diesel-powered vehicles. With a tax incentive from Washington, fleet operators say they simply can’t afford these new engines right now.

Most TL carriers run irregular long-haul routes, averaging 1,000 miles or more, and they use 13-liter or 15-liter engines, which operate better on LNG. But there’s currently no national network of LNG fueling stations since there’s currently no demand for LNG.

But that could change. Once a heavy-duty, large-liter engine gets tested and vetted in real world operating conditions, then some fleets might take the plunge in an LNG experiment. For dedicated and local operations running over a smaller, more predictable network, CNG has greater potential.

### Rates rising in future

One of the surest predictions in trucking is that TL rates will rise. The real issue is by how much—and when.

Without changes in HOS factored in, TL carriers have been successful in obtaining rate increases in the 2 percent to 4 percent range, excepting fuel surcharges. The HOS changes could perhaps add another couple of percentage points—or more. Some analysts say rate increases of as much as 10 percent could be necessary just to cover carriers’ additional costs.

Those rate increases could show up first on the spot market and really kick in during 2014 as contract rates really start to move. There is some historical precedent for this. In 2005, the last peak year when TL capacity was strained, real rate increases of 6 percent to 8 percent (excluding fuel surcharges) were common. That capacity shortage occurred one year after a previous change to hours of service was implemented in 2004.

Of course, analysts warn that the national economy will largely dictate whether we return to such a period. Housing, auto, and energy continue to show strength; but overall consumer



# I KNOW

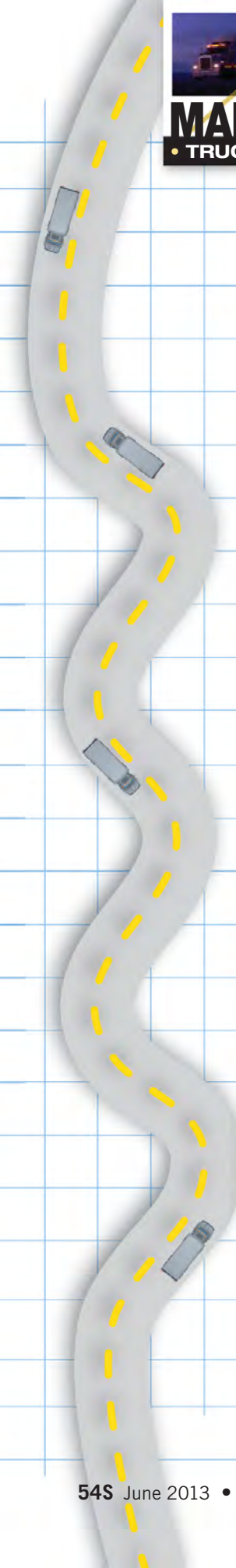
**your shipments and how to handle them.**

**WE KNOW what it takes to get it there next-day.**



**Holland, the next-day delivery leader**, is committed to knowing your business inside out. Winner of the Quest for Quality Award for 27 years running, we deliver the most next-day service lanes in our area – from Chicago to Chattanooga, St. Paul to St. Louis – and annually record one of the lowest claim ratios in the industry. Want to know more? Call **866.465.5263** or go to **[hollandregional.com/nextday](http://hollandregional.com/nextday)** today!





Fleet executives say that hiring compliant drivers remains exceptionally difficult. Carriers are paying more in performance-based pay increases, but even that has not attracted many new drivers to the market.

spending is soft, and the unemployment figures remain stubbornly high.

“Rates will be going north,” Schneider’s Rourke says flatly. “There are a lot of contrarian views, but we’re already seeing 2 percent to 4 percent increases in over-the-road rates. If we hit a substantive driver impact from HOS, those increases will be more. There is no margin to absorb more changes in the driver market.”

Fleet executives say that hiring compliant drivers remains exceptionally difficult. Carriers are paying more in performance-based pay increases, but even that has not attracted many new drivers to the market.

Spot truckload rates, which account for perhaps as much as a quarter of all TL moves, are more volatile, according to DAT RateView, an organization that closely tracks TL rates. In late April, it noted that trucking rate increases had stalled and were actually trending downward year-over-year.

Spot rate averages in the West, Midwest, South Central, and Northeast regions at that time were all trended downward—the Southeast faring only slightly better. DAT called this downward rate at this time of year “a slightly unusual



spring pattern. But large TL carrier executives say that they’ve been successful in obtaining contractual rate increases in the low-to-mid single digits, another indication that it’s the smaller carriers who are buying market share via rate discounting.

“There are some things that we can do to offset the impact of these costs, but there’s still going to be impact,” USX’s White says. “Some of it will be customer specific. Those customers who give us operating flexibility will fare better. However, the bigger challenge will be those customers with demands to pick up and deliver at certain specific hours, with demands down to the minute—that will be a challenge.”

---

—John D. Schulz is a Contributing Editor to *Logistics Management*





## When it comes to moving the world, we've got what it takes.

From the corners of the Earth to the land beneath your feet, Singapore Airlines Cargo delivers virtually anything to anywhere. Our global network connects you to over 70 cities in more than 30 countries across 6 continents. With over 900 flights weekly on more than 100 wide body aircraft, including freighters, we believe our wide network and reliable service makes us your ideal air freight transport partner.



## Top 50 3PLs

# Third-Party Logistics: Seeing into the future

Finding the right 3PL in today's global marketplace involves looking beyond the provider's "vision" statement, say industry experts. Yet, they also acknowledge that there's still an element of prognostication involved once a short list of the Top 50 has been whittled down.

## Contents

5 steps to improving your 3PL relationships	<b>72S</b>
10 elements that develop a successful outsourcing agreement	<b>80S</b>
Outsourcing cold storage: Planning for unpredictability	<b>82S</b>

**By Patrick Burnson, Executive Editor**

One of the key takeaways from this year's list of Top 50 Global third-party logistics providers (3PLs)—compiled by market consultancy Armstrong & Associates—is that business forecasting is becoming increasingly important to shippers when choosing the provider that best fits their needs. This notion becomes even more urgent when one considers that the 3PL market compound annual growth rate (CAGR) from 1996 to 2012 fell 0.3 percent to 10 percent.

Domestic transportation management (DTM) led financial results for 3PL segments again in 2012. Gross revenues were up 9.2%, and at the same time, the cost of purchasing transportation, increased competition, and slackened demand are pressuring DTM gross margins and net revenues. As a result, net revenues increased by only 5.4 percent. Overall gross margins were 14.6 percent—in 2011 they were 15.2 percent. However, overall

3PL earnings before interest, tax, and net income margins remained strong, ringing in at 33.2 percent and 20.3 percent of net revenue respectively.

The key to sustaining that net income trend appears to be in the top provider's ability to anticipate market trends, say analysts.

"Third party logistics providers are good at modeling transportation and distribution networks and identifying overall shifts in demand," notes Evan Armstrong, the consultancy's president. "But they also have the forecasting tools associated with integrated warehousing and transportation management."

According to Armstrong, the leading players in the value-added area of forecasting are Menlo Worldwide, Ryder SCS, APL Logistics, Genco, UTi, and DB Schenker. "Based on our findings," he says, "these companies can be leveraged by shippers to identify key inventory deployment locations and lower-cost transportation lanes."

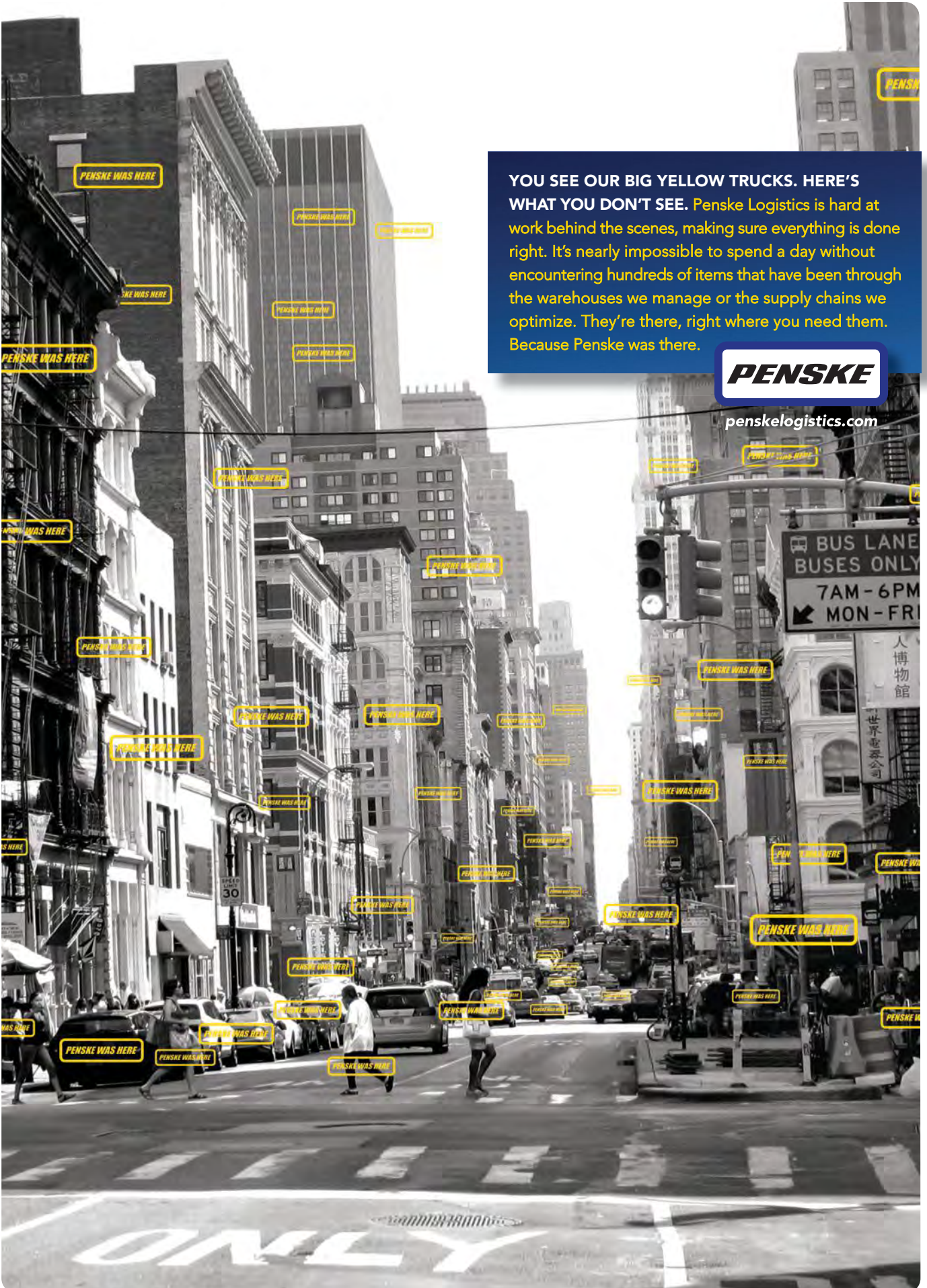
*Continued on page 60S*



## Armstrong & Associates Top 50 Global 3PLs • April 2013

Rank	Third-Party Logistics Provider	2012 Gross Logistics Revenue (USD Millions)*
1	DHL Supply Chain & Global Forwarding	31,639
2	Kuehne + Nagel	22,141
3	Nippon Express	20,321
4	DB Schenker Logistics	19,789
5	C.H. Robinson Worldwide	11,359
6	Hyundai GLOVIS	9,832
7	CEVA Logistics	9,290
8	UPS Supply Chain Solutions	9,147
9	DSV	7,759
10	Sinotrans	7,523
11	Panalpina	7,060
12	SDV (Bolloré Group)	7,038
13	Toll Holdings	6,760
14	Expeditors International of Washington	5,981
15	Geodis	5,868
16	DACHSER	5,670
17	GEFCO	5,267
18	UTi Worldwide	4,608
19	Agility	4,605
20	IMPERIAL Logistics	3,800
21	Hellmann Worldwide Logistics	3,593
22	Yusen Logistics	3,526
23	Damco	3,272
24	Kintetsu World Express	3,155
25	Hub Group	3,124
26	Burris Logistics	2,933
27	Schneider Logistics & Dedicated	2,700
28	Sankyu	2,689
29	Pantos Logistics	2,601
30	Kerry Logistics	2,490
31	Norbert Dentressangle	2,366
32	Ryder Supply Chain Solutions	2,280
33	FIEGE Group	2,090
34	BDP International	1,895
35	Wincanton	1,747
36	Neovia Logistics Services	1,730
37	Menlo Worldwide Logistics	1,726
38	Logwin	1,703
39	Nissin Corporation/Nissin Group	1,609
40	Americold	1,580
41	APL Logistics	1,555
42	BLG Logistics Group	1,540
43	J.B. Hunt Dedicated Contract Services & Integrated Capacity Solutions	1,536
44	GENCO	1,476
45	Total Quality Logistics	1,387
46	Landstar	1,350
47	Transplace	1,300
48	OHL	1,200
49	Werner Enterprises Dedicated & Logistics	1,090
50	Swift Transportation	1,058

\*Revenues are company reported or Armstrong & Associates, Inc. estimates and have been converted to USD using the average exchange rate in order to make non-currency related growth comparisons.



**YOU SEE OUR BIG YELLOW TRUCKS. HERE'S WHAT YOU DON'T SEE.** Penske Logistics is hard at work behind the scenes, making sure everything is done right. It's nearly impossible to spend a day without encountering hundreds of items that have been through the warehouses we manage or the supply chains we optimize. They're there, right where you need them. Because Penske was there.

**PENSKE**

[penskelogistics.com](http://penskelogistics.com)

At the same time, Armstrong notes that domestic “mega trends” such as near-shoring and re-shoring of manufacturing operations are being supported by the Top 30 Domestic 3PLs. “Many major domestic transportation management 3PLs, such as Con-way Multimodal, Transplace, and BNSF Logistics have developed significant cross border capabilities to handle transportation between Mexico and the U.S.

and within the U.S.,” says Armstrong.

He also observes that surges in oil and gas production in North Dakota around the Bakken Formation are driving increased operational focus from 3PLs and multimodal transportation providers. “Service providers and shippers are working hand-in-hand to manage supply chain shifts,” adds Armstrong.

### Armstrong & Associates Top 30 U.S. Domestic 3PLs • April 2013

Rank	Third-Party Logistics Provider	2012 Gross Logistics Revenue (USD Millions)*
1	C.H. Robinson Worldwide	11,359
2	UPS Supply Chain Solutions	9,147
3	Expeditors International of Washington	5,981
4	Kuehne + Nagel (The Americas)	4,878
5	UTI Worldwide	4,608
6	Exel (DHL Supply Chain - Americas)	4,500
7	DB Schenker Logistics (The Americas)	4,034
8	Hub Group	3,124
9	Burris Logistics	2,933
10	CEVA Logistics (The Americas)	2,787
11	Schneider Logistics & Dedicated	2,700
12	Ryder Supply Chain Solutions	2,280
13	Panalpina (The Americas)	2,120
14	BDP International	1,895
15	Neovia Logistics Services	1,730
16	Menlo Worldwide Logistics	1,726
17	Americold	1,580
18	J.B. Hunt Dedicated Contract Services & Integrated Capacity Solutions	1,536
19	GENCO	1,476
20	Total Quality Logistics	1,387
21	Landstar	1,350
22	Transplace	1,300
23	OHL	1,200
24	Werner Enterprises Dedicated & Logistics	1,090
25	Swift Transportation	1,058
26	NFI	1,050
27	Greatwide Logistics Services	1,046
28	Universal Truckload Services	1,037
29	FedEx Trade Networks/FedEx Supply Chain Services	1,028
30	APL Logistics (The Americas)	1,025

\*Revenues are company reported or Armstrong & Associates, Inc. estimates and have been converted to USD using the average exchange rate in order to make non-currency related growth comparisons.



© 2013 C.H. Robinson Worldwide, Inc. All Rights Reserved. www.chrobinson.com

**COLLABORATION DRIVES INNOVATION**  
Download the **FREE Case Study** and  
discover how General Cable collaborated with  
C.H. Robinson to enhance their supply chain.

# PICK UP A 21-TON FLATBED LOAD WITH ONE FINGER.



One call to C.H. Robinson  
makes flatbed shipping simple.

Step deck or double drop. Loading and unloading. Tie-downs and tarps. Flatbed shipping is complicated. So let C.H. Robinson handle it. We'll line up carriers with the right flatbed equipment, give you the best combination of price and service, and do the paperwork. All through one point of contact.

So make flatbed simple. Contact our flatbed experts today.  
[solutions@chrobinson.com](mailto:solutions@chrobinson.com) | 800.323.7587

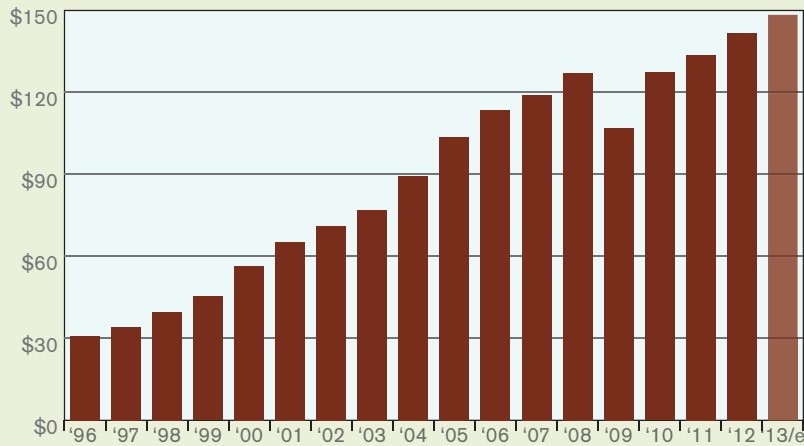


**C.H. ROBINSON**

»Accelerate Your Advantage®

**U.S. 3PL market 1996-2013/estimate**

(U.S. \$ billions, gross revenue/turnover)



Source: Armstrong & Associates

**The 3PL market compound annual growth rate (CAGR) from 1996 to 2012 fell 0.3% to 10%.**

**Need to go global**

Armstrong contends that “mega cities” in developing countries with above average per capita income rates of growth such as Shanghai, Bangkok, Mumbai, Hanoi, Jakarta, and Sao Paulo will drive consumer demand for finished goods globally. Forward-looking U.S. based 3PLs such as Jacobson, Menlo Worldwide, and OHL have

invested heavily in expanding international operations to meet the new challenges, he adds.

“Most U.S.-based shippers are very interested in working with top-notch domestic 3PLs internationally,” says Armstrong. “All 3PLs should be looking for ways to tap international markets with above average growth rates and meet the logistics needs in those rapidly growing mega cities.”

Armstrong has seen significant global expansions by APL Logistics, Dimerco, Jacobson, Kerry, Geodis, Menlo Worldwide, and Toll into high-growth regions. “If a 3PL has positioned itself as a strategic provider for a multinational customer, it should leverage those relationships to help drive international expansion,” he says. “Global size and scale are important competitive differentiators in the global 3PL market and need to be part of

**Revenues and profitability by 3PL segment (2012)**

3PL Segment	Gross Revenue (Turnover) (US\$ Billions)	% Change 2012 vs. 2011	Net Revenue (US\$ Billions)	% Change 2012 vs. 2011	Net Income (Profit Margin %)	% Change 2012 vs. 2011
Domestic Transportation Management	45.1	9.2%	6.6	5.4%	20.3	16.7%
International Transportation Management	46.3	0.4%	17.9	1.0%	7.0	-4.1%
Dedicated Contract Carriage	11.6	4.5%	11.4	4.7%	5.2	15.6%
Value-Added Warehousing and Distribution	35.8	5.3%	27.6	3.8%	2.9	-3.3%
Total*	138.8	6.0%	63.5	4.1%	6.5	6.6%

\*Total 2012 gross revenue (turnover) for the 3PL market in the U.S. is estimated at \$141.8 billion. \$3 billion is included for the contract logistics software segment.

Source: Armstrong & Associates

**Domestic transportation management (DTM) led financial results for 3PL segments again in 2012; gross revenues were up 9.2%.**



# making the impossible, possible

## end-to-end supply chain solutions

next flight out transportation • sameday delivery  
service parts logistics • warehousing & distribution • freight management



At Network Global Logistics, we pride ourselves on the reliability of our services. We offer a 99.5% on-time arrival rate measured to the minute. For us, 1 minute late is late. We are flexible in providing our customers with solutions to their specific challenges. Our information technology is a competitive advantage by ensuring real-time visibility and control for our customers.

With over 500 Forward Stocking Locations worldwide and more than 5 million square feet of distribution centers at end-of-runway, Network Global Logistics is your answer for third party logistics where and when you need it.

**rapid, reliable, flexible, scalable**

**866-938-1870**  
**www.nglog.com**



**network**  
global logistics

every 3PL's strategy."

Analysts at Gartner agree, noting that large multinational and global shippers have started to require that their 3PLs offer more extended services across more regions—and integrate those services across end-to-end business processes.

"The 3PL industry is progressing along a maturity spectrum, in accordance with these new customer requirements, through a combination of acquisition and organic growth strategies," observes Greg Aimi, Gartner's director of supply chain research.

Unlike Armstrong, however, Aimi feels that 3PLs could do a better job of forecasting and pointing shippers in the right direction for future investment.

"Our research shows that most 3PLs only did what their shippers asked them to do," says Aimi. "Original innovation and opportunity was rare from their 3PLs. Most shippers say that their 3PLs were very constructive and even innovative at developing solutions to challenges or opportunities that the customer organization raised, but that they wished the providers could have brought more industry innovation and improvement opportunity to bear on their own."

Aimi, who is co-author of the recently released report *Magic Quadrant for Global Third-Party Logistics Providers*, emphasizes that the time is now for more 3PL forecasting. "The phenomenon of the 'mega city' will drive the need for intentional sharing of logistics and infrastructure resources," he says. "This so-called 'collaborative logistics' means that companies will work together to reduce additional waste and inefficiencies of supply chains operating in isolation."

In evaluating various global 3PL players, Gartner grouped them into various categories, including challengers, players, niche players, and visionaries. And in order to participate in the *Magic Quadrant*, Gartner considered only 3PLs whose depth and breadth could cover regional and multiple service requirements were considered.

Gartner predicts that the following two emerging trends will drive logistics and supply chain pro-

professionals to explore collaborative logistics further within the next five years:

- **Rapid growth causing more urban congestion:** The number of cities with populations of more than eight million is projected to double by 2019. By 2020, Mumbai, Delhi, Mexico City, Sao Paulo, New York, Dhaka, Jakarta, and Lagos will achieve "mega city" status—or more than 20 million people—and there will be many more consumers in smaller, more congested locations.

- **Consumer and corporate sustainability demands:** These concerns will continue to drive CO2 reductions, as well as the sustainable supply of products and services. "3PLs will be in prime position to offer these collaborative services as they can be the arbitrator of resources and costs," says Aimi. "Sustainability might also boost the concept of the distribution parks or campuses whereby co-location of different companies materials and goods facilitate optimization of shared logistics resources and costs."

## Magic quadrant for global third-party logistics providers



The Magic Quadrant charts the largest global 3PLs and can help logistics managers better understand their capabilities when evaluating and selecting providers.

### Narrowing the field

The types of shippers served by the 3PLs in

**No matter where  
your customer is  
located, Landstar has  
the transportation  
solutions to get your  
freight there.**



**Integrated transportation management solutions from the  
team with the skills and resources to power your success.**

Landstar's transportation logistics professionals have the knowledge to evaluate your transportation management practices. Our experience enables you to up your game with more efficient and cost-effective operations.

Landstar, mapping the way to safe, reliable transportation logistics services for 25 years.



- Event Management – Truckload, LTL and Intermodal freight
- Freight Optimization – LTL consolidation
- Complete Shipment Visibility
- Single Point of Contact
- Specialized Project Management
- Air and ocean freight forwarding worldwide
- More than 36,000 transportation capacity providers

Visit us at [www.landstar.com](http://www.landstar.com).  
Contact us at 877-696-4507 or [solutions@landstar.com](mailto:solutions@landstar.com)

# LET THERE



WRANGLER WORKWEAR is a trademark of Wrangler Apparel Corp. and is used under license.

# BE WORK.

LET THERE BE BLUE COLLARS AND STEEL TOES. LET SWEAT-SOAKED BROWS AND BACKBREAKING FORTITUDE BE THE FUEL THAT PUTS FOOD ON OUR TABLES, ROOFS OVER OUR HEADS, AND FRESHMEN IN COLLEGE. MAY OUR WORKING DAYS FOREVER END DRAINED, BUT ACCOMPLISHED. AND MAY WE GREET EACH DAY WORTHY FOR THE WORK AHEAD.

 **Wrangler**  
**WORKWEAR™**  
*WORTHY of WORK*



Gartner's *Magic Quadrant* are global, multinational, multi-billion dollar corporations, many of whom use dozens of services providers. However, Aimi notes that this too may be changing.

"There will always be room for a strong, local provider with local expertise and widely available local resources," says Aimi. "The largest companies are trending toward wanting a smaller set of global preferred providers. However, most of these global providers will have 'best in class' local representation—especially in the most well developed markets."

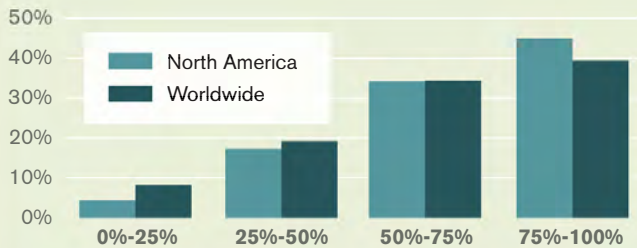
Aimi insists that the major challenge for shippers will be to determine how quickly they will want to extend their reach. They will also have to define their customer base and determine if local service can surpass the benefits of having a global preferred provider taking on more of the business. The goal, he adds, will be ultimately to reduce integration complexity, have more standard global processes, and foster end-to-end process improvement.

"It's also worth noting that the local, large North American providers are wondering when Gartner will do "localized" versions of our quadrant study so that they can be included," says Aimi.

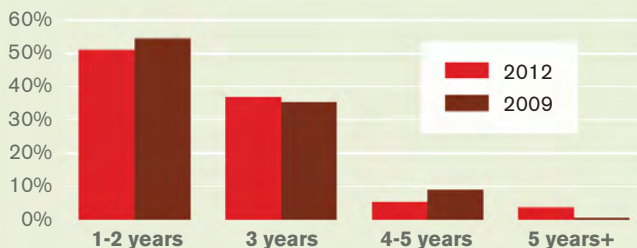
One of the interesting things about this particular quadrant, adds Aimi, is that the "leaders" are not very far into the Leadership quadrant in terms of *Completeness of Vision*. "This is indicative of the fact that even the largest and most diverse 3PLs are still a long way from providing what shippers really want from their providers, keeping them from becoming true strategic global preferred providers across a host of service offerings."

A survey done by the London-based think tank Eyefortransport (EFT) comes to many of the same conclusions, noting that contract renewals are declining as shippers seek to cut down on their reliance of multiple 3PLs. Furthermore, say EFT researchers, shippers are less likely to sign long-term contracts in the future.

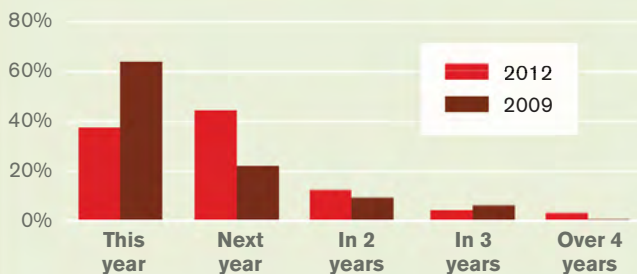
### Percentage of 3PL contracts renewed



### Average length of renewed 3PL contracts



### Time until next 3PL contract negotiation



Source: eyefortransport

**The average length of renewed contracts is usually between 1 and 2 years, according to 53% of 3PLs; the average bid process takes less than 9 months, from start to finish; and 81% of 3PLs start the renewal process within 9 months of the end of an existing contract.**

EFT research analyst Katharine O'Reilly observes in the report *3PL Selection & Contracts Renewal Report* that the percentage of North American shippers renewing over 50 percent of their 3PL contracts has dropped from 83 percent to 73 percent since the last survey was taken. Four percent of the 3PLs that participated in the study reported less than half of their contracts renewed.

"Four years ago none had a renewal rate under 50 percent," says O'Reilly. "Only 10 percent of the renewals exceed a contract term of three years, whereas 53 percent range from one to two years."

The survey, which solicited responses from global shippers, logistics providers and consultants,



# Moving you forward

Saia is always evolving; looking for better ways to move you forward. Introducing Saia LTL Freight, Saia TL Plus and Saia Logistics Services. Three service groups with the spirit, dedication and accountability that have been Saia's trademark since 1924.



Non-asset truckload and expedited solutions provider



Regional and inter-regional LTL service with the industry's most impressive guaranteed product



Logistics resources and experience to reduce costs and increase supply chain efficiency

## Sale of Vitran's 3PL unit to Legacy Supply Chain Solutions is complete

Following a recent announcement that it planned to sell its Supply Chain Operation (SCO) to Portsmouth, N.H.-based third-party logistics (3PL) services provider Legacy Supply Chain Solutions, Toronto-based less-than-truckload (LTL) carrier and transportation services provider Vitran Corporation has reported that the deal is now officially complete.

Vitran officials said that the purchase price for SCO is \$97 million in cash, adding that it has used a portion of the cash to fully reduce its debt under its senior revolving credit facility.

Vitran SCO focuses on complex, high-velocity logistics networks that serve North American-based retailers. Legacy said that this acquisition is expected to significantly expand its market share in the U.S. and Canada and also expand its total distribution footprint to 35 facilities, four transportation offices, and more than 6 million square feet of warehousing space in North America.

Rick Dempsey, vice president and marketing director at Legacy, told *Logistics Management* that prior to this deal Legacy had been looking for the right opportunity to broaden its supply chain services capabilities. "Vitran's SCO culture and values are perfectly aligned with Legacy," he explained. "Plus, the acquisition allows Legacy to expand into the large retailer market—including food and beverage. Overall, the Vitran SCO network is such a great compliment to Legacy's current supply chain network."

In terms of the biggest benefits of this deal for Legacy's customers, Dempsey cited broader supply chain capabilities, specifically expertise of people, enhanced service capabilities, and expanded infrastructure in the form of facilities and technology.

He added that there are no plans for any type of formal business integration, but he did say that the companies will leverage each other's strengths.

—Jeff Berman, *Group News Editor*

included some multinationals with annual revenues exceeding \$25 billion. Sixty-four percent of the respondents had revenues in excess of \$50 million. Nearly half of the respondents (48 percent) were based in North America, 34 percent hailed from Europe and 11 percent from the Asia-Pacific region.

Adrian Gonzalez, president of the supply chain consultancy Adelante SCM, says this narrowing of the field is not necessarily a negative. "There's a switching cost associated with outsourcing relationships. It takes time for a 3PL to understand a shipper's business, for both parties to trust each other, and for personal relationships to develop," he says.

Gonzalez notes that if a shipper switches to a new 3PL, they must build the relationship from "scratch" again. Also, there's a cost associated with managing 3PL relationships—the more 3PLs shippers have, the more time and resources are required to manage those relationships.

"Therefore, shippers may try to limit the number of partners they work with," says Gonzalez. "They don't want to put all of their eggs in one basket, but they also don't want to have a basket full of 3PL partners either."

### Future shock?

So what can shippers expect of their 3PLs in the future? According to two of the giant play-

ers in our global ranking, business forecasting will certainly be a significant piece of their offerings.

"A key value that 3PLs can provide shippers is market knowledge across multiple regions and industries," says Alan Amling, UPS global director of contract logistics marketing. "Another value is to help companies take advantage of the growth opportunities they decide to pursue."

According to Amling, the major providers also have existing infrastructure in global markets; so, after the forecast is made, they can build upon their in-country expertise to help companies navigate trade regulations, get products to end customers, and provide post-sales services.

Jordan Kass, vice president of management services for C.H. Robinson, agrees, noting that the industry leaders have the access to capital to move forward on their predictions. "When we see a trend building—"mega cities," for example—we can invest in the technological resources necessary to help shippers gain a foothold there."

Both Amling and Kass also observe that the convergence of technology and emerging market demand are forces that will shape the 3PL global landscape in 2013 and beyond.

—Patrick Burnson is *Executive Editor*  
of *Logistics Management*





**WE ARE THE  
STRONGEST  
LINK IN  
YOUR  
SUPPLY  
CHAIN.**



Unyson Logistics is an award-winning 3PL that specializes in customizing solutions to fit our clients' needs. We offer multi-modal capabilities that guarantee supply chain savings through our services, technology and expertise.

Simply put, our logistics managers are the best at what they do. Unyson deploys dedicated account management, continuous improvement programs and business intelligence that combines innovative reporting with cutting-edge technology.

**1-866-409-9759**  
**UNYSONLOGISTICS.COM**



# 5 STEPS

## to improving your 3PL relationships

Members of the University of Tennessee's Center for Executive Education share their five steps and a series of tips to improve your outsourcing relationship right from the start.

BY KATE VITASEK, PETE MOORE, AND BONNIE KEITH,  
UNIVERSITY OF TENNESSEE CENTER FOR EXECUTIVE EDUCATION FACULTY MEMBERS

**N**ot long ago on the pages of this magazine a story about Armstrong World Industries described how it won the coveted NASSTRAC Shipper of the Year award after bringing outsourced transportation back in-house.

As we read the case study we were disheartened to learn that the reason Armstrong brought the work back in house was due to a failed third-party logistics services provider

(3PL) relationship.

Yes, there are some bad service providers out there. But our experience is that there are always two sides to every story. It's pretty certain that the service provider Armstrong parted ways with would have its own story to tell from which we could all learn a lesson or two.

However, this article is not about assigning blame, but rather to point out practical steps, tips, and advice on how to improve a 3PL relationship and prevent one from becoming



**Achieve Peak Performance.**

**Rise To The Challenge.**

**Step Precisely.**

**Know The Terrain.**

**Execution is Everything.**

SUPPLY CHAIN • DISTRIBUTION • TRANSPORTATION • CONTROL TOWER

**Ryder**<sup>®</sup>  
*Supply Chain Solutions*

a failure. As experts and outsourcing coaches, members of the University of Tennessee's Center for Executive Education have created five steps to improve your outsourcing relationship from the start and help maintain that partnership once it gets rolling.

Over the next few pages, we'll explore each of these five steps and provide some of our favorite tips and advice to help you improve your 3PL relationships.

### Getting started

Many of the problems companies experience stem from jumping into a contract prematurely without a solid understanding of the business ramifications. With this in mind, our first tip is to slow down and take the steps to get outsourcing right before you start any work.

To do this properly, we recommend a five-step implementation approach that is profiled in *Vested Outsourcing: Five Rules That Will Transform Outsourcing*.

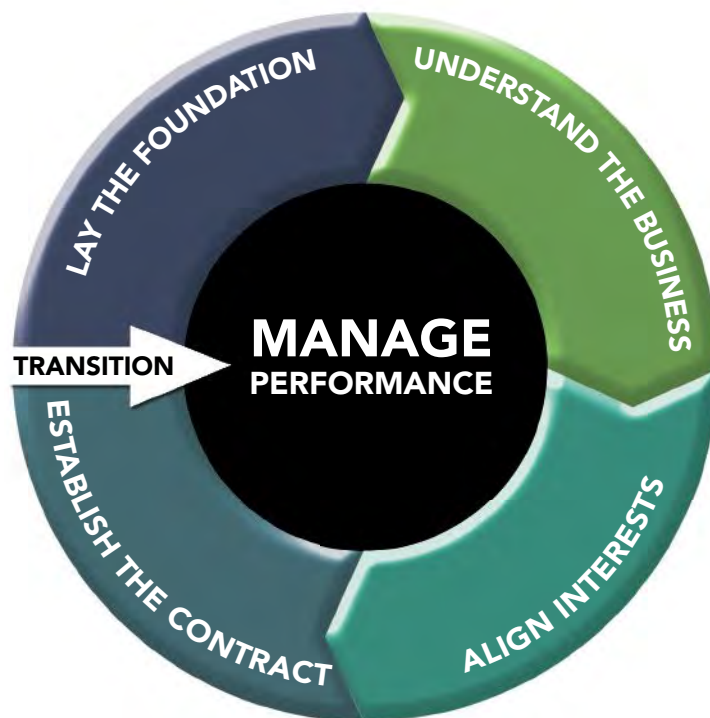
The book goes into detail on each of the five crucial steps companies and service providers can take to create a successful 3PL relationship:

1. Lay the foundation;
2. Understand the business;
3. Align interests;
4. Establish the agreement or contract; and
5. Manage performance.

When taken individually, these steps can offer shippers and service providers valuable insight into current operations. However, they tend to work best when implemented as a process for outsourcing by allowing companies to implement a true collaborative 3PL relationship where the company outsourcing and the service provider are committed to each other's success.

All too often, companies dust off an existing Statement of Work, rush to competitive bid, and give the service provider three months or less to transition the work—we've seen many that only allow for a four-week transition.

The great thing about Vested's five-step framework is that it can be used during a request for



Source: *Vested Outsourcing: Five Rules that will Transform Outsourcing*

proposal (RFP) or with an existing supplier to improve a relationship. Skipping steps usually results in a poorly conceived business outsourcing agreement or worse—a total disconnect in what the service provider is doing versus what the customer actually needs.

### Step 1: Lay the foundation

The first thing a company should do before ever lifting a finger to outsource is to thoroughly understand whether outsourcing is right for its operations. Management consultant Peter Drucker famously stated: "Do what you do best and outsource the rest." This leads to our second tip: Don't outsource what is core. A company should only outsource when a service provider can do the work better, faster, and/or cheaper.

The problem is that far too many companies jumped on the outsourcing bandwagon without realizing if outsourcing was right for them.

The case study on Armstrong raised a red flag for us when we read the statement: "Managing transportation was once a core competency of Armstrong." If managing transportation was a core competency, why did Armstrong outsource it in the

# GLOBAL CAN DO LOGISTICS®

P.O. RECEIVED: 3000 JACKETS  
NEEDED ON TIME

**2. SHANGHAI, CHINA**  
MANUFACTURED DESIGNER  
JACKETS CONSOLIDATED  
FOR RETAIL STORES

**3. SEATTLE, WA**  
SHIPMENTS ARRIVE  
AT RECEIVING CENTER

**4. NEW YORK, NY**  
JACKETS ARRIVE ON  
TIME AT REGIONAL  
DISTRIBUTION CENTER

**1. AREQUIPA, PERU**  
RELIABLE ALPACA WOOL  
SUPPLIER SECURED

**5. WORLDWIDE**  
JACKETS AVAILABLE AT  
RETAILERS ACROSS THE GLOBE



WAREHOUSING & DISTRIBUTION • PACKAGING • MANUFACTURING • STAFFING • PO MANAGEMENT  
FREIGHT FORWARDING • CUSTOMS BROKERAGE • DECONSOLIDATION • TRANSPORTATION MANAGEMENT

## CONSIDER IT DONE

As one of the world's most trusted third party logistics providers, Jacobson Companies can oversee your entire supply chain from end to end. Everything from determining the best and most economical ways to perform each step from managing the purchase order to consolidation at origin to final delivery to store.

Now, with the establishment of Jacobson Global Logistics in Asia, we offer a competitive advantage for a one stop end to end solution. You can do more with Jacobson, the originator of *Can Do Logistics*.

**JACOBSON**  **COMPANIES**

1.800.636.6171 [www.JacobsonCo.com/CanDo](http://www.JacobsonCo.com/CanDo)

first place?

When Armstrong's 3PL relationship began failing early on it decided to move the work back in house. Because the work was brought back in house, we believe that Armstrong did not follow our second tip.

We recommend companies complete a Business Model Mapping exercise to help determine the sourcing business model that is best for your organization – one of which includes keeping work in house. You can learn more by downloading a free whitepaper, "Unpacking Sourcing Business Models- 21st Century Solutions for Sourcing Services," available for download at [www.vestedway.com/vested-library/](http://www.vestedway.com/vested-library/)

## Step 2: Understand the business

Once a company has properly decided that outsourcing is the right choice and has done its homework associated with laying the foundation, it should take the time to establish a baseline that benchmarks the potential cost, service, or other opportunities.

Which leads us to our third tip: Understand your baseline and benchmarks before you outsource. In the Armstrong case study, one of the key decision-makers said: "When we priced it out we were shocked to learn that we were less than half of what everyone else was charging."

The article explains that the Armstrong team discovered this after they realized that their 3PL was failing. If Armstrong had done sound baseline and benchmarked cost and service it would have realized it already had an outstanding team that would not have benefited from outsourcing; in turn, Armstrong would have avoided the pain of transitioning the work only to bring it back in house.

Armstrong also pointed out that "there was a failure by the 3PL to understand Armstrong's customer requirements" and "the biggest flaw was that our 3PL took a one-size-fits-all approach... We have specialized needs, and they did not appreciate the complexity of our business."

So here's our fourth tip: Ensure potential suppliers understand the business. Our research and

experience says that many companies are poor at stating their requirements. In fact, we often see service providers forced to "understand the business" based on a poorly written RFP and incomplete and inaccurate data.

One way to overcome this is for companies to embrace transparency by opening their doors and letting service providers look around and explore the details of the business. Let them ask for data—after all they'll need this to run your business effectively.

Once service providers have a chance to thoroughly understand the business, the companies and the service providers should mutually agree on cost and service goals. We call these Desired Outcomes. If the service provider understands the baseline costs and service levels clearly then they can feel more comfortable about signing up to achieve your Desired Outcomes.

And this takes us to our fifth tip: Develop clearly defined and measurable Desired Outcomes. You are outsourcing because you have gaps in where you are today and where you want to go (your Desired Outcomes). It is important to make sure the service providers understand those gaps and knows what real success is: a win-win for everyone.

The Armstrong case study pointed out that the arrangement was not meeting Armstrong's established costs and service goals. As researchers and educators, we love to review RFPs and poke holes in how poorly-stated requirements often are and how few clearly state their Desired Outcomes.

Service providers do not sign up to take on a client's business with the intent to fail! As such, we strongly recommend that all companies take the time to work with service providers to ensure they understand the business, communicate the Desired Outcomes and identify the gaps.

## Step 3: Align interests

This step entails designing and documenting how a company and the service provider will work together to achieve their Desired Outcomes.

In basic terms, this is the part of the process where both companies should document – and align – their interests. We suggest starting by creat-



**Avoid being unfashionably late. Call the people who know.**

**Source your apparel supply chain in Central America or the Caribbean, and we'll save you time and money.** We offer more weekly fixed-day sailings between this region and the U.S. East and Gulf Coasts with faster transit times than anyone else. Our distribution centers, trucking services and air freight operations help speed your cargo through its supply chain. We also provide U.S. Customs brokerage services for both air and ocean shipments. Take your supply chain to a whole new level of efficiency with Crowley's ***Speed to Market***.

**JUST ASK THE PEOPLE WHO KNOW.**  
**1-800-CROWLEY or [www.Crowley.com/ontime](http://www.Crowley.com/ontime)**

Worldwide Logistics / Liner Shipping / Petroleum & Chemical Transportation / Alaska Fuel Sales & Distribution / Energy Support  
Project Management / Ship Assist & Escort / Ship Management / Ocean Towing & Transportation / Salvage & Emergency Response

**CROWLEY®**  
People Who Know®



ing a shared vision and mutually drafted Statement of Intent that outlines the desired values and cultural norms that will guide how work together. It also means documenting guardrails to act as trigger points that signal a strategic reset or review of the pricing model when certain factors go beyond the guardrails.

Early alignment is in essence a first pass at the future vision for how the two companies will communicate, collaborate, and innovate together to achieve the best results.

This brings us to our sixth tip: Identify risks before developing the pricing model and transitioning the work. In the case of Armstrong, while it's not clear if the parties took the time to align interests, we have to assume that the parties—at least the service provider—likely did not do a proper risk assessment.

We hypothesize that if interests were aligned and a proper risk assessment was performed in the relationship, Armstrong would not have stated that “it was evident pretty much from the start that it wasn't going to work.” Obviously the parties got out of the gate on the wrong foot.

#### Step 4: Establish the agreement

Vested is based on collaborating to create and share value in an outcome-based model that reduces the total cost of ownership (TCO) versus simply focusing on the price of activities or services performed by the service provider.

This brings us to our seventh tip: Establish a pricing model with incentives that encourage service providers to put “skin in the game” and invest in the business. We recommend that companies move away from a “price per transaction” (e.g. price per pick, per touch, per order) and instead adopt a transparent pricing model that includes incentives that rewards a 3PL when it achieves the Desired Outcomes.

As mentioned before, the Armstrong case study cited that “the arrangement was not meeting Armstrong's established costs and service goals.” One approach they could have taken was what we call a “fee at risk” pricing model. This is when a service provider charges below market

rates for service—but then is rewarded with incentives for delivering results against mutually defined targets. The more successful both parties are, the more profit the service provider makes, often up to three times the typical profit margins for the market. This is a true win-win because the companies become vested in each other's success. The more successful the company is, the more success the service provider is.

#### Step 5: Manage performance

This is a most crucial step around which the other steps revolve. Outsourcing is not a “throw it over the fence” business process. But neither should it be an exercise in micromanagement.

Our eighth tip helps to make this clear: Develop a governance structure based on insight versus oversight. A sound governance structure outlines how the business and the relationship will be managed, not just how the company will manage the service provider. The service provider is in essence an extension of the firm with regards to the work provided.

If you have chosen a service provider you trust and have aligned your interests, we find it's often futile to micromanage the service provider. We refer to this as a “junkyard dog” syndrome because the company outsources and then leaves in place employees who watch over and guard the old processes that have been in place for years.

We suggest that this may have been the case in the Armstrong relationship, as the case study notes that they kept four people in place to manage the service provider's 10 employees.

#### Coming full circle

The line between doing outsourcing effectively and doing it ineffectively can get a bit blurry. Instead of drawing a line in the sand we advise an integrated “full circle” approach that includes the five steps we have outlined above.

We'd have to give both Armstrong and their service provider a failing grade on their ability to outsource effectively. That's because even if the service provider was 100 percent at fault, we have found that an outsourcing failure is really a failure for everyone involved.



# CRST RUCTURED FOR SUCCESS

"Productive synergy." That's what the six operating companies of CRST International deliver. It's a unique corporate structure our customers appreciate and depend on.

CRST Dedicated Services, CRST Expedited, CRST Malone, CRST Logistics, CRST Specialized Transportation and CRST Temperature Controlled Team Service ... all integrated to provide a complete transportation solution for customers with multiple needs. From coast-to-coast runs to irregular routes, seasonal peak needs or "white glove" and temperature sensitive loads, customers know their success starts with just one call to CRST.



John Gallardo  
Group President  
Asset Light Division

Michael Gannon  
Group President  
Fixed Asset Division

Dave Rusch  
President and Chief Executive Officer  
CRST International, Inc.

THE TRANSPORTATION SOLUTION™

**CRST**  
INTERNATIONAL

crst.com • 1-800-736-2778

## 10 elements that develop a successful outsourcing agreement

University of Tennessee researchers teamed with the International Association for Contract and Commercial Management to write *The Vested Outsourcing Manual: A Guide for Creating Successful Business and Outsourcing Agreements*.

The Manual provides a clear path for developing a sound outsourcing agreement around 10 core “elements,” which are briefly summarized below:

### **Element 1: Business Model Map**

This first step is to understand and document an outsourcing business model. It is vital to take the time to determine how well the parties are aligned to each other’s goals.

### **Element 2: Shared Vision and Statement of Intent**

With the business model understood and mapped, the parties then work together on a joint vision that will guide them for the duration of the Vested relationship. The vision and alignment forms the basis of a Statement of Intent drafted by the outsourcing teams.

### **Element 3: Statement of Objectives/ Workload Allocation**

This element lays the foundation for the parties to do what they do best. Together the parties develop a Statement of Objectives (SOO), which is very different from the standard SOW. A SOO describes intended results, not tasks. Based on the SOO, a service provider will draft a performance work statement that defines in more detail the work to be performed and the results expected from that work.

### **Element 4: Top-Level Desired Outcomes**

The Desired Outcomes are the centerpiece of the agreement because without mutually defined Desired Outcomes in place, a Vested agreement cannot go forward. Outcomes are expressed in terms of a limited set of high-level metrics.

### **Element 5: Performance Management**

A sound agreement defines how they will manage overall performance of the parties in the outsourcing agreement. The metrics and the associated process for managing performance will help align performance to strategy.

### **Element 6: Pricing Model and Incentives**

The approach of many procurement professionals to outsourcing is stuck on one thing: getting the lowest possible service and labor pricing. Under the Vested model, the service provider’s profitability is directly tied to meeting the mutually agreed Desired Outcomes. The more successful the service provider, the more money it makes.

### **Element 7: Relationship Management**

A relationship management structure creates joint policies that emphasize the importance of building collaborative working relationships, attitudes and behaviors. The overarching principle is for the parties to manage the business—rather than the buyer managing the supplier.

### **Element 8: Transformation Management**

The agreement will set out how the parties manage change as they jointly strive to accomplish the Desired Outcomes. The focus is on mutual accountability for Desired Outcomes and the creation of a culture that rewards innovation, agility and continuous improvement.

### **Element 9: Exit Management**

Sometimes the best plan simply does not work out or is trumped by unexpected events. Business happens, and companies should have a plan when assumptions change. An exit management strategy can provide a template to handle future unknowns. The goal is to establish a fair plan and to keep the parties whole in the event of a separation when the separation is not a result of poor performance.

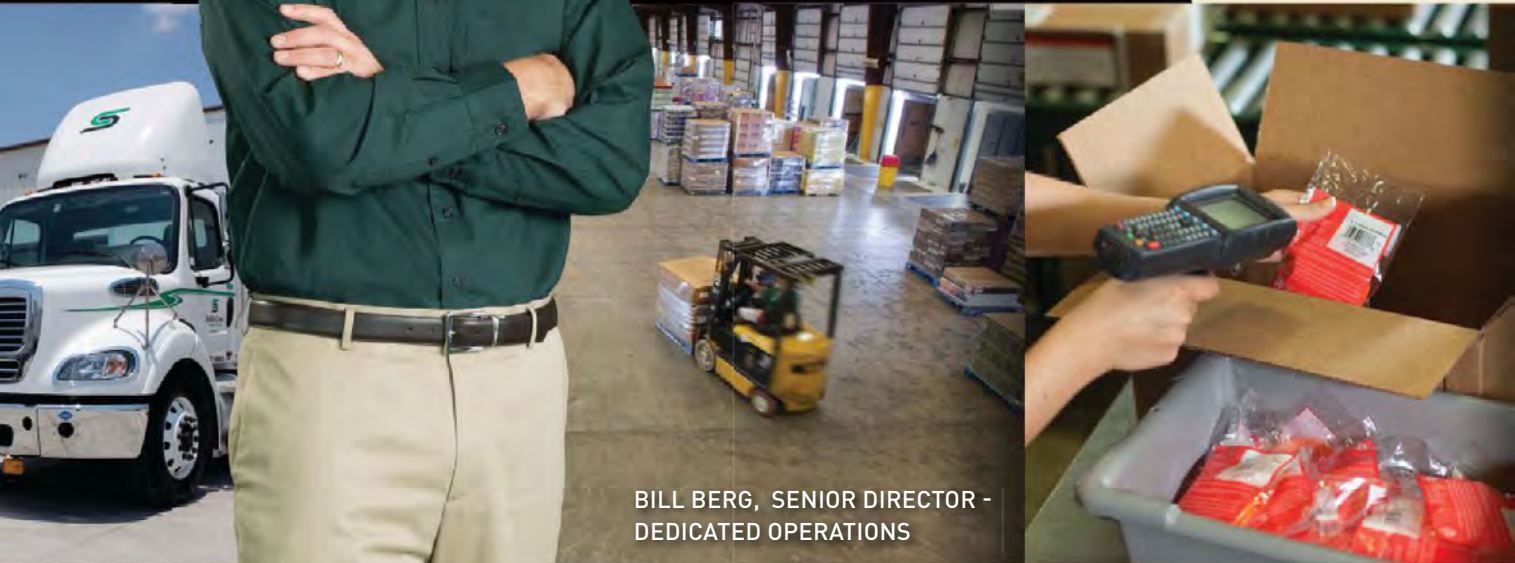
### **Element 10: Special Concerns and External Regulations**

The final element recognizes there are often special requirements and regulatory protocols. This element covers how to handle those “special” requirements.

### 10 elements of a vested agreement

Rule 1: Outcome-Based vs. Transaction-Based Business Model	
Element 1	Business Model Map
Element 2	Shared Vision Statement and Statement of Intent
Rule 2: Focus on the WHAT, not the HOW	
Element 3	Statement of Objectives/Workload Allocation
Rule 3: Clearly Defined and Measurable Desired Outcomes	
Element 4	Clearly Defined and Measurable Desired Outcomes
Element 5	Performance Management
Rule 4: Pricing Model Incentives are Optimized for Cost/Service Tradeoffs	
Element 6	Pricing Model and Incentives
Rule 5: Insight vs. Oversight Governance Structure	
Element 7	Relationship Management
Element 8	Transformation Management
Element 9	Exit Management
Element 10	Special Concerns and External Requirements

**“We go beyond the basics  
to deliver comprehensive  
logistics solutions.”**



**BILL BERG, SENIOR DIRECTOR -  
DEDICATED OPERATIONS**

At Saddle Creek Logistics Services, warehousing and transportation are just the beginning. We offer a wide array of integrated logistics services — cross-docking, product customization, packaging, e-fulfillment and more. Leverage them to help streamline operations, accommodate business fluctuations, and control supply chain costs. We'll do *Whatever It Takes!* to help meet your specific goals.



*See our integrated logistics  
solutions in action. >*

[sclogistics.com](http://sclogistics.com) | 888-878-1177



***Whatever It Takes!***


# Outsourcing cold storage: Planning for UNPREDICTABILITY

By Josh Bond, Editor at Large

In recent years, more and more manufacturers have looked to outsource their cold storage to third-party logistics (3PL) providers in an effort to separate themselves from harsh cold storage material handling conditions.

The challenges of refrigerated spaces are amplified versions of those faced by dry goods facilities. Associates are exposed to the harshest conditions in the materials handling industry. The cost of operating a refrigerated warehouse makes the hunt for efficiencies even more critical. And, the concept of product traceability is subject to the legal repercussions of an ever-stricter regulatory landscape.

In recent years, more and more manufacturers have looked to outsource their cold storage to third-party logistics (3PL) providers in an effort to separate themselves from these concerns. Similarly, refrigerated 3PLs have seen significant consolidation as



Conditions inside refrigerated warehouses are tough, driving some to consider automated alternatives to manual labor.



“Our inventory management delivered better news for their bottom line.”

Rising newsprint costs and digital competition have put the squeeze on newspaper profits. Realizing that their paper warehousing needed closer attention, a large West Coast publisher asked WSI to take over. We performed a complete overhaul of their paper roll storage and transitioned them to a digital warehouse management system - improving accuracy, virtually eliminating shrinkage and more closely monitoring rolls on receipt for damage.

Every day, WSI solves logistics challenges like these, forging partnerships that help our customers operate more efficiently and cost-effectively.

**Get the full story at [www.wsinc.com/accuracymcounts](http://www.wsinc.com/accuracymcounts)**



Integrated Logistics | Supply Chain Solutions

[inquiryLM@wsinc.com](mailto:inquiryLM@wsinc.com) | 920.831.3700 | [www.wsinc.com](http://www.wsinc.com)

those with successful strategies swallow up those without.

This has been good for 3PLs, but the increased level of competition means customers will gladly take their business elsewhere at the promise of a dollar's savings. While many customers will leave a 3PL on a dime in pursuit of a nickel, price only ranked fifth most important to customers in a recent survey by Gartner Research. Most important was customer service, while innovation ranked third.

For decades, public refrigerated warehouses simply needed to do three things very well, says Joe Couto, senior vice president and general manager for Accellos, which serves 14 of the 25 largest refrigerated warehouses in North America.

"The basic needs were to receive inventory well, manage the inventory well, and ship it accurately and timely, but you didn't have many fancy capabilities beyond lot and cold chain management control," he says.

### New challenges

The modern cold storage challenge centers on the transition from simple pallet-in, pallet-out operations to increased case handling, value-added services, and meeting the various demands of customers and their clients.

"There's an increase in outsourcing, but not just in storage and distribution," says Corey Rosenbusch, vice president at the Global Cold Chain Alliance and president of the International Association of Refrigerated Warehouses (IARW). "Our members are also asked to provide value-added services, whether it's repack operations, actual manufacturing, or consolidation."

The combined pressures of labor needs, efficient operations, and unstable customer base have put cold 3PLs in a tough spot. If they innovate, automate, and update, there's no guarantee the customer will stay with them long enough for those investments to prove worthwhile. If they don't, there's an even better chance they will lose business.

The fundamental business models of cold storage are up for grabs. The concept of "one size fits all" facilities is becoming untenable in many cases, as purpose-built, specialized facilities work to target specific customers, products, and service requirements. Again, the challenge to this

approach is the permanence of customer tenants.

"There might be a 3PL who says: 'I can do better than that with a customized, modern facility, but I'll need you to sign a 10-year agreement.' That idea is startling to most customers, but if the numbers are there, they'll sign," says Carlos Oliver, president of Frazier Industrial Company.

### Cutting costs

Customers (the manufacturers with product to sell) have cold storage 3PLs over the barrel. As customers' clients (the retail entities that sell a manufacturer's frozen goods) demand increased services in terms of pallet building and traceability, the customer increasingly passes the cost for these services to the 3PL.

"For a long time, while people were working to outsource cold storage, the competition was not as high as dry goods storage," says Oliver. "But in the last five years, there's been much more competition, there's less capacity available, and the same people are competing for smarter customers. A lot of 3PLs haven't changed their mode of operation for 30 years because they have not been inclined to design a custom solution in the face of that volatility and the potential for the customer to leave."

For example, 20 or 25 years ago, the customer would tell the 3PL which lot to ship, and then the customers left it to the 3PL to figure out which one was the oldest based on date of production, lot number or first-in, first-out, says Couto. Now, if one retailer asks for a 90-day shelf life and another wants 100-day shelf life, the 3PL needs to be ready for that. If shipping direct to a store, not only do they have to assemble a perfect order, many stores have specific requirements in terms of pallet height or pallet type for a 3PL to ship on.

The 3PLs' choices are to provide the service or lose the business. "There's real pressure on rates right now, based on manufacturers' desire to reduce landed cost to the consumer," says Rosenbusch, who says 3PLs are looking for efficiencies with technologies, with many pushing to ensure they have a robust warehouse management system (WMS) in place. In addition to facilitating more product visibility and USDA inspector-friendly facility layouts, a WMS can also address the goal of customer retention.



# Don't worry, we know all the shortcuts

That's the kind of flexibility possible when you operate the largest air fleet in Canada. Because we're the only major carrier to focus exclusively on Canada, your business is guaranteed access to more Canadian destinations than offered by any other shipping company. Finally, the shortest route between the U.S. and Canada is Purolator.

To find out what makes Purolator a smarter, faster, and easier way to ship to Canada, call 1-888-511-4811 or visit [purolatorinternational.com](http://purolatorinternational.com)

#### **Air Cargo**

For your high-volume and time-sensitive shipments, we pack, track, inventory, and deliver on your schedule

#### **Air Charter**

A dedicated flight designed and customized to the schedule, privacy, and speed your business demands

***Purolator***  
We deliver Canada

PUR0express™

PUR0parcel™

**PUR0freight™ · Air**

PUR0freight™ · Ground

Supply Chain Services



“We’re over the peak where most cold storage companies have a good baseline WMS in place. Now we’re trying to get past the challenge of multi-level product handling that the client base is demanding,” says Jeff Hedges, president of OPEX Corporation.

“But if you can offer a WMS the client can somehow interface directly to, you can develop a bond with the customer, and it might be harder for them to shop around for alternatives.”

A pick tunnel located in the freezer is another alternative, which might be coupled with automated dynamic slotting or static slotting for fast movers. “I see order picking in a 3PL cold storage environment remaining mostly manual, but becoming as ergonomic as possible,” says Labell.

### Purpose-built

3PL companies are increasingly entertaining the idea of constructing purpose-built buildings around a specific function, such as case handling and picking, then looking at customers to fill it, says Hedges. Or, they will approach a few

customers with a proposal for a long-term commitment in something automated or otherwise purpose-built. “Cold storage companies have tried to define themselves by being one-stop shopping for everyone, and that’s becoming more difficult,” says Hedges.

The model is now changing to one centered around specializations. When a facility needs to only perform one task or a small assortment of tasks very well, it might work to justify automation. With automation, a customer might find efficiencies that save money for all involved. With better rates for a targeted service, that provider might find customers more inclined to stick around for the long term.

“For the longest time, they’ve all had their select customer niche, but to acquire new customers, they are looking at driving cost out with automation, efficiency and product accessibility,” says Frazier’s Oliver.

The core concept here is to break out specific products by commonality and consistency and build a materials handling system around them.

expect more.  **GEODIS  
wilson**

 **2012  
GLOBAL  
FREIGHT  
AWARDS**  
Excellence in freight and logistics



**GEODIS WILSON IS THE WINNER OF THE INNOVATION AWARD**



“Instead of building the facility to suit all products, build it to suit some of them very well,” says Hedges, “and bring products to the facility where it makes the most sense to handle them.”

With facilities performing specialized roles in the cold chain, the flow of product from factory to consumer is also changing shape. Some 3PLs are consolidating distribution centers to bundle services for multiple 3PL customers, says Labell. He sees things heading toward more 4PL consolidation, as “mega-centers” leverage their size for efficiencies.

“This massive center receives truckloads of products from other 3PLs. This would reverse the trend of adding order selection and picking to the 3PL world because these facilities would handle it in the mega-center,” explains Labell. “That’s a model that is going to gain traction in the next 20 years.”

### From the front lines

Larry Rauch, president of Los Angeles Cold Storage, an IARW member that helps customers distribute across 48 states, says the transformation in cold storage means 3PLs are not just warehouse companies, they are logistics providers.

He echoes the issue of long-term customer retention, saying information technology has played a role in combating that trend.

“We’re giving the customer access and the ability to run reports themselves and track inventory closely in real time,” says Rauch. “There’s been a significant movement in the last few years toward that. You hope that by offering your customers a variety of services, including the technology, they will be more inclined to stay.”

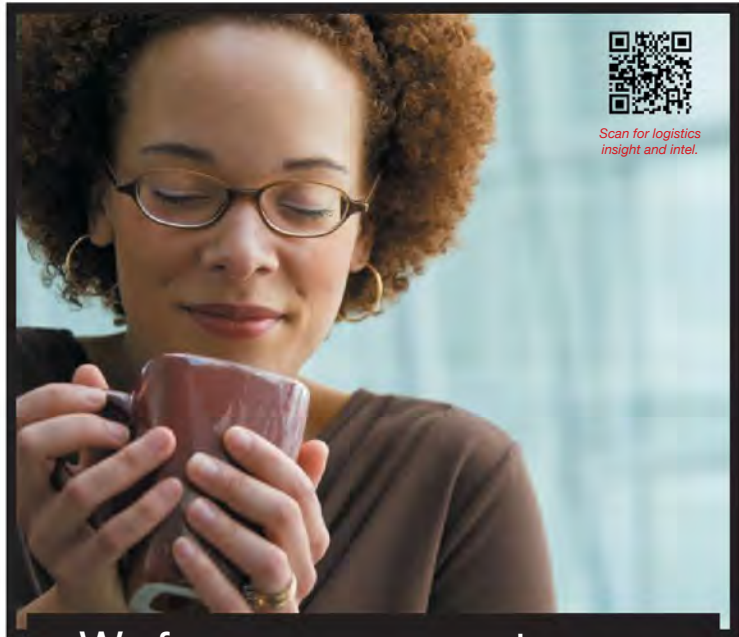
Inspection and traceability, grouped together, is a trend that is increasingly costly, says Rauch. “It’s being asked of us by both governments and customers,” he says.

“It’s something we’ll be increasingly

struggling with, and costs will be transferred to customers. You can make the case that some of those requirements will create better companies, but some will not translate into more efficient companies.”

Dematic’s Hunter agrees, and says

advancement among cold storage 3PLs happens on a relative basis. “If someone develops some cost-saving strategies, everyone else is compelled to follow,” says Hunter. “The cold storage industry has been content, but they are being forced by competitors to innovate.” □



Scan for logistics  
insight and intel.

We focus on your customers.

**DISTRIBUTION & FULFILLMENT • TRANSPORTATION MANAGEMENT  
MATERIAL HANDLING SOLUTIONS • REAL ESTATE MANAGEMENT**

Kenco’s supply chain solutions go beyond the shipping dock to satisfy your customers—during their coffee break or any time. How? We combine common sense customer service with unparalleled execution, driving continuous value to you—and your customers.



1-855-877-5910 | [solutions@kencogroup.com](mailto:solutions@kencogroup.com) | [kencogroup.com](http://kencogroup.com)



# Pacific Rim Report

By Patrick Burnson

Patrick Burnson is Executive Editor of *Logistics Management*. If you want to contact Patrick with feedback or a story idea, please send an e-mail to [pburnson@peerlessmedia.com](mailto:pburnson@peerlessmedia.com).



## West Coast port events track bold moves

WHILE THE PORT OF TACOMA IS AIMING to be a gateway for three million twenty-foot equivalent units (TEUs) over the next 10 years, it also has ambitious goals set for its bulk and breakbulk facilities.

John Wolfe, the port's executive director, gave a presentation last month at the International Association of Ports and Harbors (IAPH) conference in Los Angeles that clearly indicated that Tacoma is making a bold move to attract these cargoes. Over the next decade, said Wolfe, Tacoma hopes to be the transit point for 12 million metric tons of bulk commodities and 200,000 short tons for breakbulk, while boosting its operating margin by 30 percent and its net income by 50 percent.

At the IAPH event, Wolfe also outlined plans for the port's future bulk terminal. The session, titled "Port Project Decision Criteria: ROI and Beyond," proved to be a good platform for Tacoma's value proposition. Wolfe stated that in the first full year of bulk terminal operations, the port's investment would return \$8.6 million in annual revenue.

The U.S. shipping community will gain even more information on West Coast opportunities for bulk and breakbulk shippers, as well as those moving goods by containerload, when the Agriculture Transportation Coalition (AgTC) convenes its 25th annual meeting (June 13-14) at the Hotel Nikko in San Francisco.

One of the most anticipated sessions will certainly be "U.S. Ag Export Outlook: What Comes Next?" presented by Walter Kemmsies, chief economist with Moffatt & Nichol. Kemmsies also gave a compelling speech at the IAPH conference where he outlined the opportunities and challenges for shippers seeking to break into the South American market.

The AgTC event is also likely to showcase the "niche" advantages of the Port of San Francisco, which recently announced the expansion of its Foreign Trade Zone (FTZ) No. 3 service area to include Contra Costa, Marin, Solano Counties, as well as portions of Sonoma and Napa Counties. The previous service area included San Francisco and San Mateo Counties. This action will support efforts to strengthen the local economy and

attract new businesses to the area.

The FTZ program has certainly allowed U.S. companies to obtain a more competitive position with respect to their counterparts overseas. It also subsidizes job growth by deferring, reducing, or eliminating customs duties paid on imported goods by importers, distributors, manufacturers, and processors.

"Foreign Trade Zones are one tool to reduce logistics costs, which translates into savings to a company's bottom line," says Jim Maloney, maritime marketing manager at the Port of San Francisco, grantee of FTZ No. 3. "The FTZ program provides an excellent opportunity for Bay Area businesses to enhance their competitiveness in the global economy."

**The FTZ program allows existing and new companies in these counties to secure FTZ site status under the streamlined Alternative Site Framework program within approximately 30 days from when an application is accepted. Without the program, the process can take eight to 12 months.**

According to Maloney, the program allows existing and new companies in these counties to secure FTZ site status under the streamlined Alternative Site Framework program within approximately 30 days from when an application is accepted. "Without the program," he adds, "the process can take eight to 12 months."

An FTZ site is a secured area near a designated customs "port of entry." And while physically located within the U.S., it's considered outside the U.S. Customs territory. This allows for foreign goods to be brought into FTZs without formal customs entry for manufacturing, testing, assembly, processing, storage, and distribution.

Maloney adds that the port hopes that the development may also lead to a few more ocean cargo vessel calls for San Francisco, and its much larger neighboring port—Oakland. □

## Find everything you need when researching companies, trends, and industries.

Supply Chain 24/7 is the ultimate online business resource for transportation, distribution, logistics and supply chain professionals.

Your *best* business resource for:

- News
- Best practices
- Trends
- Case studies
- White papers
- Webcasts
- Research
- Special reports
- Blogs

and *much much* more!



**Search engine** can search across content elements and by specific companies

**Trending** news and features

**Featured companies** that are relevant to the specific topic

Visit **supplychain247.com**.  
Begin your experience today.



# WE'RE LIKE SKINNY JEANS FOR YOUR **PACKAGING.**

**YOUR PRODUCTS WILL  
APPRECIATE A TIGHT FIT.**

Using the wrong packaging size with void fill can cost you. Packsize® gives you the ultimate flexibility to rightsize the box for every product, on demand. Reduce shipping costs and dimensional charges, minimize the use of air pillows, eliminate product damages due to package size, decrease environmental impact, and increase customer satisfaction.

**GET PACKSIZED.**



The world's largest companies are  
switching to On Demand Packaging®  
[packsize.com](https://packsize.com)

