Peerless MEDIA, LLC

logisticsmgmt.com

Logistics MANAGEMENT

November 2014

Michael R. Haverty—chairman emeritus of Kansas City Southern

2014 NITL EXECUTIVE OF THE YEAR

Fortune favors the bold

Page 26

LM management UPDATE

AN EXECUTIVE SUMMARY OF INDUSTRY NEWS

◆ **Cass data bodes well for freight outlook.** Data from the *Freight Index Report* from Cass Information Systems is pointing to a decent home stretch for 2014 freight activity. The report explained that various freight indicators have shown a steady increase in shipment weights, with the thesis that a decrease in the actual number of shipments does not specifically translate into a falling off of freight activity. Rosalyn Wilson, senior business analyst with Parsons, wrote in the Cass report that 2014 is the strongest year for the freight sector since the end of the recession. "While there are still headwinds, things should continue to improve for the industry," she wrote. "The rise in costs, especially related to labor, are pressing hard on rates and should break through in early 2015. The volume growth that has supported that strengthening in freight is still fragile and susceptible to outside forces."

◆ **NRF calls for 4.1 percent annual increase for holiday retail sales.** Despite the relatively sluggish overall pace of retail sales growth, data issued by the National Retail Federation (NRF) this week points to annual retail sales gains for the 2014 holiday season. Holiday sales, as defined by the NRF, are sales in the months of November and December and exclude autos, gas, and restaurant sales. For 2014, the NRF said it expects holiday sales to grow 4.1 percent compared to 2013, which is above the actual 3.1 percent for 2013. The NRF said that holiday sales have grown by an average of 2.9 percent over the last ten years, which includes its 2014 projection, and are pegged to account for 19.2 percent of the retail sector's $3.2 trillion in 2014 annual sales. If the 4.1 percent increase is reached, it would mark the first time holiday sales have headed up more than 4 percent annually since 2011.

◆ **UPS, FedEx bracing for a busy December.** As e-commerce activity continues to gain traction among consumers, industry bellwethers FedEx and UPS are expecting subsequent volume gains. FedEx says that it expects to move more than 290 million shipments between Black Friday and Christmas Eve, which would mark an 8.8 percent annual gain over the same period from a year ago. FedEx expects December 15 to be the busiest day in its history, with the company expecting to move 22.6 million global shipments, which would nearly double the 11.5 million shipments it moved on December 17, 2007. UPS said it expects December shipments to be up 11 percent annually, with the company previously stating it has invested $175 million in operating expense and $500 million on capital expenditures to enhance its capabilities and prepare its network for Peak Season and future related volume growth.

◆ **CP-CSX merger talks are off.** While the proposed merger of Class I railroad carriers CP and CSX did not come to fruition, railroad merger and acquisition activity received its fair share of news in October. CP had proposed an integrated coast-to-coast combination that would improve customer service, promote competition, and alleviate congestion in North America, specifically the key Chicago gateway. CP CEO Hunter Harrison said that after a series of meetings regarding a potential merger, CP and CSX decided to not move forward. But he did observe that a strong case can still be made for the merger of two large carriers, which could both improve service and competition among carriers. Tony Hatch, principal of New York-based ABH Consulting and an independent railroad analyst, wrote in a research note that CP's Harrison sees Class I railroads' opposition to consolidation softening, adding that CP is willing to revisit a CP-CSX merger or other options at any point, adding that while Harrison is open to further discussion, rail deals need to be friendly, which Hatch said makes Harrison a "loner in this regard."

◆ **September POLA and POLB volumes impress.** Despite the myriad service issues affecting port production and throughput, September volumes at the Port of Los Angeles (POLA) and the Port of Long Beach (POLB) were strong. Total POLB volumes were up 7.3 percent annually at 629,771 twenty-foot equivalent units and marked the highest-volume September going back to 2007, which was the busiest year in the port's history. Imports were up 10.2 percent and exports fell 12.1 percent. POLB officials said that September's increase was attributable to goods being shipped in time for the holidays, adding that September

Continued, page 2

LM management UPDATE

AN EXECUTIVE SUMMARY OF INDUSTRY NEWS

imports were the third highest ever recorded at the port. September POLA volumes rose 9 percent annually in what was the port's busiest month going back to August 2006. POLA officials said this output was the by-product of increased Peak Season volumes and larger vessels calling at the port. While these gains are impressive and reflective of positive prospects for the holiday shopping season and an improving economy, both POLA and POLB have been dealing with various issues related to high demand, truck and chassis availability, and larger ships calling on the ports, with many ships having 50 percent more cargo.

◆**STB requiring Class I railroads to provide weekly service reports.** In light on various service-related freight railroad service issues, the Department of Transportation's Surface Transportation Board (STB) is now requiring Class I railroads to publicly file weekly data reports on service performance. The STB said that this is being done "in an effort to promote industry-wide transparency, accountability, and improved service." It added that this directive comes on the heels of a recent September STB hearing in Fargo, N.D., focused on rail service issues that began late last year. At that hearing and others hosted by the STB, the board said that many rail shippers expressed concerns about the lack of publicly available rail service metrics and requested access to certain performance data from the railroads to help them better understand the scope, magnitude, and impact of the current service problems. The data collected pursuant to this order will give the board a better real-time understanding of the current rail service issues.

◆ **Clean machines on the high seas.** BSR's Clean Cargo Working Group's *2014 Global Maritime Trade Lane Emissions Factors* report, which provides data from more than 2,900 ships representing around 85 percent of global ocean container capacity, indicates that average carbon-dioxide emissions for global ocean container transport have declined year over year, and by nearly 8 percent between 2012 and 2013. The report states that the changes in carrier representation or global trade conditions may account for part of the emissions reductions described in the findings. However, the continued performance improvement is also attributed to carrier fleet efficiency and year-on-year improvements in data quality, said BSR.

◆**Transpacific inbound/outbound woes continue.** As the Transpacific Stabilization Agreement (TSA) carrier discussion group prepares for a new round of service contract negotiations, shippers are being told to expect a new approach to pricing. Container shipping lines in the Asia-U.S. trade lane face significant cost and operational challenges in 2015-2016 as they manage inland rail and truck capacity shortages as well as sharply higher mandated fuel costs beginning in 2015. "Carriers feel an urgent need in the current market environment to view pricing differently," said Brian Conrad, TSA executive administrator. U.S. shippers looking for container space for outbound commodities will soon face higher rate structures as well. TSA-Westbound, which comprises carriers bringing American exports to Asia, announced that freight rates fall well below "break even" levels in recent months amid weakening demand and rising costs. "Many base cargo rates in the Westbound transpacific market are approaching levels that do not justify carriage, especially when you take into account offsetting destination," added Conrad.

◆ **Air cargo rebound.** The International Air Transport Association (IATA) announced August 2014 data for global airfreight markets showing continued "robust" growth in air cargo volumes. Carriers in all regions reported an expansion in volumes, but the Asia Pacific continues to be the strongest. "The outlook for air cargo is clearly getting better," said Tony Tyler, IATA's director general and CEO. "However, there are some limiting factors on the extent of potential gains." According to Tyler, demand for air cargo is growing more slowly than global economic activity. "Businesses are reported to have more confidence in the future, but the list of political and economic risks continues to moderate how that confidence translates into actual activity," he added. Cargo volumes rose 5.1 percent in August, compared to August 2013. Capacity grew at a slower pace of 3.4 percent from the previous year. □

A FREIGHT TO THE FINISH

SEE HOW INTERMODAL AND HIGHWAY MEASURE UP WHEN IT COMES TO MOVING YOUR FREIGHT

TRAIN

VS

TRUCK

★★ **A GOOD OL' FASHIONED FREIGHT-TO-FREIGHT BRAWL** ★★

GIVING YOU THE BEST IN TRANSPORTATION SERVICES DOESN'T JUST MEAN BEING

RELIABLE AND INTUITIVE.

AT HUB GROUP, WE WORK WITH YOU TO FIND

THE BEST SOLUTION FOR YOUR SHIPPING NEEDS

—EVEN IF THAT MEANS PITTING OUR OWN SERVICES AGAINST EACH OTHER.

WE ARE

THE PERFECT MATCH

TO FIND YOUR PERFECT MATCH!

GO

SETTLE THE SCORE ONCE AND FOR ALL

VISIT

HUBGROUP.COM/MAP-SHIPPING-ROUTES

HUBGROUP.COM

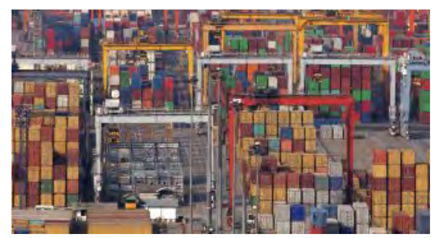
November 2014 logisticsmgmt.com

LM Logistics Management

VOL. 53, NO. 11

CONTENTS

Cover photography: Blaine Fisher/Getty Images



Logistics Management® (ISSN 1540-3890) is published monthly by Peerless Media, LLC, a Division of EH Publishing, Inc., 111 Speen St, Suite 200, Framingham, MA 01701. Annual subscription rates for non-qualified subscribers: USA $119, Canada $159, Other International $249. Single copies are available for $20.00. Send all subscription inquiries to *Logistics Management*, 111 Speen Street, Suite 200, Framingham, MA 01701 USA. Periodicals postage paid at Framingham, MA and additional mailing offices. **POSTMASTER: Send address changes to: Logistics Management, PO Box 1496 Framingham MA 01701-1496**.


PROTECTOR of CLAIMS-FREE SHIPPING
The LTL experts at Saia understand that exceeding our customers' expectations isn't possible without the right people on the job. That's why our team members use their knowledge and experience – backed by proprietary tools and technology – to find new and better ways to serve today's shippers. In fact, by equipping our Load Quality Inspectors with purpose-built handheld devices, we've achieved one of the industry's best claims-free ratios. So it's not just about touting the latest gadgets. It's about empowering our people to keep innovating – because in an industry that never stops moving, that makes all the difference.
SAIA
LTL Freight
1-800-765-7242 / www.saia.com

QUARTERLY TRANSPORTATION MARKET UPDATE

LTL: Sunny forecast for carriers

As long as LTL carriers remain disciplined on capacity additions, and the U.S. industrial economy remains strong, the LTL sector is well positioned to continue expanding margins due to operating benefits from increased density and higher freight rates. Analysts agree: It's time for shippers to pump up the freight budget. Page 54S

2014 Virtual Conference

Supply Chain Transformation: Meeting the Omni-channel Fulfillment Challenge

Tuesday, December 9 @ 1:00 p.m. ET

For both retailers and manufacturers, the pressure is on to deliver anything, anytime, from anywhere—and the momentum to improve service levels is only building. Welcome to the new world of omni-channel fulfillment, a place where mobile technology, wireless networks, and e-commerce capabilities have collided to create a new slew of challenges for supply chain managers, logistics and transportation managers, and warehouse and distribution center professionals.

In our **2014 Virtual Conference**, the speakers will put the impact of omni-channel fulfillment into perspective by taking a look at how supply chain organizations have had to transform transportation management, re-think distribution processes, and apply software, systems, and technology to meet new customer expectations in this highly competitive environment.

Register now at www.bestpracticesVC/2014.com

Now On Demand

23rd Annual Study of Logistics and Transportation Trends

Who's winning transportation's tug of war?

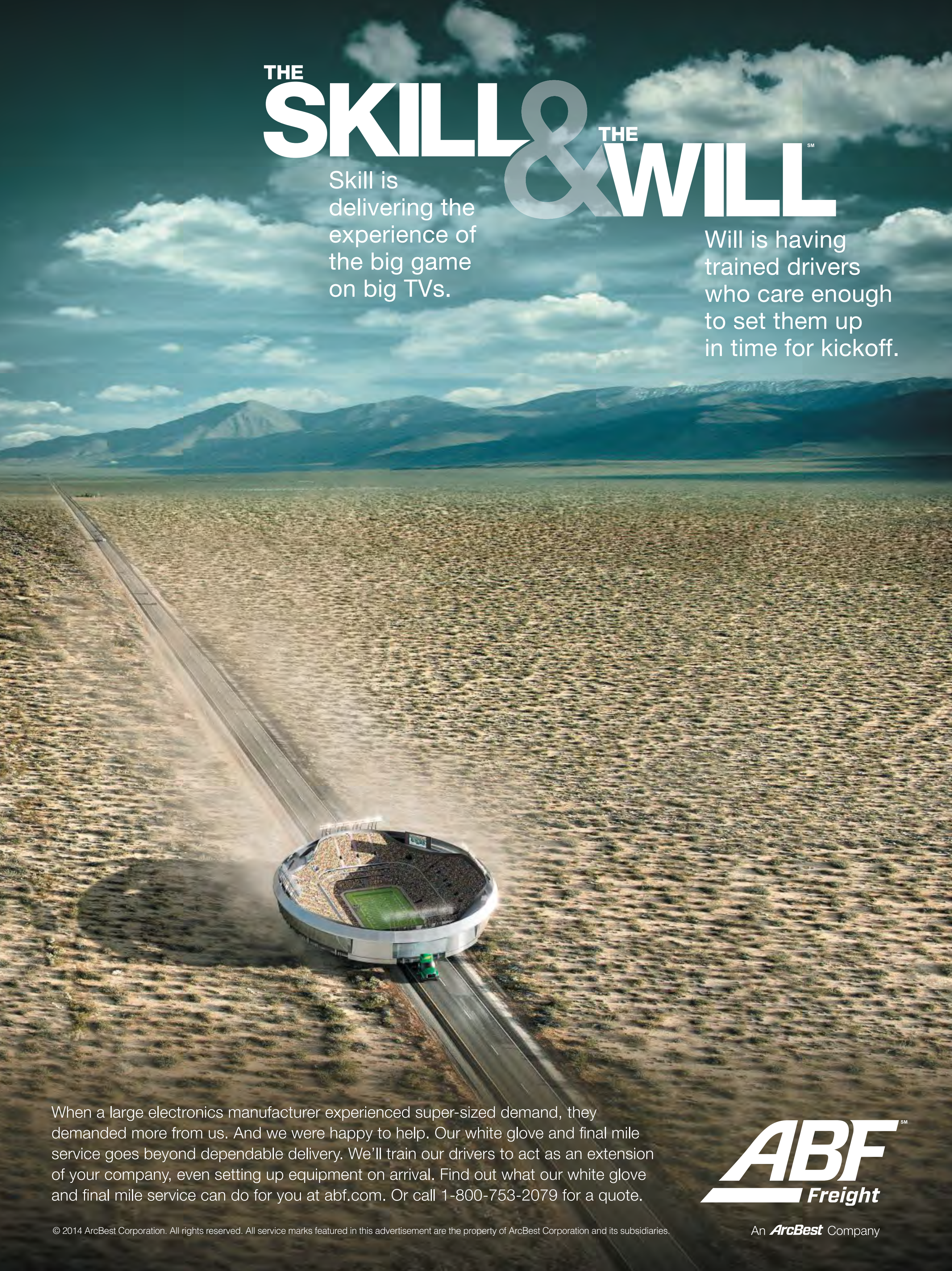
Results from our *23rd Annual Study of Logistics and Transportation Trends* suggest that carriers, driven by a need to maximize profitability, are at a polar opposite with shippers who are focused on reducing their costs.

How can carriers and shippers collaborate to put an end to transportation's tug of war?

Join Group Editorial Director **Michael Levans**, **Mary Collins Holcomb, Ph.D.** of the University of Tennessee, and **Karl B. Manrodt, Ph.D.** of Georgia Southern University, as they reveal all of the findings of our *23rd Annual Study of Logistics and Transportation Trends*. Shippers will learn:

- critical steps carriers and shippers need to take to put an end to the struggle;
- the percentage of freight dollars currently spent by mode over the past 12 months; and
- what the next era of transportation management will look and act like.

www.logisticsmgmt.com/2014masters


THE SKILL & THE WILL℠
Skill is delivering the experience of the big game on big TVs.
Will is having trained drivers who care enough to set them up in time for kickoff.
When a large electronics manufacturer experienced super-sized demand, they demanded more from us. And we were happy to help. Our white glove and final mile service goes beyond dependable delivery. We'll train our drivers to act as an extension of your company, even setting up equipment on arrival. Find out what our white glove and final mile service can do for you at abf.com. Or call 1-800-753-2079 for a quote.
ABF Freight℠
An ArcBest Company
© 2014 ArcBest Corporation. All rights reserved. All service marks featured in this advertisement are the property of ArcBest Corporation and its subsidiaries.

Haverty: Fortune favored the bold

THE EDITORIAL STAFF of *LM* is pleased to again partner with the executive team at the National Industrial Transportation League (NITL) to present the Annual Executive of the Year Award, an honor that recognizes an individual for career achievement and game-changing leadership in the transportation industry.

With that, I'm proud to announce that the 2014 recipient of this coveted award is Michael Haverty, chairman emeritus of Kansas City Southern (KCS). The award will be presented on Wednesday, Nov. 19, at the NITL's 107th Annual Meeting & TransComp Exhibition being held in Ft. Lauderdale, Fla. (Nov. 15-19).

For all of the years I've been part of this award process, I find it hard to remember another winner who fits the definition of "game-changer" better than Haverty.

A fourth generation railroader who began his career as a brakeman with the Missouri Pacific Railroad Co. in 1963, he made his climb up the corporate ladder at a time when customer service requirements were becoming more stringent, operating costs were being squeezed tighter than ever, and the ivy-like spread of global commerce was gaining momentum.

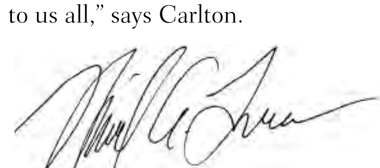
A quick read down a list of just a few of his accomplishments neatly summarizes his nomination. In the early 1990s, when Haverty served as president and chief operating officer on the Santa Fe, he helped to implement the first reduced train crew, a precedent-setting move for improved labor productivity throughout the entire rail industry. And in a legendary handshake deal aboard a train, Haverty and the late J.B. Hunt formed their historic intermodal partnership, marking the first time a Class I railroad went into business with a truckload carrier.

"Sitting across from him, you get a sense that this thoughtful, determined innovator simply believes he was at the right place at the right time," says Executive Editor Patrick Burnson, whose portrait of Haverty begins on page 26. "Based on a fundamental understanding of the rail business, coupled with a feel for the potential role rail could play in trade with Mexico, Haverty made some logical, yet bold bets—and they paid off."

In fact, many believe that those bets on intermodal transportation and the development of cross-border trade were nothing short of transformational. "Having anticipated the near-shoring trend is another part of his vision," Tony Hatch, rail analyst and principal of ABH Consulting, tells Burnson. "Haverty represents the critical lynchpin of intermodalism and its hemispheric influences, while the deals he made with regional rail companies in the U.S. and Mexico were of historic proportions."

But if he could boil his extraordinary career down, Haverty believes that most of what he accomplished can be credited to logic. "It made perfect sense to drive a deal with truckers to share economies of scale," he says. "Then, when it came to penetrating new markets, Mexico seemed like the best fit. I may have been regarded as a 'Kansas hillbilly,' but I got lucky, I guess." According to Bruce Carlton, president of the NITL, Haverty may consider himself lucky, but that type of good fortune only befalls those who are determined to make a change—and make a difference.

"Haverty is in a small club of outstanding industrialists who have started at the bottom and made it to the top on abilities, hard work, and dedication to the job. His story should be inspiration to us all," says Carlton.



Michael A. Levans, Group Editorial Director
Comments? E-mail me at
mlevans@peerlessmedia.com
Follow me on Twitter: @MikeLeva

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
President and Group Publisher

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.
Contact customer service at:
Web: www.logisticsmgmt.com/subscribe
Email: lmsubs@ehpub.com
Phone: 1-800-598-6067
Mail: Peerless Media
P.O. Box 1496
Framingham, MA 01701

ENEWSLETTER SUBSCRIPTIONS
Sign up or manage your ***FREE*** eNewsletter subscriptions at www.logisticsmgmt.com/enewsletters.

REPRINTS
For reprints and licensing please contact Tom Wilbur at Wright's Media, 877-652-5295 ext. 138 or twilbur@wrightsmedia.com.

Peerless MEDIA, LLC

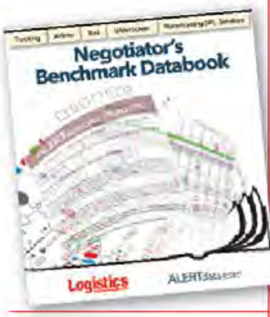

SCAN 4

price**TRENDS**

Pricing across the transportation modes

peerless DATA CENTER.

peerlessmedia.com/datacenter



For timely and accurate insights on markups and costs in the transportation services market, there is no better resource than the **Negotiators' Benchmark Databook** from *Logistics Management* and ALERTdata.com. Updated with the latest statistics every month, there are five U.S. logistics market databooks available now:

- Truck Transportation
- Air Transportation
- Waterborne
- Rail Transportation
- 3PL/Warehousing Services

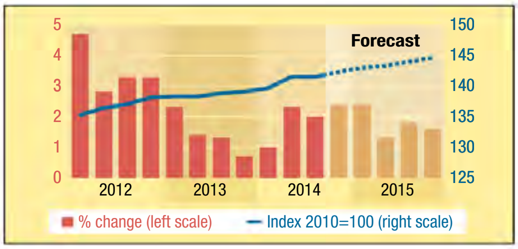
Each **Negotiators' Benchmark Databook** has helpful summary pages and also reports on detailed cost categories in labor, materials, fuel, and purchased services. Index data and spending (per $100 of sales) data provide insights into price/cost escalation and estimated mark-ups. With 10 years of monthly data, you'll see long-term trends as well as the most recent turning points in prices, costs, and margins.

For more information on these valuable databooks, go to:

peerlessmedia.com/datacenter

ALERTdata.com

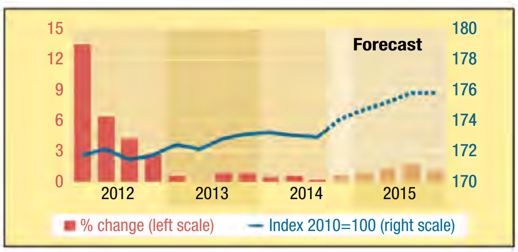
Logistics MANAGEMENT



% CHANGE VS.:	1 month ago	6 mos. ago	1 yr. ago
General freight - local	0.0	0.0	0.0
TL	0.1	1.6	3.3
LTL	0.3	2.9	4.2
Tanker & other specialized freight	-0.1	0.1	0.2

TRUCKING

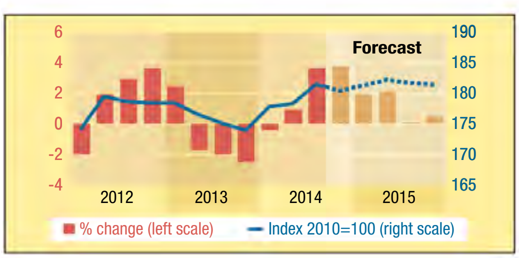
Average transaction prices in the trucking industry are forecast to increase 2.4% in the last three months of 2014 compared to same-quarter-year-ago and increase again by 1.6% in the final quarter of 2015. At the same time, trucking costs are forecast to rise 3.9% and 2.7%. Higher labor costs will be one of the main drivers behind cost escalation. For every $100 worth of services sold, the trucking industry's total costs are forecast to stand at $79.17 in the fourth quarter of 2014 and $80.14 in the fourth quarter of 2015. Meanwhile, U.S. demand for trucking services is expected to grow by 2% to 3% next year.



% CHANGE VS.:	1 month ago	6 mos. ago	1 yr. ago
Air freight on scheduled flights	0.0	-0.5	-0.3
Air freight on chartered flights	5.7	-0.7	2.1
Domestic air courier	-0.4	-0.7	3.8
International air courier	-0.3	-0.5	4.4

AIR

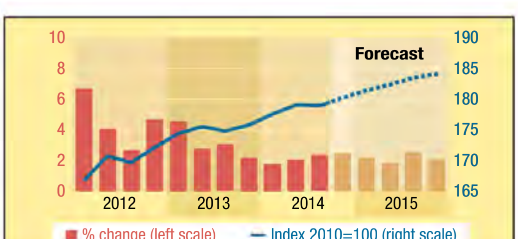
Price inflation in the U.S. airliner industry is expected to lift up gently at the end of this year and then pick up in 2015. Average transaction prices will increase 4.5% in the last three months of 2014 compared to same-quarter-year-ago and will again increase 3.5% in the final quarter of 2015. For airfreight on scheduled flights only, prices will be up 0.6% and 1% over the same time periods. Airliners' costs likely will to keep pace by growing 3.8% in the final quarter of 2014 and 3.6% in 2015. Wages, management salaries and benefits will remain the cost drivers to watch.



% CHANGE VS.:	1 month ago	6 mos. ago	1 yr. ago
Deep sea freight	-0.1	0.0	5.1
Coastal & intercoastal freight	0.0	4.9	7.8
Great Lakes - St. Lawrence Seaway	-0.5	-1.1	0.8
Inland water freight	8.9	10.2	12.0

WATER

Transaction prices in the U.S. waterborne transportation market are forecast to increase at a 3.8% pace in the last three months of 2014 compared to year-ago. That inflation rate comes after a 2.5% price drop in the fourth quarter of 2013 and before a 0.5% price uptick forecasted for the fourth quarter of 2015. While prices float up and down, operating costs for barges and ships rides its inexorable inflation tide, up 2.8% in the final quarter of 2014 and up 1.8% again in 2015. For every $100 worth of services sold, the industry's total costs are forecast to stand at $83.49 in the fourth quarter of 2014 and $84.96 in the fourth quarter of 2015.



% CHANGE VS.:	1 month ago	6 mos. ago	1 yr. ago
Rail freight	-0.2	0.5	2.1
Intermodal	-0.2	-0.9	1.2
Carload	-0.2	0.7	2.3

RAIL

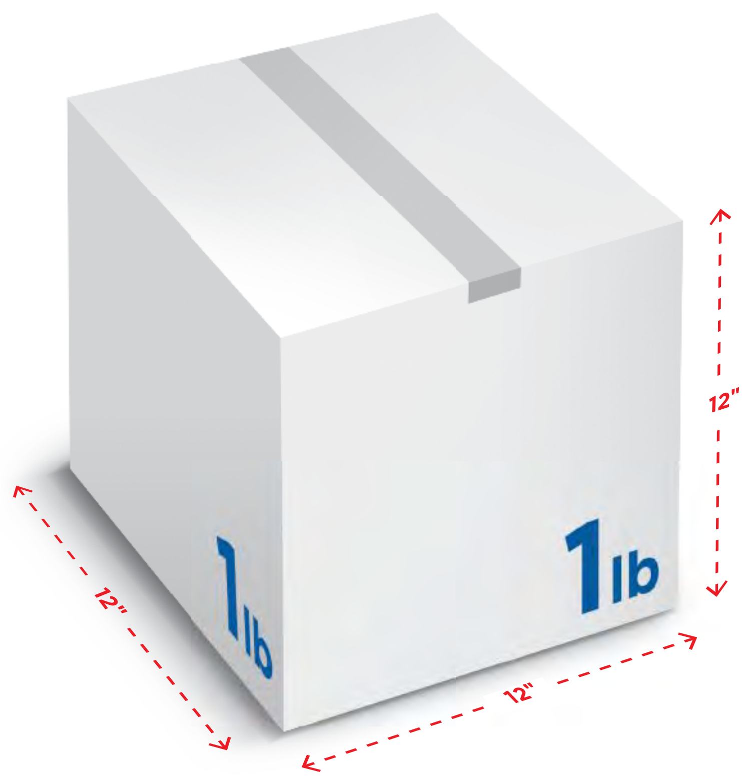
The rail transportation industry's average transaction prices are forecast to increase 2.5% in the last three months of 2014 compared to same-quarter-year-ago and accelerate 2.1% in the final quarter of 2015. Per-unit operating costs in the rail industry, meanwhile, are forecast to increase 2.8% in final quarter of this year and grow 3.2% in the final quarter of next year. Overall demand for railroad shipping will continue to increase over the coming year too. End-market demand for rail service is forecast to grow 2.6% in 2014 and 2% in 2015.

Q: HOW MUCH DOES A 1-POUND BOX WEIGH?

A: 11 POUNDS, IF YOU USE THE WRONG SHIPPING COMPANY.

Starting early next year, some shipping companies may box you in — by expanding their use of **Dimensional (DIM) Weight Pricing**. It means you'll have to pay for your domestic package's actual weight or its dimensional weight — whichever is greater. For example, you could be billed the 11-pound rate for this 1-pound box because of its 12" x 12" x 12" size. That could get expensive. But you have a choice: The **USPS**® continues to offer a broad range of efficient and economical shipping options. Because we understand that one size does not fit all.

To weigh your shipping options go to **usps.com/shippingoption**



UNITED STATES POSTAL SERVICE®

PRIORITY:YOU™

B-COMP-B-LOGMGMT

Also:

Planning is vital to successful e-commerce holiday supply chains

With holiday-related e-commerce sales expected to spike, supply chain stakeholders are putting a heavy focus on forecasting, planning, and preparing for whatever comes their way.

By Jeff Berman, Group News Editor

FRAMINGHAM, Mass.—Much was made last year regarding the estimated millions of delayed packages containing e-commerce orders and holiday gifts.

The delays saw UPS, FedEx, and even the United States Postal Service (USPS) catch more than a little heat for what was, in many respects, a series of unprecedented developments. Among the noted reasons were fewer shopping and delivery days, harsh winter weather, and retailers offering marketing promotions too close to Christmas—forcing delivery dates that pushed the limits of an already stressed system.

This situation is a by-product of the explosive growth of e-commerce, with consumers becoming more comfortable shopping online from anywhere rather than trekking to a retail store or mall. And based on holiday-related e-commerce sales, what happened last Christmas is more than a trend. In fact, it's far more likely to become the new normal, one for which consumers, retailers, shippers, and carriers will all need to adjust.

In fact, e-commerce activity for this holiday season is only heading in one direction: up. According to Shop.org, the National Retail Federation's digital retail division, holiday e-commerce sales are forecasted to increase between 8 percent and 11 percent over the 2014 holiday season to upwards of $105 billion. Independent research firm eMarketer is calling for holiday e-commerce sales to see a 16.6 percent annual jump to $72.41 billion.

These forecast increases are significant and puts the onus on strong planning processes for the holiday season. "One of the things we see regarding e-commerce delivery and fulfillment is that it's going to be a whole lot bigger this year," said Maria Haggerty, president at Dotcom Distribution, an Edison, N.J.-based provider of fulfillment and logistics services for premium e-retailers.

"All of our clients are coming in with forecasts that are much higher than last year," said Haggerty. "We're also hearing chatter about retailer holiday campaigns that are making people on the order fulfillment side nervous and looking to ensure that they have a good solution intact before the holidays hit."

In the case of Dotcom, Haggerty said that planning is the company's primary focus, pushing e-retail shipper customers to provide as accurate as possible forecasts that Dotcom matches up with its own outlook. "We take the approach of actually forecasting for our

clients based on what we see and we match that up with what they tell us and we question and challenge each other," she said. "Usually, we're come to a consensus forecast and push that upstream with UPS, our carrier partner, and are engaged with them in regular meetings regarding what our demands will be."

In the wake of last year's holiday delivery season, both UPS and FedEx have taken steps to increase staff and capacity to meet the expected increase in demand, with UPS adding as many as 90,000 to 95,000 seasonal employees—up from about 85,000 last year. FedEx said it expects more than 50,000 seasonal positions to be added across its operating companies, including package handlers, helpers, drivers and other support positions.

On the recent FedEx fiscal first quarter earnings call, Fred Smith, chairman, president and CEO, said that along with its extra seasonal employees, the company's peak planning commences early in the calendar year after Peak Season. And he made it clear that last year's peak performance was "outstanding…with the exception of a couple of weather events."

The lesson of "planning accordingly" resonates for Jeff Brady, director of transportation for Harry & David, a multi-channel specialty retailer and producer of branded premium gift-quality fruit and other gifts. He said that the 2013 holiday season was challenging for the retailer due to the continuing compression and late order curve of its e-commerce customer base, as well as the weather.

"We were affected as were all retailers," said Brady. "This year, we have challenged our partners to develop creative solutions to help alleviate that. We're trying to be even more diligent in our peak forecasting to help our partners to be successful, and we've also tasked them with being more creative in ways that we hope do not affect our fulfillment operations by creating inefficiencies." □

LABOR

FedEx Ground independent contractor case appears headed to higher courts

WASHINGTON—The long-simmering court battle over whether FedEx Ground's workers are independent contractors or employees appears to be headed to the appellate courts—and maybe the U.S. Supreme Court.

Last month, the Kansas Supreme Court ruled against FedEx, saying that its ground parcel contractors are employees by law and not independent contractors as FedEx has long-classified them. "FedEx has established an employment relationship with its delivery drivers, but dressed that relationship in independent contractor clothing," the Kansas Supreme Court said in its ruling.

This is second time in two months that a court has ruled in this manner, joining an earlier ruling by California's 9th Circuit Court of Appeals that affected FedEx Ground workers in California and Oregon. The 9th Circuit overruled a 2010 court decision in Indiana.

The cost advantage to FedEx in classifying workers as independent contractors rather than employees—as long-time rival UPS does—is significant, experts and analysts say. FedEx saves millions of dollars annually in worker compensation and other labor costs by utilizing this classification.

Scott Group, senior transportation analyst at Wolfe Research, estimated that if FedEx loses these and the remaining 20 other cases involving independent contractor/employee rulings it could be liable for as much as $3 billion in cash damages for back pay, compensation, and legal costs.

But Group said in a note to investors that such a payout was "unlikely" because a majority of courts has sided with FedEx on this issue in the past decade.

The next move for FedEx is whether it will appeal to the U.S. Court of Appeals for the 7th Circuit in Chicago, which appears likely. That court would then decide how to manage the 20 or so class-action lawsuits challenging the classification of FedEx Ground drivers as contractors, not employees.

"We fundamentally disagree with this ruling and are committed to protecting the rights of thousands of independent business owners to continue owning and operating their own businesses," FedEx said in a statement. "The model that the court reviewed is no longer in use." FedEx added it would consider "available options in response to the [Kansas] court's decision."

In California, FedEx wants a review of the recent decision by the entire appellate court in an attempt to overturn the three-judge panel's ruling. If those appellate courts fail to produce a favorable ruling, experts and analysts said that it was highly likely that FedEx would appeal to the U.S. Supreme Court.

Wolfe Research's Group said the latest court ruling "would seem to set a bad precedent, but probably would not have a material effect on FedEx's earnings." The analyst also said in a note to investors that the ruling was unlikely to alter the company's fundamental independent contractor model.

That's because in 2010, FedEx won a large court ruling that appeared to minimize the risk to its basic ground parcel independent contractor model.

Labor attorneys, experts in human relations, as well as rival UPS and shippers, are watching this case closely. A ruling ultimately against FedEx might cause the company to fundamentally alter, or even scrap, its low-cost independent contractor model that has served it well during its 45-year history.

The decision could also affect heavy freight trucking companies that utilize owner-operators as well as company employees. For decades, labor experts have urged companies utilizing both to make distinctions between how they treat owner-operators and their employee drivers.

They have even devised a "20 question test" to differentiate how the two groups of workers are treated. For instance, experts advise employees to give owner-operators different uniforms, or none at all, compared with their employee drivers. Also, little things, such as access to the company cafeteria must be made different for the two groups.

But a key component in recent court rulings on independent contractors has been judges' insistence that such workers be allowed to work for other companies. In FedEx's case, some judges have ruled that the workload at FedEx has made it impossible for such workers to hold additional posts as other companies.

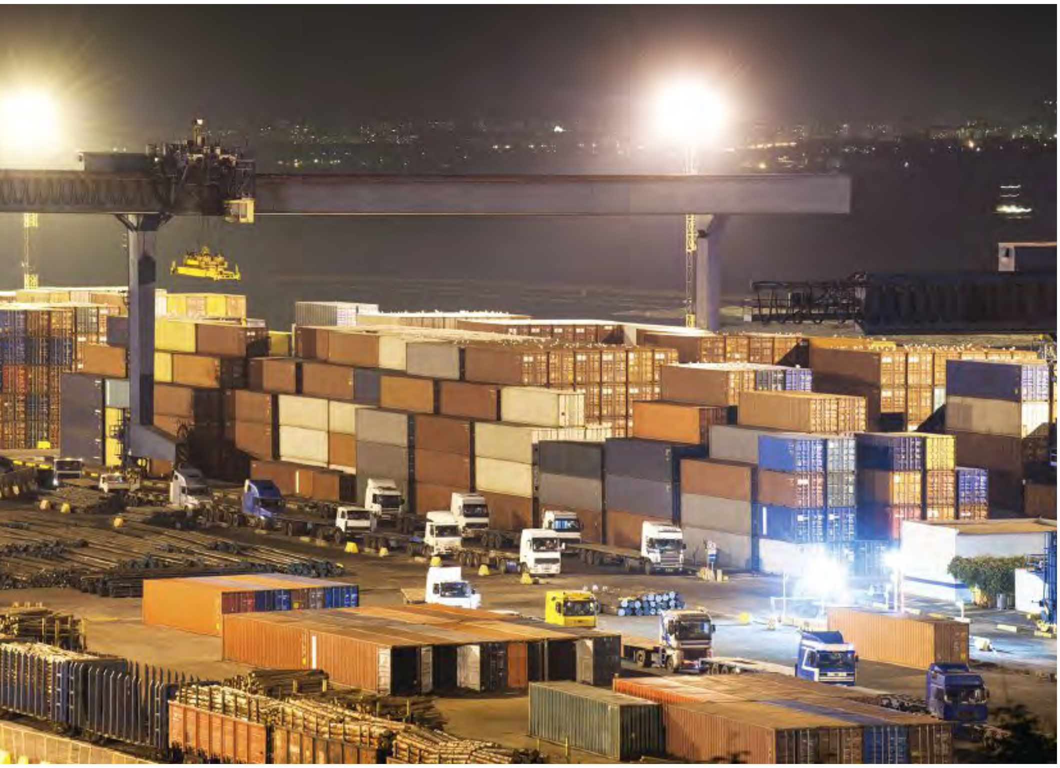
—*John D. Schulz, Contributing Editor*

OCEAN SHIPPING

Port Tracker report has high hopes for holiday-related volume gains

WASHINGTON, D.C.—When it comes to the reinforcing the themes of higher than usual import volumes at U.S.-based retail container ports, the most recent edition of the *Port Tracker* report from the National Retail Federation (NRF) and maritime consultancy Hackett Associates does not disappoint.

A combination of increasing congestion at ports, the lack of a new labor contract between the Pacific Maritime Association (PMA) and the International Longshore and Warehouse Union (ILWU) impacting West Coast port operations, and improving consumer confidence are aligned and have resulted in



strong volumes as retailers endeavor to make sure that they're prepared for the holiday shopping season.

"Increasing congestion at the nation's ports as well as the continued West Coast labor negotiations are ongoing concerns, and retailers are making one last push to make sure they're stocked up for the holidays," said Jonathan Gold, NRF's vice president for supply chain and customs policy. "Retailers are working hard to make sure customers can find what they're looking for regardless of what happens at the ports."

The report explained that with the PMA-ILWU contract situation still unresolved, it led to concerns regarding potential labor disruptions having the ability to impact back-to-school and holiday merchandise. While a West Coast port strike did not materialize and negotiations are ongoing, the lack of a contract and operational issues have translated into what the report said was record congestion at the ports.

Authors of the report explained that cargo import numbers do not correlate directly with retail sales or employment because they count only the number of cargo containers brought into the country, not the value of the merchandise inside them, adding that the amount of merchandise imported provides a rough barometer of retailers' expectations.

For August, the most recent month for which data is available, and typically one of the highest volume months of the year, the report said that the surveyed ports handled 1.52 million twenty-foot equivalent units (TEU) and is the current record high for monthly volumes.

September is pegged at 1.48 million TEU, which would be a 2.8 percent increase, while October is expected to come in at 1.53 million TEU, a projected 6.4 percent annual gain and a new monthly record. November and December are expected to reach 1.39 million TEU and 1.37 million TEU, respectively, for 3.7 and 3.9 percent annual gains.

Should these numbers hold, the report said that total 2014 volumes would be 17.1 million TEU, which would mark a 5.3 percent annual increase over 2013's 16.2 million TEU. Port Tracker said that the first half of this year was up 7 percent over the first half of last year at 8.3 million TEU.

This ambitious forecast follows the NRF's recent projection for holiday sales for the months of November and December to be up 4.1 percent this year and up 3.6 percent for all of 2014.

Hackett Associates Founder Ben Hackett said that these projections point to a return of strong consumer spending spurred on by lower unemployment levels and improved consumer confidence. He said that despite the "gloomy" economic forecast in regards to the global economy issued by the International Monetary Fund, the outlook for the U.S. is upbeat.

"The consumer is back," said Hackett. "The confidence is helping to reduce the savings ratio as borrowing rose $13.5 billion in August, and the expected surge in holiday sales is above 4 percent. That's all good news for retailer, ports, and shipping lines."

—Jeff Berman, Group News Editor

PEAK SEASON

Retail shipper explains ins and outs of Peak Season preparation

SAN ANTONIO, Texas—The topic of Peak Season planning was cited fairly often at the recent Council of Supply Chain Management Professionals (CSCMP) Annual Conference.

Even though Peak Season has been somewhat of a fluid term in recent years, with some years seeing very limited peak-related activity (2008-2009), this year is being viewed as the return of a more traditional peak according many industry stakeholders.

Reasons for this return include an improving economy, better job numbers, and the steady rise in consumer confidence. Other positives are seen in decent West Coast port volumes and truck and rail tonnage as well. But even though

those positive indicators do bode well for growth, a lack of wage growth still stands in the way of true economic growth.

Even with that imbalance, Peak Season appears to be in full swing, according to Rick Jackson, executive vice president of Columbus, Ohio-based Mast Global Logistics, a division of Limited Brands Inc.

"For those 14 weeks we plan for Peak Season it's like someone's hair is on fire," said Jackson jokingly. "The challenges we have run from capacity infrastructure, and that could be anything from having the right distribution centers in place to having your transportation lined up, to making sure that you're going to be able to move a product on time, to labor to operate your distribution centers."

And with Limited Brands being such a consumer-facing business at a time when e-commerce growth is growing, Jackson said the peaks are beginning to spike even higher due to the advent of social media and his company's ability to reach its customers during Peak Season in a store or online.

Regardless of how customers shop for the holidays, Jackson said that it results in what he called a "concentrated spike" during Black Friday and Cyber Monday, which are only 48 hours apart.

"There's this tremendous ordering of product and a mountain of orders you need to plow through, and it continues to be a challenge for us in terms of how you prepare for that infrastructure," said Jackson. "The adage is 'you don't want to build a church for Easter Sunday,' however, like others, we're seeing some challenges in that area."

Regardless of the time of year, Jackson stressed that speed is key for retail shippers. "We're in a fashion business and need speed to roll out new products," he said. "So, when you have speed in your supply chain it means you have less inventory. And when you have speed you have quicker inventory turns. And what we are finding now is that we spend a lot of time looking at our model around how to anticipate disruption in our supply chain, since we have a such a global supply chain."

In order to handle the inevitable disruptions as efficiently as possible, Jackson said the Mast Global Logistics team has spent a lot of time keeping its eyes and ears to the ground to understand market conditions and trends around the world.

"We're seeing challenges this year with ocean as a mode of transportation, but we're always thinking about how we can prepare to deliver that product regardless of where it's coming from," added Jackson.

—Jeff Berman, Group News Editor

MERGERS AND ACQUISITIONS

Transportation and logistics M&A activity sees Q3 gains, says PwC

NEW YORK, N.Y.—Transportation and logistics merger and acquisition (M&A) activity in the third quarter saw annual gains that were driven by smaller deals in the trucking, logistics, and passenger air sectors, according to data issued in the *Intersections* report recently released by PwC.

Deals cited by PwC in its data report represent all announced deals for the quarter—as opposed to completed deals only—and the report does not parse out deals that are withdrawn, intended, or pending and only tracks deals valued at $50 million or more are included.

For the quarter, PwC said that there were 48 transportation and logistics transactions valued at $50 million or more for a total of $13.6 billion, which topped the 44 deals for a cumulative $12.1 billion recorded during the third quarter of 2013. The report stated that the average deal value and volume dropped sequentially, with the second quarter seeing 52 deals for a cumulative $20.6 billion, which was largely driven by what it calls "mega deals," which are valued at $1 billion or more.

—Jeff Berman, Group News Editor

Newsroom Notes
with 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.

Driver Shortage: More than meets the eye

NOT ONLY IS THE TRUCK DRIVER SHORTAGE A PROBLEM that won't go away, the situation appears to have become exacerbated—and there's now more confusion around what needs to be done to remedy things.

A couple moves receiving a fair amount of attention are the increasing driver pay packages and related recruiting efforts that the truckload (TL) side has recently implemented. This summer, major TL carriers—including Swift Transportation, Con-way Truckload, and U.S. Xpress—made what amounts to a be a full-court press regarding increasing driver wages in an effort to curb turnover and secure capacity.

However, most of the data regarding driver turnover—due in large part to low wages, time spent on the road away from family, and sedentary lifestyle—are the chief challenges that carriers are up against. Projections from freight transportation forecasting consultancy FTR Associates estimate that the turnover problem is likely to get worse, with the shortage potentially in the 250,000-driver range by the end of this year.

According to Stifel Nicolaus analyst John Larkin, this projection will create a capacity shortage that will almost certainly translate into "fairly sizable rate increases that might be steeper than what occurred during the slow growth period over the last couple of years."

At the recent CSCMP Global Conference in San Antonio, Texas, Rosalyn Wilson, senior business analyst at Parsons and author of the *Annual State of Logistics Report*, summed up the weight of the driver situation this way: "The driver shortage could be the leading problem for the entire economy."

According to Wilson, shippers are responding by increasing the usage of dedicated contract carriage and related outsourcing. As an example, she cited how large shippers are using two separate third-party logistics providers to secure more capacity than they need to ensure that they have the needed capacity in place for the holiday rush.

While the situation is a difficult one, Jeff Tucker, president of Tucker Company Worldwide, the nation's oldest freight brokerage, recently told me that there's more than meets the eye when it comes to the driver shortage and related over-the-road capacity issues.

Tucker explained that based on government data, there are more than 10,000 motor carriers in business today compared to the beginning of the year. And over the last 30 months, the total number of active for-hire carriers has gone up 20 percent from 155,000 carriers at the end of 2012 to 186,000 today that can be hired by any shipper, carrier, or broker.

So, why is there so much talk around how hard it is to secure capacity?

"A lot of them are small upstarts, while the largest carriers will have you thinking that nobody wants to drive a truck," Tucker explains. "The fact is that the economy is picking up, and people are willing to drive trucks." With that as the backdrop, Tucker adds that many shippers are simply looking in the wrong places when it comes to finding capacity.

> **"Every large shipper has the same carriers on speed dial, and when the economy ticks up just a little bit, all of them call the same carriers."**
>
> *—Jeff Tucker, president of Tucker Company Worldwide*

"Every large shipper has the same carriers on speed dial, and when the economy ticks up just a little bit, all of them call the same carriers," says Tucker. "Then they'll call the biggest brokers, and the brokers will have them churning in the owner-operator field, and that's not capacity—or at least that's not the capacity shippers are use to dealing with."

Are too many shippers trying to get the same piece of the capacity pie? Based on Tucker's observations, it would stand to reason that there is enough capacity currently available to quell the constant concerns over the driver shortage and available capacity. Time will tell, it appears, but perhaps shippers need to at least start with a bigger fork. ☐


BRUTE
50% EASIER TO LIFT LINERS

Moore on Pricing

Peter Moore is Adjunct Professor of Supply Chain at the University of Denver Daniels School of Business, Program Faculty at the Center for Executive Education at the University of Tennessee, and Adjunct Professor at the University of South Carolina Beaufort. Peter writes from his home in Hilton Head Island, S.C., and can be reached at peter.moore@du.edu.

Increase rail rate oversight?

ONCE AGAIN, MAJOR SHIPPERS ARE ASKING the U.S. Congress and the Surface Transportation Board to help them counterbalance the rail industry juggernaut with easily accessible rate reasonableness testing and service regulation (Senate Bill 2777).

For shippers, there are two markets in rail—intermodal and bulk rail. Intermodal pricing is tempered by competition. And as a result of highway trucks as direct competitors and cross-country movements facing competition from the Panama Canal expansion, intermodal rail continues to see modest price increases.

Bulk commodities are largely dependent on rail. Many bulk shippers are served either by only one railroad or two competitors with suspiciously similar pricing. According to the American Chemical Council, and as reported in *Logistics Management*, rail rates have increased at three times the rate of inflation since 2001.

For tank car shippers, the rapid move by the Department of Transportation to force an upgrade in rail cars to reduce ruptures in derailments is added cost on top of the rate increases. To introduce competition in bulk means water or pipeline if available, but both are very capital intensive.

With only one viable mode available to them, these shippers are asking for relief anywhere they can get it. As a third-party logistics provider representing rail shippers for nearly ten years, my personal experience was that the few major railroads in North America have a bias toward having bulk shippers carry the cost increases that the railroads face despite the fact that many shippers provide their own rail equipment, inspections, and terminal services.

The Association of American Railroads (AAR) is a very active Washington lobbying engine. Recent testimony by AAR representatives sought to assure Congress that all is working fine and market forces—deregulation—has been very good for the health of U.S. railroads. They point to intermodal to demonstrate their major investments and moderate pricing.

However, the recent rapid expansion in oil transportation by rail to and from newly developed domestic sources has exasperated the problem. Equipment shortages, crowded rail corridors, and a spate of crashes have made all rail movements subject to new scrutiny by communities across the country, and shippers are taking extra precautions, allowing more time for both delivery and return of empty cars. This negatively affects customer service and inventory levels.

This year, prices have been steady with inflation, however some have alleged that recent action in Congress to beef up rail pricing regulation has caused the rails to temper their annual quest for increases well above the rate of inflation. We note that with diesel prices essentially flat, it can be argued that this major contributor to inflation has provided relief this year.

“Whatever the cause for this short-term pricing moderation, shippers should not relax their push to rein in the oligarchy that is now North American rail. Shippers need to understand what’s driving prices in rail, and any competitive leverage should be researched, including re-regulation of pricing.

Whatever the cause for this short-term pricing moderation, shippers should not relax their push to rein in the oligarchy that is now North American rail. Shippers need to understand what’s driving prices in rail, and any competitive leverage should be researched, including re-regulation of pricing.

Commercially, there are options including trading with competitors to supply each other’s customers in order to reduce transportation distances or the need for the use of rail. This can have the secondary effect of broadening the discussion with railroads about the total cost to serve and the needs of shippers to be competitive against alternate locations, commodities, and process options. But don’t forget, when a commodity is priced out of market due to transportation costs, everyone loses.

While there is little hope for a quick solution to pricing pressures in rail, a start would be transparency in rail costs to serve these critical shippers. ☐

Mark Pearson is the managing director of 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

Companies seeking success in emerging markets need strong supply chains

ACCORDING TO NEW ACCENTURE RESEARCH, a small number of companies are enjoying returns of 20 percent or more on their emerging market investments. This month, I'll provide an overview of that research and take a look at what these leading companies are doing to stoke emerging market growth.

The point of the research was to identify leading practices among global companies working in emerging markets. Just over half of the survey's respondents were members of their companies' C-suite, while just under half said that their companies posted revenues in excess of $5 billion. Industry representation was broad, with companies in electronics and high tech, consumer goods, industrial equipment, banking, retail, and communications each representing 10 percent or more of the response base.

Quite notably, 95 percent of respondents said that their companies have experienced some growth in emerging markets over the past three years. China, India, Southeast Asia, Eastern Europe, and Brazil were the top targets. The same five—in the same order—are expected to repeat as top growth markets over the next three years.

However, our survey also found that leaders are more than twice as likely as other companies to say that their supply chain organization has helped their enterprise achieve greater than 20 percent growth in their priority emerging markets. Much as DNA differentiates individuals, our analysis found that the leaders are differentiated by the way they invest in, leverage, and nurture their supply chain.

More precisely, we found that they're more likely than other companies to employ four major supply chain practices as they invest in assets in the targeted regions, tap into existing operations and hire talent to manage their operations.

That is not to say one-size-fits-all. A myriad of approaches exist, and the right answer depends on the individual company, their objectives, the target market, and their risk appetite and ability to manage it, to name a few. But skimming the cream from the top, we find that the leaders were more likely to:

• **Use a broad mix of approaches to support their emerging market initiatives.** While they invest in regional assets, service these areas from already established operations, hire local talent, and extend strategic alliances to existing partners and set up joint ventures or partnerships with local organizations, they least frequently make acquisitions. But even then, 45 percent of the leaders included acquisitions in the mix as compared to 30 percent of others surveyed.

• **Complement a low-cost structure with a focus on quality and market knowledge to differentiate themselves.** Success in emerging markets requires more than a lean cost structure. Leaders were much more likely to measure their differentiated quality as an indicator of success, and they recognized the importance of understanding the market, its culture, and how business gets done in those markets.

> **Much as DNA differentiates individuals, our analysis found that the leaders are differentiated by the way they invest in, leverage, and nurture their supply chain.**

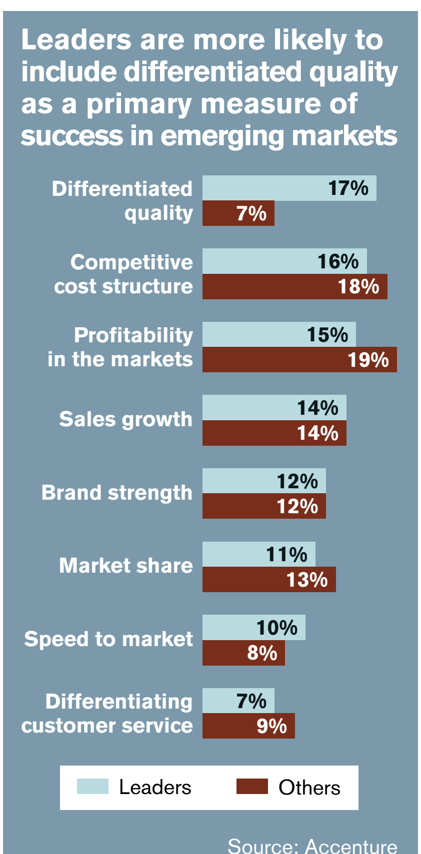
• **Use technology extensively to increase efficiency, improve flexibility, and enhance decision making**. Surprisingly, use of technology was not as widespread among the surveyed companies. While 48 percent of the companies said that their supply chain uses technology extensively to support their emerging market pursuits, 45 percent said that their use of technology is only moderate. Leaders were actually twice as likely as others to use technology extensively.

• **Continue to invest aggressively in supply chain operations to keep pace with changing market dynamics.** In fact, 22 percent of the leaders invested more than $40 million in their supply chain operations as compared to 13 percent who invested at a similar level as they seek to achieve their growth goals. As they invested more, they also tended to spread more spend across key supply chain areas, including the pursuit of operational excellence through standardization of regional operations processes, streamlining, automation, shared services and IT systems, physical infrastructure, and the development of local supply chain talent—tomorrow's leaders.

As any company that has considered emerging market expansion can attest to, these markets can be lands of opportunities, but can also present unforeseen challenges. In most cases, a company's ability to maximize the potential upside while minimizing the risks is highly dependent on the strength of the company's supply chain.

That certainly was true of the supply chain leaders who reported robust growth in their chosen emerging markets on the back of a high-performing supply chain. These organizations have created a supply chain that has exceeded their expectations by taking advantage of a variety of approaches, gaining deep insights into their target markets, making extensive use of technology, and investing aggressively in key areas of their operations.

As a result, supply chain leaders positioned themselves to gain competitive advantage as they go head to head in the marketplace with local companies that enjoy strong name recognition in the target markets as well as expansion-minded peers. In doing so, they rely heavily on their supply chain to help them navigate the uncertainty and volatility that exist in emerging markets. □



2014 NITL Executive of the Year

Lots of logic and a little luck

Fully embracing the convergence of intermodalism and NAFTA, Michael Haverty says he was the right man at the right place at the right time.

BY **PATRICK BURNSON,** EXECUTIVE EDITOR

To truly appreciate the remarkable achievements of the recipient of the 2014 National Industrial Transportation League's (NITL) Executive of the Year award, one has to begin by understanding the challenges that faced the nation's railroads when this year's winner began working his way up the executive ladder in the 1970s.

Back then, most railroads focused on competing with motor carriers on cost while appeasing shippers with service enhancements that were symbolic at best. Curt Warfel, the NITL director who was instrumental in this year's nomination, says Michael Haverty changed all that.

"He was transformational, and he understood the potential for intermodal partnerships and the advantages of cross-border trade before anyone else," says Warfel. "He took a big chance, and it obviously paid off. Presenting him with this recognition is long overdue."

For his quiet dignity and game-changing work at the border and on the nation's rails, the NITL and *Logistics Management (LM)* magazine are proud to present Michael Haverty, chairman emeritus of Kansas City Southern (KCS), with the 2014 NITL Executive of the Year Award, also known as the McCullough Award. The award is named after John T. McCullough, a former chief editor of *Distribution* magazine, a predecessor of *LM*. The award will be given to Haverty on Wednesday, November 19, at the NITL's 107th Annual Meeting & TransComp Exhibition being held in Ft. Lauderdale, Fla. (Nov. 15-19).

A fourth generation railroader, Haverty began his railroad career with Missouri Pacific Railroad Company (MoPac) in 1963 as a brakeman/switchman. After working the summers for MoPac during college, he completed its management training program in 1967, following his graduation.

In 1970, he moved to the Atchison, Topeka, and Santa Fe Railway where he held various operating positions before serving as president and chief operating officer from 1989 to 1991. During his tenure as president of Santa Fe, he reorganized the company to become an intermodal juggernaut.

"Having anticipated the near-shoring trend is another part of his vision," says Tony Hatch, rail analyst and principal of ABH Consulting. "Haverty represents the critical lynchpin of intermodalism and its hemispheric influences. The deals he made with regional rail companies in the United States and Mexico were of historic proportion."

In the early 1990s Santa Fe also implemented—with the cooperation of the United Transportation Union—the first reduced train crew. This was a precedent for improved labor productivity throughout the entire rail industry. The innovations didn't stop there. In a legendary handshake deal aboard a train,

"While many people were skeptical about NAFTA, I wanted to expand our franchise in Mexico."

—Michael Haverty, chairman emeritus of Kansas City Southern

Blaine Fisher/Getty Images

Haverty and the late J.B. Hunt established their historic intermodal partnership, marking the first time a Class I railroad went into business with a truckload carrier.

"A lot of what I achieved can be credited to simple logic," says Haverty. "It made perfect sense to drive a deal with truckers to share economies of scale. Then, when it came to penetrating new markets, Mexico seemed like the best fit. I may have been regarded as a 'Kansas hillbilly' in those days, but I just got lucky, I guess."

Owen Zidar, vice president at KCS, agrees with some of this, but insists that Haverty is being too modest. "Teaming with trucks may have seemed like a risky proposition at first," he recalls, "but it proved be a brilliant move that immediately buttressed the bottom line for both partners."

In 1995, Haverty was named as director and executive vice president of Kansas City Southern Industries, Inc. (KCSI) and director, president and chief executive officer of the Kansas City Southern Railway Company (KCSR). It was then that he made the bold move into Mexico.

"While many people were skeptical about NAFTA [the North American Free Trade Agreement] I wanted to expand our franchise in Mexico," Haverty says. "There were two principal reasons for this. More manufacturing was going to move out of Asia, and Mexico's infrastructure was improving. There was also more transparency in supply chains because of better regulatory compliance."

Haverty recalls that relationships between shipper sand carriers in the 1990s were also in need of mending. The new era of collaboration has changed that attitude, he says, and the NITL now embraces the balanced membership that includes transport providers.

"The League realized some time ago that cooperation with logistics partners made more sense than continuing to view them as adversaries," says Bruce Carlton, president of NITL. "Mike Haverty's vision was critical in driving that development."

Lessons in leadership

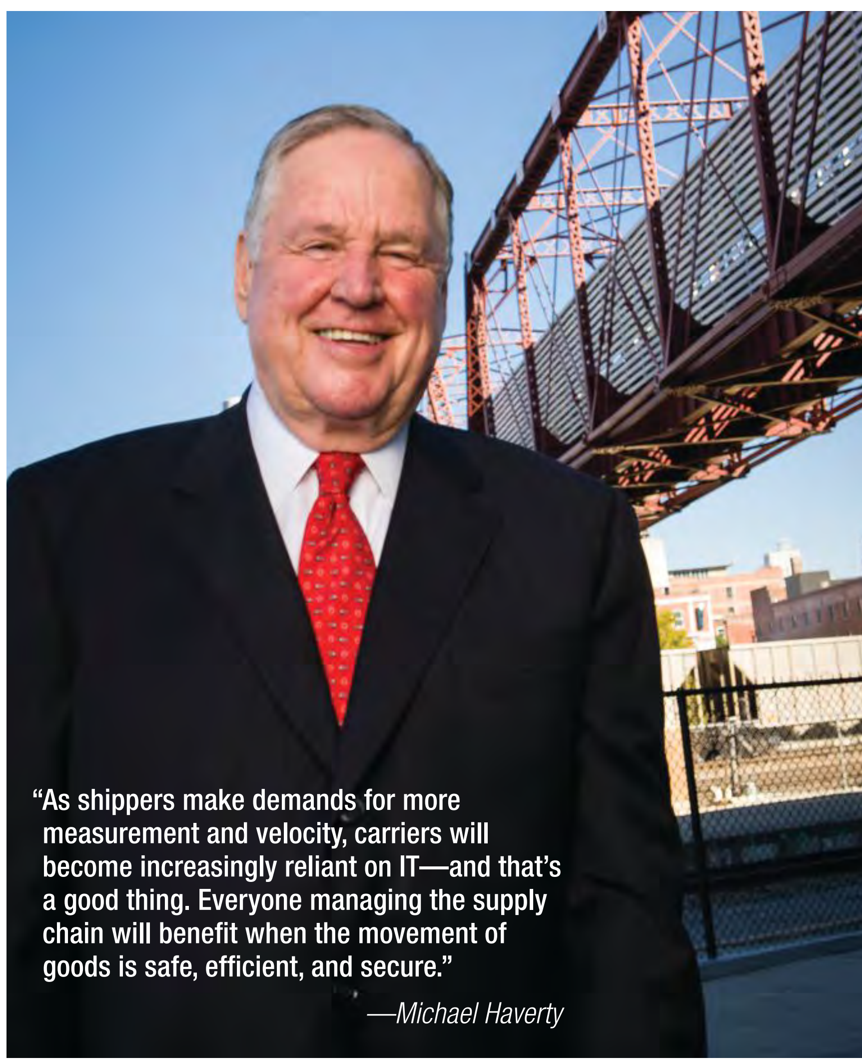
LM recently sat down with Haverty prior to him accepting this year's award. Here are some of the insights he shared.

***Logistics Management (LM):* How do you describe your leadership style?**

Michael Haverty: My style is probably described as focused and determined, and I'm not afraid to take a risk. With that said, I guess you can say I'm more entrepreneurial than staid or bureaucratic. I would like to view myself as a tough, but fair leader: tough from the standpoint of being no nonsense, but fair from the standpoint that if you did your job, you'll be treated with the utmost respect and be appreciated for your services. I've always preached that true leaders are not out to win popularity contests, but to make decisions that result in them being respected by their subordinates and peers—even their enemies.

***LM:* What had the most influence on the way you managed people and forged strategic partnerships?**

Haverty: I was probably most influenced on how I managed by my early days on the Missouri Pacific Railroad (MoPac). It was a mid-sized railroad in a turnaround process, and the



style was to run a very tight ship in a no-nonsense manner. Consequently, MoPac became a most efficient railroad that provided customers good service and increased shareholder value. That's where I learned my basics.

***LM:* The expansion of the Panama Canal is moving toward completion. What impact will that have on domestic rail and intermodal?**

Haverty: The U.S. East Coast and Gulf Coast ports will capture more direct ocean carrier calls, and the rail networks in those regions will have to accommodate this. At the same time, however, U.S. West Coast ports will continue to keep busy moving trans-Pacific cargo into the Midwest using a variety of intermodal providers. We will also see increasing volumes moving in north-south directions within NAFTA as a consequence of the Canal's expansion.

***LM:* Your bet on Mexico proved to be spot on. Do you see Latin America gaining more momentum?**

Haverty: I do believe that Mexico will continue to expand and is already "the next big thing." Just look at all the new automotive manufacturing facilities that have been announced the past few years. And, with Asian companies producing in Mexico, they've created more near-sourcing opportunities for all of North America. As for other Latin American countries, I don't think they can be lumped together. Some are doing well, such as Chile, Brazil, Panama; and even Columbia; but others have political tensions and corruption problems that will not allow them to be regarded as prospects in the near future.

***LM:* Some transportation analysts suggest that there's a demographic shift in North America that may alter supply chain networks. Do you agree?**

Haverty: There's no question that more manufacturing is being done near our borders, and that trend is only going to get stronger. NAFTA has been good for the entire continent, and for Mexico, that means more middle class jobs. The demographic shift in populations within North America makes our entire continent a powerful piece in the global trade marketplace.

***LM:* With this, NAFTA ports have their work cut out for them, especially because ocean cargo vessels just keep getting bigger. What kind of pressure does that put on other parts of the supply chain?**

Haverty: Obviously, the biggest ports with the deepest drafts and intermodal connections will be the preferred gateways; and I would not be surprised if Mexico's Lázaro Cárdenas becomes more competitive when super mega vessels are introduced. But smaller ports can compete in this environment, too, if they market the advantages they have in serving high-density population centers.

***LM:* And that's good for companies like KCS?**

Haverty: You bet it is. But more importantly, it's good for all of our nation's shippers and carriers. We have moved into a new era of logistics management, requiring a different way of looking at the world and our way of working toward improving it.

***LM:* You were an early adapter to IT. What role will IT play in the future for transportation professionals?**

Haverty: As shippers make demands for more measurement and velocity, carriers will become increasingly reliant on IT—and that's a good thing. Everyone managing the supply chain will benefit when the movement of goods is safe, efficient, and secure. The free and open exchange of information expedites all of that. So, to answer your question, yes, logistics managers will need to keep up with the wealth of data due to come on line in the future.

***LM:* Freight transportation is still not regarded as a glamorous industry. How do you see it?**

Haverty: I guess I've not regarded transportation as being especially glamorous, either. I view it more as a tough business that requires an around-the-clock focus to make it work. Over the last dozen years it's become more attractive to the investment community due to all of the products moving in international trade and the re-emergence of transportation as a key industry that helps our economy compete in the world marketplace.

***LM*: What advice would you give to young people seeking a career in this industry?**

Haverty: Young people need to understand that transportation operates around the clock. If they think it is an eight-hour a day job, five days a week, then they're in the wrong industry. They need to also understand that while IT is critical to the industry, you can't sit in your office and run things with a computer and telephone.

You have to get out on the ground to see and understand what's going on and let employees see and know their leaders. Thomas Durante, the man assigned to build Union Pacific back in the 1860s said, "Railroading is not for the weak of heart." That was true back then and it is true now, not just of railroading but for anyone in transportation management.

***LM*: So what's the upside for new folks to the industry?**

Haverty: Having said the above, I don't want to come across negative about transportation careers. It's very gratifying as a manager or employee to see a company run safely, efficiently, and economically while providing top-notch customer service. Plus, most transportation employees and managers are well compensated. For managers working in publicly-traded companies, this can be a very rewarding career.

Patrick Burnson is Executive Editor of Logistics Management

Intermodal Freight Management: Getting serious about multi-modal optimization

Our esteemed transportation consultant offers shippers a more holistic approach to strategically map their transportation capacity and capabilities to their supply chain requirements and customer expectations.

BY **BROOKS BENTZ**, CONTRIBUTING EDITOR

The North American transportation industry, as a whole, is going through the most significant transition since deregulation in 1980. The hard knocks dished out by the recent economic crunch began a tsunami of change that has been as potent as it has been unpredictable.

The perfect storm of capacity shortages, bad weather, unstable and spiky fuel costs, coupled with productivity challenges related to acclimating the new hours-of-service (HOS) regulations have created an environment no supply chain professional wanted to see or experience.

At the risk of oversimplifying, shippers are facing the worst of two worlds: rising prices and worsening service. And it has turned consumers of transportation capacity into an agitated and apprehensive subculture.

This is not because there is a dearth of strong supply chain talent—quite the contrary. In my 21 years of transportation and logistics consulting I have found that today's logistics professionals truly know their business. However, they find themselves challenged and constrained by an environment where they're frequently viewed by C-suite management as a low-visibility, low-priority, frequently irritating necessity.

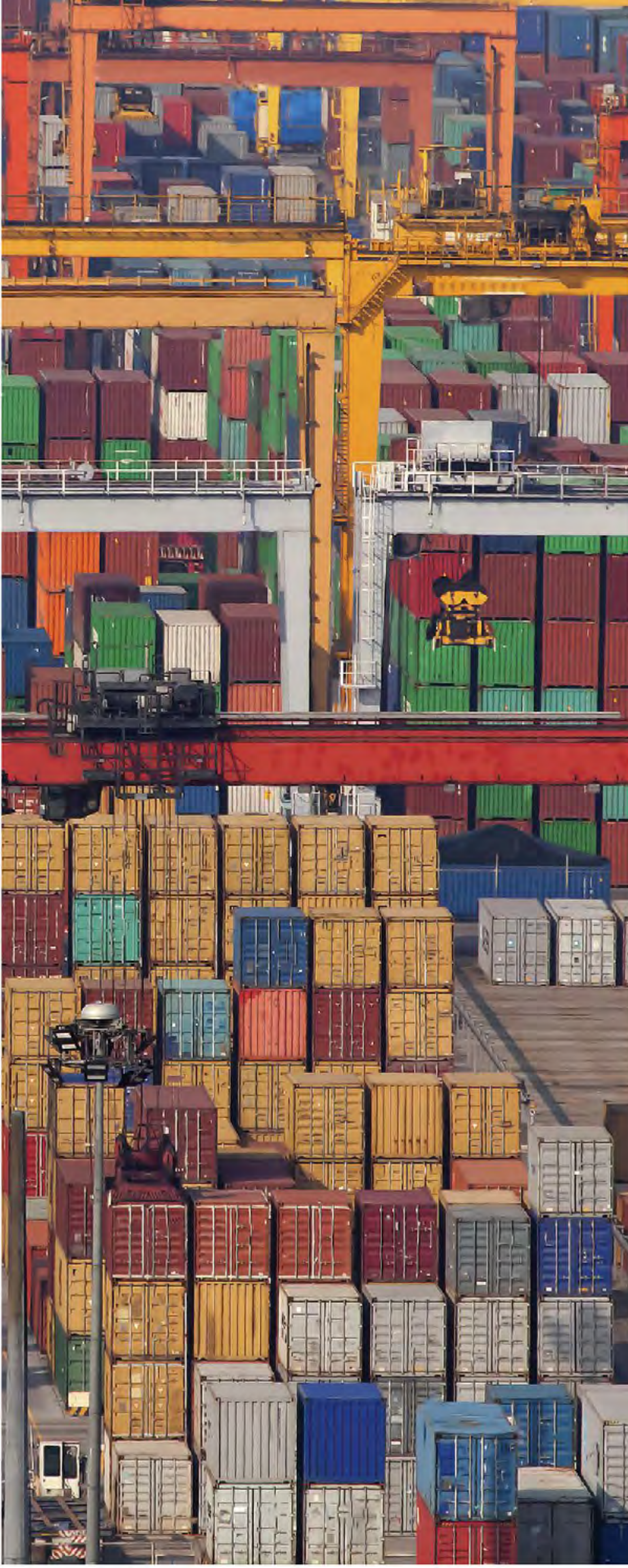
This type of thinking typically leaves logistics executives short-handed and under-invested, forcing them to make do and fight a guerilla war with little or no bandwidth for considering broader, strategic questions beyond moving today's freight. Indeed, supply chain professionals are on the hot seat, and there's no "silver bullet" that can be fired to mollify customers and executive management. The solution for making the best out of a bad situation is to change the game—easy to say, much harder to do.

Far too many buyers of transportation services and capacity focus on tactical rate shopping to find the greatest number of cheapest trucks, for example, rather than strategically mapping their transportation capacity and capabilities to their supply chain requirements and customer expectations.

A better answer can be found in what is called "holistic, multi-modal optimization." This is grounded on simple, pragmatic principles and the common-sense precept that transportation is at its best—best mode, best price, best service—when the use of expensive assets (trucks, trains, boats, planes) is optimized across the entire enterprise.

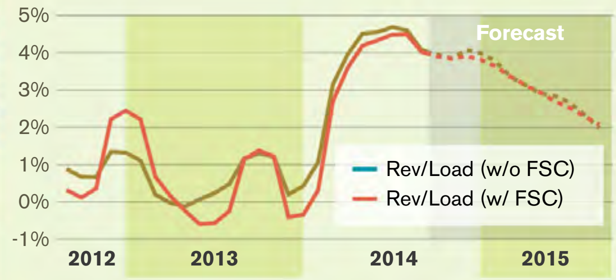
Optimization really falls into two key buckets, which just so happens to be where virtually all of the money is spent on running transportation networks: optimizing the network of capacity (modes, carriers, service, and price); and optimizing of the assets (trailers, containers, rail cars, and planes). This includes cube and/or weight at loading and routing and scheduling after loading.

The net result of executing against these two objectives is a more efficient network with more attractive freight and increased productivity. This, in turn, reduces operating costs and improves profitability for the service



Intermodal rates have accelerated despite service issues

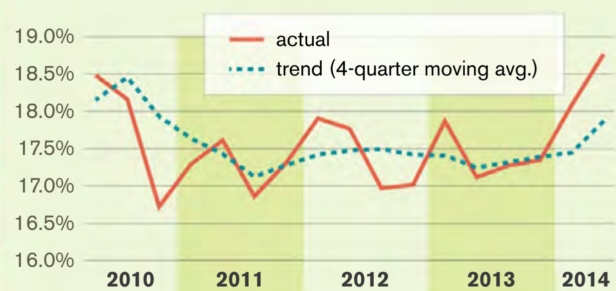
Rate outlook: Intermodal



Source: FTR Transportation Intelligence

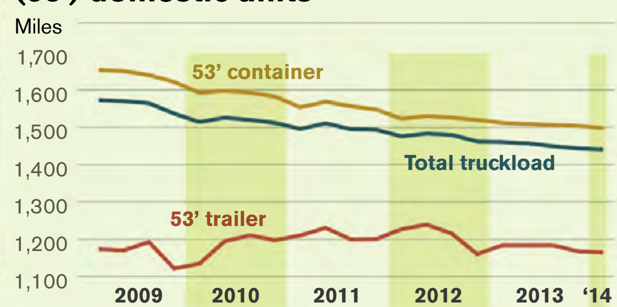
Despite all, intermodal has gained share thus far this year

Market share of long haul (550+ ml.) dry van freight
Total intermodal–international plus domestic



Source: Intermodal Association of North America ETSO, FTR Transportation Intelligence, Gross Transportation Consulting

Average length of haul of large (53') domestic units



Source: Intermodal Association of North America ETSO, FTR Transportation Intelligence, Gross Transportation Consulting providers, which results in a sounder competitive landscape and a more stable, sustainable business model.

For those shippers already doing this—and the empirical evidence says there aren't many—the advanced user approach is to expand their network and go up-stream and down-stream, working to optimize synergistic networks with suppliers and customers.

The only way of even getting close to the holy grail of a truly optimized transportation operation is through a network-based approach to capacity management called "expressive competition." This is rightly a topic unto itself; however, for our purposes here, it can be summarized as seeking to leverage the power of the overlapping networks of freight flows—inbound, outbound, and inter-facility—and capacity from those service providers that have capacity available in the right places to meet demand.

The core concept of expressive competition requires taking your entire market basket of freight out to the market and asking how service providers will value it.

Intermodal's evolving role

Intermodal plays a strong and vital strategic role in this process. Growth in intermodal services has been both profound and sustained. The case can be made that the tipping point that advanced the business from "piggyback" to "intermodal" was the advent of mechanized loading/unloading, supplanting the original "circus ramp" style for loading trailers on to flatcars.

While this shift began in the 1960s, piggyback was still suspect among the carload types in the rail business, so growth was stunted and slow-going until the watershed event of the Staggers Act in 1980. The next big game-changer was the invention of the double-stack container car, pioneered in the late 1970s by Sea-Land and Southern Pacific for international freight.

The adoption of this technology for use with domestic containers around the end of the last century transformed intermodal from a "wheels-on-wheels" technology into one that effectively doubled capacity for each linear foot of car space.

The domestic container gave the railroads much more flexibility. Prior to double-stack, intermodal trailer size was constrained by the capacity of the flatcars they rode on. Simply put, trailers don't last nearly as long as rail cars (8 years to 10 years vs. 30 years to 40 years). Trailer sizes increased steadily from 35 feet to 40 feet then to 48 feet and 53 feet—and more rapidly than the cars they needed to ride on.

Railroads struggled to provide increasingly higher-capacity cars that could efficiently handle progressively larger boxes, without obsolescing thousands of flatcars before their time. The invention of the double stack car ameliorated the problem because any size box could ride the upper position. Today, close to 90 percent of intermodal volume moves in containers.

The rampant growth in intermodal and the large upside potential was driven, in large part by the impact on trucking economics of rapidly rising fuel costs, as well as issues surrounding driver recruiting, retention and demographics. The rosy forecast impelled railroads to invest substantial capital dollars in building new, high-capacity terminal facilities and in improving line-haul capacity and service.

Fundamentals to multi-modal optimization

Which brings us to where we are today. Volume has risen dramatically, and, despite large infusions of capital in service improvements, terminals, line-haul capacity, locomotives, cars, boxes, and crews, performance has recently taken a step backward. Average train speed has fallen and congestion has mounted.

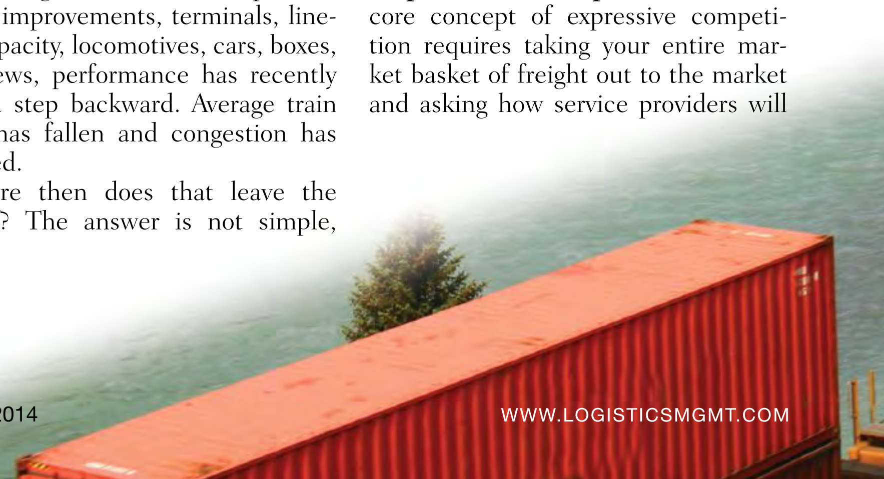
Where then does that leave the shipper? The answer is not simple, nor is it easy or for the faint of heart. It's more in line with making the very best out of an ugly situation that's not likely to get much better anytime soon. While there is no single silver bullet solution, there are things to do now.

The times are different, and old solutions may be new again, so pry open people's minds to look at multiple scenarios. The fundamental precept is that you have to be able to look at your transportation service network holistically. The foundational elements to do that include:

Data management and aggregation. Most shippers have lousy data and have a difficult time aggregating all of their transportation spend into a master baseline at the shipment history level for all modes. Problems with accuracy, completeness, and timeliness abound. Holistic, multi-modal optimization demands a fact-based grasp of operational reality in terms of modes, carriers, volumes, lanes, equipment, service, and cost. This is a key element of the foundation and a fundamental building block for all that follows.

Network design. Looking at the transportation network—inbound, outbound, inter-facility—holistically and assessing options for revamping it is the next step. This means looking at modal cost, service, and capacity trade-offs and options. It also means going upstream in the organization—marketing, sales, category management, procurement, or purchasing—to explain cost and service trade-offs and options so that impact and value realization with respect to functions such as order management and customer delivery options can be weighed against other competing priorities.

Sourcing and optimization/ "expressive competition." The core concept of expressive competition requires taking your entire market basket of freight out to the market and asking how service providers will



value it. Doing this in a fragmented, balkanized fashion misses the point and sub-optimizes results. The ability to run constraint-based optimization models and scenarios enables fact-based decision making on how to run the network to meet the defined business objectives.

Value realization and compliance management. Restructuring and optimizing transportation service networks can be challenging, interesting, and even fun work. Operationalizing the ultimate solution, and then making sure everyone stays with the playbook to get the planned results, is gritty, often arduous, but very necessary work.

Unlike other contracted services, transportation has many moving parts and multiple levers affecting the network: suppliers change; customers come and go; volumes go up and down; facilities are opened, closed, or relocated; and service providers get better, worse, or leave altogether.

Execution does not end with the awarding of contracts for a re-engineered network. Continuous improvement is not only a good idea, but vital to the on-going success and sustainability of the network.

Role of third parties

Intermodal must be evaluated in the context of improving overall network performance. A common view is that intermodal is a second-tier offering in terms of transit time.

While this is true on many lanes, this can often be mitigated by use of dynamic routing and scheduling. Too often, volumes are managed with a static model: It's tagged as a rail lane or a truck lane, for example, without looking at how modal trade-offs can be beneficial in a more flexible fashion. In essence, this looks at delivery requirements and transit times to pick certain days of the week—where a slower intermodal schedule has no impact on delivery.

For example, freight being moved from Chicago to Los Angeles may all get delivered on Monday, whether it leaves Wednesday, Thursday, or Friday. This may provide options for a good chunk of the volume to move via intermodal on certain days of the week with no impact on service to the customer. In other instances, the economic impact may be sufficient to swing the business to intermodal as a viable option.

Executing a larger-scale intermodal shift means picking the right trading partners. Because virtually all of the Class-1 railroads in the U.S. act as wholesalers, this means working through an outside source, be it a third-party logistics provider (3PL), intermodal marketing company (IMC), or a motor carrier with a large intermodal presence.

Not all third parties are created equal, so conducting up-front due diligence is critical to building a long-term, successful relationship. The leading 3PLs have multi-modal capa-

bilities, so rather than simply marking up wholesale rail rates and reselling them, they provide a comprehensive service that allows for choices between intermodal and highway or an optimal blend between the two.

"Shippers expect a lower price for intermodal because it's a slower service," says Tom Sanderson, CEO of 3PL Transplace. "Our view is that shippers have to convert more freight to intermodal due to the situation with long-haul, over-the-road drivers."

Sanderson also points out that many shippers don't realize how much better intermodal service is today than it was 10 years to 15 years ago. He says that Transplace is pushing for more use of intermodal for customer deliveries verses stock transfers and replenishment—an area for potential growth, particularly as the railroads target the shorter-haul markets they have not chased in the past. "This will be increasingly important as systemic issues with trucking continue," adds Sanderson.

Thinking strategically is of vital consequence, but easier to say and harder to do, given the frequent focus on short-term results. According to Sanderson, planning for the future with a longer-term view of intermodal as a strategic advantage means looking at your network differently.

It may well mean a designed focus on locating facilities—DCs and cross-docks or new manufacturing plants—close to existing or planned intermodal terminals or logistics parks. This is a practical way of optimizing price and service and minimizing local drayage, which takes out cost and improves overall performance.

Mark Yeager, president and COO of Hub Group, one of the oldest IMC organizations, agrees with Sanderson's assessments. Current service levels are the major impediment to growth, first driven by weather and more recently by broad-based growth in rail carloadings in crude, autos, agricultural products and even coal, contributing to locomotive power shortages and network congestion.

Yeager suggests that shippers make more informed decisions. "There's no question on what's happening in the truck sector, and there's no short-term solution to the driver situation," he says. "All indications point to the situation that finds over-the-road [OTR] supporting higher prices, and intermodal will likely follow suit."

The advantage to the buyer, of course, is that intermodal pricing typically trails OTR pricing and the fuel surcharge computations further help the intermodal solution be more competitive. Yeager's recommendation to shippers is to "continually review the book of business and make determinations based on current service performance."

Because the market is constantly changing in terms of volume, capacity, and service, this is indispensable advice. The approach to moving freight most effectively needs to be based on dynamic and real-time considerations, not historical practice. Yeager, like Sanderson, sees the expansion of intermodal beyond the DC-to-DC or supplier-to-DC arena into more service-sensitive areas, such as direct-store delivery where service reliability will support it operationally.

Finally, the newest trend is the decline in length of haul. Until recently, intermodal was viewed almost wholly as a long-haul alternative to truck, with an average length of haul over 1,500 miles. That's been steadily declining as the railroads seek to find new market segments to penetrate—and trucking costs have risen and congestion has gotten worst.

The largest segment of freight moving in the U.S. is under 750 miles. And while intermodal has a difficult time competing effectively with what a truck can do in a day (450 miles to 500 miles), the chunk between 450 miles to 800 miles is a largely untapped intermodal market.

—Brooks Bentz is a Contributing Editor to Logistics Management

Think holistically

If you're looking to the future and strategizing on how to run a more efficient, cost-effective transportation network, the key is to think holistically and keep the following elements in mind.

- Look at all of your freight, including shipments coming from suppliers, even if you don't control those today.
- Examine modal trade-offs with complete, accurate, and contemporaneous data.
- Run constraint-based optimization scenarios to evaluate alternative strategies.
- Consider "blended service" utilizing more than one mode on the appropriate lanes.
- Invest in the capabilities and technologies to monitor performance and manage compliance to the playbook.
- Use business intelligence and analytics to continuously improve service and cost performance.

Following these basic steps will wring the maximum value and performance from the network you must operate in meeting customer and corporate demands. Getting it right at the outset is commendable—maintaining it is vital.

—Brooks Bentz, Contributing Editor

TMS users being driven to the cloud

Leading SCM analysts explore the top trends in cloud-based TMS, share how they're affecting end-to-end supply chains, and give us the inside track on a few up-and-coming trends we're soon to see in the cloud.

BY BRIDGET McCREA,
CONTRIBUTING EDITOR

When it announced in September that both its transportation management and global trade management solutions would now be offered in the cloud, Oracle effectively threw its hat into the ring and—like many other software vendors—opened its arms to companies that are moving away from traditional, on-premise software delivery models. As a company that traditionally sold transportation management systems (TMS) via the latter, Oracle, like others, is now enabling shippers with quicker deployments and for a lower upfront investment.

By definition, cloud computing is the deployment of software on virtualized servers. Using this method, the TMS runs on multiple different servers as demand increases or decreases.

Users essentially rent the servers, communications, data storage capacity, and other elements that make up the platform, and are charged based on usage.

As evidenced by the growth of the cloud over the last few years, using such services generates the types of economies of scale and sharing of resources that can reduce costs and increase choices of technologies.

The fact that Oracle has moved its TMS offering into the cloud doesn't surprise Dwight Klappich, research vice president at Gartner. In a recent examination of shippers' intentions in the supply chain software space, he found that 8 percent of firms are already using a cloud-based TMS while another 51 percent of companies are "likely" to use TMS in the cloud.

Klappich identified fast and easy deployment, better total cost of ownership (TCO) versus on-premise solutions,

"By obtaining and transmitting information more efficiently and in new ways, retail shippers are able to offer more fulfillment options, giving customers the choice of picking products up in the store or the warehouse, or having them delivered to their locations."

— Shanton Wilcox, vice president of supply chain management, Capgemini Consulting

and limited capital expense budgets as the top three motives for moving supply chain management (SCM) software into the cloud. Of those firms that are not already using the cloud, Klappich says that overall uncertainty about how well the solutions fit within the organization, data security, and the fact that current IT management does not support the option were the three main drawbacks.

Over the next few pages we'll explore the top six trends that are currently driving shippers to use the cloud-based TMS model, hear how these trends are affecting end-to-end supply chains, get the inside track on a few up and coming trends in the space, and learn how to discern between cloud-based delivery methods.

Why the cloud is on a roll

There's little doubt that cloud-based solutions are making inroads in the supply chain management space. Here are six reasons why.

1. *Setup is quick and easy.* Since the first iterations of cloud-based software began to appear on the market one thing was clear: setting up shop in the cloud versus going through a traditional purchase-and-install scenario took less time and required fewer shipper resources. That key value proposition hasn't changed much over the last 10 years.

"Speedy implementation is a big draw," says Shanton Wilcox, vice president of supply chain management for Capgemini Consulting. "Companies like GT Nexus, for example, have been able to get complete supply chains up and running quickly on their cloud platforms." Wilcox says cloud-based deployments typically require less customization and configuration—two other factors that tend to drive down lifecycle costs and make web-based applications that much more appealing to shippers.

2. *Startup costs remain low.* Upfront costs can be a major inhibitor for small- to mid-sized shippers that lack huge IT budgets. Software vendors have leveled that playing field by delivering robust TMS packages in exchange for subscription fees.

Wilcox points to MercuryGate, as a best-of-breed player in the space, and Oracle, an ERP player, as two different examples of how the cloud is lowering the financial barriers to entry for TMS users. "Subscription fees are ongoing expenses versus upfront capital expenses," says Wilcox, "so they make TMS capabilities accessible to a broader range of companies."

3. *Minimized stress on internal IT departments.* For most small- to mid-sized firms, having enough IT hands on deck to select, manage, and maintain

software solutions is an ongoing challenge. Cloud-based TMS helps to free up precious resources by taking those platforms out of the internal IT department's hands and putting them back on the vendor's shoulders.

"In a lot of organizations, the IT department is overwhelmed with projects and just doesn't have the time or money to manage a full-blown implementation," says Klappich. By using a cloud-based solution, the same IT department can fund and support a project with minimal impact. "Shippers still need internal IT support, but not to the same extent as you would find with an on-premise software model," says Klappich.

4. *Omni-Channel is exploding.* In its *2015 Third-Party Logistics Study*, Capgemini Consulting found

Is your cloud multi-tenant or dedicated?

Cloud is often used as a catchall term for software that's deployed and used online, but there are very different types of cloud computing solutions being offered in the supply chain management space.

According to Dwight Klappich, research vice president at Gartner, on-demand applications served up via the web are either multi-tenant or dedicated. Here's the difference.

In **multi-tenant** environments, different shippers share the same infrastructure (both from a price and technology perspective). This allows users to maximize the efficiency of their computing resources and leverage technology at a lower cost. Also, multi-tenant applications can be quickly upgraded or updated by vendors and rolled out to users all at once.

Dedicated environments allow shippers to use hardware, data storage, software, and networks that cannot be accessed or used by any other entity. Unlike most multi-tenant environments, a dedicated option allows for customization and provides an extra layer of security—because no one else has access to your data or information.

According to Klappich, a third iteration of cloud-based TMS is now surfacing: the **dedicated cloud**—what was previously known as hosted. In such instances, a vendor offers out a single instance of the software for every shipper. Each shipper gets a unique copy of the software code and the vendor then uses its own tools and capabilities to manage the process.

In comparing multi-tenancy to the dedicated cloud, Klappich says it's the vendors that tend to accrue the biggest benefits from the former. "If there's a bug that needs to be fixed, it's a one-and-done process—versus having to deal with 10 different customers that have the bug on dedicated setups," says Klappich.

For TMS users, multi-tenancy can present new, collaborative opportunities that can't be accessed via traditional purchase-and-install or dedicated methods. By using a multi-tenant TMS from a vendor that already has your carriers on its network, for example, the on-boarding process becomes that much easier.

Company size also comes into play when deciding between multi-tenant and dedicated. Right now, for example, Klappich says that there's a clear dividing line between the two groups. "We definitely see a preference on the part of big, complex companies to having dedicated cloud TMS," says Klappich, "while small companies don't really have a preference, as long as they're paying the same amount either way."

—Bridget McCrea, Contributing Editor

that because retailers are increasingly dependent on technology for real-time visibility into operations, they're gradually moving all of their platform-based solutions to the cloud—TMS included. According to Wilcox, retailers are also using integrated technologies to improve their omni-channel networks.

Respondents are investing in warehouse management systems (58 percent), enterprise resource planning software (54 percent), transportation management systems (54 percent), supply chain visibility (43 percent), warehouse management system add-ons (33 percent), and RFID (21 percent) to achieve that goal, says Wilcox.

5. *The need for broader visibility.* Because retailers are increasingly dependent on technology for real-time visibility into operations to track products when they leave the manufacturing facility, throughout the supply chain, and until they arrive at the final point of sale, retailers are gradually moving all of their platform-based solutions to the cloud. According to the Capgemini Consulting study, this enables retailers to process large amounts of customer data faster, better match customer demands with a sales season, and provide personalized solutions—not only in what customers buy and how they buy it, but also in how they receive it.

"By obtaining and transmitting information more efficiently and in new ways, retail shippers are able to offer more fulfillment options, giving customers the choice of picking products up in the store or the warehouse, or having them delivered to their locations," says Wilcox. "These technologies, along with others, enable the concept of mass customization, which has been of growing interest to both manufacturers and retailers."

6. *There's potential for broader collaboration.* Up until now, TMS has been used to manage a single company's transportation network. Going forward, Klappich sees that model evolving into one where numerous shippers and carriers are leveraging one another's resources via the platform. As capacity constraints continue to become a bigger problem for shippers, Klappich expects more of them to move in a more collaborative direction.

A carrier that is hauling an empty truck back to a specific endpoint, for example, could use the TMS to find a shipper that requires such capacity. "That carrier with the empty leg is liable to offer you a better rate than you'd pay for a one-way move," Klappich points out, "and a better price than you'd get by just asking 10 different carriers for their best rates."

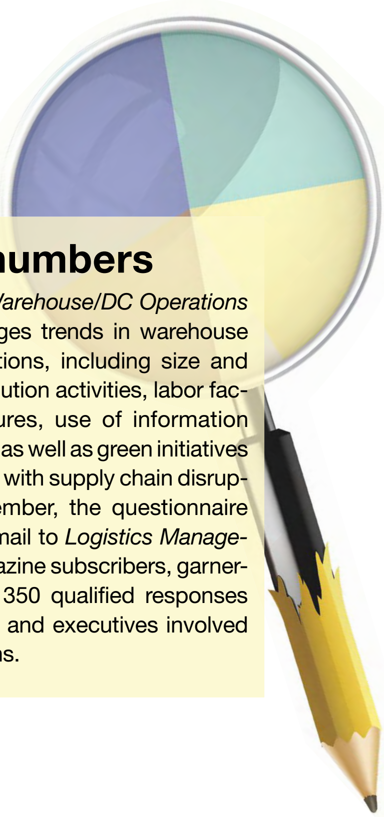
In the future, expect cloud-based TMS to play an even bigger role in helping shippers exploit their networks and work in more collaborative capacities with their trading partners and carriers. "We're in the very early stages right now, with vendors like MercuryGate and Transporeon [in Europe] both doing work in this area," says Klappich. "In the end, it's about doing things that benefit both the shippers and carriers within the network, putting more logic into the systems, and getting everyone to participate."

Bridget McCrea is a Contributing Editor to Logistics Management

2014 Warehouse/DC Operations Survey:

Industry gets crafty to combat complexities

According to our annual survey, cost efficiency is still king inside the four walls. However, respondents tell us that the multi-channel fulfillment challenge is pushing them to make more economical moves focused on process improvement and layout changes—steps that our analysts say are very encouraging.



By the numbers

Our *Annual Warehouse/DC Operations Survey* gauges trends in warehouse and DC operations, including size and scope of distribution activities, labor factors, expenditures, use of information technology (IT), as well as green initiatives and experience with supply chain disruptions. In September, the questionnaire was sent via email to *Logistics Management* (*LM*) magazine subscribers, garnering more than 350 qualified responses from managers and executives involved in DC operations.

BY **ROBERTO MICHEL**, CONTRIBUTING EDITOR

The results of our annual *Warehouse and Distribution Center (DC) Operations Survey* are in, and, once again, cost efficiency is king. But this isn't the type of pure cost control seen in recent years when budgets were tight or in decline and DCs could rarely bring in new systems.

Instead, this year's survey shows a willingness to invest to meet the pressures of multi-channel fulfillment in a more cost efficient way. In short, the survey reveals respondents are more willing to spend a little to gain a lot.

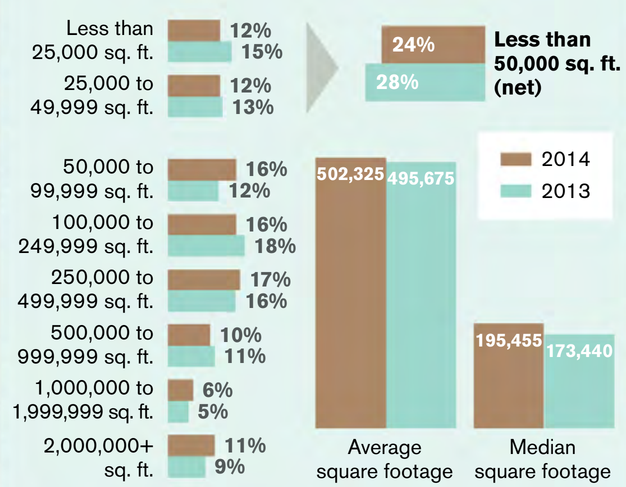
And according to our analysts, these professionals now understand that trying to tackle multi-channel complexities and a stronger economy with the same old systems and processes will not get them to the level of cost effectiveness that their organizations need.

On top of these economically motivated innovations, we also see clear evidence of growth in this year's survey, notes Don Derewecki, senior consultant with St. Onge Co., a supply chain consulting firm and *Logistics Management*'s partner for the annual research project. Among this year's findings are:

• The average number of employees is up slightly, from 236 in 2013, to 249 in 2014.

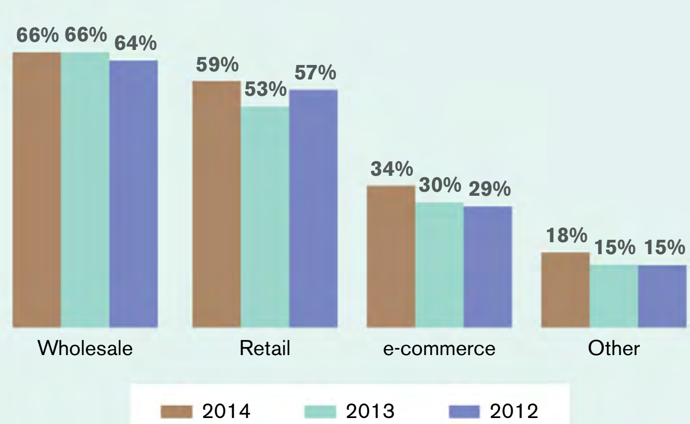
• Square footage within respondent DC networks is up, by 6.4

Size of distribution center network: Total square footage

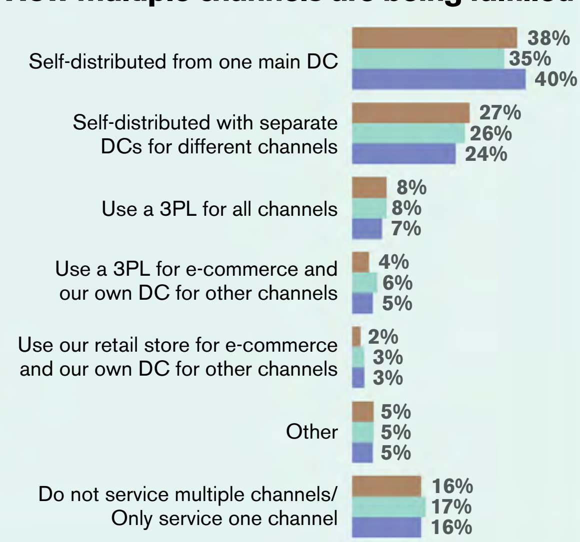


Source: Peerless Research Group (PRG)

Market channels serviced by company



How multiple channels are being fulfilled



Source: Peerless Research Group (PRG)

percent on average.

- Capital expenditure among respondents averaged just more than $1.3 million in 2014, up 24 percent from last year's average of slightly less than $1.1 million.

"When you look at average square footage being up by 6.4 percent, and by 12.7 percent on the median, those are pretty healthy increases," says Derewecki. "People don't go out and get more space when they are cutting back."

When you combine these survey findings with reports of spot shortages for DC labor in some areas, as well as the drying up of excess capacity for warehouse space, it's clear that the warehouse and logistics market is expanding. "There is more activity going on, generally," says Derewecki.

The surge in activity brings with it a slew of different challenges than what was normal for a DC a decade ago when it was common to get full pallets in and full pallets out, says Norm Saenz, managing director for St. Onge. In our 2014 survey, only 16 percent of respondents report receiving only full pallets of a single stock-keeping unit (SKU).

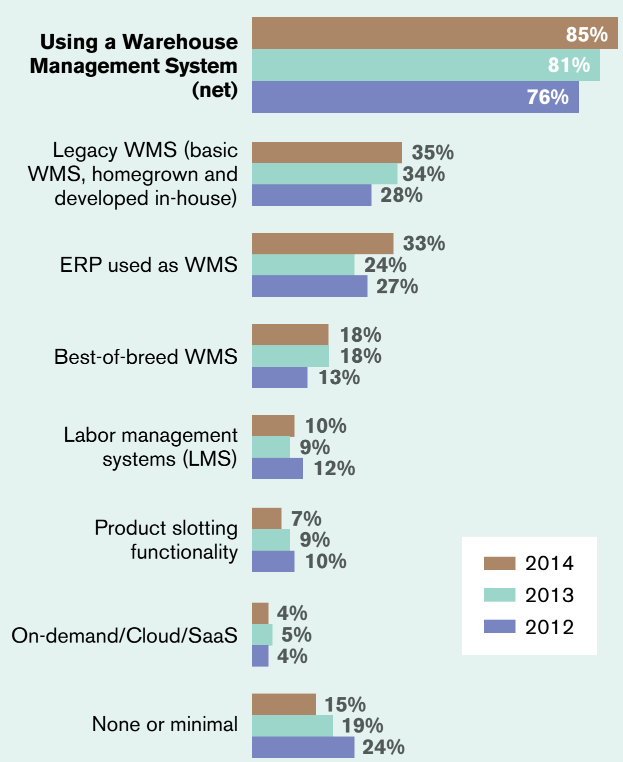
There's also more complexity on the outbound side of operations, with a need to pick individual e-commerce orders efficiently, as well as fulfill leaner orders to retailers or other businesses that, during the recession, got used to ordering in smaller, more frequent quantities. "Many companies had systems and processes that were set up for the full pallets and bigger shipment profiles of the past, but you have a lot more complexity now," says Saenz.

But perhaps the most encouraging trend from the 2014 survey is that respondents are finding multiple ways of dealing with pressures such as more e-commerce orders and growing demand for value-added services.

"People responsible for DCs are being very crafty this year. There seems to be an uptick in focus, in creativity, and in diligence—really just smart management around process changes, layout changes, looking at transportation routings, and making better use of technology to help control costs."

—Norm Saenz, managing director, St. Onge Co.

Warehouse management systems in use



Source: Peerless Research Group (PRG)

From more use of IT such as warehouse management system (WMS) or transportation management system (TMS) solutions, to changes to layouts and racks, warehouse and DC operations leaders are pursuing various ways of coping with complexity. There's expenditure involved, but the spending is seen as way of being more efficient given the pressure of today's smaller orders and intensive material handling requirements.

"People responsible for DCs are being very crafty this year," says Saenz. "There seems to be an uptick in focus, in creativity, and in diligence—really just smart management around process changes, layout changes, looking at transportation routings, and making better use of technology to help control costs. And those are all positive signs."

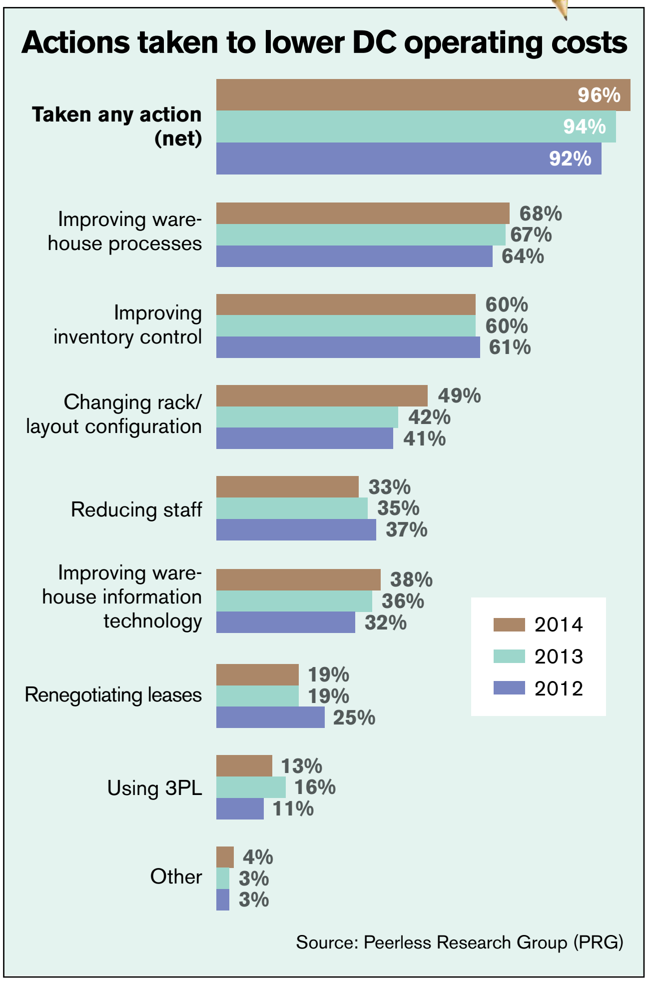
Fundamental challenges

Most participating companies in this year's survey came from manufacturing (40 percent), followed by distributors (31 percent), third-party logistics providers (11 percent), and retailers (8 percent). Leading product sectors included food and grocery, general merchandize, and health care and pharmaceuticals.

As noted, only 16 percent of respondents deal only with full pallets of a single SKU on the inbound side, and 9 percent on the outbound side. On the inbound side, 30 percent handle mixed case pallets and loose cases, followed by 28 percent who handle full pallet of a single SKU, mixed case pallets, and loose cases.

On the outbound side, the most common scenario (33 percent) is mixed-case pallets and loose cases, followed by 26 percent who handle full pallets of a single SKU, mixed case pallets, and loose cases.

In terms of multi-channel requirements, 34 percent of respondents service an e-commerce channel, up from 30 percent last year. Only 16 percent of respondents say they service only one channel. When it comes to how multiple channels are fulfilled, the leading strategy is self-distributed from one main DC, practiced by 38 percent, followed by 27



percent who self-distribute via separate DCs for different channels.

While the e-commerce growth is not high, notes Derewecki, it's on the increase, and in effect, 84 percent of respondents service multiple channels to some degree.

As noted, the 2014 survey saw an increase in the number of employees per respondent company, while square footage was also on the rise. Total square footage in the network averaged 502,325, up from 495,675. The median figure for total square footage also climbed, from 173,440 last year to 195,455 this year. When asked if they planned to expand in the next 12 months, 74 percent said "yes"—up from 72 percent last year.

The demand on DCs for value-added services is also on the rise. This year 87 percent said that they performed value-added services including special labeling (56 percent), kitting (29 percent), and promotional packs (29 percent). Overall, value-added services have increased steadily the last two years, from 82 percent performing them in 2012, to 87 percent performing them today.

All these factors—more e-commerce, more handling of small orders, expanding operations and labor forces—add up to greater complexity. "Generally, operations are much more complicated than they were even five or 10 years ago," says Derewecki. "Any little thing that goes wrong can't be hidden—it comes to the surface quickly. This complexity is also leading to the use of more mechanization and technology to be able to comply with all of these requirements."

Actions and investments

This year's respondents have been proactive. When asked if they had taken action in the past 12 months to lower DC operating costs, 96 percent said that they took some type of action, up from 94 percent in 2013, and 92 percent in 2012. Leading areas of action included improving warehouse processes (68 percent), improving inventory control (60 percent), and changing rack/layout configuration (49 percent).

Changing rack and layout configuration saw one of the bigger increases, rising by 7 percent. In keeping with the generally stronger economy, the number of respondents saying that they have reduced staff as a means of controlling costs has declined the last two years, while "improving warehouse IT" has risen slightly the last two years.

To both Derewecki and Saenz, the willingness to take action is a major positive in this year's survey. "Those indicators are all good news," says Saenz, "We're seeing more people taking actions, focusing in on process improvements, or on layout changes. It's all encouraging."

Some actions need not entail huge technology investments. For instance, because of the rise in smaller orders and e-commerce, more companies have been changing rack configurations. This is typically done to create more pick slots, notes Saenz.

More respondents are also shifting toward the use of mechanized materials handling systems for both receiving and picking. Mechanized or conveyor-based receiving among respondents reached 15 percent, an increase of 3 percent over last year, while mechanized picking rose to 16 percent, up 2 percent from 2013 and double the 8 percent use rate in 2012.

Meanwhile, paper-based picking has declined from 66 percent in 2012 to 60 percent in 2014, and voice picking is on the rise, with voice assisted picking with scan verification up by 2 percent versus 2013.

Companies have also steadily moved to adopt WMS. While WMS has been around for decades, 85 percent of respondents now use a WMS of some type, up from 76 percent two years ago. Use of enterprise

> "Generally, operations are much more complicated than they were even five or 10 years ago. Any little thing that goes wrong can't be hidden—it comes to the surface quickly. This complexity is also leading to the use of more mechanization and technology to be able to comply with all of these requirements."
>
> —*Don Derewecki, senior consultant, St. Onge Co.*

resources planning (ERP) systems for WMS rose from 24 percent in 2013 to 33 percent in 2014, while use of labor management systems software also rose slightly.

"That's a very good penetration rate for WMS, considering that there are many smaller sized respondent companies in the survey, and that just two years ago, it stood at 76 percent," notes Derewecki.

With multi-channel pressures likely to increase, says Saenz, it will be interesting to see if future surveys start to reflect more use of "best of breed" WMS. In 2014, use of best of breed held steady at 18 percent, but as Saenz notes, with complexity on the rise, companies will need solutions capable of batch picking in which multiple one line orders can be managed, which may push more companies toward advanced solutions.

"I'm surprised we haven't seen increasing use of best of breed, but I think it will start to happen soon," says Saenz.

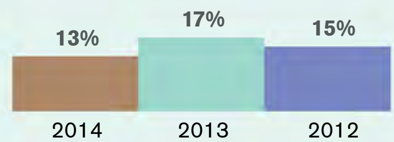
Respondents were also active with initiatives to reduce transportation costs, with 88 percent taking action of some type. Among the most common methods of reducing transportation costs is to renegotiate rates, although a slightly smaller percentage of respondents reported using that tactic in 2014 compared to 2013.

One tactic that did see an uptick (6 percent) was using TMS to optimize routes, an action taken by 22 percent of respondents in 2014. "That shows some real effort in studying the logistics costs and routings to find new ways of getting orders to the customer in the most efficient manner," says Saenz.

In short, there isn't one silver bullet for improvement, with respondents tapping everything from increased use of WMS to reconfiguring racks. As Derewecki sums up: "The majority of the people are taking multiple actions to improve their operations and lower costs."

Also encouraging, agree Derewecki and Saenz, is the fact that 90 percent of respondents are now using some type of productivity metric within the warehouse, such as tracking units per hour, lines per hour, or attainment rate on a labor standard. That fits with the smart management mentality needed today, says Saenz. "That tells me companies are looking at metrics as a way to help manage the continuing change toward more complex distribution operations," he says.

Organizations that have experienced a catastrophic event



Source: Peerless Research Group (PRG)

Cause for concern

The survey also tracks green supply chain and supply chain disruption issues. In terms of sustainable or green initiatives such as recycling, energy efficient lighting, or use of fans to improve air circulation, interest remains steady. Overall for 2014, 94 percent of respondents undertook at least one environmental initiative, up a mere 1 percent from 2013.

The percentage of respondents who experienced a catastrophic event in 2014 actually declined slightly from 2013, from 17 percent to 13 percent. However, the question elicited many individual comments on actions taken, including dual sourcing, more emphasis on domestic suppliers, installation of power protection solutions, and updating or improvement of disaster recovery plans.

"The fact that 13 percent of respondents experienced a disruption is significant," says Derewecki. "Companies know that they have to be prepared, because they know that, sooner or later, an event of some type is going to roll around to hit them."

However, the main day-to-day cause for concern comes back to the pressures of today's smaller, more frequent orders and intensive item handling in multi-channel environments. At the same time, the healthier U.S. economy is seeing more respondents increase employee head count as well as the amount of warehouse space. In effect, today there's more fulfillment complexity, and at a higher volume than recent years.

To top things off, the labor market is tighter, with 43 percent of respondents naming workforce retention as a major operational issue, tying with "insufficient space for inventory and/or operations" as the top area of concern.

Just as multichannel complexity is driving changes in DCs, so is the tighter labor market, says Derewecki. Both trends constitute a cost drain if DCs cannot adapt to them in efficient ways, he adds, such as through better technology that makes it easier to get new employees up to speed.

> "We're seeing more people taking actions, focusing in on process improvements or on layout changes. It's all encouraging."
>
> —Norm Saenz, managing director, St. Onge Co.

"Companies are realizing that they need to do one of two things, and possibly both, to deal with the tighter labor pool," Derewecki adds. "For one, they may need to raise pay rates to hold on to people; and two, they are going to have to improve their processes and technologies to gain more productivity and payoff from that investment in labor."

Roberto Michel is a Contributing Editor to Logistics Management

BIG Data & Analytics: Is it time to engage

Savvy, global shippers that capture and analyze transactional transportation management data in collaboration with their third-party service providers have seen hard dollar savings drop to the bottom line. Here's how they're getting it done.

BY **PETER MOORE,** *LOGISTICS MANAGEMENT* COLUMNIST

Today, logistics managers are being bombarded with software providers and integrators wanting to discuss Big Data, business intelligence (BI), and improved interconnectedness of the supply chain that—until recently—has been only a dream.

These information technology (IT) firms see an opportunity to sell web-based solutions directly into the logistics organization as a service. Logistics professionals, therefore, need to bone up on the benefits of leveraging supply chain information as part an overall improvement strategy—not just as clever negotiation tactics with carriers to improve customer service and cost.

With global shipper organizations consistently changing supplier partners, markets, and customers, the logistics function cannot simply wait for a request for rates from the business unit before exploring the market. Instead, they should constantly be seeking opportunities for cost and service improvements through data mining and analytics or business intelligence.

Those industry leaders that have grabbed the opportunity to gather, prepare, and analyze transactional data from forecasting through cash settlement activities have seen hard dollar savings drop to the bottom line.

For example, at one consumer retailer we worked with, the board was so impressed with the BI project that they asked the IT director to start reporting to the vice president of supply chain. They wanted to keep the focus on developing better actionable

your service PARTNERS?

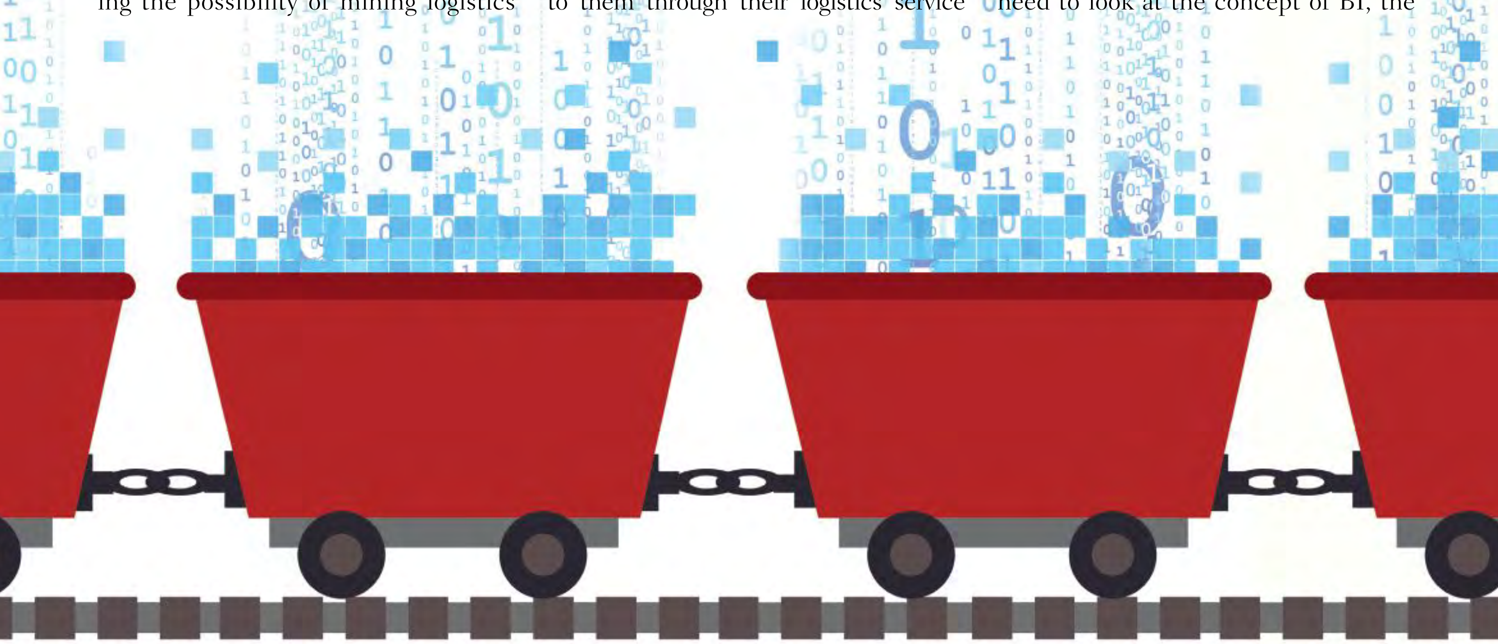
information on operational performance, the market, and customer buying habits.

As I'm seeing time and again, leading logistics managers are consistently bringing data analysis improvement ideas to management—ideas that they developed internally or with service providers that can help them transform the business strategy.

Think of global simultaneous introduction of smart phones, books, and movies as examples. When considering the possibility of mining logistics transaction data for the purposes of improving costs and service, the "motherload" for supply chain data is in international transactions. The movement of freight across borders generates valuable information from which shippers can learn of areas for innovation, margin improvement, and risk reduction.

Working with a major pharmaceutical company recently we identified 58 fields of data that they would like to have collected, cleaned, and presented to them through their logistics service providers. Initially, none of their partners could offer this level of service because they had parts of the data and often in multiple systems and formats. More importantly, the service providers didn't see themselves as sources of data for analytics—they failed to understand its value to the customers' whole enterprise.

When we collect and mine data we're entering the world of BI, which is also referred to as "business analytics" or "data science." Today, shippers need to look at the concept of BI, the



sources of their data, and the role of the international service providers—including third-party logistics providers (3PL) and freight forwarders—as the transaction data collectors and as possible analytics partners.

How can logistics services partners help?

Beyond understanding the BI basics and trends that can help identify ways that a 3PL or freight forwarder partner can help your operations, how can you tell if your logistics services partner is equipped to assist in the Big Data effort?

To help this question, I turned to someone immersed in the BI game. My son, Greg Moore, a former major in the U.S. Army and now president of Eagle River Systems, learned intelligence techniques fighting insurgents during six deployments.

He and his 30-man intelligence unit were each awarded the Bronze Star for dramatically reducing casualties from improvised explosive devices (IEDs) in Afghanistan, and he understands the value of searching for patterns in detailed event data that will help you to be innovative.

He suggests three elements that operations leaders need to have in terms of an internal or partner capability:

1. Analytics and IT. According to Moore, there are two primary skill sets that go into BI: analytics and IT. On the analytics side, the analysts, or data scientists, are applying mathematical and statistical tools to create business models to create valuable insights into trends that can inform operational and strategic decisions.

"The IT side focuses on building database infrastructure to capture, organize, and categorize data, and provide tools for discovery, analysis, and visualization for analysts and decision makers," says Moore. "So, the idea is to decide which of these two sides of BI you can provide internally and which to contract out."

For companies looking to leverage BI as a value-added service or an internal capability, Moore says that it can be easy to be pulled into IT discussions around features for designing dashboards that display critical information—and there are many platforms to choose from that are marketing their reporting capabilities. This is important, but you need to explore deeper. What is the software engine and how is it deployed?

"The big five are Oracle Hyperion, IBM Cognos, SAP Business Objects, SAS, and a Microsoft solution comprised of SQL Server and SharePoint. And there are a number of other solutions available to consider in specialized areas," says Moore. "Spreadsheets are not going to cut it beyond small rudimentary studies."

2. People. Integrating a BI solution is about more than picking out a software tool. According to Moore, it's about having the right people who can analyze the data, understand what it means to your operations, and present it to decision makers—and for the IT specialists it's about getting the data to the analysts.

"If your operational data is already being captured in an SQL or Oracle database, perhaps through an ERP, or tracked in Excel spreadsheets, it would make little sense to implement a new brand-name system," Moore says. BI analysts would then have to spend time tracking down the data and getting it into the new system—rather than doing analysis and drawing insights from already captured data. "Don't reinvent the wheel," he says.

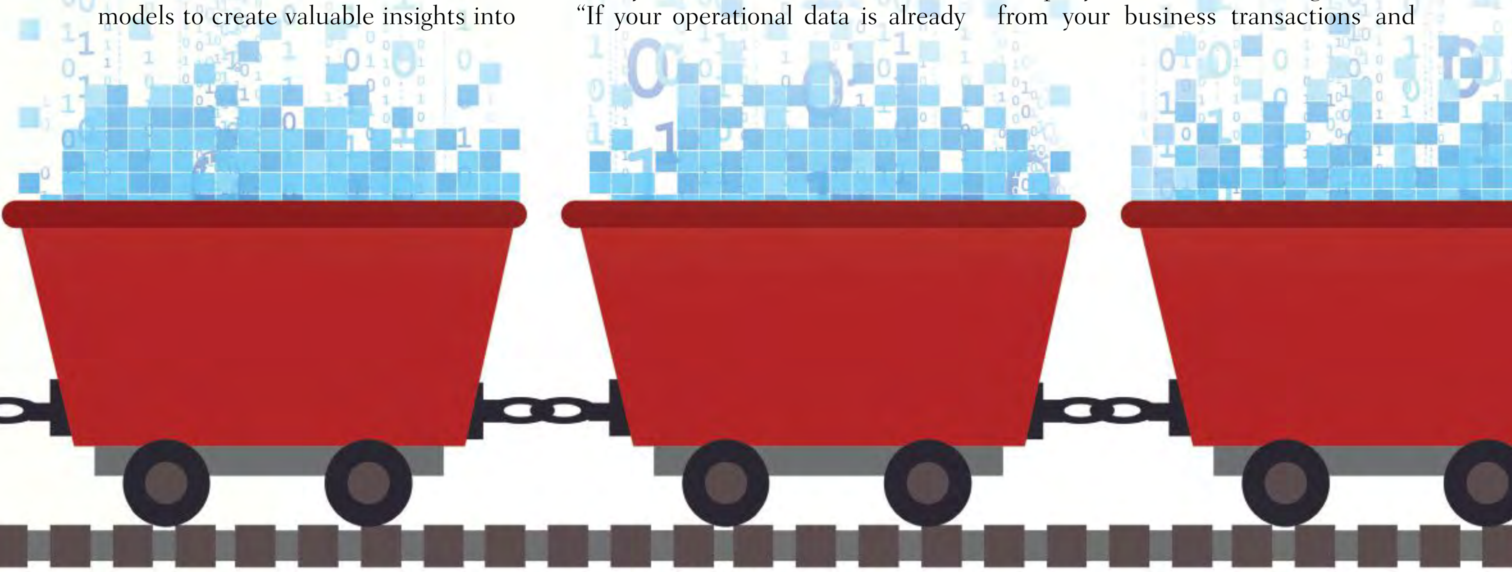
3. Put a dashboard in place. Finally, only when the right people have access to the data they need, then the discussion about the right tool for building reports and dashboards for the analysts and decision makers can take place. "Frankly," Moore adds, "this is the easy part. Getting complete, clean, usable data is 50 percent to 80 percent of the game."

The logistics organization will have to decide who should own this. Experience suggests IT infrastructure for collection and preparation should be done at the source—and in logistics, that's very often the logistics service provider.

BI: Engaging your service provider

So, how can a shipper jump into a BI solution? One viable option is to hire a qualified third-party logistics service provider to manage logistics and collect the transactional data for presentation to your in-house analysts.

It is of vital importance that your contract for service with all third parties, including carriers and warehouse services, should clearly state that your company owns the data generated from your business transactions and



that each service provider must deliver that as a part of each transaction.

Data collection, or "reporting," should not be an afterthought. It should be clearly understood by all providers that you want the service and the data describing that service in detail delivered before payment is made.

I've been regularly asked what an analyst, either at the 3PL or the shipper's office, can produce in savings. My professional experience has found that a qualified analyst with the right tools and skills will produce as much as a 1,200 percent return on investment (salary) for a mid- to large-size firm.

While that sounds like a massive amount of ROI, let me share an example. I was recently sitting with a new analyst right out of school at a client's office looking at short-haul loads from a port distribution facility.

I showed him a few tricks for sorting a two-week batch of freight payment data and he immediately caught a variation in payments for the same move. After some inquiries, he found that the dispatcher was spreading out the choice local haulage work among carriers rather than following the routing guide.

This situation was corrected that day, and it turned out that the simple observation paid that analyst's salary for two months. The more a shipper can mandate that the data is clean, timely, and in the desired format at the source, the more productive analytics will be.

Alternatively, a contract for a lead logistics provider (LLP) might also include analytics and recommendations so as to identify opportunities for your company. One advantage can be that the service provider might compare your cost and service data with other companies anonymously and provide benchmarks as well.

This full outsourcing option, however, is very difficult, as it assumes sharing of internal business information with your service provider well beyond just transactional orders. If done properly, this enables the service provider's analysts to have a business context for their models and trend analysis.

Keep in mind that full outsourcing means involving your service provider in regular business meetings and perhaps providing office space in your building in order for them to be part of your team.

We've also seen shippers with limited internal resources expand their use of third-party service providers and the scope of their contracts. The tough job of logistics data collection and the cleaning and sorting ("wrangling") is a prime area for expanded contracting.

For many freight forwarders and other third parties in international commerce, this is new territory. With investments in people, processes, and technology they're able to offer actionable BI and analytics to their customers—at a premium.

How shippers gain value

How the value that's produced is identified and shared is another critical question. Marketing this service to shipper customers means borrowing a few ideas from software and IT integrator firms because solution selling is different than simply selling services. The good news is that the service provider will be breaking through to new levels at the customer's firm.

Done correctly, service providers can expect to find themselves presenting to shipper executives who know the value of BI and are seeking reliable counsel on how to reach new markets, improve customer service globally, improve compliance, and understand and overcome local operational challenges.

If you outsource, you need to recognize the contribution made by your logistics service providers in the BI area and compensate them accordingly. To make this happen, new international service agreements need to be developed that include clearly defined data elements, shared objectives, new governance procedures, shared risk and innovation investment incentives.

With time and effort, service agreements have been improving through the use of collaborative contracting in which both parties proactively and transparently go after shared targets that help the shipper to be more successful. Remember Big Data means big opportunities for shippers and their service providers.

Peter Moore is a columnist for Logistics Management*, advisor to shippers and service providers, and part-time faculty at three universities. He can be reached at pmoorehhi@gmail.com.*

Taking out the BRG Sports

BRG Sports' new DC was designed from the ground up as an omni-channel, omni-brand distribution and manufacturing facility. Most of all, the materials handling solution optimizes fulfillment and takes touches out of the process.

BY **BOB TREBILCOCK**, EDITOR AT LARGE

Let's face it: Distribution has never been more complicated. The best retailers and distributors want to fill orders across multiple channels, multiple brands and a multitude of order profiles, all from one facility. Meeting those requirements with conventional materials handling processes often results in more touches that add waste, time, and cost to the order fulfillment processes.

Taking those touches out of the process was one of the guiding principles behind the design of BRG Sports' new 813,000-square-foot manufacturing and distribution facility in Rantoul, Ill. The acronym stands for Bell, Riddell, and Giro, three of the best-known names in sports helmets and accessories. Riddell, for example, is the leader in football helmet technology. Last spring, BRG Sports expanded its portfolio with the acquisition of C-Preme, a manufacturer of action sports helmets for children, teens and adults.

The facility, which went live in October 2013, is a complex environment. When the integration is complete, BRG Sports will have consolidated eight different distribution centers and four brands into one facility. Currently, BRG Sports is managing 23,000 SKUs while shipping an estimated 10,000 pallets a month. Its customer base includes big box retailers that may receive full truckloads with up to 10,000 cartons and smaller specialty retailers and organizations, such as professional sports teams and school athletic departments, which may order a handful of mixed cartons. Some orders are palletized and others are floor loaded.

While full pallet orders represent 70 percent of the volume, the number of e-commerce orders for parcel delivery is doubling every year. In addition to distribution, the facility includes a manufacturing operation that can produce 25,000 Bell helmets per week.

To manage that complexity, BRG Sports worked with a systems integrator (Numina Group) to design and build a Greenfield facility to minimize those touches that uses:

- very narrow aisle storage to optimize space;
- hands-free, multi-modal data collection tools to direct picking activities (voice and ring scanning); and
- automated materials handling equipment (conveyors, sortation, and automated print-and-apply and packing systems).

The facility features 44,000 pallet locations, expandable to 60,000 locations; 2 miles of conveyor; and systems that can support 60 cartons per minute in mixed full-case order shipments and 100 cartons per minute in the combined full case/split case modules.

The solution is tied together by a warehouse control system (WCS) that enables parallel pick, pack and ship operations across brands, channels and order profiles. The WCS times the release of work and synchronizes activities so the right cartons for an order arrive at the right shipping area at the right time and with the least amount of travel—and touches—by associates.

Building a Greenfield facility meant that BRG Sports could design new processes from scratch. "We didn't want to automate our existing processes," says Lewis Hornsby, vice president of global logistics and fulfillment. "Instead, we wanted to use automation to streamline our processes." While there is still some manual handling, about 80 percent of the orders go through the

touches at

Photography by Peter Wynn Thompson/Getty Images

A modern warehouse control system (WCS) and voice technology synchronizes pick and pack activities across multiple sales channels and order profiles.

automation. "Although we ship multiple brands in split and full cases, to the automation, an order is an order and a box is a box," Hornsby says.

While BRG Sports took a phased approach to integration, consolidating one DC at a time, Hornsby is already seeing a significant improvement in throughput. "We think it'll take a year after we complete the last integration to see the full benefits, but we're moving in the right direction," he says.

Network design led the way

Headquartered in Scotts Valley, Calif., and with more than $825 million in revenue in 2012, BRG Sports is a leading designer, developer, and marketer of sport equipment and accessories. Formerly known as Easton-Bell Sports, the corporate name was changed last summer following the sale of the Easton businesses—baseball/softball, ice hockey and cycling. Today, BRG Sports focuses on sports helmets, protective equipment, and accessories that support the bicycle and football businesses.

The project was initiated in August 2010, when Hornsby and his team began researching the feasibility of a new facility. At that time, each of the brands had its own unique supply chain. In all, there were seven distribution centers prior to the acquisition of C-Preme. "We had duplicate processes, and we frequently had to prepare multiple shipments from different DCs to fill orders to a big box retailer who ordered from more than one brand," says Hornsby. "What our customers really wanted was to place one order and get one shipment from one facility."

Hornsby laid out three goals for the new facility. No. 1 was customer service: The facility had to reach most of the United States in two to three days. No. 2 was to eliminate duplicate processes in multiple facilities to fill one order. Finally, the facility had to pay for itself.

Because many big box retailers arrange their own transportation and pay their own freight, finding a location that met BRG Sports' needs without adding to its customers' supply chain costs was paramount. "We did a lot of analysis on the miles our customers traveled, the amount of lead time required from the time an order is placed until pick up and the costs associated with pick up at our old facilities," Hornsby says. He adds that in addition to in-house analysis, his team also worked with a consulting firm on network analysis and site selection.

At the end of that process, BRG Sports chose Rantoul, Ill., where the company has operated manufacturing and distribution operations for more than 30 years. "We were able to meet our transportation and customer service requirements and retain key employees to help us transition the operations in a phased move," Hornsby says.

Bringing in automation

With a location set, the next step was to design a facility where automation is used to streamline and optimize labor intensive, manual processes.

In the existing facilities, lift trucks and wireless bar code scanning were the dominant technologies. Full cases were picked to pallets and delivered to staging areas. There, they were re-palletized into mixed pallet orders for individual retailers. Shipping and retailer compliance labels were applied by hand. When trailers arrived, the pallets were broken down again and the cartons were floor loaded for delivery.

Split case orders were picked to totes and delivered by lift trucks to the packing area where they were separated into LTL and parcel shipments. Parcel orders traveled by conveyor to a shipping station; however, they were weighed and labeled by hand.

What's more, associates spent a considerable part of their day walking to pick locations. With the growth of business, especially e-commerce orders, "we needed a leaner, faster process to meet the continued parcel shipment growth," Hornsby says. "We wanted a solution that could give us two- to three-times more efficiency, minimize wasted labor and increase lines per picker."

The order fulfillment system does that by bringing together automated materials handling systems and hands-free data capture technologies to enable parallel pick, pack and ship processes; that means the system allows the facility to simultaneously pick full case, split case and e-commerce orders.

As Hornsby says: A box is just a box to the automation.

There are four distinct picking areas.

1. One is represented by two, three-level split case pick modules with 3,024 carton flow positions and 237 two-deep case pick pallet flow pick positions. In the split case area, picking is done on the first two levels. Pack stations and automatic weighing and print-and-apply technology is located on the third level.

2. A second area is a three-level full case pick module with 1,131 carton flow positions and 260 two-deep pallet flow pick positions. This area represents more than half of the orders processed in the facility. In this module, picking takes place on all three levels; the full case pick module is connected by conveyor to the third level of the split case module. In that way, full cases are transported to the split case module where they are automatically weighed and labeled for shipping, inducted into the shipping sorter and diverted to the right shipping lane. In the new facility, floor-loaded cartons are conveyed directly into a trailer for fluid loading.

Picking activities in both of these modules are directed by voice recognition technology that selects the carton, and directs and confirms picking by either hands-free scanning with ring scanners or by voice.

3. Slow-moving items, some hot items and non-conveyables are picked to carts from the reserve storage area and are directed by voice. To cut down on walking, the carts are designed so an order selector can use the forklifts to transport the carts and reach both floor and upper rack pick locations, rather than manually push the cart. Picking in these areas is also directed by voice. Once all of the picks to a cart have been completed, the items are inducted into the automation system, and conveyed to the third level of the split-case module for packing, weighing and labeling.

4. Finally, an exception processing area located on the third level manages incomplete orders or those requiring a quality check or value-added services, such as price ticketing.

Regardless of where they are picked, once orders leave the packing and labeling area, they pass through a scan tunnel and enter a narrow belt shipping sorter located above the dock, which sorts them to the right shipping area for full trailer loads, LTL shipments or parcel shipments.

Multi-modal voice and scanning technology has delivered significant quality improvements. "Our error rate is less than one half of 1 percent," says Hornsby. "That's not just mis-picks, but damage from shipping or a shipping label that can't be read." But the real benefit comes from the use of the warehouse control system to direct activities. The logic in the WCS analyzes a batch of orders and determines the correct start times to synchronize processes in the different modules.

For instance, the WCS may initiate picks in the reserve storage area first because those take longer to process. Similarly, the WCS can distinguish between full truckload and LTL orders, and segregate split case orders that may require more time than full case orders. The system then synchronizes the delivery times so that full case and split case orders arrive at the palletizing area at the same time. In all instances, the double and triple handling that was common in the old processes has now been automated out of the operation.

New merchandise is processed in the receiving area and then delivered to a staging area for putaway in the very narrow aisle storage area.

Lessons learned

When the facility went live in October 2013, BRG Sports staggered the closing of facilities, integrating them one at a time. The goal was to minimize the risk of a glitch from trying to do too much at one time. At the same time, Hornsby believes that approach delayed BRG Sports' ability to realize the full benefits of automation. "We had a significant number of people doing manual processes while we spoon-fed the automation," Hornsby says. Still, there have been improvements in customer service, and he and his teams are seeing some of the synergies they expect to see when the process is complete.

Similarly, once integration of all the DCs is complete, BRG Sports will move into the second phase. At that time, the company will integrate orders with manufacturing so that it can take product directly from the assembly lines to the packing station and shipping dock in response to real-time demand. "We're not there yet," says Hornsby, "but the design and automated conveyor is in place to do that." ☐

LTL: Sunny forecast for carriers

As long as LTL carriers remain disciplined on capacity additions, and the U.S. industrial economy remains strong, the LTL sector is well positioned to continue expanding margins due to operating benefits from increased density and higher freight rates. Analysts agree: It's time for shippers to pump up the freight budget.

By John D. Schulz, Contributing Editor

"Trucking fleet owners, on their part, must expect to pay for the services of men who are worthy and are willing to promote the interests of their employers."

—*"The Truck Driver Problem,"* Traffic World *magazine, Dec. 12, 1914.*

There is nothing new about "the truck driver problem" over the past 100 years. Good, reliable drivers have always been in tight supply and coveted by the most progressive trucking companies. However, in today's $35 billion less-than-truckload (LTL) sector, even a century's worth of experience may not have sufficiently prepped the industry for the capacity crunch currently in the LTL market.

Drivers are as scarce as ever, regulations are tightening, equipment costs are rising by double-digit percentages, terminals are frightfully expensive to

build or acquire, and shipper demands for faster, more trackable deliveries are only mounting as e-commerce and omni-channel fulfillment turn up the pressure on both retailers and manufacturers.

However, for carriers who are able to meet these challenges and stay viable, the rate forecast is certainly brighter than it has been the last five years. "To put it into weather terms, the forecast for LTLs is sunny today, tomorrow, the rest of this year, and into 2015 and 2016," says Satish Jindel, principal of SJ Consulting, an analyst firm that closely analyzes trends and pricing in the LTL sector.

According to Jindel, LTL carriers are benefitting from strength in the U.S. industrial sector. Also, a capacity shortage in the truckload (TL) sector is causing a "trickle-down" effect of freight to the LTL sector. Such favorable market conditions are somewhat tempering LTL carriers' bottom lines due to an unprecedented cost increase in labor, equipment, terminals, and replacement parts and tires, carriers say.

In fact, a recent study by the American Transportation Research Institute (ATRI), a unit of the American Trucking Associations, confirmed what nearly every shipper in the U.S. has discovered: trucking costs and rates per mile are rising with no end in sight.

In its most recent *Analysis of the Operational Costs of Trucking* that analyzes trucking costs from 2008 through 2013 derived directly from fleets' financial and operational data, the ATRI found that the average marginal cost per mile in 2013 was $1.68, an increase from the $1.63 found in 2012. Because of costs associated with operating terminals, some expensive union labor contracts, as well as secondary costs such as tolls and health care benefits, LTL carriers' costs are even higher than those averages, analysts emphasized.

While shippers may not appreciate the mid-single digit rate increases the next time they renegotiate their LTL contracts, carriers and analysts say that it's about time for those rate hikes.

"Our rates over the last several years have not kept up with our cost of doing business," says Pitt Ohio President Chuck Hammel. As way of proof, he says that since 2009, Pitt Ohio's rates have gone up on average 11 percent; however, costs of power units have risen 24 percent, trailers 18 percent, tires over 50 percent, parts 14 percent, and wages are up 16 percent during that period.

Data clearly show that LTL pricing has trailed the increases in the truckload, parcel, and rail sectors for nearly 10 years. According to SJ Consulting, LTL rates have risen 5.1 percent from 2008 through 2013, compared with 8.1 percent for TL, and 13.1 percent for ground parcel. LTL pricing has even slightly trailed the 8.2 percent rise in the Consumer Price Index (CPI) that tracks inflation.

"Now is the time for LTL carriers to raise rates aggressively and rapidly," says Jindel, adding that those hikes are not only necessary to pay drivers more, but to invest in equipment and reward shareholders.

Tight capacity

The combination of a decent economy combined with a stagnant LTL driver situation means that capacity is limited. Add it all up and it probably means that we're going to experience the tightest LTL market since 2004-2006—a period of sharply rising rates for shippers following the 2002 bankruptcy and liquidation of Consolidated Freightways, a $3 billion unionized carrier.

"Currently the market is tight and we're headed into the busy season," says Pitt Ohio's Hammel. "I suspect that demand will exceed supply in the fourth quarter, and in the near term

Smoother operations. That's Ryder.

Specialized capabilities and proactive services—that's what allows us to continuously optimize supply chain operations and cut inbound logistics costs by up to 15%. Discover how outsourcing with us can improve your fleet management and supply chain performance at **ryder.com.**

FLEET MANAGEMENT | SUPPLY CHAIN SOLUTIONS

Ryder® Ever better.™

things will get chaotic and capacity will be in short supply."

Phil Pierce, executive vice president for sales and marketing at Averitt Express, says that Averitt began experiencing some positive signs in November 2013. And after a harsh winter, the second quarter was very strong in the LTL market. "That trend has continued in the third quarter, and all indications are that 2015 will continue to see an increase in freight movement," he adds.

Shippers looking to add LTL capacity won't get much help from the TL or rail sectors. The TL sector is unable to put drivers in their trucks, causing even more freight to shift to LTL carriers, while the railroads are still recovering from service meltdowns from last winter.

Larry Gross, an intermodal analyst for FTR Associates, recently said that average train speeds have declined 8 percent to 9 percent year-over-year and that there are no real signs of improvement. Service remains stable, but at unsatisfactory levels, says Gross.

Thom Albrecht, transport analyst at BB&T Capital Markets, is predicting that rail service might not return to 2013 service levels by 2015, meaning even more freight "downstream" for LTL carriers.

"Capacity is tight, but it's not because carriers are more disciplined," says analyst Jindel. "It's because they can't hire people. The wages the industry pays for the kind of work it takes to drive a truck are not commensurate with what people have to put up with to drive a truck. However, the industry can't afford to pay too much more."

The regulatory situation

Roy Slagle, president and CEO of ABF, says that he expects "more of the same" from Washington regulators in 2015. That would mean more tweaks to the current hours-of-service (HOS) regulation, adjustments to the Compliance, Safety, Accountability (CSA) program, and more edits to the requirement that truckers outfit their fleets with electronic logging devices (ELDs) to prevent cheating on HOS.

"ABF Freight supports the FMCSA's efforts to mandate ELDs in commercial vehicles and sees this effort as one of the most impactful ways to promote safety on the highways," says Slagle.

As for CSA, the Obama administration's three-year old program designed to weed out as many as 150,000 unsafe drivers, is still plagued by technical oversights that carriers say unfairly penalize truckers for offenses that they have little control over. "CSA is a great system fundamentally, but it's seriously flawed," says Pitt Ohio's Hammel. "Until the flaws are addressed and corrected, it will not work as designed."

Electronic onboard recorders are the next regulatory hill for truckers to climb. They're designed to prevent drivers from cheating on HOS and are backed by most of the large LTL carriers.

"We have all of our power units equipped with them and have for the past few years," adds Hammel. "But some carriers are struggling to raise the capital to bring their equipment up to the regulation, and they're beginning to run out of time."

As for how carriers are responding to higher costs associated with the Affordable Care Act and other government initiatives, Hammel says that "most carriers are just complying to the new regulations, some are selling their company, and the rest are closing down operations."

Bill Logue, president and CEO of FedEx Freight, is pushing heavily for regulations that would allow 33-foot trailers instead of the current 28-foot "pups" currently used by LTL carriers in combination vehicles. If FedEx and UPS LTL and parcel units could utilize that equipment, Logue says that truckers would travel some 600 million fewer miles, saving 100 million gallons of fuel. Use of 33-foot trailers would mean an 18 percent rise in capacity using the same number of trucks.

"That's a safer environment," says Logue. "Between LTL and parcel, that's a huge opportunity. You just can't double the volume out there on highways. Ocean has megaships coming, rail uses doublestack trains, and air has wide-body aircraft. Yet, we have an industry moving 70 percent of commodities, and we have to find ways to be more efficient."

Logue's dream of 33-foot trailers is a long shot. But given that Congress again will revisit an extension of the Interstate highway funding bill next May, it's possible that trucking lobbyists could get that language inserted in such a measure. "The short-term extension gives us time so everybody can understand the situation so we

"Between LTL and parcel, that's a huge opportunity. You just can't double the volume out there on highways. Ocean has megaships coming, rail uses doublestack trains, and air has wide-body aircraft. Yet, we have an industry moving 70 percent of commodities, and we have to find ways to be more efficient."

—Bill Logue, president and CEO, FedEx Freight

can continue to educate everyone on the importance of trucking," Logue says. "We need efficiency improvements."

Logue has a point. There have been no productivity improvements in trucking since the Surface Transportation Assistance Act of 1982 allowed greater use of longer combination vehicles (LCVs) in exchange for a nickel rise in the fuel tax that year. LCV use has been frozen since 1993, and only allowed on interstates where they were allowed prior to that year.

When asked whether LTL carriers would back an increase in the fuel tax in exchange for greater use of LCVs, Logue said that it's a very realistic solution. "The fuel tax is most efficient way to capture it. It's very efficient, and that's the ideal way to go. The crisis is today, and we need to solve it today; otherwise, you're putting more tonnage on same amount of capacity."

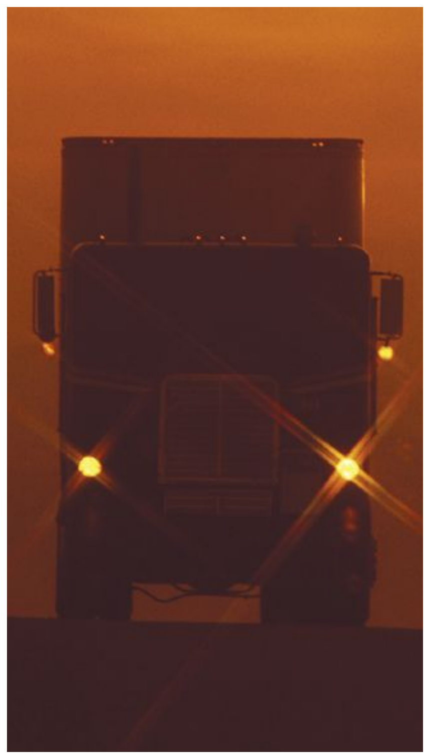
Driver pay pressure

Con-way, the nation's second-largest LTL carrier, recently raised driver pay by about 6 percent at both its LTL and TL units. That was in response to what Douglas Stotlar, Con-way's CEO, calls "the most pronounced driver shortage we've ever seen."

Trucking analyst David Ross at Stifel Inc. says that he does not believe Con-way's move will be matched by other public LTL carriers. He noted that ABF and YRC have union contracts that will not change, while Old Dominion and Saia are already planning on giving normal annual wage increases and do not seem to have any "catch-up" increases to make.

Ross adds that TL carriers should continue to see "much more significant driver pay pressure" than the LTL market because TL wage levels are significantly lower. Still, the underlying issue of demographics, the trucking industry's inability to attract minorities and women, and the tough nature of the job are limiting new entrants into the truck driving field, including LTL carriers.

A changing regulatory environment such as the one LTL carriers are facing today "tends to have a negative impact on the driver pool," says Averitt's Pierce. "More veteran drivers are leaving the industry before they're ready to retire, making it even more challenging to find qualified drivers," he says. "Carriers are under pressure to recruit and retain drivers, and that's as competitive an environment—or more competitive—as securing new business."



Pierce adds that driver retention is just as important as recruiting. Some 10 percent of Averitt's work force has been with the company at least 20 years. To increase that percentage, it recently began a Driver Advisory Council to offer feedback on what's going on out on the road and how it can help drivers succeed.

If the LTL tonnage remains as strong as it is presently, analyst Ross says that any driver wage increases should be covered by higher rates in 2015, including the recent raises at Con-way Freight.

Where are rates heading in 2015?

Analyst Ross says that as long as LTL carriers remain disciplined on capacity additions, and the U.S. industrial economy remains strong, the LTL sector is well positioned to continue expanding margins due to both operating leverage benefits from increased density and higher freight rates.

"Rates are a product of capacity," Pierce adds. "It looks like LTL volumes will continue in an upward trend in 2015 and rates will continue to be firm in the upcoming year."

No matter how one slices it, demand is up for LTL services while capacity is static. There have been no major entrants in the LTL market place since FedEx and UPS entered the sector in the early 2000s. And those players currently in the LTL space are not adding significant capacity due to the cost of building or acquiring terminals and the scarcity of drivers.

"Due to ongoing driver shortages fueled by restrictive regulations, industry capacity will likely continue to be tight in 2015," ABF's Slagle adds. "However, our perspective is that this issue most directly affects truckload carriers."

"Capacity is shrinking while demand is growing," Pitt Ohio's Hammel says. "Driver shortages, business shutdowns, and an improving economy are creating the current environment. I don't see any short-term fix."

When all the factors are added up, analysts and industry executives believe that the inevitable conclusion is that LTL rates will rise significantly in 2015—on top of the mid-single digit percentage increases this year. "Carriers have no choice but to continue to increase rates to cover these increased costs," adds Hammel.

John D. Schulz is a Contributing Editor to Logistics Management

Reaching new service heights

The editorial staff of *Logistics Management* was thrilled to offer the logistics and transportation community the results of the 31st Annual Quest for Quality Awards in our August issue (logisticsmgmt.com). This year a record of 155 providers of transportation and logistics services received the ultimate vote of confidence, posting the highest scores across our lists of critical service criteria. The winners officially accepted their awards on September 24 at the San Antonio Grand Hyatt.

Following cocktails, dinner, and the awards presentation, our guests were treated to a performance by comedian Greg Hahn. Hahn is a favorite on the nationally syndicated *Bob and Tom Show* and has appeared on the *Late Night* with Conan O'Brien, Comendy Central, and more.

For over three decades, *Logistics Management*'s Quest for Quality has been regarded in the transportation and logistics industry as the most important measure of customer satisfaction and performance excellence. To determine the best of the best, *Logistics Management* readers rate carriers, third-party logistics (3PL) service providers, and U.S. ports strictly on the basis of service quality.

Quest for Quality winners are voted on by the readers of *Logistics Management*—the customers that put these carriers and providers to the test around the clock in countries throughout the world. If fact, this year we had 7,451 logistics and supply chain decision makers place their vote during this six-month research project.

LM EXCLUSIVE Quest for Quality Wrap Up

▲ Southwest Airlines Cargo put up top marks in all six Air Cargo attribute categories.

▲ Southwest Airlines Cargo wins Quest for Quality Gold for serving up top service in the air.

▲ Holland took home Quest for Quality awards for both South/Southcentral LTL and Midwest/North Central LTL.

▲ Honored guests and *LM* staff enjoyed cocktails and dinner before the awards presentation.

Reddaway claimed their Quest for Quality award in the Truckload Expedited Motor category.

New Penn took home Quest for Quality gold in Northeast Less-than-truckload and Truckload Expedited Motor.

This year's entertainment, comedian Greg Hahn. A favorite on the nationally syndicated *Bob and Tom Radio Show*, Greg has appeared on *Late Night with Conan O'Brien*, Comedy Central, CBS, ABC, FOX, MTV and CMT.

This year a record number of winners officially accepted their awards at the San Antonio Grand Hyatt.

Quest for Quality 2014 Winners

To read the results and see all the winners in the 2014 Quest for Quality Awards, go to **www.logisticsmgmt.com/q4q14**

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.

When port partnerships make sense

In an unprecedented move to strengthen the Puget Sound gateway, the ports of Seattle and Tacoma plan to unify marine cargo terminal management. Dubbed "The Seaport Alliance," the new partnership will also align cargo terminal investments and operations along with planning and marketing.

Taken together, marine cargo operations at both ports support more than 48,000 jobs across the region and provide a critical gateway for the export of Washington state products to Asia. "We must make it clear that this is not a merger," says Tara Mattina, the Port of Tacoma's communication director. "The Alliance was created to compete for more cargo on a regional basis."

One aspect of the deal that remains to be addressed, however, is the impact it will have on dockside labor. No mention of this issue was made in either statement by the ports. For the time being, however, both gateways have framed the alliance as nothing but a positive move.

"Where we were once rivals, we now intend to be partners," says Stephanie Bowman, co-president of the Port of Seattle Commission. "Instead of competing against one another, we're combining our strengths to create the strongest maritime gateway in North America. The Seaport Alliance is the result of our shared commitment to maintaining the economic health of our region through a thriving maritime industry."

The Seaport Alliance is the outgrowth of talks held under the sanction and guidance of the Federal Maritime Commission (FMC), the independent federal agency responsible for regulating the U.S. international ocean transportation system.

Subject to further FMC review and approval, the two port commissions will enter into an "Interlocal Agreement," which is intended to provide the ports with a framework for a period of due diligence to examine business objectives, strategic marine terminal investments, financial returns, performance metrics, organizational structure, communications, and public engagement. Following the due diligence period, the two port commissions intend to submit a more detailed agreement for the Seaport Alliance to the FMC by the end of March 2015.

During the due diligence period, John Wolfe, CEO of the Port of Tacoma, and Kurt Beckett, deputy CEO of the Port of Seattle, will co-lead the planning work and coordinate with the two port commissions. Both ports expect to hold a public meeting next spring to hire Wolfe as the CEO of the Seaport Alliance following the FMC's approval of the agreement.

Might Pacific Northwest shippers expect more alliances of this type? The Port of Vancouver, Wash., had once made overtures to the Port of Portland for a similar arrangement, but that concept never gained sufficient traction. According to Josh Thomas, Portland's marketing and media relations manager, there's a variety of reasons for this.

"We've worked cooperatively on issues in the past, but there has never been a plan to merge or consolidate the ports," says Thomas. "It would be a challenging proposition to say the least, given that the ports are located in different states with different commissions and governance and regulations."

Thomas says that when ports consider consolidation, the first consideration is what will be achieved for the hard work that goes into such an arrangement.

> **"The Seaport Alliance is the result of our shared commitment to maintaining the economic health of our region through a thriving maritime industry."**
>
> *—Stephanie Bowman, co-president, Port of Seattle Commission*

"Portland and Vancouver, Wash., already work cooperatively on issues of mutual importance and have partnered on joint marketing agreements," says Thomas. "Consolidation would require an act of Congress and bi-state involvement and approvals, costing time and money in what would be a lengthy process. There is a reason so few regional ports, especially in separate states, have consolidated, and there's no guarantee that it would gain efficiencies, produce benefits, or solve problems."

The two largest ports on the West Coast, meanwhile, have dodged any talk about consolidation since last April when a recommendation by the Los Angeles 2020 Commission to merge the operations of Los Angeles and Long Beach into a single, massive "megaport" was rejected by Long Beach city and port officials.

"We should be competing with ports in other regions, not with each other," the final report from Long Beach stated.

The next opportunity for Southern California stakeholders to voice their position on the issue may surface in January when the American Association of Port Authorities stages a one-day meeting in Long Beach comprising think tank "influencers," transportation officials, and one or more members of Congress. □

I KNOW

your shipments and how to handle them.
WE KNOW what it takes to get them there next-day.

New Penn, the next-day delivery leader with 98% on-time delivery service, has the regional know-how to ensure that your shipments are delivered on time. From the northeastern United States to Quebec, Toronto and Puerto Rico, New Penn is proud to be a Quest for Quality Award Winner for 20 years. Be in the know. Call **1.800.285.5000** or check out **newpenn.com/nextday** today!

NEW PENN