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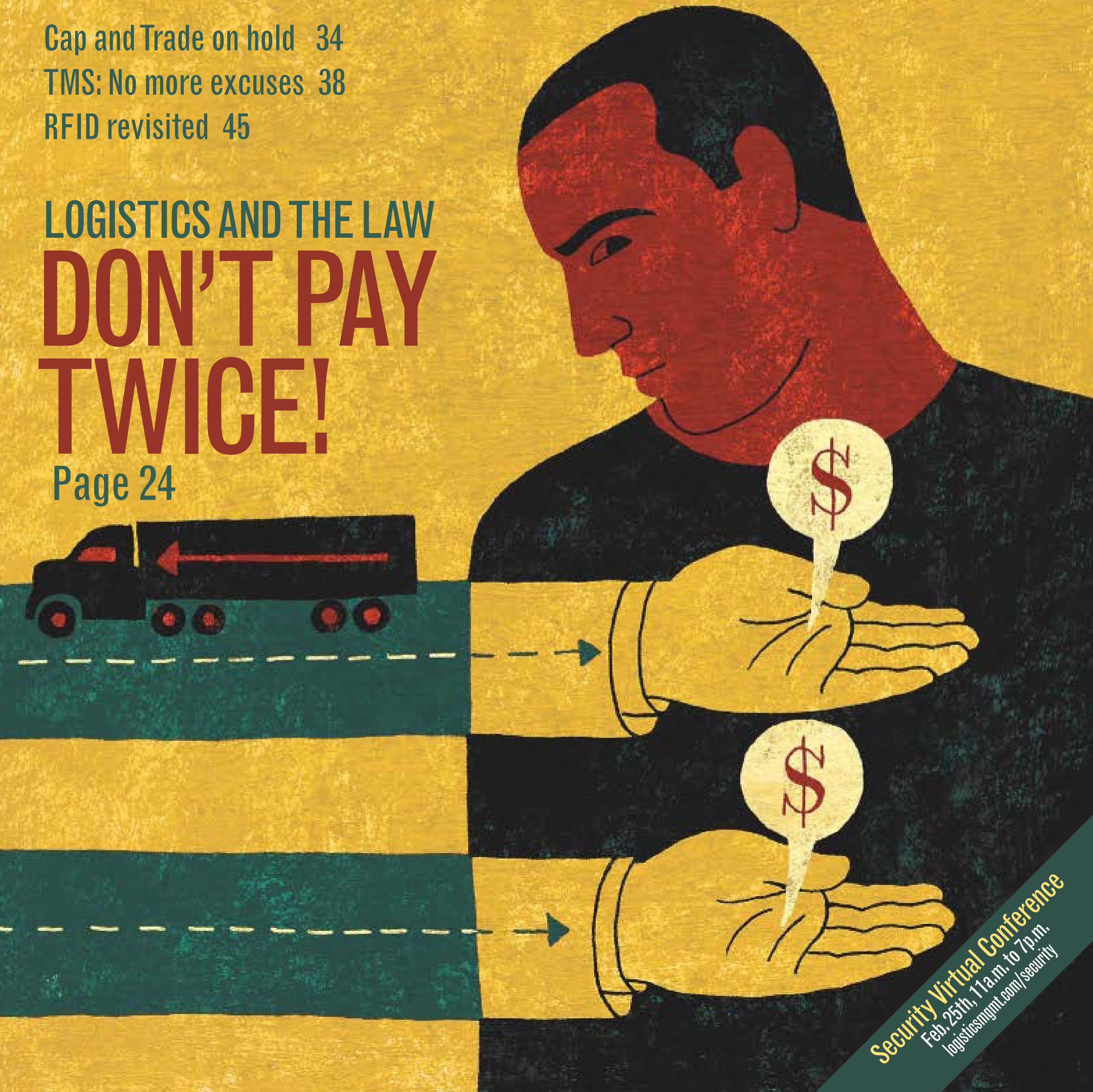

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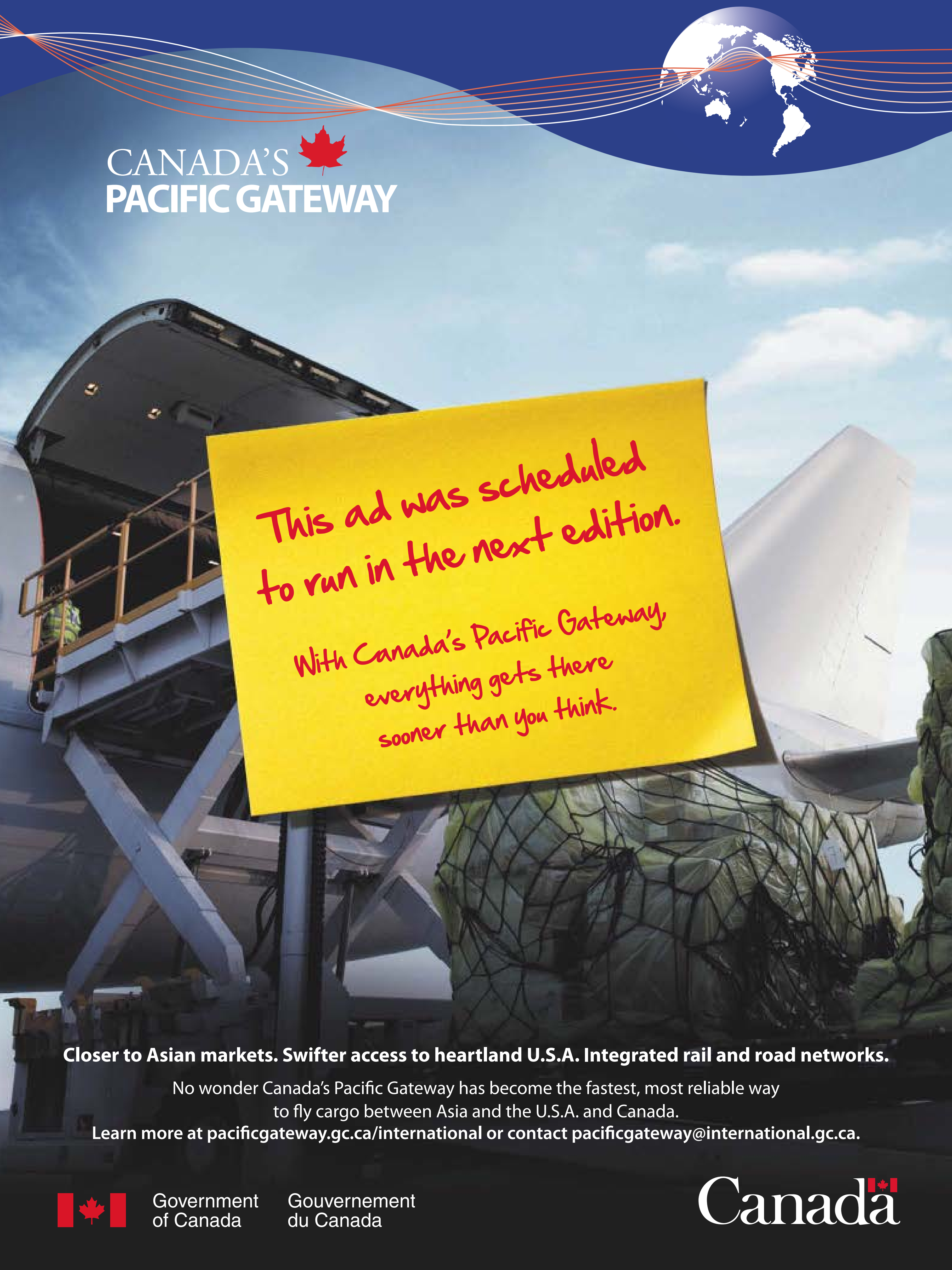
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Management UPDATE

AN EXECUTIVE SUMMARY OF INDUSTRY NEWS

Logistics concerns step up in Haiti relief efforts. Following the tragic events of the January 12 earthquake in Haiti, various transportation and logistics organizations and providers have taken steps to offer aid in various ways. Some of those helping out included the American Logistics Aid Network (ALAN), an organization that serves as a primary point of industry contact for disaster relief support; UPS contributed $1 million to support earthquake relief efforts through the UPS Foundation, its charitable arm; FedEx collaborated with designated charitable relief organizations to help ensure that aid was on the way, as well as provide transportation services for the American Red Cross, Heart to Heart International, Direct Relief International, and Water Missions; and Crowley Maritime Corporation reported that it's ready to ship emergency supplies and needed cargo as soon as port conditions allow.

Trucking tonnage ends 2009 on a positive note. While freight volumes largely remain down, the American Trucking Associations (ATA) reported that its advanced seasonally-adjusted (SA) For-Hire Truck Tonnage Index edged up 2.1 percent in December, coming on the heels of a 2.6 percent November gain. While the year ended with decent momentum, the ATA said that the SA index was down 8.3 percent for all of 2009—its largest annual decrease since the 12.3 percent drop in 1982.

West Coast ports on rebound. Reversing a precipitous, extended trade decline, Southern California's two major seaports reported the first increases in monthly container cargo numbers in two years. In an unexpected surge at the Port of Long Beach and Los Angeles, imported cargo increased by more than 13 percent in December 2009 from the same time period a year ago while exports jumped more than 30 percent. "These numbers are far better than expected and may very well be the first signs of an economic recovery," said Port of Long Beach Executive Director Richard Steinke. "We are cautiously optimistic that this marks the beginning of an ongoing, upward trend." The Port of Seattle also reported an influx of containers in December, but the Port of Oakland saw a decline in container throughput, though only by 8 percent. And at the same time, Oakland's outbound volume increased 6.5 percent.

NRF calls for better retail performance in 2010. Recent data from the National Retail Federation (NRF) is calling for a 2.5 percent gain in 2010 retail sales—excluding automobiles, gas stations, and restaurants. In its quarterly Retail Sales Outlook, the NRF cited the housing market and unemployment showing "positive signs" which could bolster consumer confidence throughout 2010. The organization also noted that other positive economic contributions will come from trade, especially strong exports, a turnaround in the inventory cycle, and federal government spending. "As we continue to see signs of improvement throughout the U.S economy in 2010, overall sentiment will begin to lift, making way for slight increases in consumer spending," said NRF Chief Economist Rosalind Wells.

Lunar forecast is strong. In anticipation of the "Year of the Tiger," transpacific carriers are bracing for a temporary surge in shipper

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Management UPDATE

continued

demand. The downside: Shippers may have to pay more. A record turnout of shippers at the annual National Retail Federation (NRF) meeting seemed to signal confidence that 2010 will be an economic turning point. A prominent carrier executive suggested that the Lunar New Year may be even more auspicious. In his general session address at the NRF conference, Peter Keller, executive vice president and CEO of NYK Line (Americas), said that he expects an "early peak" in mid-February, coinciding with the celestial cycle. "If the demand continues after the Chinese New Year, we all have lots of ships that we can throw into the mix relatively quickly," he said. This has given carriers participating in the Transpacific Stabilization Agreement's planned rate hike confidence, too.

■ **Job hunt is on.** After major layoffs and hiring freezes during 2009, there's growing optimism for renewed jobs in the logistics and manufacturing sectors in 2010. "Many of our clients are expressing confidence in the economy and planning increased hiring for 2010," said Don Firth, president of JobsInLogistics.com. "During these last two months, contracts for job postings and resume search services with us have increased by more than 45 percent over the same period of 2008," Firth said, adding that late last year, many clients were purchasing small job posting packages to fill essential positions only. "The recession meant that companies were going to stay 'lean and mean.' But we see that trend being reversed." According to Firth, increased confidence by the retail industry has a domino effect on the whole supply chain, including manufacturers, importers, distributors, 3PLs, and transportation companies.

■ **Could the storm be passing?** CSX Corporation issued some slightly encouraging news late last month when it announced its fourth quarter earnings. In a statement to shareholders, Michael Ward, chairman, president, and CEO, said that he believes "the worst of the recession is likely behind us." Fourth quarter revenues of $2.3 billion were down 13 percent from the prior year, primarily due to a 7 percent decline in volume and lower fuel surcharge recovery. At the same time, core pricing remained strong and consistent with prior quarters, reflecting high service levels and the overall value of rail transportation. While volumes declined across the business, the rate of decline continued to slow in nearly all markets compared to the second quarter. More importantly, said analysts, is that CSX continued to improve its network efficiency and safety while reducing operating costs by 20 percent compared to the same period last year.

■ **Wal-Mart set to make significant supply chain savings.** A *Financial Times* report indicated that Wal-Mart plans to cut billions of dollars from its supply chain by combining its store purchasing and consolidating global sourcing across geographic regions. The report said this is part of Wal-Mart's push to increase the proportion of goods it buys directly from manufacturers, rather than by third-party procurement companies or suppliers. A Wal-Mart executive said in the report that this shift to direct purchasing could reduce overall costs by 5 percent to 15 percent across the company's supply chain within five years, with potential savings of $4 billion to $12 billion if it meets its goal of sourcing 80 percent of purchases directly.

■ **DHL to donate former Air Park.** DHL said last month it has reached a preliminary agreement with the Clinton County Port Authority (CCPA) to donate its former DHL Air Park in Wilmington, Ohio, to the local Wilmington community. Company officials said the air park will be redeveloped for future use as an airport/commerce park. This news comes nearly six months after DHL moved its U.S hub operations from Wilmington to the Kentucky-based Cincinnati/Northern Kentucky International Airport. CCPA officials said that it plans to lease a portion of the air park to ABX parent Air Transport Service Group (ATSG).

■ **Security void in the air.** In response to the withdrawal of Errol Southers' nomination

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Management UPDATE

continued

for Transportation Security Administration (TSA) Administrator, shippers were asking for leadership. "Errol Southers' withdrawal from consideration is a worrisome development for the air cargo industry," said Brandon Fried, executive director of the Airforwarders Association (AfA). "While we appreciate the concerns regarding TSA unionization, the absence of permanent leadership in the most senior position at TSA for more than a year has the potential to imperil many programs currently underway at TSA." Fried noted that the deadline for screening 100 percent of air cargo on passenger planes is this August, just six months from now. Given the extensive resources and planning necessary to meet this critical mandate, he said it is imperative that a new TSA administrator be nominated and approved as quickly as possible.

■ **Capacity drop.** The active capacity of the world's leading ocean cargo carriers dropped by 2.4 percent over the last 12 months. According to a new report issued by ASX-Alphaliner, capacity management has become the key to restoring the industry to profitability in 2010. "Although the total operated fleet of the top 20 carriers increased by 1.6 percent since 2009, the effective capacity dropped due to an increase in the idle fleet," said ASX analysts. They also noted that the combined capacity of the top 20 carriers reached 10.81 million twenty-foot equivalent units (TEU) on January 1, 2010, compared to 10.63 million TEU in January 2009. The idled capacity of these carriers currently stands at 743,000 TEU, representing 6.9 percent of the carriers' operated fleet.

■ **FRA, DOT sign off on positive train control mandate.** U.S. Transportation Secretary Ray LaHood and Federal Railroad Administrator Joseph Szabo stated that historic regulations requiring positive train control (PTC) technology must be installed on major U.S. rail lines. The objective of PTC systems is to prevent train-to-train collisions, overspeed derailments, and incursions into roadway work limits. PTC systems utilize technologies including digital radio links, global positioning systems, and wayside computer control systems that aid dispatchers and train crews in safely managing train movements. A mandate for PTC systems was included in House and Senate legislation-H.R. 2095/S. 1889, The Rail Safety and Improvement Act of 2008. The legislation was passed shortly after a September 2008 collision between a freight train and a commuter train in Los Angeles.

■ **Damco strengthens security offering.** Damco a freight forwarding and supply chain management service provider, has announced a strategic partnership that may give it a boost in emerging markets this year. Having selected Savi Networks' Savi-Trak wireless tracking intelligence service, Damco is hoping to improve the visibility, security, and safety of global container shipments for its shippers. Steve Sewell, senior vice president of networks and business development for Savi Networks, noted that the company will incorporate GPS, satellite, and GPRS (cellular) technology into its logistics service offerings to provide real-time, automated intelligence on the location and status of customer shipments.

■ **Impotent response.** The Chamber of Shipping of American (CSA) expressed its frustration at the "seeming impotence" of the international community to address the continuing piracy crisis in the Indian Ocean. "Over 50 ships were pirated in 2009 around the Horn of Africa and over 1,000 seafarers taken hostage," said Joseph Cox, president of the CSA. Currently, there are over 20 ships being held with over 200 seafarers and their families affected." Cox added that the current unacceptable situation puts seafarers lives at risk on a daily basis—with Somali pirates still operating with impunity. "There is a growing concern among the national ship owner associations that the international community is not actively seeking to eliminate piracy and is instead treating the current level of attacks against shipping as somehow tolerable," Cox added.

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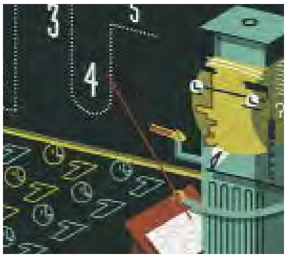
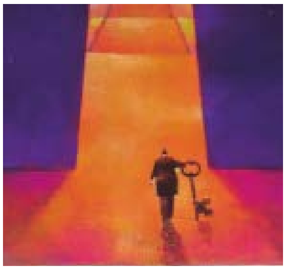
cover illustration by James Steinberg



LTL costs 30



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2010 Rate Outlook: Be on the lookout for subtle rate hikes

While the economic recovery will be slow in coming, our panel of transportation analysts and economists tell us that shippers should keep their eyes open for early signs of rate hike activity in the first half of 2010.
logisticsmgmt.com/2010outlook

Transportation Sourcing 2010: More than just buying freight services

The transportation landscape has lent itself to cost reductions due to the abundance of capacity. Many companies have decided to go to market with their transportation spend to align cost with service. In many cases, they have found the process too cumbersome at best. With access to innovative technologies and transportation networks, shippers are finding Do-It-Yourself (DIY) Transportation Procurement Applications to be an easier way to generate significant savings.
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bears repeating...

"Economic problems still persist, and the most significant [problem] is a weak labor market. We expect the economy to continue to expand this year at a moderate pace...of up to 3 percent."

— Rosalind Wells, National Retail Federation, Chief Economist

this month's fast facts

1. **The American Trucking Associations** reported that its seasonally-adjusted truck tonnage index was up 6.6 percent year-over-year in December 2009 for its first annual gain since September 2008.
2. **U.S. railroad volumes in 2009** were down 16.1 percent from 2008 and 18.2 percent from 2007, according to data released by the Association of American Railroads (AAR).

If you weren't online, you missed this...

SMC3 Winter Conference speakers state that legislation calling for Cap and Trade is far from a done deal.

blog takeaway

"In addition to the lack of a national energy policy, this country also lacks a national transportation policy and this has significant ramifications. Our old highway bill, SAFETEA-LU, expired on September 30, 2009. The government is funding our highway programs with supplemental appropriations. The Chairman of the House Transportation Committee Rep. Oberstar and other members of the Committee would love to pass a new Highway Bill that would create jobs and address critically important infrastructure issues. Unfortunately, the Senate and the Administration are in no hurry to pass new highway legislation."

"Next year is today"
Mike Regan, January 26, 2010
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Good economic vibrations

Like many savvy shippers, I tend to lean more toward the skeptical side. I need to see something before I believe it.

Well, if I were to share a quick, gut-level observation from my time walking the National Retail Federation's (NRF) 99th Annual Conference and Expo in New York last month, it would be that the economy just may be picking up. In fact, I would go as far as saying that the mood in the Jacob Javits Center—which was packed with a near-record number of retailers (up 17 percent from 2009)—was downright lively.

Booths were busy, some like bee hives, and you often needed to avoid the main aisles to steer clear of traffic jams. The buzz seemed to be generated by the NRF's early prediction of a 2.5 percent gain in 2010 retail sales after a 2.5 percent drop in 2009.

We may see a 3 percent to 4 percent uptick in retail in 2010, thanks in part to improved logistics and supply chain management.

Mark Zandi, chief economist and cofounder of Moody's Economy.com, put a charge into the morning keynote session. Typically one of the dreariest of the "dismal scientists," Zandi was cautiously upbeat, saying that he thought that we may see a 3 percent to 4 percent uptick in retail in 2010, thanks in part to improved logistics and supply chain management.

"I base this on the fact that many big retailers did a terrific job of supply chain re-engineering over the past year," Zandi said. "Getting a better handle on inventory levels over this time has helped put retailers in a better position to succeed."

Zandi's uncharacteristically upbeat takeaways were reinforced on the show floor by news that the NRF's Port Tracker report (which tracks container volumes in the nation's ports) was about to reveal some positive signs after being down for 28 consecutive months. As Group News Editor Jeff Berman explains on page 20, the report is pointing to a promising future in the coming months, with double-digit TEU volume growth predicted for February through May at some of the nation's biggest ports.

Now, I realize that a lot of this buzz I just shared is loosely based on speculation, conjecture, and a hearty dose of intuition. But it felt good to be hit by positive vibes—and considering that we were surrounded by some of nation's leading economic bellwethers made it all the more encouraging.

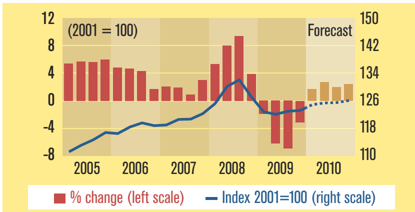
If you're looking for a few more rays of sunshine, I highly suggest that you give our Management Update pages a good read. This month's collection of short items gathered from our daily news reporting on **logisticsmgmt.com** reveal a few more pleasant surprises.

Editor's note: In the latest installment in our Logistics and the Law series, our legal expert, Brent Primus, continues the educational mission of the late transportation legal guru Bill Augello by raising awareness of the "double-payment problem" that's occurring with more frequency when shippers work with brokers (page 24). Primus explains the three variations of the problem that have emerged, and offers a few suggestions for avoiding—or at least minimizing—the risk.

Michael A. Levans, Group Editorial Director

Comments? E-mail me at michael.levans@reedbusiness.com

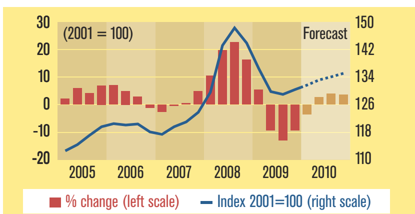
Pricing Across the Transportation Modes



% CHANGE VS.:	1 month ago	6 mos. ago	1 yr. ago
General freight - local	-0.2	0.5	-0.1
Truckload	-0.1	0.5	-2.8
Less-than-truckload	-2.5	-3.8	0.1
Tanker & other specialized freight	0.3	1.4	-0.6

TRUCKING

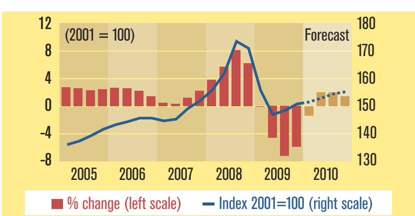
For December 2009, the BLS reports average transaction prices charged by U.S. trucking companies dropped 0.4% from a month ago and fell 1.3% from the same month a year ago. That occurred despite the fact that in December the ATAs' truck tonnage index jumped 6.6% from the same month a year ago. The fact that truck tonnage picked up but prices did not reflects the severity of the recession of 2008-2009. The rate of increase in truck tonnage is expected to be slow in coming months, and trucking prices will rebound slowly too. After plunging 6.9% in 2009 we forecast TL tags to increase 1.9% in 2010. Following a 2% annual price cut in last year, TL prices will pick up 2.5% in 2010.



% CHANGE VS.:	1 month ago	6 mos. ago	1 yr. ago
Scheduled air freight	2.9	3.3	-7.2
Chartered air freight & passenger	-0.1	6.1	-6.8
Domestic air courier	2.3	5.8	3.9
International air courier	2.3	2.5	1.3

AIR

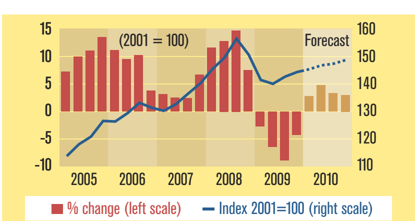
U.S. airliners have hiked prices in interesting ways. For passengers, it was a baggage fee. So, it shouldn't come as a surprise that, despite the recession, shippers who flew cargo (excluding mail) on scheduled flights faced a 3.1% price hike from November to December. Compared to December 2008, however, those prices remained down 7.6%. Nonscheduled air freight chartering on domestic flights, meanwhile, cost shippers 2% more than a year ago, while on international flights, prices plunged 23.2%. Prices charged by U.S. airlines flying cargo on scheduled flights fell 12% from their fuel-surcharge-infused price peak set in Q3 of 2008 to Q4 of 2009. By the end of 2010, those prices will regain only 3.6%



% CHANGE VS.:	1 month ago	6 mos. ago	1 yr. ago
Deep-sea freight	0.4	4.1	-15.3
Coastal & intercoastal freight	-0.5	0.8	-1.5
Grt. Lks.-St. Lawrence Seaway	0.4	0.6	-3.1
Inland water freight	0.9	2.5	-11.2

WATER

Inland water freight transportation providers led the way in the final month of 2009 with a 0.9% one-month price hike. Alas, like all in the U.S. water transportation industry, it will take one heck of an economic recovery or boiling cost pressures before prices once again return to 2008 levels. From their respective price peaks in 2008 to the last quarter of 2009, average prices charged by inland water carriers fell 14.7% and deep sea transportation plunged 21.4%. By the final quarter of 2010, we forecast inland water and deep sea price tags will come back up only 4.6% and 3.7%. Looking at the aggregate water transportation price trends, prices fell 13% from 2008 peak to year-end 2009 and will bump up 2.9% by the final quarter of 2010.



% CHANGE VS.:	1 month ago	6 mos. ago	1 yr. ago
Rail freight	0.0	2.2	-1.7
Intermodal	-0.5	2.1	-0.7
Carload	0.1	2.4	-1.8

RAIL

Mirroring the recession hit that truckers have endured, intermodal rail carriers also have seen pricing power disappear. In the past year, intermodal rail prices plunged 8.8% in Q1, 15.2% in Q2, 15.1% in Q3, and ended in Q4 down 5.7%. By the time the entire year was over, intermodal rail tags had fallen at an unprecedented 11.4% annual pace. Carload rail carriers likewise suffered four quarters of price cuts, albeit not as deep as intermodal. Carload rail prices registered a 5% annual price decline for in 2009. Looking forward, we cautiously predict average rail industry transaction prices will rebound, though slowly, ending 2010 with annual price hikes for intermodal and carload of 4.0% and 3.2%, respectively.

Source: Elizabeth Baatz, Thinking Cap Solutions. E-mail: ebaatz@alertdata.com

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- ATA Chairman: Truckers should look at how they do business
- Port Tracker report says positive volumes on the horizon
- 2009 3PL revenue down 15.2 percent year-over-year

Increased spending on infrastructure "essential" to economic recovery

U.S. Chamber of Commerce CEO Donohue says intelligent investment in infrastructure projects could literally pave the way for a sustained economic rebound as the country seeks efficiencies from its transportation network to compete in the global economy.

By John D. Schulz, Contributing Editor

WASHINGTON—Saying America's infrastructure is "running out of capacity," the nation's top business lobbyist says it's time to boost public investment in highway, bridge, rail, and air projects now to help catapult the country out of the worst recession in 70 years.

Speaking at the U.S. Chamber of Commerce's annual "State of American Business" outlook in Washington last month, U.S. Chamber of Commerce President Thomas Donohue said intelligent investment in infrastructure projects could literally pave the way for a sustained economic rebound as the country seeks efficiencies from its transportation network to compete in the global economy.

"To meet our infrastructure needs, we need to boost public investments while working to ensure that the money is spent wisely in areas of genuine need," Donohue said, predicting a 3 percent growth in Gross Domestic Product in 2010. "Reauthorization of the nation's core highway bill is essential."

Renewal of the federal-aid highway reauthorization bill has been stalled in Congress since the previous five-year, $286 billion bill expired last Sept. 30. Instead of passing a bill that would double that spending, Congress has instead punted and passed a stop-gap bill at the old law's spending levels, which transportation experts have said is too low to meet current infrastructure spending needs.

"I'm not sure they've punted, but they've done a lot of things that haven't helped," Donohue said.

The common misperception in Washington is that the U.S. Chamber is opposed to all taxes. In fact, Donohue has led the charge for higher "user fees" on the federal tax on fuel that last was raised in 1994 and is currently at 23.4 cents for diesel and 18.4 cents per gallon of gasoline. Some trucking executives are backing Donohue, who formerly ran the American Trucking Associations.

"They (lawmakers) would do better to increase the federal fuel tax that hasn't been changed in 16

INFRASTRUCTURE, *CONTINUED*

years," Donohue said, adding that it's politically feasible because he called it "a user fee, not a tax." The Chamber has called for up to a 25-cent increase, perhaps increased in stages, to help fund badly needed infrastructure projects.

"If we did that, we would do serious road, bridge, and transport efforts," Donohue said. "That would create a lot of jobs."

For shippers, an increased fuel tax would be a mixed blessing. Eventually, shippers would enjoy greater efficiencies from a more modern transport network. But they also would see higher fuel surcharges, which may or may not ultimately be passed through to their own customers.

Regarding bridge and highway spending, Donohue said the nation is "doing a lot of things to hurt ourselves. It's got all sorts of politics, and we're making a serious mistake."

Bruce Josten, executive vice president for government affairs at the U.S. Chamber, specifically criticized Congress' series of 90-day extensions of legislation for infrastructure spending at current levels, saying that they don't meet current needs or keeps up with inflation.

"These constant three-month extensions, kicking the can down the road, just fuels uncertainty," Josten said. "What do you do if you're a governor? How much is going to come [from Washington]? We have absolutely screwed up one of the most obvious things that could help the recovery."

Josten said increased spending on infrastructure reduces costs, accelerates supply chain management, helps just-in-time delivery systems, and modernizes the American transportation network. "We have locks on Mississippi that are 50 years old," Josten said, incredulously.

In one aspect, Donohue said, the nation caught a break with the worst recession in decades. That's because the lack of economic activity actually masked the country's infrastructure needs across all modes and industries.

"If we had not had this recession we would have run into a wall on ports and highway capacity, broadband, and electrical grid capacity," Donohue said.

But the process of building roads and bridges takes too long and should be streamlined, he said.

"The Federal Highway Administration has estimated it takes 13 years to build a substantial highway project. But there are hopeful signs that the U.S. economy is improving," Donohue said. L

TRUCKING REGULATION

FMCSA looking for uniformity, enforceability in HOS rules

WASHINGTON—The federal government is asking for industry and citizen input in devising truck driver hours of service (HOS) regulations that can be enforceable, productive, and can sustain court challenges.

Judging from comments at one of the public outreach sessions, the government is getting an earful on the nitty-gritty on how to write such regulations.

"We want to reach out to everybody and get as much input as possible—the good, the bad, and the ugly," said new Federal Motor Carrier Safety Administration (FMCSA) Administrator Anne Ferro at the agency's outreach session on Jan. 19 in Arlington, Va.

There were scores of affected groups representing carriers, drivers, law enforcement personnel, and just plain citizens who generally voiced support for the current rules. At least four such outreach sessions were planned around the country in January, including one in Davenport, Iowa, next to the Flying J truck stop on Interstate 80.

Ferro said her agency was looking to promote three core priorities in the latest HOS rewrite: raising the bar to entry to the trucking industry; maintaining high safety standards; and removing high-risk drivers.

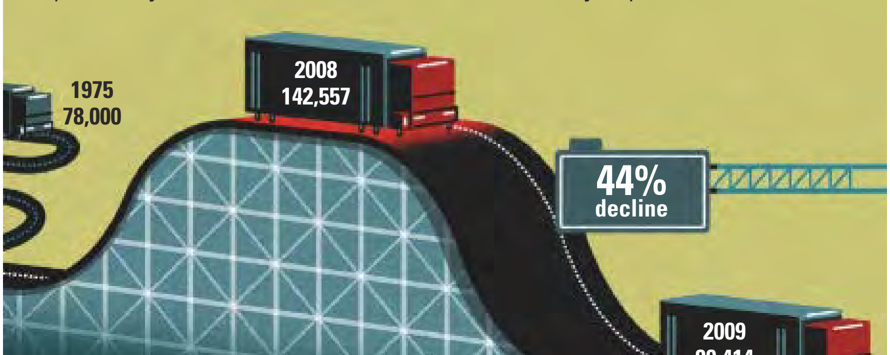
"We owe it to the public to do better than we've been doing," Ferro remarked.

FMCSA has no other choice. This latest rewrite was a result of a court settlement last Oct. 26 between FMCSA and Public Citizen, the Teamsters union, and other advocacy groups

News Capsule

Trailer shipments bottom out in 2009

Last year's commercial trailer factory shipments–at 80,414–dipped 44 percent year-over-year compared to 2008's 142,557, according to data from ACT Research Co., a publisher of commercial vehicle industry data. What's more, this represents the lowest shipment tally since 1975, when commercial trailer factory shipments hit 78,000 units.



Source: ACT Research Co.

TRUCKING REGULATION, *CONTINUED*

who had challenged the rule in courts. Under those rules, truck drivers get 14 hours to drive 11 hours following 10 straight hours off duty. Drivers are limited to 60 hours driving in seven days or 70 hours in eight days. Any period of 34 straight off hours "resets" a driver's work week.

FMCSA has until mid-summer to issue a proposed rulemaking to the DOT. Public comments are currently being sought. The FMCSA advisory committee hopes to have an outline of its proposal in letter form to FMCSA by spring. A final rule is required by law to be issued by 2012—the current rule remains in effect until then.

Motor carriers, by and large, would like to keep the HOS rules as they are. They say that they are working well, are based on sound science, have worked to improve highway safety, and any change would be costly. Schneider National, for instance, said it spent $6 million when it changed to the current HOS rules in 2004.

"The problem is not the rules," said Marsha VandeHei, Schneider's longtime director of regulatory compliance. "It is the adherence to the rules."

Any changes would ultimately cost shippers, as carriers say that they would try to pass on the additional costs through higher rates.

The latest rewrite of these rules were established in 2004 and have coincided with a downward shift in truck accident rates. The American Trucking Associations (ATA) says the trucking industry's truck fatality rate is at its lowest since the DOT began keeping truck crash statistics in 1975.

Since 2004, the trucking industry is citing statistics that show truck-related fatalities have decreased by 19 percent, truck-involved injuries have fallen by 21 percent, and occupant fatalities down by 16 percent.

"Facts—not perceptions—must support these rules," said Dave Osiecki, the ATA's director of safety and operations, in support of keeping the current rules with some tweaking of the "split sleeper berth" provision that allows a driver more flexibility during his work day to achieve the required 10 hours off duty in a 24-hour period.

"In the real world of trucking, safety has improved the past six years under these rules," Osiecki said. "There is no doubt about that."

Osiecki added that the trucking industry has invested "hundreds of millions of dollars" in devising systems and operations that comply with the current HOS regulations.

"If the rules are changed again," Osiecki warned, "these industry investments will be huge, stranded costs." L

—John D. Schulz, Contributing Editor

TRUCKING'S FUTURE

ATA Chairman: Truckers should look at how they do business

ATLANTA—In a wide-ranging speech focused on various facets of freight transportation, American Trucking Associations (ATA) Chairman G. Tommy Hodges provided attendees at the SMC3 Winter Conference with a detailed overview of how economic and market conditions, as well as legislative headwinds, are effecting business operations for trucking carriers.

G. Tommy Hodges

Hodges explained that current economic conditions have forced transportation and logistics services providers to take a completely different look at how they do business. This was exemplified by the 4,053 trucking bankruptcies of carriers with ten trucks or more in the last seven quarters—not including the fourth quarter of 2009. This figure, he said, represents roughly 160,000 trucks that have left the marketplace.

"That is 160,000 loads a day that the marketplace let go of," said Hodges. "And more importantly that is 160,000 drivers that left the industry under not very good circumstances—that is a worrisome point as we start to look to the future."

On top of that, Hodges said large fleets—with more than 100 trucks—downsized by 9.1 percent during that same period. He explained that this level of exiting capacity puts the impact of the recession into perspective.

"Things have truly bottomed out," Hodges said. "It took us 35 years to get the supply chain narrowed down to where we could get the gross-macro inventory to sales range down to the 1.25 range. It used to be around 1.6 to 1.8, when carrying inventory used to be thought of as a good thing. But that changed as we speeded up the supply chain."

Hodges said that the recession began in earnest in the second half of 2007, but many economists predicted a quick recovery. That did not occur due in large part to near $5 per gallon diesel prices. This led to plunging retail sales and a significant inventory overhang for retailers as a slowdown was not anticipated ahead of time. This confluence led to the "perfect storm" for freight transportation, stated Hodges.

This led to too much inventory in warehouses, which was not moving because the American consumer stopped buying. "There went our load factors and our revenue, and we have been playing catch-up ever since," he said. "We spent all of 2009 adjusting our inventories and now we have hit the bottom. Unless something else comes along and we have a double dip [recession],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TRUCKING'S FUTURE, *CONTINUED*

we will continue to bounce along the bottom in a U-shaped recovery."

Before a true recovery takes hold, though, Hodges said it's likely there will be seasonal upticks and downticks until a true rebound occurs. These conditions, in turn, have led to the weakest pricing conditions the market has ever seen, according to Hodges.

"We are now pricing ourselves at unsustainable rates, and when that happens as an industry, your future is not too bright. But as a group, our industry is made up of problem solvers; it is in our DNA to figure this out," he said.

On the legislative front, Hodges said that there are multiple issues which have the potential to negatively impact the trucking industry.

> **"We are now pricing ourselves at unsustainable rates, and when that happens as an industry, your future is not bright. But as a group, our industry is made up of problem solvers. It is in our DNA to figure this out."**
> —ATA Chairman G. Tommy Hodges

Among these are Comprehensive Safety Analysis (CSA) 2010, a Federal Motor Carrier Safety Administration (FMCSA) initiative to improve large truck and bus safety and ultimately reduce commercial motor vehicle-related crashes, injuries and fatalities.

According to the FMCSA, CSA introduces a new enforcement and compliance model that allows FMCSA and its state partners to contact a larger number of carriers earlier in order to address safety problems before crashes occur. It's expected to be rolled out before the end of this year.

"This is a game-changer," said Hodges. "Life is going to be different in terms of how drivers operate. This will statistically monitor driver behavior like never before. L

—Jeff Berman, Group News Editor

CONTAINER VOLUMES

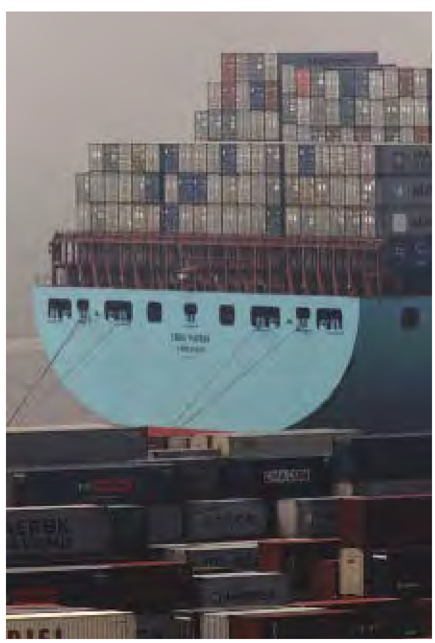
Port Tracker report says positive volumes on the horizon

WASHINGTON—Even though import cargo volume declines at major U.S. container ports have been down year-over-year for nearly 30 months, there are some indications that the trend may be coming to an end, according to the monthly Port Tracker report from the National Retail Federation (NRF) and Hackett Associates.

Volumes have been down for 28 consecutive months through November 2009—the most recent month for which data is available. November came in at 1.09 million Twenty-foot equivalent units (TEU), which was off 8 percent from October 2009, traditionally the busiest month of the year due to Peak Season, and 10 percent compared to November 2008.

While volumes were down again, the Port Tracker report is pointing to a promising future in the coming months, with December slated to hit 1.08 million TEU, a 1.7 percent annual increase, and January to come in at 1.15 million TEU, a 9 percent annual increase.

Looking further, February—typically the slowest month of the year—is expected to reach 1.05 million TEU, a 25 percent annual increase. March is



being pegged at 1.16 million TEU for a 21 percent increase, April is calling for 1.19 million TEU, a 20 percent annual hike, and May is predicted to hit 1.2 million TEU, a 15 percent annual bump.

The ports surveyed in the report include: Los Angeles/Long Beach, Oakland, Tacoma, Seattle, New York/New Jersey, Hampton Roads, Charleston, and Savannah.

"These numbers are a clear sign that retailers are optimistic about 2010," NRF vice president for Supply Chain and Customs Policy Jonathan Gold said in a statement. "Retailers are still going to be cautious with their inventories, but we wouldn't see these increases in imports if stores weren't expecting sales to improve. It's been a long time since we've seen year-over-year volume go up, so this is definitely good news."

And Ben Hackett, founder of Hackett Associates, told *LM* that the biggest takeaways of this month's report for shippers is that a cautious economic recovery is taking place.

"The emphasis is on 'cautious,'" said Hackett. "I don't think we should be expecting a sharp return to growth. A lot of the current recovery is based on restocking in the wholesale and retail trades, with much of the overall recovery being due to the various economic stimuli. The consumer has not really shown up in any force yet, but consumer sales in November and December are up, which is encouraging, although it is at the cheaper end

CONTAINER VOLUMES, *CONTINUED*

of the range. Consumers are starting to cautiously test the waters."

The reason for such dismal 2009 volumes, noted Hackett, stems largely from the collapse of consumer demand, which a year ago stuck retailers with very high inventory volumes that took a long time to eliminate at steep discounts. Now, inventory levels are comparably lower, with discounting at a relatively small level. This serves as a good indication of lower inventory levels, said Hackett.

And with changes in service patterns by ocean carriers, Hackett said shippers are seeing longer transit times, which makes shipping expenses more costly, and subsequently places a greater emphasis on cost control and managing the supply chain.

For actual early 2009 Port Tracker projections to come to fruition, Hackett said unemployment needs to come down slowly from current levels, which, will, in turn, help increase consumer spending. L

—Jeff Berman, Group News Editor

THIRD PARTY LOGISTICS MARKET

2009 3PL revenue down 15.2 percent year-over-year

STOUGHTON, Wisc.—Recent data from supply chain consultancy Armstrong & Associates found that year-over-year U.S. third-party logistics (3PL) market revenues dropped for the first time since Armstrong began collecting the data in 1995.

For 2009, Armstrong said that total 3PL segment gross revenues (at an estimated $105.1 billion) decreased 15.2 percent while net revenues (at an estimated $54.6 billion) were down 6.5 percent.

Data for the survey was based on 3PL reported third quarter financial results coupled with results from Armstrong's August 3PL report on the feedback of roughly 40 U.S. 3PLs. The August survey found that 72 percent of participating 3PLs reported gross revenue decreases while 24 percent reported increases in gross revenue for the first half of 2008 compared to the first half of 2009.

Individual market segments showed:

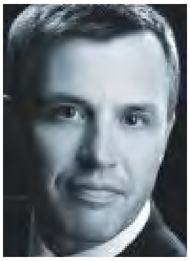
- domestic transportation management gross revenue at $32 billion was down 14.7 percent year-over-year, and net revenue at $5.7 billion was down 3.4 percent year-over-year;
- international transportation management gross revenue at $34.4 billion was down 25.2 percent year-over-year, and net revenue at $5.7 billion was down 3.4 percent year-over-year;
- dedicated contract carriage (DCC) gross revenue at $9.5 billion was down 15.2 percent year-over-year, and net revenue at $9.4 billion was down 14.5 percent year-over-year;
- international transportation management gross revenue at $34.4 billion was down 25.2 percent year-over-year, and net revenue at $5.7 billion was down 3.4 percent year-over-year; and
- value-added warehousing and distribution (VAWD) gross revenue at $29.2 billion was down 0.7 percent year-over-year, and net revenue at $23.9 billion was up 1.7 percent year-over-year.

While the majority of revenue figures were down across the board, Armstrong & Associates President Evan Armstrong told *LM* that much of the 2009 losses could be attributed to individual market factors. For example, the DCC segment saw significant 2009 losses because a good chunk of its business is dependent on the automotive industry.

"For most 3PLs, the best part about 2009 is that it's over," said Armstrong.

Third party performance in 2010 is likely to be "less than stellar," said Armstrong who said projected gross revenue is expected to be up 7.2 percent year-over-year compared to previous years (excluding 2009), which were all up 13 percent or better year-over-year. L

—Jeff Berman, Group News Editor



Advancements that will fuel tomorrow's supply chain

All companies consume energy. But transportation—which accounts for approximately 50 percent of global fossil-fuel utilization—clearly has the biggest appetite.

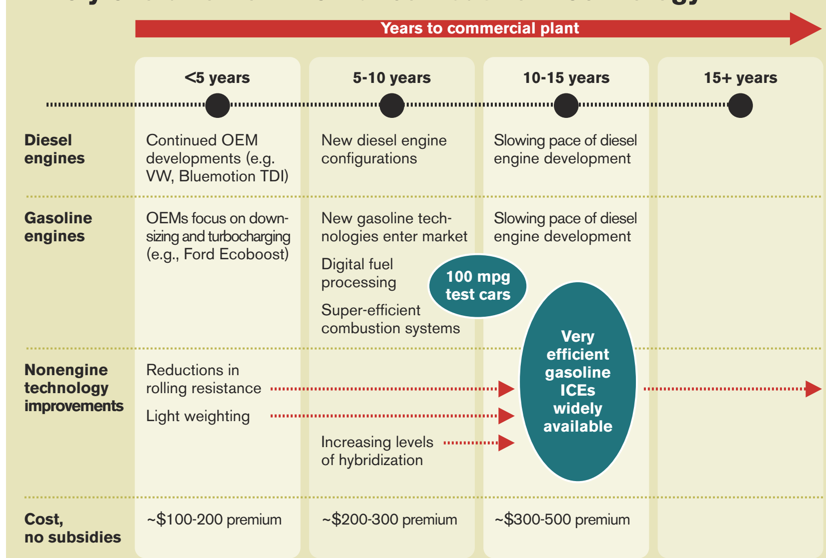
The problem, of course, is that fossil fuels are getting evermore expensive, and the further out you look, the gloomier it gets. Practically speaking, the world's oil supply will be depleted by 2050. Huge stores will remain, but most will be sheathed in barely accessible shale and deep-water deposits. Smearing the oil picture further is the commodity's volatility. Rapid price increases and falls—often 25 percent or more—make it difficult for companies to formulate effective operating strategies.

None of these observations should be surprising. But unless your supply chain decision makers are also biochemists, futurist, or research scientists, they may not realize how many energy alternatives are currently being studied. Following is a brief look at transport-focused technologies with potential to dramatically change tomorrow's logistics and transportation picture. Perhaps these insights will spur a few conversations about alternatives to the imminently unsustainable carbon-intensive paradigm.

The first of three new technology categories might be termed "evolutionary" because its subjects leverage currently available assets and resources. For example, advances in the internal combustion (IC) engine already are responsible for vehicles that get close to 50 miles per gallon (mpg); and additional enhancements could deliver 100 mpg by 2030 (See chart). Generally speaking, continued IC improvements will be easier and cheaper than building electric or hybrid vehicles.

Advancements in agriculture-based fuels are also on today's table, with significant progress already associated with carbon-negative crops such as corn, cane, miscanthus, and sweet sorghum. The current mission is to make agriculture-based fuels (ag-fuels) cost competitive with oil at,

Likely evolution of internal combustion technology



or possibly even below, $65 per barrel.

Waste-to-fuel initiatives are following a similar but less mature arc, with small government projects in place but little current legislative or financial support. However, if waste-to-fuel technology can be brought to scale—and collection and transportation modes found that are not greenhouse-gas intensive—then waste feedstock processing could provide a fantastic source of low-cost, low-carbon, renewable fuel as well as a solution to landfill capacity concerns.

Also on the evolutionary radar screen are scrubbers: tools to increase the efficiency and ecological soundness of marine vehicles and aircraft. This technology could avoid the need for significant capital to upgrade refineries to produce more—and more expensive—low-sulfur fuel oil. Marine scrubbing has been proven feasible; in fact, several companies have tested it successfully and some commercialization is expected by 2011.

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

The second category is more "revolutionary"—emerging technologies that support the creation of fungible (interchangeable) fuels but still leverage many existing distribution infrastructures. The best example is using "synthetic biology" to convert sugar cane to diesel. Two companies, Amyris and LS9, are planning to break ground on commercial plants in 2011, with production starting by 2013.

Butanol (butyl alcohol) is also enticing. Butanol is energy content similar to gasoline, transportable through existing pipelines, and mixable with gasoline at ratios much higher than ethanol. Significant production and economic issues remain, but genetic engineering and advances in synthetic biology could lead to breakthroughs. Companies such as Gevo and Butamax have successfully piloted these technologies and are planning commercial plants within a few years.

Several variants on the ag-fuel theme are also bringing attention to the revolutionary category. One is bio-crude (oil substitutes made from agricultural products) that may be able to cost-effectively leverage existing refining and distribution infrastructures. Few companies are currently on board with this technology, but some commercialization is expected within five years.

Another agri-option is algae, which is plentiful, high yielding, and drawing interest from companies such as Shell, ExxonMobil, BP, Valero, and Chevron. Commercialization could take a decade.

The third category we'll refer to as "game changing technologies." These focus on electrification and the technologies needed for plug-in hybrid electric vehicles (PHEVs) to reach scale. The upside—low running costs and extended driving ranges—is high, but battery cost, capacity, and availability are major hurdles.

Researchers estimate that PHEVs can run at an equivalent price of $0.75 per gallon, but the battery premium over internal combustion engines and hybrid electric vehicles is still great. The key is the ability of various countries' grid systems to withstand PHEV penetration rates.

What should supply chain decision makers make of these advancements? Perhaps the most important message is that new fuels and energy paradigms will involve players from myriad industries, including government, utilities, energy, chemicals, pharmaceuticals, and consumer electronics. Thus supply chain executives may need to gauge their involvement as suppliers as well as consumers.

They might also push to participate in the inter-company partnering that will likely accompany these changes. Lastly, it's essential that every supply chain executive understand his or her company's "tipping point"—when rising fuel prices require a major shift in supply chain programs and policies. L

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LOGISTICS AND THE LAW

DON'T PAY

BY **BRENT WM. PRIMUS, J.D.,** PRIMUS LAW OFFICE, P.A.

In the latest installment of our "Logistics and the Law" series, our legal expert focuses on the growing double-payment problem and offers a few suggestions for avoiding—or at least minimizing—the risk of this emerging phenomenon.

Believe it or not, one of the most critical areas of the law relating to transportation and logistics relates to money—in particular, the payment of freight charges.

When a shipper engages a broker or when a shipper or a broker books a load with a carrier, they expect to be billed and to pay for the charges for moving the freight. What they don't expect is to have to pay the charges twice. Unfortunately this does happen and, in the last few years, has happened with increasing frequency. This emerging issue is called "the double payment problem."

In this installment of the ongoing series titled "Logistics and the Law," we will focus on this double-payment problem and offer a few suggestions as to how to avoid, or at least minimize, the risk.

3 VARIATIONS OF THE DOUBLE PAYMENT PROBLEM

There are three variations of the double-payment problem. The first is that of the "going-out-of-business broker." The problem arises when, in the last weeks or months of its business life, a broker continues to book loads, collects payment for the carrier's charges (as well as the broker's commission), and then fails to pay the carrier.

In this variation, there is little, if any, notice of a problem until a shipper calls a broker to find the phone disconnected or when a shipper receives an invoice from the carrier that provided the underlying transportation services.

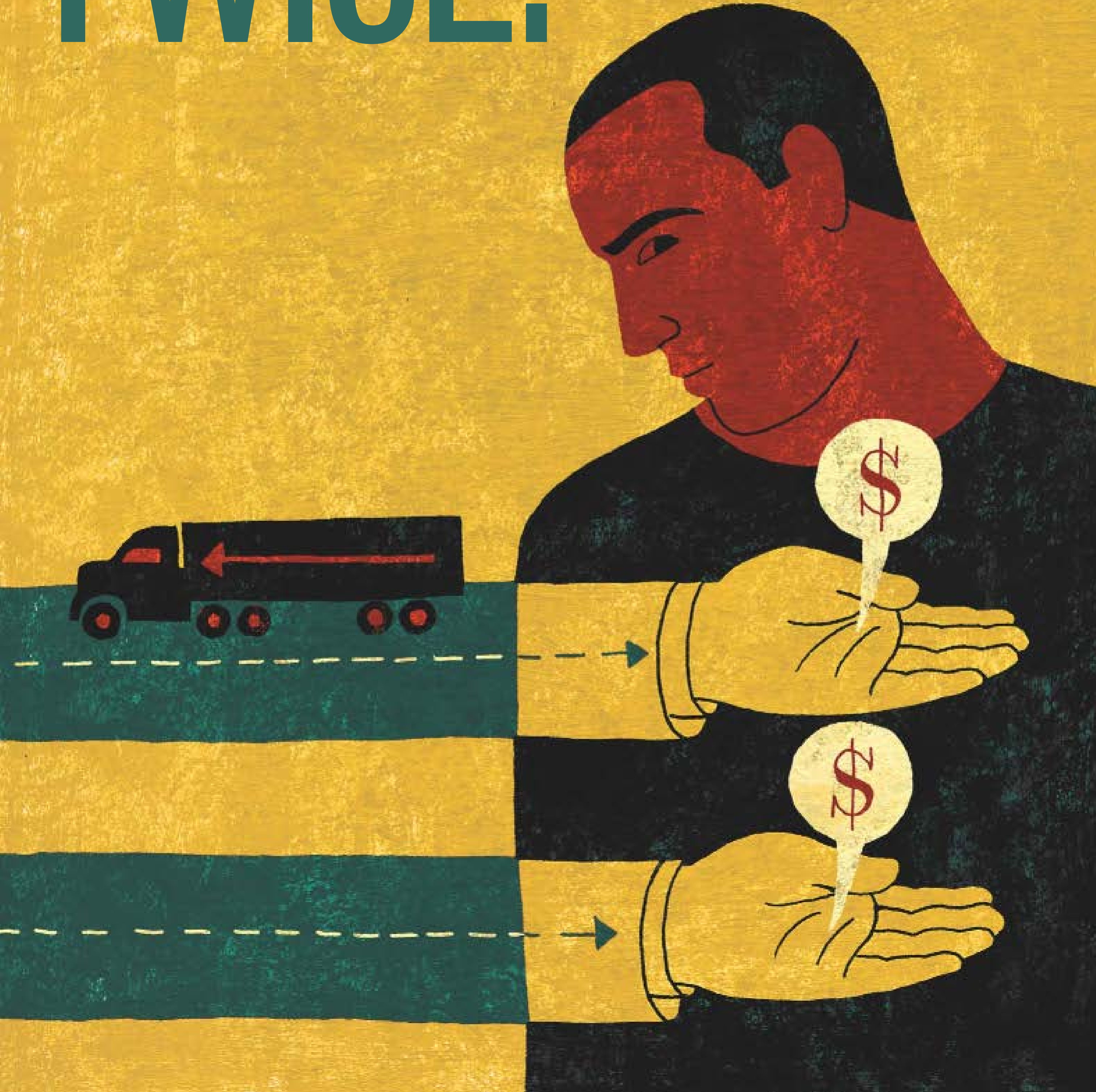
The second variation is something we'll call the "double-brokering carrier." This situation arises when a load is tendered to a carrier with the understanding that the carrier will be providing the actual transportation. However, instead of providing the transportation itself, the carrier uses its broker authority and tenders the load to another carrier.

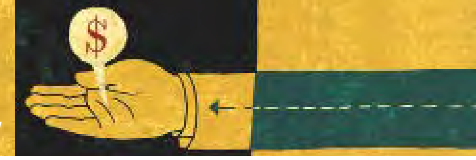
The shipper or broker who tendered the load to the original carrier pays the original carrier, but that carrier—i.e. the "double-brokering carrier"—fails to pay the actual carrier. Again, the first time the shipper or broker who tendered the load may learn of the problem is when a bill for freight charges arrives from the carrier that provided the actual transportation.

The third variation is the "fraudulent broker." This is a relatively new phenomenon involving a criminal element in the transportation industry. The gist of this variation is that the fraudulent broker solicits loads that it then tenders to carriers with every intention of collecting from the shipper but with no intention whatsoever of paying the carrier.

Illustration by James Steinberg

TWICE!





VARIATIONS 1 & 2

The variation of the "going-out-of-business broker" has been around for some time. The "double-brokering carrier" is relatively new, but, based upon the calls I've received over the last year, is happening with increasing frequency as the sheer number of brokers increases and the economic times get tougher.

When these situations end up in Court, the judge is put between a rock and a hard place. This is because what shipper's call the "double-payment problem" the carriers call the "no payment problem." From the carriers' point of view, they moved the load, bought the fuel, paid the drivers, and now deserve to be paid.

As a result of this tension, two competing legal theories have developed. The first theory is the well-established principle that under the traditional bill of lading contract the consignor has primary liability for payment of the charges on "prepaid" shipments; and if the consignor fails to pay, then the consignee must pay.

For "collect" shipments, the consignee has primary liability; and if the consignee fails to pay, then the consignor has to pay (unless it signed the no recourse provision of the bill of lading known as "Section 7"). In other words, since the consignor and the consignee both benefitted from the transportation of the goods, it is only fair that at least one of them has to pay the carrier.

However, the plot thickens when another entity is added in addition to the consignor, consignee, and carrier. Unlike the situation described in the above paragraph where a consignor or consignee has failed to pay the carrier, what happens when the consignor or consignee has fully paid an entity with the good faith assumption that the entity is either paying the carrier or is the carrier?

To address this situation, a legal principle known as "equitable estoppel" arose over the years. This principle applies in certain situations where Courts have held that it would not be fair or equitable to ask a party to pay twice.

One situation involves a "prepaid" shipment where the Courts have held that if a purchaser-consignee has paid the seller-consignor's invoice then they should not have to pay the carrier because they have already paid for the freight charges.

Another situation is where a consignor or consignee has in good faith paid a broker. If the facts show that the broker was a true intermediary and the carrier was extending credit to the broker, the fairest result would be to have the risk of default by the broker borne by the carrier. Unfortunately for shippers, in recent years the Courts have been more sympathetic to the unpaid carrier then to the shippers.

An example of this is a case known as Oak Harbor Freight Lines, Inc. v. Sears Roebuck & Co. decided in 2008 by the Ninth Circuit Court of Appeals. In this case, Sears dealt with a particular broker for many, many years. When the broker went out of business, it turned out that the broker had not paid Oak Harbor Freight Lines $400,000 of Oak Harbor's freight charges. The Ninth Circuit Court of Appeals held that Sears must pay twice—that is, had to pay Oak Harbor Freight Lines for the same shipments for which Sears had already paid the broker. The Ninth Circuit was not receptive to the fairness arguments advanced by Sears.

VARIATION 3

There is no way of knowing exactly how many "fraudulent brokers" are in existence, but now and then they do get caught. Two recent cases clearly illustrate the harm they can cause.

In 2008, a six count federal criminal indictment for computer and mail fraud was issued against Viacheslav Berkovich and Nicholas Lakes, also known as Dmitry Livshits. In 2009 they both pled guilty and were sentenced to prison. The full plea agreement indictment may be read in the on-line library at transportlawtexts.com website (www.transportlawtexts.com/indictment.html).

The essence of their scheme was to use various "load boards" (web-based systems for posting available loads) to accept loads as a carrier and then to act as a broker to tender the load to an actual carrier. To accomplish this they registered a multiplicity of entities as motor carriers and brokers. They also started a factoring company—a business which, in the context of the transportation industry, buys the accounts receivable of trucking companies for a discounted amount and then collects the bills from the trucking company's customers.

In the three actual instances described in the indictment, the amount of money that the perpetrators offered to the actual carrier was approximately 20 percent higher than the amount that they had accepted the load for as a "carrier." This is the exact opposite of how a legitimate broker operates; that is, offering the actual carrier an amount lower than the amount that the broker has agreed to accept. If nothing else, this alone demonstrates the intent of never paying the actual carrier.

The computer fraud count of the indictment arose out of the fact that the defendants hacked into U.S. Government computers. Specifically, they accessed the SAFER system and changed registration information of bona fide trucking and brokerage companies already registered to make it look like the perpetrators were somehow affiliated with the valid entities. They also substituted bogus telephone numbers and e-mail addresses belonging to the perpetrators for those of the legitimate companies.

As part of the plea agreement, the two defendants were ordered to pay 3.7 million in restitution. From this it is reasonable to surmise that shippers and brokers across the country were receiving payment demand notices from carriers for 3.7 million dollars in freight charges that they had already paid.

Published reports indicate that 1.4 million dollars was recovered by the government from the defendants; however, it has not been reported as to how much, if any, of this was paid to the victims of this fraud.

Currently pending is an indictment that was issued in August of 2009 in the U.S. District Court of Harrisburg, Pa., against three individuals alleged to be involved in a similar conspiracy. The 42 count indictment alleges that the defendants had defrauded companies out of more than one million dollars.

SOLUTIONS TO DOUBLE-PAYMENT

So, what should you do? In preparing this article I contacted Steve Fernlund,


If what you see is all you get,
you're looking in the wrong place.
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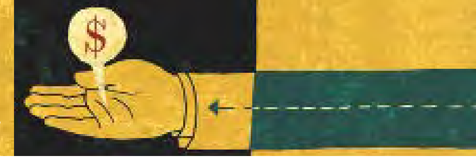


the executive director of the Freight Transportation Consultants Association (FTCA). As the FTCA is an organization whose members are heavily involved in freight bill auditing and payment, I was looking for advice based upon the collective wisdom of the FTCA as well as his own professional experience.

Here is what he had to say: "As you know, there's no sure fire way to eliminate the risk. This may seem obvious, but one way is to always know who you're doing business with. Check payment practices and credit rating agencies to make sure there is minimal risk that the carrier and/or broker will default on its obligations. Have a standard procedure to qualify carriers and brokers and follow that procedure in every transaction."

In addition to the basics of due diligence, the proper use of contracts and contract administration can also provide protection, although not absolute, against being exposed to liability for double payment. Shippers and brokers both need to have written contracts in place with their carriers specifically requiring them to move the load themselves and not to tender it to another carrier.

However, simply writing and signing such a contract is not enough. My experiences have revealed that many carriers will sign such a contract but then simply ignore the prohibition against tendering to another carrier through their brokering authority. This means that a shipper or broker has to monitor the carrier to make sure they are complying with the terms of the contract.

One way to do this is to spot check delivery receipts to see if the carrier named as the delivering carrier is the carrier with whom you have the contract. Please bear in mind that I fully understand that this is a lot easier for me to write then it is for someone to do in practice.

When shippers are using brokers, they should have a written contract with their broker which requires, amongst other things, that the broker will have written contracts with its carriers. In turn, the broker's contracts with its carriers need to (a) require that the carrier specifically designate the broker as its agent for collection and (b) waive any right to collect from the consignor or consignee if the broker has been paid. Again, to be effective, there needs to be a process in place to monitor compliance.

There are perhaps only two ways for a shipper to guarantee that it will not have to pay the same freight bill twice.

The first would be to adopt a procedure whereby no check would be written to a carrier unless or until there is an accurate, trustworthy delivery receipt documenting the fact that the delivering carrier was indeed the same entity as to whom the check was made payable.

However, I have been told by many people in the industry that for many reasons, not the least of which is the sheer volume of transactions involved, that it would be virtually impossible to implement such a process.

The only remaining option is for a shipper to require a surety bond for any broker with whom it does business. For example, a shipper would first determine the dollar amount involved with respect to any particular broker for a particular time period, say six months. If this number is $100,000, then a surety bond in that amount would be purchased to protect the shipper in the event of a broker default.

The difficulty with this as a practical matter is that surety bonds can be difficult to obtain, especially if the involved broker has less than perfect credit. Another problem is that most sureties (the person issuing the bond) require substantial collateral—for example, 150 percent of the face amount of the bond, which, in our example, would be $150,000. Most brokers would be either unable or unwilling to do so. Another obstacle is that there would have to be a negotiation between the shipper and the broker as to who would be responsible for payment of the bond premium.

To conclude, shippers and brokers exposure for liability for having to pay the same freight bill twice will always be with us. However, due diligence, coupled with well-drafted transportation contracts, will go a long way toward not having to pay twice. L

Brent Wm. Primus, J.D. is a frequent contributor to Logistics Management *and the presenter of the "Transportation, Logistics and the Law On-line, On-demand" course.*

Illustration by Daniel Guidera

MASTERS CLASS: Negotiating LTL costs

BY **HANK MULLEN**

Our pricing expert expounds on five golden rules designed to reduce costs for LTL shippers *and* carriers. Is freight transportation's Holy Grail within reach?

The late Ray Bohman, the long-time Pricing columnist for *Logistics Management*, and I talked about new methods for improving less-than-truckload (LTL) pricing for more than 20 years. While we kicked around a number of opposing ideas, we certainly agreed that improving service and reducing cost for both the shipper and the LTL carrier was the Holy Grail for logistics and transportation professionals.

After years of discussion, we came to the conclusion that these seemingly opposing objectives can actually be met if several factors are in place. We thought of proposing a method founded on space occupied, or a process-based concept that has dimensional shipment size as the basic measurement to determine rates and charges. Simply stated: You pay for only what you use based upon space occupied. In this case, both shippers and carriers benefit from the new structure.

Later, Ray and I learned of the research work being done at the University of Tennessee (UT) on behalf of the U.S. Air Force on contracting logistics and transportation. That work, headed up by Kate Vitasek, spawned several suggestions for successful outsourcing that both Ray and I agreed made good sense for LTL shippers and carriers:

1. Focus on the what, not the how;
2. Agree on clearly defined and measurable outcomes;

3. Focus on outcomes;

4. Optimize pricing model incentives;

5. Governance structure should provide insight, not merely oversight.

According to Vitasek, lead researcher at UT's Center for Executive Education, "These five tenants are proven factors in the readiness of two parties to engage in a long term partnership. In fact, they were critical in 'vesting' logistics providers in performance-based logistics contracts with the Air Force and with varied service providers in industry."

As their research project rolled on, Moore, an analyst with Celerant Consulting, an international process improvement consulting firm, along with a member of UT's faculty, coined the phrase "Vested Outsourcing" to refer to the combination of the five rules with the new opportunities available to shippers and carriers following the deregulation of LTL pricing in the United States.

According to Vitasek and Moore, the conversation with carriers needs to change from "my terms" and "how much" to "what can we do together to serve my customer?"

"Stop the bidding and start partnering," says Moore. "We need to get out of old paradigms and begin to match our needs with the capabilities of our contractors. In LTL shipping, start by throwing out the NMFC [National Motor Freight Classification] and the Class Rate discount pricing contracts."

By "vesting," the shipper and carrier match supply chain networks, but also mesh business processes right down to choosing insurance, fuel options, shipping schedules, and weight/cube impact of the product. The goal is to reduce the carrier risk in dealing with the shipper and reduce costs by aligning processes to optimize freight cost and service in a tough business environment.

The best part is that these new rules or processes will be different in many ways from carrier to carrier and shipper to shipper; and they can also be custom-tuned to your network and requirements and allow for continuous improvement. Here's how the rules are being defined along with a few examples of how they're being applied.

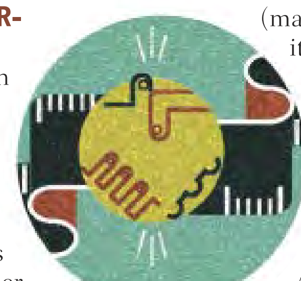
RULE 1: FOCUS ON THE "WHAT," NOT THE "HOW"

Compliance with this rule may be a little simpler than it sounds. First, it's up to the carrier to perform the transportation service. Second, the shipper will set the bar for service requirements and the carrier will optimize their network to make a profit while meeting the service and cost requirement.

To align with this tenant, the shipper needs to adapt their processes, where possible, to enable that optimization. This could mean flexibility in pick-up times, changing packaging, or perhaps rearranging trailer spotting space. We recently learned of a partnering between shipper and carrier over date and time of shipments that resulted in fuller trucks making fewer pickups. The benefit was a shared cost reduction of 12 percent—split by both partners.

RULE 2: AGREE ON CLEARLY DEFINED AND MEASURABLE OUTCOMES

To fall in line with this rule, the carrier and shipper need to share information about the strategy of each firm and fully understand how a new agreement meets those strategies. The carrier needs to fill trucks in the lanes they have chosen as their network; and this means, for the sake of profitability, that they do not carry every load to its destination themselves.



The shipper and carrier will want to focus on harmonizing their networks and let the experts in each organization work out the details of timing, roles, and best practices over a long period of time. This rule implies selecting business partners and sticking with them, sharing information openly, and enabling a joint strategic vision by collaborating on the execution—hence Moore's recommendation to stop bidding and start partnering.

"The finance or pricing people need to be in on the negotiations between shippers and carriers. Our experience is that the salesperson has an incentive to take any load, regardless of margin. Vested deals are done to maximize margin for both sides" says Moore.

RULE 3: FOCUS ON OUTCOMES

While it may be impossible to ignore a particular lane price in order to support a sales margin for a shipper, the focus for management should be on how the transportation helps support the business objectives of the shipper.

Perfect order metrics support customer satisfaction, and these are critical to the joint success of the agreement. A shared information platform enables each partner to view the metrics and make adjustments that are accessible immediately by other partners. In the end, the shipper needs to satisfy the customer. That is the key external metric. The key internal metric is sustainability of the sale (margin) and the sustainability of the delivery service (margin).

On peak week, end of month, or end of quarter shipping the confusion on the dock increases as more shipments are staged for carrier pick-up. A simple program/diagram of what shipments going to each state or carriers break bulk locations eliminates additional handling and usually decreases transit time by one day. Loading to furthest destinations first is also helpful.

Most carriers assume that the fastest and quickest delivery is always a shipper's request. Many consignees

would much rather have the deliveries conform to the date, dock, and shipment size that helps the warehouse run more efficiently. If a one-day transit time is needed and the cost for one-day service is too high, simply ship one day earlier.

RULE 4: OPTIMIZE PRICING MODEL INCENTIVES

Classification-based LTL pricing is a notoriously complicated system. Simply stated, a shipment needs to go from origin to destination within a specified amount of time. Factors that represent a direct cost to the carrier should be factored into pricing, but often are not. We have found three main methods for creating optimal pricing. These need to be on the table in negotiations:

1. Utilize a rate base that maximizes each carrier's own efficiencies;

2. Price according to factors that drive cost and do so dynamically; and 3. Offset the risk of escalating fuel prices.

Utilize a rate base that maximizes each carrier's efficiencies. When a carrier is required to subscribe to a foreign, older-year rate base, they need to offset their efficiencies and inefficiencies by adjusting discounts. Most carriers also offer an alternative—their own independent rates. These rates truly reflect the carriers' network efficiencies and cost drivers within their network and can be "tuned" to a common, current year standard base rate, like CzarLite as an example.

Price according to factors that drive cost dynamically. Carrier cost drivers also include equipment, labor, and insurance. One carrier cited an average cost of $7 per invoice to prepare and send a paper invoice. Additionally, carriers pay fees to subscribe to classification based pricing.

This cost can be reduced or eliminated by modern LTL pricing initiatives, such as dynamic pricing. Dynamic pricing allows for the manipulation of cost and service factors within the contract during ongoing operations (daily, weekly, even hourly) to improve carrier costs and thus improve margins while meeting customer service parameters.

Dynamic pricing requires the ability to communicate and to adjust those factors that have been historically locked down in averages of the old classification system. Thus, the shipper needs to know their operation and be prepared to tender freight electronically. The carrier regularly adjusts their system with many more variables than just class and weight. By providing this information to carriers you have a more dynamic pricing.

Load factor provides the carrier with the maximum amount of shipments for a given container size. The carrier is unable to accurately determine the amount of space a

Striking a high-tech, high-touch balanced approach

Combining human and technological expertise. While it is tempting to dive straight into a detailed analysis of discounts and tariff terms, a healthy approach instead focuses first defining the ultimate goals, then reviewing the current transportation processes, and finally, benchmarking all relevant KPI's in order to gear any recommendations within the context of what is achievable operationally because often times, the perfect theoretical solution never gets fully implemented, diluting the expected benefits.

Aligning of goals. With that in mind, it is prudent to first gather all relevant data and be ready to perform a "deep dive" analysis with the appropriate software tools and relevant internal/external subject matter experts involvement. After reviewing the pricing and rules tariffs and studying historical shipping patterns, it may become apparent that your carrier's deliveries aren't always well-aligned with their network strengths. This is frequently a significant cost-savings opportunity because carriers pricing reflects cross-subsidizing profitable and unprofitable lanes, so they are robbing Peter to pay Paul. In the end, the shipper doesn't get the best pricing and service nor does the carrier make an acceptable profit margin.

Re-thinking base rates. Another avoidable problem is the common practice of using several different rate base years all of which were several years old. The key shortcomings can be summarized as follows:

1. multiple base rate years,

2. carriers using foreign base rates,

3. pricing calculations from state-to-state or 3-digit zip codes rather 5-digit zip codes, and

4. client's single tier F.A.K. rate structure.

These are just a few recurring pricing problems we often observe. There are multiple ways to address these types of deficiencies. We believe each shipper's strategy is unique and optimizing their transportation program should be addressed by blending technology and human expertise in innovative ways.

shipment will occupy by classification-based pricing. Given the dimensions of a shipment in advance, the carrier can better allocate equipment, avoiding equipment shortages or costly unfilled capacity.

Rigid pricing systems also neglect changing external factors that can drive up costs. As an example, a carrier opens a new terminal or secures an anchor client in a new market. They would like to reposition equipment, but shippers cannot take advantage of the more attractive rates until their annual contract negotiations.

However, in the course of a year, a shippers' business strategy will most certainly change. This flux is also true for the carriers that must constantly re-evaluate pricing that maximizes equipment allocation and utilization. With business constantly changing, carriers that are required to use rigid classification based pricing must assume and mitigate risk. In the form of "padding prices" this risk undermines the carriers' ability to be competitive.

After reviewing a tariff and studying a client's historical shipping patterns, it becomes apparent that the carrier's deliveries weren't well-aligned with their network strengths. This is frequently a significant cost-savings opportunity since the carrier's pricing reflects the fact that they are cross-subsidizing profitable and unprofitable lanes for any given customer, so their pricing reflects this need to rob Peter to pay Paul. The shipper doesn't get the best pricing nor does the carrier make an acceptable overall profit margin.

Rather than employ a cumbersome and rigid classification pricing method, we encourage shippers and carriers to adopt dynamic pricing, allowing for shippers and carriers to continuously optimize network and distribution patterns. By having a proper mix of carriers and overlaying those carrier networks with shipper networks, and allowing a certain level of transparency of the shippers' freight, carriers create an optimized pricing system, which encourages healthy competition among carriers.

To phase-in dynamic based pricing, we assure both the shipper and carrier are first comfortable with using multiple discounts and minimum charges for both inbound and outbound, with approximate class ratings. This pricing can be changed on a state-by-state, lane-by-lane basis, creating point-to-point rates, pallet rates, and exception ratings with multi-tier FAK structure for inbound and outbound shipments. Once this is established, shippers and carriers will be ready for dynamic pricing.

Offset the risk of escalating fuel prices. Fuel, particularly over the past several years, has been a major consideration in transportation. Risk exists for both the shipper and carrier with volatile fuel prices, even with fuel surcharge caps. We recommend offsetting this risk and stabilizing fuel prices for both the carrier and shipper by locking in fuel prices. Pricelock (www.pricelock.com) has a clever solution to help mitigate this risk and stabilize pricing.

RULE 5: GOVERNANCE STRUCTURE SHOULD PROVIDE INSIGHT, NOT MERELY OVERSIGHT

With tools that capture the nuances of each shipment, it's often difficult for transportation managers to find the time to weed through data to develop conclusions and act on those conclusions.

As stated in Rule 3, clearly defined and measurable outcomes create a path for cause and effect investigation. For example, we have had clients complain of core carrier compliance issues within their own organization. A core set of carefully chosen carriers at a corporate level often proliferates into an unmanageable amount at a site level.

In many cases, corporate transportation managers blame lack of discipline within their own organization for compliance. We've often found that the core set of carriers at a tactical level were not suited for the client. By changing perspective from control to understanding, shippers have been able to determine root causes and fix those issues.

At the end of the day, shippers and carriers should consider optimizing for today's conditions and enabling one source for the measurement of cost and service. Once this takes place, we can take a giant step forward in transportation following nearly 80 years of rigid contract formulas. The focus then shifts to meeting strategic business objectives and optimizing the shipper and carrier networks and planning based upon insights. L

Hank Mullen is a 42-year veteran of the transportation industry and a frequent contributor to Logistics Management. *He can be reached at hmullen@thevisibilitygroup.com.*

Suggested reading

1. Understanding LTL carrier class rates, *Logistics Management*. Ray Bohman, *LM* Columnist

2. The importance of freight classification in today's pricing market, *Logistics Management*. Ray Bohman, *LM* Columnist

3. New LTL Pricing: Thinking inside the cube, *Logistics Management.* Ray Bohman, *LM* Columnist

4. Packaging update: New package certification requirement. *Logistics Management*. Ray Bohman, *LM* Columnist

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Cap and Trade deferred

BY **PATRICK BURNSON**, EXECUTIVE EDITOR

Now that the proposed bill appears to have been placed on hold by the Obama Administration, many industry analysts suggest that a less punitive version will surface again in 2010. Here's why shippers should be concerned—and prepared.

Cap and Trade—a form of emissions trading used to control pollution by offering economic incentives—remains wildly controversial and far from settled.

As drafted late last year, U.S. legislation would have put limits on emissions from motor vehicles, coal-fired plants, and factories. And judging by *LM*'s most recent reader survey, shippers hated it. Now that the proposed bill appears to have been placed on hold by the Obama Administration, many industry analysts say that a less punitive version will surface again in 2010.

However, supply chain experts believe shippers should still be concerned—and prepared. Many have been blindsided by local or regional laws already, and one more blow from Washington law makers could be far more telling.

The chairman of the U.S. Senate Energy and

Natural Resources Committee is telling shippers that it's doubtful Congress will be able to pass Cap and Trade legislation aimed at reducing greenhouse gas emissions this year. But, Sen. Jeff Bingaman, D-N.M., says emission reductions may be forced by federal regulators. "That will also drive up utility rates," Bingaman says. "The question is what will drive up utility rates the least. That's what we're trying to determine."

He's not the only one anticipating mitigating strategies. Among supply chain professionals, the concern is the effect on transportation-related costs.

"Of course, the Environmental Protection Agency (EPA) will regulate your emissions if a political hiatus emerges this year in the Senate," says Dr. Stephen Stokes, vice president of sustainability and green technology with AMR Research. "Standardizing emission management and sustainability as part of corporate strategy is the most important thing a shipper can do," he adds. "It will slowly but surely move the needle for the corporate world and the planet."

And if shippers fail to heed this call to arms? "If they don't," says Stokes, "they're likely to fall into the trap of so many of the well-intended but over-exuberant participants at the Copenhagen Summit late last year. For business and the planet, this is a serious issue and it deserves serious and well-considered plans and actions, not undeliverable speculative aspirations and puffery."

THE COPENHAGEN EFFECT

While the general consensus among shippers is that the "CO15 Summit" failed to establish any global standards of compliance, Stokes is among those analysts who strongly advise U.S. shippers to get their houses in order.

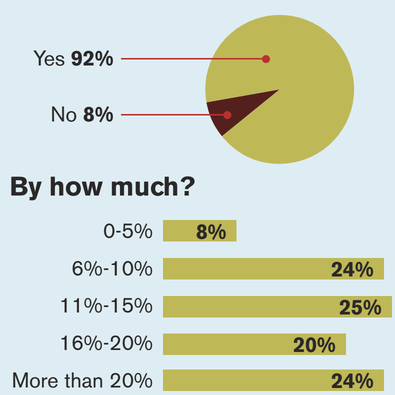
"For quite some time we've been pushing for parallel and related but independent governmental and corporate dialogs on climate change strategy, emissions, and the new economy," says Stokes. "Regulations provide a structure to most markets and are a potent vehicle for change, but other factors are at play."

In the absence of a deal in Copenhagen, which could have removed significant amounts of the uncertainty that remains, Stokes says shippers have to consider one major question: What's next for the political process and the new model of business in the second decade of the 21st century?

Sven T. Marlinghaus, partner and managing director of BrainNet—a German consulting firm specializing in supply chain management—says it's already clear that climate targets cannot be achieved with new technologies and alternative energies alone.

"If we are to combat climate change, business processes also need to be fundamentally modified," he says. "There is an urgent need for methods, mechanisms, indicators, and guidelines that enable producers to audit and monitor their suppliers' environmental management processes," says Marlinghaus. "Classic approaches to risk management, financial management, and supplier selection, evaluation, and development are not designed with sustainability in mind."

Do you think Cap and Trade policy will increase your transportation costs?



Source: *LM* Research, 2009

And while he concedes that the appropriate level of environmental awareness is there, shippers still lack the necessary tools to put the theory into practice.

WHAT U.S. SHIPPERS WANT

Not all shippers are buying into this strategy; particularly those who have yet to see the economic recovery take hold.

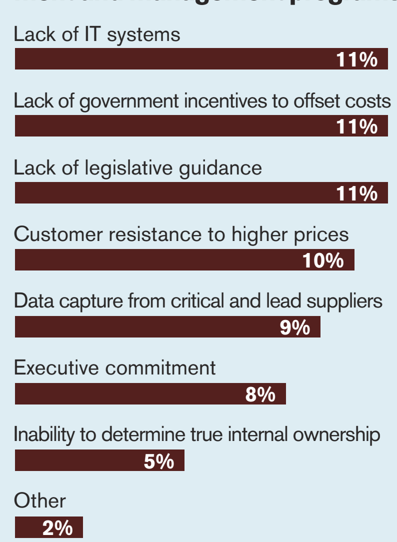
"The recession hit the construction industry pretty hard," says Ralph Bloom III, purchasing manager for Morrow Equipment Company (MEC), LLC in Manassas, Va. "And because that's our principal type of customer, we don't have a lot of money to spend on regulations that may—or may not—be enforced."

According to Bloom, such haphazard enforcement may also create "unintended dislocations" in the marketplace. MEC, which ships goods via full-load flatbed trucks on a customized domestic basis, wants to react quickly if any legal changes are suddenly enacted. "Right now we are faced with a lot of questions about future

Most important drivers behind corporate environmental initiatives

Source: AMR Research, 2009

Perceived barriers to the development of carbon measurment and management programs



Source: AMR Research, 2009

Recognizing the early adopters

The EPA's "SmartWay Transport Partnership" program has recognized that a great many players are leading by example and are showing a tremendous amount of green initiative.

Late last year, the EPA announced 37 winners of the 2009 SmartWay Excellence Awards at the American Trucking Associations Management Conference in Las Vegas. These awards recognize freight industry leaders that have made significant contributions to protecting the environment through their participation in the partnership.

Both shippers and truckers were praised for slashing carbon dioxide (CO2) emissions and saving fuel through significant improvements to their freight operations.

Truck carriers:
Bison Transport
C.R. England
Celadon Trucking Services
Challenger Motor Freight
Covenant Transport
Gordon Trucking
J.B. Hunt Transport Services
Knight Transportation
LTI Trucking Services
MacKinnon Transport
Mesilla Valley Transportation
Quad/Graphics
Roehl Transport
Schneider National
Stan Koch & Sons Trucking
States Logistics Services
Swift Transportation
UPS
U.S. Xpress Enterprises
Xpress Global Systems

Shippers:
Best Buy
Georgia-Pacific Consumer Products
JCPenney
Kimberly-Clark
Kohl's Department Stores
Kraft Foods Global
Limited Brands
Lowe's Companies
PepsiCo
Sharp Electronics
Stonyfield Farm
The Home Depot
USG

3PLs:
Hub Group
Menlo Worldwide
Transplace

Affiliates:
American Trucking Associations
Cascade Sierra Solutions

fuel costs and possible surcharges associated with this legislation," he says. "So for us, a wait-and-see position might be best."

For Wayne Taylor, distribution warehouse manager for Jones Plastic in Louisville, Ky., the issue is not about immediate compliance but is about waiting for an overall change in the federal administration. "Unlike the EU, everything in the U.S. moves by truck," says Taylor. "If we had a decent rail system, shippers wouldn't have to pay so much to work with cleaner vehicles or spend on other regulatory changes. We have to accept that. But no one is going to like it."

Staking the middle ground on the issue is a shipper who tells us that he sees the advantages of global accountability while keeping an eye on the bottom line of his own oil seed and grain agricultural enterprise in Illinois. "As a plant manager for a Fortune 50 energy management company, I can say that shippers are going to get hit with more expenses no matter what they do. And as a private farmer who pays into the Chicago Carbon Exchange, I feel that it may all be worth it," he says.

But he allows that the U.S. is at "a cultural disadvantage," in that they lack the solidarity similar to that prevailing in the EU. As a consequence, shippers here prefer to keep a low profile and take what Taylor describes as "a distanced approach" in reacting to change.

Brittain Ladd, a former logistics executive with Dell now working as a supply chain consultant and lecturer on green distribution strategies, agrees: "Based on my research, shippers, faced with having to reduce their emissions, will have no choice but to make adjustments to their supply chains that will take significant amounts of capital," he says.

According to Ladd, many shippers are already doing this by relocating factories, investing in new technology, and changing their distribution channels. Carriers, in turn, have to adjust their business models and infrastructure to support changes made by shippers. "Foremost among my suggestions is that shippers need to reach out to their carriers, customers, and suppliers to begin a dialogue on the subject," adds Ladd. "They need to identify potential impacts while also formulating Cap and Trade strategy."

Ladd also strongly recommends that shippers invest in the use of supply chain modeling software to identify the optimal, low-emission supply chain for their companies. He says that supply chain modeling software is a "must-have" as it allows companies to conduct greenhouse gas analysis, perform risk analysis, contingency planning, network optimization, and enterprise simulation.

"By conducting joint modeling and strategy sessions with carriers and suppliers, shippers can utilize the power of such software to make better business decisions," he says. "Put simply, Cap and Trade will require the art of supply chain management to be balanced by the science of supply chain modeling and optimization like never before." L

Patrick Burnson is Executive Editor of Logistics Management

A glossary of terms

Cap and Trade programs use emission allowances as the currency to comply with emission reduction requirements. They have the following key features:

Emissions "cap": A limit on the amount of pollution that can be emitted from all regulated sources (e.g., power plants). A lower cap is set to reduce emissions.

Allowances: An authorization to emit a fixed amount of a pollutant.

Measurement: Accurate tracking of all emissions.

Flexibility: Sources can choose how to reduce emissions, including whether to buy additional allowances from other sources that reduce emissions.

Allowance trading: Sources can buy or sell allowances on the open market. Because the total number of allowances is limited by the cap, emission reductions are assured.

Compliance: At the end of each compliance period, each source must own at least as many allowances as its emissions.

TMS: YOUR KEY TO THE NEW ECONOMY

BY **BRIDGET MCCREA**, CONTRIBUTING EDITOR

Research shows that shippers that have invested in TMS are seeing cost reductions, improved delivery reliability, and inventory reduction. Over the next few pages will establish why TMS can no longer be ignored.

It's hard to imagine a link in the supply chain that doesn't involve a software application. However, according to recent research from ARC Advisory Group and AMR Research, there's still plenty of room for more automation within the freight transportation market where more than half of the shippers surveyed say they're still relying on manual management systems.

"Only about 38 percent of companies are using a TMS right now," says Greg Aimi, research director for supply chain at AMR Research in Boston. Of those firms with over $5 billion in annual sales, the numbers increase to about 60 percent, Aimi adds, while those with less than $5 million in revenues are much less likely to be using a TMS.

Adrian Gonzalez, director of ARC Advisory's Logistics Executive Council, has seen similar adoption numbers, and estimates that roughly 40 percent of shippers have a TMS in place. "A lot of shippers are still using the spreadsheet, fax machine, and telephone route to manage the transportation component," says Gonzalez. "Aside from the company that ships one truckload a week and can get by without a TMS, there are many firms out there that should be streamlining their operations, but aren't."

But that doesn't mean that the TMS sector isn't making inroads. According to Aimi, it has grown by 11 percent annually, and is up from 30 percent penetration just three years ago. He credits fuel volatility, fuel surcharges, and a challenging economy with helping to drive shippers to find ways to work smarter, better, and faster. In return for those TMS investments, shippers are seeing freight budget cost reductions, more competitive delivery reliability, improved customer service, and inventory reduction.

If those results sound enticing, and if your company has yet to purchase a TMS—or fully utilize an existing system—then you've come to the right place. Over the next few pages we'll make a case for why TMS can no longer be ignored as a key component heading into the new economy.

Operations savings potential

TMS operation/capability	Relative savings potential
Route and mode optimization	$$$$
More competitive delivery options	$$$
Reduced network inventory levels	$$$
Electronic communications with supply chain partners	$$
Carrier assignment optimization	$$
Rate negotiations and compliance	$$
Continuous moves and dedicated fleets	$$
More efficient and automated operations	$

Source: AMR Research

NO EXCUSES

TMS may rank as one of the most mature and fastest-growing segments within the supply chain software market yet not all shippers are taking advantage of it. Some companies ignore the TMS route completely, while others implement the systems and never tap the full potential.

Even with the on-demand model removing some of the barriers to entry for smaller companies—namely in the way of lower startup fees, infrastructure requirements, and implementation time—adoption hovers below 40 percent.

"There's no excuse not to have a TMS, what with the various deployment and pricing options that are out there on the market," says Gonzalez. "The solutions range from those suitable for large, international enterprises to those developed for single-location firms that want to get away from spreadsheets and faxes, and everything in between."

"For the second half of 2009, TMS vendors saw a resurgence of interest in their systems. I expect that to continue and to result in steady growth for the TMS sector in 2010."

Greg Aimi, research director, supply chain, AMR Research

Gonzalez says TMS is particularly important for firms that want to maximize the savings presented at the procurement engagement level. "If you don't have a TMS, and if you're using spreadsheets and fax machines to handle the routing and shipping, then a large portion of the savings identified at procurement will evaporate and never materialize," he explains.

A quick walk through the warehouse will reveal whether or not those cost savings are being realized at your firm, says Gonzalez. "Spend some time in your transportation operation and see if a lot of people are on the phone and/or feeding paper into fax machines," he says. "If they are, then you're leaving profits on the table."

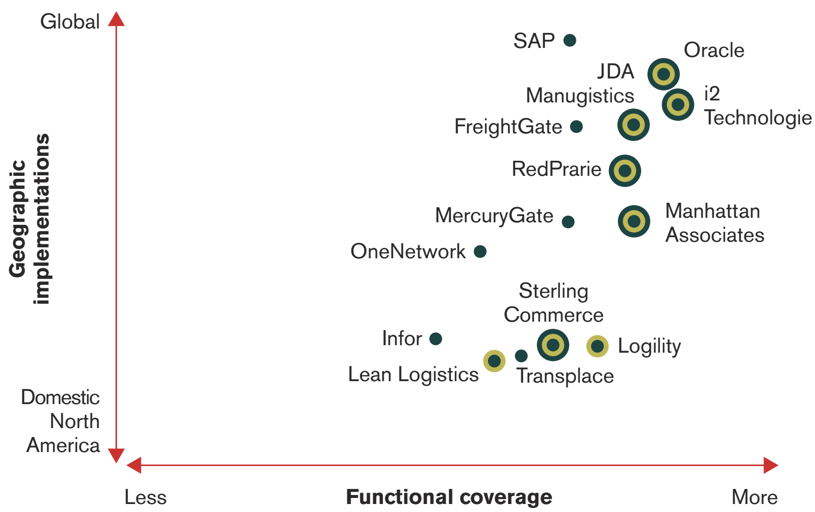
Aimi says companies that don't have an automated transportation process are missing the boat by running on what he calls a "somehow, some way" mentality that won't cut it in the new economy. By implementing a centralized, automated transportation function, companies can begin to break out of that mode and create more productive transportation operations.

"In a completely manual environment, a logistics planner can handle 10 to 12 loads per day," says Aimi. "With automation, that same person can handle anywhere from 100 to 120 loads per day, with most of that person's effort focused on handling the exceptions, while the TMS takes care of the work."

Dwight Klappich, research vice president for Gartner says the reputation TMS has for producing high payback within a short period of time also makes it a "can't miss" application for shippers in the new economy. "In this business environment, projects that don't produce good returns don't get funded," says Klappich, who pinpoints the typical payback from a TMS at 12 months or less.

Carrier selection and management also becomes easier when technology is introduced to the transportation component, says Klappich. The entire process becomes more consistent and disciplined,

TMS breadth, depth, and scale chart



Number of outer rings represents vendor's scale relative to number, size, and complexity of implementations.

Source: AMR Research

he says, and helps shippers break out of the "pick the carrier who gave the best Christmas gift last year" mentality.

The company that writes $10 million in checks every year to an outside freight provider, says Klappich, would save $500,000 annually by simply cutting freight costs by 5 percent. "The corporation that wants to always pick the lowest-cost carrier can rely on a TMS to make that happen every time," says Klappich "That translates into real money for the bottom line."

MAXIMIZE EXISTING TECHNOLOGY

Even among the 40 percent of companies that have a TMS in place, not all are using the applications to their fullest potential. Many TMS users shoot for the "low-hanging fruit" such as route optimization, carrier connectivity, and electronic communication with carriers, says Aimi, and wind up missing out on other valuable aspects of the software such as metrics reporting and asset tracking.

"They try to tackle the stuff that they believe will give their company the most benefit as quickly as possible," says Aimi, who advises firms to maximize their TMS by using multiphase implementations supported by benchmarks. "The goal should be to get to the stage where you're utilizing TMS to its fullest degree."

Gonzalez says companies looking to maximize their TMS investment should look at the application as a "living, breathing solution" that operates in an environment where rates, networks, carriers, and locations change constantly. "Treat your TMS like an automobile by making sure rates are accurate, constraints make sense, and other dynamic elements are maintained and updated regularly," says Gonzalez. "By maintaining your TMS you'll not only be able to drive continuous improvement but you'll also be able to see which lanes are problematic from a service or cost standpoint—and tackle the problem before you lose a lot of money over it."

And remember, says Klappich, that those dollars saved by a TMS can be sent right to the company's bottom line, particularly for those firms that are using carriers as opposed to their own fleets. "There are a lot of applications with the same ROI as a TMS, but for companies using carriers to haul their goods, every dollar saved is a dollar that can be kept inside the company," he says.

OUT IN THE COLD

With the TMS sector expected to grow at a steady rate of 8 percent to 10 percent annually over the next few years, according to Aimi, there are sure to be more shippers realizing the fast and significant ROI associated with such systems.

On-demand options that require lower up-front costs and implementation times continue to grow in popularity within the transportation sector, where keywords like "centralization" and "automation" will be top-of-mind for shippers in the new economy.

Aimi, who says the average shipper can slash 10 percent to 25 percent from its annual freight budget within six to 12 months of implementation, believes that there's a lot of room for adoption in the new economy. "For the second half of 2009, TMS vendors saw a resurgence of interest in their systems," he adds. "I expect that to continue and to result in steady growth for the TMS sector in 2010."

Klappich is also bullish on the future of TMS adoption, and notes that on-demand options will be of particular interest to shippers. "Over the last 18 months, and largely due to economic conditions, we've seen on-demand become a preference rather than an option," says Klappich.

Also driving growth within the TMS sector will be the need to replace antiquated or "partial" solutions in preparation for the economic recovery and the business growth—and transportation challenges—that will come as a result. Add in the return of fuel volatility and tighter capacity, says Aimi, and the case for a solid TMS that can handle multiple tasks in a fast-paced environment is clear.

"If the economy picks up at any pace at all, we're going to run out of capacity for trucks," says Aimi, who points out that trucking firms have significantly slashed capacity and the number of drivers in order to "stay afloat" during the recession. Now, he says, there's simply "not enough credit to go around" to help those carriers ramp back up quickly to meet the demand.

That's where a TMS will come in. "If you're not using a TMS to be the first shipper to tender to your carriers," says Aimi, "there's a good chance that you won't be getting the trucks you need."

Bridget McCrea is a Contributing Editor to Logistics Management

RFID revisited

BY **MAIDA NAPOLITANO,** CONTRIBUTING EDITOR

While it may have dropped off the front pages of the business press, RFID is enabling maverick warehouse and DC managers to add value and streamline supply chain processes. Here are four benefits that those managers are achieving within the first year of deployment.

It was understandable from the outset why the technology had quickly become a "media darling." In its very basic form, an RFID system uses an inlay, consisting of a microchip and an antenna, along with a reader to communicate digital information about an object to which the inlay is attached. The Electronic Product Code (EPS) was developed to associate to that microchip and create a unique serial number to every item manufactured—just like the UPC in bar coding.

The ability of RFID and EPC to communicate all sorts of unique data about a product as it moves anywhere in the world made it a potentially powerful technology for the global supply chain. It certainly grabbed the attention of Wal-Mart: The company issued mandates to its major suppliers to initiate the EPC tagging of select pallets and cases.

Over the past few years reports have been widespread that Wal-Mart was beginning to backpedal from its initial EPC initiative. John Simley, spokesperson for the retail giant, declares that those reports are simply not true. "In fact, we continue to invest in RFID," says Simley. "Currently, about 600 suppliers are applying EPC tags to some degree, and they are being read at five Wal-Mart DCs and six Sam's Club DCs—as well as at their receiving stores and clubs."

If the Wal-Mart initiative is still going strong then why aren't we hearing more about aggressive RFID deployments? Mike Liard, practice director of RFID for ABI Research, believes that the economic challenges in the last 18 months have caused many companies to shift IT priorities. "We've noticed a slowdown in the RFID marketplace," says Liard. "It led a few companies to either delay or maybe cancel their projects; but not enough to cause a contraction of the marketplace where we'll see negative growth."

On the flip side, those who have deployed RFID are now enjoying a quicker return on their investment. Liard points out that two years ago RFID users reported a return on investment (ROI) period of 12 to 18 months. Last year, he says, it was less than 12 months.

WHY THE QUICKER ROI?

One reason for the quicker ROI is the reduction in the cost of RFID tags combined with significant upgrades in the technology. Victor Vega, director of marketing for Alien Technology, a major provider of RFID products and services, says that there's also support from large software companies such as Microsoft and Oracle. "What this does is foster an easier interface for the user, allowing their back-end system to accept the lingo of our systems." Add to that an open protocol adopted by companies worldwide, and costs are being driven down.

A typical shipping/receiving portal (left); using RFID to validate cases to an order (center); using RFID to validate pallets to an order (right).

Vega recalls that, over a decade ago, first-generation contactless RFID tags were $12 each, had only 27 bits of memory, and had a "read range" of two to three inches. "Today, our latest inlays that function as engines for our Gen2 UHF passive tags (the preferred tag for pallet, case, and item-level tagging in the DC) have 800 bits of memory and can be read to a maximum of 100 feet—with each costing under a dime."

Though, Tom O'Boyle, vice president of Miles Technologies, a barcode, voice, and RFID services provider, cautions that hardware and tags represent less than half of the project expenditure in a typical turnkey system. "There's the software and other systems needed to make the data collected useful." He's seen turnkey systems range from under $50,000 to over $500,000, depending upon the number of read zones, applications desired, and business intelligence needed to truly create value.

Despite the recent lull in RFID deployment and attention, all of the sources contacted for this feature agree that logistics and supply chain managers should keep an eye on RFID—not because they're forced by mandates, but because of the value that can be derived from its use. Over the next couple pages we'll discuss four key benefits that RIFD-enabled warehouses and DCs can achieve well within the first 12 months of deployment.

FOUR DEPLOYMENT BENEFITS

1. Eliminate shipping and receiving errors. Correcting errors not only cost a company thousands of dollars annually, but the error itself can translate into lost sales and loss of customers. With RFID, supply chain and logistics teams can eliminate errors from receiving to shipping by automatically capturing accurate information via the simple act of moving product through a read zone. (See above photos.)

For example: A fixed reader can automatically retrieve data of tagged receipts and check them against an advanced shipping notice (ASN) sent by the factory. The actual receipts can then be added to the WMS inventory. After order picking, readers can validate the accuracy of the product mix that's linked to the pallet ID without having to scan each and every case. At shipping, a red light comes on when a material handler attempts to load a pallet to the wrong trailer.

2. Improve productivity. The efficiencies gained from not scanning can be substantial. O'Boyle describes how the workers in a chemical warehouse initially used barcode scanners to "ship-confirm" barrels of product before loading them into a trailer. A material handler had to dismount his lift truck and, using a handheld mobile computer, scan the serial number and the lot number for each barrel for all 60 to 65 barrels that can fit in a trailer.

"With RFID, the company tackled two steps in one," says O'Boyle. "As the worker transports the barrels into the trailer, readers are keeping track of what was loaded, confirming that the correct product and quantity was shipped while grabbing the lot numbers at the same time." The system immediately alerts the material handler should any discrepancies occur—without the material handler ever stepping down from his lift truck. "With RFID, they were able to load 15 percent to 18 percent more trailers with the same number of people," he adds.

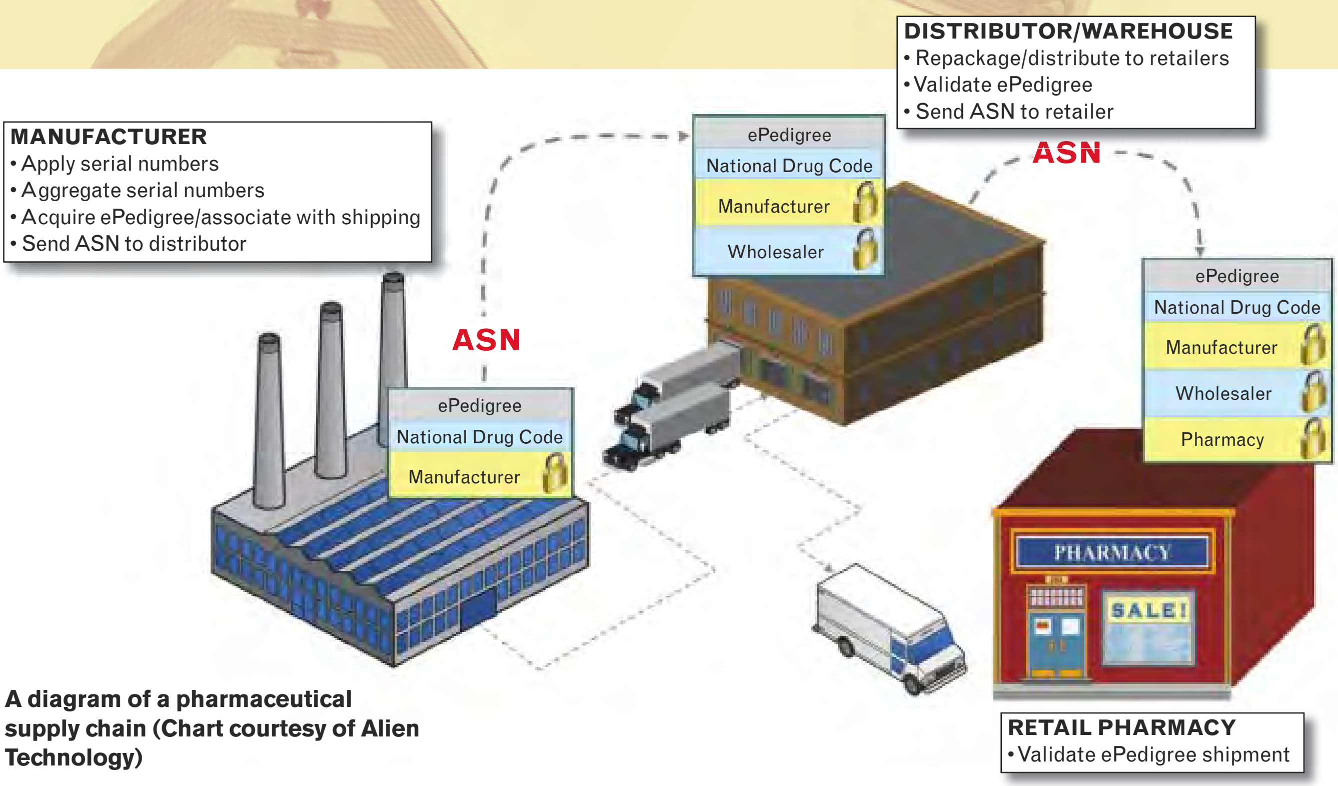
Because fixed readers are stationary and have limited read ranges, providers have been exploring more mobile solutions by installing readers in lift trucks to identify the load and automatically direct the driver to the correct put-away location. The next generation of RFID-enabled lift trucks goes a step further by combining RFID data collection with optical real-time location systems (RTLS) to precisely record where the pallet has been put away without any operator typing or scanning the location.

3. Establish traceability. In 2004 the FDA issued a report to combat counterfeit drugs and recommended the use of barcode or RFID technology to track and trace a prescription drug's "chain of custody" from the time a drug leaves the plant to the moment the patient receives the medication.

This electronic history of all transactions involving that drug is known as its ePedigree. Because ePedigree compliance means tagging down to the item-level, many feel that scanning each salable unit's barcode would be too labor intensive and time consuming. "By using UHF passive tags," says Vega, "individually tagged items can be read while still packaged inside cases, thus saving a tremendous amount of labor at the DC."

Although compliance deadlines have been pushed back to beyond 2010, it remains a legislation to watch because it will affect operations at the DC level. According to Paul Faber, a principal with consulting firm Tompkins Associates, some health care companies are already taking a conservative approach and integrating ePedigree requirements into their planned SAP or Oracle upgrades.

The need for traceability also extends to retailers of luxury goods that are concerned about protecting their brand.



A diagram of a pharmaceutical supply chain (Chart courtesy of Alien Technology)

Alien Technology's Vega cites an apparel company that discovered a leak in its distribution network where designer purses were being diverted to "grey markets," or unauthorized channels. Each year, a staff of brand police would go out and scour the market, buying back the purses, trying to find that leak.

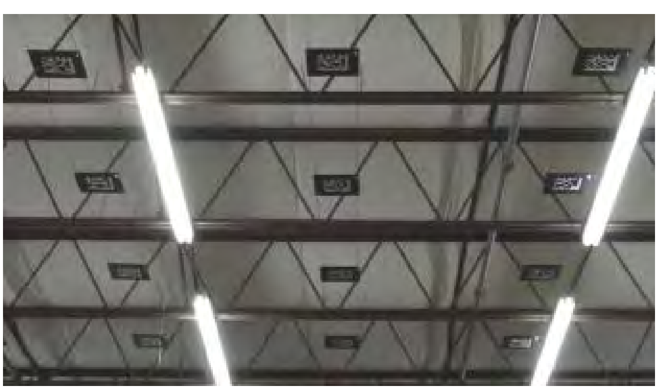
By embedding the RFID tags inside the purse, it recorded each item's transactions through the supply chain. They then bought the purse from the grey market and brought it back to the DC where they read it and determined exactly which distributor leaked it. "They immediately shut down the source of the problem," Vega adds.

4. Achieve inventory control and accuracy. By RFID-tagging product at the case level, companies achieve complete visibility of a product's movement from manufacturing to the point of purchase at the retail store. Replenishment alerts at the DC can be automatically generated after a specific number of RFID-tagged cartons leave a retail store's backroom.

In the DC, with RFID tags linked to serial numbers and expiration dates, workers can be directed to select the oldest product first. Where a specific pallet needs to be located, the latest handheld RFID readers offer pinpoint location technology—think metal detectors at the beach—using audible and visual cues to quickly guide workers to the desired load.

When cycle counting, instead of scanning each pallet in a rack bay with 10 pallets, a mobile RFID reader could capture all 10 pallets in one read. Shrinkage is reduced as RFID readers can be configured to sound alarms if tagged items are removed from storage without prior approval.

Optical position markers (OPM) hung from a DC ceiling. A camera mounted on the truck cage looking up reads the OPM, providing inch-level position accuracy as well as rotation angle and speed.



LOOKING TO THE FUTURE

RFID tags may be less expensive than they used to be, but they are still more expensive than the fraction of a penny a bar code costs. Faber agrees, "It's not a universal replacement for bar coding yet, but the ROI is there for specific applications," says Faber.

As for Wal-Mart, their commitment remains strong and there appears to be no let up in sight. "We're a company that never reaches the finish line," says Simley. "There's always another improvement or another application. We'll keep researching and investing in EPC because it improves our inventory accuracy, improves our customers' shopping experience, and lowers costs." And as long as Wal-Mart stays committed, supply chain and logistics managers can be sure that RFID discussions will not go away any time soon. L

Maida Napolitano is a Contributing Editor for Logistics Management

LMS SURVEY: WHO, WHAT, WHEN, WHY?

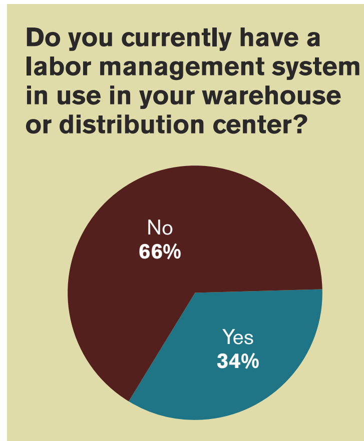
BY BOB TREBILCOCK,
CONTRIBUTING EDITOR

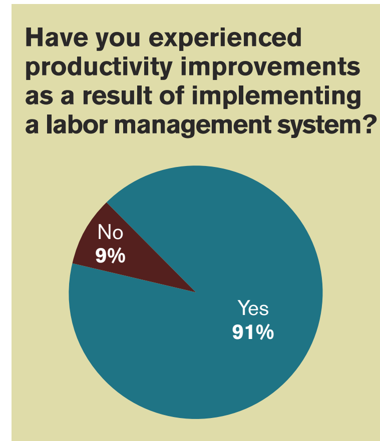
Logistics professionals weigh in on who's using labor management systems and whether these solutions are really delivering value.

Labor management systems (LMS) have been one of the bright spots in an otherwise dismal year for the supply chain software market. In part, that's because labor management delivers quantifiable results. Or, so we're told. As sister magazine *Modern Materials Handling (MMH)* reported last March, "A site using labor management is 20 percent to 30 percent more effective than a non-LMS site," according to Charles Zosel, vice president of Tom Zosel Associates.

That is a common sentiment. But, what are logistics professionals actually doing with labor management and what kinds of results are companies achieving in the real world? *MMH* surveyed its readers to answer exactly this.

MMH sent a survey to its online readers and received back 398 responses, including representatives from companies that have yet to implement labor management, companies that are investigating these systems, and companies that have implemented labor management systems and, in some cases, employee incentive programs. The respondents represented more than 15 different industries, including food and beverage, manufacturing and distribution, retail distribution, chemicals and pharmaceuticals, and the automotive industry. Here's are the results.



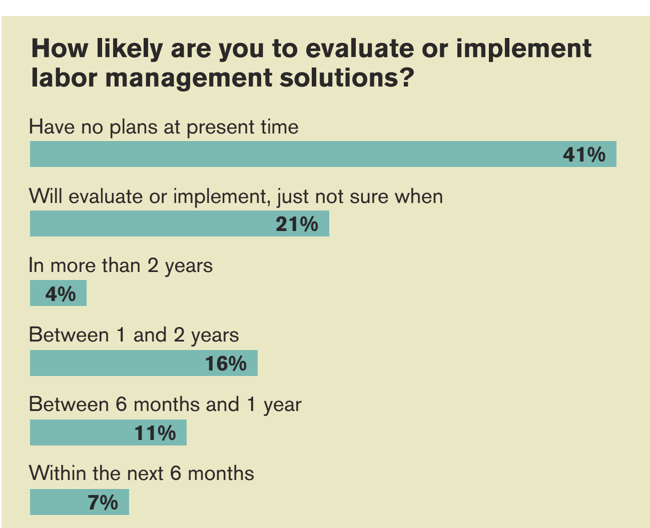


NOT WIDELY DEPLOYED, BUT GROWING

Despite proven results, labor management systems are still not widely deployed. Only 137 out of 398 respondents, (or roughly 34 percent), are currently using a labor management solution in their warehouses or distribution centers. The other 66 percent have yet to implement a system.

That may be a reflection of the fact that a significant number of warehouses and distribution centers have yet to implement a warehouse management system (WMS). In this case, it's not a chicken versus the egg question; it's unlikely a company without a WMS system of some kind would implement labor management.

But nearly 60 percent of those who aren't using labor management now say they are likely to evaluate a solution in the future; 18 percent expect to do so within the next year. Based on that result, the market should continue to grow.



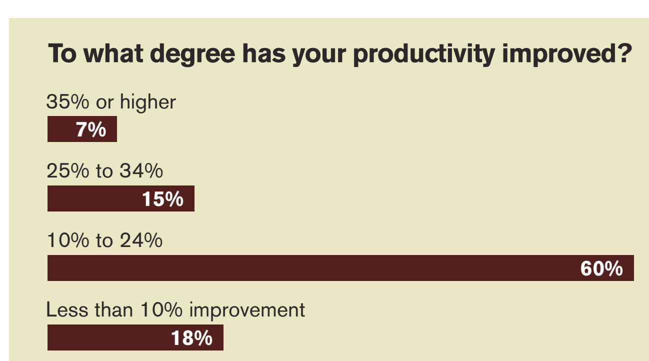
COMPANIES, BIG AND SMALL

Just who is using labor management? A closer look at the respondents currently using labor management revealed some expected and unexpected responses.

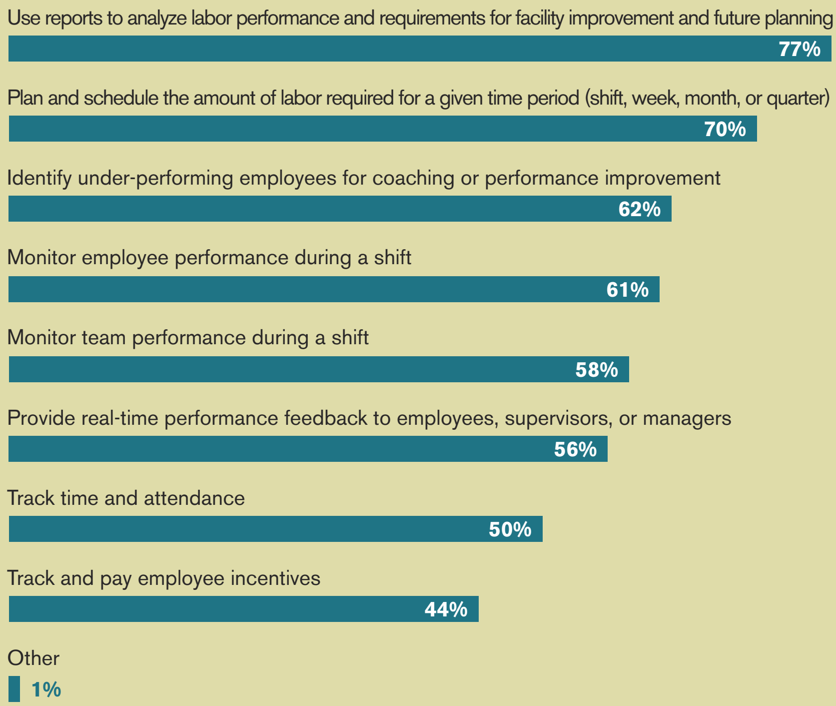
First, the expected: 97 percent of the users were in management, and nearly 20 percent were corporate level managers, including CEOs, presidents, and vice presidents.

What's more, the most represented industry verticals were also the most labor-intensive industries among our readership: Transportation and warehousing services (22 percent), food and beverage (16 percent), retail distribution (15 percent), and automotive manufacturing (9 percent). No surprise there: Industries with slim profit margins like food and beverage and third-party logistics providers (3PLs) were the earliest adopters of labor management. That's because any reduction in operating costs goes right to the bottom line.

The unexpected? Companies of all sizes have adopted labor management technology. Expectedly, 48 percent of the users had more than 1,000 employees; but surprisingly, 30 percent of the users had fewer than 250 employees, including 13 percent that had fewer than 50 employees. To be fair, providers of labor management software systems have been reporting that companies with as few as 30 employees can benefit from the technology, and these results seem to agree.



For which purposes are you using/planning to use your labor management application?

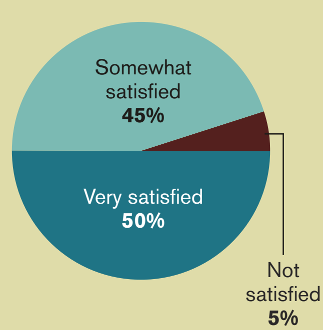


Respondents are also using labor management for a variety of purposes: 77 percent are using the reporting functions to analyze labor performance and for future planning; 70 percent use the systems to plan and schedule the amount of labor required for a given period of time, whether that is a shift, a week, a month or a quarter; 62 percent are using the data to identify under-performing employees for coaching or performance improvement; 61 percent are using labor management to monitor employee performance during a shift; 58 percent use the systems to monitor team performance; and 56 percent use the system to provide real-time performance feedback to employees, supervisors or managers. Finally, 44 percent of users are using their labor management systems to track and pay employee incentives, another key component to getting the most from the labor force.

Labor management is also being used for nearly every labor intensive task within the distribution center: 75 percent of respondents are using their systems in packing and shipping; 65 percent in receiving; 60 percent to manage case picking; 55 percent for putaway processes, palletizing and piece picking; and 50 percent are using the systems in pallet picking.

One other response caught our attention: 53 percent of the users of labor management are planning to expand the system into areas of their business besides the distribution center, including manufacturing, their transportation departments, and their retail store operations.

In general, how satisfied are you with the results delivered by your labor management solution?



LABOR MANAGEMENT DELIVERS RESULTS

One reason users are interested in implementing labor management in other areas of their businesses is that labor management does deliver results: 91 percent said they had experienced productivity improvements as a result of implementing a labor management system. Of those, 60 percent said they had productivity improvements of between 10 percent and 24 percent, and 22 percent reported improvements of more than 25 percent, including 7 percent who had improvements of more than 35 percent. Those are impressive results.

Labor management consultants contend that the most successful facilities are those that develop and implement engineered labor standards, using time and motion studies, along with preferred methods for performing a task. That was certainly the case for readers: 76 percent said they had implemented both.

In fact, a lack of standards appears to hinder results, according to comments from some users. "Our solution is fine," wrote one. "We as a company need to create engineered standards in order to get more out of the system."

That thought was echoed by another user who used pre-established labor standards that proved to be "too general and did not accommodate unique circumstances like piece picking versus pallet picking on the same order."

Standards are used to measures an employee's performance while working. But what about when employees are not engaged in productive activities? Seventy-two percent said they are using labor management systems to monitor indirect time, that is, time not spent on specific tasks, such as breaks.

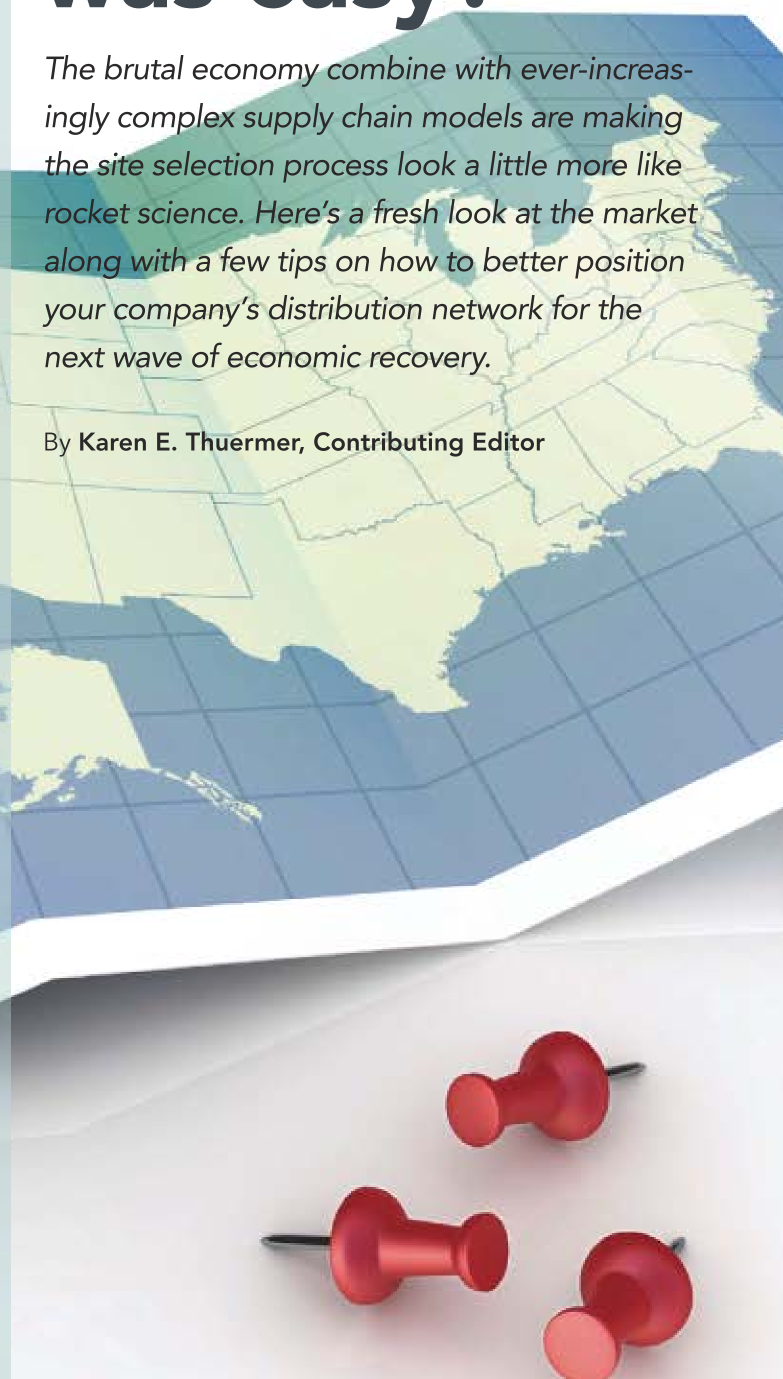
The bottom line is that readers overwhelmingly believe that they are getting value from their investment in labor management: 50 percent describe themselves as very satisfied and 45 percent are somewhat satisfied. Only 5 percent said they were unsatisfied with their systems.

Bob Trebilcock is a Contributing Editor for Logistics Management

Who said site selection was easy?

The brutal economy combine with ever-increasingly complex supply chain models are making the site selection process look a little more like rocket science. Here's a fresh look at the market along with a few tips on how to better position your company's distribution network for the next wave of economic recovery.

By **Karen E. Thuermer, Contributing Editor**



Let's face it: No matter what shape the economy is in, selecting a site for a warehouse or distribution center (DC) has never been easy.

There's a lot at stake, with multiple factors weighing heavily on the decision. And as it did in 2009, transportation costs will continue to weigh heavily in the decision-making process this year as companies of all sizes will be scrutinizing every single factor involved, including inventory and carrying costs.

But while the economic news is a little more positive heading into 2010, it's going to take a while to burn off the residual effects of the past two years. In that time we saw severely escalated warehouse vacancy rates, tightened credit availability for both landlords and tenants, and a corporate attitude to trim costs wherever possible. The prolonged downturn has also translated into less volume, thereby putting pressure on distribution costs per unit as excess warehouse space becomes greater than normal.

> *Industrial vacancy rates are at an all time high of 11 percent while warehouse rents are at a low of $4 per square foot.*

Consequently, economic conditions have made companies re-think their location and network strategies—both from a sourcing and distribution perspective. Combine this with ever-increasingly complex supply chain models that vary between companies, industries, or commodities, and the process starts to look a little bit more like rocket science.

Multiple factors; multiple options

Even as certain indictors point to a subtle upturn heading into this year, the idea of shaving every nickel out of distribution continues to be the mantra. This includes looking for ways to save in real estate, transportation, and overhead costs.

While labor and customer service alone itself account for 17 percent of supply chain costs, according to Grubb & Ellis, inventory carrying costs account for nearly 22 percent and transportation over 50 percent. Given the unpredictability of fuel prices, the fact that cargo volumes are creeping up at East Coast ports, and to some extent Gulf ports over West Coast ports, and the reality that industrial vacancy rates are at an all time high of 11 percent while warehouse rents are at a low $4 per square foot, provides a perfect environment for companies to re-evaluate their warehouse and distribution center needs.

Case in point: Early last year Handy Hardware, a member-owned hardware buying group, announced plans to break ground in mid-2009 on a $20-million distribution center in

Meridian, Miss. Company officials see the new facility as fulfilling Handy's growth plan to serve members in the southeastern U.S. Up until then, the Houston-based company had been solely operating from a 560,000-square-foot distribution center in Houston.

In many regards, Handy Hardware's example indicates today's overall trend toward opening regional and single mega DCs. Mega distribution centers offer larger footprints, higher elevation heights, and more truck and trailer parking. Companies are also consolidating smaller, inefficient facilities in multiple locations to augment existing networks with small levels of safety stock or emergency product.

Mega distribution centers offer larger footprints, higher elevation heights, and more truck and trailer parking.

Locations with high unemployment can be appealing because labor is oftentimes cheaper and abundant. "We always look for areas of high unemployment because there's available workforce and also incentives," says Richard Allen, CEO of San Diego-based The Allen Group, developer of the Dallas Logistics Hub (DLH) in southern Dallas County, Texas. "The politicos want to see their people go to work so they always support the mega projects," adds Allen.

To attract distribution center projects, communities across the country are touting their affordable real estate and available labor. To sweeten the deal, some locations offer tax incentives to companies in exchange to a commitment. In fact, communities like Dallas have adopted a federal immigration program that trades green cards and the promise of permanent residency for investments of $500,000 or $1 million.

Site optimization

Today, when third party logistics providers (3PLs) talk to prospective clients, much of that discussion centers on site optimization as well as the intricacies of inbound and outbound logistics, including fuel costs. This can involve going to another location that offers an abundance of truckload business so that a company can save money by consolidating shipments.

"Or they consider taking on the cost of traditional carrying cost by establishing another DC because they can bring shipments closer to market and service customers better and quicker," says Carl Neverman, vice president of client solutions for Weber Distribution, a Los Angeles-based 3PL. "Some of that customer demand means product must be available to 80 percent of the market within 24 or 48 hours of order confirmed or order drop."

Consequently, many companies—particularly 3PLs—today are changing their site selection strategies to be located where they get the benefit of trucking companies servicing multiple clients. This way they no longer have to pay for an entire truck when they only need to ship half a load. This is especially important to companies concerned about product obsolesces and code date issues.

"Shipping by half loads may be more cumbersome and costly in some regards, but more frequent shipments are preferable," Neverman says. "But as a result, they are shrinking their back rooms and the size of their own DCs." This is especially the case for companies concerned about shrink or product obsolescence.

One site selection trend that Tony Russo, senior associate at CB Richard Ellis, reports seeing from specific tenants in the Washington, D.C./Dulles market is their decision to move farther afield where real estate costs and overhead are lower. Companies can cut their base rent in half by moving west to Winchester, Va., he says, particularly those that cater to the Eastern Mid-Atlantic region and don't need to service the Washington metro area. "Due to the

INTERMODAL AND DISTRIBUTION: A MARRIAGE OF CONVENIENCE

Are railroads the next big trend in site selection? Richard Allen, CEO of San Diego-based The Allen Group, the developer of the Dallas Logistics Hub (DLH) in southern Dallas County, Texas, believes so. In fact, he's adamant that future trends, specifically in intermodal, will play a major role in site-selection strategy.

One only needs to consider Warren Buffett's purchase of Burlington Northern Santa Fe Railroad (BNSF) in 2009 for Allen's belief in huge changes to come. After all, it's a proven fact that rail costs a fraction of truck transit for moves 500 miles or more.

"When you think about how site-location decisions were made 10 to 15 years ago, intermodal did not enter into the equation," Allen says. "In the case of the Dallas/Fort Worth area, for example, in the past you located your site near the DFW Airport because it was easier for your boss to fly in and see the site, and it happened to be closer to where the plant manager wanted to live."

Now strategies are changing, although Allen is surprised at corporate site selectors who still hold onto outdated ways of determining optimal DC locations. He regards intermodal to be the wave of the future in terms of DC location and savings in transportation costs

"You'd better think long and hard about renewing your lease in an area that is 30, 40, or 50 miles away from where the goods are coming in," he says. "Companies save $1.5 million per year in freight charges if they locate in a DC next to an intermodal yard."

According to Allen, his figures are quantifiable. These kinds of savings, he claims, makes lease rates and land costs irrelevant. "It's amazing the number of people in this industry who have not figured this out," he states.

But just consider how railroads are purchasing vast amounts of land around intermodal projects with the intent of leveraging the property with a developer partner who can supplement them with warehousing and distribution development. There are examples everywhere such as CSX near Winterhaven, Fla.; BNSF in Kansas City; and Union Pacific (UP) in the Dallas/Fort Worth area.

"We have been working with the railroads for 15 years," Allen says. "When we first went to Dallas to buy land in 2004 we went because UP announced that they were putting in a new intermodal facility."

downturn in the economy, I think we will continue to see this trend," Russo adds.

That's because transportation has become one of the most scrutinized costs in a company's site selection criteria.

Yet, with real estate prices plummeting, and buildings becoming outdated and obsolete, many companies still consider the traditional, more expensive locations since prices are now more affordable. Russo warns, however, that clients are also finding that consequently higher transportation costs can outweigh cost savings in rent.

But according to Tim Feemster, senior vice president and director of global logistics at Grubb & Ellis Co., the rising rate of DC vacancies—currently at 10.4 percent and expected to reach 11.4 percent by the end of 2010—is making this a "tenant-controlled" market.

"Most of our clients are looking at their network and, if in the right place to meet their strategic goals, are blending and extending leases to take advantage of immediate and long-term cost reductions through free rent, tenant improvement allowances, and rent rate reductions," says Feemster.

Companies save $1.5 million per year in freight charges if they locate in a DC next to an intermodal yard.

Many clients, he adds, are able to redo their lease for up to five years at annual rent rates below their current levels. But Feemster concurs that the right move should be driven by total costs, not just transportation costs—even though these can account for over 50 percent of supply chain costs. Where and what mode the inbound and outbound transportation network utilizes has a significant impact on location.

"Being too far away from specific transportation infrastructure points like domestic and international intermodal sites will greatly surpass most rental rate and incentive packages and have a negative impact on total costs," adds Feemster.

Expert recommendations

So, what strategies do site-selection experts from both real estate and supply chain think tanks recommend to help companies better position themselves for the next wave of economic recovery?

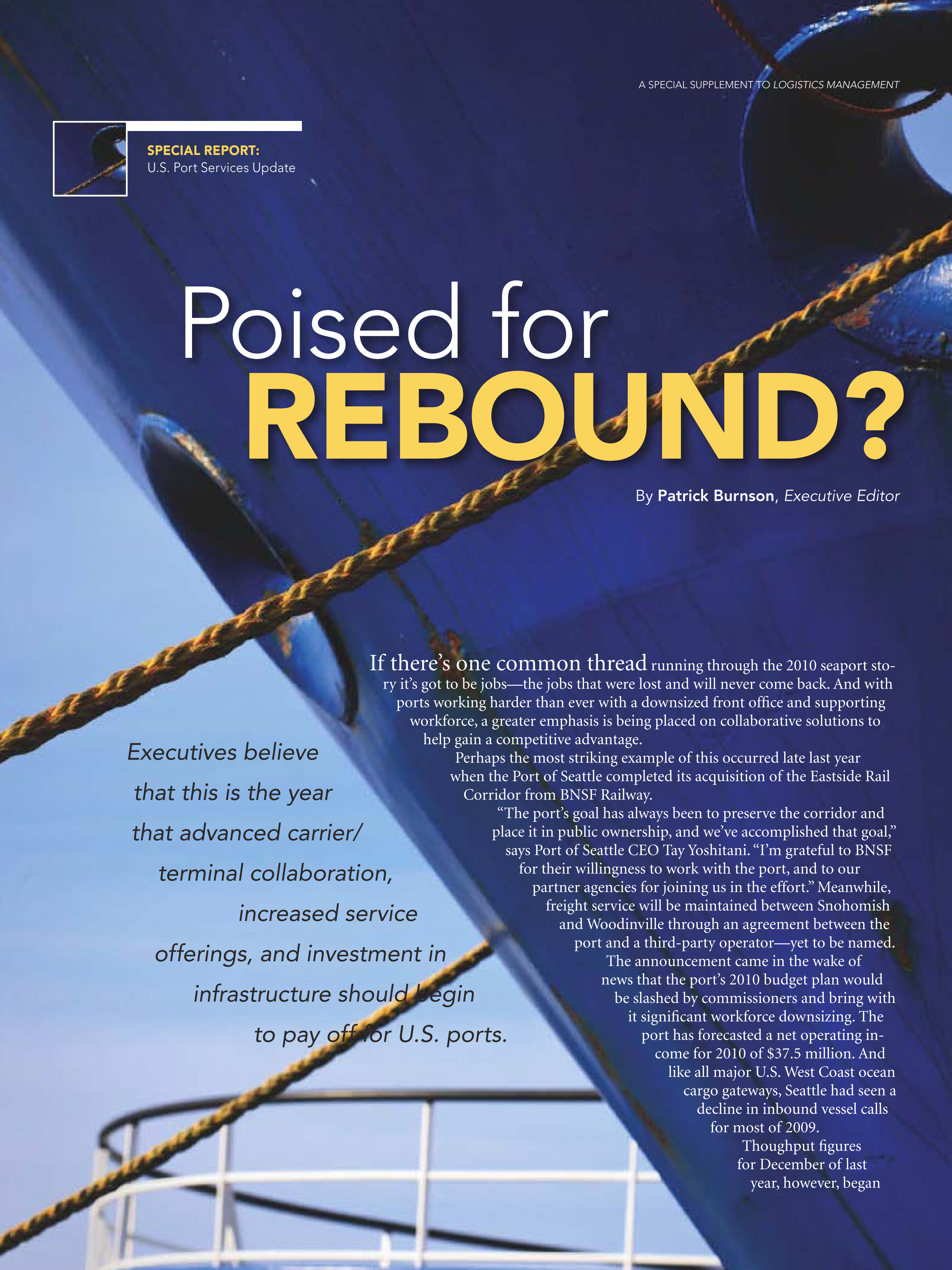
Feemster suggests making sure that you understand your company's sourcing strategy. "Consider your firm's market strategy by employing a cross-functional team for advice before even commencing the site selection process," he says. "If you do not align the strategy of the project with that of the organization, you may sub optimize the solution—especially if you don't include finance, real estate, supply chain, and manufacturing/ procurement on the team."

That's because each department is measured and incented on different goals. For example, real estate concentrates on free rent, low rent, and incentives; supply chain considers low transportation and labor costs; manufacturing and procurement focuses on low cost components; and finance keeps its eyes fixed on return on investment (ROI), earnings per share (EPS), and earnings before taxes and interest (EBIT).

"Look at total costs and not individual elements when making the decision," Feemster says. "And hire someone who understands the supply chain and can analyze your total cost elements properly."

Many companies today utilize site selection firms that take the total cost picture into account. In Feemster's mind, such firms are able to get better long term solutions. "Search the market for qualified site selection consultants and ask them what the top five selection elements are," he suggests. "If they do not mention transportation, pass on their proposals." L

Karen Thuermer is a Contributing Editor for Logistics Management



SPECIAL REPORT:
U.S. Port Services Update

Poised for REBOUND?

By **Patrick Burnson**, *Executive Editor*

Executives believe that this is the year that advanced carrier/terminal collaboration, increased service offerings, and investment in infrastructure should begin to pay off for U.S. ports.

If there's one common thread running through the 2010 seaport story it's got to be jobs—the jobs that were lost and will never come back. And with ports working harder than ever with a downsized front office and supporting workforce, a greater emphasis is being placed on collaborative solutions to help gain a competitive advantage.

Perhaps the most striking example of this occurred late last year when the Port of Seattle completed its acquisition of the Eastside Rail Corridor from BNSF Railway.

"The port's goal has always been to preserve the corridor and place it in public ownership, and we've accomplished that goal," says Port of Seattle CEO Tay Yoshitani. "I'm grateful to BNSF for their willingness to work with the port, and to our partner agencies for joining us in the effort." Meanwhile, freight service will be maintained between Snohomish and Woodinville through an agreement between the port and a third-party operator—yet to be named.

The announcement came in the wake of news that the port's 2010 budget plan would be slashed by commissioners and bring with it significant workforce downsizing. The port has forecasted a net operating income for 2010 of $37.5 million. And like all major U.S. West Coast ocean cargo gateways, Seattle had seen a decline in inbound vessel calls for most of 2009.

Thoughput figures for December of last year, however, began

"OUR 2009 TEU VOLUMES WERE DOWN ONLY 8 PERCENT FROM 2008, BUT OUR OUTBOUND VOLUME ACTUALLY INCREASED 6.5 PERCENT. THESE NUMBERS REFLECT STRONG PERFORMANCE IN A WEAK GLOBAL ECONOMY AND ARE THE HEALTHIEST OF ANY U.S. WEST COAST PORT." **JAMES KWON,** *maritime director, Port of Oakland*

to tell a different story. As Maersk Line and CMA CGM began a new service to Seattle, a surge in traffic became starkly evident. And with Hanjin Shipping reinstating Seattle in one of its trans-Pacific services, port officials are even more optimistic.

Oakland, too, has had its wave of layoffs in response to diminished container throughput and fewer inbound calls, but maritime director James Kwon says things are looking up: "Our 2009 twenty-foot equivalent unit (TEU) volumes were down only 8 percent from 2008," he says. "But our outbound volume actually increased 6.5 percent. These numbers reflect strong performance in a weak global economy and are the healthiest of any U.S. West Coast port."

Kwon also notes that the gateway is seeking innovative ways of attracting more inbound calls form Asia. "Oakland currently has three first-port-of-call services and is aggressively marketing to carriers serving the port to bring in additional cargo," Kwon says. "The port has sufficient existing terminal and rail capacity with plans for expansion in the very near future."

Doing more with less is another consequence of worker layoffs—both at ports and with their business partners. In a move to double its cargo-handling

U.S. PORTS TRY REGIONAL MARKETING STRATEGY

In a historical first, six major U.S. West Coast ports and two western railroads came together at the World Shipping Summit (WSS) in Qingdao, China, late last year to announce their collaboration.

They addressed leaders and customers of the maritime industry including ocean carriers, beneficial cargo owners (BCOs), and marine terminal and intermodal operators and showcased the benefits of the U.S. West Coast as the premier region for trans-Pacific trade.

The U.S. West Coast Collaboration (USWCC) is comprised of the major container-ports on the U.S. West Coast—Seattle, Tacoma, Portland, Oakland, Long Beach, and Los Angeles—along with BNSF Railway Company and Union Pacific Railroad.

"Union Pacific has a long track record of investing in its network to support the growth of the West Coast ports and its customers," says John Kaiser, vice president and general manager of Union Pacific. "With valuable input from both, we use a systematic, structured approach. We have added capacity and enhanced service through new and expanded terminals, a new interline gateway and additional main line capacity." And by working with the ports, adds Kaiser, the railroad is creating faster, more reliable service, as well as greater access to growing markets throughout the United States.

"The U.S. West Coast Ports are major players in world trade because of our deep water, vast container terminals, an unrivaled roadway and rail network, and the neighboring warehousing to complement our ports," says Richard Steinke, executive director, Port of Long Beach. "These advantages enable us to handle more than $450 billion in trade a year. We are the best way to move trade between the U.S. and Asia."

The concept behind this collaboration began earlier in the year (2009) when the top leadership of these ports met to discuss ways to take advantage of their combined resources, experience, and proximity to Asia. They also recognized that the participation of the two largest U.S. railroads, Union Pacific and BNSF, was absolutely critical given the interdependency between port and rail to connect U.S. markets with global markets.

At the same time, The Panama Canal Authority has put together a Memorandum of Understanding (MOU) creating allies with a "fraternity" of East Coast and Gulf ports designed to achieve increased trade by soliciting shippers worldwide through collaborative marketing and information sharing.

The MOU fraternity includes the Port Authority of New York and New Jersey, Georgia Ports Authority, South Carolina State Ports Authority, Virginia Port Authority, Massport, Port of Miami, Port of Tampa, Port of Houston and the Port of New Orleans. Port Manatee, an emerging cargo gateway in the region, became the 10th member.

"We are the closest deepwater port to Panama Canal," says Steve Tyndal, senior director of trade development and special projects, who added that Manatee is the second closest port (after Miami) to Cuba—a potential source of new business if trade with that nation is restored.

Panama Canal Authority CEO Alberto Alemán adds that this collaboration is also beneficial as ports seek innovative ways to provide enhanced customer service. "Looking ahead to 2014 and the completion of the waterway, we anticipate growth in trade and the emergence of new economic opportunities."

The fresh aroma of early morning coffee
fills the air and your senses.
But, behind the scenes, the very source,
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"WE'RE TAKING THE OPPORTUNITY DURING THIS TIME TO IMPROVE RAIL CONNECTIVITY, INCREASE ON-TERMINAL CAPACITY, AND DECREASE THE TIME IT TAKES TO PROCESS CARGO."

DOUG MARCHAND, *executive director, Georgia Port Authority*

capacity without adding to its payroll, APL announced the completion of its "Global Gateway Central," the result of a two-year reconstruction at its Port of Oakland marine terminal. According to APL, this is a milestone event that will improve terminal operating efficiency.

"We've talked for years about the need to improve productivity at U.S. ports," says John Bowe, president of the Americas for APL. "By completing this project we've significantly increased our cargo-handling capacity, and we've done it without adding a single acre of space in Oakland. That's a dramatic productivity gain."

The terminals are central to APL's intermodal strategy for inbound logistics, adds APL spokesman Mike Zampa. By increasing Oakland's capacity, APL says it can offer shippers greater flexibility in selecting a West Coast gateway.

Gulf partnerships boom

Even in ports where job losses have not been as dramatic, carrier and terminal partnering is playing a significant role. In yet another move signaling increased collaboration, one of the Port of New Orleans' terminal operators has agreed to reduce the size of its leased area to make room for a refrigerated facility.

"This site was not initially available to us because the property was under long-term lease," says Gary LaGrange, president and CEO of the Port of New Orleans. "It is geared for handling international cargo and is located within the existing footprint of the Uptown river terminal complex where we handle about 90 percent of our cargo today."

Access to and from the terminal via the port truckway will make for efficient cargo movements and keep truck traffic off neighborhood streets, adds LaGrange. Thanks to the flexibility of Ports America

The Panama Canal Authority has put together a Memorandum of Understanding creating allies with a "fraternity" of East Coast and Gulf ports designed to achieve increased trade by soliciting shippers worldwide through collaborative marketing and information sharing. Port Newark, pictured above, is one of the ports that stands to benefit from the agreement.


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THE TIME IS NOW
SEA STAR
ENVIRONMENTAL MANAGEMENT SYSTEM
Monday
Tuesday
Wednesday
Thursday
Friday
Saturday
Sunday
OFFICES
TERMINALS
VESSELS
Fuel Reduction Target %
2008 Level
2009 Target
Carbon Footprint Index

"IN THE CONTEXT OF TRANSPORTATION AND PORT INFRASTRUCTURE PROJECTS, I BELIEVE WE NEED TO TAKE A NATIONAL VIEW IN DEVELOPING SYSTEMS THAT WORK FOR ALL OF THE NATION'S GATEWAYS." **JERRY BRIDGES,** *executive director, Virginia Port Authority*

and New Orleans Cold Storage, they have an agreement that "will benefit all parties involved."

Under the current contract, Ports America has agreed to reduce its leased area from the port by about 13.5 acres. The area includes a transit shed and open space normally used to store steel and other breakbulk commodities on the upriver end of Ports America's footprint. That will make room for the construction of a 147,000 square foot refrigerated warehouse that will be operated by New Orleans Cold Storage.

The need to build a new cold storage facility was brought about by Hurricane Katrina that cut off waterborne access for larger deep draft vessels to the port's refrigerated terminal at Jourdan Road on the Industrial Canal. The closure of the Mississippi River Gulf Outlet substantially restricted access to the Jourdan Road Terminal.

"In many respects, we're returning to our old home—this time with a dockside location and a new state-of-the-art warehouse," says Mark Blanchard, President and CEO of New Orleans Cold Storage. "This new site allows us to keep our business and jobs in Louisiana. Our capacity and efficiency will be substantially enhanced with this additional facility. That translates into increased jobs and export tonnage for the port"

At the Gulf port of Houston, newly-appointed CEO Alec Dreyer says 2010 will be a tough year. But he allows that there will be modest growth in cargo volume. And even before Dreyer was put on the job, commissioners of The Port of Houston Authority (PHA) approved up to $20 million for Bayport projects. This includes the design of a Marine Emergency Building and the purchase of nine diesel electric container cranes.

Job creation—albeit temporary—will be a happy byproduct. The Port Commission previously engaged Prozign Architects to design the facility, which is expected to offer about 4,600 square feet with emergency equipment bays, living quarters, and emergency equipment storage. The project site work includes adjoining parking, service roads, utilities, and a guard booth with associated gate arms. The total cost is expected to range between $1 million and $5 million.

East Coast collaborations

University of Georgia economists report that by the end of this deep recession their state will have lost about 9.5 percent of its jobs. In comparison, the nation will have lost about 5 percent. Savannah's loss percentage, however, has been much closer to the national average at slightly more than 5 percent. And with that, the Georgia Ports Authority (GPA) remains bullish on the future.

While the global recession has significantly affected international trade, the GPA says that it's focused on preparing for future growth by improving efficiencies and increasing capacity. "We're taking the opportunity during this time to improve rail connectivity, increase on-terminal capacity, and decrease the time it takes to process cargo," says GPA's executive director Doug J. Marchand.

By becoming the only U.S. East Coast seaport to have two intermodal container transfer facilities (ICTFs), the Port of Savannah is poised to offer shippers unrestricted double-stack rail service to many inland destinations.

Dedicated just last year, the Chatham Intermodal Container Transfer Facility at the GPA Garden City Terminal features three working tracks at 2,145 ft. each and a total of 12,406 ft. of storage tracks. Two Class I rail providers offer two- to five-day transit times to major hubs throughout the Midwest, Gulf Coast, and Southeast. Construction of GPA's second ICTF has been completed, and CSX now provides seven weekly services through the facility.

The recession did not spare the Port of Virginia, either, as the port had the largest wave of layoffs in its history. But on a more positive note, the deep-water gateway's move to privatize more of its operations gained speed in 2009 when Illinois-based CenterPoint Properties Trust made an unsolicited $3.5 billion offer. That bid was quickly followed by ones coming from The Carlyle Group and a partnership involving Carrix Inc. and Goldman Sachs.

"It reaffirms what those of us who have been involved with the port have been saying for a while now, which is that the Virginia port, for many reasons, has the opportunity to become the pre-eminent port on the East Coast," says John Milliken, chairman of the Virginia Port Authority Board of Commissioners.

Jerry Bridges, the port's executive director, welcomes any other moves that signal collaborative solutions: "Competition is positive when it comes to securing the financial health of a port and its community," he says. "In the context of transportation and port infrastructure projects, I believe we need to take a national view in developing systems that work for all of the nation's gateways. This approach would recognize the relative value of all major freight movement infrastructure projects and concentrate our efforts in supporting the anticipated growth in volumes more efficiently and ultimately at lower cost to all stakeholders."

In this economy, Bridges adds, "Ports must look at things as a whole and advocate for those things that will move the most cargo across all of the nation's ports, create jobs, and spur economic development." L

Patrick Burnson is Executive Editor of Logistics Management


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"Those who cannot learn from the past are doomed to repeat it"

By Wayne Bourne

A FEW DAYS AGO I was hit by a wave of nostalgia as I contemplated the topic for this column. I don't know why, but I was reminded of a couple quotes that were presented to me by two close mentors.

The first came to me as I was digging through old correspondence that I'd saved from my oldest brother Dick in 1952. I was entering the third grade and he was just finishing "A" school in the Navy. In a previous letter to him I asked what he did all day, and he replied that he was in school, again. It was then that he issued his now legendary quote: "You should never stop going to school, you should never stop learning. Embrace it in order to be successful."

I have been going to school ever since, either through formal classes, seminars, conferences, or by reading trade books and periodicals. And he was right.

The second was the famous quote by philosopher George Santayana who said: "Those who cannot learn from the past are doomed to repeat it." This was shared with me by my first logistics boss, the late W. K. Smith of General Mills. He was commenting on the fact that he believed in continuous improvement and the value it brought to the organization and to the individual as well.

Both deliver the same message: Take sufficient time out of your daily work routine to acquire more knowledge within your field. This advice is aimed at prevention, not repair.

Life in transportation during the 1970s was far more complicated with its arcane, regulation-bloated ICC than it is today. We were fortunate then to have a vision of what was brewing in Washington, and we prepared well for the effects of the pending legislation that eventually resulted in three major deregulation bills within 24 months—bills that reshaped how shippers would conduct business with the air, motor, and rail carriers of the day. I can't imagine what it would have been like if we had not been required to study the potential effects the proposals would produce. But we had studied and prepared.

There has been much legislation since the Staggers Act and the Motor Carrier Act of 1980 entered our operating world, and I think we can all agree that there is more to come. And that brings me to my concern: Are the newly minted logistics professionals focusing on the current bills before Congress? Have they studied the history of transportation as it existed during the days prior to regulatory reform?

I have often said that transportation logisticians need to be completely aware of the history, the language, and the traditions of transportation. This includes not only the operating and negotiating skills that are being studied today, but shippers need to be studying pending legislation, economics, insurance changes, safety regulations, legal implications, and contract writing. All of these topics form the body of work shippers do each day. How can we plan for tomorrow if we can't anticipate what will challenge us?

Within the past 15 years or so we've witnessed a steady flurry of legislation surrounding highway safety along with the many changes to the Hours of Service (HOS) rules. I believe they are on the fourth version of HOS now; and each time the government changes the HOS rules they diminish carrier productivity and therefore change the way we do business.

Let's consider the evolution of the highway bills, like the one that began in 1987 that was originally known as "The Surface Transportation and Uniform Relocation Assistance Act." That became the "Intermodal Surface Transportation Efficiency Act" (ICE-TEA) in 1991, then became "The Transportation Equity Act for the 21st Century" (TEA-21) in 1998, and then came out the other end as "The Safe, Accountable, Flexible, Efficient Transportation Equity Act-A Legacy for Users" (SAFETEA-LU) in 2005.

The names of these pieces of legislation, if nothing else, are a cure for insomnia. However, the purpose of each was to continuously improve safety, develop and maintain transportation infrastructure, provide much needed funding. The effects of each of these bills had a significant impact on supply chain operations in that speeds were increased, intermodalism was enhanced, and transit times improved.

It's fun for us old timers to look back pre-1980 and revisit the days of total government regulations and the odd way in which we did business. However, many of today's transportation professionals comment that we'll never see a period like that again, so why bother with yesterday. Well, here's why: "You should never stop learning" and "Those who cannot learn from the past are doomed to repeat it." L

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