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Logistics MANAGEMENT®

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LM management UPDATE

AN EXECUTIVE SUMMARY OF INDUSTRY NEWS

◆ **ATA and FMCSA agree to disagree over HOS.** With motor carriers hours-of-service (HOS) regulations expected to significantly change in July, the American Trucking Associations (ATA) and the Federal Motor Carrier Safety Administration (FMCSA) remain at odds over the impact of the new rules as well as the timing. The ATA maintains that the FMCSA should delay the compliance effective date until three months after the D.C. Circuit Court issues its decision over the planned changes to HOS. FMCSA, meanwhile says the ATA's request to delay the compliance date of the rule "is really a request for a stay pending the decision of the court, plus an additional three months of non-compliance." The pending HOS changes have been top of mind for shippers and carriers for more than a year, with shippers concerned about the changes resulting in higher rates and tighter available capacity, and carriers worried about changes in transit times and less time on the road.

◆ **AAR says more Class I capex investments are on tap.** Investments by Class I railroads are expected to be significant again in 2013, according to recently released data by the Association of American Railroads (AAR). The AAR said that the seven North American-based Class I railroads plan to invest an estimated $24.5 billion in 2013, with $13 billion of that investment allocated towards projected capital expenditures to upgrade or enhance rail capacity. The AAR said that with hundreds of transportation projects underway, railroads are investing in things like intermodal terminals that facilitate truck to train transport, new track, bridges and tunnels, modernized safety equipment, new locomotives, and rail cars. It added that in recent years railroads have spent about 17 percent of annual revenue on capital expenditures, whereas the average U.S. manufacturer spends about 3 percent.

◆ **Big merger, big impact?** As anticipated by the world's air cargo shipping community, American Airlines and US Airways agreed to merge. While it's far from clear what the implications will be for U.S. shippers, consolidation has been good for carriers. Currently, more than 70 percent of the U.S. market is in control of just four airlines: the new American, United, Delta, and Southwest. Industry analysts said to shippers in a recent "rate forecast" that change will not be dramatic in any case. "If your volume is down, you can expect carriers to raise your rates," says Charles "Chuck" Clowdis, managing director of transportation advisory services at IHS global Insight. "And if your volumes are up, expect to be asked to lunch and continue to pay at the existing level." Base, rates, he adds, will be raised on a slight scale in any case. "But there's always a margin for error."

◆ **Cardinal Logistics and Greatwide Logistics complete merger.** Two third-party logistics service providers—Greatwide Logistics Services LLC and Cardinal Logistics Management Inc.—reported that they have completed a merger of their two companies which they said will create a market leading logistics organization that offers a broad service platform with annual revenues of more than $1 billion. Greatwide and Cardinal officials said that the combined company's dedicated contract carriage and delivery division will have one of the largest, most diverse dedicated fleet operations in the country and will be uniquely positioned to provide industry leading capabilities for its customers with over $850 million in annual revenue; 5,000 drivers; 125 operating locations; and demonstrated expertise across multiple industries including grocery, bulk food, retail, metals, and building products.

◆ **Big box boom.** Same-day delivery from major e-commerce and multichannel retailers during the 2012 holiday season introduced e-commerce as a highly viable option, even for last-minute shoppers. This evolution in customer demand now ripples through the supply chain for all retailers, prompting executives to re-evaluate real estate strategies, according to a new report from Jones Lang LaSalle (JLL). "Retailers are anxious to create effective multichannel strategies that cater to new customer expectations, such as same-day delivery as well as e-and m-commerce," said Kris Bjorson, head of JLL's retail and e-commerce distribution group. "This means revaluating their supply chain networks and distribution models down to one of the most important components, their distributions centers."

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LM management UPDATE

AN EXECUTIVE SUMMARY OF INDUSTRY NEWS

◆ **Air standard.** The International Civil Aviation Organization (ICAO) should serve as the focal point for implementing global air cargo supply chain security standards, the Global Air Cargo Advisory Group (GACAG) recently said. In its latest position paper, *Air Cargo Supply Chain Security Regimes for Regulators*, the group said it supports global standards and programs with regulatory backing around the world in order to facilitate safe, secure, and efficient air cargo operations. It calls for ICAO, in collaboration with other international organizations, to take the lead role to continue improvements in the security of the global air cargo supply chain with the commitment of its member states. Meanwhile, GACAG welcomed ICAO's endorsement of air cargo supply chain security as a standard for its member states and recognized the efforts it's making to facilitate building the capacity of those states that plan to enhance air cargo supply chain security regulatory frameworks.

◆ **Modest import increases.** Zepol Corporation has reported that U.S. vessel imports are up from December by 6.9 percent and just above January of 2012 by 0.1 percent. The total twenty-foot equivalent unit (TEU) count for January was 1,518,851 and shipments were over 750,000. January imports have not been this high since 2007, which signals some steady rebounding growth for 2013. "This year may be a repeat of 2012 in terms of import growth," said Paul Rasmussen, Zepol's CEO. "We didn't see a dramatic move from 2011 to 2012, and so far in January, the numbers aren't surprising. I think modest increases can be expected this year as we continue the slow bounce-back from the recession."

◆ **DOT establishes National Freight Advisory Committee.** In February, Department of Transportation Secretary Ray LaHood announced the formation of the National Freight Advisory Committee designed to provide recommendations to the Secretary of Transportation on how DOT can improve its freight transportation policies and programs. DOT explained that by engaging stakeholders that represent diverse geographic, modal, and policy interests like safety, labor, and the environment, the committee will in turn provide recommendations regarding ways in which freight transportation policies and programs can be augmented. "Our freight system is the lifeblood of the American economy," said LaHood. "We must ensure that our freight system is stronger and better connected." DOT said that it's now soliciting nominations for members of the National Freight Advisory Committee, with instructions on how to submit nominations coming out in the Federal Register soon.

◆ **Vitran sells off 3PL unit.** Toronto-based less-than-truckload (LTL) carrier and transportation services provider Vitran Corp. reached an agreement last month to sell its supply chain operation to Portsmouth, N.H.-based third-party logistics provider Legacy Supply Chain Solutions. The purchase price is $97 million and is subject to certain working capital adjustments and expected to close during the first quarter. Vitran officials said that it plans to allocate a portion of the net proceeds from this transaction to fully reduce its outstanding debt under its senior revolving credit facility, as well as to support the development of its LTL business.

◆ **Battle ready in the Transpacific.** The battle lines between shippers and carriers comprising the Transpacific Stabilization Agreement (TSA) were shaping up early as both sides make plans for future contracting. According to the TSA, container shipping lines operating from Asia to the U.S. want to shore up rate gains made to date as they look ahead to the post-Lunar New Year shipping period and as 2013-2014 service contract negotiations intensify. "The week-long Lunar New Year factory closures in Asia tend to pull forward spring shipments, especially among retail customers," said TSA executive administrator Brian Conrad. "This translates into slowing cargo demand after the holidays, and is one of many such inflection points that can erode revenue throughout the year. Carriers are committed to keeping market rates stable over the next 6 weeks to 8 weeks, as the contracting season ramps up."

◆ **Click this.** With e-commerce retail sales in the fourth quarter breaking yet another record, many economists are suggesting that "clicks

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LM management UPDATE

AN EXECUTIVE SUMMARY OF INDUSTRY NEWS

are gaining on bricks." According to IHS Global Insight, the fourth quarter's gain pushed sales to their highest level and claimed more of a retail trade share. Currently, e-commerce retail sales account for 5.4 percent of all retail trade. In the third quarter, e-commerce retail sales accounted for 5.2 percent of all retail trade. E-commerce retail grew 15.8 percent in 2012, while retail trade grew only 5 percent. Clearly, clicks are taking on the bricks. Several traditional brick-and-mortar outlets have looked to e-commerce to maintain market share. More importantly, however, is the fact that economists expect e-commerce retail sales to increase around 15 percent in 2013, and continue to make significant inroads in the retail space.

◆ **White House heralds new infrastructure investment plan.** Last month, the White House introduced "The President's Plan to Make America a Magnet for Jobs by Investing in Infrastructure." One component of the plan is President Obama's "fix it first" policy that he cited during his recent State of the Union address. This policy, according to the White House, calls for an investment of $50 billion towards U.S. transportation infrastructure, with $40 billion targeted to the most urgent upgrades such as fixing highways, bridges, transit systems, and airports in need of repair. Another component is attracting private investment through what the White House calls a "Rebuild America Partnership" that will partner federal, state, and local businesses and private capital to provide America with the best transportation, electric, water, and communications networks in the world.

◆ **Trucking volumes roll into 2013 in a positive direction.** The American Trucking Associations (ATA) said last month that seasonally-adjusted (SA) truck tonnage increased 2.9 percent in January following a 2.4 gain in December. ATA officials said that there has been a monthly SA increase of at least 2.4 percent each month going back to November, during which time the SA index has gone up a cumulative 9.1 percent. On an annual basis, the SA was up 6.5 percent compared to January 2012, which represents the best annual SA gain since December 2011, when it was up 10.5 percent. ATA officials said that for calendar year 2012 SA tonnage was up 2.3 percent, following a 5.8 percent gain in 2011. The ATA's not seasonally-adjusted (NSA) index, which represents the change in tonnage actually hauled by fleets before any seasonal adjustment, was 122.4 in January, which was 10.5 percent ahead of December's 110.5 and up 10.3 percent compared to January 2012.

◆ **USPS reports $1.3 billion loss for fiscal first quarter.** Following a $15.9 billion loss in fiscal year 2012, the United States Postal Service (USPS) reported last month that it lost $15.9 billion in the fiscal first quarter of 2013. USPS said that total mail volume of 43.5 billion pieces was down 1 percent annually, with first class volume down 4.5 percent and standard mail volume up 3.6 percent, due in part to election season. Operating revenue—at $17.7 billion—was down $17 million, or less than one percent, and operating expenses—at $18.9 billion—were down 9.8 percent. On a more positive note, quarterly shipping and package volume were up 4.0 percent. These services are comprised of priority mail, express mail, parcel select, and parcel return services and account for 2.2 percent of total USPS volume and 17.8 percent of total revenue.

◆ **Mighty Matson.** Among the highlights contained in a recent PricewaterhouseCoopers (PwC) report on global transportation and logistics industry mergers and acquisitions is the fact that Matson shareholders timed the market right. One of last year's merger and acquisition bright spots: the $1.17 billion acquisition of Matson Navigation Co. Inc. by shareholders in December. Further evidence of this triumph was issued last month by Matson, Inc., a leading U.S. carrier in the transpacific, that reported net income of $15.6 million. Significantly, the company reported that in the China trade freight rates in the fourth quarter of 2012 continued to be higher than year earlier periods, reflecting an improved general rate environment. In addition to the trade lane outlook, Matson expects to benefit from operating a nine-ship fleet for most of 2013 and lower outside transportation costs. ☐


UPGRADE TO OWNING THE LONG HAUL

LM Logistics Management

VOL. 52, NO.3

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More freight, less investment

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Cover illustration: Daniel Guidera

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QUARTERLY TRANSPORTATION MARKET UPDATE:

Will consolidation change air cargo?

While U.S. shippers wait to see how the American/US Airways merger shakes out, analysts say consolidation may be a blessing in the long run for shippers. **44S**

As an indicator of the continued economic recovery in the materials handling, supply chain, and logistics industry, U.S. and international attendees registered in record numbers for ProMat 2013—the premier North American materials handling solutions trade expo. **50S**

Logistics Management: **Webcast**

Q1/2013 News Roundup: Shippers brace for change

March 21 @ 2:00 p.m. (EDT) www.logisticsmgmt.com/q1news

Q1 2013 has certainly not been thin on the news front. We've already seen the much-ballyhooed UPS acquisition of TNT Express nixed by the European Union, the resignation of U.S. Department of Transportation Secretary Ray LaHood, and the USPS announcing it plans to stop Saturday mail delivery.

How will these top stories affect your logistics and transportation planning over the next few months?

Join Group Editorial Director Michael Levans, Group News Editor Jeff Berman, and a panel of transportation insiders as they put these and all of the top stories of Q1 2013 into context for logistics and transportation professionals.

Attendees will gain a better understanding of:

- How the USPS move will affect the parcel market
- What's next for the DOT and much-needed infrastructure funding
- What shippers should expect when HOS changes go into effect
- The latest on the 3PL consolidation trend and its impact on service

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LM VIEWPOINT

"More with less" is here to stay

THIS MONTH WE DIVE INTO THE DETAILS of *Logistics Management's 2013 Warehouse/DC Equipment and Technology Survey,* our annual study conducted by Peerless Research Group (PRG) that offers a comprehensive snapshot of the investment plans of managers involved in the purchase decision of materials handlings solutions.

As we've illustrated in retail case studies over the past year (ASICS, Best Buy, Tuesday Morning), online and brick-and-mortar retailers are working feverishly to re-invent distribution operations and revolutionize their business models based on the application of materials handling systems and how they interrelate with their transportation networks and operations.

The new standard is distribution networks closer to population centers, 99.99 percent picking accuracy, lightning fast turn around on all orders, and same-day shipping for most—goals that can only be hit through enhanced communication across the supply chain.

And while our study over the course of 2011 and 2012 revealed heightened investment in equipment and systems to help reach these new ambitious standards, this year we find that spending has cooled. In fact, analysts say that our findings further validate that the recession-era mantra, "doing more with less," has not only stuck, but it has become the new mindset of U.S. business.

As Editor at Large Josh Bond deftly reports this month (page 24), investment inside the four walls is steadying and will be readjusting to a new, slower pace of growth over the next two years following the release of pent up demand after the downturn. At the same time, "facility activity as a percentage of capacity" numbers have jumped up by as much as 10 percent in one year following six straight years of decline.

According to John Hill, director at supply chain engineering firm St. Onge, percentages between 60 percent and 70 percent are traditionally a sign that investment is not only imminent, but necessary. When they rise above 70 percent, Hill tells Bond, it's often mandatory to spend on materials handling equipment just to keep up.

"In the past couple years, we saw the effect of delayed spending," says Hill. "Now, many have caught up; and unless growth is phenomenally good, there won't be as much pressure to spend."

And this year's respondents feel confident in their ability to keep up with whatever volumes are thrown their way. In fact, 95 percent told us that they expect their activity to increase or stay the same over the next two years—validating that they are ready to do more without further investment.

The recession-era mantra, "doing more with less," has not only stuck, but it's become the new mindset of U.S. business.

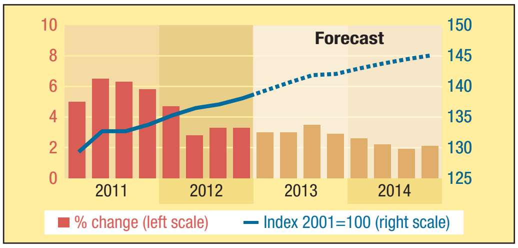
According to our analysts, many operations put their investment dollars to good use inside the four walls over the past two years. They've upgraded weakened systems, pulled the trigger on more sophisticated automation, and have concentrated on keeping labor engaged through technology that makes them more productive.

But for this overall confidence level to be maintained without hearty investment, Hill suggests warehouse/DC decision makers now focus on the technology necessary to improve trading partner collaboration in order to harness the data and work toward real-time visibility—the holy grail of supply chain management.

Michael A. Levans, Group Editorial Director
Comments? E-mail me at
mlevans@peerlessmedia.com

price TRENDS

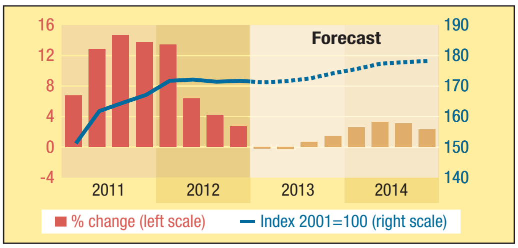
Pricing across the transportation modes



% CHANGE VS.:	1 month ago	6 mos. ago	1 yr. ago
General freight - local	0.0	3.2	3.3
TL	-0.3	0.3	2.6
LTL	-0.1	4.4	6.7
Tanker & other specialized freight	-0.2	-0.1	0.6

TRUCKING

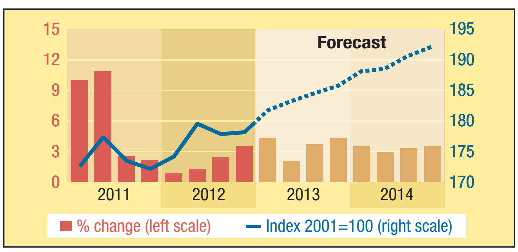
The U.S. trucking industry began 2013 the same way it ended 2012, with limited negotiation leverage and falling prices. LTL started the year with the most weakness as its primary transaction price index slipped 0.6% from month-ago. LTL made up some ground with a 2.1% one-month price hike in ancillary services. Falling for the third consecutive month, truckload prices also dipped 0.1%. Local trucking of special freight, not including home movers, was the only segment to pick up pricing power in January with a 0.8% price hike. Long-distance haulers of special freight, meanwhile, cut their average prices 0.3%. The trucking industry price forecast is unchanged: up 3.1% in 2013 and up 2.2% in 2014.



% CHANGE VS.:	1 month ago	6 mos. ago	1 yr. ago
General freight - local	-0.1	-0.3	0.2
Air freight on chartered flights	-6.0	-3.7	2.9
Domestic air courier	-0.4	-0.4	6.5
International air courier	-0.4	-0.8	4.9

AIR

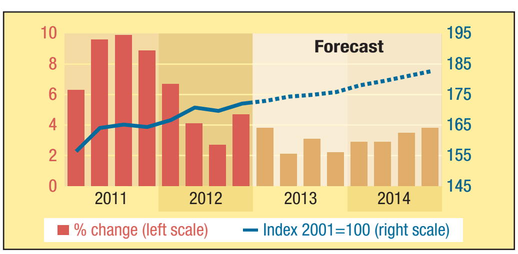
Last year, U.S.-owned airline companies had no luck pushing monthly price hikes up by more than 0.2% and were just as likely to cut prices by 0.1% in any given month. That's why the industry's 0.5% price hike in January 2013 was a rush. At the same time, average prices for domestic nonscheduled airfreight services increased 4.2%, though international nonscheduled airfreight tags fell 4%. Couriers and express delivery services, meanwhile, pushed through a 5.1% price hike. Our price outlook for shippers moving freight in the belly of planes on scheduled flights has been raised to a 0.9% average inflation rate in 2013 and reset to 2% in 2014.



% CHANGE VS.:	1 month ago	6 mos. ago	1 yr. ago
Deep sea freight	0.0	-1.3	4.0
Coastal & intercoastal freight	-1.2	-2.5	3.8
Great Lakes/St. Lawrence Seaway	1.3	3.8	7.2
Inland water freight	0.9	3.5	3.2

WATER

We did not see any surprises in the water transportation services industry in January as all segments in this market reflected the lackluster nature of the U.S. economic recovery. In aggregate, the U.S.-based water transportation industry cut average transaction prices by 0.6% in January 2013 from month-ago levels. That means average prices were up only 2.9% compared to year-ago levels. Prices for Great Lakes-St. Lawrence Seaway freight transportation service floated up 0.5% from month-ago, but remained submerged 2.9% below same-month-year-ago price levels. Inland waterways prices also declined 1.1% from month ago. The industry price outlook remains: up 3.6% in 2013 and up 3.3% in 2014.



% CHANGE VS.:	1 month ago	6 mos. ago	1 yr. ago
Rail freight	-0.2	0.3	4.8
Intermodal	0.1	1.2	2.9
Carload	-0.2	0.2	5.3

RAIL

Counter to the other transportation markets, U.S. line-haul railroads reported that their prices began running on an upward rising track at the start of 2013. Carload rail freight prices increased 1.5% in January, which was its largest one-month price hike in eight months. At the same time, intermodal rail freight prices chugged up 1.1%. For the entire U.S. rail transportation market, average prices were up 1.4% from month-ago and up 5.3% from same-month-year-ago. This rail inflation surge in January caused a re-assessment for our near-term forecast. We are now forecasting rail industry prices to escalate at a 3.5% pace in 2013 and 2.4% in 2014.

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ILA, USMX reach tentative labor contract agreement

Deal marks significant progress, as prospects of East and Gulf Coast ports strike inched closer.

By Jeff Berman, Group News Editor

WASHINGTON—Following months of acrimonious negotiations, the U.S. Maritime Alliance (USMX), a group of container carriers, direct employers, and port associations serving U.S.-based East and Gulf Coasts, and the International Longshoremen's Association (ILA), the largest union of maritime workers in North America, reached a tentative agreement on a new labor contract last month.

News of this accord came from the U.S. Federal Mediation and Conciliation Service (FMCS), which, since September, spent time at the bargaining table helping ILA and USMX work out the deal.

"I am extremely pleased to announce that the parties have reached a tentative agreement for a comprehensive successor Master Agreement," said George Cohen, FMCS director. "The tentative agreement is subject to the ratification procedures of both parties and to agreements being achieved in a number of local union negotiations. Those local negotiations are ongoing and will continue without interruption to any port operation."

The ILA listed details of the Master Contract that it said are subject to the drafting of final contract language and acceptance by its membership. Some of the details include:

- The expiration date of the new Master Contract will be September 30, 2018.
- The new contract will not take effect until all local bargaining is concluded.
- There will be respective $1-per-hour wage increases on October 1, 2014, October 1, 2016, and October 1, 2017.
- The wage progression formula extention has been shortened from 9 years to 6 years.
- A minimum coastwise guarantee of $211 million in container royalty for each year of the contract.

These negotiations are very significant in that they affect 14 East and Gulf Coast ports that cumulatively represent 95 percent of all containerized shipments—along with 110 million tons of import and export cargo—to the Eastern seaboard.

ILA officials noted in March that since 1977, ILA and USMX have successfully negotiated nine

These negotiations are very significant in that they affect 14 East and Gulf Coast ports (like the Port of Miami pictured here) that cumulatively represent 95 percent of all containerized shipments to the Eastern seaboard.

new Master Contracts without any disruption in operations, with the current contract in effect since 2004 and then subsequently extended for two years in 2010.

But concerns have remained heightened due to the 10-day, 2002 longshore contract dispute on the West Coast, which cost the U.S. economy several billion dollars per day and negatively affected various key sectors in the economy.

Based on this history, shippers have been cautious about planning for the unknown when assessing how these negotiations could affect their supply chain operations. A Northeast-based shipper recently told *Logistics Management* that in anticipation of a possible strike, her company completed an inventory review and arranged to bring in inbound inventory ahead of time, coupled with discussing alternate routes with the company's freight forwarders.

The National Retail Federation (NRF) expressed relief that the makings of a deal are in place. Jonathan Gold, NRF's vice president of supply chain, said that this is very positive news for retailers and their supply chain operations.

"We are pleased to hear the FMCS announce the tentative agreement between the ILA and USMX," said Gold. "We encourage them to quickly conclude the local negotiations and ratify the new contract. It will bring certainty back to the supply chain and provide relief to the nation's retailers, manufacturers, farmers, and others who have been dealing with the continuing threat of a port shutdown." □

POLICY

Atypical Washington trio backs concept of higher fuel taxes to pay for infrastructure

WASHINGTON, D.C.—A once-in-a-generation triumvirate of Washington power players is coalescing behind the idea of increasing federal fuel taxes to pay for badly needed infrastructure improvements.

President Barack Obama and two power brokers representing business and labor—U.S. Chamber of Commerce President and CEO Thomas Donohue and AFL-CIO President Richard Trumka—are all backing a "Fix-it-First" infrastructure improvement program.

What this will likely mean for shippers is higher freight rates for shipments; but it may also result in faster and more reliable transit times as trucks travel over smoother, more modern highways and bridges. In short, infrastructure is no longer a dirty word in Washington.

President Obama's fiscal year 2012 budget proposal calls for $128 billion on transportation spending. That's a whopping 68 percent increase over the projected spending for the current fiscal year. The $128 billion would be the first installment in a six-year, $556 billion plan that would also include $30 billion in spending on a new National Infrastructure Bank and $53 billion on high-speed and intercity rail.

"Our aging infrastructure is badly in need of repair," the president said during his Feb. 12 State of the Union address to Congress. His "Fix-it-First" program would help improve highways and repair some of the 70,000 bridges described as "structurally deficient."

Obama drew a straight line between infrastructure reliability and economic growth. "Let's prove there is no better place to do business than the United States of America, and let's get this done," Obama urged Congress.

The very next day, Donohue largely agreed with the president during testimony before the powerful House Committee on Transportation and Infrastructure (T&I). Rep. Bill Shuster (R-Pa.), the newly installed chairman of the T&I, recently said "all options are on the table" to pay for infrastructure, including raising the federal tax on fuel—currently 18.4 cents on gasoline, 23.4 cents on diesel, and unchanged since 1993.

Just to prove it was no fluke, Donohue and AFL-CIO President Richard Trumka—a pair that would likely argue that the current year is not 2013—testified before the Senate Committee on Environment and Public Works to say that, yes, they do agree the nation needs to spend more on infrastructure, and raising the fuel tax is the best way to pay for that.

"The fact that Tom Donohue and I appear before you today does not mean that Hell has frozen over or that unicorns are roaming the land," Trumka said. Not to be outdone in the quip wars, Donohue observed that he and Trumka were "the oddest couple since Felix and Oscar." Then, turning serious, Donohue said that the status quo is not acceptable.

"There needs to be a vigorous dialogue on funding and financing, but first we have to agree on the direction in which we're going," Donohue said. "Everyone needs to keep an open mind."

For at least two years, Donohue has quietly been pushing for an increase in the fuel tax—an unusual stance for the usually tax-adverse Chamber, which represents 3 million U.S. businesses. Lately, when asked about the fuel tax, Donohue has subtly shifted to calling it a user fee—which it actually is.

Donohue was extra cautious about attaching too many labels on the money needed to pay for infrastructure, noting: "We've got to avoid cutting off our nose to spite our face."

Still, Donohue and Trumka faced a Senate panel that largely agreed that the nation needs to upgrade its roads, bridges, electrical, and water grids. The timing is fortuitous—right after an election, hopefully long enough before the 2014 mid-terms.

"Election season comes soon enough, and now we have an obligation to set all that aside and work together for our people, for jobs, and for our future," Sen. Barbara Boxer (D-Calif.), the Senate committee chairwoman said.

Sen. James Inhofe (R-Okla.), the ranking minority member on the committee, somewhat surprisingly agreed on the need for infrastructure spending—he just wanted to understand how the U.S. can pay for the $556 billion plan. Donohue and others are calling for a phased-in increase in the fuel tax.

—John D. Schulz, Contributing Editor

INTERMODAL

IANA report points to strong Q4, full-year 2012 intermodal performance

CALVERTON, Md.—During a prolonged period of economic ebbs and flows, one constant has been the resilience of intermodal transportation. That was made clear by this week's release of the *Intermodal Market Trends & Statistics* report from the Intermodal Association of North America (IANA).

IANA reports that 2012 was a record year for intermodal container movements at roughly 13,108,672, which topped 2011 by 5.9 percent and the previous high in 2007 by 9.8 percent.

And total 2012 intermodal volume was up 4.0 percent annually. Domestic containers saw a 12 percent annual gain, while international containers were up 1.7 percent. All domestic equipment at was up 6.5 percent, and trailers continued their slide, down 10.1 percent.


IANA reports that 2012 was a record year for intermodal container movements.

For the fourth quarter, total volume was up 2.0 percent compared to 2011. Domestic containers again paced all intermodal volumes, up 10.5 percent, and international containers were down 0.7 percent. All domestic equipment was up 4.9 percent and trailers dipped 12.2 percent.

With fourth quarter annual growth of 2 percent lower than annual growth of 4 percent, IANA said that some shipping trends make it difficult to discern how much of the weakness was due to one-time factors and how much was due to economic uncertainty. The report also pointed out that December was not a strong month, although it was not clear how much was due to the since-resolved East and Gulf Coast ports and labor contract situation as well as economic issues.

"Speculation heading into the fourth quarter was that things would be much flatter, and that did not happen," said IANA President and CEO Joni Casey. "We were expecting similar growth, but not at the levels that we saw."

The growth on the domestic container side does not come as a major surprise, as domestic containers grew for the fourth straight quarter at a double-digit clip, coupled with the fact that big-box loads have nearly doubled in the last decade. According to IANA, factors such as strong investments into rail networks, terminals and container fleets, high fuel prices, financial and regulatory burdens on truckers, and expansion of rail product offerings all remain intact.

Total domestic intermodal volumes increased 1.8 percent from the third quarter to the fourth quarter on a seasonally adjusted basis, which IANA said was the strongest growth of the year in leading domestic intermodal volumes to a new seasonally-adjusted high.

What's more, domestic intermodal has grown for 13 consecutive quarters, even though IANA said gains slowed down for the third straight quarter and domestic growth was at its slowest pace since the recession ended.

"We see this continuing," said Casey. "We are looking at 10-plus percent domestic growth this year. It still remains to be seen how it will shake out, but the indicators and conditions driving this momentum will be maintained if not increased, especially with the recent spike in fuel prices."

Although domestic intermodal is in good shape at the moment, Casey observed that international represents more than 50 percent of total volumes and she said about 3-4 percent growth is expected for 2013.

IANA said that total international shipments were down 7.7 percent from December 2011 to December 2012, marking it the worst month on record since December 2009.

—Jeff Berman, Group News Editor

LABOR

Part-timers, pensions, health care key issues in Teamsters-UPS contract talks

ATLANTA and WASHINGTON, D.C.—In one corner, the world's largest and most profitable transportation company. In the other corner, the Teamsters union. Now, get ready for a heavyweight labor contract negotiation.

UPS and the roughly 275,000 Teamsters who make it arguably the best-run transport company in the world have already begun talks on the contract that expires July 31. It's the largest collective bargaining agreement in the nation.

While no one is expecting a repeat of the 1997 strike that idled UPS for 15 days, the early stages of the negotiation have been marked by the usual tough rhetoric by the union and complete silence on the part of the company.

Another factor complicating these talks is that they are two separate negotiations: one for the parcel side of UPS (covering 260,000 workers) and another for LTL hauler UPS Freight (covering 15,000 or so workers).

UPS representatives are apologetic about the news blackout from their side—a sure sign of the importance and sensitivity of these contract talks. "I apologize, but we do not have any updates or comments about current negotiations," said Dan McMackin, a UPS spokesman.

However, the Teamsters are more than happy to fill that vacuum. They pointed out the difference in the major issues in the two contracts. For UPS Freight, the major issues are: addressing what the union calls "harassment" regarding the use of telematics; poor staffing levels and retaliation due to accident and injury reports and other issues regarding filing grievances; and prohibiting subcontracting of bargaining unit work to non-union carriers.

In the small parcel contract at UPS, some of the union's major issues are: dealing with the expansion of the company's SurePost service and packages handled by the U.S. Postal Service; how to protect and improve pensions; protecting affordable retiree healthcare and restoring health insurance for part-timers after 90 days; and improving part-time pay, which starts around $9 an hour compared to about $20 an hour for full-time.

Another hot-button issue is health care. Currently UPS Teamsters enjoy a zero co-pay for health care coverage—and they intend to keep it that way.

UPS is proposing Teamsters pay up to $90 a week for health benefits, but that appears to be a non-starter with Teamsters leadership drawing a line in the sand on that issue. As Teamsters General Secretary-Treasurer Ken Hall, the chief negotiator in the UPS contract talks, said: "We're not paying $90. We're not paying $9. We're not paying 9 cents. We're not paying premiums for health insurance for a company that made $4.839 billion."

In the fourth quarter of 2012, UPS earned $2.05 billion in net profit excluding a big one-time pension accounting "non-cash charge" of $3 billion. Teamsters officials noted that the charge did not affect the company's cash flow or benefits paid to participants. After that paper loss, UPS posted an official fourth-quarter net loss of $1.75 billion.

Teamsters officials are used to this sort of stuff. As one official simply said of the fourth quarter loss: "It's contract time."

—John D. Schulz, Contributing Editor

Newsroom Notes
by Jeff Berman

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

Rockefeller and Lautenberg introduce new transportation infrastructure bill

EVEN THROUGH WE'RE ONLY THREE MONTHS into the new year, there's been a flurry of activity regarding transportation infrastructure on multiple fronts.

Here are a few examples: "The President's Plan to Make America a Magnet for Jobs by Investing in Infrastructure" introduced by the White House in mid-February; the announcement of the Department of Transportation's National Freight Advisory Committee; and an atypical triumvirate of Washington players including President Obama and two power brokers representing business and labor—U.S. Chamber of Commerce President and CEO Thomas J. Donohue and AFL-CIO President Richard Trumka—all backing a "Fix-it-First" infrastructure improvement program, which is a core component of the aforementioned White House plan.

But not to be outdone are Senators Jay Rockefeller IV (D-W.Va.), Senate Commerce Committee Chairman, and Frank Lautenberg (D-N.J.), Chairman of the Surface Transportation and Merchant Marine Infrastructure, Safety, and Security Subcommittee, who introduced a bill that they said would leverage federal investment to rebuild and expand transportation infrastructure and create American jobs.

At the heart of the bill, titled The American Infrastructure Fund Act of 2013, is a $5 billion fund that would incentivize private, state, and regional investments in transportation projects around the country by providing eligible projects with financial assistance.

The major goals of the bill include establishing within the Department of Transportation (DOT) a Fund designed to leverage federal dollars to incentivize private investment in transportation projects that maintain U.S. economic competitiveness; using a variety of tools, such as loans and loan guarantees, to provide financial assistance to eligible projects; and defining eligible types of projects including rail lines, marine ports, pipelines, airports, highways, bridges, public transportation systems, and other transportation-related projects.

The Fund would be designed to allow it to broaden its investment portfolio in the future into other infrastructure projects, including telecommunications, energy, and water projects, and authorize a multimodal National Infrastructure Investment Grant program within DOT at $600 million for fiscal years 2014 and 2015.

Like previously proposed bills and plans before it, this one is also replete with good ideas and concepts to rebuild what needs to be rebuilt—and help spur economic growth. And given the interminable partisan bickering in Washington, much of which has simply morphed into noise, good ideas are certainly welcome.

What has not been welcome are the the ongoing stops and starts regarding our nation's transportation infrastructure—as well as ideas for how to properly execute on a plan to make it a national asset.

Funding, of course, is always an issue and will continue to be. We all know the federal gasoline tax has not been raised for some time now, right?

As the Senators involved in this bill point out, investment in U.S. transportation infrastructure has "lagged in recent decades and America has developed an infrastructure investment backlog."

They were quick to point out, too, that the American Society of Civil Engineers (ASCE) estimates a cumulative five-year investment need of $2.2 trillion into the country's rails, roads, bridges, ports, transit systems, and other infrastructure.

What's more, the ASCE gave U.S. infrastructure a "D" grade. And on top of that, it estimates that if this investment backlog is not dealt with in a meaningful way, then the U.S. will cumulatively lose more than $3.1 trillion in GDP and $1.1 trillion in total trade. Significant numbers to be sure.

However, it's not all doom and gloom. Legislation and calls for action are good steps forward, but what we need now is execution.

Last summer's MAP-21 was a step in the right direction; but now we need Washington to keep it going in the right direction.

Is that asking too much? ☐

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How shippers can help ease the driver shortage

IN A RECENT ARTICLE by Cornelius Frolik in the *Dayton Daily News*, we learned that the number of licensed truck drivers in the State of Ohio dropped for the first time on record.

Frolik sited several factors including the aging work force and relatively low wage—averaging around $38,000 per year—as contributing to the perceived lack of new entrants. He also notes that new trainees graduating driver schools are averaging 54 years of age, indicating that driving is a possible second career or fallback position when better-paying jobs are scarce.

And while truck driving is the third fastest growing job category according to the U.S. Labor Department, the pay is well below the first and second in growth, which are registered nurses and post-secondary educators. And, of course, driver turnover rates remain extraordinarily high.

In fact, the Owner Operators and Independent Drivers Association (OOIDA) recently noted that some 40,000 new commercial driver licenses are granted by DOT annually, but their estimate is that turnover is over 100+ percent per year due to poor working conditions. Not mentioned by OOIDA is the increasing difficulty in compliance with safety regulations and initiatives like CSA. With these factors in mind, the American Trucking Associations has estimated that there will be a shortage of over 240,000 drivers in the coming decade.

This is much more than an internal industry problem, and we're all going to see higher rates, greater risk, as well as an impact on performance metrics when there's a shortage of qualified operators.

What can shippers do to help the industry and themselves to increase the ranks of qualified drivers? Well, when you step back and give it some thought, quite a bit.

Three often-mentioned negatives to being a truck driver are working conditions, wasted time running empty, and the resulting limits on personal income from the previously named factors. Drivers and their company make money hauling loaded trailers—down time is dead time.

I remember a visit to a client's distribution center where I saw a 10-foot painted circle on the floor near the loading docks. It was explained to me that this is where the drivers were told to stand while being loaded. There was no restroom or even a cell phone signal.

During this visit, I also learned that they were having trouble getting loads covered despite being located just off Interstate 95 in Maryland. In talking to drivers, I learned that the word was out that this is the last place from which you agree to take a load. If this sounds a bit like your warehouse then let me offer you some free advice: Fix it.

Shippers need to be advocates for drivers. You should be looking to see that your carriers and fleet operators

“Shippers need to be advocates for drivers. You should be looking to see that your carriers and fleet operators are treating drivers with respect and paying a fair wage. You should also meet with your carriers and talk about how your loads fit into a regional network.

are treating drivers with respect and paying a fair wage. You should also meet with your carriers and talk about how your loads fit into a regional network.

Should you be using dropped trailers or live loading? Which receiving and loading operations practices are causing down time for drivers? Can you provide backhauls by sharing inbound/outbound-matching opportunities?

In the public discussions on infrastructure, shippers' voices are rarely heard. The carriers are speaking up for safe truckers rest stops, faster toll collection, and use of tandem trailers. If major shippers and local businesses add their voices to such improvements politicians would pay more attention.

With pressures on hours of service labor capacity, limits on immigration, and an average new driver age of 54, shippers need to proactively promote careers in transportation—and treat operators as professionals who have a choice as to whom they provide service. ☐

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Adaptable Structure: The essence of supply chain flexibility

IN THIS COLUMN—THE THIRD IN A SERIES of five focused on dynamic operations—we look at the role and importance of adaptable structure.

Think about how rapidly mergers, acquisitions, market shifts, economic upheavals, and other events can knock a company's supply chain off balance. Almost overnight, arteries, people, and facilities may no longer be positioned to buy, make, move, or sell the right items in the right quantities in the right places. Change happens. But rigid supply chain structures don't like change. An adaptable structure, on the other hand, embraces change.

Companies often respond to the above-mentioned shifts by adjusting their product designs. However, it can be far more difficult to achieve the process and system flexibility needed to also adjust your supply chain operations. This is the focus of adaptable structures. The most obvious example is flexible manufacturing: responding quickly to currency fluctuations, supply disruptions, or sudden demand shifts by altering manufacturing volumes, venues, and mixes.

In addition to flexible manufacturing, companies with adaptable structures may excel at hedging. These organizations are often able to rapidly assess the level of redundancy needed to mitigate supply chain risks. If risk is deemed too high, they can raise their investment in the flexibility of a particular node—procurement, manufacturing, distribution, etc.

Companies with adaptable structures also tend to leverage outsourcing as a cost-management mechanism and even a competitive weapon. The ability to turn fixed costs into variable costs is, in a very real sense, the epitome of flexibility.

Nissan is a good example of how adaptable structures can play a big role in today's volatile business environment. As it was covered in great detail, 2011 was a tough year for Japanese automakers. Two natural disasters—the Japan earthquake and the Thailand floods—crippled production, while a strong Yen and increasing competition put extreme pressure on markets.

However, Nissan fared quite well. Following the earthquake, Nissan was the first Japanese car company to get back to business. And in the wake of the Thailand floods, Nissan was able to contain the issues locally, with global parts-supply operations hindered far less than those of many competitors.

Several innovations explain Nissan's adaptability. One is that the company had carefully implemented a long-term strategy focused on rapid recovery during times of volatility. Cross-functional teams—led by the CEO and a chief recovery officer—were already in place to ensure continuity and manage adverse situations. Within days of the earthquake, the CEO and a

The key components of Adaptable Structure

Key Components	Principle Capabilities
Alignment with business strategy	• Supply chain processes with measurable performance criteria
	• Clear, enterprise-wide views of critical processes and functions
	• Supply chains segmented by customer, product, and market
	• A talent-management strategy that emphasizes a culture of flexibility
Structural hedging	• Adequate levels of redundancy to help manage supply chain risks
	• Enlightened operating models that allow for regular evaluation of insourcing and outsourcing options
	• Financial optimization: balancing currencies and commodity pricing along with localized supply costs
Adaptable execution structure	• Flexible pricing structures that drive customer service and profitability
	• Use of shared services models across supply chains
	• Flexible capacity—built in to support peaks and reduce costs during troughs
	• Optimized, innovative core processes combined with streamlined, standardized non-core processes

risk management team visited the plant, surveyed the damage, and determined what should be done to regain normal operations.

Another innovation was Nissan's global, low-cost "V" platform for vehicles in emerging markets. The V has allowed Nissan to extend its production base across the world—using standardized parts in different production facilities. When the Thailand floods hit, Nissan was able to swiftly re-source parts from China, thereby limiting production constraints to Thailand. Global operations were largely unaffected.

In the wake of Asia's weather calamities, Nissan's adaptable structure innovations helped the company sell more cars in the U.S., while its competitors dealt less effectively with production issues. Nissan's Altima model did particularly well, outselling competitors and capturing the top position for several months. Nissan also posted strong sales in other regions such as China and Europe. And in Japan, Nissan suffered 2011 sales drops that were far less severe than those of most competitors.

Making it happen

Adaptable structure has a handful of cornerstones. But companies can often benefit by taking a far-reaching, multi-pronged approach:

- Infuse a risk-management mindset throughout the company, instead of a risk-avoidance mindset.
- Develop a variable, rather than fixed, cost structure on a node-by-node basis. At one company, it may be feasible to contract out some manufacturing operations, thus making it easier to scale or move production. At another organization, outsourcing might make more sense for post-sale service management than for manufacturing.
- Launch flexible-capacity initiatives to ensure the ability to handle demand peaks and reduce costs during slow times.
- Establish hedging strategies for critical components and supplies, and put appropriate backup plans in place.
- Consider actual insurance policies for specific high-risk events.
- Explore the use of shared services models.
- Implement flexible pricing structures to rapidly align demand and supply.

Perhaps the easiest way to understand adaptable structure is to envision a supply chain environment in which products, processes, and systems are easily modified in response to changing conditions. This, in turn, could be one of the clearest paths to high performance. □

2013 Warehouse/DC Equipment and Technology Survey

More freight, less investment

Our annual survey finds the industry steadying for a new, slower pace of growth following the release of pent-up demand after the downturn. Yet even as planned spending inside the four walls drops off, facility activity is the highest since 2007—signaling that "doing more with less" has stuck.

BY **JOSH BOND,** EDITOR AT LARGE

Just as an effective materials handling system cannot be shaped around one data point, interpreting the results of an industry survey is about more than just the bottom line.

For instance, take a look at the average materials handling budget as reported by Peerless Research Group (PRG) in the *2013 State of Warehouse/DC Equipment and Technology Survey*. At nearly 26 percent less than last year, the average anticipated spending among the survey's 597 respondents is just $334,510. In fact, about half of those respondents plan to spend less than $50,000.

But if we look at activity levels, facility capacity numbers have jumped up by as much at 10 percent in one year—following six consecutive years of decline. According to John Hill, director at supply chain engineering firm St. Onge, capacity figures between 60 percent and 70 percent, although a big improvement, are still below a certain threshold. When they rise above 70 percent, he says, it's often necessary to spend on materials handling equipment just to keep up. In the meantime, most businesses will tend to sit tight.

"In the past couple of years, we saw the effect of delayed spending," says Hill. "Now, many have caught up; and unless growth is phenomenally good, there won't be as much pressure to spend. We're looking at modest growth that perhaps many feel they are able to handle."

In fact, respondents expressed a great deal of optimism that they could handle it. When asked about their anticipated activity levels over the next two years, almost 95 percent said that they expected activity to increase or stay the same. To be fair, more than 50 percent of respondents suggested their warehousing activity would stay the same.

According to George Prest, CEO of Material Handling Industry (MHI), growth is projected to improve into 2014. Following industry growth rates of 14 percent in 2011 and 10 percent in 2012, 2013 could hover around 6 percent before breaking double digits again in 2014.

"We're on the declining side of the growth curve," says Prest, "but we can expect to see things trending upward from here. Specific industry segments will pick back up at different times, but the overall outlook is good."

Respondent demographics

In January, Peerless Research Group e-mailed survey questionnaires to readers of *Modern Materials Handling* and *Logistics Management*, yielding 597 qualified respondents from manufacturing (39%), warehousing (21%), corporate (25%), and aligned logistics professionals (15%). Revenues of responding companies range from large—26% have annual revenues of $500 million or more—to small—47% are below $50 million. Qualified respondents are those managers and personnel involved in the purchase decision process of materials handling solutions.

Demographics and reduced spending

This year's respondent base of 597 is about twice last year's 314 survey responses. However, according to Judd Aschenbrand, director of research for PRG, the demographic break-


Daniel Guidera

cent said that will be the case, and just 26 percent expect spending to increase. In 2012, 45 percent said they expected spending to stay the same, but now almost 60 percent expect their spending to remain unchanged in 2013.

According to Jim Moran, chairman of the Industrial Truck Association and member of the board of directors at Crown Equipment, the industry might want to get used to a slow and steady approach.

"Everyone is being very conservative, but that's predictable given the news you hear today and the level of uncertainty," says Moran. "The tendency is to feel negative, and it's hard to shake that. The reality is that it's not that bad, but it's so much different than anything we've seen in the past. I think the industry is moving gradually forward in a positive way, but it's a pace we have to get used to, because I think it's going to be around for a while."

The return of labor

The 14 percent of respondents who reported that they would hold off on investments in the coming year will avoid primarily big-ticket items like automation, storage, and technology and software. The 19 percent who plan to proceed with investments are looking at the same technologies, including conveyors and sortation, information technology like warehouse management systems (WMS) and enterprise resource planning (ERP) systems, as well as automatic guided vehicles and robotics.

Hill says that the outlook for robotics suppliers is good as solutions for picking and packing gain momentum. But he was quick to point out that manpower remains an effective solution, particularly for retailers facing the e-commerce boom. He pointed to the 43 percent of respondents who plan to spend on labor and staffing in 2013, up from 40 percent in 2012 and 37 percent in 2011.

However, MHI's Prest suggests that hiring practices have evolved in recent years. As companies expand their labor forces, they will tend to recruit and train with an eye toward long-term retention. No longer content to "throw bodies at the problem," businesses will use employees to leverage investments in technology, maximizing the productivity of

down of the group remains statistically similar to last year.

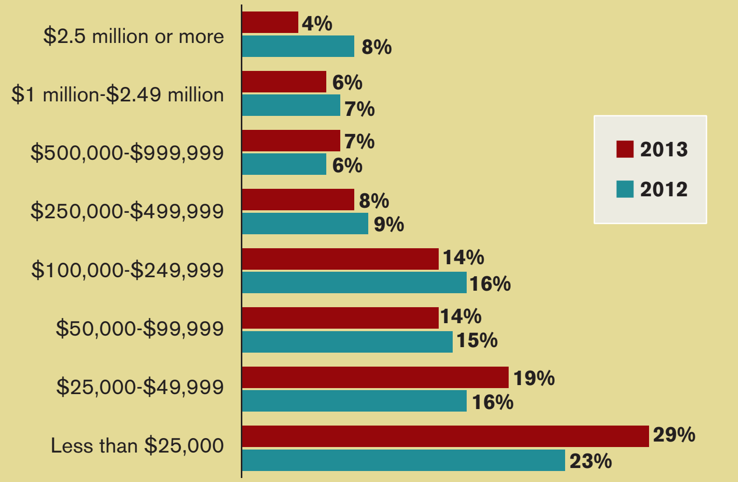
One notable change is in the level of participation in the Southern and Southeastern U.S., where 20 percent of respondents are located—as compared to just 10 percent in last year's results. Aschenbrand also pointed to the political and economic climate at the time of the survey, which was fielded in January as President Obama was poised to begin his second term.

A level of uncertainty was reflected in the 50 percent of respondents who said that they will take a "wait-and-see" approach in 2013, up from 46 percent last year. Those with pre-approved capital expenditure budgets for materials handling solutions dropped from 60 percent in 2011 and 48 percent in 2012 to 38 percent this year, averaging just $390,000. Both figures are the lowest in seven years.

The uncertainty also made an impact on optimism as compared with January 2012, when 40 percent of respondents to last year's survey said they expected their materials handling spending to increase in 2012. This year, only about 30 per-

Level of spending

In total, over the next 12 months, approximately how much do you expect to spend on materials handling equipment and information systems solutions?



Median anticipated spending	2011	2012	2013
	$77,000	$85,500	$58,620

Source: Peerless Research Group (PRG)

each. "It's a different kind of hiring," he says. "People are being more cautious about the types of employees they bring into their companies."

As respondents work to grow their workforce and productivity, it is not surprising that safety tops the survey's list of most important issues, placing above company growth, throughput, and last year's top issue, cost containment. Moran suggests the reason productivity metrics have fallen in importance is due to the spending on technology in recent years, which has helped many companies to be more efficient and reduce cost.

"It's one of the reasons we saw employment numbers hold steady while productivity increased," says Moran. "People are employing every ounce of technology they can as warehousing becomes more and more sophisticated."

But there is perhaps a limit to how much productivity can increase while headcount stays the same. Hill suggests that, following the recession's layoffs and large investments in technology, we might expect to see staffing levels and productivity return to synchronous growth.

This corresponds to the survey's anticipated increase in the importance of training, which 57 percent of respondents said is very important today—but which 63 percent said would be more so in the next two years. "As technology spreads to every facet of operations," says Moran, "workers will need to become conversant in increasingly complex information systems."

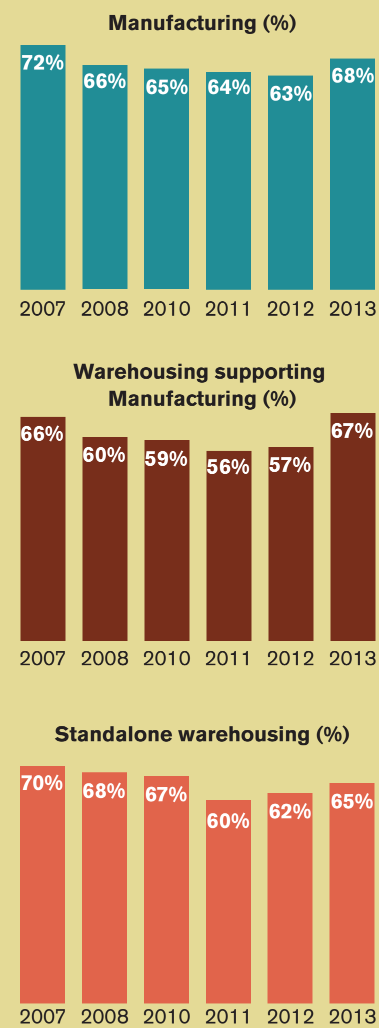
Information technology and supply chain software

New entrants into the workforce will be surrounded by technology designed to make them more productive than ever. The change is already underway with lift trucks, where operators need both the mechanical skills to operate the machine and the abstract skills to interface with tablets and voice-based data systems.

Fully half of respondents report that they plan to invest in information technology hardware and software in the coming year, and Hill says that the

Facility activity as a percentage of capacity*

*2009 data not available

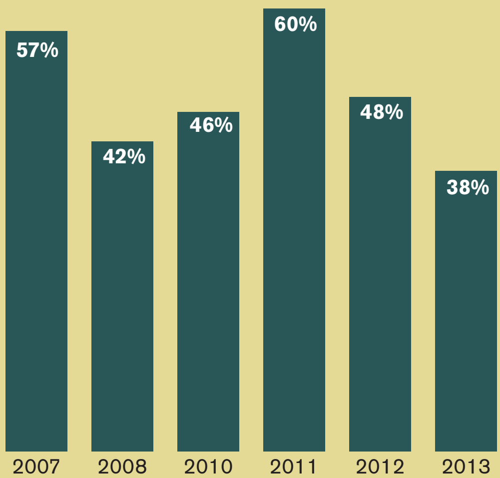


Source: Peerless Research Group (PRG)

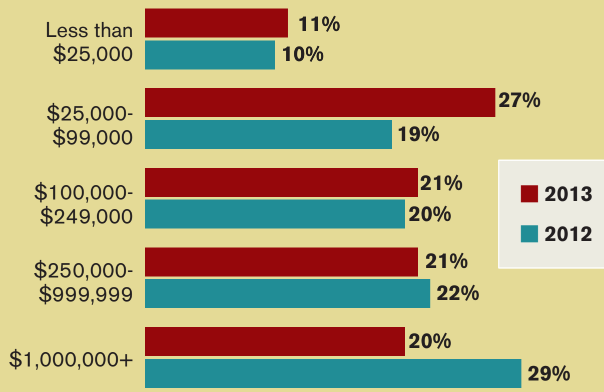
Budget levels*

Do you have a pre-approved annual capital expenditures budget for materials handling solutions?

*2009 information not available.



If yes, what is the amount?



Mean:

2007–$600,120
2008–$655,000
2010–$515,000
2011–$694,500
2012–$470,250
2013–$390,000

Source: Peerless Research Group (PRG)

trend is toward a convergence of software such as WMS, warehouse control systems (WCS), and ERP—the enterprise applications in which 25 percent of respondents are planning to invest. In 2011, just 12 percent had plans for enterprise applications.

"For more than 20 years, we've been talking about trading partner collaboration and the importance of sharing information across trading partners to reduce order cycle times and improve visibility." says Hill. "People are embracing collaboration not just philosophically, but actually. If that's true, it suggests we need to make investments in technology and systems that enable real-time information."

Companies are beginning to recognize that unless they're able to share information with their trading partners, they're going to fall behind the curve, says Hill, and they are looking to suppliers to provide everything—WMS, WCS, ERP, customer relationship management, and sales and operations planning—on a single platform.

—Josh Bond is an Editor at Large for Logistics Management

Future evaluation

Which systems and equipment are you likely to evaluate or consider during the next 12 months?

Materials handling equipment for 2013	
Lift trucks and accessories	49%
Racks and shelving	47%
Totes, bins, and containers	32%
Packaging, including palletizers, pallets, and dunnage	31%
Bar coding	31%
Dock equipment	30%
Mobile and wireless	27%
Order picking and fulfillment	22%
Conveyors, including sortation equipment	22%
Systems solutions	20%
RFID solutions/products	20%
Hoists, cranes and monorails	16%
Power transmission, including motors and belts	16%
Controls	15%
3PL services	10%
Mezzanines	10%
Automated storage	9%
AGVs	5%
Information management systems for 2013	
ERP (enterprise resource planning)	34%
WMS (warehouse management systems)	32%
WCS (warehouse control systems)	28%
Voice recognition	15%
TMS (transportation management systems)	11%
Other supply chain-related software	4%

Source: Peerless Research Group (PRG)

Dedicated Carriage: The future of truckload?

Truckload carriers are increasing their fleet capacity to provide more dedicated truck options to solve complex shipper operations and eliminate volatility—and everybody seems to be happy.

BY **JOHN D. SCHULZ**, CONTRIBUTING EDITOR

Dedicated trucking services are probably the fastest-growing sector of any sizeable truckload (TL) carrier's fleet operations. It accounts for as much as $40 billion of the $280 billion truckload market, and that number, analysts and industry officials estimate, is only heading skyward.

That's due to several macro factors affecting TL shipping. Capacity is tightening, so shippers are worried about securing adequate numbers of trucks during peak periods. With a dedicated operation, those concerns are lessened because carriers are, more or less, guaranteeing adequate capacity will be available to their dedicated customers.

Analysts and trucking executives say that dedicated trucking is growing at a greater overall percentage than typical dry van freight for several reasons: Shippers get guaranteed capacity to eliminate concerns during peak seasons; carriers are assured of a certain guaranteed level of freight demand to smooth out cyclicality in their operations; rates tend to be lower than either spot market or contractual truck rates; and dedicated business tends to be longer term and "stickier"—that is, without the usual 15 percent to 20 percent annual turnover in normal business churn.

"The biggest driver is the economics behind dedicated," says Saul Gonzalez, president of Con-way Truckload. "Customers are looking to save money, and dedicated opportunities are less expensive than one way. That's the biggest driver for the customer. The service is better and costs are reduced—everybody wins."

Donald Broughton, the respected trucking analyst for Avondale Partners, says dedicated trucking's growth reflects the desire of those wanting to provide truck capacity with those wanting to secure trucks. And in an economy that could be finally on the cusp of a solid, sustainable rebound, that desire may only be growing.

"It secures capacity, locks price, sets a shipper's budget, and takes volatility out—all at a price that's competitive," says Broughton. "If you're providing

Daniel Vasconcellos

service, it takes unpredictability out of the normal seasonality and cyclicality."

Dedicated rates are clearly a bargain for shippers, with carriers often giving a break in these rates because they're assured of a certain level of demand—which they like in the notoriously cyclical world of truckload freight. As Broughton says: "There's not the variability to it."

Current market conditions in the trucking industry are also a factor in driving up the popularity of dedicated. First and foremost is the confluence of regulatory and economic conditions. The government's Compliance Safety Accountability (CSA) program is cracking down on unsafe drivers, and may eliminate as many as 150,000 drivers from the work force in an era when it's already difficult to attract qualified drivers.

In the shadow of CSA, trucking companies are doing everything they can to keep their qualified drivers in the saddle. One way to do this is by placing more drivers on dedicated routes. Truck drivers much prefer working a set route because it provides regularity and home time in an industry lacking both.

"Customers have been talking about driver shortage for 15 years, but since the recession this industry hasn't been challenged by strong economic demand," says Dan Van Alstine, Schneider National's senior vice president and general manager of dedicated service. He says that dedicated is one of the fastest growing elements in Schneider's portfolio.

"It is driven by many factors," Van Alstine says. "The recession had a reshaping impact on our industry. Then there are the regulatory, technology, and economic factors that are changing how people think about dedicated. CSA is going to be one of those influences that create more acute influences on driver availability—and that is going to affect demand for dedicated services."

Eliminating capacity spikes

The desire for truckers to eliminate volatility in their operations should not be underestimated by shippers.

Trucking companies have high fixed costs so anything they can do to even out freight demand throughout the year alleviates demand spikes.

"There is not only cyclicality in freight, there is seasonality," Broughton explains. "Nobody makes as much money in February with their trucks as they do in September. So more dedicated takes variability out of the equation and people like that."

It's crystal clear that carriers certainly appreciate dedicated. The latest numbers from some of the largest truckload fleets show that the percentage of their fleets devoted to dedicated is, in fact, growing. For example, J.B. Hunt's dedicated contract division has nearly 4,400 power units, according to research firm Armstrong & Associates—and Hunt isn't alone.

Ruan Transport has 4,068 units in dedicated operations, followed by Schneider National with 4,000, Greatwide Logistics 3,950, and Swift Transportation with 3,400 rounding out the five largest dedicated fleets. Salt Lake City-based C.R. England, the nation's eighth-largest TL carrier, devotes about 1,600 trucks out of its total fleet of 4,600 power units to its dedicated operations.

J.B. Hunt's dedicated segment also posted solid results last year. In last year's fourth quarter, Hunt's operating income was up 7 percent year-over-year, but its dedicated revenue improved 9 percent year-over-year.

Phoenix-based Swift Transportation, the nation's largest truckload carrier, recently reported its dedicated segment revenue (excluding fuel surcharges) grew 6.4 percent year-over-year in the most recent quarter—and it grew profitably. Swift's dedicated division posted an adjusted operating ratio of 84.3 for the last quarter of 2012, an improvement of 80 points year-over-year.

As dedicated profits are growing, so is the amount of capacity fleets are using for dedicated operations. Hunt's dedicated segment is expected to produce in excess of $1 billion in revenue this year, accounting for about 20 percent of Hunt's overall revenue.

Con-way Truckload's Gonzalez says that its dedicated operation began about two years ago. "We're looking to find more," he says, adding that shippers are asking for more dedicated options in their supply chain. "More opportunities are coming," he says.

"[Dedicated] secures capacity, locks price, sets a shipper's budget, and takes volatility out—all at a price that's competitive. If you're providing service, it takes unpredictability out of the normal seasonality and cyclicality."

—Donald Broughton, Avondale Partners

Other carrier executives agree. Even some top LTL operators are eyeing dedicated routes as a growing part of their portfolio.

"Dedicated is good business for us," says Myron P. "Mike" Shevell, chairman of the $400 million Shevell Group that includes truckload carrier Eastern Freightways, a division that's growing its dedicated business. "It's not growing to the extent we'd like, but that's not the major point," he adds. "The appeal of dedicated freight is that you know exactly how much money you're going to take in. You know how many trucks you're going to be using every day."

Even those top carrier executives who are not taking part in the dedicated revolution can see its appeal and its future. David Congdon, president and CEO of Old Dominion Freight Line, the most profitable LTL carrier, says that because the bulk of his operations are LTL, dedicated freight is not a perfect fit—well, not just yet.

"We're not into it that much, but I think we would be in time," says Congdon. "I think dedicated is a wave of the future in truckload, and there's going to be plenty of it to pursue, when the time is right."

Benefit to all operations

Ask trucking analysts for the key to a profitable freight operation, and chances are they'll talk about "blocking and tackling"—concentrating on the basics such as timely pickups and delivery, little or no empty miles, no delays in transit, and optimum equipment utilization.

All those things play well in dedicated trucking operations; however, as analyst Broughton explains, often it's easier to talk about those things than to actually do them. "Running a great dedicated operation is like the NBA—all an effective scorer has to do is pull up at the 3-point line and make the jumper," says Broughton. "But not everybody can do that. Again and again, you see people fail to deliver."

But when dedicated operations work, they work very well for carriers. According to Broughton, developing and keeping that dedicated business allows carriers to focus on other parts of trucking that are hard, things like finding, training, and keeping qualified drivers; maintaining equipment and keeping it in operating condition to be profitably operated; finding and securing the least expensive sources of fuel; and, of course, concentrating on safety.

"Trucking is not an easy business, but running a good dedicated fleet takes at least one of the headaches—the variability of demand and price—out of equation," says Broughton. "That allows fleets to concentrate on the operations side of the business."

Operationally, dedicated fleet operations are easier to manage, executives say. That's because of their built-in familiarity and regular routing. "In some cases, you almost forget about it—it almost runs automatically," Con-way's Gonzalez says. "And, in certain cases, you can pass on savings to customers."

Schneider National's Van Alstine agrees, noting that the nation's second-largest truckload fleet has benefited from its newfound emphasis on dedicated routs to help serve the burgeoning industries associated with fracking, domestic energy exploration, and associated services.

"For us, it means getting into seg-

ments of transportation that, in the past, we weren't involved in," Van Alstine says. "For example, domestic energy exploration involves oil field support and moving commodities such as water, sand, and chemicals in areas where safety is critical."

Domestic energy exploration also has been a bonus to big dedicated operations such as Schneider because of the large geographic areas involved. "Lots of times you see defined growth in just a particular area, like the Southeast, but energy exploration is very widespread over a significant part of country. From Texas to Pennsylvania to North Dakota, it's across all regions and it's created significant opportunities for a variety of companies in various sectors," he says.

Besides energy exploration, Van Alstine says that other industries are looking to find better ways of getting product from distribution center to end user. Dedicated routes play well in that quest. "Customers are looking for greater payload asking, 'Is there is a better way?' Dedicated routes allow us to create tractor/trailer profiles fairly unique to that shipper, whether it's a bakery, auto manufacturer, or whatever. We have the experience to help shippers look at things differently."

Driver advantages

Simply put, truck drivers love working dedicated routes. They are predictable, shorter, allow for more home time, and they provide a familiarity with routes and customers that hauling typical dry van freight doesn't allow.

"There is great value in dedicated for our driver associates," says Schneider's Van Alstine says. "A predictable work week is very important, and most of our dedicated operations have a very regular home time—that's important."

Besides that, there's the connection with customers that working a dedicated route allows. Fleet managers say dedicated drivers talk about relationships they're building with stores. Receivers are accustomed to seeing the same driver coming into their docks.

"We had one receiver bake a birthday cake for one of our dedicated driver associates," Van Alstine recalled. "It's an engaging environment that drivers like."

Con-way's Gonzalez agrees: "Drivers get to know people at the dock. It becomes routine, and in certain cases we have onsite personnel for dedicated routes. That driver becomes very familiar."

And that familiarity comes because dedicated contracts tend to be multi-year deals, rather than the typical 12-month or 18-month contracts. "Customers are looking forward and they realize this is for the long run" Van Alstine says. "That's a great win. As long as you're able to provide service, they tend to stay—it's very difficult to mess it up."

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

Middlemen move front and center

Freight intermediaries are no longer happy waiting in the wings, and that's great news for shippers who want deeper engagement as extra emphasis is placed on U.S. exports over the coming years.

BY **PATRICK BURNSON,** EXECUTIVE EDITOR

Relationship building with a reliable transportation middleman has always been a goal for global shippers seeking to penetrate new markets. But with the Obama Administration placing extra emphasis on U.S. exports in the coming years, the need for more detailed engagement has gained a new urgency.

What steps must today's global pioneers take to ensure a profitable and sustainable relationship with these necessary freight intermediaries? *Logistics Management* has invited four prominent global trade and compliance experts to explore that question along with other pressing industry issues that are top of mind for today's logistics management professionals.

Beth Peterson is president of BPE, Inc., a consultancy

specializing in export operations and the development of global supply chain security programs; Evan Armstrong is president of third party logistics advisory firm Armstrong & Associates; Greg Johnsen is co-founder of GT Nexus, a technology company that drives sustainable improvements in global sourcing; and Matt Motsick is CEO and co-founder of Catapult International, a company providing web-based rating applications for the world's shipping industry.

In the end, our analysts and practitioners agree that shippers can no longer hide behind their freight forwarders or the "black hole of customs." In the brave new world of cloud computing, shippers and forwarders need to be up front with their data and provide accurate and timely information to achieve any semblance of global success.

***Logistics Management (LM):* How has the commercial landscape changed in recent years for freight forwarders?**

Beth Peterson: The biggest change is the fact that the shippers are inserting themselves more into the process. In the past, freight forwarders were simply expected to pick up the cargo, deliver it, and deal with any issues that might come up. Now, freight forwarders have direct access to the shipper to get information to solve any and all issues. This is resulting in a more accurate picture, but there is still a lag in getting the information if their operations are not scalable.

Evan Armstrong: I agree. Freight forwarding has become less focused on the "freight" and more focused on providing end-to-end supply chain management solutions to customers. For example, higher-margin airfreight business is being converted to ocean freight wherever it makes sense from a service standpoint, while ocean LCL programs and service are just getting better.

Greg Johnsen: That's right, Evan. The landscape for shippers has changed in the last several years, and this flows down to the logistics service providers that support shippers. Recent studies indicate that five years ago an estimated 50 percent of chief supply chain officers reported directly to the CEO. Today that number is 80 percent.

Supply chain is strategic, and increasingly so. The best companies—Apple, Amazon, Walmart—are not just great branding companies, they are great supply chain companies, and this puts enormous pressure on logistics service providers. They must perform at increasingly higher levels.

***LM:* How important is data in performing at such a high level?**

Matt Motsick: We live in an information age and shippers now expect forwarders to have data available to them at their fingertips. From mobile apps to tracking status messages, forwarders are adopting the online environment and are listening to their customers. As logistics managers turn over to 30- and 40-year old age groups, they will drive automation in every aspect of the forwarders' operations—on both sides, the shipper and the forwarder. At the same time, eCommerce and cloud-based systems are revolutionizing logistics and the freight forwarders are recognizing this.

***LM:* So, shippers expect forwarders to have a wider range of skill sets?**

Motsick: Yes. Shippers not only demand more skill sets, but more service adds as well. When everyday consumer tasks such as shopping and paying the mortgage can be done from the comfort of one's home on a mobile phone or tablet, businesses begin to expect the same fully integrated, simple solutions commercially. Today, the client assumes the forwarder is the import/export expert.

Armstrong: Managing shipment and order information is the key. Forwarders need to have robust integrated systems to handle regulatory filings, import/export product and packaging limitations, transportation management, container station/warehouse management, and overall order management. Taking a "control tower" approach to one's supply chain management has become critical, and this is what the large integrated forwarders are selling.

Johnsen: And without robust information sharing and information management, corporate customers can't streamline their broader supply chain operations and run their businesses. Forwarders need to be great information partners too.

***LM:* That answer implies that shippers have even more choices today. What are the advantages and drawbacks of using multiple forwarders?**

Armstrong: We've observed that different forwarders can have better local market operations in certain countries, which could be helpful. Governmental regulations and customs licensing may give them preferential treatment. However, the more forwarders you have to manage, the more difficult it is to administer and take an overall control tower approach to managing your supply chain.

Peterson: I agree. The first issue is standardization—ensuring that all of your service providers use the same data and present it uniformly. The second issue is visibility—providing transparency to their services.

Johnsen: There can be big advantages to reducing the number of forwarders a company works with; but increasingly, companies want choice and flexibility, particularly as their own business needs and structure changes—and they want specialization, as long as it can be managed and integrated without a lot of extra overhead or risk.

Motsick: But companies that use multiple forwarders understand that no forwarder can be the best option everywhere. Systems that can provide companies the ability to choose forwarders are needed in the marketplace. With the exponential amount of information that can be shared today in seconds, it seems laughable that a small- or medium-sized business should require several days to get a single quote.

***LM:* With that in mind, when is it best for shippers to use a "boutique" forwarder rather than a huge global player?**

Motsick: Both "boutique" forwarders and global forwarders are needed in the marketplace. Niche forwarders that focus on a specific geography, like the Caribbean, or handling specific cargo, such as agriculture products, fulfill shippers' specific needs. At the same time, it is the global forwarder that can provide dependability and visibility by offering an end-to-end solution of shipments without going out of their network.

Armstrong: Matt is right on, but it comes down to the need for local market expertise. Governmental regulations and customs licensing may give a boutique provider preferential treatment and provide customers with better service levels.

Peterson: Right, for example when a company is entering a highly controlled market with very specific products that have a lot of complexity.

***LM:* With so much happening in the information technology world—mobile, cloud, social networks—what are forwarders doing to take advantage of IT and do you see a shift in emphasis on their part in terms of market approach and their overall proposition?**

Johnsen: Forwarders are in a unique position to harness newer cutting-edge IT, especially with respect to cloud-based collaboration platforms and social networks. We are seeing enormous shifts in the capabilities in these systems, and because many of them are delivered as a service, not as capital-intensive multi-year IT deployments, forwarders can get in the game immediately and leap frog far bigger competitors who have made massive investments in IT that is now dated, closed-off, and proprietary.

Supply chain planners, analysts, and logistics professionals are increasingly on line, and mobile. The best forwarders are taking advantage of newer on demand technology and systems to reach their customer and engage with them more closely around the business processes and flows that are at the center of their working relationship. IT used to be the barrier, but that is changing now—and quickly.

***LM:* That being said, what are the major new challenges facing the forwarding community?**

"Forwarder's overall end-to-end, port-to-door, door-to-door, and information management capabilities need to be emphasized in making solid provider selections."

—Evan Armstrong

Johnsen: To stay relevant, forwarders must increase their strategic value proposition to their customers. This is not just a matter of launching new services or building better information systems, but how these services and information systems can be used to connect with customers, to engage with customers, and to differentiate based on service and collaboration.

Peterson: Indeed, data integration and reporting continue to be challenges. Customers require more data and more information than was available before now.

Armstrong: Furthermore, the number of governmental regulations continues to increase requiring stronger trade and compliance expertise. Ocean shipping lines continue to bleed financially, adding uncertainty to capacity and rate plans. To avoid the pitfalls of offering one-off services, many forwarders see providing high-value end-to-end supply chain management solutions as a way to improve margins, increase service levels, and develop strategic relationships with customers.

Motsick: It's all very Darwinian. With the advent and adoption of the numerous technological advances in information sharing and data processing, forwarders need to adapt and survive or lose clients and revenues to companies that are willing to invest in innovations to improve the process. Old habits may die hard, but today's consumers and business owners will expect those habits to be updated and integrated with the newest information technologies.

***LM:* What does this all mean for today's global shipper?**

Motsick: Shippers will expect the forwarding community to become IT companies on the side. For forwarders that still have green screens, it will be a large mountain to climb. But I see this as a good time to be a shipper in the small- and medium-sized enterprise community.

While corporations have largely internalized most of their logistics, supply chain management, and shipping divisions and provided them with the tools and financing to quickly access the freight forwarders or carriers, smaller companies have been underserved. Information technology, cloud-based computing, and web service, however, is going to level the playing field, and quickly

Armstrong: Matt's right. Information technology is critical. Order management and a provider's ability to manage supply chains from order placement through to delivery is becoming increasingly important. Meanwhile, the process for evaluating and selecting forwarders is becoming more and more detailed.

It's no longer acceptable to select forwarders simply based upon their rates in specific trade lanes. Forwarder's overall end-to-end, port-to-door, door-to-door, and information management capabilities need to be emphasized in making solid provider selections. Having greater internal resources within shipper procurement operations to better understand and evaluate providers is becoming a greater necessity.

Peterson: And I think all of us agree that, in the end, it comes to accountability. The shipper can no longer hide behind their freight forwarders or the "black hole" of customs. Both shippers and forwarders must provide accurate and timely information.

Patrick Burnson is Executive Editor of Logistics Management

WMS moves toward

Our technology correspondent examines the current state of the warehouse management systems (WMS) market, explores key trends driving the industry, and highlights the new, smarter capabilities that are just around the corner for both vendors and users.

BY **BRIDGET McCREA,** CONTRIBUTING EDITOR

After posting 10 percent growth in 2011, the warehouse management systems (WMS) market continued adding to its $1.3 billion in total sales volume last year and experienced a growth rate of about 6 percent, according to early estimates from analyst firms Gartner and IDC Manufacturing Insights.

Key market drivers for WMS included an economic landscape that continues to improve and push companies to spend more on technology; the ongoing need for more streamlining and visibility in the DC; as well as the fact that many existing solutions are aging and need to be upgraded or replaced.

"Overall, manufacturers are a little more optimistic, and, as a result, are making more investments in WMS and other solutions," says Simon Ellis, practice director at IDC. "When we talk to the larger WMS vendors right now, they are all seeing reasonably healthy growth in the segment."

Over the next few pages we'll examine the current state of the WMS market, explore the key trends that are currently driving the industry, and highlight a few of the new capabilities that are just around the corner for vendors and users.

WMS on cloud nine

Much like its transportation management system (TMS) cousin did about six years ago, WMS has officially moved into the cloud. "We're seeing a rapid emergence and adoption of cloud-based WMS," says Dwight Klappich, research vice president for Gartner. "Companies that agonized over whether to keep their data behind a firewall or on the web—or, that were worried about scalability and performance issues in the cloud—have done complete turnarounds."

Klappich says cloud-based WMS is where TMS was about six years ago, when the cloud was "an option, but not a preference" for most shippers. The movement is gaining momentum, says Klappich, who expects WMS-in-the-cloud to continue growing over the next two years, putting pressure on both the mega-suite vendors and best-of-breed providers to come up with subscription-based solutions.

"At this point, the vendors are kind of holding back in this area," Klappich points out, "but that's starting to go away as demand for cloud-based systems grows."

Rolling out the bells and whistles

WMS may be the granddaddy of the supply chain software lineup, but that doesn't mean its makers aren't continually looking for ways to improve upon their offerings.

Driven by users' wants and needs, WMS innovations come in different shapes and formats. At a very basic level, for example, Ellis says software vendors focus on developing solutions that support functions like cross-docking, bypass shipments, and multiple-manufacturer facilities.

After all, says Ellis, not all warehouses are dedicated to single companies anymore. "There are a lot of facilities out there, in addition to the many 3PL operations, that support multiple manufacturers," says Ellis. "Oracle, in particular, can support warehouses that are being used by multiple firms under a single roof."

INTELLIGENCE

"Companies that agonized over whether to keep their data behind a firewall or on the web—or, that were worried about scalability and performance issues in the cloud—have done complete turnarounds."

—Dwight Klappich, Gartner

Vendors are also introducing new functionalities to meet user demand. Workforce management, for example, is one component that some WMS vendors are including in or tying into—in the form of add-ons—their solutions. These systems help warehouse managers assign the right employees with the right skills to the right job at the right time—a mission that's not always attainable with manual systems.

"There have definitely been some enhancements made around planning and forecasting for warehouse labor," says Robert Hood, senior manager at IT consultancy Capgemini.

WMS providers are also helping shippers achieve tighter, closer supply chain integration by figuring out how to align the warehouse management's tactical and operational effectiveness with functions like inventory management, inventory optimization, and even global trade.

"It's about bringing these capabilities closer together and making them even smarter, as well as connecting transportation with the warehouse and with optimization technology to manage tactical decisions in a more cohesive manner," says Ellis.

Getting mobile within the four walls

Mobility was infused into the warehouse years ago with the introduction of ruggedized handhelds and other mobile tools. More recently those tools—while robust and able to withstand the physical strain of being used in a warehouse environment—have given way to more advanced tablets and smart phones.

"Ruggedized equipment is worth the money for the warehouse, but there are things that you can do with an iPad that you can't do with traditional mobile equipment," says Ellis, who points to inventory performance and workforce management as two functions that a tablet can handle. "All of the major software vendors understand the importance of being able to connect mobile devices into a WMS," says Ellis.

Klappich points out that at one time, tablet computers and related applications designed for them were not for the blue-collar worker on the warehouse floor, but for the supervisor or manager who received event-based information while seated at his or her desk. With more mobility making its way into the warehouse—and more WMS packages integrating this functionality via app—that same supervisor can cut the wires and operate in a more mobile fashion.

"We're seeing a lot of WMS vendors piloting first generation tablet apps right now," says Klappich, "and more shippers using tablets as a result."

International flair

High demand for WMS isn't limited to the U.S. According to Klappich, the number of WMS users is also growing in Europe and in various emerging markets, the latter of which tend to be "15 years to 20 years behind the established markets in terms of WMS maturity levels," says Klappich. "In emerging markets, businesses have evolved to the point where putting in the very rudiments of WMS are getting more and more important."

As companies in emerging markets strive to pick-and-ship orders on time and as efficiently as possible, Klappich says WMS will gain an even stronger foothold. Concurrently, a number of companies have already figured out how to stay on top of changes in order volumes, but are now looking to operate more efficiently and utilize their resources more effectively.

"We're expecting a lot more growth internationally for WMS," says Klappich, "as companies get to the point where manual processes just don't cut it anymore."

Not all buyers want luxury

Where international WMS users differ from their U.S. counterparts is that most of them don't need the advanced functionalities that vendors are incorporating into their solutions.

"These users aren't looking for best-of-breed solutions, necessarily," says Klappich. That phenomenon alone will drive notable changes in WMS over the next five years, he says, with mega-suite vendors like SAP and Oracle "beginning to catch up and even outpace the growth of the best-of-breed marketplace."

Klappich uses an automobile analogy to describe the current landscape: "RedPrairie and Manhattan are the BMWs and Mercedes-Benzs, and Oracle and SAP are the Toyotas and Hondas," says Klappich. "The latter offer solid, proven, reliable sys-

Creating the intelligent warehouse

Making a warehouse intelligent requires a pretty smart WMS, but these solutions haven't traditionally been known for their brains. "WMS is pretty rudimentary," says Dwight Klappich, research vice president for Gartner, who adds that he sees that slowly changing over the next five years as WMS vendors add a dose of "intelligence" to their solutions.

To get there, Klappich says, the systems will have to go beyond just collecting data and learn how to apply sophisticated algorithms and methodologies that help their users make better decisions.

"Shippers can get KPIs and see how many shipments they've processed," says Klappich, "but now it's time to take all of that real-time data and wrap real-time analytics around it." If WMS vendors fall short in this area, Klappich says providers like Reddwerks (for warehouse control systems); FORTE Industries (distribution supply chain solutions); One Network (appointment scheduling); and PINC (RFID yard management) are all standing by, ready to innovate.

"The WMS providers are already playing around with the idea and testing it out in the labor planning segment," says Klappich, "but they need to get more aggressive with it. Manufacturing has had advanced support systems for 20 years and the WMS providers have been slow to adopt in this area."

Don't expect overnight changes, says Klappich, who predicts that a more intelligent warehouse will begin to materialize over the next five years. "Some vendors are doing interesting things right now," says Klappich, "but there is still a lot of work left to be done."

—Bridget McCrea, Contributing Editor

tems that will get you from Point A to Point B, but they don't have heated bumpers."

That said, Klappich points out that best-of-breed providers continue to dominate the market for now, but adds that most are doing the "complex, multimillion dollar deals." For now, the "other" deals seem like small potatoes in the scheme of things, says Klappich, "but in terms of net new customer acquisition, we believe that within five years the mega-suite vendors will command about 50 percent of the marketplace."

Merging and acquiring

If one piece of news shook up the WMS landscape in 2012 it was the announcement that JDA Software Group and RedPrairie would become one. Wrapped up in December, the merger brought together a supply chain software powerhouse (JDA) and a WMS provider (RedPrairie) that consistently ranked as one of the top players in the best-of-breed space.

The merger could prove to be a double-edged sword for RedPrairie, according to Hood. On one hand the best-of-breed provider will benefit from JDA's dominance in the industry, but on the other side RedPrairie's laser focus on the WMS market could be diminished.

"JDA is a demand supply company that has the planning space completely covered up and is less focused on execution," Hood comments. "Will that cause RedPrairie to get lost in the shuffle? And will that give [competitors] like Manhattan a competitive advantage? Only time will tell."

ERPs drill down

Large ERP providers like SAP and Oracle continue to claim the lion's share of sales around supply chain components. Such components are delivered as collections of "modules," and closely integrated with the ERP in question.

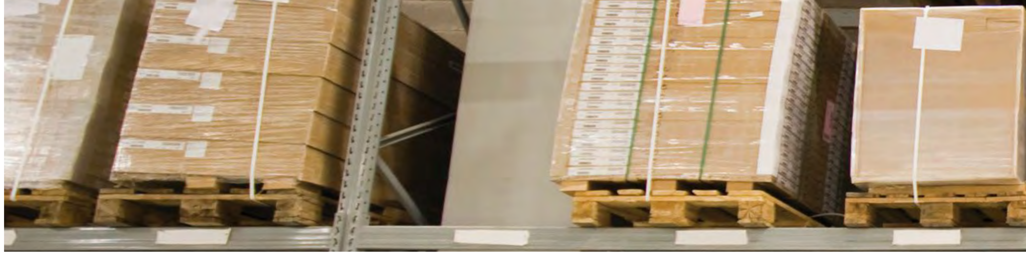
Offerings like SAP's extended warehouse management (EWM) solution, for example, claim to help shippers "gain control over warehouse efficiency, transform operations, and increase competitiveness." Hood says shippers are paying attention to these claims.

"Over the last six months we've seen a significant uptick in the level of interest and energy around SAP EWM," says Hood, who adds that some of the momentum is being driven by a handful of successful EWM implementations in Europe. "There was some initial skepticism among WMS practitioners at first—in terms of the solution's differentiation points over what's already been done—but we're deploying EWM in six projects right now and finding it to be more functionally rich than its predecessor."

Expect to see more WMS vendors stepping up to the plate across all areas mentioned in this article—from mobility and the cloud, to specific functions, and even the kind of mergers or acquisitions that will help make their solutions more valuable for shippers.

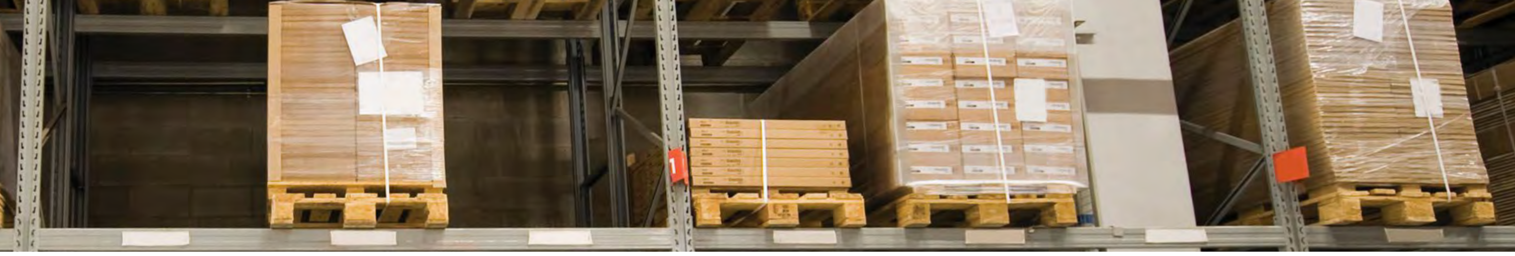
"Warehouse management systems have pretty much done the same thing for the last 30 years," adds Klappich. "But over the next five years we'll definitely see some functionality improvements in an effort to make the WMS that much more intelligent and useful."

—Bridget McCrea is a Contributing Editor to Logistics Management



Top 8 guidelines to improve inventory management

Our panel—representing a combined 80 years of inventory experience—gets back to the basics, reviewing critical strategies that some organizations have been neglecting over the past several years.



BY **MAIDA NAPOLITANO**, CONTRIBUTING EDITOR

Let's keep it simple: Inventory is the lifeblood of the supply chain. It's what flows from node to node. And at each node it's critical to figure out that perfect balance of supply and demand, or else suffer dire consequences. If you have too little inventory you risk lost sales and customers from "out of stocks." If you have too much inventory you'll need more of everything—more space, more transportation, more handling, more labor, and more money.

Even after figuring out the correct amount to keep in stock you'll still need to execute the proper flow. But it's not only about the timely movement of the physical goods from your suppliers in Asia to your stores all over the U.S. It's also about managing the vast amount of information associated with those goods in order to keep it moving to the next node—even before it gets there.

Over the next few pages, our inventory experts—who bring a combined 80 years of experience to the table—present eight guidelines for managing inventory in the supply chain. Our panel approaches this exercise from both planning and execution perspectives and investigates the latest in leading-edge technologies that can be used to put these guidelines into action. The panel also gets back to the basics, reviewing critical strategies that some companies have been neglecting over the past several years.

1 Consider inventory optimization tools

Inventory optimization tools have been gaining ground as companies seek to evaluate their entire network and determine the best inventory policies for each product at each node in their supply chain. These are typically stand-alone software tools that use data from WMS and ERP systems.

"These optimization tools take into account demand variability, supply variability, and replenishment parameters to determine how much inventory to hold in order to guard against that variability," says Dave Wheeler, principal of supply chain services for consulting firm St. Onge.

Aman Sapra, senior project manager of inventory and supply chain strategy at St. Onge, attributes the increasing popularity of these tools to the realization by more companies that the transactional systems running their DCs do not provide enough cutting-edge optimization capabilities.

However, Sapra cautions against optimization tools that are simply "great analysis, smart math monsters."

"You want something that when the results come out, and with minimal human intervention, it can execute on those

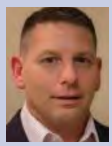
More expert inventory management advice from our panel:

"Model your inventory and fully understand where it comes from, what attributes are critical, where your safety stock will come from, and what levels you must have to keep costs down. Don't let yourself be surprised by stock outs. Think down the road so that you can be flexible and do better than your competitors."

—Curt Sardeson, Managing Principal, The Open Sky Group

"Perform continuous and appropriate periodic review of inventory. It shouldn't be a one-time activity. Promotions don't happen only once. The nature of the supply chain is that things can happen all the time."

—Aman Sapra, Sr. Project Manager, Inventory & Supply Chain Strategy and Analytics, St. Onge Company



"Maintain open communication with your sales and operations planning team so you know what's coming down the pike in terms of additional volume. Is there a big promotion that inventory planners need to know about and plan for? Is there a new contract with a customer that will drive demand to increase twofold?"

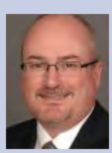
—Dave Wheeler, Principal, Supply Chain Services, St. Onge Company

"Ask your vendors if they have a solution that can be mobile-enabled and at your level of sophistication. Do they have something that will allow you to crawl, then walk, and then run? Do they have an inventory solution that will meet all of your future business growth, not just warehousing, but perhaps reverse logistics and repair or manufacturing? Do they have a solution that will give you the granularity of information that you require to make better planning decisions?"

—Jennifer Sherman, Senior Director for Fulfillment, Applications Strategy, Oracle

"Ensure speed to value. The quicker you have the information the more valuable and pertinent your decisions are going to be—and the more agile and flexible your company will be."

—Michael Wohlwend, Vice President of SAP Americas, Vice President of the Warehousing Education and Research Council (WERC)



"Standardize the data so that everybody can see the same information and standardize the process so they know what to do with that information."

—Chris Jones, External Vice President, Marketing and Services, Descartes

results. It may seek approval for a few items, but will work seamlessly with business systems on most recommendations."

2 Employ business solutions that use real-time analytics under one platform

According to Michael Wohlwend, vice president of SAP Americas and this year's vice president of the Warehousing Education and Research Council, "the days of managing inventory using Excel spreadsheets are passé."

Powerful sales and operations planning solutions are now using real-time analytics that take a unified data model of demand, supply chain, and financial data, analyze them at any level of granularity, and instantly provide responses. "You can even perform rapid, interactive scenario planning and simulation with this data to support inventory and other planning decisions," says Wohlwend.

Operating on one platform where data is shared is key, says Jennifer Sherman, senior director for fulfillment applications strategy for Oracle. "You have one picture of inventory, one picture of costs, and one platform to plan against. This allows you to have real-time inventory within that one model and even track who owns that inventory—even if I've got a product that has been consigned to me from my supplier, it's still in the same inventory model."

With all of these systems providing users so much real-time information at their fingertips, managers can capitalize on unique opportunities for moving inventory, such as completely bypassing the DC. Chris Jones, external vice president of marketing and services for Descartes, explains that companies can now treat ocean carriers as mobile warehouses, allocating inventory before it even gets to the port.

From the port, it typically goes to a deconsolidator who then sends it to the DC, who then decides to send it from there to a retail store. "The latest software cuts out one big step from the process," says Jones. "So, because you know what's coming and you have it labeled with accurate electronic information, when it gets to the deconsolidator you can process it to go directly to the retail store."

3 Don't treat all SKUs the same

There is no such thing as a one-size-fits-all solution. "Each and every product does not have the same supply and demand variability pattern," says Sapra. "Focus on those 20 percent that statistically make up 80 percent of the volume and manage that inventory really well, so you maximize sales and profits."

"Some companies will not only plan for items differently, but they might also have different targeted fill rates for each item category," explains Wheeler. "My fast-moving A items should be filled at a rate of 99 percent, B items at 98 percent, and C items at 95 percent. It's called service-level differentiation." The goal, he adds, is to maximize resources on the more profitable A products, while minimizing the resources used on the less profitable C items. Each segment will then have different forecasting and stocking policies.

4 Keep an eye on your suppliers

There are suppliers that don't necessarily stick to their schedule or deliver on their commitments. "It's not only in terms of timing, but also fill rate," says Wheeler. "If you ordered 1,000 cases of pencils and the order shows up at the door with only 900, then that's a problem."

Our experts suggest closely monitoring supplier activity. Most systems track the inbound receipt of an item: There is a promise date, an actual receipt date, quantity ordered, quantity received, and the condition in which it was received. These are metrics that can be tracked and analyzed to determine a supplier's reliability. "All of that data is typically available in a WMS," says Sapra, "but has anybody really looked at it to determine unreliable suppliers?"

After identifying unreliable suppliers, you can deal with them and resolve any issues and work toward improving a supplier's performance—or hold more of their inventory to guard against their variability.

5 Track essential attributes

Over the past few years, tracking product genealogy and traceability are at the top of inventory managers' must-have lists.

"It's not enough to just track your lot number," says Carl Sardeson, managing principal of the Open Sky Group, a consulting firm specializing in supply chain management solutions. "If you used subcomponents and subassemblies that you mix into your product, you also need to know those lot numbers in case your product has a recall."

The key is to efficiently capture these attributes without increasing labor or handling costs. Sardeson recommends electronically capturing data such as country of origin (COO), serial numbers, and vendor lot number then automatically sending that information via EDI/ASN to the next node on the supply chain. "Without it, manual intervention, space utilization, and labor can get out of control quickly." The increased tracking also affords trading partners with increased visibility and the ability to make more timely decisions.

6 Leverage mobile devices

Mobile technologies and mobile user interfaces are now ubiquitous for capturing data on inventory. "It's time for even businesses that don't see themselves as complex to demand mobility solutions for accuracy," says Oracle's Sherman.

SAP's Wohlwend points out how most sales associates on the store floor now have mobile devices with real-time inventory of the store. "Not only are they able to improve customer service, but when inventory is low, they're able to generate a replenishment from the DC down to the store."

Mobile devices allow quick access to accurate information and data so that managers can act quickly on their inventory decisions, especially in the DC. It also eliminates the errors and delays associated with a paper-based operation, improving accuracy, efficiency, and the general speed of your business.

7 Be smart about your slow moving and obsolete items

While it makes sense to focus on your more profitable fast movers, you can't ignore your slower-moving merchandise. Every day that these items are not used or sold, they occupy space, utilize labor and resources, run the risk of obsolescence, and in many cases actually get in the way of your more popular items.

"It begs the question: Do I even need these slow movers in all of my warehouses?" says Sapra.

"The more DCs that you store an item in, the more inventory you're going to have," says Wheeler. "If you pull that inventory back into a single DC, you're able to aggregate your demand variability, which allows you to reduce your required safety stock."

It doesn't matter where you put slow movers; many DCs will need to deal with them. "Control your SLOB—slow moving and obsolete items," adds Sapra. "These are products that everyone conveniently forgets about. Well-managed operations are going to put it on sale or send it to thrift channels and off-price retailers."

8 Lastly, don't neglect slotting

Proper slotting not only delivers much needed space, but appropriately locates the fastest moving items closer to docks and more accessible locations, minimizing travel distance and maximizing overall throughput and productivity. Unfortunately many companies tend to neglect their slotting.

"In the best companies, slotting is a daily activity not a quarterly or annual activity," says Open Sky's Sardeson. "As a daily activity, you can stay on top of it because it's only a little bit of work and completely manageable. If you slot annually it becomes a major undertaking."

St. Onge's Wheeler also suggests investigating if two items have a high probability of being ordered on the same order. "If so, you want them close to each other in the picking area so that your travel distance is minimized, reducing your labor costs."

Maida Napolitano is a Contributing Editor to Logistics Management

A SPECIAL SUPPLEMENT TO:
Logistics MANAGEMENT

Will consolidation change air cargo?

While logistics managers wait to see how the American/US Airways merger shakes out, analysts say deals like this recent blockbuster may be a blessing in the long run for shippers.

By Patrick Burnson, Executive Editor

The air cargo industry has recognized 2013 as the 100th year of commercial aviation; but so far, the sector's expected profit margin of 1.3 percent is very weak—and shippers concerned about securing enough air capacity are taking notice. Furthermore, says the International Air Transport Association (IATA), current returns on investment are less than half the industry's cost of capital, which continues to erode shareholder value and add to shipper anxiety.

However, according to Tony Tyler, IATA's director general and CEO, during the course of this year governments should resolve to bring down the barriers to connectivity and growth and help airlines get back on a path to prosperity. "This can be done by addressing excessive taxation,

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high infrastructure costs, onerous regulation, and improving the capacity and efficiency of airports and air navigation services," says Tyler. "A strong air transport sector is in the self-interest of governments eager to support economic growth and development, and trade is the key to that growth. For that," he adds, "connectivity is critical, and it's aviation that makes that happen."

The big story for U.S. air shippers, however, was the latest episode of airline consolidation, with American finally signing a deal to merge with U.S. Airways last month. While it's far from clear what the implications will be for U.S. shippers, consolidation has been good for carriers.

Currently, more than 70 percent of the U.S. market is in control of just four airlines: the new American, United, Delta, and Southwest, (which acquired AirTran three years ago). However, industry analysts say that change will not be dramatic in the short term.

The new American Airlines brings both carriers to the same level as Delta and United—not only in terms of cargo payload, but also in global reach. Shippers will be left with just four U.S. mega-airlines to pick from, and the merger will likely bring to a close more than 30 years of U.S. airline consolidation.

US Airways CEO Doug Parker will run the new

Small shippers chime in on mega and mini carriers

Surveys conducted over the past two years by the Express Delivery & Logistics Association (XLA)—a non-profit trade association that represents the regulatory and business interests of the express delivery, mail, and logistics industry—suggest that small package shippers have been fairly satisfied with the performance of the major airlines.

Southwest Airlines Cargo received the highest rating in e-business for its real-time tracking and tracing information, easy online booking, user-friendly website, and barcode technology.

American Airlines Cargo was judged "most improved" based on the business-to-client communication experience, service experience, web, and technology, while United Cargo was named "international airline of the year."

According to Scott Cannon, president of XLA, United provides "the best service and communication" for all international areas based on capacity, hours of operations, local service changes, and improvements.

But while there's mega, there's also mini—and for some premium air cargo shippers the latter may be better.

Take for example AirNet Systems, which late last year announced the launch of AirNet Cargo Charter Services. Headquartered in Columbus, Ohio, AirNet Cargo Charter Services is a small package express cargo airline that services a wide array of industries that require speed, reliability, flexibility, and security in the transportation of high-priority shipments.

Founded in 1974, AirNet operates a fleet of more than 120 aircraft that conduct hundreds of scheduled and on-demand charter flights per night throughout North America and is one of the largest specialized air cargo airlines—as well as the largest commercial operator of Cessna aircraft in the world.

According to AirNet Systems' CEO John Dupuy, shippers generally examine freighters, passenger planes, or integrated courier companies based purely on "up front" costs. But AirNet's value proposition of leveraging speed-to-market, risk mitigation, and customer service can be persuasive.

"Even during the weak economic cycle, we saw greater demand for our business," says Dupuy. "When shippers weigh the value of paying slightly more for expedited delivery against what they might lose with a bigger carrier, they can see the attention to detail we provide. Being smaller and more agile is a big advantage for us."

—Patrick Burnson, Executive Editor

airline—now the world's biggest—with American CEO Tom Horton serving as chairman. Parker notes that the combined airline will have the scale, breadth, and capabilities to compete more effectively and profitably in the global marketplace.

"Our combined network will provide a significantly more attractive offering to shippers, ensuring that we are always able to take their cargo to its destination," says Parker. Yet to be measured is what impact—if any—the merger of American and US Airways will have on existing code share agreements with other airlines.

Industry analysts dismiss this as a minor concern, however.

"Unlike the passenger market, where code sharing provides added convenience for the passenger and potential additional traffic for the airline through the use of computerized reservation systems, air cargo does not make much use of code sharing," says Russell Tom, regional director of airline market analysis for Boeing Corp.

For example, bookings by shippers and forwarders are made directly with the individual airlines, often contracting for capacity over a period of time rather than for a specific trip and through a neutral site, which is often the case for passenger bookings.

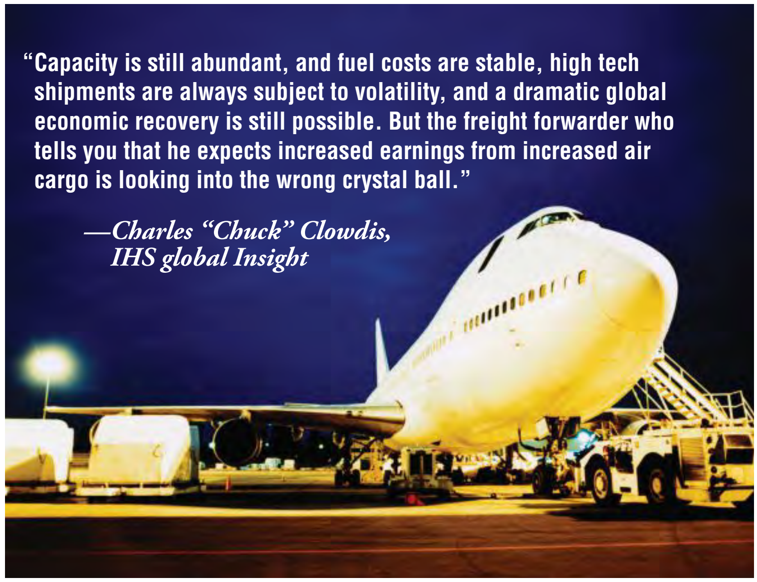
"Because of this difference in the nature of the businesses, the benefits of code sharing to air cargo are minimal, and that is not expected to change with consolidation in the industry," adds Tom.

Duopoly dominates

According to Boeing, the integrated carriers comprising the freight duopoly of UPS and FedEx continues to dominate the domestic U.S. air cargo market with about 65 percent of the traffic measured in revenue.

In 2012, American and US Airways combined accounted for about 3 percent of U.S. domestic air cargo. Currently, scheduled air cargo carriers—which includes combination carriers such as American and US Airways—carry about 14 percent of the U.S domestic air cargo. Boeing analysts say it's a safe bet that, domestically, the dominance of UPS and FedEx would continue, especially since they offer more popular express-type services.

Internationally, UPS and FedEx account for about 9 percent of the revenue carried, and American and US Airways account for about 2 percent. "So we don't really expect to see a negative impact for the two giant integrators



overseas," says Tom.

It is not expected that a merger of American and US Airways would have a noticeable effect on UPS and FedEx in the international market, add analysts.

Jerry Hempstead, president of parcel consultancy Hempstead Consulting, agrees, noting that the commercial passenger airlines are simply creating four mega-hub-and-spoke competitors that will have very similar coverage. "The hubs may differ, but we could see greater competition for passengers and cargo since there will be multiple options between city pairs," says Hempstead. "Empty below deck capacity will mean competition for freight especially on longer flights."

According to analysts like Hempstead, it appears that UPS and FedEx, along with niche cargo operators like Atlas Air World Holdings and Air Transport Services Group, are going to be doing the "heavy lifting," thereby creating the greatest fight for air cargo.

Both Tom and Hempstead observe that while consolidation reduces the number of airlines, it does not appreciably change the choices that air shippers have. Recent merger activity has been among the U.S. legacy carriers, and these airlines have had relatively small air cargo operations compared to other airlines from other regions.

Rate picture blurry

Brandon Fried, executive director of the Airforwarders Association (AfA), says that the recent merger announcement of US Airways and American creates worry that there will be higher rates. However, knowing that two weak carriers could combine as one for a more certain future may offset this. At its darkest hour of need, it looked like American might actually disappear, thereby depriving shippers of scores of jumbo freighters.

"The grounding of freighter aircraft is always a concern because commercial passenger planes cannot handle everything, and forwarders need access to these all-cargo operators for outsized pieces and large special project shipments," says Fried.

At the same, though, Fried acknowledges that freight forwarders have adjusted their business models in response to adverse economic demands over the past several years. Few rarely focus on one single transport mode and most offer ancillary services formerly reserved for third party logistics providers.

"For example, forwarders once specializing only in next-day air cargo may now offer various air service levels and ocean shipping to fit tight customer budgets," says Fried. "Storage, pick-and-pack, and kitting services are common ways to increase revenue while addressing increasing customer needs."

And other industry analysts insist that the current air cargo rate structure will not be dramatically altered in any case. "If your volume is down, you can expect carriers to raise your rates," says Charles "Chuck" Clowdis, managing director of transportation advisory services at IHS Global Insight. "And if your volumes are up, expect to be asked to lunch and continue to pay at the existing level."

Base, rates, Clowdis adds, will be raised on slight scale in any case. But there's always a margin for error, he adds. "Capacity is still abundant, and fuel costs are stable," he says. "High tech shipments are always subject to volatility, and a dramatic global economic recovery is still possible. But the freight forwarder who tells you that he expects increased earnings from increased air cargo is looking into the wrong crystal ball. It just ain't gonna happen."

Patrick Burnson is Executive Editor of Logistics Management

A SPECIAL SUPPLEMENT TO: Logistics MANAGEMENT

ProMat 2013 WRAP UP

Latest solutions unveiled

By Supply Chain Group Staff, Peerless Media

As an indicator of the continued economic recovery of the materials handling, supply chain, and logistics industry, U.S. and international attendees registered in record numbers for ProMat 2013—the premier North American materials handling solutions trade expo. The show was held in Chicago's McCormick Place from January 21-24 and was sponsored by the Material Handling Industry (MHI). ProMat was co-located with Automate 2013, an event that saw a 62 percent boost in attendance, reflecting a rising global interest in automation and robotics. Hosting exhibitors and visitors from 125 countries, ProMat 2013 covered 300,000 net square feet of exhibit space with 785 exhibiting companies. Total registration for the event was 34,085. Visitors included key decision makers in virtually all manufacturing, logistics, distribution, and supply chain industries including a majority of the Fortune 1000 and Top 100 Retailers. Eight-five percent of attendees reported having buying authority and 34 percent are planning on spending $1 million or more over the next 18 months on equipment and systems. Here's a look at what our editors saw during the show.

SHOW OPENS

ProMat 2013: the bottom line is savings

David Young, chairman of MHI, sponsor of ProMat 2013, and Catherine Morris, chairperson of the Robotic Industries Association, sponsor of Automate 2013, cut the ribbon to open ProMat 2013.

LET THE SHOW BEGIN and the savings commence. That was the message from David Young, chairman of MHI, the sponsor of ProMat 2013. Following a ribbon cutting ceremony, the show got underway.

"This is the expo where supply chain solutions connect," Young said. "Over four days, you'll experience equipment and systems solutions as well as learn opportunities that will enhance the performance and efficiency of your manufacturing and supply chain operations."

On the show floor, ProMat featured 800 exhibits and a broad scope of educational content, including three keynotes, 100 show floor seminars, and five educational tracks. As always, the focus was on new and existing solutions that save space, increase throughput, improve accuracy, and positively affect productivity. The bottom line is savings.

Carrying that theme forward, ProMat announced its first-ever ProMat Innovation Award winners, a showcase of new products and innovations on display. In addition, ProMat 2013 co-located with Automate 2013, where attendees saw the latest developments in robotics, motion control, and vision and imaging technologies.

Also on hand was Don Welsh, CEO of Choose Chicago. His organization, as well as the offices of the mayor and governor, welcomed attendees to Chicago and thanked the industry for its business.

"When it comes to uncovering those big ideas, products, and people that will make all of the difference in moving your business and supply chain forward... here at ProMat at McCormick Place is the place to find them," Young said.

Henrik Christensen

KEYNOTE

Robotics primed to transform domestic and global economies

On the first day of the show, the opening keynote, "The Impact of Robotics on Economic Growth," drew a 50/50 split of attendees for both ProMat and Automate, according to a show of hands requested by presenter Henrik Christensen, KUKA Chair of Robotics and Director of Robotics at Georgia Tech.

Christensen successfully united the co-located shows by outlining present and future logistics applications for robots and automation. He also emphasized the increasingly competitive domestic labor market, citing a rapidly shrinking salary gap and efforts by Apple and Lenovo to bring more manufacturing jobs to the U.S. Christensen discussed his successful efforts at the White House to convince lawmakers that automation and job growth were not mutually exclusive.

"It's about how to leverage and empower the workforce, not remove it," he said. "Once we bring manufacturing here, we also

have more control over jobs in the associated supply chain."

Christensen suggested that 10 years from now, autonomous cars could serve as driverless parcel carriers and unpiloted drones could ship packages coast to coast. Inside a facility, robots serviced by their manufacturer are already providing intra-facility transportation services, with the customer no more involved with robot maintenance than they are in upkeep of UPS trucks.

KEYNOTE

Forbes sees blockages to stronger economic recovery

Keynote speaker Steve Forbes reiterated his call for a flat tax policy in his keynote address, while also calling for a return to the gold standard for the U.S. dollar.

In his keynote address, Steve Forbes, chairman and editor-in-chief of Forbes Media, called for removal of long-term structural blockages on U.S. economic recovery, while noting that Republican leaders in Congress are wise in taking smaller tactical steps rather than repeating big showdowns.

Forbes, a former presidential candidate and author, repeated his long-held belief in the benefits of a flat tax, stating his belief that for businesses, a 17 percent flat tax would work. He also called for a return to the gold standard for monetary policy and setting the value of the U.S. dollar. The current tax code, he said, if far too complex.

"This tax code is beyond redemption," he said. "The only thing you can do with this beast is kill it."

Forbes said Republicans should avoid big showdowns in Congress that are likely to fail, and focus on smaller adjustments, such as forcing the Senate to set a budget as part of any debt ceiling extension deal, or not allowing Medicare funding to be used to help fund the Patient Protection and Affordable Healthcare Act.

Forbes said such steps might seem small, but will help educate the public while paving the way for larger reforms.

THE FUTURE

Challenging perceptions of an industry in transition

At day three of the show, the keynote was all about perceptions. Are mentors necessarily older and more experienced? Is a collection of expensive luggage more valuable than a backpack? Was there ever a recession in the last five years?

Titled "The Future of Material Handling, Logistics and Supply Chain," the keynote began with a presentation from Edie Weiner, president of futurist consulting firm Weiner, Edrich, Brown. She challenged the audience to take business advice directly from 15-year-olds, consider employing those older than 60 and younger than 25, and be prepared for "exponential, exponential change."

"I did not repeat that word by accident," said Weiner. "Change is not the whole story. It's the speed of that change."

Weiner warned of what she calls "educated incapacity," the tendency for professionals to remember when they might do better to forget.

When new events test old frameworks, it is often best to embrace the new, said Weiner. In addition to 3D printing, nanotechnology, cyber security and augmented reality, Weiner said the future would include an emphasis on learning instead of education.

"There was never a recession, there isn't any double-dip, and there's no recovery," said Weiner. "What happened was a fundamental global economic transformation." As with the agricultural, industrial, and technological revolutions, the duration of time between these disruptive events decreases exponentially.

Weiner was then joined by a panel consisting of George Prest, CEO of MHI; Rick Blasgen, president and CEO of CSCMP, Michael Mikitka, CEO of WERC, and Liz Richards, VP of MHEDA.

The panel discussed ongoing shifts in "the industry hidden in plain sight," including the integration of soft and hard metrics, the Internet of things, and the proximity of food production to population centers.

EDUCATION

Educators learn how to start training programs

More than 50 educators and administrators from technical high schools, colleges, and community colleges around the country attended the day-long Technical Career Education Conference. The participants learned how to establish a materials handling and logistics instruction program at their schools.

"The goal of the conference was to expose these program leaders to our industry and offer them an opportunity to partner with MHI as they educate and develop tomorrow's workforce," explained Ray Niemeyer, MHI's education services director. "We make a significant investment in our Technical Career Education Program (TCEP), including developing classroom materials, establishing networking opportunities within the industry, instructor education, and supporting academic programs. We hope more schools will leverage these resources to help them deliver trained individuals to enter our industry."

Acknowledging the differing educational needs of high school versus college level students, the conference offered both joint and separate sessions on a variety of topics. Led by administrators and programs already in existence, presentations included how to build a program from the ground up, the importance of hands-on learning and training within a working warehouse lab, and how to secure quality educational resources and certifications.

Participants took a special tour of the show floor to specifically visit the key technologies needed in a live working warehouse lab. More information about the TCEP program can be found at www.mhi.org/tcep.

MHI is also announcing the publication of "Fundamentals of Warehousing & Distribution, Volume 3: Warehouse & Personal Performance." This textbook was designed to build on the knowledge of warehouse equipment, processes, and operations introduced in volumes 1 and 2. This volume focuses on how the performance of equipment, processes, and employees come together in different types of warehouses.

The goal of Volume 3, written by industry professionals, is to broaden the student's understanding of why a warehouse uses certain types of equipment and how those choices affect the performance of that facility. It also focuses on personal performance and the metrics placed on the employees

The book is available for purchase on MHI's website (www.mhi.org).

AWARDS

MHI names Innovation Award winners

On day two of the show, the winners of the inaugural ProMat Innovation Awards were announced. Winning the Best New Innovation award for iQ Fusion was Packsize, while Fox IV took Best Innovation of an Existing Product for its TwinPrint.

"The awards were created to educate and provide valuable insights to ProMat attendees about the latest innovative manufacturing and supply chain products and services offered by exhibitors," explained George Prest, CEO of show sponsor MHI.

"Seventy-four companies submitted 78 different entries, and were judged prior to the show by a committee of industry experts to narrow down each category to six finalists," Prest continued. "Those finalists were visited on Monday by the committee, who then selected the winner in each category."

Finalists in the "Existing Innovation" category were: Bishamon Industries; Daifuku Webb; Dematic; Intelligent Lighting Systems; Fox IV Technologies; and Jungheinrich. In the "New Innovation" category, finalists included: Blickle Casters; Engineered Lifting Systems; Intelligrated; KUKA Systems; Opex Corporation; and Packsize International.

INTERNATIONAL

CeMAT announces changes to Hannover show

In a press conference, Wolfgang Pech, senior vice president of Deutsch Messe, announced that the Hannover, Germany CeMAT—part of a global network of materials handling industry trade shows—will now be staged every two years. The next Hannover show will be held May 19-23, 2014.

"This change was made to accommodate the faster pace of change in the intralogistics market, as well as the industry's shorter innovation cycles," he explained. "The decision to present this exhibition every two years was made in close consultation with the CeMAT

Executive Committee and the German Engineering Federation (VDMA), as well as by the unanimous request of exhibitors."

Additionally, CeMat 2014 will sport a new look, with five distinct technology zones: pick and pack; move and lift; store and load; logistics information technology (IT); and manage and service. The event will feature branch-specific focus topics to give attendees a concentrated overview of showcased products and services under prioritized headings, Pech said. The Hannover CeMAT is forecast to host 1,000-plus exhibitors and be attended by more than 53,000 international visitors.

Pech also discussed the results of this year's CeMAT shows held in China, India, and Russia, as well as shared an outlook for the next CeMAT expo to be held in Sao Paulo, Brazil, from March 19-22, 2013.

CeMAT HANNOVER · GERMANY 19 – 23 MAY 2014

INTERNATIONAL

Students enjoy 10th Classroom Day

On day three of the show, students of engineering, technology, manufacturing, operations, supply chain, and logistics experienced first-hand the latest technologies and solutions as they toured the show floor with their professors as part of the Material Handling & Logistics Classroom Day. These students came from four-year higher education programs.

The program, in its 10th year, said Carmen Murphy, College Classroom Day coordinator for MHI, and MHI's College Industry Council on Material Handling Education (CICMHE) puts the event together in conjunction with the Material Handling Equipment Distributors Association (MHEDA).

"The opportunity to spend time at the show offers students a better understanding of the latest industry developments by giving them a chance to see the variety of solutions that support the flow of materials throughout the supply chain for both manufacturing and distribution operations, all in one place," said Murphy.

With more than 215 students and professors registered, this year's group is the largest one ever to participate, added Murphy. Participating schools include: Alabama A&M; Marquette; Ohio State University; Penn State; Purdue; Rochester Institute of Technology; Southern Illinois; Tennessee Tech; University of Texas El Paso; Western Illinois; and Universidad Autonoma De Baja Calif., Mexico.

NEWS

MHI launches Young Professionals Network

YPN main page: mhi.org/ypn

Twitter: mhi.org/ypn/twitter

LinkedIn: mhi.org/ypn/linkedin

Blog: mhi.org/ypn/blog

In an effort to attract and retain fresh talent in the industry, Materials Handling Industry (MHI) launched the Young Professionals Network (YPN) at ProMat 2013. YPN membership is free and open to MHI members and non-members under 40 years of age who are interested in supply chain management.

"The goal is to get more young people interested in materials handling, and get them to stay," says Devon Birch, marketing and communications services manager for MHI, and one of the association's eight YPN members. "It's about making them feel as if they belong and are connected to a support network."

Birch says the YPN will provide online forums and tools for networking, trend-watching, and professional development. Social media will play a big role in connecting the network, and the YPN has already set up a blog (mhi.org/ypn/blog) as well accounts at Twitter (@MHIYPN) and LinkedIn (mhi.org/ypn/linkedin).

YPN's first Webinar (titled "Other Generations: What ARE They Thinking?")was held in late February.

STATE OF THE INDUSTRY

Steady as she goes

At the annual State of the Industry press conference, MHI predicted slow but steady growth in 2013 and 2014. MHI also announced co-location of supply chain event at Modex.

The materials handling industry is expected to grow at a slower clip in 2013 and 2014, but nevertheless continue to grow. Meanwhile, Supply Chain & Transportation USA will co-locate with Modex at Atlanta's Georgia World Congress Center in March 2014. Those were two of the announcements at MHI's annual State of the Industry press conference on the second day of ProMat.

First, the numbers.

- New orders grew by 7.7% in 2012 over prior year orders. MHI anticipates new orders to grow by 6% in 2013 and 10% in 2014.
- Shipments grew by 9.6% in 2012 over prior year shipments. MHI expects shipments to grow by 7% in 2013 and 9% in 2014.
- Domestic demand, which is defined as shipments of materials handling equipment plus imports less exports, grew by 10.6% in 2012. Domestic demand is expected to mirror shipments in 2013 (7%) and 2014 (9%).

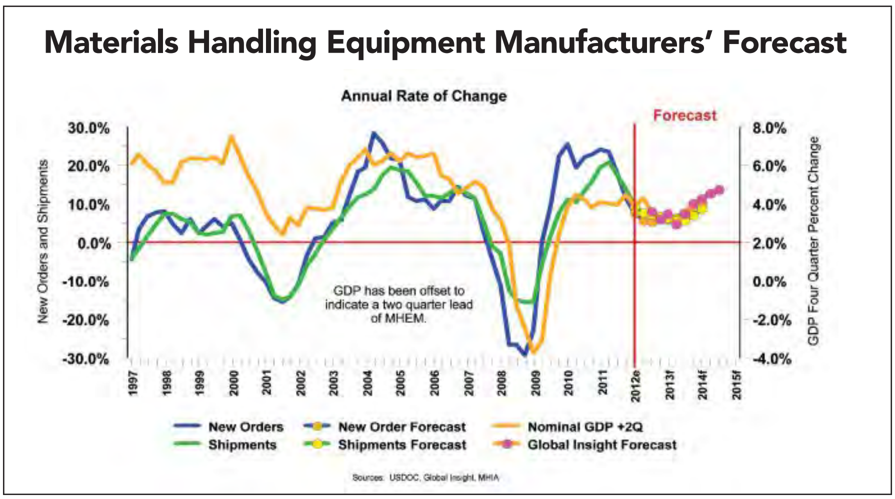
"We are expecting slower growth, but we are still in a growth mode," said George Prest, CEO of Material Handling Industry, sponsor of ProMat 2013. Prest added that the industry continues to climb from the nearly 50% drop it experienced in 2007. "We have posted some strong numbers, but we don't expect to get back to 2007 numbers until 2015."

Prest and Laurent Noel, vice president of Reed Exhibitions, also announced the co-location of the supply chain show at Modex 2014. The new event will include 50,000 square feet of exhibits as well as educational sessions focused on transportation, logistics, real estate and the future supply chain.

"In 2012, MHI launched Modex as part of our strategic vision to provide supply chain solutions both within and beyond the four walls of an industrial facility," Prest said. "The co-location represents the next step in this process as we offer attendees supply chain solutions beyond material handling and into logistics and transportation."

The co-located events will be the largest international expo and conference of its kind held in the U.S. and South America in 2014. More than 500 exhibitors are expected to showcase their solutions on the 230,000 square foot floor. Tens of thousands of manufacturing supply chain professionals from more than 100 countries are expected attend.

"We are very excited to be working with MHI," added Noel. "The combined event creates the first U.S. event that offers a one-stop shopping experience for supply chain executives."



The outlook for 2013 is for growth of 6% and 10% for 2014; although there remains some downside risk in the first half of 2013.

PACKAGING

Is packaging now part of materials handling?

Show analysis by Bob Trebilcock, Editor at Large

The argument for the creation of Modex, a show that will co-locate a logistics show within a materials handling show, is the recognition that what happens outside the four walls is converging with what happens inside the four walls.

After attending ProMat, I think another convergence is underway. That is the convergence of automated packaging systems with automated materials handling systems. A number of solutions were on display in Chicago that were

designed to handle the new complexity of packaging orders for e-fulfillment, or what our industry is calling multi-channel distribution. Think of it as ProMat meets PackExpo.

They came in a couple of flavors. First, there were the box on demand solutions. These are designed to create a shipping container that is the right size for an order of one to a few items with a minimal amount of void fill. They are also designed to integrate with an automated materials handling system. I saw solutions from Packsize, Sealed Air, and System Logistics. There were other exhibitors that I didn't get to visit.

What's of particular interest is that each is bringing a different business model to the market. Packsize sells its solution similar to the way Gillette sells razors and razor blades. The cost of the machine is minimal; the customer pays for the corrugated that is designed to work with the machine.

Sealed Air charges an installation fee but does not sell the corrugated. Instead, it charges a transaction fee for every box that is formed by the system.

System Logistics operates with a traditional sales and services model: a customer purchases the equipment and works with the vendor of its choice on the packaging materials. A customer can choose the system that best suits its needs and that best meets its capital requirements.

The second area includes automation to add packing slips to shipping cartons, print and apply shipping labels, or both. I visited with the Numina Group, Fox IV Technologies and Logopak and spoke with PSI Engineering after the show.

While solutions like print and apply have been in the marketplace for years, something is changing. They are moving from a packing process to part of an overall materials handling process. "What's resonating with our customers is that we now look at this as part of a continuous process," says Dan Hanrahan, president of Numina Group. "We look at pick, pack, validation and flow as one continuous process from picking right into the truck door. What's flowing out your doors has a great deal to do with how you build efficiency into your operation."

MODEX 2014

So long Chicago. Hello Atlanta.

Sure, it was one of the coldest weeks of the year. What did you expect for January in Chicago? But ProMat 2013 was one hot show. Attendance topped 2011's figure as of noon on the third day of the show, with well more than 30,000 attendees, including more than 1,000 walk up registrations.

"It was absolutely fabulous," said George Prest, CEO of MHI, the sponsor of the show. "Fifty percent of the Fortune 1000 was represented and we had all of the top 100 retailers." He added that 85 percent of attendees said they had buying authority and 34 percent had budgets of $1 million or more to spend on materials handling and supply chain solutions over the next 18 months.

The interest in materials handling solutions may be a reflection of an economy on the mend. "To have a strong economy, we need a strong manufacturing sector," Prest said. "To have strong manufacturing, we need productivity. Our products represent an investment in productivity."

ProMat 2013 also reflected the industry's commitment to the next generation of the warehousing, distribution, and logistics workforce. The show saw the launch of the Young Professionals Network, a networking event for women in the materials handling industry, and visits by technical high school and college students interested in joining the industry.

Perhaps the most encouraging sign of the health of the industry were the number of help wanted signs for engineers and project managers displayed at the booths of major companies.

The end of the show also sets the stage for Modex 2014, the supply chain show to be held in Atlanta at the Georgia World Congress Center March 17–20, 2014. To that end, more than 75 percent of the available space was locked up at the space draw on day 3 of ProMat. Some 300 exhibitors have committed to 131,000 net square feet, said Tom Carbott, senior vice president for exhibitions. A number of exhibitors increased their square footage over ProMat. "Our goal is to sell at least 60 percent of the space," said Carbott.

Modex 2014 will collocate with Supply Chain & Transportation USA, a new show that will showcase a complete range of products and services dedicated to transportation, logistics and the future supply chain. "The collocation validates out concept for Modex as a venue for the whole supply chain," Prest said. "MHI is just one voice of the supply chain. We will now provide a venue where we can fill all of the needs of an organization."

Say so long to Chicago and hello to Atlanta.

ProMat
SHOW PRODUCTS

Rugged mobile computers support omni-directional scanning

Next-generation CK3 rugged mobile computers incorporate OMAP architecture for superior processing performance. Features include extended battery life, enhanced bar code scanning capabilities and device health monitoring. The CK3R model offers a small size and light form factor. It contains the EA31 scan engine for quick and accurate scanning operations and support for omni-directional scanning of 1D and 2D bar codes. The CK3X model offers the choice of standard range or near/far range scanning and reads damaged 1D and 2D bar codes. **Intermec,** 425-356-1652, www.intermec.com.

RFID-equipped lift trucks

To support a semi-automatic approach to reaching destinations by lift truck, the supplier's warehouse navigation system uses RFID transponders placed in the facility floor at specific distances. The transponders communicate with an RFID reader/writer in the lift truck to identify aisle locations and distances. Armed with this information, the lift trucks know where to go. Increased productivity is achieved by having the truck select the optimum combination of driving and lifting to reach a pallet position in the fastest, most efficient way. Because pallet lifting and put away is principally controlled by the truck, not the driver, product damage is reduced. **Jungheinrich,** 877-543-6757, www.jungheinrich-lift.com.

Rack attachment aids in fire protection

The heavy-duty FlueKeeper HD pallet rack attachment can be easily installed to keep pallets and their loads out of transverse flue spaces. Intended for use with hand-loaded boxes, the attachment meets the 2012 International Fire Code section stating that fire code officials can now require rack storage installations to be equipped with approved devices to protect the required flue spaces. It maintains open flue spaces within the racks to assist in activating ceiling sprinklers and delivering water to an in-rack fire event. **DACS,** 866-400-8107, www.fluekeeper.com.

Dual-movement rack frame offers impact, seismic resistance

Incorporating a dual-movement frame, the TubeRack system allows flexibility both front-to-back and side-to-side. This enables it to withstand impacts and seismic events safely. Its horizontal-bolt-together modular construction can handle higher capacities with less steel, while reducing the stress on the slab. Its modularity also allows for future flexibility. TubeRack can be used in all of the supplier's storage rack solutions, including selective, double deep, push back, pallet flow, drive-in, and AS/RS. **Hannibal Industries,** 323-588-4261, www.hannibalrack.com.

Driverless shuttle navigates freely for transport, picking

Differing from conventional driverless transport systems, the Open Shuttle moves freely across a surface without lines for guidance. These free-moving vehicles can be used for transport and picking activities. They move using laser navigation and react quickly to new or changed transport routes. The shuttles also react dynamically to obstacles by planning an alternate detour to the optimal route while keeping order parameters in consideration for optimal throughput. Easily adapted to changes, such as capacity fluctuations or warehouse reconfigurations, no structural modifications are necessary because of flexible route planning. **KNAPP Logistics Automation,** 888-606-0695, www.knapp.com.

ProMat

SHOW PRODUCTS

Pocket-sized IP67-rated device

The rugged Dolphin 70e Black smart device offers auto-identification and data capture users a sleeker form factor than a typical AIDC industrial device that is tougher than a consumer-grade phone. Lightweight and compact, the hybrid device weighs 7 ounces and is 0.75-inches thick, allowing it to be stored in a pocket when not in use. Capable of scanning, accessing the Internet and capturing data, the device features an IP67 rating for submersion in water, completely dust-proof construction and 4.3-inch capacitive touch display that can be viewed in direct sunlight. Its user-replaceable battery delivers up to 12 hours of operating life. **Honeywell Scanning and Mobility,** 770-447-4224, www.honeywellaidc.com.

Fit a custom AS/RS into low- or high-bay warehouses

A line of automated storage and retrieval systems can fit into existing high- or low-bay warehouses with ceilings as low as 20 feet. Customizable, these systems maximize storage, optimize product flow, reduce costs and keep perishables rotating through the warehouse. Included are storage/retrieval machines, load-handling devices, the supplier's Savanna.NET warehouse management system software and AS/RS rack structures. All can be integrated with other warehousing tools such as pick-to-light/pick-to-voice order fulfillment, pallet flow systems, conveyors and palletizers. **Westfalia Technologies,** 800-673-2522, www.westfaliausa.com.

Pallet truck carries user-friendly features

The 8000 series pallet trucks operate with up to 33% more energy efficiency, allowing it to move more product in less time. They are engineered with significant increases in material strength for heavy-duty use. Reinforced components reduce wear, deliver more uptime and lower costs. Other user-friendly highlights include a roomy operator compartment with padding and multiple lean points, accessory bars with lights and fans, large storage totes, and additional caster options. To help operators reduce steering effort, the truck is equipped with speed-sensitive steering for optimized productivity and precise, smooth control at all speeds. **The Raymond Corp.,** 800-235-7200, www.raymondcorp.com.

Voice picking solution runs on standard mobile computers

Jennifer VoicePlus voice-directed warehouse solution improves efficiency, productivity and fulfillment accuracy by creating a two-way conversation with associates who wear a headset connected to a standard mobile computer. Capable of running on standard industrial mobile computers, the system allows seamless use of voice recognition and scanning in a single multi-modal application. The latest version includes a next-generation speech recognition platform for minimal user training and improved recognition accuracy across all languages. **Lucas Systems,** 724-940-7144, www.lucasware.com.

Floating material handler

Using air power, the LoadRunner allows a single operator to safely and easily move 2,500-pound loads. It employs an on-board compressed air system to float the load across the floor, reducing friction and requiring a fraction of normal operator effort to move the load. Offered as an alternative to hand trucks, pallet jacks and forklifts, the unit is completely self-contained. The unit features a low profile deck with a 2-inch insertion height and intuitive throttle-style fingertip controls. **AeroGo,** 800-426-4757, www.aerogo.com.

Mobile computer supports voice-directed picking and scanning

For use in receiving dock and truck-based workflows, as well as for picking in both dry and freezer environments, the Talkman A700 accommodates demanding environments with optimized voice workflow support. The system enhances hands-free and eyes-free productivity, and also provides wearable, orientation-free scanning when needed. Its advanced capabilities, lower accessory costs and predictive analytics provide a lower total cost of ownership and increase ease of use. For additional picking productivity, the system can be used in conjunction with the supplier's SRX2 wireless headset. **Vocollect,** 412-349-2684, www.vocollect.com.

Monitor and control warehouse and distribution operations with mobile app

The Mobile App software application monitors and controls warehouse and distribution operations from a smart phone or tablet device. The software displays materials handling system status and operational status in real time in a simple, easy-to-understand format. Wi-Fi accessibility gives instant access to data and controls critical to managing the operation. Features include the DC View interactive visualization interface that produces a bird's eye view of the facility layout. Standard, gesture-based navigation supports finger touch panning and pinch zooming. Navigable dashboards provide operational information for all areas, including receiving, storage, order fulfillment, sorting and shipping. **Dematic,** 262-860-6546, www.dematic.com.

Tablet offers multi-touch display

Less than 1 inch thick and weighing slightly more than 2 pounds, the M9700 tablet delivers lightweight mobility in a rugged tablet with a 9.7-inch multi-touch display for pan and zoom functions. The device is equipped with a 32 GB drive and runs on a Windows-based operating system for seamless migration into existing Windows-based networks. Protected against water, dust and 4-foot drops to concrete, the M9700 offers a more durable solution than consumer tablets, enabling its use in a variety of environments. Communication options include Wi-Fi, Bluetooth, 3G and GPS. **DAP Technologies,** 855-327-8324, www.daptech.com.

Wireless remote sensor for dry contact applications

The SureCross Q45 remote device is a self-contained, wireless standard photoelectric sensor for control and monitoring applications that interfaces with isolated dry contacts or PNP outputs to connect with any digital sensor. It also features a mode that allows it to interface directly with NAMUR inductive proximity sensors. Features include a self-contained battery, radio and sensor for simple deployment and untethered communications. Operating on less than 100uA of current, the sensor's battery lasts at least five years. **Banner Engineering,** 888-373-6767, www.bannerengineering.com.

Compact, mobile workstation cart

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

Capture RFID tag information easily

The CaptureTech interpreter provides an easy way to get RFID tag data into any Windows-based PC application. Using plug-and-play technology, the device can be implemented and begin reading RFID tags in less than 1 minute with existing legacy applications. It plugs into a USB port on a PC, identifies itself and inputs RFID tag data into existing applications. Integrated features include an RFID reader, antenna and tag data processor into a portable desktop device. **Barcoding,** 888-412-7226, www.barcoding.com.

Mobile, iPad-based solutions for distributors

Two mobile applications for tablets—the mobile business analyzer and Eclipse customer relationship management system—support high-level decision making by wholesale distributors. Intended specifically for the iPad, the business analyzer provides access to critical key business metrics such as average invoice and order values, cost of goods sold, profit dollars and profit percent. It also communicates proactive alerts from the supplier's Prophet 21 enterprise resource planning system. It employs a single, near real-time mobile dashboard across a secure VPN. The browser-based Eclipse enables remote order entry, the ability to view existing and create new sales opportunities and associate them with a customer and specific contacts. **Epicor Software,** 800-776-7438, www.epicor.com.

RFID-enabled AS/RS tracks inventory 24/7

The MicroVert AS/RS integrates RFID hardware and software, an automatic door, and an ergonomic product counter. The RFID system provides real-time put-and-pick verification and cycle counting. Stock transactions can be securely and accurately monitored without operator intervention, and inventory can be audited on-demand in less than 30 seconds. For real-time verification of all transactions in and out of the unit, the RFID antenna is embedded in the removable counter, ensuring control and continuous visibility of inventory transactions. **SencorpWhite,** 508-771-9400, www.sencorpwhite.com.

Smart phone cases turn devices into Bluetooth-enabled bar code readers

A selection of smart phone cases work with the supplier's suite of Bluetooth bar code data and card readers, allowing users to turn their smart phone into a bar code PDA. Cases are offered for several devices, including the Samsung Galaxy SIII, Apple iPhone5, Pantech Vega Racer, Samsung Galaxy SII, Samsung Player 5, Samsung Note, Apple iPhone 4(S), Apple iPod touch 4G, Apple iPod touch 5G and Samsung Galaxy Note2. The cases work with: KDC200, KDC250, KDC300, and KDC400 programmable Bluetooth bar code scanners and sleds. **KoamTac,** 855-562-6822, www.koamtac.com.

By Patrick Burnson

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Transpacific chief shoots from the hip

BRIAN CONRAD, EXECUTIVE ADMINISTRATOR for the Transpacific Stabilization Agreement (TSA), is not only regarded as a "thought leader" in the ocean shipping arena, but also as a man of uncommon candor. For the past several years now, he has weathered the storm brought on by shippers' associations challenging pricing and operations in the world's most active—and vital—trade lane linking North America and Asia.

In an exclusive interview with *Logistics Management* recently, Conrad says that it's too soon to tell what carriers' profits will be in 2013; however, there are many factors that will certainly weigh on their financial situation over the next several months. Among them is the volatility of the price of fuel, which continues to represent 60 percent or more of carriers' voyage costs.

Conrad says that prevailing market rates are approaching "sustainable levels," but in order for the carriers to see better financial results in 2013, this pricing must be maintained and carriers need to avoid the volatility and erosion of previous years.

Most importantly, he adds, longer-term contracts need to be concluded at rate levels that more closely reflect the prevailing market—representing a "meaningful" increase relative to last year.

"It's unrealistic to expect that carriers can return to profitability carrying cargo for another 12 months to 14 months at 2012 rates," says Conrad.

Even in the recent past these rates were not "viable," he adds—an assessment easily verified by carrier quarterly returns in the first half of last year.

Meanwhile, most of the carriers' energies are focused on three main areas today:

- Managing costs, particularly fuel costs because it is a large share of operating cost per sailing.
- Environmental compliance, which requires not only meeting existing rules and standards, but anticipating future mandates; and not just government requirements, but customer "green" supply chain concerns as well.
- Improving productivity and service predictability toward a more time-definite service model within the industry.

These efforts, says Conrad, will produce subtle enhancements with cumulative effects over time. Furthermore, with manufacturing costs rising in Asia—most notably China—and government incentives for manufacturers shifting toward domestic production, carriers expect a revitalized U.S. manufacturing sector. This trend, combined with a renewed U.S. export promotion effort, will help narrow the structural 2-to-1 imbalance of transpacific cargo and equipment.

But here, too, it will take time for these forces to combine and yield measurable results. Conrad says that it's important to remember that a large share of Asian manufactured exports to the U.S. grow out of U.S. firms' relationships with contract manufacturers and, in some cases, significant plant, equipment, and staffing investment.

"Also, Asian factories still enjoy cost and scale advantages worldwide, so it's likely that U.S. consumers' reliance on imports from Asia will remain strong for some time," says Conrad.

> **With manufacturing costs rising in Asia—most notably China—and government incentives for manufacturers shifting toward domestic production, carriers expect a revitalized U.S. manufacturing sector.**

It should be emphasized, however, that shipyard order books are much lighter this year in view of global overcapacity, depressed revenues, and fewer ship finance options. This explains the expectation that transpacific supply and demand will come into closer alignment during 2014 as cargo growth accelerates.

Finally, Conrad notes that despite a sense that underlying economic trends are positive and that business and trade are poised for a breakout, no true catalyst has emerged. Shippers minimized orders and drew down inventories in 2012, while carriers were reluctant to invest in equipment or new services, especially at the depressed rate levels seen throughout the year.

"We can only hope that 2013 will bring some resolution," adds Conrad. □